CLIMATE CHANGE RESEARCH

REPORT 10/1999

CLIMEX project: Data report for June 1994 - May 1999

NIVA

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Norwegian Institute for Water Research

REPORT

Main Office
P.O. Box 173, Kjelsås
N-0411 Oslo
Norway
Phone (47) 22 18 51 00
Telefax (47) 22 18 52 00
Internet: www.niva.no

Regional Office, Sørlandet
Televeien 3
N-4879 Grimstad
Norway
Phone (47) 37 29 50 55
Telefax (47) 37 04 45 13

Regional Office, Østlandet
Sandvikaveien 41
N-2312 Ottestad
Norway
Phone (47) 62 57 64 00
Telefax (47) 62 57 66 53

Regional Office, Vestlandet
Nordnesboder 5
N-5008 Bergen
Norway
Phone (47) 55 30 22 50
Telefax (47) 55 30 22 51

Akvaplan-NIVA A/S
N-9005 Tromsø
Norway
Phone (47) 77 68 52 80
Telefax (47) 77 68 05 09

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Abstract

CLIMEX project was conducted from May 1994 to June 1998 and involved whole ecosystem manipulation of temperature and CO_2 at the catchment scale. Measurements of precipitation and runoff continued for one-year post-treatment (July 1998 to May 1999). This data report consists of precipitation and runoff chemistry and volumes for the 5 monitored catchments as well as meteorological data from the manipulated KIM (CO_2+air warming) and EGIL (soil warming) catchments.

4 keywords, Norwegian	4 keywords, English
1. klimaendring	1. climate change
2. sur nedbør	2. acid precipitation
3. økosystem	3. ecosystem
4. vannkjemi	4. water chemistry

Richard F. Wright
Project manager

Brit Lisa Skjelkvåle
Research manager

Nils Roar Sælthun
Head of research department

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CLIMEX project:

Data report for June 1994 – May 1999

Ann Kristin Buan, Rolf Høgberget, Richard F. Wright

Preface

The CLIMEX project ran from June 1993 to June 1999 and was financed by grants from the Ontario Ministry of Environment (Canada), the European Commission, the Dutch Global Change Programme, the Research Council of Norway, the Norwegian Ministry of Environment, the National Environment Research Council (UK), Hydrogas Norge A/S, and the Norwegian Institute for Water Research.

Ann Kristin Buan was responsible for the CLIMEX database. Rolf Høgberget held overall responsibility for climate, precipitation and runoff monitoring at Risdalsheia. Rolf Høgberget, Jarle Håvardstun, Mette Lie, and Tore Sørvåg carried out routine data collection in the field, all at NIVAs Grimstad office. Others assisting with the collection of these data were Wim Arp and Paul Verburg, both at Wageningen Agricultural University, NL.

Oslo, December 1999

Richard F. Wright
Project manager, CLIMEX

Contents

Summary

This is the 5th data report from Risdalsheia, and comprises precipitation, runoff and meteorological data. Data tables are extended from last sample or measurement in previous report (generally from June 1994). Figures presented also include previous data in order to illustrate long-term trends. There have been two different projects running at Risdalsheia. The RAIN project (June 1983 – May 1994) measured the reversibility of acidification following experimental reduction of acid deposition. The CLIMEX project (May 1994 – June 1998) looked at the ecosystem response to manipulations of CO_2 and temperature. One year of post-treatment (July 1998 – July 1999) is also included.

1. Introduction

This report contains data for meteorological parameters as well as precipitation and runoff collected as part of the CLIMEX project at Risdalsheia over the period June 1994 – June 1999. The CLIMEX treatments ran from May 1994 to June 1998. The period July 1998 – July 1999 represents a one-year post-treatment period.

Data collection at Risdalsheia started in 1983 as part of the RAIN project (Reversing Acidification In Norway) (Wright et al. 1993). These data have previously been compiled in 5 reports (**Table 1**). A complete list of publications from the RAIN and CLIMEX projects is given in Appendix 1.

Table 1. Overview of data reports from Risdalsheia (RAIN and CLIMEX projects).

Period from	to	Reference	Report
Jan 1983	Nov 1985	Wright et al. 1986	Acid Rain Research Report 10/1986
Nov 1985	Dec 1986	Wright 1987	Acid Rain Research Report 13/1987
Dec 1986	Dec 1987	Wright 1988	Acid Rain Research Report 16/1988
Dec 1987	Aug 1990	Wright 1991	Acid Rain Research Report 24/1991
Jun 1990	May 1994	Wright 1994	Acid Rain Research Report 36/1994
Jun 1994	Jul 1999	Buan et al. (this report)	Climate Change Research Report 10/99

Five catchments have been monitored as part of CLIMEX (**Table 2**). KIM catchment was enclosed by a glasshouse and received elevated CO2 and air warming; EGIL catchment received soil warming by electric heating cables. Three catchments (ROLF, MET, CEC) served as untreated references. For studies of plants and soils in small plots, the upper 20% of the two manipulated catchments (KIM and EGIL) were sectioned off and did not receive the climate change treatment. These sections served as controls for the climate change treatment. A complete description of the CLIMEX experimental design and investigations is given by Dise and Jenkins (1995).

Table 2. Overview of the 5 catchments at Risdalsheia included in the CLIMEX project. The first three were run by the RAIN project for 11 years (June 1983 - May 1994). Clean rain treatment began in June 1984. CLIMEX treatment began in April 1994. KIM and EGIL were divided in April 1994 to an upper control section (KIM-c, EGIL-c, no climate change) and lower treatment section (KIM-t, EGIL-t, climate change).

catchment	**area m^2**	**enclosure**	**rain quality**	**climate treatment**	**monitor start**	**monitor end**
KIM	860	roof	clean	CO_2+air warming	Mar 1984	ongoing
EGIL	400	roof	ambient	soil warming	Mar 1984	Nov 1998
ROLF	220	open	ambient	none	Oct 1984	ongoing
METTE	650	open	ambient	none	May 1993	Jul 1999
CECILIE	380	open	ambient	none	May 1993	May 1997

2. PRECIPITATION AND CHEMISTRY

2.1 EGIL

Precipitation chemistry 1994-95 Units: ueq/l **File: N95.XLS**
EGIL-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1994	526	603	0.0		26.5		25	13.2	108.5	42.8	31	85.4
1994	602	616	11.4	58.9	130.1	10.2	25	33.7	3.4	47.1	126.9	79.1
1994	616	623	23.8	22.9	13.5	5.1	3.5	4.9	2.2	1.6	16.9	35.4
1994	623	722	20.8	38.9	5.2	1.5	17.5	4.1	2.3	20	8.5	45.8
1994	722	729	0.7	33.1	11.3	3.1	4.5	2.5	10.6	13.6	5.6	50
1994	729	804	0.0	50.1	7	0.5	5.5	0.4	22.3	27.8	14.1	62.5
1994	804	810	0.0		3		10.5	3.3	36.3	42.1	5.6	64.5
1994	810	818	19.4	21.9	7.4		6.5	2.5	3.9	5.6	8.5	35.4
1994	818	825	54.3	30.2	0.9	1	1	0.4	16.6	21.4	14.1	37.5
1994	825	901	48.8	30.9	22.2	0.8	2	5.8	29.1	27	31	41.6
1994	901	908	66.5	33.9	28.7	1.5	1	5.8	28.8	35	42.3	47.9
1994	908	915	87.5	36.3	48.3	2	2.5	6.6	8.8	22.8	59.2	29.1
1994	915	922	25.5	11.5	10	4.3	1	4.1	1.3	5.1	14.1	12.5
1994	922	929	8.3	6.5	15.2	1.8	2.5	3.3	1.6	0.6	16.9	10.4
1994	929	1006	14.2	5.1	3.9	1	18	14	1.8	0.2	5.6	4.2
1994	1013	1024	208.8	52.5	85.7	5.1	10.5	20.6	44.6	57.5	87.5	58.3
1994	1024	1031	73.2	38.9	61.3		5.5	15.6	18.9	34.3	67.7	39.6
1994	1031	1108	11.6	58.9	120.5	4.1	10.5	28.8	42.8	41.8	129.8	85.4
1994	1108	1114	6.6	28.2	40.9	1.3	1	8.2	16.3	18.9	45.1	39.6
1994	1114	1128	21.4	15.5	18.3	0.8	1	12.3	5.2	9.7	22.6	14.6
1994	1128	1205	31.1	37.2	32.6	0.8	8	7.4	24.1	35.3	38	41.6
1994	1205	1212	51.2	22.9	112.7	2.6	7.5	23.9	22.6	28.9	132.6	37.5
1994	1212	1219	71.8	38	65.3	2	5	14	34.4	32.5	76.2	47.9
1994	1219	1227	12.3	28.8	103.1	4.1	6.5	19.7	15.7	24.3	104.4	37.5
1994	1227	103	11.9	11.5	39.6	1.8	3.5	9.9	10.4	10.7	53.6	18.7
1995	103	109	7.8	81.3	156.2	10	14.5	41.1	17.6	60.7	155.2	89.5
1995	109	116	10.7	33.9	103.1	2.3	8.5	25.5	18.3	32.5	115.7	45.8
1995	116	130	48.3	38	142.2	3.3	8.5	29.6	50	53.2	149.5	60.4
1995	130	206	16.1	30.9	116.6	2.6	7	26.3	9.1	28.2	126.9	37.5
1995	206	213	0.2	18.2	24.4	0.5	2.5	4.1	7.4	19.3	22.6	14.6
1995	213	220	43.2	31.6	61.3	1.5	5.5	14	26.8	38.6	70.5	37.5
1995	220	227	34.4	23.4	123.1	2	8	27.1	6.4	18.6	143.9	35.4
1995	227	306	6.1	34.7	72.2	1.3	5.5	16.5	42	53.2	81.8	41.6
1995	306	313	0.7	85.1	49.6	2	5.5	11.5	85.7	92.8	59.2	89.5
1995	313	410	7.5	58.9	153.1	2.3	13.5	33.7	102.8	82.5	174.9	120.8
1995	410	418	2.6	21.9	138.8	3.3	9.5	30.4	14.8	22.8	160.8	43.7
1995	418	424	1.4	158.5	180.5	12.8	18.5	45.2	29.1	77.8	211.6	133.2
1995	424	502	0.2	17.4	21.8	4.1	52.4	15.6	85	67.5	11.3	127
1995	502	508	14.6	0.9	8.7	2	4.5	6.6	20.8	15	11.3	16.7
1995	508	515	12.6	1.6	10.4	1	4.5	3.3	16.9	13.9	14.1	22.9
1995	515	522	16.8	0.7	38.3	3.1	6.5	10.7	32.8	18.9	45.1	37.5
1995	522	531	246.1	13.8	3.5	1.5	3	1.6	35.3	23.6	5.6	50
1995	531	606	99.2	1.4	44.4	4.6	4.5	13.2	21.6	17.1	53.6	35.4

Precipitation chemistry 1995-96 Units: ueq/l **File: N96.XLS**
EGIL-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1995	606	612	52.0	21.9	12.2	1.8	3.0	3.3	19.1	26.8	14.1	29.1
1995	612	619	30.5	34.7	5.2	1.0	3.5	2.5	24.1	37.8	8.5	39.6
1995	619	704	3.5		5.7	0.8	6.5	3.3	1.0	0.3	5.6	37.5
1995	704	711	3.0		10.9		10.5	9.0	2.7	0.3	16.9	54.1
1995	711	717	15.0	13.2	3.9	0.5	4.5	1.6	2.2	3.7	5.6	20.8
1995	717	724	18.7	13.2	3.9	0.5	4.5	1.6	2.2	3.7	5.6	20.8
1995	724	821	36.1	31.6	9.1	0.5	5.0	3.3	1.9	3.4	14.1	43.7
1995	821	828	13.1	11.0	16.1	3.6	7.0	4.9	2.4	0.6	16.9	29.1
1995	828	904	39.6	7.8	9.1	2.6	11.5	3.3	16.8	10.4	5.6	27.1
1995	904	912	113.6	36.3	29.1	1.0	3.5	6.6	26.7	32.1	31.0	47.9
1995	912	918	116.6	26.3	11.7	0.5	4.5	3.3	2.2	10.3	11.3	22.9
1995	918	926	15.2	7.4	99.6	1.8	7.0	18.9	1.2	0.3	107.2	20.8
1995	926	1002	15.3	7.9	49.2	2.0	4.5	10.7	1.7	1.8	56.4	14.6
1995	1002	1009	71.1	44.7	31.3	1.0	5.0	9.0	40.8	58.5	33.9	45.8
1995	1009	1023	39.8		45.2	2.6	29.9	14.8	227.8	317.7	48.0	291.5
1995	1023	1030	12.3	46.8	69.2	1.3	6.0	16.5	4.4	32.8	81.8	41.6
1995	1030	1106	9.9	52.5	119.2	3.1	13.5	28.8	42.0	72.5	138.2	60.4
1995	1106	1113	123.7	18.6	7.4	3.3	4.5	14.0	15.8	13.6	11.3	22.9
1995	1113	1120	26.7	26.3	23.1		6.0	9.0	18.6	19.3	28.2	35.4
1995	1120	1204	51.4	66.1	132.2	5.1	12.5	32.9	97.1	126.0	158.0	95.8
1995	1204	1211	5.5	28.2	319.7	8.2	18.5	81.4	20.9	36.8	397.8	87.4
1995	1211	112	0.2	55.0	55.7	3.3	5.5	14.8	47.4	41.1	62.1	99.9
1996	112	122	25.4	89.1	44.4	4.3	6.5	10.7	68.5	78.2	48.0	110.3
1996	122	205	0.0	47.9	103.5		17.5	28.0	31.2	53.2	110.0	85.4
1996	205	219	0.0	55.0	150.9	5.1	15.0	40.3	30.0	61.8	183.4	85.4
1996	219	311	7.4	40.7	42.2	3.1	5.5	11.5	47.5	38.2	50.8	50.0
1996	311	325	0.0	53.7	192.7	9.5	111.8	62.5	115.7	147.1	160.8	266.5
1996	325	422	72.5	0.7	13.1	21.5	10.5	14.8	95.0	20.3	11.3	33.3
1996	422	429	8.4		45.7		109.3	28.8	214.9	235.6	59.2	279.0
1996	429	514	43.9	63.1	13.9	1.5	11.5	4.1	60.7	65.0	8.5	66.6
1996	514	519	79.0	5.4	17.0	4.3	54.9	15.6	106.4	53.9	14.1	120.8
1996	519	528	52.2	64.2	29.2	3.1	10.0	9.9	68.2	67.1	36.7	83.3
1996	528	610	17.9	75.9	54.4		30.4	24.7	117.1	123.5	70.5	145.8

Precipitation chemistry 1996-97 Units: ueq/l **File: N97.XLS**
EGIL-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1996	610	617	15.2	63.1	49.6	2.3	13.5	14.8	5.2	48.6	33.9	85.4
1996	617	703	19.4	14.8	19.1	2.8	4.5	6.6	1.7	0.4	25.4	20.8
1996	703	708	15.2	24	16.1	1	6	4.9	1.1	0.3	14.1	45.8
1996	708	715	1.9	47.9	17	0.8	2.5	4.1	13.9	34.6	19.7	35.4
1996	715	805	0.0							2.6	25.4	27.1
1996	805	819	22.7	28.2	20	0.8	8	5.8	2.7	13.2	22.6	33.3
1996	819	826	12.3	37.2	27.8	1.5	14.5	7.4	22.6	33.2	33.9	50
1996	826	909	47.1	20.4	4.8	0.5	3	1.6	1.5	11.4	5.6	18.7
1996	909	923	2.0							0.7	245.4	64.5
1996	923	930	79.9	28.2	31.3	3.1	6	9	45.4	51.4	39.5	33.3
1996	930	1007	37.9	27.5	71.3	2	6.5	18.1	1.9	17.9	87.5	33.3
1996	1007	1014	16.5	120.2	165.7	4.3	16	42.8	68.5	134.9	183.4	116.6
1996	1014	1021	161.5	82.2	78.5	3.2	10.5	20.6	64.5	63.6	95.8	110.3
1996	1021	1028	33.8	30.9	74.4	4.3	7	18.1	43.4	48.6	90.3	45.8
1996	1028	1104	27.9	5.5	42.6	2.3	4	9.9	4.1	11.1	56.4	16.7
1996	1104	1202	42.5	6	142.7	5.6	9	37	11.5	13.9	186.2	31.2
1996	1202	1209	12.7	36.3	192.7	5.6	10.5	46.9	19.1	37.8	239.8	52
1996	1209	107	0.2		134.4		9.5	27.1	23.5	61.4	146.7	62.5
1997	107	113	1.0	32.4	50.9	14.1	12	13.2	59	53.6	62.1	77
1997	113	120	8.6						196.1	191.4	129.8	139.5
1997	120	127	1.2		62.6		20.5	18.1	140.2	227.1	76.2	149.9
1997	127	203	3.2	49	190.1	8.7	14	47.7	75.2	85.7	217.2	93.7
1997	203	217	30.3	37.2	209.7	7.4	15	51.8	27.2	35	256.7	72.9
1997	217	227	106.2	24.5	76.1	1.8	5	18.1	19.3	26.1	87.5	31.2
1997	227	317	35.5	28.2	221	5.9	11.5	50.2	12.2	21.1	256.7	54.1
1997	317	324	0.7						263	310.6	352.6	218.6
1997	324	421	170.3	68.3	156.1	4.6	12.5	37.8	42.8	50.5	193.5	90.0
1997	421	505	4.6	16.6	19.1	1.8	7.5	10.7	14.3	20.3	14.1	31.2

Precipitation chemistry 1997-98 Units: ueq/l **File: N98.XLS**
EGIL-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1997	505	512	19.0	14.5	14.4	1.3	2	4.1	19.2	23.9	16.9	22.9
1997	512	609	16.9		117		77.8	35.4	49.6	112.1	53.6	129.1
1997	609	616	1.5		73.5		26.9	35.4	65.7	151.4	70.5	206.1
1997	616	623	41.4	22.4	10.4	1.3	4.5	4.1	17.4	16.1	14.1	33.3
1997	623	701	18.9	30.2	5.7	1	8.5	3.3	8.9	13.9	8.5	45.8
1997	701	722	0.0	28.8	4.3	0.5	7	2.5	1.5	16.1	5.6	27.1
1997	722	811	0.0	0.5	10.4	0.5	9	8.2	1.2	19.6	25.4	31.2
1997	811	825	0.0	51.3	16.5	0.5	11.5	5.8	0.6	24.6	16.9	54.1
1997	825	901	34.5	7.6	9.1	4.3	12.5	8.2	35.3	30	11.3	29.1
1997	901	922	10.3	12.3	28.3	1.5	9.5	10.7	20.1	28.6	39.5	29.1
1997	922	1006	0.0	14.8	28.7	1.3	5.5	8.2	2.1	0.4	36.7	29.1
1997	1006	1013	0.0	25.7	12.6	0.8	4.5	3.3	28.6	34.3	19.7	37.5
1997	1013			30.2	28.7	1.5	3	5.8	20.1	33.9	42.3	27.1
1997	1020	1110	58.9	30.9	39.1	1.8	7	12.3	26.8	42.8	48	41.6
1997	1020	1110	62.8	22.4	47.5	1.0	2	10.8		12.8	55.3	15.4
1997	1110	1117	89.6	34.7	43.5	1.5	9	9	53.3	66.8	48	37.5
1997	1117	1201	16.2	14.8	82.7	6.4	9.5	20.6	60.3	31.1	110	77
1997	1201	1215	88.8	44.7	51.8	2.6	6.5	13.2	35.6	52.5	64.9	47.9
1997	1215	1229	0.0	34.7	20.9	4.3	7.5	5.8	13.6	33.2	22.6	37.5
1997	1229	105	0.1	27.5	33.1	2.8	4	8.2	30.6	38.9	42.3	31.2
1998	105	112	11.2	25.7	23.1	1.5	4.5	6.6	9.8	27.5	28.2	22.9
1998	112	126	0.0	33.9	52.6	1.8	7.5	12.3	36.4	43.6	64.9	43.7
1998	126	216	0.0	58.9	139.6	4.1	11	32.9	33.8	68.2	155.2	75
1998	216	223	13.2								174.9	160.3
1998	223	301	0.0	5.6	285.8	6.6	15	63.3	10.4	9.9	338.5	47.9
1998	301	317	0.0	14.8	179.7	7.2	21.5	42.8	72.5	88.5	205.9	58.3
1998	317	330	44.2	39.8	59.6	2	9	14	102.2	87.8	70.5	68.7
1998	330	406	9.1	22.4	98.7	3.6	11	25.5	42.1	38.6	110	54.1
1998	406	414	54.5	26.9	44.4	1.5	7	10.7	39.6	32.8	50.8	47.9
1998	414	420	90.9	32.4	14.4	0.8	5.5	3.3	41.4	35.3	19.7	54.1
1998	420	426	54.5	49	11.3	1.8	19	4.9	75	71.4	11.3	95.8
1998	426	503	12.7	91.2	6.1	2.3	25.4	5.8	105.7	71.4	8.5	181.1
1998	503	524	0.0						337	269.2	48	289.4

2.2 KIM

Precipitation chemistry 1994-95 Units: ueq/l **File: N95.XLS**
KIM-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1994	526	603	1.1	14.6	28.2	0.6	1.2	6.5	108.5	42.8	32.9	3.4
1994	602	609	0.0	58.9	28.2	0.6	1.2	6.5	3.4	47.1	32.9	3.4
1994	609	616	78.3	1.0	28.2	0.6	1.2	6.5	25.0	25.0	32.9	3.4
1994	616	623	19.1	22.9	28.2	0.6	1.2	6.5	2.2	1.6	32.9	3.4
1994	623	630	11.9	38.9	51.9	1.1	2.3	11.9	2.3	20.0	60.5	6.2
1994	714	721	1.8	1.0	51.9	1.1	2.3	11.9	87.1	0.7	60.5	6.2
1994	722	729	5.7	33.1	51.9	1.1	2.3	11.9	10.6	13.6	60.5	6.2
1994	729	804	15.5	50.1	51.9	1.1	2.3	11.9	22.3	27.9	60.5	6.2
1994	804	810	3.8	1.0	51.9	1.1	2.3	11.9	36.3	42.1	60.5	6.2
1994	810	818	4.8	21.9	51.9	1.1	2.3	11.9	3.9	5.6	60.5	6.2
1994	818	825	14.6	30.2	51.9	1.1	2.3	11.9	16.6	21.4	60.5	6.2
1994	825	901	65.1	30.9	51.9	1.1	2.3	11.9	29.1	27.0	60.5	6.2
1994	901	908	40.0	33.9	51.9	1.1	2.3	11.9	28.9	35.0	60.5	6.2
1994	908	915	63.2	36.3	51.9	1.1	2.3	11.9	8.8	22.9	60.5	6.2
1994	915	922	19.8	11.5	76.1	1.7	3.3	17.4	1.3	5.1	88.7	9.1
1994	922	929	2.1	6.5	76.1	1.7	3.3	17.4	1.6	0.6	88.7	9.1
1994	929	1006	87.3	5.1	76.1	1.7	3.3	17.4	1.8	0.2	88.7	9.1
1994	1013	1024	161.0	52.5	76.1	1.7	3.3	17.4	44.6	57.5	88.7	9.1
1994	1024	1031	31.7	38.9	76.1	1.7	3.3	17.4	18.9	34.3	88.7	9.1
1994	1031	1108	11.2	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1108	1114	0.0	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1114	1121	17.4	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1121	1128	1.0	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1128	1205	20.7	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1205	1212	34.1	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1212	1219	45.7	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1219	1227	10.7	0.0	58.0	1.3	2.5	13.3	0.0	0.0	67.6	7.0
1994	1227	103	15.2	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	103	109	6.9	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	109	116	6.9	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	116	123	45.0	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	123	130	0.0	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	130	206	5.5	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	206	213	10.6	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	213	220	34.4	0.0	92.0	2.0	4.0	21.0	0.0	0.0	107.2	11.0
1995	220	227	25.4	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	227	306	19.9	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	306	313	12.6	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	313	327	19.1	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	327	410	3.1	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	410	418	0.0	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	418	425	10.8	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	424	502	117.7	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	502	508	75.8	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	508	515	116.6	0.0	34.9	0.8	1.5	8.0	0.0	0.0	40.7	4.2
1995	515	522	75.5	0.0	172.1	3.8	7.5	39.4	0.0	0.0	200.6	20.7
1995	522	531	16.9	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	531	606	4.8	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6

Precipitation chemistry 1995-96 Units: ueq/l **File: N96.XLS**
KIM-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1995	606	612	34.5	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	612	619	20.8	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	619	626	7.3	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	626	703	0.9	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	703	711	2.1	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	711	717	4.6	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	717	724	16.8	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	724	731	0.0	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	731	807	0.0	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	807	814	1.7	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	814	821	30.9	0.0	63.5	1.4	2.8	14.5	0.0	0.0	74.0	7.6
1995	821	828	69.4	0.0	42.8	0.9	1.9	9.8	0.0	0.0	49.8	5.1
1995	828	904	8.7	0.0	42.8	0.9	1.9	9.8	0.0	0.0	49.8	5.1
1995	904	912	74.3	0.0	42.8	0.9	1.9	9.8	0.0	0.0	49.8	5.1
1995	912	918	93.0	0.0	42.8	0.9	1.9	9.8	0.0	0.0	49.8	5.1
1995	918	926	10.5	0.0	42.8	0.9	1.9	9.8	0.0	0.0	49.8	5.1
1995	926	1002	10.6	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1002	1009	35.4	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1009	1016	0.0	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1016	1023	0.0	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1023	1030	24.6	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1030	1106	60.5	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1106	1113	43.9	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1113	1120	38.3	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1120	1204	44.9	0.0	54.3	1.2	2.4	12.4	0.0	0.0	63.3	6.5
1995	1204	1211	8.5	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1995	1211	112	0.0	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	112	122	44.4	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	122	129	0.0	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	129	205	0.0	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	205	219	0.0	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	219	311	0.0	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	311	325	3.3	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	325	415	71.5	0.0	103.1	2.2	4.5	12.4	0.0	0.0	120.1	23.6
1996	415	422	13.4	0.0	86.0	1.9	3.7	10.3	0.0	0.0	100.3	19.7
1996	422	429	0.0	0.0	86.0	1.9	3.7	10.3	0.0	0.0	100.3	19.7
1996	429	514	25.8	0.0	86.0	1.9	3.7	10.3	0.0	0.0	100.3	19.7
1996	514	519	97.1	0.0	66.4	1.4	2.9	8.0	0.0	0.0	77.4	15.2
1996	519	528	45.8	0.0	66.4	1.4	2.9	8.0	0.0	0.0	77.4	15.2
1996	528	610	10.0	0.0	66.4	1.4	2.9	8.0	0.0	0.0	77.4	15.2

Precipitation chemistry 1996-97 Units: ueq/l **File: N97.XLS**
KIM-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1996	610	617	9.1	0.0	66.4	1.4	2.9	15.2	0.0	0.0	77.4	8.0
1996	617	703	13.1	0.0	66.4	1.4	2.9	15.2	0.0	0.0	77.4	8.0
1996	703	708	23.1	0.0	66.4	1.4	2.9	15.2	0.0	0.0	77.4	8.0
1996	708	715	1.7	0.0	66.4	1.4	2.9	15.2	0.0	0.0	77.4	8.0
1996	715	805	21.8	0.0	47.8	1.0	2.1	10.9	0.0	0.0	55.7	5.7
1996	805	819	31.3	0.0	47.8	1.0	2.1	10.9	0.0	0.0	55.7	5.7
1996	819	826	34.2	0.0	47.8	1.0	2.1	10.9	0.0	0.0	55.7	5.7
1996	826	909	59.6	0.0	47.8	1.0	2.1	10.9	0.0	0.0	55.7	5.7
1996	909	923	1.1	0.0	47.8	1.0	2.1	10.9	0.0	0.0	55.7	5.7
1996	923	930	72.1	0.0	47.8	1.0	2.1	10.9	0.0	0.0	55.7	5.7
1996	930	1007	27.4	0.0	47.8	1.0	2.1	10.9	0.0	0.0	55.7	5.7
1996	1007	1014	8.2	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.5	6.9
1996	1014	1021	47.8	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.5	6.9
1996	1021	1028	17.2	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.5	6.9
1996	1028	1104	29.2	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.5	6.9
1996	1104	1202	59.9	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.5	6.9
1996	1202	1209	42.2	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.5	6.9
1996	1209	107	1.5	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	107	113	3.2	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	113	120	5.2	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	120	127	0.0	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	127	203	3.8	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	203	217	5.1	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	217	227	29.3	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	227	324	40.7	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	317	324	62.8	0.0	72.3	1.6	3.2	16.5	0.0	0.0	84.3	8.7
1997	324	421	188.6	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.4	6.9
1997	421	505	9.0	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.4	6.9

Precipitation chemistry 1997-98 Units: ueq/l ikke sikkert denne er riktig File: N98.XLS
KIM-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1997	505	512	14.9	0.0	57.9	1.3	2.5	13.2	0.0	0.0	67.4	6.9
1997	512	609	10.9	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	609	616	1.8	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	616	623	49.6	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	623	701	21.7	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	701	722	11.7	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	722	811	15.3	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	811	825	10.0	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	825	901	0.0	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	901	922	32.9	0.0	78.1	1.7	3.4	17.9	0.0	0.0	91.0	9.4
1997	922	1006	8.1	0.0	94.4	2.1	4.1	21.6	0.0	0.0	110.0	11.3
1997	1006	1013	26.4	0.0	94.4	2.1	4.1	21.6	0.0	0.0	110.0	11.3
1997	1013	1020	88.9	0.0	94.4	2.1	4.1	21.6	0.0	0.0	110.0	11.3
1997	1020	1110	17.9	0.0	28.2	0.6	1.2	6.5	0.0	0.0	32.9	3.4
1997	1110	1117	79.9	0.0	28.2	0.6	1.2	6.5	0.0	0.0	32.9	3.4
1997	1117	415	17.5	0.0	28.2	0.6	1.2	6.5	0.0	0.0	32.9	3.4
1997	1201	1215	42.8	0.0	28.2	0.6	1.2	6.5	0.0	0.0	32.9	3.4
1997	1215	1229	5.8	0.0	28.2	0.6	1.2	6.5	0.0	0.0	32.9	3.4
1997	1229	105	0.4	0.0	28.2	0.6	1.2	6.5	0.0	0.0	32.9	3.4
1998	105	112	23.9	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	112	126	24.7	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	126	216	6.9	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	216	223	1.7	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	223	301	9.6	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	301	317	4.6	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	317	330	13.3	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	330	406	0.0	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	406	414	19.9	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	414	420	27.7	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	420	426	10.8	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	426	503	14.2	0.0	75.2	1.6	3.3	17.2	0.0	0.0	87.7	9.0
1998	503	512	132.3	0.0	89.4	1.9	3.9	20.5	0.0	0.0	104.2	10.7
1998	503	524	113.0	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7

Precipitation chemistry 1998-99 Units: ueq/l **File: N99.XLS**
KIM-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1998	524	823	30.2	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7
1998	601	615	28.8	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7
1998	615	622	18.5	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7
1998	622	628	52.9	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7
1998	628	706	0.0	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7
1998	706	713	23.3	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7
1998	713	720	26.4	0.0	39.5	0.9	1.7	9.0	0.0	0.0	46.1	4.7
1998	720	728	12.0	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	728	803	30.0	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	803	810	34.5	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	810	817	9.2	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	817	824	10.3	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	824	831	3.9	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	831	907	0.0	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	907	914	64.3	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	914	921	15.4	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	921	1012	20.0	0.0	69.9	1.5	3.0	16.0	0.0	0.0	81.5	8.4
1998	1012	1019	19.1	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1998	1019	1026	2.8	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1998	1026	1104	35.1	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1998	1104	1118	21.2	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1998	1118	1123	2.0	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1998	1123	1129	10.0	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1998	1129	1218	145.3	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1998	1218	106	0.4	0.0	50.4	1.1	2.2	11.5	0.0	0.0	58.8	6.1
1999	106	121	55.8	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	121	130	3.4	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	130	208	3.1	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	208	214	0.7	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	214	226	8.8	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	226	306	11.7	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	306	312	0.7	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	312	322	9.8	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	322	330	19.1	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	330	406	4.5	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	406	413	13.2	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	413	419	1.8	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	419	506	131.6	0.0	66.5	1.4	2.9	15.2	0.0	0.0	77.5	8.0
1999	506	512	127.4	0.0	78.6	1.7	3.4	18.0	0.0	0.0	91.6	9.4
1999	512	520	3.6	0.0	14.4	0.3	0.6	3.3	0.0	0.0	16.8	1.7
1999	520	525	3.8	0.0	14.4	0.3	0.6	3.3	0.0	0.0	16.8	1.7

2.3 ROLF

Precipitation chemistry 1994-95 Units: ueq/l **File: N95.XLS**
ROLF-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1994	526	602	3.5		26.5		25	13.2	108.5	42.8	31	85.4
1994	602	616	8.3	58.9	130.1	10.2	25	33.7	3.4	47.1	126.9	79.1
1994	616	623	26.4	22.9	13.5	5.1	3.5	4.9	2.2	1.6	16.9	35.4
1994	623	722	20.3	38.9	5.2	1.5	17.5	4.1	2.3	20	8.5	45.8
1994	722	729	13.7	33.1	11.3	3.1	4.5	2.5	10.6	13.6	5.6	50
1994	729	804	31.4	50.1	7	0.5	5.5	0.4	22.3	27.8	14.1	62.5
1994	804	810	6.8		3		10.5	3.3	36.3	42.1	5.6	64.5
1994	810	818	7.9	21.9	7.4		6.5	2.5	3.9	5.6	8.5	35.4
1994	818	825	66.7	30.2	0.9	1	1	0.4	16.6	21.4	14.1	37.5
1994	825	901	79.4	30.9	22.2	0.8	2	5.8	29.1	27	31	41.6
1994	901	908	68.0	33.9	28.7	1.5	1	5.8	28.8	35	42.3	47.9
1994	908	915	96.9	36.3	48.3	2	2.5	6.6	8.8	22.8	59.2	29.1
1994	915	922	36.2	11.5	10	4.3	1	4.1	1.3	5.1	14.1	12.5
1994	922	929	7.0	6.5	15.2	1.8	2.5	3.3	1.6	0.6	16.9	10.4
1994	929	1013	14.6	5.1	3.9	1	18	14	1.8	0.2	5.6	4.2
1994	1013	1024	47.6	52.5	85.7	5.1	10.5	20.6	44.6	57.5	87.5	58.3
1994	1024	1031	71.5	38.9	61.3		5.5	15.6	18.9	34.3	67.7	39.6
1994	1031	1108	7.3	58.9	120.5	4.1	10.5	28.8	42.8	41.8	129.8	85.4
1994	1108	1114	37.8	28.2	40.9	1.3	1	8.2	16.3	18.9	45.1	39.6
1994	1114	1128	30.8	15.5	18.3	0.8	1	12.3	5.2	9.7	22.6	14.6
1994	1128	1205	28.6	37.2	32.6	0.8	8	7.4	24.1	35.3	38	41.6
1994	1205	1212	67.0	22.9	112.7	2.6	7.5	23.9	22.6	28.9	132.6	37.5
1994	1212	1219	73.7	38	65.3	2	5	14	34.4	32.5	76.2	47.9
1994	1219	1227	28.6	28.8	103.1	4.1	6.5	19.7	15.7	24.3	104.4	37.5
1994	1227	103	31.8	11.5	39.6	1.8	3.5	9.9	10.4	10.7	53.6	18.7
1995	103	109	10.2	81.3	156.2	10	14.5	41.1	17.6	60.7	155.2	89.5
1995	109	116	12.7	33.9	103.1	2.3	8.5	25.5	18.3	32.5	115.7	45.8
1995	116	130	127.1	38	142.2	3.3	8.5	29.6	50	53.2	149.5	60.4
1995	130	206	28.6	30.9	116.6	2.6	7	26.3	9.1	28.2	126.9	37.5
1995	206	213	19.1	18.2	24.4	0.5	2.5	4.1	7.4	19.3	22.6	14.6
1995	213	220	69.9	31.6	61.3	1.5	5.5	14	26.8	38.6	70.5	37.5
1995	220	227	64.8	23.4	123.1	2	8	27.1	6.4	18.6	143.9	35.4
1995	227	306	24.1	34.7	72.2	1.3	5.5	16.5	42	53.2	81.8	41.6
1995	306	313	49.2	85.1	49.6	2	5.5	11.5	85.7	92.8	59.2	89.5
1995	313	410	36.8	58.9	153.1	2.3	13.5	33.7	102.8	82.5	174.9	120.8
1995	410	418	12.7	21.9	138.8	3.3	9.5	30.4	14.8	22.8	160.8	43.7
1995	418	424	4.1	158.5	180.5	12.8	18.5	45.2	29.1	77.8	211.6	133.2
1995	424	502	6.4	17.4	21.8	4.1	52.4	15.6	85	67.5	11.3	127
1995	502	508	38.0	0.9	8.7	2	4.5	6.6	20.8	15	11.3	16.7
1995	508	515	20.7	1.6	10.4	1	4.5	3.3	16.9	13.9	14.1	22.9
1995	515	522	7.3	0.7	38.3	3.1	6.5	10.7	32.8	18.9	45.1	37.5
1995	522	531	24.1	13.8	3.5	1.5	3	1.6	35.3	23.6	5.6	50
1995	531	606	7.0	1.4	44.4	4.6	4.5	13.2	21.6	17.1	53.6	35.4

Precipitation chemistry 1995-96 Units: ueq/l **File: N96.XLS**
ROLF-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1995	606	612	75.9	21.9	12.2	1.8	3	3.3	19.1	26.8	14.1	29.1
1995	612	619	36.9	34.7	5.2	1	3.5	2.5	24.1	37.8	8.5	39.6
1995	619	704	4.1		5.7	0.8	6.5	3.3	1	0.3	5.6	37.5
1995	704	711	3.0		10.9		10.5	9	2.7	0.3	16.9	54.1
1995	711	717	20.6	13.2	3.9	0.5	4.5	1.6	2.2	3.7	5.6	20.8
1995	717	724	20.7	13.2	3.9	0.5	4.5	1.6	2.2	3.7	5.6	20.8
1995	724	821		31.6	9.1	0.5	5	3.3	1.9	3.4	14.1	43.7
1995	821	828	20.4	11	16.1	3.6	7	4.9	2.4	0.6	16.9	29.1
1995	828	904	41.7	7.8	9.1	2.6	11.5	3.3	16.8	10.4	5.6	27.1
1995	904	912	117.5	36.3	29.1	1	3.5	6.6	26.7	32.1	31	47.9
1995	912	918	130.5	26.3	11.7	0.5	4.5	3.3	2.2	10.3	11.3	22.9
1995	918	926	19.7	7.4	99.6	1.8	7	18.9	1.2	0.3	107.2	20.8
1995	926	1002	16.6	7.9	49.2	2	4.5	10.7	1.7	1.8	56.4	14.6
1995	1002	1009	70.7	44.7	31.3	1	5	9	40.8	58.5	33.9	45.8
1995	1009	1023	32.4		45.2	2.6	29.9	14.8	227.8	317.7	48	291.5
1995	1023	1030	19.7	46.8	69.2	1.3	6	16.5	4.4	32.8	81.8	41.6
1995	1030	1106	10.8	52.5	119.2	3.1	13.5	28.8	42	72.5	138.2	60.4
1995	1106	1113	4.5	18.6	7.4	3.3	4.5	14	15.8	13.6	11.3	22.9
1995	1113	1120	3.2	26.3	23.1		6	9	18.6	19.3	28.2	35.4
1995	1120	1204	16.9	66.1	132.2	5.1	12.5	32.9	97.1	126	158	95.8
1995	1204	1211	26.1	28.2	319.7	8.2	18.5	81.4	20.9	36.8	397.8	87.4
1995	1211	112	30.6	55	55.7	3.3	5.5	14.8	47.4	41.1	62.1	99.9
1996	112	122	52.8	89.1	44.4	4.3	6.5	10.7	68.5	78.2	48	110.3
1996	122	129	4.7	47.9	103.5		17.5	28	31.2	53.2	110	85.4
1996	205	219	15.9	55	150.9	5.1	15	40.3	30	61.8	183.4	85.4
1996	219	311	52.8	40.7	42.2	3.1	5.5	11.5	47.5	38.2	50.8	50
1996	311	325	5.1	53.7	192.7	9.5	111.8	62.5	115.7	147.1	160.8	266.5
1996	325	422	8.8	0.7	13.1	21.5	10.5	14.8	95	20.3	11.3	33.3
1996	422	429	3.2		45.7		109.3	28.8	214.9	235.6	59.2	279
1996	429	514	30.2	63.1	13.9	1.5	11.5	4.1	60.7	65	8.5	66.6
1996	514	519	15.8	5.4	17	4.3	54.9	15.6	106.4	53.9	14.1	120.8
1996	519	528	58.6	64.2	29.2	3.1	10	9.9	68.2	67.1	36.7	83.3
1996	528	610	6.1	75.9	54.4		30.4	24.7	117.1	123.5	70.5	145.8

Precipitation chemistry 1996-97 Units: ueq/l **File: N97.XLS**
ROLF-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1996	610	617	8.6	63.1	49.6	2.3	13.5	14.8	5.2	48.6	33.9	85.4
1996	617	703	22.6	14.8	19.1	2.8	4.5	6.6	1.7	0.4	25.4	20.8
1996	703	708	38.2	24	16.1	1	6	4.9	1.1	0.3	14.1	45.8
1996	708	715	1.6	47.9	17	0.8	2.5	4.1	13.9	34.6	19.7	35.4
1996	715	805	0.0							2.6	25.4	27.1
1996	805	819	73.2	28.2	20	0.8	8	5.8	2.7	13.2	22.6	33.3
1996	819	826	49.3	37.2	27.8	1.5	14.5	7.4	22.6	33.2	33.9	50
1996	826	909	89.4	20.4	4.8	0.5	3	1.6	1.5	11.4	5.6	18.7
1996	909	923	1.6							0.7	245.4	64.5
1996	923	930	103.8	28.2	31.3	3.1	6	9	45.4	51.4	39.5	33.3
1996	930	1007	46.5	27.5	71.3	2	6.5	18.1	1.9	17.9	87.5	33.3
1996	1007	1014	8.9	120.2	165.7	4.3	16	42.8	68.5	134.9	183.4	116.6
1996	1014	1021	55.7	44.7	20.4	2	8	7.4	64.5	48.2	28.2	81.2
1996	1021	1028	40.1	30.9	74.4	4.3	7	18.1	43.4	48.6	90.3	45.8
1996	1028	1104	26.1	5.5	42.6	2.3	4	9.9	4.1	11.1	56.4	16.7
1996	1104	1202	117.5	6	142.7	5.6	9	37	11.5	13.9	186.2	31.2
1996	1202	1209	73.5	36.3	192.7	5.6	10.5	46.9	19.1	37.8	239.8	52
1996	1209	107	4.1		134.4		9.5	27.1	23.5	61.4	146.7	62.5
1997	107	113	7.6	32.4	50.9	14.1	12	13.2	59	53.6	62.1	77
1997	113	120	2.1						196.1	191.4	129.8	139.5
1997	120	127	3.2		62.6		20.5	18.1	140.2	227.1	76.2	149.9
1997	127	203	7.0	49	190.1	8.7	14	47.7	75.2	85.7	217.2	93.7
1997	203	217	10.8	37.2	209.7	7.4	15	51.8	27.2	35	256.7	72.9
1997	217	227	145.2	24.5	76.1	1.8	5	18.1	19.3	26.1	87.5	31.2
1997	227	317	29.6	28.2	221	5.9	11.5	50.2	12.2	21.1	256.7	54.1
1997	317	324	2.8						263	310.6	352.6	218.6
1997	324	402	21.9	30.2	62.6	2.6	8.5	16.5	42.8	35	84.6	56.2
1997	421	505	15.3	16.6	19.1	1.8	7.5	10.7	14.3	20.3	14.1	31.2

Precipitation chemistry 1997-98 Units: ueq/l **File: N98.XLS**
ROLF-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1997	505	512	35.6	14.5	14.4	1.3	2	4.1	19.2	23.9	16.9	22.9
1997	512	609	3.5		117		77.8	35.4	49.6	112.1	53.6	129.1
1997	609	616	2.8		73.5		26.9	35.4	65.7	151.4	70.5	206.1
1997	616	623	80.2	22.4	10.4	1.3	4.5	4.1	17.4	16.1	14.1	33.3
1997	623	701	36.6	30.2	5.7	1	8.5	3.3	8.9	13.9	8.5	45.8
1997	701	722	20.6	28.8	4.3	0.5	7	2.5	1.5	16.1	5.6	27.1
1997	722	811	25.4	0.5	10.4	0.5	9	8.2	1.2	19.6	25.4	31.2
1997	811	825	16.8	51.3	16.5	0.5	11.5	5.8	0.6	24.6	16.9	54.1
1997	825	901	98.6	7.6	9.1	4.3	12.5	8.2	35.3	30	11.3	29.1
1997	901	922	97.7	12.3	28.3	1.5	9.5	10.7	20.1	28.6	39.5	29.1
1997	922	1006	5.0	14.8	28.7	1.3	5.5	8.2	2.1	0.4	36.7	29.1
1997	1006	1013	103.7	25.7	12.6	0.8	4.5	3.3	28.6	34.3	19.7	37.5
1997	1013	1020	19.1	30.2	28.7	1.5	3	5.8	20.1	33.9	42.3	27.1
1997	1020	1110	51.8	30.9	39.1	1.8	7	12.3	26.8	42.8	48	41.6
1997	1110	1117	72.2	34.7	43.5	1.5	9	9	53.3	66.8	48	37.5
1997	1117	1201	17.5	14.8	82.7	6.4	9.5	20.6	60.3	31.1	110	77
1997	1201	1215	66.8	44.7	51.8	2.6	6.5	13.2	35.6	52.5	64.9	47.9
1997	1215	1229	48.3	34.7	20.9	4.3	7.5	5.8	13.6	33.2	22.6	37.5
1997	1229	105	77.0	27.5	33.1	2.8	4	8.2	30.6	38.9	42.3	31.2
1998	105	112	22.9	25.7	23.1	1.5	4.5	6.6	9.8	27.5	28.2	22.9
1998	112	126	38.2	33.9	52.6	1.8	7.5	12.3	36.4	43.6	64.9	43.7
1998	126	216	13.6	58.9	139.6	4.1	11	32.9	33.8	68.2	155.2	75
1998	216	223	0.6								174.9	160.3
1998	223	301	14.9	5.6	285.8	6.6	15	63.3	10.4	9.9	338.5	47.9
1998	301	317	16.2	14.8	179.7	7.2	21.5	42.8	72.5	88.5	205.9	58.3
1998	317	330	33.7	39.8	59.6	2	9	14	102.2	87.8	70.5	68.7
1998	330	406	11.1	22.4	98.7	3.6	11	25.5	42.1	38.6	110	54.1
1998	406	414	75.1	26.9	44.4	1.5	7	10.7	39.6	32.8	50.8	47.9
1998	414	420	50.2	32.4	14.4	0.8	5.5	3.3	41.4	35.3	19.7	54.1
1998	420	426	25.4	49	11.3	1.8	19	4.9	75	71.4	11.3	95.8
1998	426	503	14.0	91.2	6.1	2.3	25.4	5.8	105.7	71.4	8.5	181.1
1998	503	524	2.2						337	269.2	48	289.4

Precipitation chemistry 1998-99 Units: ueq/l **File: N99.XLS**
ROLF-N

	dON	dOFF	mm	H+	Na	K	Ca	Mg	NH4	NO3	Cl	SO4
1998	524	601	30.2	5.4	5.5	16.5	6.6	63	19.5	22.6	29.6	28.9
1998	601	608	48.0	23.4	17.8	2	6.5	6.6	16.4	21.1	22.6	33.3
1998	615	622	41.3	14.5	31.8	1.8	9.0	9.9	6.4	10.2	39.5	27.1
1998	622	628	77.6	25.1	10	0.5	6	4.9	22.5	32.1	16.9	29.1
1998	628	706	6.0	7.4	10.4		9	9	9.6	0.4	16.9	22.9
1998	706	713	31.1	10.5	7.4	0.5	4.5	3.7	2.1	1.5	11.3	16.7
1998	713	720	41.0	24.5	63.1	1.5	6.5	14.8	0.7	13.9	76.2	27.1
1998	720	728	21.9	41.7	26.5	2	14.5	10.7	24.2	46.8	28.2	52
1998	728	803	17.1	34.7	3.9	1.0	4.0	1.2	5.6	25.7	5.6	29.1
1998	803	810	40.0	12.3	36.1	1.8	8	10.7	1.4	9.7	45.1	20.8
1998	810	817	26.4	27.5	18.3	1.5	7.5	8.2	6.1	17.5	25.4	37.5
1998	817	824	14.0	1.0	29.1	4.1	7.5	7.4	29.8	14.3	33.9	22.9
1998	824	831	7.3	3.2	7	2	7.5	3.3	2.6	0.5	14.1	8.3
1998	831	907	10.1	56.2	30.9	6.1	21	14	25.3	44.6	39.5	83.3
1998	907	914	103.1	37.2	30.9	2.6	11.0	8.2	22.9	42.5	36.7	43.7
1998	914	921	7.0	0.7	64.4		25	23	65	22.5	79	39.6
1998	921	1012	73.5	36.3	35.7	8.9	13	17.3	31.3	26.8	50.8	66.6
1998	1012	1019	42.0	3.4	36.5	3.8	6.5	11.5	17.0	11.4	48.0	14.6
1998	1019	1026	121.9	6.3	52.2	1.8	6	15.6	9.7	11.8	64.9	14.6
1998	1026	1104	25.7	2.6	94	11.8	10	24.7	6.9	3.6	101.6	20.8
1998	1104	1118	57.3	14.1	76.6	3.1	7.0	19.7	15.2	21.4	95.9	31.2
1998	1118	1123	27.0	52.5	131.8	4.1	14.5	31.3	36	56.4	152.3	75
1998	1123	1129	12.7	229.1	226.2	8.2	24.5	42.8	271.3	324.9	253.9	258.2
1998	1129	1218	21.4	63.1	87.4	4.3	11.0	25.5	60.7	88.5	93.1	97.9
1998	1218	106	119.4	30.2	122.2	3.8	9.5	28	35.5	36.8	141	50
1999	106	121	100.2	16.2	117.5	12.8	11.5	26.3	19.8	32.5	129.8	37.5
1999	121	130	21.3	11.0	27.8	1.8	5.5	5.8	2.9	9.1	33.9	10.4
1999	130	208	14.6	18.6	84	2.6	12	15.6	1.1	12.9	98.7	18.7
1999	208	214	0.6								536	478.9
1999	214	226	51.5	9.3	15.2	0.8	5.0	3.3	4.1	8.9	16.9	12.5
1999	226	306	80.5	21.9	57.9	1.3	10	14	14.7	24.3	64.9	29.1
1999	306	312	14.0	37.2	13.5	1.8	12.5	3.3	35.1	31.4	16.9	68.7
1999	312	322	43.2	46.8	29.1	0.5	8.0	6.6	58.5	44.6	33.9	72.9
1999	322	330	23.8	38	46.1	1	11	11.5	89.3	91.7	50.8	60.4
1999	330	406	6.3	9.5	15.2	3.3	11.5	4.9	43.6	38.6	8.5	39.6
1999	406	413	33.4	12.6	11.7	1.0	2.0	2.5	16.9	20.3	16.9	18.7
1999	413	419	29.9	23.4	7.8	0.5	4.7	1.6	15.7	28.6	8.5	18.7
1999	419	506	10.5	18.6	20.4	3.1	11	10.7	78.5	70	19.7	52
1999	506	512	60.4	5.0	26.5	5.6	13.5	5.8	16.6	13.6	22.6	22.9
1999	512	520	5.7	7.2	23.9	2.6	8.5	4.1	10.8	0.3	28.2	10.4
1999	520	525	10.5	22.4	104.8	2.6	15	26.3	3.4	13.9	126.9	41.6

3. RUNOFF

3.1 Chemistry – Figures

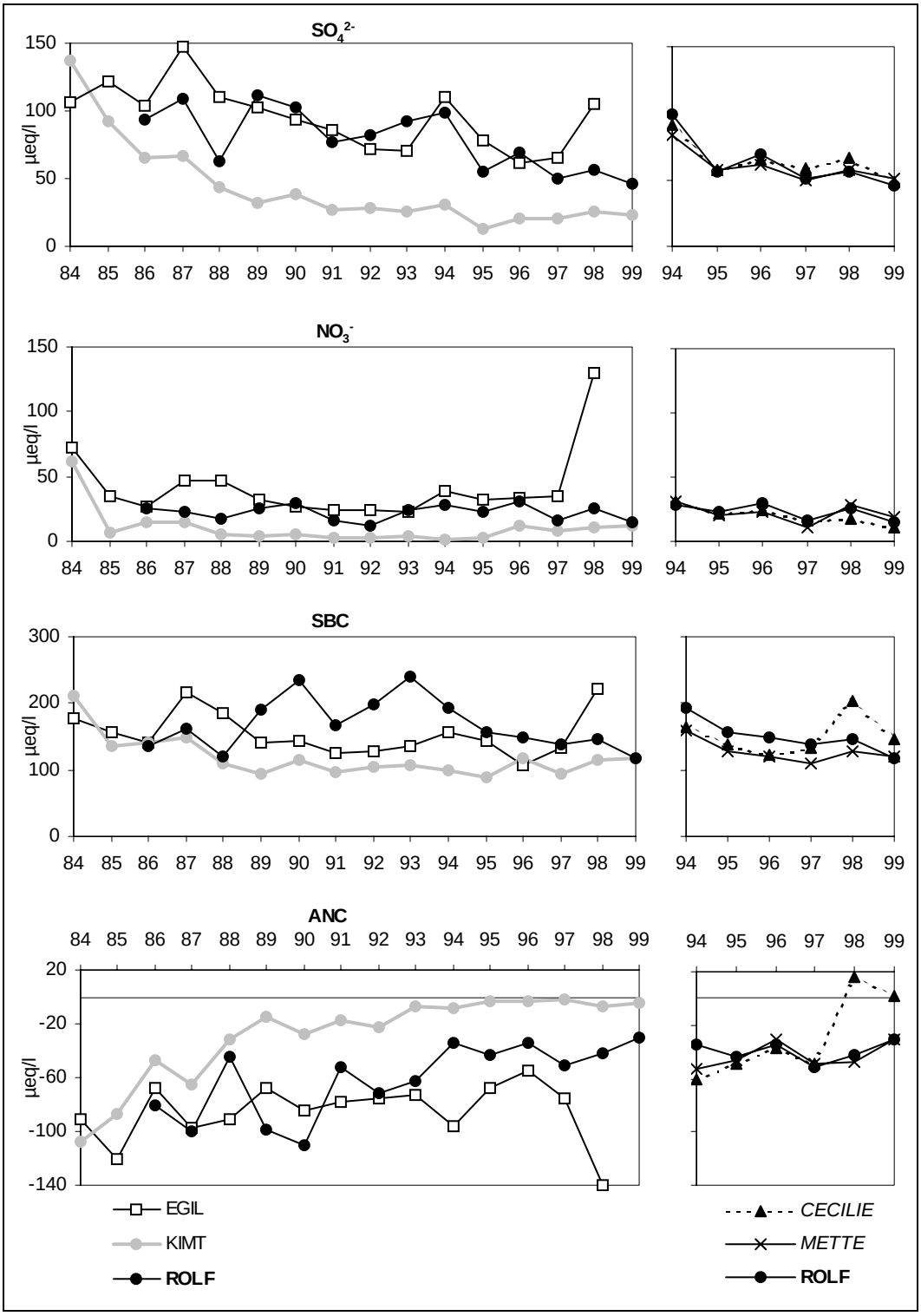


Figure 1. Volume-weighted concentrations of major ions in runoff from EGIL (roof, acid), KIM (roof, clean), ROLF (no roof acid) catchments at Risdalsheia for RAIN-project period 1984 - 1994, extended with data from the CLIMEX-period 1994 -1999. Comparison of ROLF, METTE and CECILIE (no roof, acid) during the CLIMEX period.

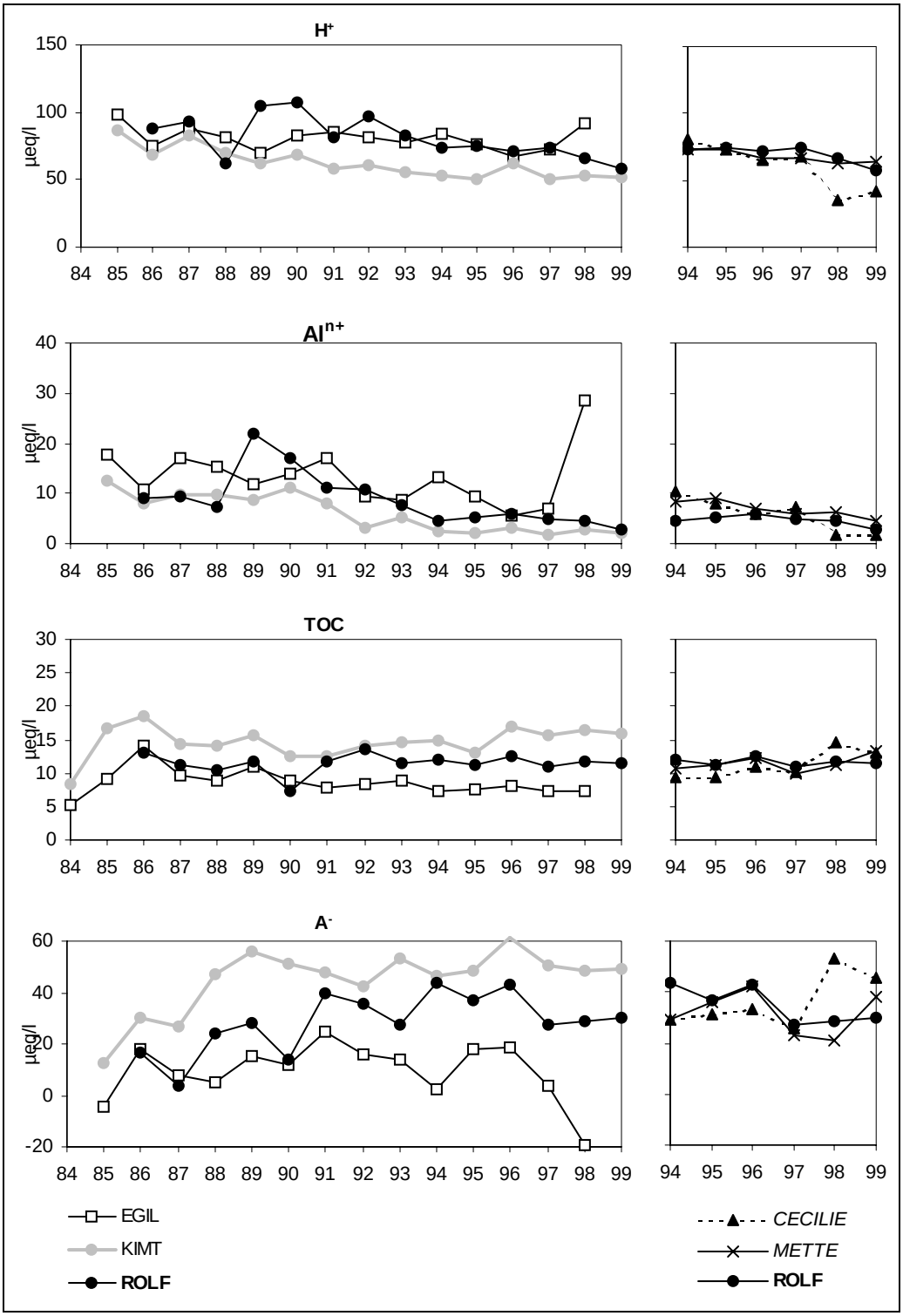
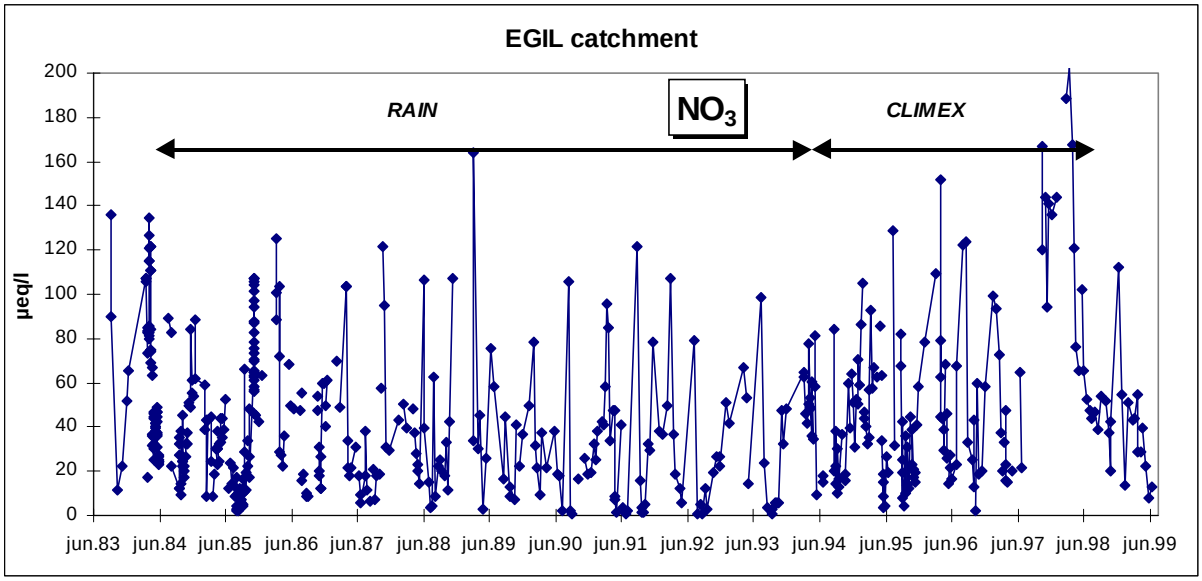
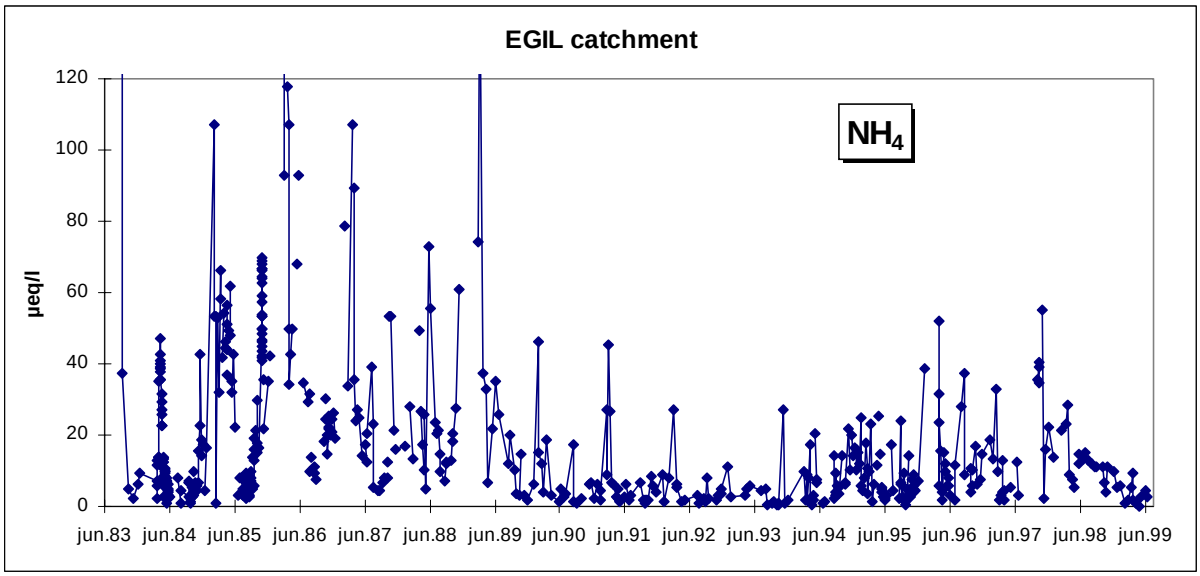
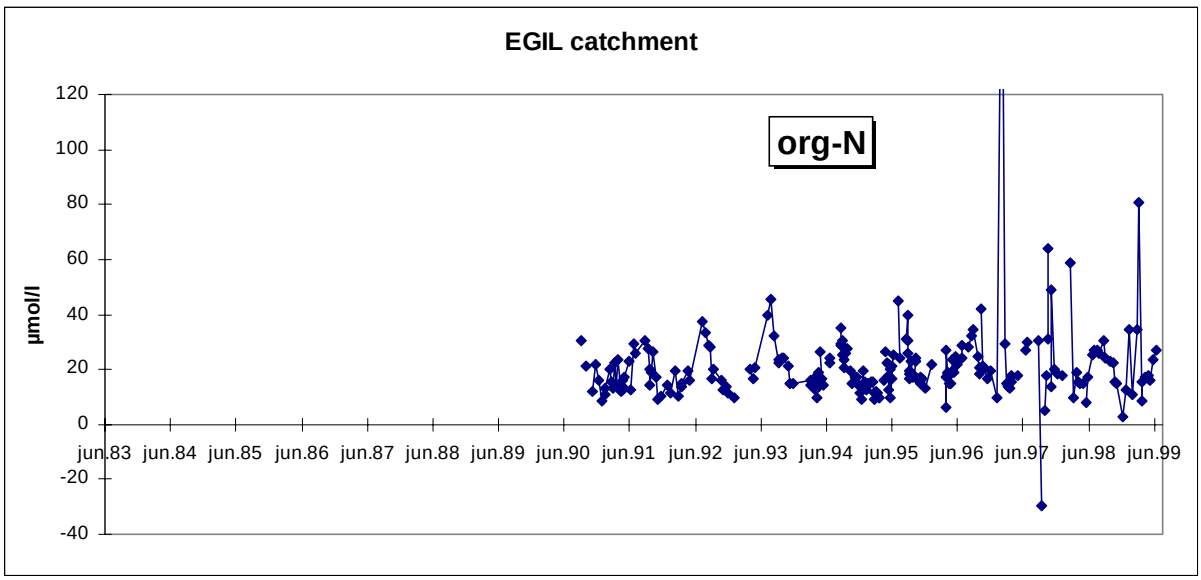
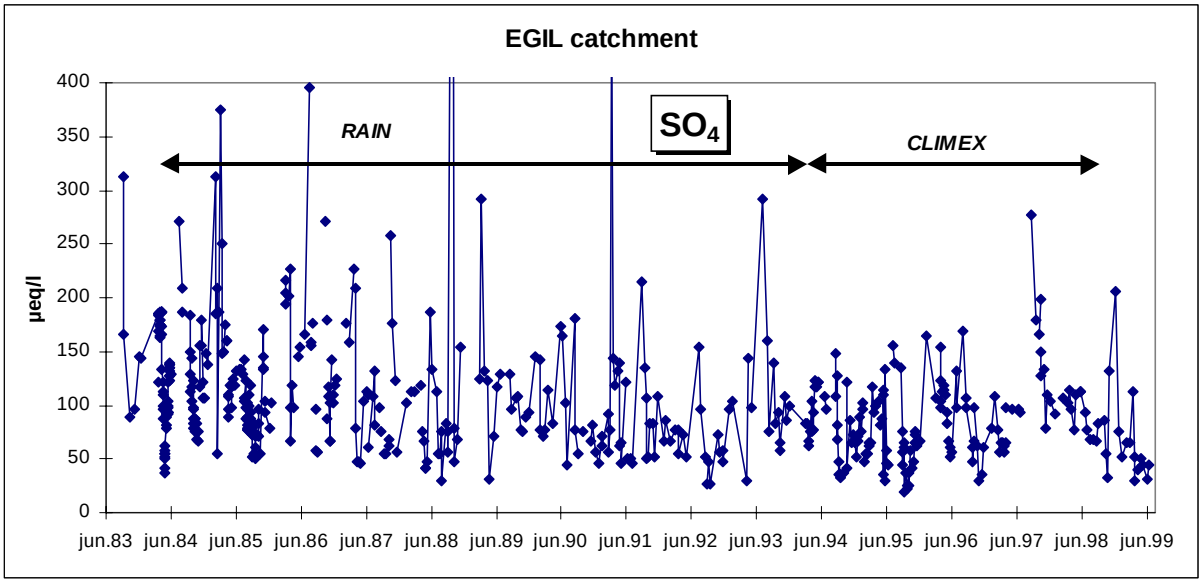


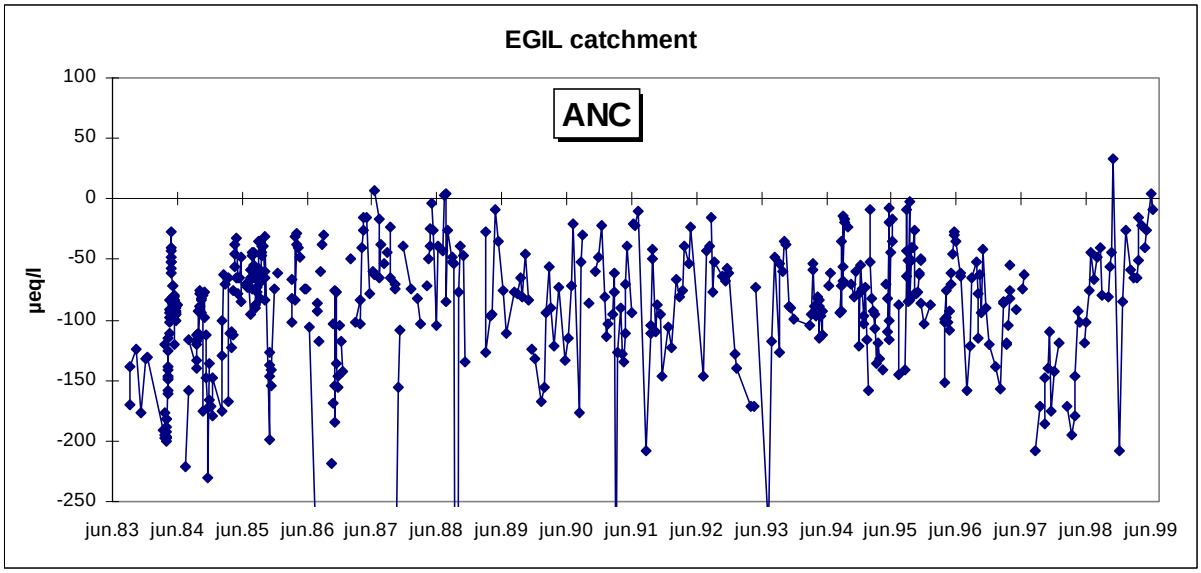
Figure 2. Volume-weighted concentrations of major ions in runoff from EGIL (roof, acid), KIM (roof, clean), ROLF (no roof acid) catchments at Risdalsheia for RAIN-project period 1984 - 1994, extended with data from the CLIMEX-period 1994 -1999. Comparison of ROLF, METTE and CECILIE (no roof, acid) during the CLIMEX period.

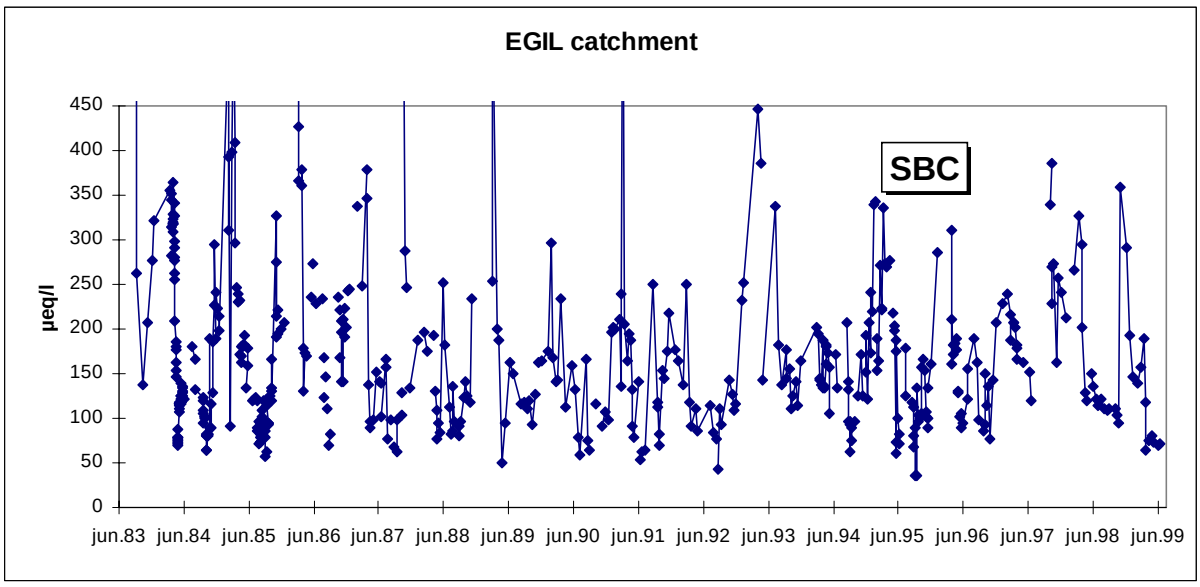

EGIL catchment
RAIN
NO3
CLIMEX
µeq/l
200
180
160
140
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

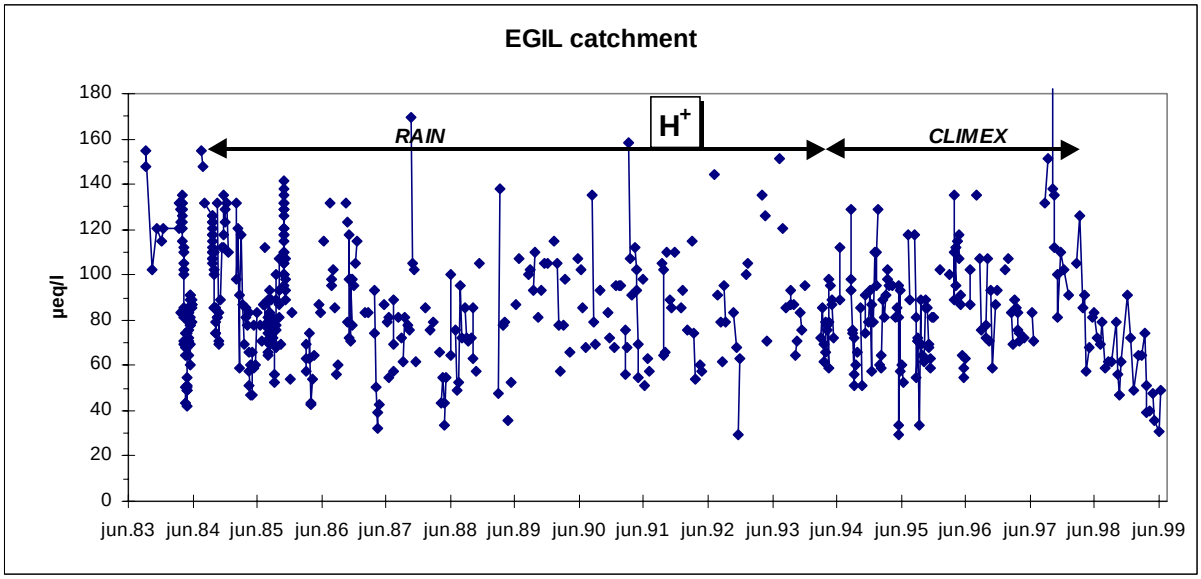

EGIL catchment
NH4
µeq/l
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

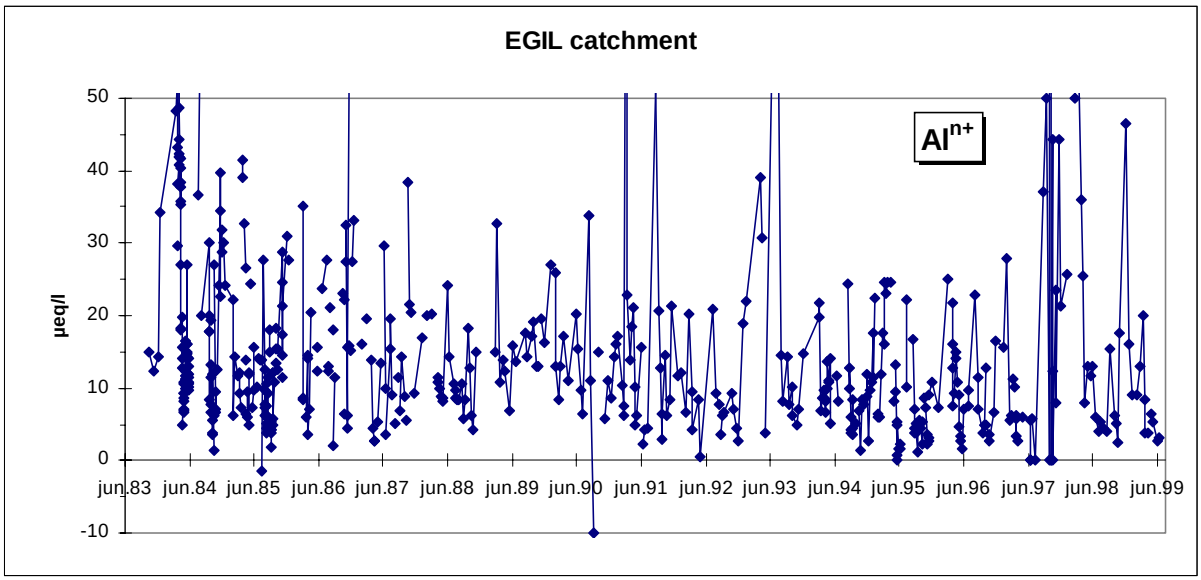

EGIL catchment
org-N
µmol/l
120
100
80
60
40
20
0
-20
-40
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

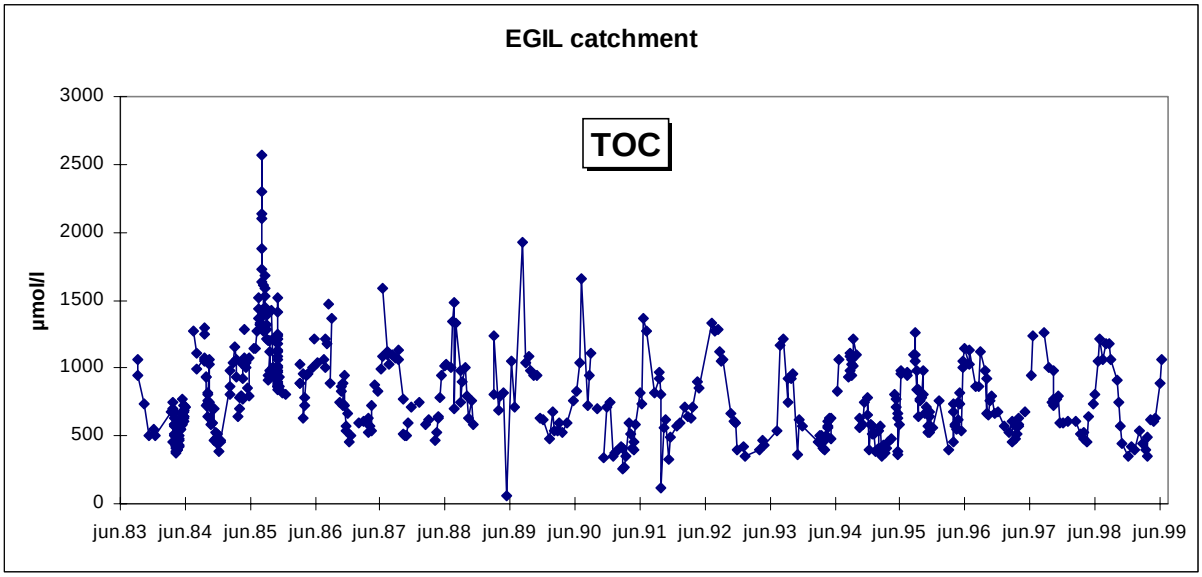

EGIL catchment
SO4
RAIN
CLIMEX
µeq/l
400
350
300
250
200
150
100
50
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

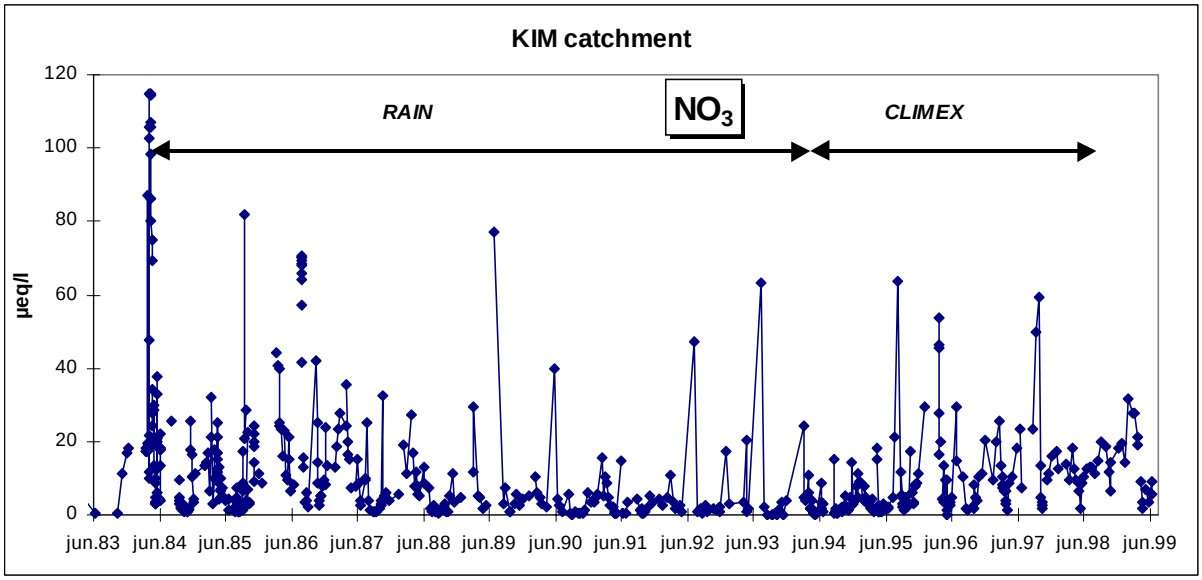

EGIL catchment
ANC
µeq/l
100
50
0
-50
-100
-150
-200
-250
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

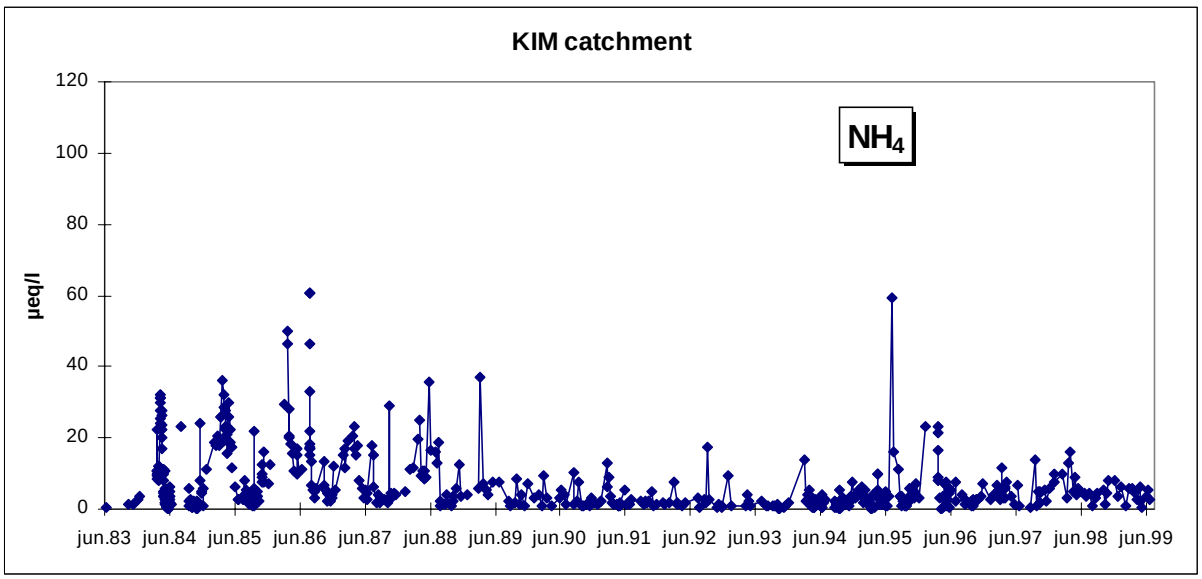

EGIL catchment
SBC
µeq/l
450
400
350
300
250
200
150
100
50
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


EGIL catchment
H+
RAIN
CLIMEX
µeq/l
180
160
140
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


EGIL catchment
Al n+
µeq/l
50
40
30
20
10
0
-10
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


EGIL catchment
TOC
µmol/l
3000
2500
2000
1500
1000
500
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


KIM catchment
RAIN
NO3
CLIMEX
µeq/l
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


KIM catchment
NH4
µeq/l
120
100
80
60
40
20
0
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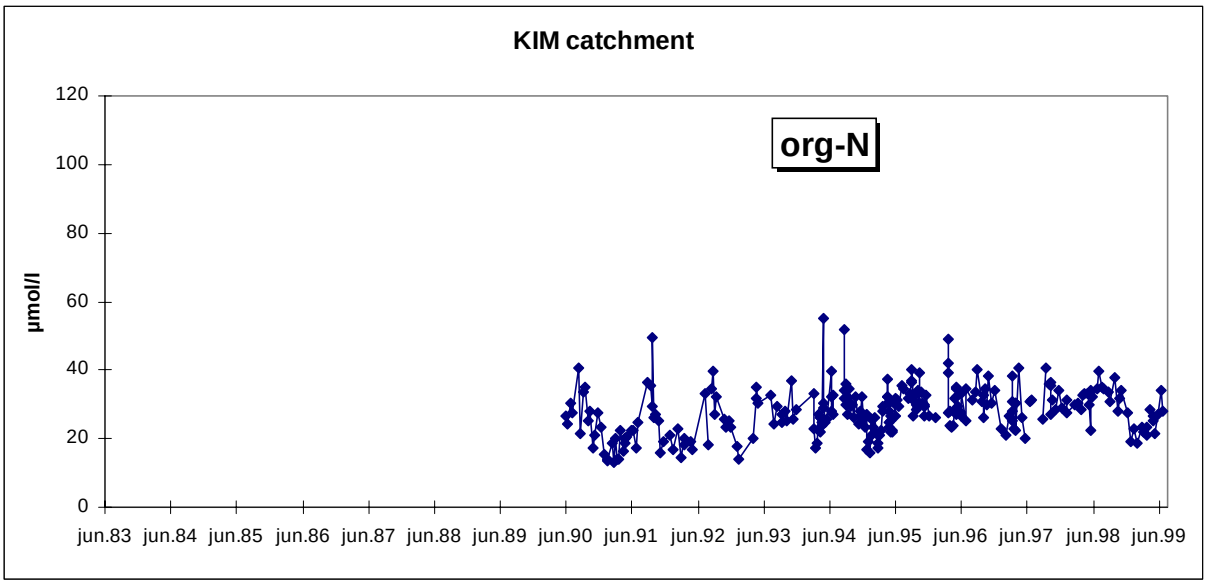
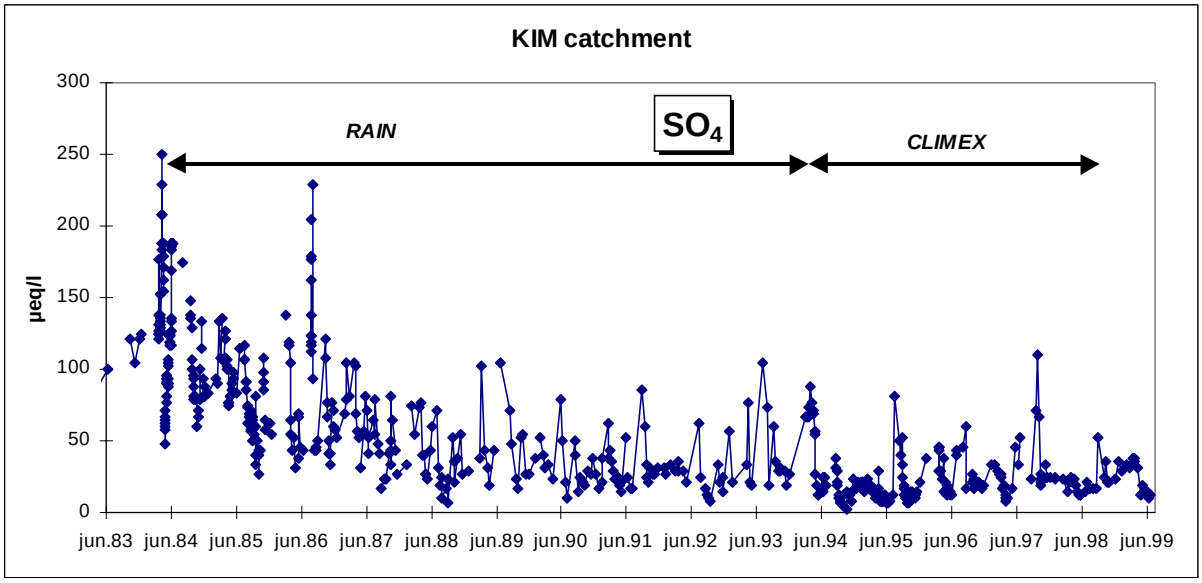
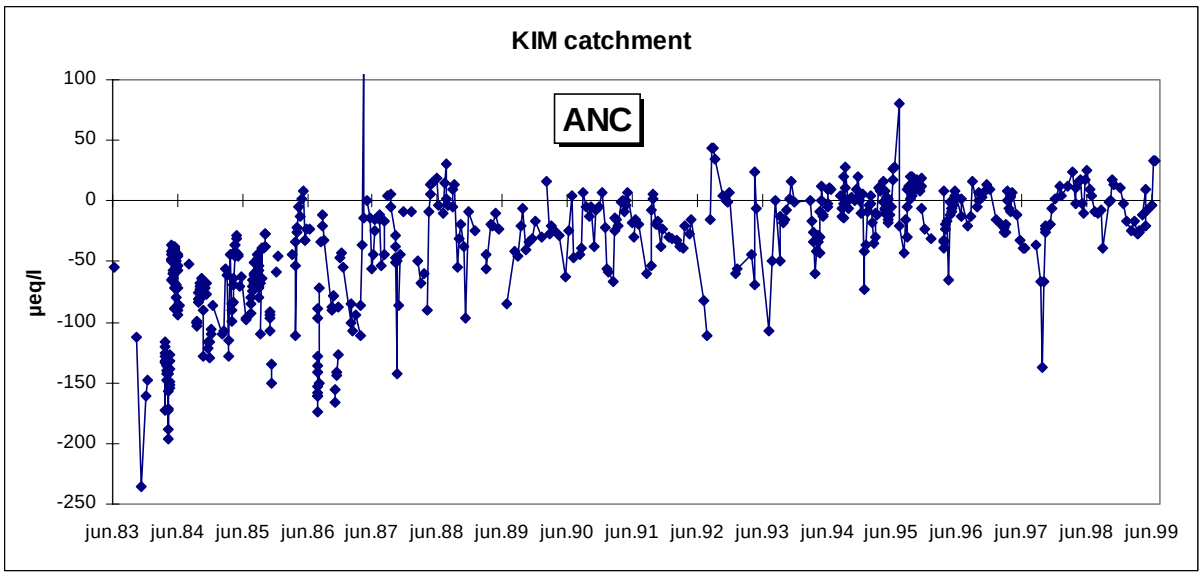
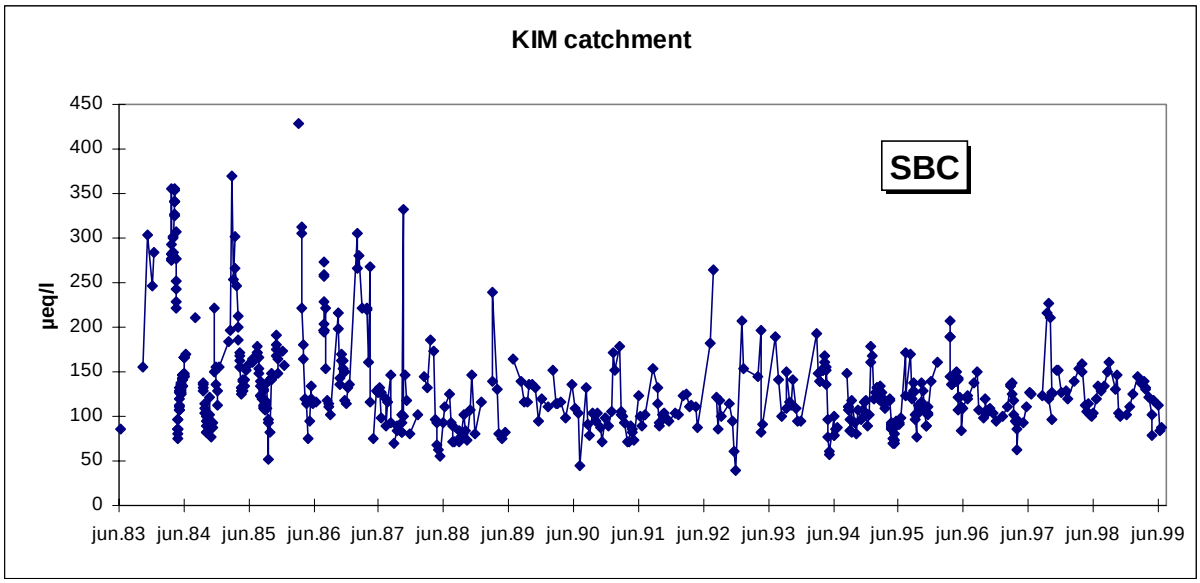
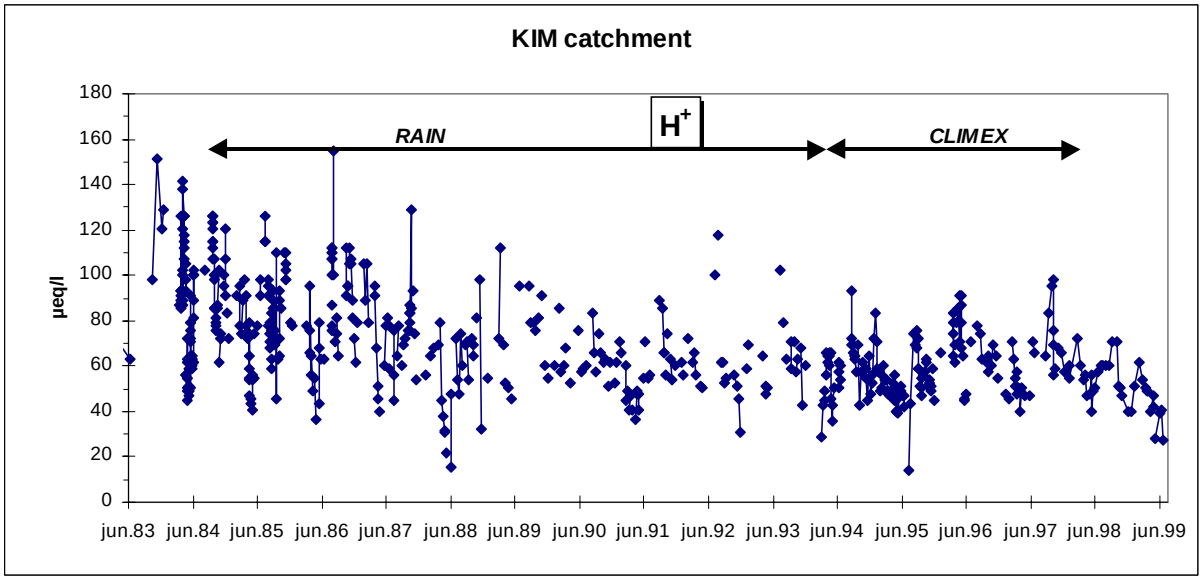
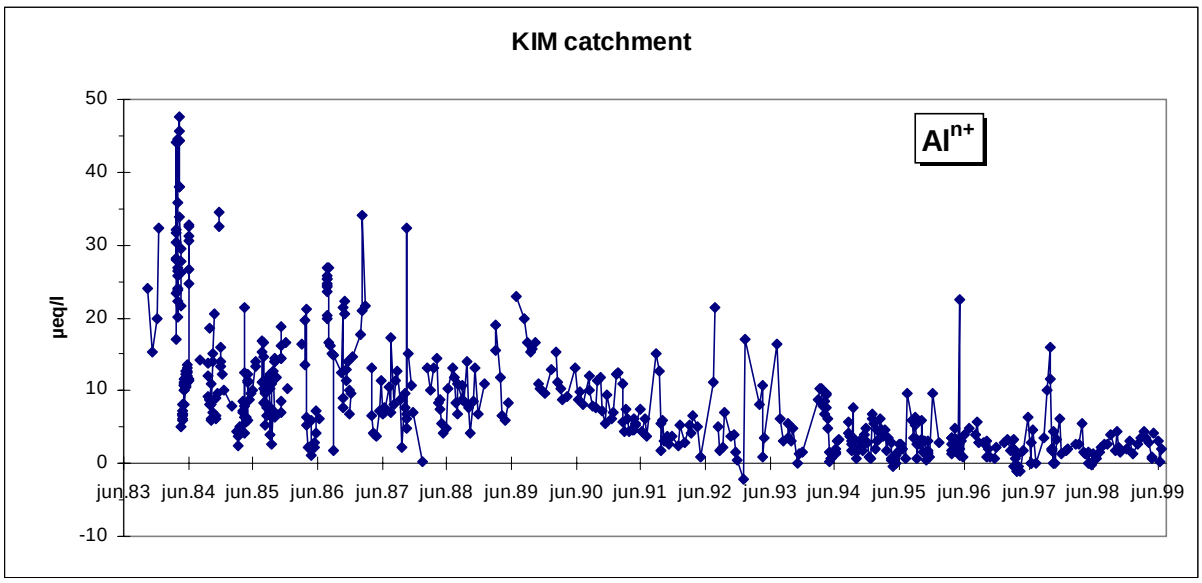

KIM catchment
org-N
µmol/l
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

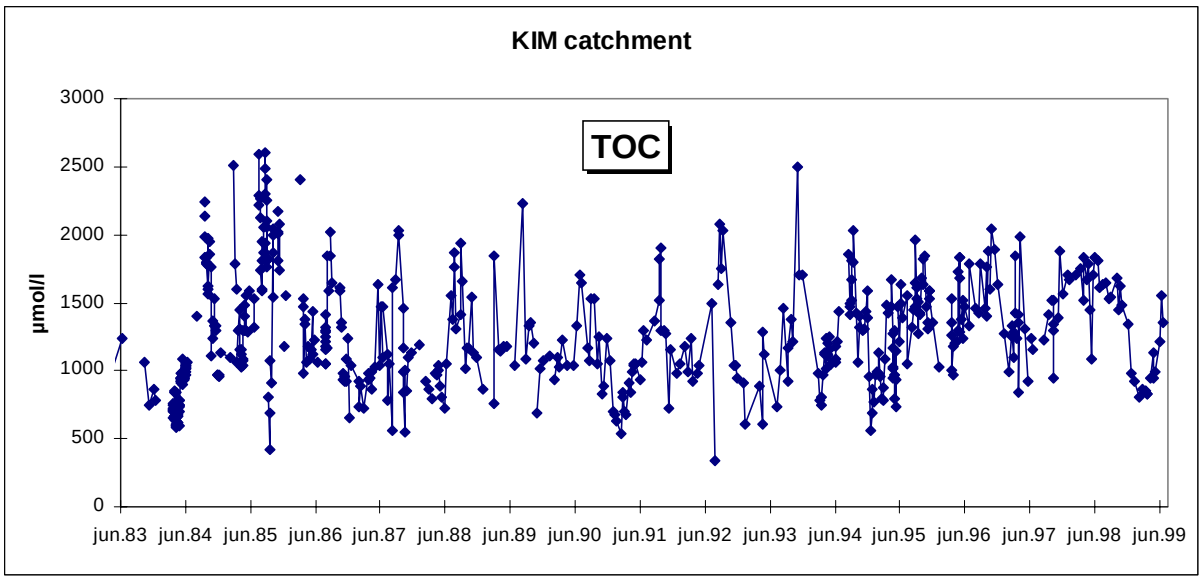

KIM catchment
SO4
RAIN
CLIMEX
µeq/l
300
250
200
150
100
50
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

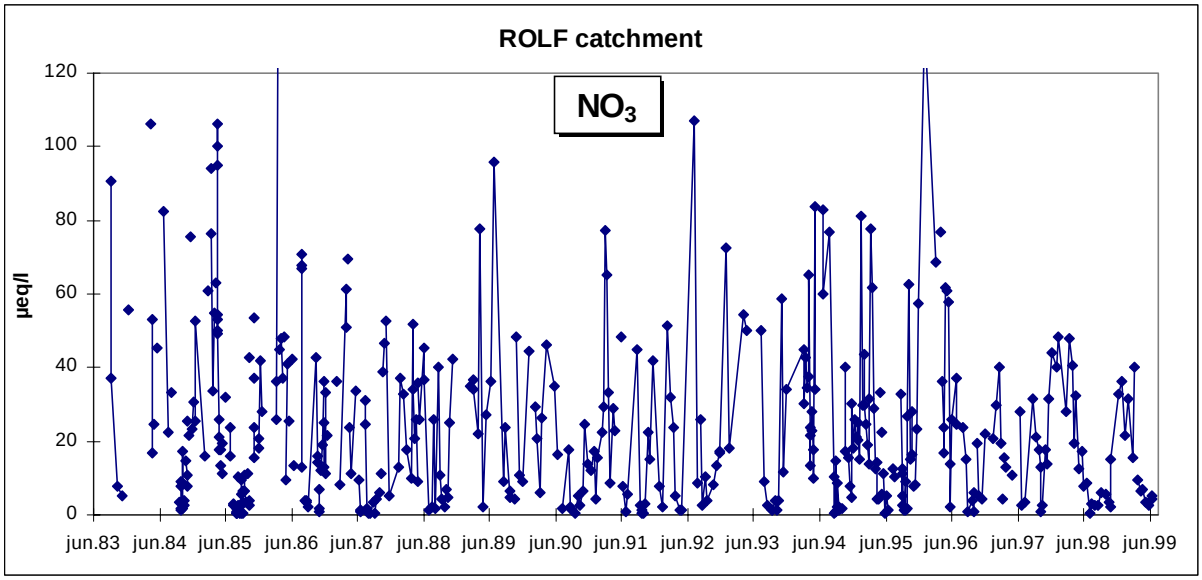

KIM catchment
ANC
µeq/l
100
50
0
-50
-100
-150
-200
-250
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

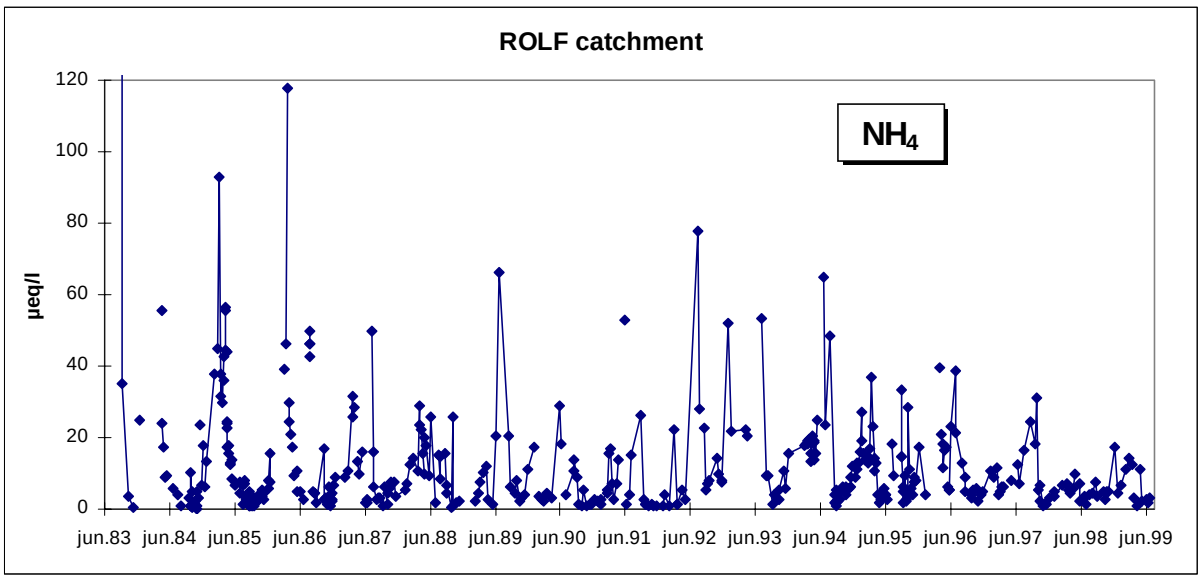

KIM catchment
SBC
µeq/l
450
400
350
300
250
200
150
100
50
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

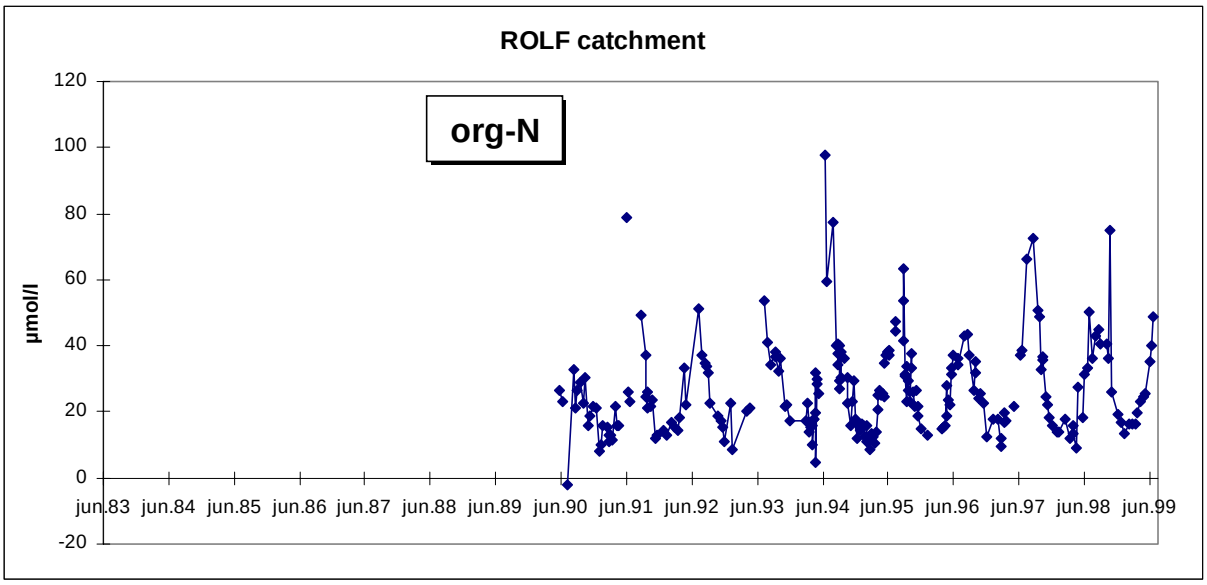

KIM catchment
H+
RAIN
CLIMEX
µeq/l
180
160
140
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

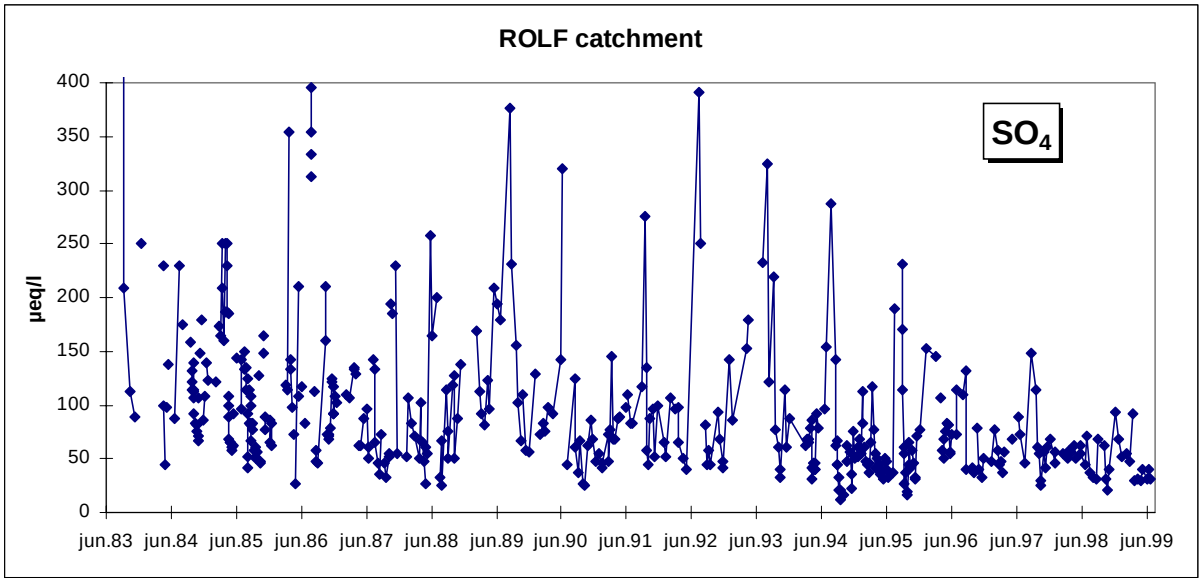

KIM catchment
Al n+
µeq/l
50
40
30
20
10
0
-10
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

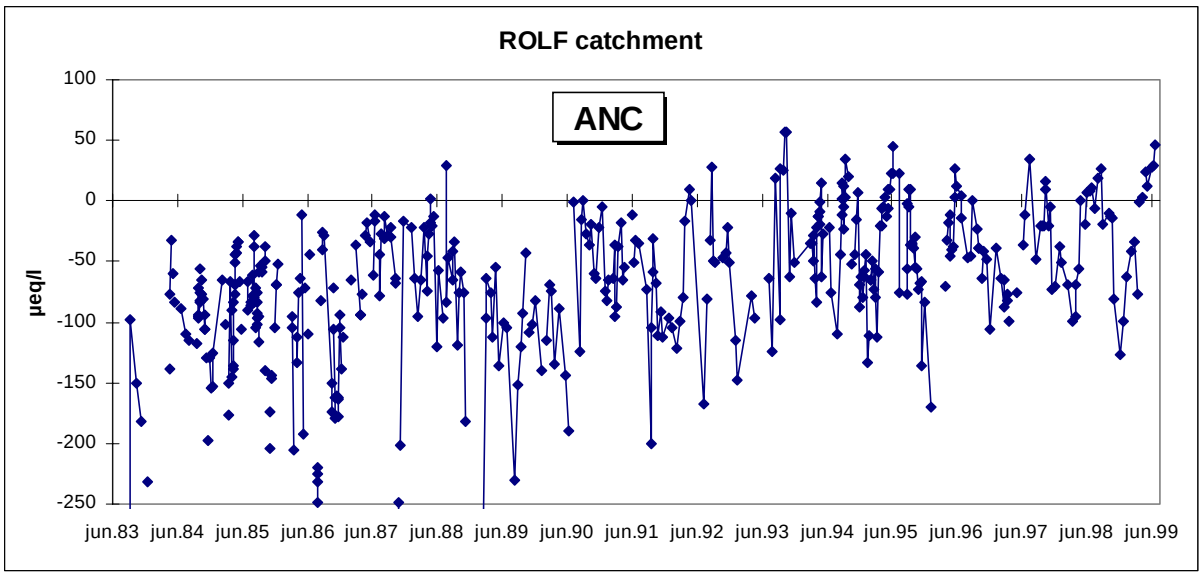

KIM catchment
TOC
µmol/l
3000
2500
2000
1500
1000
500
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

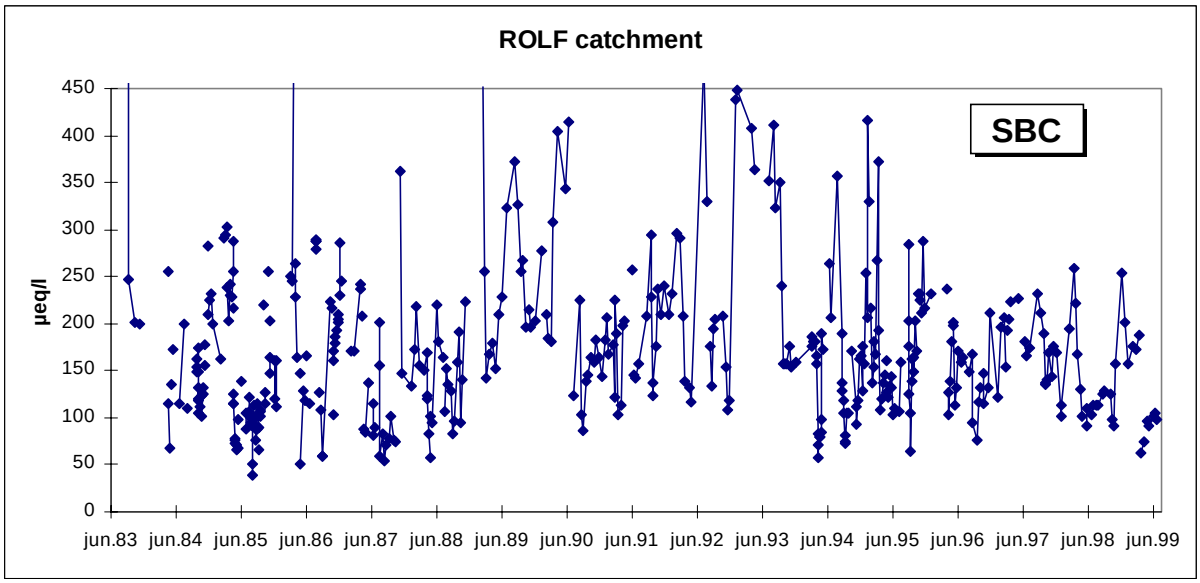

ROLF catchment
NO3
µeq/l
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

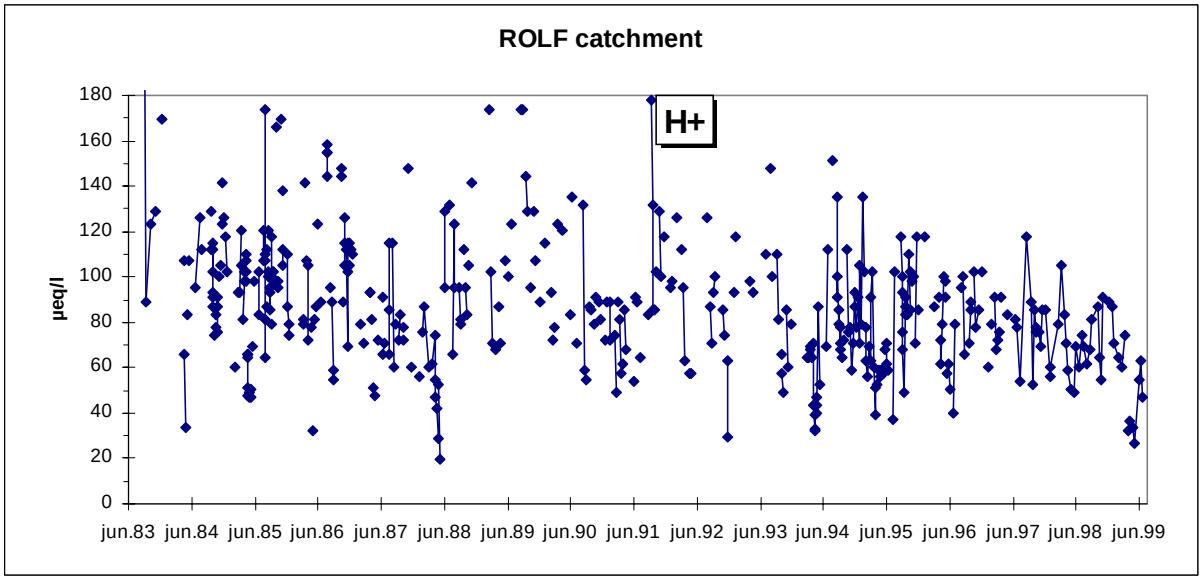

ROLF catchment
NH4
µeq/l
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

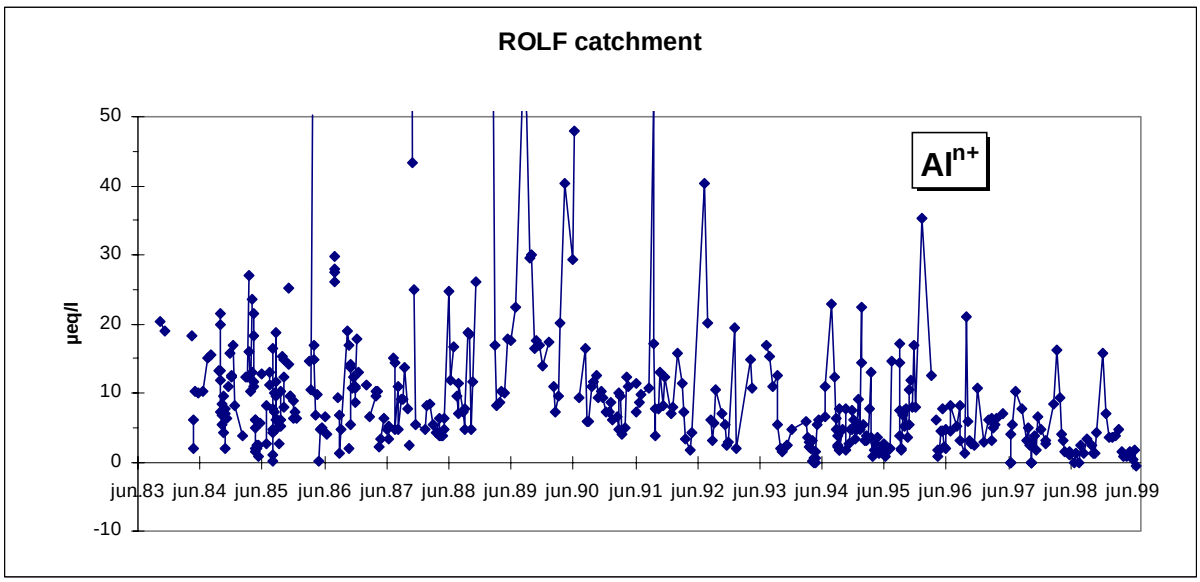

ROLF catchment
org-N
µmol/l
120
100
80
60
40
20
0
-20
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

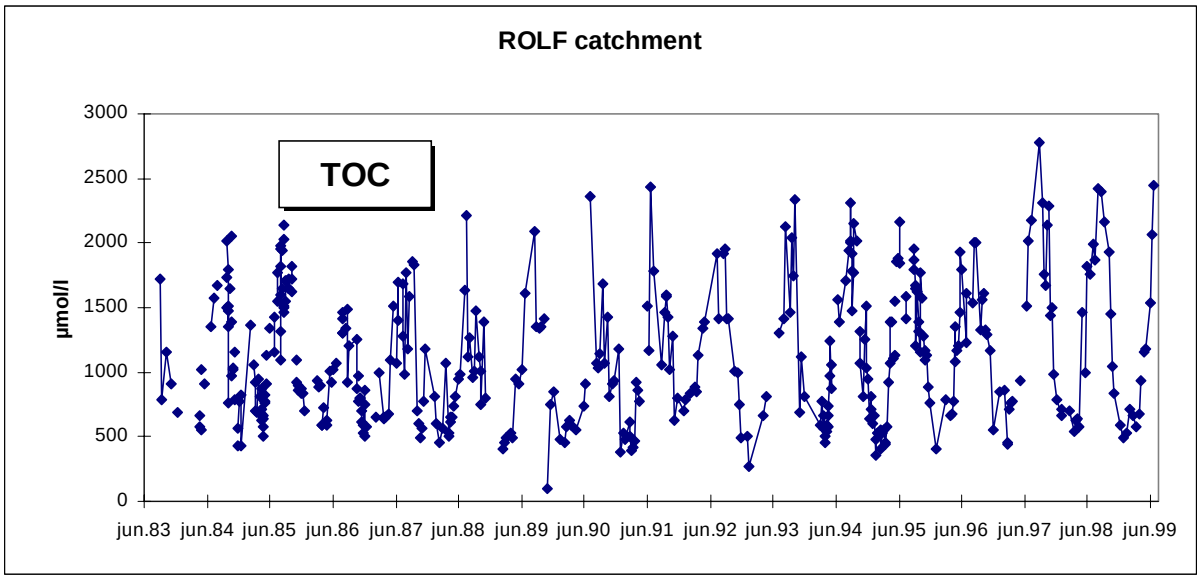

ROLF catchment
SO4
µeq/l
400
350
300
250
200
150
100
50
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

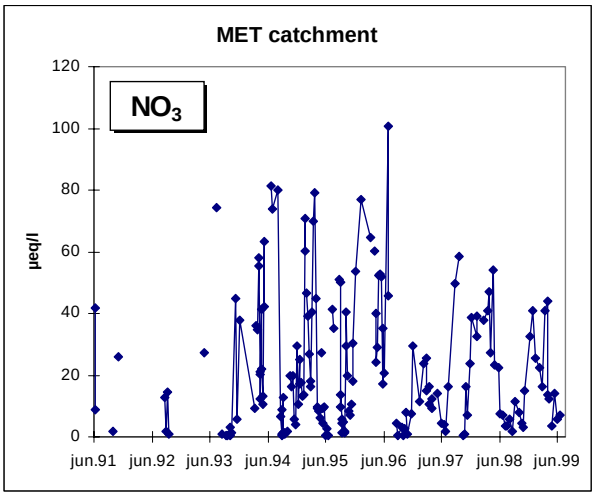

ROLF catchment
ANC
µeq/l
100
50
0
-50
-100
-150
-200
-250
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

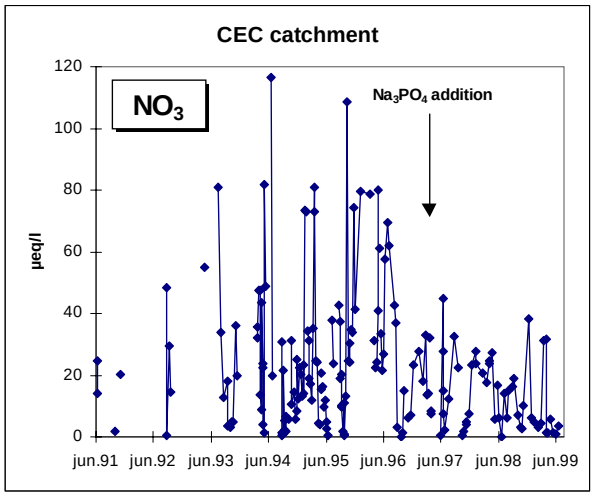

ROLF catchment
SBC
µeq/l
450
400
350
300
250
200
150
100
50
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

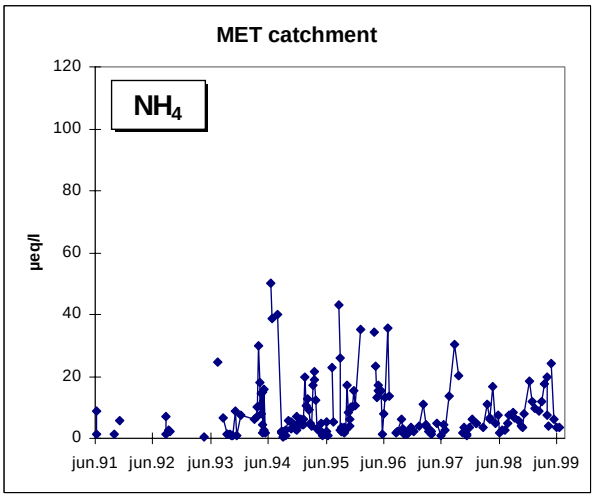

ROLF catchment
H+
µeq/l
180
160
140
120
100
80
60
40
20
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

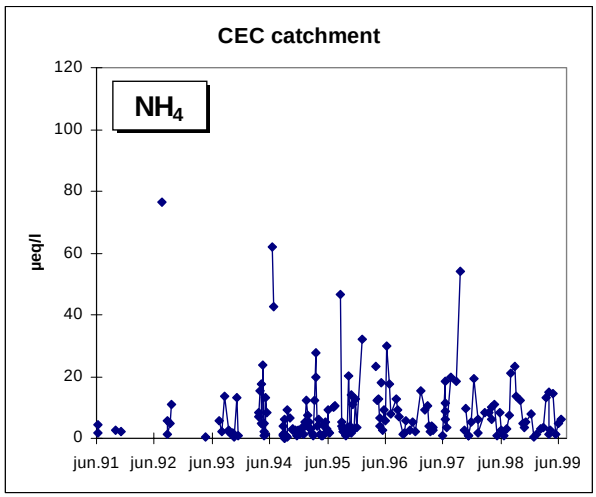

ROLF catchment
Al n+
µeq/l
50
40
30
20
10
0
-10
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

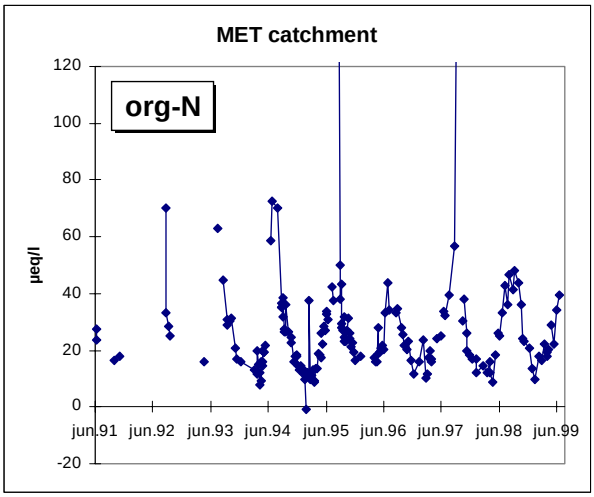

ROLF catchment
TOC
µmol/l
3000
2500
2000
1500
1000
500
0
jun.83 jun.84 jun.85 jun.86 jun.87 jun.88 jun.89 jun.90 jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

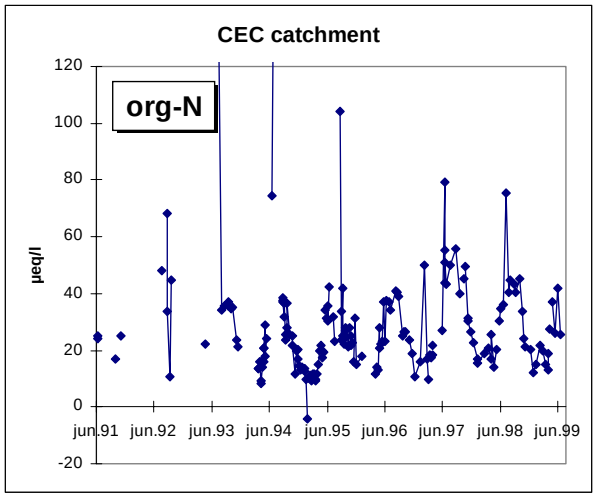

MET catchment
NO3
µeq/l
120
100
80
60
40
20
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

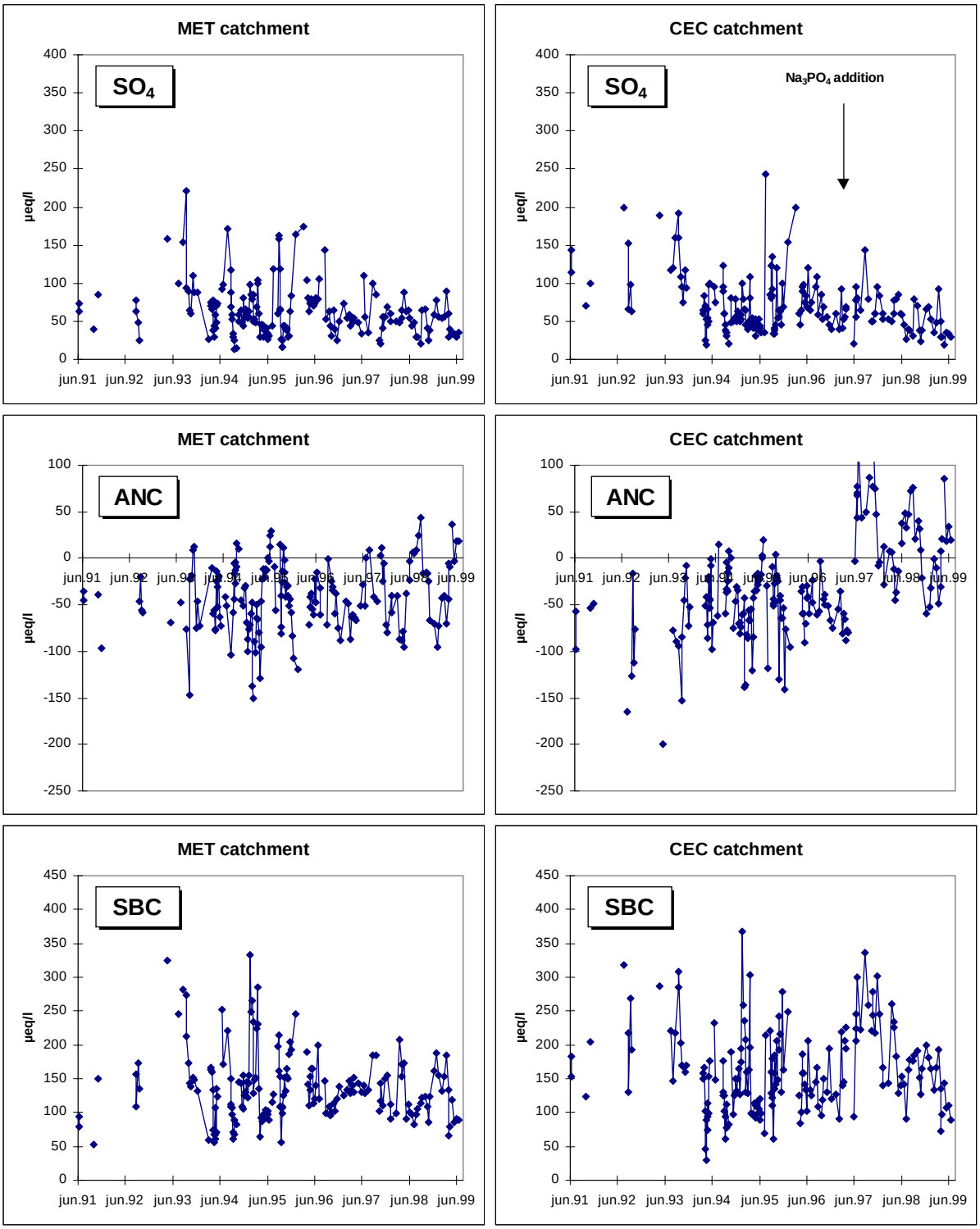

CEC catchment
NO3
Na3PO4 addition
µeq/l
120
100
80
60
40
20
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

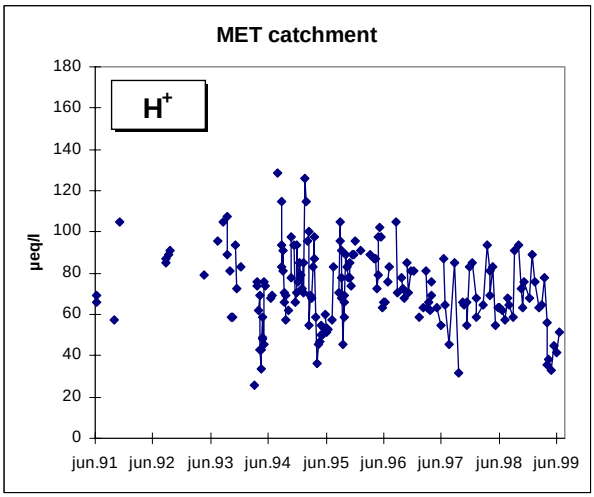

MET catchment
NH4
µeq/l
120
100
80
60
40
20
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

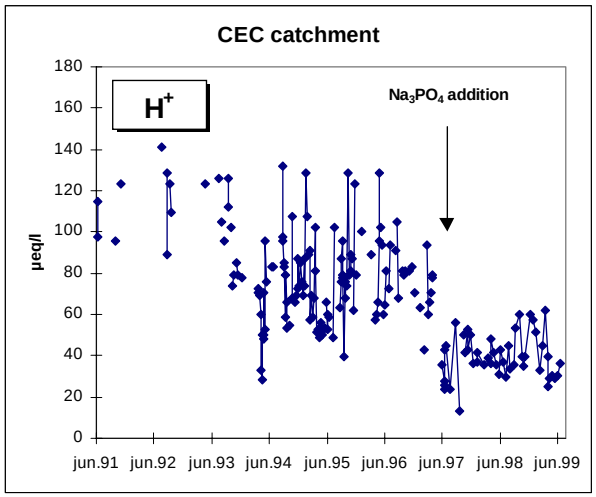

CEC catchment
NH4
µeq/l
120
100
80
60
40
20
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

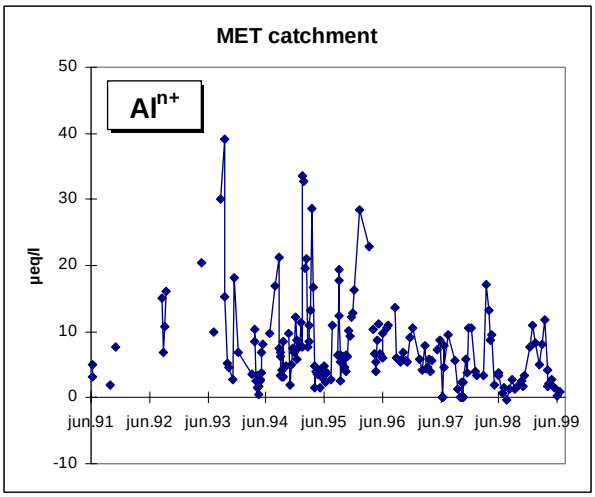

MET catchment
org-N
µeq/l
120
100
80
60
40
20
0
-20
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

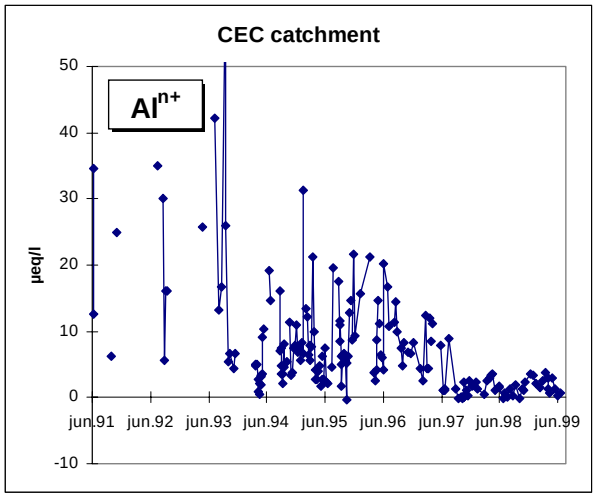

CEC catchment
org-N
µeq/l
120
100
80
60
40
20
0
-20
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

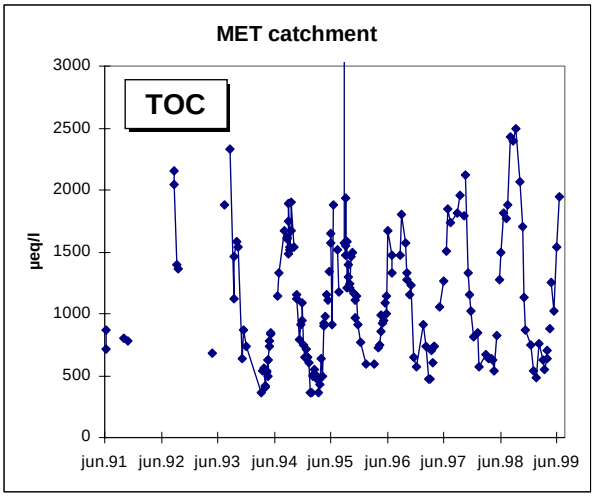

MET catchment
SO4
µeq/l
CEC catchment
SO4
Na3PO4 addition
µeq/l
MET catchment
ANC
µeq/l
CEC catchment
ANC
µeq/l
MET catchment
SBC
µeq/l
CEC catchment
SBC
µeq/l
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

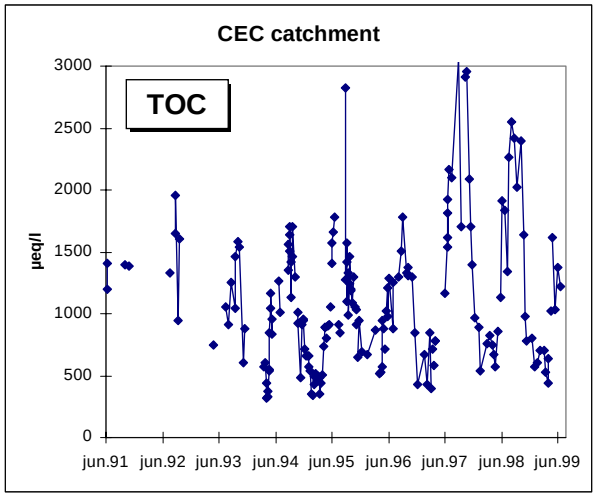

MET catchment
H+
µeq/l
180
160
140
120
100
80
60
40
20
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


CEC catchment
H+
Na3PO4 addition
µeq/l
180
160
140
120
100
80
60
40
20
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


MET catchment
Aln+
µeq/l
50
40
30
20
10
0
-10
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


CEC catchment
Aln+
µeq/l
50
40
30
20
10
0
-10
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


MET catchment
TOC
µeq/l
3000
2500
2000
1500
1000
500
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99


CEC catchment
TOC
µeq/l
3000
2500
2000
1500
1000
500
0
jun.91 jun.92 jun.93 jun.94 jun.95 jun.96 jun.97 jun.98 jun.99

3.1.1 EGIL

EGIL T runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1994	623	89.1	19.5	24.7	124	1.5	1.1	117	108.3	115.7	18.2	134.7	170.8	242.2	-71.4	316	199	4	10	580	9	42
1994	630	112.2	11	19.7	100.9	0.8	1.2	82	95.8	84.6	15	132.4	133.6	195.4	-61.8	306	224	4.1	12.7	565	10	58
1994	825	128.8	20	37	128.8	7.9	14.4	244	147.8	70.5	83.9	278.7	208.1	302.2	-94.1	487	243	5.5	11.2	1870	7	56
1994	829	97.7	11	21.4	90.9	7.4	2.2	100	108.3	76.2	20	126.1	132.9	204.5	-71.6	387	287	3.5	13.3	715	5	36
1994	901	93.3	14.5	23	91.3	8.9	3	128	127	84.6	22.4	128	140.7	234.0	-93.3	409	281	4.1	11.7	765	6	40
1994	905	74.1	7	13.2	67.4	5.1	3.8	59	68.7	48	14.3	98.6	96.5	131.0	-34.5	336	277	2.2	13	610	6	25
1994	908	75.9	9	9.9	60.5	7.4	9.4	42	81.2	45.1	37.8	50	96.2	164.1	-67.9	266	224	1.6	12.3	1090	7	27
1994	912	51.3	5	7.4	40.9	6.1	3.6	38	35.4	31	10.4	75.5	63.0	76.8	-13.8	228	190	1	12.8	530	5	22
1994	915	72.4	7.5	13.2	57.4	8.2	5.7	35	47.9	70.5	30	51	92.0	148.4	-56.4	208	173	0.99	11.3	790	4	27
1994	919	56.2	6	8.2	48.3	6.4	5.5	85	33.3	45.1	13.2	124	74.4	91.6	-17.2	268	183	1.5	12.2	620	6	16
1994	922	60.3	10	13.2	57	5.9	3.6	44	35.4	56.4	16.4	85.8	89.7	108.2	-18.5	348	304	3.2	14.5	640	5	23
1994	1006	66.1	8.5	14	56.1	3.3	14.4	52	37.5	45.1	36.4	95.4	96.3	119.0	-22.7	301	249	3.3	13.1	1100	7	
1994	1024	85.1	15	26.3	67.9	9.7	6.5	68	120.8	59.2	15.7	82.8	125.4	195.7	-70.3	163	95	3.4	7.5	585	6	
1994	1030	51.3	6.5	9.9	52.6		6.4	14	41.6	56.4	18.9	23.8	75.4	116.9	-41.5	103	89	0.61	6.7	565	5	
1994	1114	91.2	13	28	101.8	7.2	22	-74	85.4	107.2	59.6	-63	172.0	252.2	-80.2	103	177	2	7	1380	5	44
1994	1121	74.1	10.5	18.1	80.9	6.1	10.1	87	64.5	81.8	39.3	101.2	125.7	185.6	-59.9	260	173	2	8.9	935	5	23
1994	1205	79.4	15.5	23	86.6	6.4	19.9	124	72.9	93.1	64.3	124.5	151.4	230.3	-78.9	251	127	1.5	7.8	1380	6	28
1994	1212	93.3	19	28.8	123.1	8.4	14.4	64	64.5	200.3	51.1	35.1	193.7	315.9	-122.2	216	152	1.3	9.4	1080	3	31
1994	1219	57.5	9	12.3	77.9	5.9	16.4	192	52	93.1	30.7	195.2	121.5	175.8	-54.3	271	79	0.4	4.7	790	4	23
1994	1227	87.1	16.5	28	138.3	8.2	16.2	-60	70.8	158	52.8	-47.3	207.2	281.6	-74.4	106	166	1.4	7	1240	6	39
1995	103	79.4	14.5	24.7	115.7	7.2	10.4	87	66.6	152.3	50.7	69.3	172.5	269.6	-97.1	262	175	1.4	6.9	1050	4	34
1995	109	109.6	19.5	36.2	160.9	8.9	14.9	118	89.5	183.4	70.3	124.8	240.4	343.2	-102.8	283	165	1.9	6.2	1410	6	51
1995	116	95.5	18	31.3	149.2	8.7	12.1	183	75	158	58.9	205.9	219.3	291.9	-72.6	340	157	1.8	6.2	1170	4	45
1995	123	109.6	28.9	47.7	227.9	10.7	24.8	158	95.8	273.6	86.4	151.8	340.0	455.8	-115.8	272	114	0.7	4.6	455	2	50
1995	130	128.8	30.4	55.1	240.6	10.5	5.6	338	102	293.4	105	308.6	342.2	500.4	-158.2	338		1.5	4.8	1760	3	70
1995	206	60.3	44.4	20.6	114.4	6.1	4.3	359	47.9	104.4	46.4	410.4	189.8	198.7	-8.9	496	137	0.74	4.9	920	5	27
1995	213	64.6	9.5	18.1	112.7	4.9	7.8	36	54.1	107.2	43.6	48.7	153.0	204.9	-51.9	196	160	1.1	6.5	935	5	25
1995	220	58.9	13	16.5	110.9	6.1	17.8	125	54.1	152.3	40.3	101.5	164.3	246.7	-82.4	224	99	0.64	6.9	1030	9	26
1995	227	89.1	18.5	33.7	201.8	7.4	10.6	65	62.5	270.8	32.1	60.7	272.0	365.4	-93.4	158	93	0.6	4.2	725	2	39
1995	306	81.3	16	31.3	167	5.6	3.7	76	64.5	231.3	35	50.1	223.6	330.8	-107.2	212	136	1.6	5.2	700	3	45
1995	313	91.2	15	28.8	162.7	4.6	9.7	166	64.5	194.6	56.8	162.1	220.8	315.9	-95.1	312	146	1.4	5	1100	3	43
1995	320	102.3	24.5	46.9	234.5	6.4	23.1	180	116.6	262.4	92.5	146.2	335.4	471.5	-136.1	307	127	1.2	4.5	1780	2	52
1995	327	97.7	20.5	36.2	209.2	5.4	1.4	212	93.7	239.8	57.8	191.1	272.7	391.3	-118.6	372	160	2.1	4.9	965	3	44
1995	403	95.5	19.5	37	195.3	10.7	6.3	235	99.9	234.1	66.8	198.5	268.8	400.8	-132.0	390	155	2.2	5.4	1160	3	74
1995	424	95.5	22.5	37.8	191.4	13.3	11.4	247	104.1	251.1	62.8	200.9	276.4	418.0	-141.6	401	154	2.3	5.8	1260	8	60

EGIL T runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	508	81.3	16	26.3	144.9	4.9	25.1	222	81.2	121.3	85.3	232.7	217.2	287.8	-70.6	400	178	1.9	9.7	1920	11	24
1995	516	85.1	14.5	24.7	140.9	3.3	14.6	67	87.4	129.8	63.2	69.7	198.0	280.4	-82.4	259	192	2.1	9.2	1400	7	32
1995	522	95.5	16.5	28.8	152.3	2	4.2	69	110.3	169.3	33.6	55.1	203.8	313.2	-109.4	287	218	4.1	8.5	775	5	50
1995	525	33.9	4	5.8	57	1.5	4.8	226	35.4	48	8.4	241.2	73.1	91.8	-18.7	350	124	0.59	8	490	15	13
1995	526	81.3	14	23.9	128.3	4.3	5.1	46	114.5	146.7	15.4	26.3	175.6	276.6	-101.0	131	85	0.39	4.4	460	7	22
1995	527	29.5	4	4.9	47	1.5	4.1	22	29.1	36.7	3.4	43.8	61.5	69.2	-7.7	133	111	0.57	7.6	385	12	11
1995	531	93.3	19	29.6	132.2	4.1	2.6	54	133.2	152.3	18.6	30.7	187.5	304.1	-116.6	136	82	0.73	4.6	430	4	28
1995	606	57.5	8	11.5	76.6	2.05	1.71	17	58.3	81.81	4.28	35.56	99.9	144.4	-44.5	133	116	0.52	7	320	5	<10

EGIL runoff chemistry 1995-96 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R96.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	612	60.3	8.5	12.3	59.2	0.8	2.2	16	45.8	45.1	26.8	41.6	83.0	117.7	-34.7	216	200	1.4	11.5	705	8	12
1995	619	52.5	7.5	9.9	51.3	0.5	2.9	22	43.7	25.4	19.6	57.9	72.1	88.7	-16.6	231	209	1.2	11.7	670	9	25
1995	717	117.5	25	41.1	89.6	5.9	17.5	222	156.1	39.5	128.9	194.1	179.1	324.5	-145.4	400	178	4.9	11.4	2675	10	48
1995	724	89.1	17	23.9	78.3	2	4.4	102	139.5	42.3	31.4	103.5	125.6	213.2	-87.6	350	248	5.9	11.6	840	7	30
1995	828	117.5	24	28.8	61.8	1.5	2.4	168	135.3	42.3	82.1	144.3	118.5	259.7	-141.2	413	245	7.7	13.1	1620	13	43
1995	904	81.3	12	18.9	52.6	5.4	23.9	70	75	33.9	67.8	87.4	112.8	176.7	-63.9	276	206	3.7	13.2	1840	10	34
1995	906	55	7	9.9	40.5	3.6	6.4	37	43.7	25.4	7.6	82.7	67.4	76.7	-9.3	258	221	2.2	15.1	620	12	25
1995	908	70.8	9.5	14.8	44.4	5.4	6.9	45	56.2	25.4	42.5	72.7	81.0	124.1	-43.1	231	186	1.6	12.6	1050	9	29
1995	912	72.4	10.5	14.8	56.1	5.6	2.2	51	64.5	50.8	25	72.3	89.2	140.3	-51.1	240	189	1.7	10.1	640	4	22
1995	914	70.8	9	13.2	6.1	4.3	2.5	37	60.4	39.5	19.6	23.4	35.1	119.5	-84.4	223	186	1.8	11.7	580	5	20
1995	918	33.9	4	4.1	21.8	3.3	2.2	11	18.7	14.1	4.4	43.1	35.4	37.2	-1.8	116	105	0.7	7.7	325	7	16
1995	926	89.1	17.5	25.5	77.4	3.8	9.4	51	37.5	143.9	35.7	56.6	133.6	217.1	-83.5	236	185	1.8	10.1	950	10	27
1995	929	69.2	11.5	16.5	66.6	1.8	0.5	54	25	112.8	9.9	72.4	96.9	147.7	-50.8	269	215	3.1	9.1	385	4	28
1995	1002	69.2	11	15.6	74.8	1.5	1.2	55	22.9	107.2	13.9	84.3	104.1	144.0	-39.9	261	206	3.5	9.3	465	5	27
1995	1009	64.6	10.5	14.8	66.1	4.6	4.7	44	37.5	73.3	30.7	67.8	100.7	141.5	-40.8	204	160	1.5	9.4	740	4	20
1995	1016	61.7	11.5	13.2	74.4	3.1	2.5	23	25	93.1	12.5	58.8	104.7	130.6	-25.9	263	240	4.1	11.7	535	6	17
1995	1023	89.1	17.5	27.1	91.3	6.1	14.3	53	58.3	132.6	44.3	63.2	156.3	235.2	-78.9	230	177	2.3	9.6	1160	7	34
1995	1030	85.1	15	25.5	118.8	5.1	2.5	86	41.6	180.5	22.8	93.1	166.9	244.9	-78.0	287	201	3.5	8	590	4	31
1995	1106	85.1	13	23	105.3	5.1	7.4	73	47.9	143.9	38.6	81.5	153.8	230.4	-76.6	271	198	2.5	8.6	870	4	34
1995	1113	136.8	21	33	131.9	10.2	13.6	59	147.9	146.6	37.8	73.2	209.7	332.3	-122.6	228	169	1.35	13.1	1185	13	31
1995	1120	122	21	28	124	7.6	9.7	58	129	126.9	35	79.4	190.3	290.9	-100.6	278	220	1.63	14.4	1065	10	15
1995	1128	81.3	12.5	23	88.7	4.6	4.3	91	62.5	115.7	40.7	86.5	133.1	218.9	-85.8	246	155	2	7.7	860	3	28
1995	1211	81.3	14	28.8	105.7	4.9	7.1	109	66.6	138.2	58.2	87.8	160.5	263.0	-102.5	268	159	2.5	6.7	1095	3	39
1996	115	102.3	20.5	47.7	167.5	10.7	38.6	73	164.5	129.8	78.2	87.8	285.0	372.5	-87.5	158	85	1.5	9.1	1940	7	50
1996	311	100	23.5	43.6	124.4	9.5		250	106.2	132.6	109.2	203.0	201.0	348.0	-147.0	382	132	2.8	4.7	1810	2	58
1996	409	224	50.4	92.1	246.6	23	58	378	258.2	251.1	214.6	348.2	470.1	723.9	-253.8	697	319	4.7	14.2	4145		
1996	410	109.6	20.5	37	109.2	12.5	31.5	127	122.8	107.2	79.3	138.0	210.7	309.3	-98.6	275	148	1.5	8.1	1930	9	54
1996	412	95.5	15	27.1	94	11	23.5	75	97.9	104.4	44.6	94.2	170.6	246.9	-76.3	201	126	0.8	7	1220	7	45
1996	415	112.2	19	32.1	104	11.5	15.6	92	112.4	124.1	43.9	106.0	182.2	280.4	-98.2	212	120	0.9	6.8	1090	7	46
1996	422	114.8	22.5	35.4	111.8	11	3.9	141	114.5	132.6	38.9	154.4	184.6	286.0	-101.4	299	158	2.5	6.6	810	5	33
1996	429	117.5	19.5	32.1	126.6	9.5	1.9	149	118.7	149.5	29.3	158.6	189.6	297.5	-107.9	340	191	3.6	7.4	645	3	42
1996	506	107.1	17.5	28.8	106.6	8.4	15.3	108	110.3	90.3	68.2	122.9	176.6	268.8	-92.2	310	202	2.3	8.9	1425	6	34
1996	514	91.2	13.5	21.4	79.2	5.1	9.6	91	93.7	59.2	45.7	112.4	128.8	198.6	-69.8	255	164	2.1	8.8	1050	8	27
1996	516	87.1	14	20.6	77	6.6	12.2	47	83.3	81.8	26.1	73.3	130.4	191.2	-60.8	193	146	0.95	9.8	865	11	23
1996	519	64.6	11	14	65.7	4.9	5.6	27	66.6	64.9	14.6	46.7	101.2	146.1	-44.9	127	100	0.63	6.5	545	10	16
1996	527	58.9	10	14.8	70.9	4.3	5.6	34	60.4	48	27.5	62.6	105.6	135.9	-30.3	258	224	1.8	12	810	9	16
1996	603	55	9	13.2	56.5	2	7.9	17	52	42.3	21.4	44.9	88.6	115.7	-27.1	243	226	1.7	12.6	715	7	16

EGIL runoff chemistry 1996-97 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R97.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1996	610	63.1	9.0	14.0	65.3	2.6	3.1	70	56.2	56.4	16.8	97.6	93.9	129.4	-35.5	295	225	2.8	13.7	610	7	23
1996	703	87.1	14.0	21.4	83.1	0.8	1.8	76	131.2	31.0	22.9	99.0	121.0	185.1	-64.1	324	248	6.4	12.3	680	8	34
1996	708	102.3	18.5	32.9	87.4	4.6	11.4	97	97.9	50.8	67.5	138.0	154.8	216.1	-61.3	269	172	3.4	13.6	1510	10	29
1996	812	134.9	27.0	45.2	82.7	6.9	27.9	228	168.6	56.4	122.5	205.0	189.7	347.5	-157.9	447	219	4.5	10.4	2500	12	56
1996	826	107.2	21.0	31.3	62.6	10.2	37.1	114	106.2	53.6	123.5	100.1	162.2	283.3	-121.1	259	145	2.4	10.4	2700	18	39
1996	902	75.9	11.0	18.1	57.0	2.6	8.9	70	97.9	31.0	33.2	81.3	97.5	162.1	-64.6	300	230	3.5	13.4	1070	17	17
1996	930	72.4	15.5	14.0	43.1	1.5	10.9	39	60.4	50.8	25.4	59.8	84.9	136.5	-51.6	248	209	1.8	11.8	850	11	<10
1996	1007	77.6	9.5	15.6	62.6	1.3	3.9	49	47.9	110.0	13.2	48.5	93.0	171.1	-78.2	218	169	1.4	8.0	500	5	22
1996	1014	107.2	17.0	30.4	94.8	1.3	5.9	128	66.6	155.2	43.2	119.6	149.4	265.0	-115.6	367	239	3.9	11.0	975	6	31
1996	1017	70.8	13.0	19.7	65.7	5.6	10.2	48	97.9	76.2	2.5	56.5	114.2	176.5	-62.3	160	112	0.5	7.9	765	8	<10
1996	1028	93.3	15.5	23.9	75.3	3.8	17.0	36	62.5	107.2	59.6	35.5	135.4	229.3	-93.9	205	169	1.5	9.1	1370	7	22
1996	1104	58.9	7.0	10.7	49.2	2.8	6.4	27	29.2	70.5	18.6	43.7	76.1	118.2	-42.2	181	154	1.3	9.5	640	6	14
1996	1125	87.1	12.0	21.4	99.2	3.3	7.6	66	35.4	177.7	20.0	63.4	143.4	233.1	-89.7	234	168	2.6	8.0	615	3	32
1996	1209	93.3	16.5	32.1	138.3	4.9	14.9	166	60.4	208.8	58.2	138.6	206.6	327.3	-120.7	318	152	3.3	8.1	1295	6	29
1997	120	102.3	18.5	39.5	146.6	5.6	18.6	156	79.1	189.0	99.3	119.8	228.8	367.4	-138.6	342	186	4.8	6.8	1790	4	48
1997	210	107.2	22.5	42.8	155.3	5.4	13.4	278	108.3	194.7	93.5	228.0	239.2	396.4	-157.2	432	154	5.0	6.3	4350	4	
1997	227	83.2	16.5	28.0	128.3	10.5	32.7	55	77.0	152.3	72.5	52.3	215.9	301.8	-85.9	188	133	1.2	7.3	1880	8	
1997	307	69.2	16.5	23.9	129.6	6.9	10.0	61	56.2	177.7	37.5	45.6	186.9	271.4	-84.6	182	121	0.7	5.5	870	6	
1997	317	89.1	18.5	30.4	149.2	7.7	1.6	113	64.5	242.6	20.4	82.0	207.4	327.5	-120.1	296	183	2.4	6.8	500	3	
1997	324	85.1	20.0	33.7	143.1	7.4	2.9	102	64.5	228.5	33.2	68.0	207.2	326.2	-119.1	279	177	2.5	5.7	690	4	
1997	402	83.2	15.5	27.2	140.1	6.7	13.0	62	56.2	203.1	47.5	40.7	202.3	306.8	-104.5	208	146	1.4	6.1	1060	5	
1997	404	75.9	13.5	23.0	132.7	4.9	3.9	33	62.5	174.9	22.9	26.6	177.9	260.2	-82.3	227	194	1.6	6.8	615	15	
1997	407	70.8	13.0	20.6	125.7	4.9	1.9	58	64.5	160.8	15.7	53.8	166.1	241.1	-75.0	279	221	1.6	7.5	485	5	
1997	409	74.1	14.5	26.3	131.4	5.6	4.3	27	97.9	124.1	15.4	45.9	182.1	237.3	-55.3	144	117	2.5	7.0	525	7	

EGIL T runoff chemistry 1997-98 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R98.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1997	0512	72.4	11.5	19.7	122.7	3.3	5.2	59	95.8	138.2	20.0	39.9	162.4	254.0	-91.6	206	147	2.5	8.1	605	4
1997	0623	83.2	15.5	24.7	93.1	5.9	12.4	56	95.8	64.9	64.6	65.4	151.5	225.3	-73.7	209	153	2.2	11.3	1460	16
1997	0701	70.8	11.0	18.9	86.1	1.3	2.9	57	93.7	67.7	21.4	65.2	120.2	182.8	-62.6	288	231	4.1	14.8	760	10
1997	0901	131.8	34.9	52.7	170.5	39.1	198.1	370	276.9	183.4	242.8	294.2	495.4	703.0	-207.7	645	275	7.4	15.1	6600	13
1997	0922	151.4	37.9	82.3	174.9	35.3	226.2	500	179.1	166.4	382.0	480.4	556.5	727.5	-170.9	742	242	8.1	12	8100	23
1997	1013	138.0	37.9	66.6	175.3	23.0	35.7	1020	166.6	163.6	289.9	876.5	338.6	620.1	-281.5	1223	203	7.9	8.9	4630	8
1997	1019	182.0	40.4	82.3	198.8	25.3	38.9	1359	197.8	200.3	342.0	1186.6	385.7	740.1	-354.4	1597	238	9.9	8.7	5580	8
1997	1026	247.1	37.4	82.3	247.1	55.7	75.0	567	276.9	268.0	287.0	479.6	497.5	831.9	-334.5	1015	448	5.9	20.9	6400	25
1997	1110	100.0	20.5	41.1	127.0	29.4	55.0	236	133.3	135.4	144.2	196.1	273.0	412.9	-139.9	445	209	2.2	9.3	2980	7
1997	1117	81.3	12.5	23.0	97.0	27.4	2.3	79	79.1	98.7	93.9	50.7	162.2	271.8	-109.6	268	189	2.2	9.5	2030	6
1997	1201	109.6	22.5	47.7	137.9	33.2	15.8	442	110.4	180.5	141.0	376.8	257.1	431.9	-174.8	604	162	2.6	7.2	2480	7
1997	1215	102.3	19.0	40.3	129.6	30.2	22.3	214	104.1	143.9	136.0	173.7	241.4	384.0	-142.6	387	173	1.5	7.1	2470	5
1998	112	91.2	18.5	36.2	120.5	24.0	13.9	258	91.6	95.9	144.2	230.6	213.1	331.8	-118.6	462	204	2.5	7.3	2460	5
1998	301	104.7	27.0	51.0	138.8	28.6	21.3	499	106.2	143.9	188.5	431.8	266.6	438.6	-171.9	710	211	3.8	7.3	3760	6
1998	322	125.9	31.4	63.3	177.9	30.2	23.3	577	102.0	217.2	202.1	507.7	326.2	521.3	-195.2	785	208	3.4	6.2	3290	5
1998	406	85.1	26.0	51.8	164.4	23.8	28.4	360	114.5	191.8	167.4	265.7	294.4	473.8	-179.4	590	230	2.4	5.7	3010	3
1998	414	91.2	18.0	34.6	124.0	16.9	8.9	255	95.8	132.6	120.7	199.5	202.3	349.0	-146.7	468	213	1.8	6.3	2030	4
1998	426	57.5	11.5	20.6	75.7	12.8	7.4	80	77.0	67.7	76.0	44.6	127.9	220.8	-92.9	222	142	0.7	5.5	1380	3
1998	511	67.6	13.5	21.4	67.9	10.7	5.3	129	110.4	45.1	65.3	94.5	118.7	220.8	-102.1	335	206	1.7	7.7	1200	3

EGIL T runoff chemistry 1998-99 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R99.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1998	601	81.3	18.5	31.3	76.6	9.2	14.5	116	112.4	53.6	102.5	78.8	150.0	268.5	-118.5	356	240	2.8	8.8	1750	5
1998	608	83.2	16.5	27.2	70.9	9.0	12.1	130	112.4	59.2	65.7	111.4	135.6	237.4	-101.8	350	220	2.8	9.6	1330	9
1998	629	72.4	16.0	20.6	63.9	8.4	13.4	60	93.7	50.8	52.8	57.4	122.3	197.3	-75.0	305	245	2.3	12.6	1280	9
1998	713	69.2	14.0	18.1	56.1	10.7	15.1	40	77.0	33.9	47.1	65.2	114.0	158.0	-44.0	329	289	3.7	14.5	1250	13
1998	728	79.4	15.5	20.6	67.0	6.4	12.9	53	68.7	76.2	43.9	65.9	122.3	188.8	-66.5	281	228	2.5	12.8	1170	8
1998	810	58.9	16.5	18.1	58.3	4.9	12.1	44	68.7	42.3	46.8	55.0	109.9	157.8	-47.9	294	250	2.4	14.2	1190	6
1998	831	61.7	16.5	18.1	57.4	4.9	11.3	40	66.6	42.3	38.9	62.0	108.1	147.8	-39.7	323	283	3.6	14.2	1130	8
1998	914	61.7	16.5	22.2	56.1	5.1	11.0	153	83.3	53.6	54.3	134.4	110.9	191.1	-80.2	372	219	2.2	12.7	1250	10
1998	1012	79.4	18.5	23.0	51.8	6.4	11.1	63	85.4	53.6	52.1	62.1	110.7	191.1	-80.4	293	230	2.1	10.9	1210	7
1998	1026	56.2	15.5	18.9	55.7	6.7	6.6	51	54.1	67.7	37.1	51.6	103.4	159.0	-55.6	208	157	1.4	9	925	7
1998	1104	46.8	14.5	14.0	57.0	4.9	3.9	25	33.3	84.6	20.0	28.1	94.2	137.9	-43.7	170	145	0.8	6.9	555	5
1998	1111	61.7	159.7	67.5	112.2	7.9	11.0	175	131.2	152.3	42.1	269.3	358.3	325.6	32.7	325	150	4.8	5.3	955	4610
1998	1218	91.2	85.8	79.0	114.0	2.1	9.6	466	206.1	180.5	112.5	348.5	290.5	499.1	-208.7	610	144	2.3	4.2	1750	947
1999	106	72.4	40.9	32.9	113.1	1.5	5.1	161	75.0	149.5	54.6	148.0	193.6	279.1	-85.5	324	163	1.1	5	1010	669
1999	121	49.0	24.0	20.6	95.3	1.3	5.6	90	52.1	107.2	13.6	112.8	146.6	172.8	-26.2	204	114	0.7	4.7	755	463
1999	214	64.6	25.5	20.6	90.9	1.3	1.1	90	64.5	81.8	51.1	96.4	139.3	197.4	-58.1	266	176	1.4	6.5	885	360
1999	306	64.6	29.9	24.7	100.1	1.3	2.0	130	64.5	115.7	43.2	129.1	158.0	223.4	-65.5	285	155	1.3	5.3	1120	271
1999	322	74.1	38.9	32.9	110.9	1.0	5.1	201	112.4	98.7	43.6	209.3	188.9	254.7	-65.8	351	150	1.3	4.7	1810	200
1999	406	90.2	39.9	24.7	104.0	2.8	11.4	123	81.2	84.6	83.9	146.2	182.7	249.7	-67.0	356	233	1.6	10.1	1665	674
1999	419	39.8	17.0	10.7	45.2	0.8	0.7	38	39.6	28.2	29.1	55.3	74.4	96.9	-22.5	206	168	1.1	7.4	655	253
1999	506	47.9	20.0	11.5	47.4	1.3	0.4	65	50.0	31.0	39.6	72.8	80.5	120.6	-40.1	243	178	1.3	7.3	810	229
1999	520	35.5	17.5	9.9	42.2	1.3	2.6	54	43.7	33.9	22.1	63.2	73.4	99.7	-26.3	201	147	1.2	7.6	570	229

3.1.2 KIM T

KIM T runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1994	615	119.2	24.7	16.5	130.9	4.3	0.8	34	41.7	132.6	10.7	145.4	177.2	185.0	-7.8	325.0	291	3.1	25.7	1170	36	46
1994	617	50.1	9.9	5	58.7	1	4.1	13	14.6	50.8	3.4	73	78.7	68.8	9.9	172.0	159	1.2	14.1	495	13	25
1994	623	53.7	11.5	7.5	63.1	1.3	1.6	30	25	48	0.9	94.8	85.0	73.9	11.1	287.0	257	2.1	14.5	415	8	28
1994	630	60.3	14	6	64.4	0.5	2.9	34	18.7	56.4	3.1	103.9	87.8	78.2	9.6	286.0	252	2.3	17.2	540	16	17
1994	825	93.3	27.1	11	103.5	3.6	2.2	58	37.5	90.3	15.4	155.5	147.4	143.2	4.2	402.0	344	5	22.3	970	21	35
1994	829	72.4	15.6	6.5	86.1	1.8	0.5	42	31.2	84.6	0.4	108.7	110.5	116.2	-5.7	354.0	312	4	17.7	455	8	26
1994	901	69.2	15.6	6.5	81.3	1.8	1.7	37	29.1	90.3	0.9	92.8	106.9	120.3	-13.4	323.0	286	3.2	17	515	8	27
1994	905	66.1	15.6	6.5	86.6	1.8	0.5	37	20.8	84.6	1.3	107.4	111.0	106.7	4.3	340.0	303	3.1	18	445	8	27
1994	908	69.2	9.9	6	77.9	1.5	1.3	30	18.7	90.3	1.7	85.1	96.6	110.7	-14.1	340.0	310	2.8	20	545	11	27
1994	912	63.1	11.5	5	65.3	1.5	0.9	27	12.5	73.3	0.6	87.9	84.2	86.4	-2.2	319.0	292	2	18.2	401	7	23
1994	915	64.6	11.5	6	64.4	1.5	0.7	17	10.4	53.6	0.6	101.1	84.1	64.6	19.5	315.0	298	1.9	21.7	470	9	24
1994	919	64.6	8.2	6.5	64.8	2.3	0.4	76	8.3	62.1	1.1	151.3	82.2	71.5	10.7	346.0	270	1.9	21.6	460	8	18
1994	922	57.5	15.6	8.5	84	3.8	5.2	35	6.2	81.8	1.3	120.3	117.1	89.3	27.8	411.0	376	3.9	24.4	575	16	24
1994	1006	69.2	14.8	7	66.1	2.3	3.1	16	12.5	84.6	2.3	79.1	93.3	99.4	-6.1	222.0	206	1.5	17.1	490	14	
1994	1013	42.7	9	5	60.5	1.8	3.3	6	4.2	73.3	0.8	50	79.6	78.3	1.3	177.0	171	0.86	12.8	475	12	
1994	1024	57.5	14.8	6	81.8	1.8	2.2	31	4.2	95.9	5.3	89.7	106.6	105.4	1.2	272.0	241	2.1	15.8	470	8	
1994	1030	61.7	14	7	78.3		1.2	22	14.6	79	2.4	88.2	100.5	96.0	4.5	239.0	217	1.6	16.8	505	9	
1994	1114	58.9	11.5	3	78.3	2.6	1	18	12.5	81.8	1.4	77.6	96.4	95.7	0.7	289.0	271	2.1	15.6	375	5	24
1994	1121	55	13.2	5.5	83.5	2.8	2.3	40	14.6	79	4.6	104.1	107.3	98.2	9.1	339.0	299	3	15.7	485	7	29
1994	1128	44.7	13.2	7.5	87	4.1	3.5	29	8.3	84.6	2.8	93.3	115.3	95.7	19.6	374.0	345	3.6	17.2	462	11	22
1994	1205	64.6	15.6	11.5	79.6	3.1	7.8	48	22.9	76.2	14.3	116.8	117.6	113.4	4.2	315.0	267	2.8	19.1	760	15	30
1994	1212	47.9	12.3	8	74.8	2.8	3.4	28	16.7	81.8	2.9	75.8	101.3	101.4	-0.1	333.0	305	2.7	16.6	450	7	26
1994	1219	56.2	10.7	7	65.3	3.6	3.1	10	16.7	79	4.1	56.1	89.7	99.8	-10.1	168.0	158	0.92	11.5	430	8	28
1994	1227	52.5	11.5	8.5	70.5	7.7	4.1	7	18.7	70.5	7.9	64.7	102.3	97.1	5.2	277.0	270	1.9	6.7	545	8	24
1995	103	72.4	28	9.5	116.6	3.6	3.7	67	20.8	208.8	4.6	66.6	161.4	234.2	-72.8	271.0	204	1.9	8.3	355	4	44
1995	109	83.2	27.1	9.5	132.7	3.6	5.2	62	18.7	189	11.4	104.2	178.1	219.1	-41.0	280.0	218	2.3	10.4	500	6	40
1995	116	70.8	24.7	10.5	125.3	3.6	3.9	56	20.8	174.9	8.9	90.2	168.0	204.6	-36.6	248.0	192	2.2	9.2	400	4	37
1995	123	58.9	15.6	7	87.9	3.8	5.1	20	20.8	98.7	8.5	70.3	119.4	128.0	-8.6	226.0	206	1.3	11.6	550	8	25
1995	130	57.5	15.6	7	94.4	3.1	6.1	31	20.8	104.4	4.3	85.2	126.2	129.5	-3.3	303.0	272	2.2	11.9	440	7	40
1995	206	49	15.6	7.5	103.1	4.3	1.8	47	14.6	115.7	3.7	94.3	132.3	134.0	-1.7	319.0	272	2.9	11.7	405	8	30
1995	213	56.2	17.3	6	100	2.8	5.5	33	20.8	98.7	7.9	93.4	131.6	127.4	4.2	297.0	264	2.3	13.6	550	8	24
1995	220	50.1	16.5	7	90.5	3.3	2.9	61	22.9	110	4.8	93.6	120.2	137.7	-17.5	262.0	201	1.7	11.5	410	6	22
1995	227	60.3	18.1	7.5	103.1	3.8	1.4	46	18.7	146.7	3.2	71.6	133.9	168.6	-34.7	222.0	176	1.4	9.5	305	4	29
1995	306	53.7	17.3	7.5	99.2	2	1.3	45	18.7	135.4	3.4	68.5	127.3	157.5	-30.2	238.0	193	1.7	9.4	325	4	34
1995	313	53.7	14	6	92.7	2	1.8	37	18.7	104.4	3.4	80.7	116.5	126.5	-10.0	271.0	234	1.8	10.5	365	5	28

KIM T runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	320	47.9	14.8	7.5	95.3	2.6	0.4	46	14.6	115.7	1.7	82.5	120.6	132.0	-11.4	295.0	249	2.4	13	340	5	31
1995	327	49	12.3	6.5	84	2	4	18	16.7	76.2	4.5	78.4	108.8	97.4	11.4	290.0	272	1.8	17.8	530	11	25
1995	403	46.8	14	6	90.5	5.1	0.6	35	10.4	95.9	1	90.7	116.2	107.3	8.9	345.0	310	2.2	17.1	415	7	44
1995	424	52.5	16.5	7.5	83.1	3.1	10	29	29.1	73.3	18.2	81.1	120.2	120.6	-0.4	323.0	294	2.4	17.6	845	18	<10
1995	426	56.2	14	8	80.9	5.1	10	4	16.7	70.5	15	76	118.0	102.2	15.8	230.0	226	1.8	20.1	870	22	23
1995	428	50.1	10.7	7	67.4	2.6	5.5	6	14.6	67.7	2.8	64.2	93.2	85.1	8.1	229.0	223	1.4	15.3	565	14	21
1995	430	50.1	10.7	5.5	68.3	2.6	3.6	8	12.5	84.6	1.4	50.3	90.7	98.5	-7.8	186.0	178	0.9	12.3	460	12	21
1995	501	50.1	9	5	67.4	2.3	3.1	5	10.4	81.8	0.9	48.8	86.8	93.1	-6.3	157	152	0.7	11.4	405	10	20
1995	502	44.7	9	5.5	67.9	2.6	1.4	10	10.4	84.6	0.9	45.2	86.4	95.9	-9.5	165	155	0.7	12.2	360	11	17
1995	504	49	9	7	67.9	2	2.9	-3	10.4	79	0.9	44.5	88.8	90.3	-1.5	181	184	0.7	14	475	12	20
1995	508	50.1	6.6	6	69.2	2	2.6	6	8.3	73.3	1.4	59.5	86.4	83	3.4	173	167	0.7	15.6	485	12	17
1995	509	44.7	7.4	4.5	54.4	1.5	1.3	6	8.3	59.2	0.9	51.4	69.1	68.4	0.7	148	142	0.62	11.6	405	10	21
1995	512	39.8	8.2	5	58.7	1.5	1.5	9	8.3	70.5	1.4	43.5	74.9	80.2	-5.3	143	134	1.4	9.5	350	8	19
1995	516	40.7	9	6	62.2	1.3	1.5	10	8.3	67.7	2.1	52.6	80	78.1	1.9	170	160	1.8	11.2	405	10	18
1995	519	38.9	7.4	4.5	54.4	2	1.4	1	8.3	79	0.8	21.5	69.7	88.1	-18.4	103	102	0.93	8.8	340	9	22
1995	522	46.8	8.2	5	57.4	1.5	1.1	11	8.3	79	1.2	42.5	73.2	88.5	-15.3	177	166	1.3	13.7	350	7	22
1995	531	51.3	11.5	5.5	73.1	1.5	2.7	16	12.5	90.3	2.9	55.9	94.3	105.7	-11.4	287	271	2.1	17.6	505	11	21
1995	606	49	6	9.9	72.2	2.6	9.3	27	6.3	87.5	2.3	81.1	100.0	96.0	4.0	302	275	2.2	14.6	420	8	16

KIM runoff chemistry 1995-96 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R96.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	612	46.8	6.5	11.5	69.2	1	4.9	18	8.3	64.9	1.8	82.9	93.1	75.0	18.1	301	283	2.1	17.9	540	11	18
1995	619	46.8	5.5	10.7	72.2	1.3	1	27	6.2	56.4	1.9	100.0	90.7	64.5	26.2	359	332	2.3	19.6	475	9	27
1995	626	41.7	7	10.7	74.4	1.5	3.8	21	8.3	59.2	2.2	90.4	97.4	69.7	27.7	329	308	2.3	16.6	495	8	<10
1995	717	14.1	13.5	11.5	80.5	6.4	59.3	6	12.5	73.3	4.7	100.8	171.2	90.5	80.7	304	298	2.5	18.6	1390	123	17
1995	724	102.3	27.4	52.6	120.9	2.8	10.4	196	243.6	64.9	23.6	180.3	214.1	332.1	-118.0	392	196	4.7	10.1	800	23	12
1995	817	74.1	14	30.4	104.4	9.5	11.4	60	50	98.7	63.5	91.6	169.7	212.2	-42.5	269	209	3.3	15.8	1495	24	30
1995	828	69.2	10.5	18.1	82.2	4.6	3.4	36	39.6	90.3	5	89.1	118.8	134.9	-16.1	251	215	2.5	17.4	580	13	20
1995	904	75.9	11	23.9	98.7	1.5	3	64	52	104.4	11.8	109.8	138.1	168.2	-30.1	345	281	4.3	17.7	715	16	35
1995	906	67.6	10.5	20.6	94.8	2	1.1	55	33.3	95.9	5.2	117.2	129.0	134.4	-5.4	346	291	4.2	19.8	605	12	29
1995	908	72.4	10	19.7	90	2.6	3.7	52	25	87.5	4.6	133.3	126.0	117.1	8.9	332	280	3.3	23.6	680	13	33
1995	912	58.9	7.5	13.2	72.2	2.3	1.2	34	16.7	67.7	2.4	102.5	96.4	86.8	9.6	278	244	2.1	18.4	505	9	24
1995	914	58.9	8	14	75.3	2.8	2.1	26	18.7	67.7	2.9	97.8	102.2	89.3	12.9	275	249	2.2	19.4	505	8	20
1995	918	51.3	6.5	9	54.8	4.3	2.2	8	12.5	62.1	1.1	60.4	76.8	75.7	1.1	156	148	1.1	15.3	420	12	20
1995	926	55	11	13.2	75.3	3.6	0.7	29	10.4	67.7	4.9	104.8	103.8	83.0	20.8	332	303	3.2	18.1	535	12	22
1995	929	46.8	20.5	18.1	70.9	2.3	0.7	26	10.4	79	2.5	93.4	112.5	91.9	20.6	314	288	3	17.1	445	9	17
1995	1002	50.1	8.5	11.5	79.2	3.1	0.7	31	6.2	90.3	2.4	85.2	103.0	98.9	4.1	325	294	3.4	16.9	460	9	18
1995	1009	56.2	8	15.6	79.2	3.1	2.4	34	10.4	79	2.1	107.0	108.3	91.5	16.8	319	285	2.7	20.2	540	8	23
1995	1016	57.5	8.5	15.6	84.8	4.6	1.7	59	6.2	90.3	3.1	132.1	115.2	99.6	15.6	360	301	3.9	19.6	490	8	22
1995	1023	63.1	12	22.2	90.9	6.6	5.7	16	14.6	95.9	17.5	88.5	137.4	128.0	9.4	315	299	4	21.9	875	14	30
1995	1030	61.7	10	18.9	90.9	4.9	4	32	14.6	90.3	5.9	111.6	128.7	110.8	17.9	331	299	3.7	22.2	610	9	50
1995	1106	51.3	8.5	15.6	70.9	5.1	5	4	12.5	73.3	6	68.6	105.1	91.8	13.3	238	234	1.8	17.6	580	12	35
1995	1113	106.2	17	23	119.7	11	7.2	33	25	127	6.5	158.6	177.9	158.5	19.4	316	283	2.7	31.9	1020	18	32
1995	1120	100.3	17	28.8	147.5	9.5	8.1	44	22.9	141	15.9	175.4	210.9	179.8	31.1	555	511	6.2	38.2	1120	15	<10
1995	1128	58.9	7	15.6	68.3	5.9	7.1	9	14.6	87.5	8.7	61.0	103.9	110.8	-6.9	214	205	1.8	18.3	680	8	23
1995	1211	44.7	8	20.6	99.6	7.7	3.2	97	20.8	129.8	11.1	119.1	139.1	161.7	-22.6	357	260	4.5	16.2	570	6	30
1996	115	66.1	10.5	23.9	94.4	8.7	23.3	29	37.5	124.1	29.6	64.7	160.8	191.2	-30.4	150	121	2.1	12.3	1110	14	30
1996	329	236.7	41	100.4	354.4	27.3	60.9	85	118.6	378	145.3	263.8	584.0	641.9	-57.9	809	724	9.9	49.7	4705	70	118
1996	331	64.6	9	23	97.4	6.4	8.7	27	45.8	110	27.8	52.5	144.5	183.6	-39.1	209	182	3.3	12	895	12	31
1996	402	61.7	8.5	19.7	92.7	7.2	8	18	29.1	110	16.4	60.3	136.1	155.5	-19.4	217	199	5.1	14.1	735	10	30
1996	409	69.2	9	21.4	96.6	6.1	3.3	28	29.1	110	20	74.5	136.4	159.1	-22.7	219	191	4.6	11.6	660	6	40
1996	415	79.4	10.5	20.6	99.6	6.6	0.4	49	22.9	126.9	4.1	112.2	137.7	153.9	-16.2	267	218	4.7	14.4	385	6	43
1996	422	85.1	10	23	101.8	5.6	3.4	33	37.5	158	13.6	52.8	143.8	209.1	-65.3	266	233	4.9	14.5	570	7	30

KIM runoff chemistry 1995-96 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R96.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1996	429	70.8	9.5	18.1	104	6.9	0.6	34	14.6	132.6	3.6	93.1	139.1	150.8	-11.7	306	272	5.2	15.5	460	7	29
1996	506	91.2	9	20.6	108.3	5.6	7	23	20.8	121.3	9.6	113.0	150.5	151.7	-1.2	348	325	5.3	20.8	680	11	31
1996	513	79.4	9	19.7	105.7	6.4	0.8	225	12.5	129.8	0.1	303.6	141.6	142.4	-0.8	380	155	5.3	22	465	10	37
1996	514	178.3	19	40.3	180.5	11.2	14.6	43	35.4	231.3	13.5	206.7	265.6	280.2	-14.6	556	513	6.9	42.2	1365	28	59
1996	516	67.6	6	12.3	80.9	3.6	4.1	12	12.5	98.7	1.4	73.9	106.9	112.6	-5.7	180	168	1.4	15.4	455	11	25
1996	519	64.6	8	15.6	89.6	4.9	2.8	19	14.6	107.2	3	79.7	120.9	124.8	-3.9	255	236	2.5	16.5	490	17	20
1996	527	45.7	6.5	14	84.4	4.6	0.6	32	12.5	87.5	2.6	85.2	110.1	102.6	7.5	303	271	2.7	18.2	440	8	25
1996	603	44.7	5	10.7	62.2	2.6	4.3	9	14.6	62.1	3.6	58.2	84.8	80.3	4.5	194	185	1.2	14.9	480	10	18

KIM T runoff chemistry 1996-97 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File:**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1996	610	47.9	6.5	13.2	77.9	5.4	5.4	39	12.5	87.5	4.8	90.5	108.3	104.7	3.6	287	248	2.7	17.6	605	12	25
1996	703		9.5	16.5	84.4	5.4	7.5		39.6	67.7	29.3	-13.3	123.2	136.5	-13.3			2.8	15.9	865	13	30
1996	708	70.8	9.0	19.7	83.5	4.9	2.1	48	43.7	59.2	14.6	120.4	119.2	117.6	1.6	265	217	2.8	21.5	715	19	25
1996	812	77.6	10.5	23.0	96.6	2.8	3.9	40	45.8	101.6	10.4	96.6	136.8	157.8	-21.0	280	240	3.9	17.5	640	17	26
1996	826	74.1	11.5	24.7	110.5	2.6	1.3	58	60.4	101.6	1.7	119.0	150.5	163.7	-13.2	345	287	5.1	17.1	515	10	30
1996	902	63.1	7.5	15.6	79.6	1.8	2.6	29	16.7	73.4	1.4	107.8	107.2	91.4	15.7	288	259	2.3	21.4	620	12	18
1996	930	61.7	6.5	15.6	71.3	1.5	2.4	28	27.1	73.4	2.4	84.2	97.4	102.8	-5.4	274	246	3	17.5	495	13	10
1996	1007	63.1	8.0	18.1	76.6	2.1	0.9	27	20.8	76.2	1.8	96.9	105.6	98.8	6.8	311	284	3.5	21.1	495	10	23
1996	1014	57.5	16.0	18.1	81.8	2.1	1.1	32	22.9	87.5	8.2	90.0	119.0	118.6	0.4	293	261	4.1	16.8	495	9	19
1996	1016	64.6	8.5	17.3	71.3	3.6	2.5	9	16.7	76.2	4.6	79.3	103.2	97.5	5.7	244	235	4.4	22.5	585	14	<10
1996	1028	60.3	8.5	16.5	76.1	3.8	2.7	20	18.7	81.8	4.0	83.3	107.6	104.6	3.1	265	245	4.4	19.2	515	11	21
1996	1104	69.2	10.0	18.1	71.3	6.7	2.5	10	20.8	70.5	10.3	86.1	108.6	101.6	7.0	251	241	3.3	24.5	715	17	23
1996	1125	64.6	8.0	16.5	68.7	5.9	3.8	7	16.7	62.1	11.1	84.6	102.8	89.8	13.0	250	243	2.8	22.7	635	16	26
1996	1209	55.0	7.0	14.8	60.0	5.1	6.9	23	18.7	45.1	20.4	87.6	93.9	84.2	9.6	222	199	2.3	19.6	860	11	18
1997	120	47.9	6.5	14.8	72.2	4.4	2.7	28	33.3	73.4	9.4	60.4	100.6	116.1	-15.5	276	248	4.6	15.3	490	8	22
1997	210	45.7	7.5	17.3	77.9	4.4	3.9	33	33.3	76.2	20.0	60.1	110.8	129.5	-18.6	229	196	4.5	11.9	625	17	
1997	227	70.8	9.5	23.9	90.0	6.1	6.9	17	29.2	104.4	25.4	65.3	136.4	158.9	-22.5	250	233	4	15.9	825	10	
1997	307	63.1	9.0	23.0	90.9	5.1	5.2	32	27.1	118.5	13.6	69.2	133.2	159.1	-25.9	245	213	3.1	15.0	630	8	
1997	315	51.3	8.5	20.6	87.9	5.9	2.6	20	25.0	115.7	10.6	45.4	125.4	151.2	-25.8	219	199	2.8	13.1	540	9	
1997	316	55.0	10.0	19.7	96.1	6.7	4.4	33	27.1	121.3	7.6	69.0	136.9	155.9	-19.0	293	260	4.6	15.4	560	11	
1997	320	57.5	10.5	18.9	69.2	7.9	11.8	-4	16.7	84.6	8.4	62.2	118.3	109.6	8.6	205	209	1.8	22.1	815	16	
1997	323	47.9	8.5	15.6	67.0	6.1	5.4	6	16.7	79.0	6.6	54.2	102.7	102.3	0.4	222	216	2.2	17.1	600	12	
1997	401	50.1	6.0	14.0	66.6	5.6	3.0	12	18.7	76.2	6.6	55.7	95.2	101.6	-6.4	221	209	2	14.9	455	11	
1997	407	49.0	6.0	12.3	63.1	5.4	5.9	-10	12.5	73.4	4.0	41.8	92.6	89.8	2.8	203	213	1.2	16.9	560	10	
1997	408	49.0	6.0	10.7	56.6	5.4	6.4	-10	10.4	67.7	3.1	42.8	85.0	81.2	3.8	153	163	0.67	16.2	560	14	
1997	409	39.8	4.2	6.6	44.8	3.8	2.9	-4	8.3	62.1	1.2	26.6	62.4	71.6	-9.2	102	106	0.1	10.1	370	10	
1997	421	50.1	5.0	12.3	64.4	4.6	7.6	-11	10.4	67.7	8.6	46.3	94.0	86.8	7.2	241	252	1.7	23.8	795	18	

KIM T runoff chemistry 1997-98 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R98.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1997	512	46.8	5.5	12.3	67.0	4.1	3.4	17	16.7	76.2	10.6	52.7	92.3	103.4	-11.1	237	220	2.7	15.7	565	9
1997	602	46.8	8.0	17.3	82.7	1.8	1.1	64	45.8	79.0	18.2	78.6	110.8	143.0	-32.2	258	194	3.7	11	555	11
1997	623	70.8	10.5	23.0	82.2	4.6	6.9	29	33.3	110.0	23.2	60.4	127.2	166.5	-39.4	193	164	2.6	14.8	855	24
1997	701	66.1	11.0	24.7	85.7	2.1	1.0	47	52.1	104.4	7.4	73.6	124.4	163.9	-39.5	244	197	3.4	13.9	555	9
1997	901	64.6	13.0	21.4	85.7	1.8	0.6	35	22.9	112.8	23.6	62.7	122.4	159.3	-36.9	263	228	3.6	14.7	695	13
1997	922	83.2	17.5	43.6	130.9	9.2	14.0	101	70.8	160.8	49.6	118.2	215.2	281.2	-66.0	341	240	7.1	17	1460	24
1997	1006	95.5	26.0	50.2	140.9	9.5	0.8	160	110.4	194.7	59.3	118.6	227.3	364.3	-136.9	452	292	7.1	17	1460	22
1997	1013	97.7	17.5	40.3	142.7	5.6	4.8	116	66.6	197.5	13.6	146.9	210.9	277.7	-66.8	417	301	8.2	18.2	760	12
1997	1019	75.9	9.0	18.1	88.3	5.9	4.4	19	22.9	121.3	4.9	71.4	125.7	149.1	-23.4	208	189	3.7	18.2	640	14
1997	1020	69.2	7.0	16.5	85.3	5.4	4.9	17	20.8	115.7	3.3	65.4	118.9	139.8	-20.8	190	173	2.9	16.1	610	15
1997	1021	56.2	6.0	12.3	72.2	3.3	2.0	21	18.7	101.6	1.9	50.9	95.9	122.2	-26.3	162	141	1.5	11.4	430	10
1997	1026	58.9	10.5	18.9	93.1	3.3	1.9	44	27.1	121.3	2.4	79.8	127.7	150.8	-23.1	270	226	3.8	15.6	495	11
1997	1117	67.6	10.5	22.2	107.9	5.1	5.4	34	33.3	126.9	9.5	82.9	151.0	169.8	-18.7	253	219	3.8	16.6	610	11
1997	1201	66.1	11.5	23.0	108.8	5.9	2.1	62	25.0	121.3	11.4	121.6	151.2	157.7	-6.5	371	309	4.5	22.6	665	14
1997	1215	57.5	9.5	18.1	89.2	4.6	5.6	13	25.0	84.6	16.1	71.9	127.0	125.7	1.3	285	272	3.2	18.8	710	9
1998	112	60.3	8.0	18.1	86.6	6.4	9.6	18	22.9	76.2	17.1	90.7	128.7	116.2	12.5	237	219	2.6	20.5	815	11
1998	116	55.0	9.0	16.5	82.2	4.9	7.6	19	25.0	79.0	12.5	77.6	120.1	116.5	3.7	270	251	2.8	20.1	670	9
1998	301	72.4	8.5	18.9	96.6	5.9	9.6	27	22.9	90.3	13.9	111.8	139.5	127.1	12.4	319	292	3.8	20.4	750	11
1998	322	60.3	11.0	19.7	111.8	7.2	3.3	27	14.6	104.4	9.4	111.8	153.0	128.4	24.6	370	343	4.9	21	605	12
1998	406	53.7	9.5	20.6	100.9	6.1	13.1	56	20.8	112.8	18.2	108.1	150.3	151.9	-1.6	318	262	4.5	18.2	835	8
1998	414	56.2	11.5	21.4	103.5	6.4	15.9	15	25.0	110.0	12.5	82.5	158.7	147.5	11.2	293	278	4.3	22	855	12
1998	426	46.8	8.5	14.8	80.0	5.1	4.9	13	22.9	64.9	9.4	75.9	113.3	97.1	16.2	257	244	3.0	20	665	10
1998	511	47.9	8.5	13.2	69.2	5.4	9.0	1	18.7	62.1	6.6	66.6	105.2	87.4	17.7	242	241	1.8	21.5	685	10
1998	518	56.2	8.5	15.6	81.8	4.1	3.9	15	14.6	93.1	8.7	68.7	113.8	116.4	-2.5	243	228	2.5	17.4	595	12
1998	524	39.8	7.0	12.3	74.0	3.3	5.6	1	12.5	98.7	1.7	30.1	102.2	112.9	-10.7	154	153	1.8	13	415	8

KIM T runoff chemistry 1998-99 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File:**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1998	601	49.0	7.5	13.2	73.1	2.3	4.9	-1	12.5	62.1	8.7	65.6	100.9	83.3	17.6	253	254	2.2	20.4	665	12
1998	608	50.1	8.0	14.0	74.4	3.1	4.9	13	12.5	56.4	10.5	88.0	104.3	79.4	24.9	274	261	2.3	22	665	14
1998	629	57.5	13.5	17.3	80.5	3.3	4.5	7	14.6	81.8	12.5	74.7	119.0	108.9	10.2	256	249	2.5	21.7	720	14
1998	713	60.3	14.5	19.7	93.1	2.6	3.6	15	20.8	95.9	12.9	79.1	133.4	129.6	3.9	287	272	3.4	19.4	785	16
1998	728	60.3	9.5	19.7	90.9	3.3	4.4	22	16.7	107.2	13.2	73.0	127.8	137.1	-9.3	289	267	3.2	19.6	735	16
1998	810	60.3	15.0	20.6	93.5	3.1	1.0	27	16.7	115.7	11.4	76.7	133.1	143.7	-10.6	270	243	2.8	19.8	660	11
1998	831	60.3	15.0	23.0	105.7	3.6	3.3	26	16.7	126.9	14.6	78.6	150.6	158.2	-7.7	297	271	3.7	18.3	720	11
1998	914	70.8	14.0	28.0	110.1	3.3	4.6	39	52.1	126.9	20.0	70.7	159.9	199.0	-39.1	296	257	3.6	18.5	775	15
1998	1012	70.8	13.0	21.4	84.4	5.9	5.3	17	25.0	87.5	18.6	86.7	129.9	131.0	-1.1	272	255	2.9	20.2	865	16
1998	1026	51.3	15.5	23.0	101.4	5.1	1.1	43	35.4	98.7	11.8	94.5	146.1	145.9	0.2	289	246	4.4	17.4	575	10
1998	1104	50.1	12.0	14.8	68.3	4.9	4.5	23	20.8	59.2	6.4	91.1	104.5	86.5	18.0	243	220	2.3	19.5	600	18
1998	1111	46.8	7.0	14.0	65.7	4.6	8.2	16	20.8	50.8	14.3	76.4	99.5	85.9	13.6	244	228	2.4	17.8	795	15
1998	1218	39.8	9.5	14.0	63.9	7.2	7.9	21	22.9	50.8	18.2	71.3	102.4	91.9	10.5	264	243	2.4	16.1	750	10
1999	106	39.8	10.0	15.6	78.3	4.1	3.5	30	35.4	59.2	19.3	67.4	111.5	113.9	-2.4	235	205	4.0	11.8	585	8
1999	121	51.3	11.0	21.4	82.2	4.6	6.2	14	29.2	98.7	14.3	48.5	125.4	142.2	-16.8	200	186	2.4	11	605	14
1999	214	61.7	27.5	22.2	88.3	5.1	1.1	26	33.3	104.4	31.4	62.7	144.2	169.1	-25.0	208	182	2.9	9.7	715	15
1999	306	53.7	13.0	23.9	90.9	4.6	5.6	36	31.2	95.9	27.9	72.7	138.0	155.0	-17.0	222	186	3.2	10.4	795	19
1999	322	50.1	14.0	25.5	90.0	3.8	5.8	45	37.5	101.6	27.9	67.4	139.1	166.9	-27.8	231	186	3.1	10.2	780	10
1999	406	98.0	26.0	46.1	171.0	9.7	9.6	70	72.9	200.3	40.0	117.1	262.3	313.2	-50.8	415	345	5.7	19.8	1310	30
1999	419	39.8	11.5	19.7	83.5	4.4	2.9	29	31.2	93.1	9.1	57.3	122.0	133.5	-11.5	223	194	2.8	11.4	570	11
1999	506	88.5	14.5	23.9	124.8	9.0	8.5	16	25.0	160.8	5.2	94.1	180.6	190.9	-10.3	341	325	2.0	24.9	915	28
1999	520	28.2	14.0	16.5	80.0	6.4	0.5	41	18.7	98.7	7.0	62.1	117.4	124.5	-7.1	232	191	2.3	11.9	405	6

3.1.3 KIM C

KIM C runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1994	615	77.89	36.93	16.46	97.01	3.84	0.79	23	18.74	95.92	0.65	140.6	155.0	115.3	39.7	184	161	1.3	15.5	620	31	41
1994	630	61.66	3.49	13.16	70.04	0.51	1.21	39	16.66	56.42	0.36	115.6	88.4	73.4	15.0	334	295	2.4	19.7	470	17	40
1994	804	97.72	6.49	21.39	126.15	3.07	2.86	87	70.79	118.48	0.86	154.6	160.0	190.1	-30.2	496	409	7	20.6	535	13	70
1994	825	74.13	3.49	15.63	90.48	0.51	0.71	45	14.57	64.88	0.14	150.4	110.8	79.6	31.2	398	353	3.5	23.3	550	13	35
1994	829	69.18	3.49	12.34	83.95	1.02	0.57	36	14.57	81.81	0.07	110.1	101.4	96.5	4.9	391	355	2.6	22	470	8	33
1994	901	66.07	3.99	13.98	90.04	1.02	0.5	63	12.49	78.99	0.21	146.9	109.5	91.7	17.8	437	374	3	21	470	8	35
1994	905	63.09	3.49	13.16	81.78	1.28	0.57	35	12.49	73.35	0.29	112.2	100.3	86.1	14.2	357	322	2	20	405	8	30
1994	908	64.56	5.49	9.87	70.04	1.28	1.21	21	12.49	87.45	0.36	73.2	87.9	100.3	-12.4	256	235	1.4	18.4	485	11	28
1994	912	56.23	2.5	8.23	52.64	1.02	0.93	27	8.33	56.42	0.29	83.5	65.3	65.0	0.3	273	246	1.1	15.7	370	8	25
1994	915	53.7	2.5	6.58	46.11	1.02	0.57	23	8.33	36.67	0.14	88.3	56.8	45.1	11.6	298	275	1.2	17.5	390	10	26
1994	919	58.88	2	4.94	54.81	1.53	0.36	73	6.25	53.6	0.29	135.4	63.6	60.1	3.5	371	298	1.6	19.6	415	9	27
1994	922	44.67	5.49	13.16	64.82	2.56	1.43	41	8.33	62.06	0.21	102.5	87.5	70.6	16.9	356	315	1.7	19	420	12	27
1994	1006	54.95	9.48	13.16	60.9	1.53	1.57	21	10.41	84.63	0.29	67.3	86.6	95.3	-8.7	188	167	0.9	12.4	365	12	
1994	1013	57.54	3.49	13.98	74.82	1.28	1.36	40	4.16	112.84	0.14	75.3	94.9	117.1	-22.2	239	199	0.94	11	340	8	
1994	1024	58.88	3.99	15.63	82.21	1.53	1.36	39	16.66	90.27	0.14	95.5	104.7	107.1	-2.3	259	220	1.6	14.1	340	9	
1994	1030	51.28	3.99	13.16	73.51		0.57	17	16.66	78.99	0.14	63.7	91.2	95.8	-4.6	182	165	1.1	12.5	340	8	
1994	1114	51.28	1	11.52	78.3	2.3	0.57	43	16.66	81.81	0.07	89.4	93.7	98.5	-4.9	307	264	1.8	14	310	6	29
1994	1121	57.54	3.49	12.34	81.35	2.81	0.57	46	20.82	76.17	0.29	106.8	100.6	97.3	3.3	327	281	2.4	15.4	380	8	33
1994	1128	51.28	3.99	12.34	85.26	4.35	0.71	61	20.82	81.81	0.43	115.9	106.7	103.1	3.6	379	318	2.9	15.7	445	18	24
1994	1205	50.12	16.47	13.16	70.9	2.05	0.57	39	24.98	76.17	1.79	89.3	103.2	102.9	0.2	229	190	1.7	13.5	400	11	
1994	1212	50.12	5.99	11.52	69.6	2.3	0.36	27	20.82	81.81	0.29	64.0	89.8	102.9	-13.2	261	234	1.7	12.6	300	8	27
1994	1219	52.48	3.99	10.69	65.68	2.56	0.36	32	20.82	81.81	0.21	64.9	83.3	102.8	-19.6	215	183	1	9.9	265	6	30
1994	1227	43.65	3.99	9.87	50.89	2.05	0.36	9	20.82	59.24	1.57	38.2	67.2	81.6	-14.5	197	188	1.1	10.2	310	8	26
1995	103	91.2	10.48	39.48	137.03	4.6	0.36	172	35.39	284.92	0.14	134.7	192.0	320.5	-128.5	318	146	1.1	5.5	155	4	60
1995	109	87.09	8.48	32.08	138.33	4.35	0.36	105	33.31	214.4	1.64	126.3	183.6	249.4	-65.8	265	160	1.3	6.6	205	7	54
1995	116	64.56	6.99	24.68	107.01	3.84	0.43	62	33.31	157.98	1.57	76.7	143.0	192.9	-49.9	219	157	1.3	7.7	240	6	35
1995	123	56.23	5.49	17.27	99.61	3.32	0.64	42	43.72	107.2	2.64	71.0	126.3	153.6	-27.2	195	153	0.7	7.4	240	5	33
1995	131	57.54	4.49	18.92	97.88	3.58	0.36	68	49.97	124.12	0.21	76.5	125.2	174.3	-49.1	260	192	1.2	7.9	205	8	50
1995	206	60.25	4.99	23.03	122.24	3.84	0.36	82	52.05	138.23	0.29	106.1	154.5	190.6	-36.1	273	191	1.7	7.2	197	3	42
1995	213	50.12	10.48	20.57	103.09	3.58	0.36	36	39.56	112.84	1	70.8	138.1	153.4	-15.3	214	178	1.1	8.2	625	8	30
1995	220	54.95	7.49	23.03	116.58	4.35	0.86	78	33.31	166.44	1.36	84.2	152.3	201.1	-48.8	202	124	0.77	7	220	5	30
1995	227	46.77	4.99	13.16	85.26	3.32	0.36	40	24.98	112.84	0.07	56.0	107.1	137.9	-30.8	159	119	0.6	6.4	180	9	30
1995	306	42.66	33.93	15.63	83.08	2.56	0.36	52	29.15	101.56	0.07	99.4	135.6	130.8	4.8	205	153	0.9	7.6	205	4	32
1995	313	46.77	4.99	13.98	82.21	1.79	0.36	52	31.23	107.2	0.14	63.5	103.3	138.6	-35.2	237	185	1.2	9.8	255	5	30
1995	320	45.71	5.49	17.27	97.44	2.56	0.36	56	41.64	110.02	0.07	73.1	123.1	151.7	-28.6	251	195	1.6	8.6	235	4	45

KIM C runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	327	45.71	4.49	16.45	102.22	4.09	0.36	44	39.56	107.2	1.14	69.4	127.6	147.9	-20.3	246	202	1.4	10.2	280	6	50
1995	403	43.65	5.49	17.27	90.04	5.11	0.36	65	37.48	101.56	0.29	87.6	118.3	139.3	-21.1	263	198	1.4	9.6	285	7	44
1995	424	38.9	6.49	19.74	83.08	2.81	1.21	67	39.56	98.74	0.29	80.6	113.3	138.6	-25.3	271	204	2.2	9.6	335	9	10
1995	502	30.9	5.49	13.16	77.86	2.3	0.93	44	22.9	81.81	0.14	69.8	99.7	104.9	-5.1	196	152	1.1	9.4	305	10	21
1995	504	30.9	3.99	9.87	69.6	2.81	2.5	23	12.49	78.99	0.21	51.0	88.8	91.7	-2.9	149	126	0.4	9.1	375	13	24
1995	508	34.67	4.49	9.05	72.64	2.56	0.79	25	12.49	76.17	0.21	60.3	89.5	88.9	0.7	160	135	0.5	10.2	385	15	15
1995	509	39.81	3.5	7.4	58.7	2.3	1.14	11	10.41	64.88	0.21	48.4	73.0	75.5	-2.5	119	108	0.46	8.1	310	10	20
1995	512	39.81	4.5	9.1	65.7	2.3	0.43	13	10.41	84.63	0.14	39.7	82.0	95.2	-13.2	103	90	0.89	6.3	245	8	20
1995	516	31.62	3	8.2	58.7	1.79	0.43	12	8.33	67.7	0.14	39.6	72.1	76.2	-4.0	123	111	1.9	8.3	305	11	26
1995	519	31.62	4	8.2	55.7	1.79	0.79	5	8.33	81.81	0.07	16.9	70.5	90.2	-19.7	88	83	0.84	5.9	250	7	28
1995	522	39.81	4	8.2	60	1.79	0.36	23	10.41	78.99	0.57	47.2	74.4	90.0	-15.6	137	114	1	7.4	270	7	28
1995	531	39.81	4.5	11.5	71.3	0.77	0.36	232	10.41	78.99	0.07	270.8	88.4	89.5	-1.0	232	0	1.6	13.3	365	11	28
1995	606	39.81	5	12.3	70.1	1.28	0.43		12.49	78.99	0.07	37.4	89.1	91.6	-2.4			1.7	11.4	370	13	28

KIM C runoff chemistry 1995-96 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R96.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	612	15.13	6.99	12.34	52.64	4.35	0.36	23	8.33	62.06	0.21	44.2	76.7	70.6	6.1	111	88	0.57	8.7	460	32	31
1995	619	40.74	4.99	9.87	69.17	1.02	0.64	29	8.33	50.78	0.14	96.2	85.7	59.3	26.4	314	285	1.6	18.3	415	12	24
1995	626	32.36	5.49	9.87	71.34	0.77	0.5	40	8.33	56.42	0.07	95.5	88.0	64.8	23.2	311	271	1.8	16.6	430	10	<10
1995	717	8.91	8.48	15.63	70.04	9.46	2.93	16	8.33	64.88	0.93	57.3	106.5	74.1	32.4	72	56	0.24	9.3	515	32	15
1995	724	40.74	8.48	18.92	79.61	0.77	0.36	83	74.95	59.24	0.36	97.3	108.1	134.6	-26.4	285	202	3.9	11.1	360	12	<10
1995	817	54.95	7.49	20.57	107.01	4.86	5.14	111	60.38	104.38	0.57	145.7	145.1	165.3	-20.3	359	248	4.1	18.6	600	18	39
1995	828	57.54	4.49	12.34	83.52	2.05	0.64	70	29.15	81.81	0.07	119.6	103.0	111.0	-8.0	291	221	2.1	17.4	430	9	27
1995	904	48.98	7.49	16.45	88.74	1.53	0.5	70	33.31	90.27	0.57	109.5	114.7	124.2	-9.4	321	251	2.8	14.4	415	11	29
1995	906	67.61	6.99	16.45	100.05	1.53	0.71	62	27.07	90.27	0.07	137.9	125.7	117.4	8.3	402	340	3.3	23.4	590	18	40
1995	908	61.66	5.99	13.98	88.74	1.53	0.64	55	18.74	78.99	0.07	129.7	110.9	97.8	13.1	352	297	2.5	21.1	505	11	33
1995	912	50.12	5.49	9.87	67.42	2.3	0.71	28	12.49	62.06	0.07	89.3	85.8	74.6	11.2	247	219	1.3	16.6	410	10	24
1995	918	38.02	3.49	5.76	49.15	2.3	0.36	21	6.25	39.49	0.07	74.3	61.1	45.8	15.3	207	186	0.8	13.6	350	9	20
1995	926	43.65	5.99	9.87	59.16	3.32	1	36	12.49	47.96	0.07	98.5	79.3	60.5	18.8	317	281	1.9	17.4	460	17	21
1995	929	34.67	6.99	9.87	61.77	2.3	1.21	25	8.33	62.06	0.29	71.1	82.1	70.7	11.5	231	206	1.5	12.7	590	31	13
1995	1002	43.65	8.98	12.34	78.74	1.79	0.86	39	8.33	70.52	0.07	106.4	102.7	78.9	23.8	336	297	2.5	16.5	400	15	19
1995	1009	12.88	6.49	13.16	79.61	4.86	54.55	20	10.41	70.52	0.07	110.6	158.7	81.0	77.7	285	265	2.5	19.2	1720	172	37
1995	1025	56.23	7.98	18.1	91.78	4.6	0.64	25	12.49	98.74	0.29	92.8	123.1	111.5	11.6	371	346	3.8	19.8	635	32	35
1995	1106	50.12	5.49	11.52	60.9	3.32	0.64	8	14.57	67.7	0.79	56.9	81.9	83.1	-1.2	174	166	0.86	13.5	365	11	24
1995	1113	54.95	5.49	10.69	73.51	4.09	0.86	36	12.49	73.35	1.07	98.7	94.6	86.9	7.7	293	257	2.4	17.8	405	7	19
1995	1120	42.66	5.99	10.69	63.51	2.56	0.71	13	12.49	59.24	0.29	67.1	83.5	72.0	11.4	198	185	1.7	15.8	430	12	<10.00
1995	1128	40.74	6.49	16.45	76.56	4.6	0.64	17	16.66	101.56	0.07	44.2	104.7	118.3	-13.6	159	142	0.98	11.3	445	17	17
1995	1211	50.12	20.96	67.45	266.22	7.93	5.14	48	47.89	366.73	11.42	39.8	367.7	426.0	-58.3	182	134	1.6	6.7	485	31	32
1996	115	69.18	6.99	23.03	112.23	4.35	2.64	78	70.79	124.12	6.64	94.9	149.2	201.6	-52.3	253	175	2.6	8.9	380	5	39
1996	311	60.25	10.48	20.57	100.05	5.63	2.64	53	37.48	124.12	9.85	81.2	139.4	171.5	-32.1	250	197	4.4	10.1	375	5	36
1996	328	67.61	11.98	32.08	119.63	6.14	2.93	63	54.13	135.41	21.78	92.1	172.8	211.3	-38.6	224	161	2.7	10	700	13	18
1996	329	56.23	11.48	35.37	128.76	5.37	1.79	70	68.71	160.8	12.85	66.6	182.8	242.4	-59.6	215	145	2.5	8.3	550	12	44
1996	331	57.54	8.98	27.97	113.97	5.37	0.71	72	85.36	129.77	12.85	58.6	157.0	228.0	-71.0	217	145	2.6	8.3	475	9	50
1996	402	36.31	7.49	18.1	88.74	3.84	0.71	26	35.39	124.12	3.93	17.8	118.9	163.4	-44.6	124	98	3.1	6.8	460	9	28
1996	415	87.09	6.99	22.21	101.79	3.84	0.36	79	70.79	115.66	2.07	112.8	135.2	188.5	-53.3	269	190	4.2	9.8	280	5	46
1996	422	83.17	8.48	23.03	109.62	4.09	0.43	64	83.28	138.23	0.14	71.2	145.7	221.7	-76.0	299	235	0.9	13.6	310	7	39
1996	429	69.18	8.48	22.21	107.44	3.32	0.43	58	60.38	107.2	0.29	101.2	141.9	167.9	-26.0	309	251	4.3	13.3	360	7	37
1996	506	75.86	7.98	20.57	101.35	3.84	0.79	46	45.8	112.84	1.36	96.4	134.5	160.0	-25.5	283	237	3.5	14	450	19	38
1996	514	85.11	6.99	18.92	96.14	4.35	0.64	46	24.98	118.48	0.43	114.3	127.0	143.9	-16.9	294	248	2.3	16.9	470	18	38
1996	517	52.48	5.99	13.98	80.04	3.58	0.64	17	16.66	93.09	0.57	63.4	104.2	110.3	-6.1	172	155	0.99	11	320	9	23
1996	519	46.77	6.49	13.16	73.08	3.32	0.43	14	20.82	84.63	0.43	51.4	96.5	105.9	-9.4	164	150	2.1	9.5	275	10	20
1996	527	26.3	4.99	9.87	53.07	2.56	2.78	13	14.57	56.42	1.57	40.0	73.3	72.6	0.7	145	132	0.8	8.5	380	18	16
1996	603	48.98	5.49	12.34	71.34	1.53	1.07	29	18.74	67.7	0.07	83.2	91.8	86.5	5.3	321	292	2.1	23.1	465	15	25

KIM C runoff chemistry 1996-97 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R97.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1996	610	31.6	7.0	14.0	63.5	2.1	0.7	51	14.6	64.9	0.2	90.2	87.2	79.7	7.6	223	172	1.3	14.3	410	12	30
1996	703	57.5	4.5	13.2	70.5	0.5	0.4	50	39.6	50.8	0.1	106.2	89.1	90.4	-1.3	339	289	3.7	16.9	485	14	35
1996	708	46.8	5.5	11.5	59.2	0.5	0.4	44	20.8	50.8	0.1	96.1	77.0	71.7	5.4	235	191	2	15.2	435	15	21
1996	812	77.6	6.5	19.7	105.7	0.5	0.4	86	50.0	107.2	0.1	139.3	132.9	157.2	-24.4	435	349	5	19.5	480	9	41
1996	826	67.6	6.0	16.5	89.2	0.8	1.9	65	29.2	90.3	0.3	127.2	114.3	119.7	-5.4	385	320	3.8	19.1	485	12	35
1996	902	60.3	5.0	11.5	82.7	0.5	0.7	41	10.4	76.2	0.1	115.0	100.4	86.7	13.7	391	350	2.6	21.5	570	10	22
1996	930	63.1	4.0	10.7	65.3	1.0	1.1	33	18.7	64.9	0.1	94.4	82.0	83.7	-1.7	301	268	2.3	19.4	440	12	21
1996	1007	61.7	4.0	11.5	72.2	0.8	0.6	24	12.5	73.4	0.1	88.9	89.1	85.9	3.2	357	333	3	21	465	10	23
1996	1014	53.7	5.0	14.0	77.9	0.8	1.1	33	10.4	81.8	0.3	92.9	98.7	92.5	6.2	346	313	4.5	19.9	410	9	23
1996	1016	56.2	4.5	10.7	62.2	1.8	0.9	18	12.5	67.7	0.1	74.0	80.0	80.3	-0.2	293	275	3.6	18.4	400	11	<10
1996	1028	30.2	7.0	14.0	50.9	2.8	3.4	13	20.8	62.1	4.1	34.2	78.0	87.0	-9.0	118	105	2.3	8.6	520	25	<10
1996	1104	58.9	4.0	11.5	65.7	1.8	1.1	16	8.3	64.9	0.4	85.4	84.1	73.6	10.5	303	287	3.3	21.1	440	9	26
1996	1125	56.2	6.0	13.2	76.6	4.9	0.9	68	12.5	70.5	1.8	140.9	101.4	84.8	16.6	339	271	3.2	23.6	530	16	32
1996	1209	31.6	5.5	11.5	57.0	2.6	0.6	25	14.6	73.4	2.3	43.6	77.2	90.2	-13.0	116	91	0.94	4.3	250	6	16
1997	120	26.9	5.0	12.3	66.1	2.8	0.4	69	18.7	70.5	0.3	93.1	86.7	89.6	-2.9	276	207	2.2	12	265	5	24
1997	210	24.0	6.0	14.0	73.1	3.3	0.8	12	20.8	90.3	3.1	19.0	97.2	114.2	-17.0	74	62	0.37	3.9	210	10	
1997	227	66.1	5.0	23.0	92.7	2.8	1.6	46	45.8	124.1	2.5	64.7	125.1	172.4	-47.4	224	178	1.9	9.2	290	8	
1997	307	67.6	5.0	22.2	91.4	2.8	0.4	49	43.7	126.9	1.4	66.3	121.8	172.1	-50.3	231	182	1.6	9.2	255	4	
1997	315	63.1	7.5	25.5	99.2	3.8	0.6	47	43.7	141.1	0.4	61.5	136.6	185.1	-48.6	302	255	2.3	13	315	5	
1997	320	25.7	4.0	11.5	44.8	2.6	0.4	28	14.6	62.1	0.6	39.7	63.2	77.3	-14.0	111	83	0.45	6.1	200	6	
1997	323	22.9	5.0	11.5	47.0	2.8	0.4	27	14.6	62.1	0.6	39.4	66.7	77.2	-10.5	116	89	0.35	6.2	235	7	
1997	402	35.5	6.0	14.0	61.8	3.6	0.6	30	22.9	79.0	1.1	48.5	86.0	103.0	-17.0	173	143	1	8.3	285	9	
1997	407	23.4	5.0	10.7	53.1	2.1	0.4	15	10.4	70.5	0.3	28.4	71.2	81.2	-10.1	106	91	0.1	6.8	235	10	
1997	409	31.6	4.5	6.2	39.2	3.1	1.3	3	8.3	50.8	0.3	29.4	54.2	59.4	-5.2	89	86	<0.10	8.5	305	11	
1997	421	32.4	4.0	9.1	53.1	2.3	1.0	-2	10.4	59.2	0.6	29.6	69.4	70.2	-0.8	153	155	0.75	11.4	400	16	

KIM C runoff chemistry 1997-98 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R98.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1997	0512	33.1	3.0	8.2	43.5	0.5	1.1	20	16.7	45.1	0.3	47.3	56.3	62.1	-5.8	226	206	2.5	14.4	385	11
1997	0623	53.7	5.5	14.0	70.9	2.6	2.9	35	20.8	93.1	0.1	70.6	95.9	114.0	-18.1	206	171	2.5	14.2	415	16
1997	0701	57.5	5.0	21.4	84.0	0.5	1.0	65	12.5	104.4	0.2	117.3	111.8	117.1	-5.2	328	263	3.4	19.4	430	10
1997	0901	15.9	9.5	18.1	83.5	9.0	0.4	39	8.3	107.2	0.3	59.4	120.4	115.8	4.6	101	62	1.2	15.2	675	34
1997	0922	11.5	17.5	43.6	107.0	9.2	1.6	-9	18.7	160.8	0.3	1.6	178.9	179.8	-0.9	22	31	1.0	63.4	3060	290
1997	1006	50.1	8.0	28.0	126.2	5.4	5.7	151	43.7	143.9	0.3	186.4	173.2	187.9	-14.7	451	300	5.9	24.6	1060	47
1997	1013	74.1	9.5	31.3	144.0	3.8	5.6	140	50.0	186.2	0.3	171.9	194.2	236.5	-42.2	450	310	6.6	20.9	890	34
1997	1019	66.1	7.5	21.4	103.5	3.8	1.4	48	22.9	129.8	0.3	98.7	137.6	153.0	-15.4	282	234	4.0	19.4	575	14
1997	1021	53.7	4.5	10.7	67.4	4.4	1.1	21	14.6	95.9	0.3	52.0	88.0	110.8	-22.8	137	116	1.2	10.3	365	11
1997	1026	41.7	6.0	9.9	66.1	3.8	0.6	38	14.6	90.3	0.1	61.2	86.5	104.9	-18.5	168	130	1.2	11.9	385	12
1997	1110	64.6	11.0	22.2	113.1	4.1	2.9	36	31.2	118.5	0.1	104.0	153.2	149.8	3.5	286	250	1.2	18.9	525	9
1997	1117	46.8	5.5	11.5	84.4	3.3	0.4	26	18.7	87.5	0.1	71.6	105.1	106.3	-1.2	213	187	1.2	13	285	7
1997	1201	50.1	5.0	13.2	83.1	3.3	0.4	39	18.7	87.5	0.2	87.6	104.9	106.4	-1.5	281	242	1.9	15.5	350	6
1997	1215	33.9	7.5	15.6	82.7	5.4	0.4	49	22.9	87.5	0.3	83.7	111.5	110.6	0.9	236	187	1.9	12.9	285	8
1998	112	37.2	6.0	17.3	97.0	4.4	0.9	49	33.3	81.8	0.1	96.4	125.5	115.2	10.3	254	205	2.1	13.9	315	8
1998	116	38.9	6.0	15.6	84.4	4.6	0.6	31	35.4	87.5	0.4	57.9	111.3	123.3	-12.0	229	198	1.6	12.8	315	10
1998	301	33.9	5.5	19.7	99.6	5.1	1.1	70	31.2	95.9	0.1	107.8	131.1	127.2	3.9	281	211	2.1	14.2	385	12
1998	322	26.3	9.0	22.2	114.0	5.6	1.4	94	33.3	110.0	0.1	129.1	152.2	143.4	8.8	309	215	3.0	11.4	330	9
1998	414	49.0	6.5	18.9	90.0	3.8	0.8	30	27.1	98.7	1.2	72.0	120.1	127.0	-6.9	273	243	2.3	15.2	350	9
1998	426	39.8	4.0	10.7	66.6	3.8	0.9	20	29.2	33.9	1.5	81.3	86.0	64.5	21.5	258	238	1.4	19.6	415	11
1998	511	37.2	5.5	10.7	68.3	3.3	1.1	22	14.6	79.0	0.1	54.5	88.9	93.6	-4.7	232	210	1.6	13.1	345	7
1998	524	38.9	5.0	12.3	75.3	0.5	1.1	40	10.4	76.2	0.1	86.3	94.2	86.7	7.4	293	253	1.8	17.3	425	11

KIM C runoff chemistry 1998-99 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R99.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1998	601	39.8	5.0	9.9	66.6	0.5	1.1	24	8.3	48.0	0.3	90.3	83.1	56.6	26.5	314	290	1.8	19.9	430	9
1998	608	41.7	5.5	12.3	71.8	0.8	0.9	19	8.3	62.1	0.1	81.5	91.2	70.5	20.8	273	254	1.6	18.7	405	13
1998	629	57.5	8.5	14.0	80.5	0.8	0.8	14	12.5	84.6	0.1	78.8	104.5	97.2	7.3	292	278	2.0	21.3	465	13
1998	810	40.7	10.0	18.9	96.1	0.5	0.9	60	10.4	112.8	0.1	103.8	126.4	123.3	3.1	339	279	2.6	18.4	535	17
1998	831	44.7	10.5	20.6	110.9	0.5	0.7	75	8.3	126.9	0.1	127.5	143.2	135.3	7.8	419	344	4.4	20.2	495	13
1998	914	58.9	5.0	18.9	101.4	0.8	0.9	19	20.8	115.7	2.1	66.2	127.0	138.6	-11.7	373	354	3.5	20.8	445	11
1998	1012	51.3	7.0	16.5	98.8	0.5	0.9	90	14.6	101.6	0.3	148.5	123.6	116.4	7.2	466	376	3.5	21.2	525	8
1998	1026	56.2	5.5	17.3	97.4	0.8	0.6	36	31.2	95.9	0.1	86.6	121.6	127.3	-5.7	356	320	4.2	18.7	430	9
1998	1111	42.7	7.5	13.2	67.4	1.3	0.6	36	16.7	53.6	0.1	98.3	90.0	70.3	19.7	309	273	2.2	18.1	495	13
1998	1218	13.8	10.0	7.4	10.0	3.1	0.4	15	12.5	19.8	0.3	27.2	30.9	32.5	-1.6	79	64	0.4	6.8	525	19

3.1.4 ROLF

ROLF runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1994	623	69.2	34.4	37.8	105.7	20.5	65	66	95.8	107.2	82.8	112.8	263.4	285.8	-22.4	163	97	0.6	18.8	3440	14	52
1994	630	112.2	30.4	51	92.7	8.9	23.4	110	154.1	67.7	60	146.8	206.4	281.8	-75.4	320	210	3.4	16.6	2000	28	60
1994	804	151.4	40.9	77.3	164.9	24.5	48.6	228	287.3	101.6	76.8	269.9	356.2	465.7	-109.5	481	253	4.6	20.5	2840	20	74
1994	825	134.9	20.5	39.5	124	2	3.8	124	141.6	81.8	10.2	215.1	189.8	233.6	-43.8	454	330	5.6	23.3	760	14	56
1994	829	91.2	11.5	22.2	91.3	2.3	1.6	48	62.5	64.9	0.6	140.1	128.9	128.0	0.9	395	347	3.6	24.2	555	13	33
1994	901	100	12.5	23	96.6	3.1	2.1	63	66.6	81.8	0.9	151	137.3	149.3	-12.0	468	405	4.2	27.7	610	13	36
1994	905	79.4	10.5	17.3	87.4	2	0.9	39	43.7	59.2	0.7	132.9	118.1	103.6	14.5	361	322	2.8	24	500	10	31
1994	908	85.1	11	13.2	73.5	2	5.2	23	43.7	50.8	14.6	103.9	104.9	109.1	-4.2	280	257	2	23	840	14	30
1994	912	67.6	6.5	10.7	50.9	1.8	2.4	21	20.8	36.7	2.4	101	72.3	59.9	12.4	284	263	1.5	21.4	475	9	25
1994	915	77.6	8	13.2	55.2	2	2.6	17	33.3	62.1	8.6	71.6	81.0	104.0	-23.0	216	199	1.1	17.7	535	10	29
1994	919	70.8	7	9	52.6	2.6	2.6	76	20.8	48	2.1	149.7	73.8	70.9	2.9	283	207	1.5	21.2	490	9	21
1994	922	64.6	12.5	16.5	65.3	6.1	5	18	12.5	56.4	1.4	117.7	105.4	70.3	35.1	387	369	2.4	25.8	625	12	30
1994	1006	72.4	12	18.9	65.3	3.3	6.2	48	16.7	67.7	1.8	139.9	105.7	86.2	19.5	396	348	3.7	24.2	620	13	
1994	1024	112.2	18.5	38.7	105.7	2.3	6.4	76	62.5	121.3	40.3	135.7	171.6	224.1	-52.5	272	196	2.5	15.8	1080	11	
1994	1030	75.9	9.5	17.3	77		4.2	18	47.9	73.3	17.1	63.6	108.0	138.3	-30.3	132	114	0.82	12.8	615	7	
1994	1114	77.6	5.5	18.1	80	2.8	5.9	26	56.2	84.6	15.7	59.4	112.3	156.5	-44.2	189	163	1.4	9.8	525	5	30
1994	1121	58.9	6.5	12.3	65.3	2.6	6.4	47	35.4	64.9	7.9	90.8	93.1	108.2	-15.1	197	150	1.3	15	525	6	22
1994	1128	70.8	8	14.8	83.5	3.8	8.9	46	22.9	84.6	4.7	123.6	119.0	112.2	6.8	352	306	2.6	18.1	605	13	26
1994	1205	93.3	17.5	29.6	100	4.1	11.8	75	75	126.9	30.3	99.1	163.0	232.2	-69.2	225	150	1.4	12.4	840	6	40
1994	1212	87.1	16	28.8	104	5.6	12.1	61	50	186.2	18.2	60.2	166.5	254.4	-87.9	213	152	1.1	11.3	665	3	37
1994	1219	77.6	11	18.1	85.7	4.6	8.8	34	52	112.8	25.7	49.3	128.2	190.5	-62.3	124	90	0.49	7.6	650	4	30
1994	1227	91.2	15	29.6	113.5	5.6	12.9	54	60.4	174.9	21.1	65.4	176.6	256.4	-79.8	212	158	1.1	9.7	700	6	39
1995	103	70.8	12	22.2	106.6	4.9	11.3	46	52	146.7	20.2	54.9	157.0	218.9	-61.9	176	130	0.8	8.6	650	5	22
1995	109	104.7	32.9	42	157.5	8.7	12.7	91	68.7	217.2	25	138.6	253.8	310.9	-57.1	245	154	1.3	7.3	730	8	48
1995	116	79.4	16.5	32.1	133.5	7.7	15.9	48	54.1	180.5	15	83.5	205.7	249.6	-43.9	184	136	1.3	8	660	8	43
1995	123	134.9	31.9	71.6	274.9	10.2	27.3	224	112.4	355.4	81	226	415.9	548.8	-132.9	303	79	0.4	4.3	1740	2	55
1995	130	102.3	23.5	54.3	224	8.9	19.1	143	83.3	327.2	30	134.6	329.8	440.5	-110.7	271	128	1.1	5.8	865	2	70
1995	206	77.6	13	28	153.6	6.4	15.6	55	60.4	177.7	43.6	67.5	216.6	281.7	-65.1	162	107	0.48	6.4	1050	3	32
1995	213	63.1	7	18.1	94	4.1	13.8	30	47.9	124.1	29.6	28.5	137.0	201.6	-64.6	112	82	0.36	6.2	765	4	23
1995	220	56.2	8.5	16.5	110.9	4.9	13.9	31	43.7	135.4	24.6	38.2	154.7	203.7	-49.0	108	77	0.37	6.7	690	4	23
1995	227	69.2	9.5	20.6	130.9	5.1	14.6	38	45.8	189	18.9	34.2	180.7	253.7	-73.0	108	70	0.6	4.8	590	2	28
1995	306	63.1	8.5	19.7	121.4	4.3	13	34	37.5	172.1	13.9	40.5	166.9	223.5	-56.6	131	97	0.6	6.3	565	4	30
1995	313	91.2	17	35.4	191.8	5.6	17.1	78	64.5	251.1	31.4	89.1	266.9	347.0	-80.1	206	128	1	6.7	850	3	37
1995	320	102.3	25	54.3	250.1	6.4	36.8	131	116.6	290.6	77.8	120.9	372.6	485.0	-112.4	226	95	0.72	5.3	1780	3	44
1995	327	60.3	11	20.6	133.5	4.6	23.3	35	77	112.8	61.8	36.7	193.0	251.6	-58.6	130	95	0.41	5.4	1335	3	25
1995	403	38.9	5.5	9	74.8	4.9	14.4	8	41.6	59.2	28.9	25.8	108.6	129.7	-21.1	113	105	0.48	7	800	5	33

ROLF runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	410	51.3	7	11.5	84	6.4	10.6	17	54.1	73.3	12.5	47.9	119.5	139.9	-20.4	197	180	0.9	11	610	6	40
1995	418	52.5	8	13.2	97	6.1	13	16	50	79	14.3	62.5	137.3	143.3	-6.0	195	179	1	12.8	730	7	22
1995	424	58.9	8.5	14.8	110.5	7.2	4.2	27	41.6	104.4	4.5	80.6	145.2	150.5	-5.3	278	251	1.6	16.7	490	8	26
1995	502	56.2	9.5	15.6	128.8	5.6	1.7	35	43.7	110	4.3	94.4	161.2	158.0	3.2	276	241	1.9	16.7	435	7	12
1995	508	58.9	9	9.9	100.9	3.1	3.9	12	35.4	70.5	33.2	58.6	126.8	139.1	-12.3	152	140	0.9	13.3	875	11	22
1995	516	58.9	8	12.3	96.6	2.6	2.6	14	37.5	67.7	22.5	67.3	122.1	127.7	-5.6	185	171	1.2	13.6	695	8	24
1995	522	57.5	11	15.6	97.4	4.9	5	18	31.2	87.5	5.6	85.1	133.9	124.3	9.6	271	253	1.7	18.6	635	11	35
1995	531	67.6	10.5	15.6	97.9	2.6	6	17	50	62.1	11.1	94	132.6	123.2	9.4	276	259	2.1	22.3	760	12	27
1995	606	70.8	11.5	16.5	110.5	2.1	4.1	27	47.9	73.4	0.6	129.3	144.7	121.8	22.8	365	338	3.2	22.6	600	14	23

ROLF runoff chemistry 1995-96 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R96.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	612	61.7	8.5	11.5	78.7	1	3.8	7	39.6	36.7	5.3	90.6	103.5	81.6	21.9	254	247	1.9	22.2	670	15	22
1995	619	58.9	9	11.5	86.1	1	2.7	12	33.3	31	1.4	115.5	110.3	65.7	44.6	303	291	2	26	580	13	26
1995	717	37.2	13	14	49.2	12.5	18.1	20	37.5	33.9	12.5	80.1	106.8	83.9	22.9	141	121	0.81	19.1	1090	17	26
1995	724	102.3	24.5	42	77.4	5.1	9.4	146	189.5	33.9	10.4	172.9	158.4	233.8	-75.4	359	213	3.7	16.9	895	21	56
1995	904	117.5	23	51.8	160.5	14.8	33.3	172	231.1	95.9	32.8	213.1	283.4	359.8	-76.4	452	280	5.3	22.4	1680	14	74
1995	906	100	16.5	37	125.7	8.2	14.9	143	170.7	76.2	11.1	187.3	202.3	258.0	-55.7	449	306	4.7	21.6	945	13	42
1995	908	93.3	13.5	27.1	108.8	12.3	14.9	75	114.5	62.1	2.5	165.8	176.6	179.1	-2.5	329	254	3.1	23.5	1130	12	49
1995	912	75.9	10.5	16.5	83.5	8.2	6.4	37	60.4	56.4	12.5	108.7	125.1	129.3	-4.2	245	208	1.8	19.7	705	8	32
1995	914	67.6	8.5	13.2	70.9	7.9	4.9	18	54.1	36.7	5.1	95.1	105.4	95.9	9.5	207	189	1.6	20	575	11	19
1995	918	49	5	6.6	44.8	5.9	1.7	20	27.1	25.4	1.5	79.0	64.0	54.0	10.0	185	165	1	14.4	370	7	19
1995	926	91.2	16	28	99.6	10.2	9.2	68	37.5	152.3	8.9	123.5	163.0	198.7	-35.7	353	285	1.9	19.5	730	15	38
1995	929	83.2	13	23.9	93.5	5.6	2.4	70	18.7	155.2	1.1	116.6	138.4	175.0	-36.6	376	306	3.1	16.7	460	7	37
1995	1002	87.1	15	26.3	115.7	4.6	2.5	74	16.7	180.5	1.8	126.2	164.1	199.0	-34.9	355	281	3.4	15.8	430	7	40
1995	1009	83.2	12	23	103.5	6.9	4.2	51	43.7	118.5	26.8	94.8	149.6	189.0	-39.4	220	169	1.3	13.9	760	7	20
1995	1016	109.6	27.4	34.5	102.7	9.2	28.6	76	64.5	129.8	62.5	131.2	202.4	256.8	-54.4	385	309	2.8	21.3	1800	10	39
1995	1023	85.1	15	26.3	111.8	6.1	11.2	35	41.6	143.9	15	90.0	170.4	200.5	-30.1	312	277	2.5	18.9	835	8	43
1995	1030	102.3	19.5	37.8	160.9	7.2	5.6	55	58.3	200.3	27.8	101.9	231.0	286.4	-55.4	289	234	2.4	15.4	835	6	35
1995	1106	97.7	19	39.5	161.8	7.7	3.9	104	45.8	242.6	16.4	128.8	231.9	304.8	-72.9	335	231	2.7	13.1	590	6	54
1995	1113	100	18.5	37	153.6	8.2	7.5	118	33.3	251.1	7.6	150.8	224.8	292.0	-67.2	323	205	3.5	14	580	7	35
1995	1120	70.8	17.5	34.5	144.9	6.6	8.7	80	31.2	239.8	8.2	83.8	212.2	279.2	-67.0	311	231	3.9	13.6	540	5	37
1995	1128	117.5	21	53.5	194.9	10.2	8	170	70.8	330.1	23.2	151.0	287.6	424.1	-136.5	364	194	3.9	10.6	700	4	56
1995	1211	85.1	13	35.4	144.4	7.2	17.1	79	77	166.4	57.5	80.3	217.1	300.9	-83.8	225	146	1.6	9.2	1255	5	43
1996	115	117.5	29.9	55.9	134.8	6.9	4.1	352	152	115.7	133.5	299.9	231.6	401.2	-169.6	484	132	2.8	4.8	2110	3	66
1996	311	87.1	19.5	43.6	179.7	60.3		126	145.7	191.8	68.5	110.2	303.1	406.0	-102.9	282	156	2.4	9.4	2180	8	48
1996	409	91.2	14.5	35.4	135.3	11.5	39.7	61	106.2	124.1	76.8	81.5	236.4	307.1	-70.7	181	120	1.1	8	1840	5	50
1996	415	72.4	7	14.8	77.4	7.4	21.1	18	58.3	64.9	36.4	58.5	127.7	159.6	-31.9	111	93	0.7	8.1	1020	5	39
1996	422	61.7	7	11.5	60.5	6.6	18.3	7	50	48	23.6	51.0	103.9	121.6	-17.7	127	120	0.7	9.3	810	6	23
1996	429	79.4	10	18.1	89.6	9.2	11.7	17	68.7	64.9	16.8	84.6	138.6	150.4	-11.8	214	197	1.3	16.2	790	7	27
1996	506	100	13.5	29.6	111.8	9.7	16.5	45	75	90.3	61.8	99.0	181.1	227.1	-46.0	228	183	1.5	13	1360	6	40
1996	514	97.7	16	34.5	124.4	9.7	17.1	78	83.3	98.7	60.7	134.7	201.7	242.7	-41.0	253	175	1.8	14	1420	5	50
1996	519	91.2	17	35.4	132.2	6.4	6.3	44	81.2	95.9	57.8	97.6	197.3	234.9	-37.6	255	211	2	14.4	1210	8	45
1996	527	57.5	9	16.5	76.6	5.9	5.4	21	56.2	39.5	13.9	82.3	113.4	109.6	3.8	202	181	1.3	17.5	735	11	23
1996	603	61.7	10	17.3	94.8	3.6	5.5	20	54.1	48	2.2	108.6	131.2	104.3	26.9	285	265	2	23.2	550	8	26

ROLF runoff chemistry 1996-97 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R97.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1996	610	50.1	15.0	23.0	100.9	8.4	23.1	48	72.9	59.2	26.1	110.4	170.4	158.2	12.3	275	227	1.9	21.6	1205	9	42
1996	703	39.8	18.0	22.2	70.0	10.7	38.6	45	72.9	45.1	37.1	89.2	159.5	155.1	4.4	199	154	1.3	14.7	1570	9	41
1996	708	79.4	18.5	32.9	87.4	3.8	21.4	82	114.5	39.5	24.6	146.8	164.0	178.6	-14.7	280	198	3.0	19.4	1125	18	39
1996	812	95.5	16.5	30.4	84.4	5.4	12.9	52	110.4	62.1	23.9	100.7	149.5	196.3	-46.8	254	202	2.4	18.5	1115	16	45
1996	826	100.0	20.0	36.2	101.8	1.5	8.7	81	131.2	67.7	15.0	135.3	168.2	213.9	-45.7	391	310	4.6	24	940	19	40
1996	902	66.1	8.5	14.8	65.3	1.3	4.7	32	39.6	53.6	0.9	98.6	94.5	94.0	0.5	291	259	2.3	24.1	595	12	20
1996	930	70.8	8.0	14.0	49.2	1.0	3.9	12	39.6	56.4	3.9	59.0	76.1	99.8	-23.8	169	157	1.3	15.9	480	10	<10
1996	1007	85.1	12.0	23.0	76.1	1.8	3.1	210	41.6	112.8	0.9	255.8	116.1	155.3	-39.3	305	95	3.0	18.7	550	10	38
1996	1014	89.1	15.0	27.2	83.1	1.5	5.2	59	37.5	126.9	6.0	109.6	131.9	170.4	-38.5	314	255	3.1	19.3	600	10	28
1996	1028	102.3	15.0	30.4	94.4	1.8	5.7	31	79.1	112.8	19.6	69.0	147.3	211.6	-64.3	231	200	1.7	15.9	690	7	35
1996	1104	77.6	11.0	21.4	78.7	2.1	2.3	27	39.6	112.8	5.2	62.5	115.4	157.6	-42.2	220	193	1.4	15.5	460	5	28
1996	1125	85.1	11.5	23.0	91.4	2.6	4.1	24	33.3	143.9	4.1	60.4	132.6	181.3	-48.8	192	168	1.2	14	430	5	32
1996	1209	102.3	17.0	39.5	145.7	4.1	5.1	106	50.0	245.4	22.1	102.1	211.3	317.5	-106.2	195	89	0.8	6.7	555	5	31
1997	120	60.3	7.5	16.5	84.4	3.6	10.5	29	47.9	93.1	20.7	50.0	122.4	161.7	-39.3	148	119	1.2	10.2	685	15	23
1997	210	79.4	13.5	31.3	138.3	3.8	8.7	60	77.0	152.3	30.0	75.7	195.6	259.4	-63.7	221	161	2.0	10.3	790	6	
1997	227	91.2	14.0	34.6	140.9	4.9	11.6	63	58.3	194.7	40.3	66.9	206.0	293.3	-87.3	157	94	0.4	5.3	865	3	
1997	307	67.6	10.0	23.0	112.2	3.8	4.2	30	43.7	155.2	19.6	32.4	153.3	218.5	-65.2	116	86	0.1	5.5	500	4	
1997	317	72.4	13.5	30.4	137.9	5.9	4.9	49	47.9	222.9	4.1	39.1	192.6	274.9	-82.3	185	136	1.0	8.6	360	4	
1997	324	75.9	17.5	36.2	137.5	7.2	6.1	53	37.5	228.5	15.4	51.9	204.4	281.3	-77.0	192	139	1.3	9.1	575	6	
1997	402	91.2	17.0	38.7	153.6	8.4	6.1	64	56.2	253.9	12.9	55.9	223.7	323.0	-99.3	220	156	1.5	9.3	510	5	

ROLF runoff chemistry 1997-98 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R98.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1997	0505	89.1	20.0	43.6	158.3	6.9	10.3	92	68.7	242.6	45.7	63.2	239.1	357.0	-117.9	203	111	0.9	6.2	1070	7
1997	0507	85.1	13.0	26.3	135.7	2.3	0.9	32	50.0	177.7	5.2	62.4	178.2	232.9	-54.7	215	183	2.2	12.2	425	9
1997	0512	83.2	16.0	33.7	164.9	4.1	8.1	70	68.7	222.9	10.7	77.7	226.8	302.3	-75.5	244	174	2.2	11.2	570	6
1997	0623	81.3	14.0	28.0	123.1	3.1	12.3	41	89.5	98.7	28.2	86.2	180.4	216.5	-36.1	209	168	2.1	18.1	1090	25
1997	0701	77.6	14.0	24.7	117.9	1.3	7.2	54	72.9	101.6	2.4	119.8	165.0	176.9	-11.8	326	272	3.3	24.2	675	13
1997	0722	53.7	14.5	23.0	117.5	2.1	16.6	103	45.8	90.3	3.4	190.8	173.6	139.5	34.1	327	224	3.7	26.1	1210	36
1997	0901	117.5	21.0	37.8	137.5	11.3	24.5	77	147.8	101.6	31.4	145.7	232.0	280.8	-48.8	476	399	5.2	33.3	1800	18
1997	0922	89.1	17.5	33.7	133.5	8.4	18.2	31	114.5	95.9	21.1	100.0	211.4	231.5	-20.1	368	337	4.3	27.8	1260	15
1997	1006	52.5	19.0	27.2	107.0	5.9	31.3	50	60.4	132.6	17.9	81.9	190.3	210.8	-20.6	305	255	4.3	21.1	1370	25
1997	1013	85.1	11.0	17.3	101.4	2.1	5.3	24	54.1	90.3	12.9	88.8	136.9	157.3	-20.3	253	229	2.1	20	715	10
1997	1019	75.9	11.0	15.6	104.4	2.1	2.4	23	29.2	95.9	0.9	108.4	135.5	125.9	9.6	333	310	2.9	25.7	560	8
1997	1026	77.6	9.5	17.3	104.0	2.3	6.7	28	25.0	95.9	2.4	122.0	139.7	123.3	16.4	326	298	3.3	27.5	625	11
1997	1110	75.9	13.0	22.2	131.4	1.5	0.8	39	56.2	115.7	17.9	94.0	168.9	189.7	-20.9	267	228	3.3	17.2	605	6
1997	1117	69.2	9.5	17.3	113.1	2.3	1.1	17	41.6	93.1	13.9	80.8	143.3	148.7	-5.4	228	211	3.3	18	520	5
1997	1201	85.1	15.0	29.6	127.5	3.3	1.4	65	60.4	158.0	31.4	77.1	176.7	249.8	-73.1	259	194	1.5	11.8	715	4
1997	1215	85.1	14.0	28.0	120.9	3.8	3.0	46	68.7	126.9	43.9	61.3	169.7	239.6	-69.9	207	161	1.3	9.4	880	5
1998	112	56.2	7.0	13.2	73.5	3.3	4.7	31	45.8	53.6	40.0	49.5	101.7	139.4	-37.7	130	99	0.7	7.9	820	4
1998	116	60.3	11.0	18.1	77.4	3.6	3.5	27	56.2	59.2	48.6	36.8	113.6	164.0	-50.4	157	130	0.7	8.6	925	4
1998	301	79.4	16.5	37.8	125.7	7.4	6.8	83	54.1	180.5	28.2	93.8	194.2	262.9	-68.6	262	179	1.6	8.4	740	8
1998	322	104.7	22.0	53.5	167.9	7.9	7.1	163	50.0	259.5	47.8	168.8	258.4	357.3	-98.9	316	153	1.7	6.5	935	4
1998	406	83.2	18.5	42.0	147.9	7.2	5.4	93	58.3	217.2	40.7	80.9	220.9	316.2	-95.3	254	161	1.3	7.5	870	3
1998	414	70.8	11.5	27.2	120.1	4.9	4.3	40	56.2	160.8	19.3	42.3	167.8	236.3	-68.5	192	152	1.3	7.7	515	4
1998	426	58.9	10.0	19.7	89.6	4.6	16.4	32	62.5	90.3	32.5	46.0	140.4	185.2	-44.9	146	114	0.7	6.9	660	3
1998	511	50.1	10.5	14.0	63.9	3.8	9.7	15	50.0	39.5	12.5	65.1	102.0	102.0	0.0	243	228	1.0	17.5	695	7

ROLF runoff chemistry 1998-99 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R99.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1998	601	49.0	7.5	14.0	60.9	1.8	7.0	10	62.5	31.0	17.1	39.5	91.2	110.6	-19.5	173	163	1.0	12	595	7
1998	608	69.2	10.5	18.1	79.2	0.8	2.1	15	54.1	42.3	7.7	90.7	110.7	104.2	6.5	233	218	1.9	21.9	575	13
1998	629	60.3	13.5	14.0	71.3	0.5	3.7	0	43.7	42.3	8.6	68.7	103.0	94.6	8.4	196	196	1.5	21.1	635	11
1998	713	74.1	14.0	20.6	76.6	0.5	1.5	12	70.8	31.0	0.6	96.9	113.1	102.4	10.7	324	312	3.6	23.9	730	16
1998	728	69.2	11.5	19.7	77.0	0.5	4.1	0	37.5	79.0	3.1	62.4	112.8	119.6	-6.8	282	282	2.5	22.4	605	10
1998	810	61.7	16.0	18.1	75.3	0.5	4.5	25	33.3	59.2	2.6	105.9	114.3	95.1	19.2	314	289	2.6	29	700	20
1998	831	67.6	16.0	20.6	80.0	1.0	7.7	12	31.2	64.9	2.4	106.4	125.3	98.5	26.8	345	333	3.6	28.8	770	16
1998	914	81.3	13.5	24.7	86.6	1.0	3.6	34	68.7	73.4	5.9	96.6	129.3	148.0	-18.7	323	289	2.8	26	700	15
1998	1012	87.1	16.5	23.0	79.2	1.8	5.1	23	62.5	67.7	5.6	99.8	125.5	135.8	-10.3	304	281	2.7	23.2	715	13
1998	1026	64.6	11.0	15.6	67.0	1.5	2.6	13	31.2	76.2	3.6	64.2	97.7	111.0	-13.3	201	188	1.6	17.4	595	15
1998	1104	55.0	11.5	14.8	57.9	1.8	4.9	12	20.8	81.8	2.4	52.8	90.9	105.0	-14.1	165	153	0.9	12.6	1150	86
1998	1111	91.2	16.0	32.1	102.7	1.5	4.8	42	39.6	183.4	15.0	52.3	157.0	237.9	-80.9	199	157	1.2	10.1	640	10
1998	1218	89.1	25.5	53.5	152.7	4.4	17.4	157	93.7	253.9	32.8	119.1	253.4	380.4	-127.1	308	151	2.2	7.1	970	12
1999	106	87.1	18.5	37.0	138.3	2.3	4.4	71	68.7	194.7	36.4	58.9	200.5	299.8	-99.2	200	129	0.7	5.9	805	4
1999	121	70.8	11.0	21.4	116.2	2.6	6.9	35	52.1	146.7	21.4	43.6	157.9	220.2	-62.2	154	119	0.6	6.4	585	6
1999	214	64.6	12.5	23.9	125.3	3.8	10.9	35	54.1	132.6	31.4	57.8	176.4	218.1	-41.8	176	141	0.9	8.5	825	8
1999	306	60.3	14.5	20.6	119.6	4.1	14.1	38	47.9	143.9	15.4	64.0	172.9	207.1	-34.2	166	128	1.2	7.9	645	7
1999	322	74.1	13.0	25.5	133.1	3.1	12.6	48	91.6	132.6	40.0	45.2	187.2	264.2	-77.0	177	129	1.0	6.9	965	5
1999	406	32.4	6.5	4.9	47.0	1.5	3.3	16	29.2	25.4	9.4	47.7	63.2	63.9	-0.7	117	101	0.5	8.1	455	8
1999	419	36.3	7.0	7.4	57.4	1.8	0.9	9	31.2	33.9	6.4	48.3	74.5	71.5	3.0	148	139	0.9	11.2	425	8
1999	506	33.9	9.5	7.4	65.7	3.3	11.2	8	29.2	36.7	6.9	66.3	97.1	72.7	24.4	187	179	0.9	13.8	595	24
1999	520	26.9	11.0	8.2	68.7	1.3	2.2	14	39.6	36.7	3.6	52.5	91.4	79.9	11.6	182	168	1.2	14.2	440	9

3.1.5 METTE

METTE runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1994	623	67.6	26.9	36.2	119.6	19.9	50		91.6	121.3	81.4	25.9	252.6	294.3	-41.7			1.4	13.7	2660	11	68
1994	630	69.2	24	29.6	66.6	12.8	38.6	97	97.9	50.8	73.9	115.2	171.6	222.6	-51.0	266	169	2.1	16	2590	22	60
1994	804	128.8	21	37.8	105.7	15.9	40	169	170.7	73.3	80	194.2	220.4	324.0	-103.6	421	252	3.9	20.1	2660	22	60
1994	825	114.8	13	25.5	107.4	1.5	1.9	213	116.6	84.6	6.8	269.1	149.3	208.0	-58.7	610	397	5.6	19.4	635	8	68
1994	829	83.2	8	14	84.4	2.8	2.3	74	68.7	59.2	0.3	140.5	111.5	128.2	-16.7	469	395	3.4	19.3	525	13	32
1994	901	93.3	8.5	15.6	80.5	1.8	2	68	87.4	56.4	8.8	117.1	108.4	152.6	-44.2	395	327	2.6	17.8	645	9	32
1994	905	81.3	7.5	13.2	83.1	2	0.6	62	52	59.2	0.9	137.6	106.4	112.1	-5.7	432	370	2.8	21	465	7	30
1994	908	91.2	9.5	9.9	73.5	1.8	2.4	33	58.3	53.6	12.6	96.8	97.1	124.5	-27.4	354	321	1.9	22.7	750	12	28
1994	912	66.1	4	4.9	50	1.8	0.9	31	33.3	31	1.2	93.2	61.6	65.5	-3.9	319	288	1.3	18.2	400	6	21
1994	915	70.8	6	6.6	55.7	2.3	0.7	42	29.1	53.6	1.5	99.9	71.3	84.2	-12.9	379	337	1.7	18.5	415	6	21
1994	919	69.2	5.5	5.8	53.5	2.6	0.7	85	25	50.8	1.2	145.3	68.1	77.0	-8.9	362	277	1.6	20	400	5	17
1994	922	57.5	8.5	12.3	61.8	4.1	2.6	32	12.5	59.2	1.1	106.0	89.3	72.8	16.5	463	431	2.6	22.8	555	12	24
1994	1006	61.7	7	11.5	56.5	2	5.6	47	14.6	56.4	1.7	118.6	82.6	72.7	9.9	417	370	3.3	18.5	475	7	
1994	1024	97.7	14	25.5	100	2.6	3.3	98	58.3	112.8	19.6	150.4	145.4	190.7	-45.3	368	270	3.1	13.9	640	6	
1994	1030	77.6	10.5	15.6	72.2		5.3	20	50	73.3	16.4	61.5	103.6	139.7	-36.1	155	135	0.77	13.4	650	8	
1994	1114	93.3	8	21.4	104.8	4.3	4.4	50	64.5	110	19.6	92.1	142.9	194.1	-51.2	249	199	1.4	9.5	560	4	33
1994	1121	66.1	7.5	14.8	80.5	2.8	3.2	74	47.9	87.5	5.5	108.0	108.8	140.9	-32.1	301	227	1.7	10.9	370	4	20
1994	1128	70.8	7	14	79.6	3.1	2.6	68	43.7	87.5	4.1	109.8	106.3	135.3	-29.0	333	265	1.9	11.4	345	5	30
1994	1205	93.3	17	26.3	100	4.6	6.9	122	81.2	112.8	29.6	146.5	154.8	223.6	-68.8	357	235	1.9	13	770	6	40
1994	1212	75.9	11.5	18.9	86.1	3.8	4.1	87	54.1	146.7	10.7	75.8	124.4	211.5	-87.1	296	209	1.5	9	410	3	34
1994	1219	85.1	10.5	18.1	89.6	6.1	5.1	59	66.6	138.2	25	43.7	129.4	229.8	-100.4	217	158	0.71	7.8	605	5	37
1994	1227	79.4	12	23	98.7	5.6	6.1	76	60.4	143.9	17.1	79.4	145.4	221.4	-76.0	299	223	1.2	8.6	530	4	43
1995	103	72.4	9.5	18.1	84.4	4.9	4.5	77	54.1	121.3	17.5	77.9	121.4	192.9	-71.5	264	187	0.96	7.8	500	3	38
1995	109	85.1	9.5	22.2	113.1	5.1	4.5	114	62.5	138.2	13.2	139.6	154.4	213.9	-59.5	319	205	1.5	7.8	430	3	43
1995	116	70.8	10	21.4	101.8	4.1	6.4	76	56.2	121.3	13.6	99.4	143.7	191.1	-47.4	242	166	1.4	7.3	440	3	30
1995	123	125.9	23.5	55.9	222.3	11.8	19.8	336	97.9	301.8	70.7	324.8	333.3	470.4	-137.1	460	124	0.6	4.4	1400	3	70
1995	130	114.8	18	44.4	168.3	7.7	10.6	327	85.4	253.9	60.3	291.2	249.0	399.6	-150.6	471	144	0.93	4.4	980	40	78
1995	206	95.5	15	39.5	186.2	11.5	12.9	195	79.1	228.5	46.4	201.6	265.1	354.0	-88.9	375	180	0.89	6	1000	3	52
1995	213	100	13	35.4	168.3	8.4	9.1	210	85.4	211.6	39.3	207.9	234.2	336.3	-102.1	390	180	1.1	6.1	835	3	46
1995	220	55	7	14.8	92.7	5.4	9.1	77	50	101.6	26.8	82.6	129.0	178.4	-49.4	201	124	0.56	6.6	1030	3	23
1995	227	69.2	9.5	18.9	110.1	5.6	4.9	84	52	143.9	17.9	88.4	149.0	213.8	-64.8	222	138	0.7	5.9	455	3	36
1995	306	67.6	10	20.6	110.9	5.4	4.1	110	47.9	152.3	16.1	112.3	151.0	216.3	-65.3	254	144	0.9	5.9	440	2	43
1995	313	83.2	17.5	34.5	150.5	4.6	17.1	133	68.7	194.6	40.3	136.8	224.2	303.6	-79.4	282	149	1	5.6	990	11	41
1995	320	97.7	19.5	43.6	194	6.4	21.7	286	104.1	239.8	70	255.0	285.2	413.9	-128.7	436	150	1.1	4.4	1410	2	56
1995	327	87.1	14	29.6	161.8	6.1	18.8	168	99.9	146.7	79.3	159.5	230.3	325.9	-95.6	334	166	0.84	5.2	1500	2	43

METTE runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	403	58.9	6.5	14.8	94.4	7.4	12.4	47	60.4	76.2	44.6	60.2	135.5	181.2	-45.7	220	173	0.62	7.6	985	3	44
1995	410	36.3	4.5	6.6	46.5	3.3	2.9	15	29.1	48	9.4	28.6	63.8	86.5	-22.7	129	114	0.5	5.9	365	5	22
1995	418	45.7	7	11.5	66.6	4.9	2.6	39	45.8	48	9.8	73.7	92.6	103.6	-11.0	256	217	0.9	11.1	440	4	26
1995	424	46.8	5.5	10.7	63.5	5.1	2.4	36	45.8	53.6	8.4	62.2	87.2	107.8	-20.6	272	236	1	10.8	405	3	40
1995	502	50.1	6	10.7	74	5.4	2	41	43.7	62.1	6.3	77.1	98.1	112.1	-14.0	306	265	1.4	11.7	360	3	21
1995	508	55	6	7.4	71.8	5.4	4.6	15	29.1	50.8	27.1	58.2	95.2	107.0	-11.8	173	158	0.9	13.9	810	11	20
1995	516	50.1	6.5	9.9	70.9	4.3	1	43	37.5	59.2	9.1	79.9	92.6	105.8	-13.2	287	244	1.5	13.3	450	5	27
1995	522	53.7	12	13.2	73.1	4.6	1.3	41	31.2	67.7	4.4	95.6	104.2	103.3	0.9	339	298	1.9	16.1	480	6	29
1995	531	60.3	6	11.5	77.9	2.3	1.4	30	41.6	50.8	9.6	87.4	99.1	102.0	-2.9	363	333	2.3	18.8	530	8	23
1995	606	51.3	7.5	9.9	76	4	9	47	27.1	62.1	0.6	126.6	106.2	89.7	16.5	421	374	0	19.8	550	8	

METTE runoff chemistry 1995-96 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µg/l, µgF/l **File: R96.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	612	53.7	7.5	10.7	74	2.8	2.3	23	33.3	36.7	2.7	101.3	97.3	72.7	24.6	354	331	2	11	525	10	18
1995	619	52.5	6	9	71.3	2.3	0.9	37	31.2	28.2	0.4	119.2	89.5	59.8	29.7	382	345	2.2	22.6	450	9	18
1995	717	57.5	14	17.3	40	21	23.1	27	43.7	39.5	41.4	75.3	115.4	124.6	-9.2	128	101	0.78	18.2	1495	16	28
1995	724	83.2	18.5	25.5	70	7.2	5.4	109	118.7	28.2	35	136.9	126.6	181.9	-55.3	305	196	3.8	14.1	1090	11	44
1995	828	70.8	24	28.8	61.8	39.4	43.2	65	60.4	70.5	51.1	151.0	197.2	182.0	15.2	227	162	1	41.1	3480	33	38
1995	904	104.7	19	34.5	118.3	15.9	25.8	178	162.4	81.8	50	202.0	213.5	294.2	-80.7	478	300	5.4	18.9	1760	16	60
1995	906	95.5	12	26.3	115.3	5.4	2.5	194	158.2	67.7	9.7	215.4	161.5	235.6	-74.1	547	353	5.4	17.7	705	10	60
1995	908	91.2	12.5	22.2	107.4	8.2	3.7	125	118.7	62.1	13.6	175.8	154.0	194.4	-40.4	517	392	4.2	23.2	850	11	48
1995	912	67.6	9.5	14	76.1	6.6	2.1	65	66.6	62.1	5.9	106.3	108.3	134.6	-26.3	384	319	2.3	18.6	505	6	22
1995	914	77.6	9	13.2	77.9	6.4	2	54	64.5	53.6	4.5	117.5	108.5	122.6	-14.1	368	314	2.3	19	505	8	23
1995	918	45.7	4.5	4.9	38.7	5.1	3	26	27.1	16.9	1.5	82.4	56.2	45.5	10.7	182	156	0.9	14.5	440	9	17
1995	926	69.2	13.5	16.5	71.8	4.1	3.5	60	25	81.8	4.9	126.9	109.4	111.7	-2.3	382	322	2.1	16.7	560	12	18
1995	929	58.9	9	13.2	69.6	4.6	2.9	63	16.7	95.9	1.1	107.5	99.3	113.7	-14.4	388	325	2.9	15.6	400	5	26
1995	1002	66.1	10	14.8	77.4	4.1	1.6	59	16.7	115.7	1.9	98.7	107.9	134.3	-26.4	356	297	3.1	14.9	375	5	25
1995	1009	89.1	10.5	18.9	86.1	6.4	2.9	46	43.7	93.1	29.3	93.8	124.8	166.1	-41.3	271	225	1.4	14.5	775	5	29
1995	1016	83.2	18	24.7	83.5	8.7	17.1	64	43.7	98.7	40.3	116.5	152.0	182.7	-30.7	408	344	2.6	17.6	1180	7	38
1995	1023	77.6	13.5	20.6	83.5	5.9	8.4	40	39.6	101.6	19.6	88.7	131.9	160.8	-28.9	380	340	2.7	18	830	9	31
1995	1030	77.6	11	21.4	111.4	6.1	4	63	41.6	143.9	8.5	100.5	153.9	194.0	-40.1	368	305	2.9	14	515	5	40
1995	1106	85.1	12	23	117	6.9	6.4	101	37.5	172.1	7.1	134.7	165.3	216.7	-51.4	373	272	3.4	13.3	555	10	35
1995	1113	74.1	14	21.4	98.3	6.9	10.2	93	29.1	155.2	10.6	123.0	150.8	194.9	-44.1	315	222	3.3	11.6	590	9	28
1995	1120	89.1	15	26.3	126.6	7.9	10.3	121	31.2	194.6	18.2	152.2	186.1	244.0	-57.9	397	276	4.2	13.7	715	5	<10
1995	1128	89.1	15	32.1	135.3	6.6	15.3	128	62.5	194.6	30.3	134.0	204.3	287.4	-83.1	381	253	3.8	10.9	910	4	42
1995	1211	95.5	12	18.1	143.6	8.4	10.6	163	83.3	163.6	53.6	150.7	192.7	300.5	-107.8	409	246	2.7	9.2	1125	2	52
1996	115	91.2	17.5	42.8	140.5	10.5	35.1	285	164.5	124.1	77.1	256.9	246.4	365.7	-119.3	461	176	2	7.1	1820	6	62
1996	311	89.1	21.5	42.8	161.8	12.5		228	174.9	149.5	64.6	166.7	238.6	389.0	-150.4	396	168	2.5	7.1	1810	7	56
1996	409	87.1	12.5	28.8	100.5	13	34.3	103	104.1	95.9	60.3	118.9	189.1	260.3	-71.2	270	167	1.5	8.7	1570	7	62
1996	415	87.1	9	21.4	77.9	10.2	23.3	67	81.2	73.3	40	101.4	141.8	194.5	-52.7	252	185	1.4	9	1110	4	49
1996	422	72.4	7	14.8	66.1	8.9	13.3	39	62.5	64.9	24.3	69.8	110.1	151.7	-41.6	239	200	0.9	10.3	750	4	25
1996	429	79.4	10.5	19.7	77.9	10.2	15.5	54	75	67.7	28.9	95.6	133.8	171.6	-37.8	292	238	1.3	11.9	1015	12	35
1996	506	97.7	10.5	24.7	88.7	11.5	17.1	88	72.9	81.8	52.5	131.0	152.5	207.2	-54.7	333	245	1.6	11.1	1240	6	40
1996	514	102.3	12.5	28	97.9	11.8	14.8	111	79.1	93.1	52.8	153.3	165.0	225.0	-60.0	347	236	2.1	11.4	1220	4	42
1996	519	97.7	12.5	28	98.3	10.7	15.4	67	75	84.6	51.8	118.2	164.9	211.4	-46.5	327	260	2.6	13.1	1230	3	48
1996	527	63.1	8.5	17.3	77.9	8.4	1.5	62	70.8	48	17.1	102.8	113.6	135.9	-22.3	317	255	1.8	13.7	565	4	25

METTE runoff chemistry 1996-97 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R97.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1996	610	66.1	13.5	21.4	82.7	9.5	13.1	97	81.2	53.6	20.7	147.7	140.1	155.5	-15.4	392	295	2.4	20	940	9	47
1996	703	75.9	36.9	40.3	67.0	18.9	35.7	105	79.1	50.8	100.7	149.1	198.9	230.6	-31.7	307	202	1.7	17.7	2520	13	56
1996	708	83.2	16.0	22.2	63.9	3.8	13.7	110	106.2	28.2	45.7	132.8	119.7	180.1	-60.4	333	223	3.3	15.9	1310	15	43
1996	826	104.7	15.5	29.6	99.2	1.5	1.6	137	143.7	70.5	4.4	170.5	147.4	218.5	-71.2	500	363	5.5	17.7	545	7	50
1996	902	70.8	9.0	14.0	72.2	1.8	2.1	61	52.1	48.0	0.3	130.5	99.0	100.3	-1.3	451	390	3.6	21.6	520	6	24
1996	930	77.6	9.5	14.8	77.0	1.5	6.1	55	62.5	67.7	3.2	108.1	108.9	133.4	-24.5	333	278	2.7	18.8	520	11	21
1996	1007	72.4	9.0	16.5	64.8	1.8	3.1	58	43.7	81.8	0.3	99.8	95.2	125.8	-30.6	358	300	3.1	15.3	405	9	28
1996	1014	67.6	9.5	18.1	70.0	2.3	1.3	68	31.2	101.6	2.9	101.2	101.2	135.7	-34.4	388	320	3.5	16	365	6	27
1996	1028	85.1	10.0	20.6	79.6	2.8	1.3	57	64.5	101.6	7.9	82.3	114.3	174.0	-59.8	300	243	2.2	13.9	415	13	29
1996	1104	70.8	8.0	17.3	71.8	2.8	1.6	54	39.6	98.7	0.9	87.0	101.5	139.2	-37.8	315	261	2.4	14.8	360	10	32
1996	1125	81.3	10.0	22.2	81.4	3.6	3.4	92	25.0	163.6	7.5	97.7	120.6	196.1	-75.6	273	181	1.9	7.8	380	4	48
1996	1209	81.3	9.5	22.2	100.5	3.8	2.0	105	50.0	146.7	29.3	98.4	138.0	225.9	-87.9	233	128	0.6	6.8	600	5	33
1997	120	58.9	8.0	18.9	91.4	3.6	3.9	59	72.9	87.5	11.4	71.8	125.7	171.7	-46.1	297	238	2.6	11	435	4	34
1997	210	63.1	10.0	19.7	89.2	4.4	10.8	41	54.1	104.4	23.9	55.7	134.0	182.4	-48.4	169	128	0.9	8.8	820	9	
1997	227	81.3	10.5	23.9	103.1	4.9	4.4	78	58.3	149.5	25.7	72.5	146.7	233.5	-86.8	230	152	0.8	5.7	565	3	
1997	307	63.1	8.5	18.9	93.1	4.6	3.5	43	43.7	132.6	15.0	43.4	128.6	191.3	-62.7	177	134	0.4	5.7	420	3	
1997	317	66.1	9.5	20.6	93.5	5.6	2.4	46	52.1	129.8	10.6	51.3	131.6	192.4	-60.8	245	199	1.1	8.4	425	5	
1997	324	61.7	13.0	23.9	94.4	6.4	2.8	59	50.0	138.2	16.4	56.4	140.4	204.6	-64.2	232	173	1.2	7.2	545	6	
1997	402	69.2	10.0	20.6	91.4	6.1	2.1	39	50.0	132.6	12.1	43.6	130.1	194.7	-64.6	234	195	1.4	8.9	435	3	
1997	407	75.9	12.5	23.9	108.8	5.4	1.3	56	54.1	155.2	9.4	65.0	151.8	218.6	-66.9	273	217	1.6	8.9	370	4	

METTE runoff chemistry 1997-98 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File:**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1997	0507	64.6	8.5	17.3	100.1	3.1	0.6	62	50.0	121.3	1.1	83.7	129.4	172.3	-42.9	267	205	2.4	11	280	4
1997	0512	63.1	13.0	20.6	102.2	3.6	4.9	72	47.9	132.6	14.3	84.5	144.2	194.8	-50.6	283	211	2.4	12.7	605	9
1997	0602	55.0	11.5	17.3	98.8	2.3	0.9	88	33.3	121.3	4.4	114.6	130.7	159.0	-28.4	347	259	3.3	15.1	425	5
1997	0623	87.1	12.0	20.6	101.8	1.5	4.3	78	110.4	76.2	4.1	114.6	140.2	190.7	-50.5	313	235	3.0	18.1	590	13
1997	0701	64.6	10.5	14.0	100.5	1.5	2.4	46	56.2	70.5	1.9	110.9	128.9	128.6	0.3	358	312	3.3	22.2	510	16
1997	0722	45.7	11.0	22.2	82.2	4.9	13.4	95	35.4	73.4	16.1	149.6	133.7	124.8	8.9	311	216	3.2	20.8	965	13
1997	0901	85.1	19.0	24.7	102.7	8.4	30.1	57	99.9	76.2	49.6	101.3	184.9	225.7	-40.9	387	330	4.2	21.8	1910	21
1997	0922	31.6	20.0	26.3	107.0	11.3	20.2	13	85.4	87.5	58.6	-2.0	184.8	231.4	-46.6	288	275	4.2	23.5	4410	146
1997	1019	66.1	8.5	11.5	78.3	1.8	1.6	24	25.0	73.4	0.4	93.0	101.7	98.8	2.9	357	333	3.1	21.5	450	6
1997	1026	64.6	11.0	14.0	85.3	3.6	3.6	24	20.8	84.6	0.9	99.6	117.4	106.3	11.1	380	356	3.5	25.5	595	8
1997	1110	66.1	10.5	19.7	109.6	2.3	1.4	59	56.2	95.9	16.4	100.0	143.5	168.5	-25.0	330	271	3.5	15.9	615	5
1997	1117	55.0	10.0	14.0	84.4	2.1	0.8	37	41.6	67.7	7.1	86.7	111.2	116.5	-5.3	289	252	3.5	13.8	390	4
1997	1201	83.2	14.0	26.3	101.8	3.8	3.7	105	56.2	141.1	23.9	116.6	149.6	221.2	-71.6	326	221	1.8	12.2	645	3
1997	1215	85.1	14.0	28.0	102.2	4.4	6.1	106	68.7	126.9	38.6	111.6	154.7	234.2	-79.6	294	188	1.7	9.7	860	4
1998	112	67.6	7.5	16.5	79.6	3.6	4.7	40	60.4	59.2	32.5	67.3	111.8	152.1	-40.3	215	175	1.5	10.2	755	3
1998	116	58.9	7.0	14.0	60.9	3.8	4.6	33	50.0	59.2	38.9	34.1	90.4	148.1	-57.8	164	131	0.7	6.9	780	4
1998	301	64.6	8.5	14.8	67.4	4.4	3.6	33	50.0	50.8	37.8	57.6	98.6	138.6	-40.0	201	168	1.0	8	780	3
1998	322	93.3	18.0	40.3	130.9	7.7	10.8	171	47.9	205.9	41.1	177.1	207.7	294.9	-87.2	359	188	2.1	7.6	895	3
1998	406	81.3	13.5	32.1	112.2	7.4	6.1	132	54.1	158.0	47.1	125.4	171.3	259.2	-87.9	334	202	1.5	7.7	970	5
1998	414	69.2	12.5	25.5	104.0	5.4	6.6	88	64.5	141.1	27.1	78.4	154.0	232.7	-78.8	268	180	1.5	7.5	640	2
1998	426	83.2	14.5	28.0	104.4	9.2	16.9	95	87.4	126.9	54.3	82.4	172.9	268.6	-95.7	233	138	0.9	6.4	1120	2
1998	511	55.0	8.5	13.2	58.7	4.6	4.9	20	62.5	42.3	23.2	36.9	89.9	128.0	-38.1	204	184	0.9	9.9	650	5

METTE runoff chemistry 1998-99 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R99.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1998	601	63.1	11.0	18.9	70.0	3.8	7.6	37	64.5	48.0	22.5	76.5	111.4	135.0	-23.6	267	230	1.8	15.3	785	9
1998	608	63.1	10.5	15.6	71.8	1.3	1.9	34	54.1	42.3	7.4	94.4	101.1	103.8	-2.7	301	267	2.2	18	480	6
1998	629	61.7	10.5	14.0	69.2	0.8	2.6	6	43.7	39.5	7.2	74.3	97.0	90.4	6.6	294	288	2.2	21.8	600	9
1998	713	57.5	11.5	11.5	56.1	1.0	2.6	15	47.9	25.4	3.7	78.3	82.7	77.0	5.7	311	296	3.0	21.2	685	18
1998	728	67.6	10.5	14.8	66.6	0.5	4.9	-3	29.2	56.4	3.4	73.0	97.3	88.9	8.4	316	319	2.6	22.5	620	9
1998	810	64.6	13.5	16.5	67.4	0.5	7.3	13	29.2	45.1	5.9	102.5	105.1	80.2	24.9	335	322	2.5	29.2	840	18
1998	831	58.9	15.0	15.6	74.4	0.8	8.2	27	20.8	48.0	1.7	129.4	114.0	70.5	43.5	416	389	4.2	28.8	715	12
1998	914	91.2	14.5	23.0	77.0	0.5	6.8	13	64.5	62.1	11.4	88.0	121.8	138.0	-16.2	327	314	2.7	29.9	930	18
1998	1012	93.3	17.5	20.6	78.7	1.3	5.9	19	66.6	64.9	8.0	96.7	123.9	139.5	-15.6	347	328	2.5	24.8	810	11
1998	1026	72.4	12.5	18.9	71.8	2.1	3.9	25	41.6	79.0	4.4	81.5	109.2	125.1	-15.9	302	277	2.4	20.5	625	10
1998	1104	63.1	11.5	12.3	56.1	2.1	3.4	17	25.0	81.8	3.1	55.5	85.3	109.9	-24.6	192	175	0.9	13.6	430	8
1998	1111	75.9	12.5	22.2	79.2	2.3	8.1	34	37.5	138.2	15.0	43.4	124.2	190.7	-66.5	214	180	1.2	10.4	650	11
1998	1218	67.6	18.0	26.3	95.7	3.8	18.3	76	58.3	141.1	32.5	73.9	162.1	231.8	-69.7	264	188	1.7	9	1000	8
1999	106	89.1	15.5	31.3	126.2	3.3	12.1	109	77.0	166.4	40.7	102.2	188.3	284.2	-95.9	291	182	0.9	6.4	930	3
1999	121	75.9	12.5	23.0	107.4	2.8	9.8	82	56.2	146.7	25.4	85.2	155.5	228.3	-72.7	237	155	0.8	5.8	630	4
1999	214	63.1	11.0	16.5	93.5	2.8	8.8	50	54.1	98.7	22.5	70.3	132.6	175.4	-42.8	245	195	1.2	9.1	685	6
1999	306	64.6	14.0	20.6	104.0	3.3	12.0	80	56.2	121.3	16.1	104.8	153.8	193.6	-39.8	266	186	1.6	7.5	620	8
1999	322	77.6	12.5	26.3	124.8	3.3	17.5	118	89.5	124.1	41.1	125.4	184.5	254.7	-70.3	306	188	1.4	6.6	1130	5
1999	406	91.7	17.5	20.6	127.0	7.4	27.1	60	89.5	101.6	57.5	102.7	199.5	248.6	-49.0	346	286	1.4	16.2	1700	13
1999	419	38.0	7.5	9.1	56.6	2.3	3.9	22	39.6	36.7	12.1	50.9	79.3	88.4	-9.1	220	198	1.1	10.6	505	5
1999	506	33.1	8.5	9.9	70.9	4.4	24.4	28	33.3	45.1	3.4	97.3	118.0	81.8	36.1	278	250	1.6	15	790	30
1999	520	44.7	9.5	8.2	59.2	3.1	6.1	16	33.3	42.3	13.9	57.2	86.1	89.5	-3.5	185	169	1.0	12.3	595	7

3.1.6 CECILIE

CECILIE runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1994	623	83.2	28.4	35.4	86.6	19.7	62.1	192	95.8	81.8	116.4	213.4	232.2	294.0	-61.8	342	150	1.3	15.1	3540	15	62
1994	630	83.2	24	25.5	46.1	10.5	42.8	147	75	39.5	19.6	245.0	148.9	134.1	14.8	258	111	1.2	12.1	2880	25	40
1994	825	131.8	22.5	31.3	114.8	3.3	3.9	160	122.8	81.8	30.7	232.3	175.8	235.3	-59.5	442	282	3.7	16.2	1010	12	56
1994	829	97.7	16	18.1	94	1.8	1.1	71	95.8	67.7	0.4	135.8	131.0	163.9	-32.9	383	312	3.4	18.7	560	11	35
1994	901	95.5	10	17.3	94.8	2	0.9	74	89.5	70.5	1.2	133.3	125.0	161.2	-36.2	392	318	3.2	18.1	550	9	36
1994	905	83.2	12.5	12.3	98.3	1.5	0.4	48	60.4	67.7	0.9	127.2	125.0	129.0	-4.0	377	329	2.9	20.5	460	8	31
1994	908	85.1	9	9	76.1	2.6	6.1	36	60.4	56.4	21.4	85.7	102.8	138.2	-35.4	314	278	1.9	19.6	900	16	27
1994	912	58.9	4	3.3	51.8	1.5	0.9	21	37.5	36.7	2.1	65.1	61.5	76.3	-14.8	204	183	1.3	13.6	370	7	20
1994	915	79.4	6.5	8.2	76.6	2	0.9	36	45.8	67.7	5.1	91.0	94.2	118.6	-24.4	311	275	1.9	17	445	6	24
1994	919	66.1	5	4.9	63.9	2.3	0.6	80	31.2	53.6	1.9	136.1	76.7	86.7	-10.0	320	240	1.9	17.6	425	6	19
1994	922	53.7	11.5	15.6	70.5	5.4	9.4	45	35.4	62.1	6.7	106.9	112.4	104.2	8.2	368	323	2.5	20.4	740	12	29
1994	1006	55	9.5	12.3	52.6	2	6.6	54	20.8	56.4	5.5	109.3	83.0	82.7	0.3	310	256	2.6	15.5	530	8	
1994	1024	107.1	18	31.3	135.3	2.6	3	113	81.2	152.3	31.1	145.7	190.2	264.6	-74.4	374	261	2.6	12.1	830	7	
1994	1030	67.6	8.5	14.8	86.6		2.4	33	47.9	87.5	10.7	66.8	112.3	146.1	-33.8	179	146	0.9	11.1	485	7	
1994	1114	66.1	4.5	13.2	74.8	2.3	2.5	38	50	79	14.6	57.8	97.3	143.6	-46.3	173	135	1	5.8	400	3	25
1994	1121	69.2	9.5	15.6	97	2.6	0.7	75	52	98.7	5.8	113.1	125.4	156.5	-31.1	321	246	2	11	370	4	26
1994	1128	72.4	10.5	16.5	97	2.8	2.4	79	56.2	98.7	8.4	117.3	129.2	163.3	-34.1	329	250	2	11.5	435	8	28
1994	1205	87.1	15	22.2	105.3	4.1	2.8	109	79.1	115.7	25	125.7	149.4	219.8	-70.4	316	207	1.6	11.3	625	5	
1994	1212	74.1	12	18.9	95.7	3.8	1.5	70	50	138.2	12.5	75.3	131.9	200.7	-68.8	255	185	1.3	8.6	400	4	27
1994	1219	85.1	11.5	20.6	112.2	4.3	1.8	68	62.5	146.7	22.5	71.8	150.4	231.7	-81.3	228	160	0.9	7.9	520	4	38
1994	1227	75.9	13	23.9	120.1	4.9	3.7	75	60.4	158	20.3	77.8	165.6	238.7	-73.1	258	183	1	7.9	535	5	35
1995	103	69.2	10	17.3	92.7	6.1	1.2	56	50	124.1	13.2	65.2	127.3	187.3	-60.0	235	179	1	7.9	390	4	30
1995	109	87.1	13.5	24.7	126.6	5.9	4.1	82	58.3	152.3	23.2	110.1	174.8	233.8	-59.0	227	145	1.1	6.9	570	22	35
1995	116	74.1	14	28.8	139.2	7.7	5.4	67	52	172.1	13.9	98.2	195.1	238.0	-42.9	207	140	1.2	6.5	445	4	30
1995	123	128.8	25.4	58.4	261.4	10.5	12.3	313	99.9	332.9	73.5	303.5	368.0	506.3	-138.3	420	107	0.7	4.2	1340	2	60
1995	130	107.1	20	43.6	180.5	6.9	7.6		79.1	242.6	73.2	-29.2	258.6	394.9	-136.3	339		0.74	4.1	1070	2	64
1995	206	89.1	14.5	34.5	174	7.4	5.3	134	66.6	217.2	34.3	140.7	235.7	318.1	-82.4	278	144	0.75	5.1	700	2	45
1995	213	91.2	13.5	30.4	154.9	6.4	2.9	121	64.5	197.5	31.4	126.9	208.1	293.4	-85.3	278	157	0.8	6	260	2	36
1995	220	57.5	8	14.8	100.5	4.3	2.9	64	45.8	121.3	18.9	66.0	130.5	186.0	-55.5	177	113	0.61	6.2	460	3	20
1995	227	69.2	10	19.7	124	4.9	1.6	78	45.8	163.6	17.1	80.9	160.2	226.5	-66.3	197	119	0.6	5.5	390	2	28
1995	306	58.9	7	15.6	101.8	3.3	1	57	39.6	143.9	11.8	49.3	128.7	195.3	-66.6	181	124	0.8	5.9	340	3	27
1995	313	67.6	12	21.4	113.5	3.8	12.5	76	50	132.6	35	89.2	163.2	217.6	-54.4	207	131	0.9	5.8	830	3	50
1995	320	102.3	21.5	43.6	203.1	6.6	27.7	212	108.3	234.1	81	193.4	302.5	423.4	-120.9	337	125	0.89	4.2	1660	2	46
1995	327	81.3	13.5	25.5	132.2	5.1	19.8	100	81.2	126.9	73.2	96.1	196.1	281.3	-85.2	225	125	0.65	5.3	1430	3	31
1995	403	51.3	6	9.9	74.4	4.3	4.1	27	45.8	70.5	24.6	36.1	98.7	140.9	-42.2	167	140	0.62	6.1	565	3	43

CECILIE runoff chemistry 1994-95 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R95.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	410	52.5	5.5	11.5	67.9	5.9	6.1	42	54.1	53.6	24.3	59.4	96.9	132.0	-35.1	231	189	0.8	8.8	635	4	<10
1995	418	49	7.5	9.9	74.8	3.8	1.3	27	41.6	70.5	4.2	57.0	97.3	116.3	-19.0	218	191	1.1	10.7	355	6	15
1995	424	56.2	8.5	14	85.3	4.9	1.1	39	47.9	95.9	3.9	61.3	113.8	147.7	-33.9	243	204	1.3	10.7	375	6	22
1995	502	52.5	12.5	14	74.4	4.9	4.2	48	52	70.5	15.4	72.6	110.0	137.9	-27.9	230	182	1.2	9.6	520	5	20
1995	508	50.1	5.5	9	73.5	3.6	0.8	18	31.2	56.4	20.7	52.2	92.4	108.3	-15.9	173	155	0.8	10.8	580	9	14
1995	516	52.5	6	9.9	76.6	3.3	1.5	27	39.6	64.9	16.1	56.2	97.3	120.6	-23.3	201	174	1.1	10.9	515	5	23
1995	522	53.7	14	18.1	75.7	4.9	5.1	63	45.8	84.6	9.8	94.3	117.8	140.2	-22.4	252	189	1.5	12.6	690	10	34
1995	531	66.1	7.5	11.5	80.9	2.6	2.9	28	52	59.2	11.8	76.5	105.4	123.0	-17.6	308	280	2.1	16.9	645	11	24
1995	606	52.5	11.5	12.3	83.1	3.6	5.2	75	43.7	70.52	2.57	137.0	115.7	116.8	-1.1	362	287	3.1	18.8	660	12	23

CECILIE runoff chemistry 1995-96 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µg/l, µgF/l **File: R96.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1995	612	60.3	7.5	9	69.6	0.8	2.2	23	41.6	42.3	4.6	83.9	89.1	88.5	0.6	309	286	1.9	19.9	520	10	19
1995	619	58.9	6.5	9	80.9	0.5	1.6	21	35.4	42.3	0.4	100.3	98.5	78.1	20.4	331	310	2	21.3	620	13	18
1995	717	49	11.5	12.3	24.8	10.2	10.1	46	35.4	25.4	37.8	65.3	68.9	98.6	-29.7	133	87	0.88	11	1120	10	22
1995	724	43.6	17.5	20.6	62.2	7.7	16.1	97	81.2	42.3	21.4	119.8	124.1	144.9	-20.8	250	153	3.4	12.6	1010	15	30
1995	828	63.1	22	31.3	82.7	37.6	46.8	176	85.4	101.6	42.5	230.0	220.4	229.5	-9.1	391	215	2.5	33.9	2710	49	43
1995	904	75.9	15.5	21.4	72.2	15.9	3.9	84	81.2	53.6	37.5	116.5	128.9	172.3	-43.4	286	202	2.9	15.3	1050	10	37
1995	906	87.1	15	24.7	100.5	15.1	5.4	109	122.8	67.7	18.9	147.4	160.7	209.4	-48.7	354	245	3.3	17	670	10	48
1995	908	95.5	14.5	27.1	120.5	16.1	2.2	115	135.3	76.2	20.3	159.1	180.4	231.8	-51.4	396	281	3.6	18.9	905	13	48
1995	912	77.6	10.5	15.6	74.8	6.6	3.2	62	91.6	56.4	10.1	92.2	110.7	158.1	-47.4	282	220	2.1	13.2	520	5	24
1995	914	79.4	11	15.6	84.4	8.2	3.1	51	83.3	56.4	9.6	103.4	122.3	149.3	-27.0	300	249	2.4	16	530	7	23
1995	918	39.8	6	4.9	42.6	4.6	3.2	17	33.3	22.6	1.7	60.5	61.3	57.6	3.7	156	139	1.1	11.9	380	8	19
1995	926	77.6	14.5	21.4	111.4	8.4	2.5	64	41.6	126.9	11.1	120.2	158.2	179.6	-21.4	339	275	2.2	14.9	565	8	22
1995	929	67.6	11	18.1	97.9	6.4	1.1	66	33.3	118.5	0.9	115.4	134.5	152.7	-18.2	385	319	3.3	17.6	370	6	33
1995	1002	75.9	16.5	25.5	136.2	4.9	1	65	37.5	169.3	0.6	117.6	184.1	207.4	-23.3	331	266	3	14.4	415	6	29
1995	1009	74.1	11	18.1	101.8	6.4	3.7	57	45.8	107.2	13.2	105.9	141.0	166.2	-25.2	291	234	1.9	14.3	620	10	23
1995	1016	128.8	33.4	39.5	102.2	11	20.1	-3	120.8	107.2	108.5	-4.5	206.2	336.5	-130.3	62	65	2.6	13	2100	7	47
1995	1023	79.4	13.5	21.4	103.5	6.6	3.9	52	54.1	110	24.6	91.6	148.9	188.7	-39.8	348	296	2.6	15.6	790	6	37
1995	1030	89.1	14.5	27.1	141.4	8.2	1.7	63	56.2	158	24.3	106.5	192.9	238.5	-45.6	334	271	2.4	12.6	665	4	45
1995	1106	81.3	18	36.2	158.3	15.9	14.3	129	64.5	211.6	30.3	146.6	242.7	306.4	-63.7	395	266	3.2	12.4	975	7	49
1995	1113	87.1	19.5	34.5	137.5	13.3	11.1	146	62.5	183.4	34.6	168.5	215.9	280.5	-64.6	351	205	3	11	955	5	17
1995	1120	61.7	15	21.4	85.3	5.9	3.2	88	45.8	104.4	33.9	96.4	130.8	184.1	-53.3	229	141	2.1	7.8	745	4	<10
1995	1128	123	21.5	46.9	186.2	11	12.8	216	99.9	245.4	74.3	197.8	278.4	419.6	-141.2	490	274	3.2	11.3	1660	5	52
1995	1211	79.4	11	26.3	115.3	7.2	3.4	94	68.7	129.8	41.4	96.7	163.2	239.9	-76.7	282	188	1.8	8.3	840	3	41
1996	115	100	20.5	42	141.4	12.5	32.3	156	154.1	110	79.6	161.0	248.7	343.7	-95.0	310	154	1.5	8.1	1820	5	50
1996	311	89.1	28.4	52.6	197.1	27.4		212	199.9	197.5	78.5	130.7	305.5	475.9	-170.4	395	183	3	10.4	2555	8	58
1996	409	57.5	7.5	14.8	71.8	8.4	23.5	37	60.4	70.5	31.1	58.5	126.0	162.0	-36.0	135	98	0.9	6.2	925	8	33
1996	415	60.3	6.5	9.9	48.3	6.4	12.3	26	45.8	45.1	22.5	56.3	83.4	113.4	-30.0	129	103	0.9	6.3	685	8	32
1996	422	66.1	8	13.2	59.6	6.9	12.8	42	64.5	70.5	24.3	49.3	100.5	159.3	-58.8	154	112	1.1	6.8	705	5	20
1996	429	95.5	17.5	24.7	102.2	10.2	3.9	88	89.5	87.5	41.1	123.9	158.5	218.1	-59.6	317	229	1.8	11.4	1020	7	32
1996	506	128.8	17.5	32.1	117	13.3	6.6	147	95.8	101.6	80	184.9	186.5	277.4	-90.9	373	226	2	10.6	1500	7	46
1996	514	102.3	21	27.1	81.3	11.5	18.1	112	97.9	70.5	61	143.9	159.0	229.4	-70.4	276	164	1.5	8.6	1420	7	37
1996	519	93.3	11	21.4	98.3	8.2	2.8	65	75	76.2	33.6	115.2	141.7	184.8	-43.1	288	223	1.4	12.3	830	8	37
1996	527	60.3	12	18.9	82.7	11.5	9.2	61	83.3	59.2	21.4	91.7	134.3	163.9	-29.6	272	211	1.6	14.5	950	14	27
1996	603	64.6	11.5	16.5	63.1	5.9	5.6	41	68.7	48	26.8	64.7	102.6	143.5	-40.9	237	196	1.4	11.8	780	7	19

CECILIE runoff chemistry 1996-97 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l, µgF/l **File: R97.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP	F
1996	610	81.3	27.0	33.7	105.3	10.5	29.8	202	120.8	87.5	57.5	223.8	206.2	265.7	-59.5	392	190	2.1	15.4	1745	11	68
1996	703	72.4	30.9	32.1	46.6	6.1	17.7	168	64.5	22.6	69.3	217.5	133.4	156.4	-23.0	304	136	2.3	10.5	1740	12	42
1996	708	93.3	18.0	28.0	68.3	3.6	7.7	108	75.0	36.7	61.8	153.5	125.5	173.4	-47.9	309	201	2.7	15	1450	16	33
1996	812	91.2	18.5	25.5	79.6	9.0	12.9	113	95.8	67.7	42.5	143.6	145.4	206.0	-60.6	353	240	2.7	15.6	1345	17	43
1996	826	104.7	21.5	29.6	102.7	4.1	9.4	144	108.3	79.0	36.8	191.9	167.2	224.0	-56.8	451	307	4.0	18.1	1210	13	45
1996	902	67.6	9.5	14.0	77.0	1.8	7.1	100	58.3	50.8	3.0	164.9	109.4	112.1	-2.7	379	279	3.0	21.3	685	14	22
1996	930	81.3	9.0	17.3	66.1	1.3	1.3	74	85.4	53.6	0.1	111.2	94.9	139.0	-44.1	378	304	3.3	15.9	370	5	25
1996	1007	79.4	10.5	18.1	86.6	1.3	1.6	47	52.1	104.4	1.1	86.9	118.1	157.6	-39.5	337	290	2.7	16.5	410	6	25
1996	1014	81.3	16.0	25.5	100.1	2.1	5.6	82	68.7	115.7	15.0	113.1	149.2	199.4	-50.2	376	294	3.0	15.7	660	7	29
1996	1104	81.3	11.5	20.6	92.7	2.6	2.7	68	56.2	118.5	6.4	98.2	130.0	181.0	-51.1	324	256	2.5	15.5	455	7	32
1996	1125	83.2	12.5	28.8	144.4	3.6	5.4	67	45.8	208.8	7.0	83.3	194.7	261.6	-66.9	256	189	1.3	10.1	440	13	37
1996	1209	70.8	8.0	18.1	89.2	2.6	2.0	82	39.6	132.6	23.2	77.3	119.8	195.4	-75.5	182	100	0.6	5.1	500	2	28
1997	120	63.1	10.0	18.9	79.6	3.3	15.2	44	60.4	93.1	27.9	52.8	127.0	181.3	-54.3	187	143	1.2	8.1	825	7	29
1997	210	42.7	6.5	11.5	59.2	3.6	9.4	25	39.6	67.7	18.2	32.4	90.2	125.5	-35.3	94	69	0.5	5.2	1090	17	
1997	227	93.3	17.0	34.6	151.0	5.4	10.7	125	91.6	174.9	32.8	137.5	218.6	299.4	-80.8	347	222	2.4	10.1	850	5	
1997	307	60.3	10.5	19.7	102.2	3.8	3.9	44	41.6	143.9	13.6	45.4	140.2	199.1	-58.9	146	102	0.4	4.8	380	3	
1997	317	66.1	11.5	22.2	104.4	4.9	2.3	43	52.1	143.9	14.3	44.1	145.2	210.2	-65.0	226	183	1.3	8.6	490	4	
1997	324	70.8	20.0	37.8	136.6	7.7	3.8	120	56.2	205.9	32.1	102.4	205.8	294.3	-88.4	286	166	1.7	7	745	4	
1997	402	79.4	16.5	31.3	137.5	7.4	2.5	84	66.6	197.5	8.3	86.2	195.1	272.4	-77.3	294	210	2.1	9.4	405	4	
1997	407	77.6	22.5	37.8	154.9	6.7	3.4	112	68.7	228.5	7.6	110.1	225.2	304.8	-79.5	311	199	2.1	9.4	460	6	

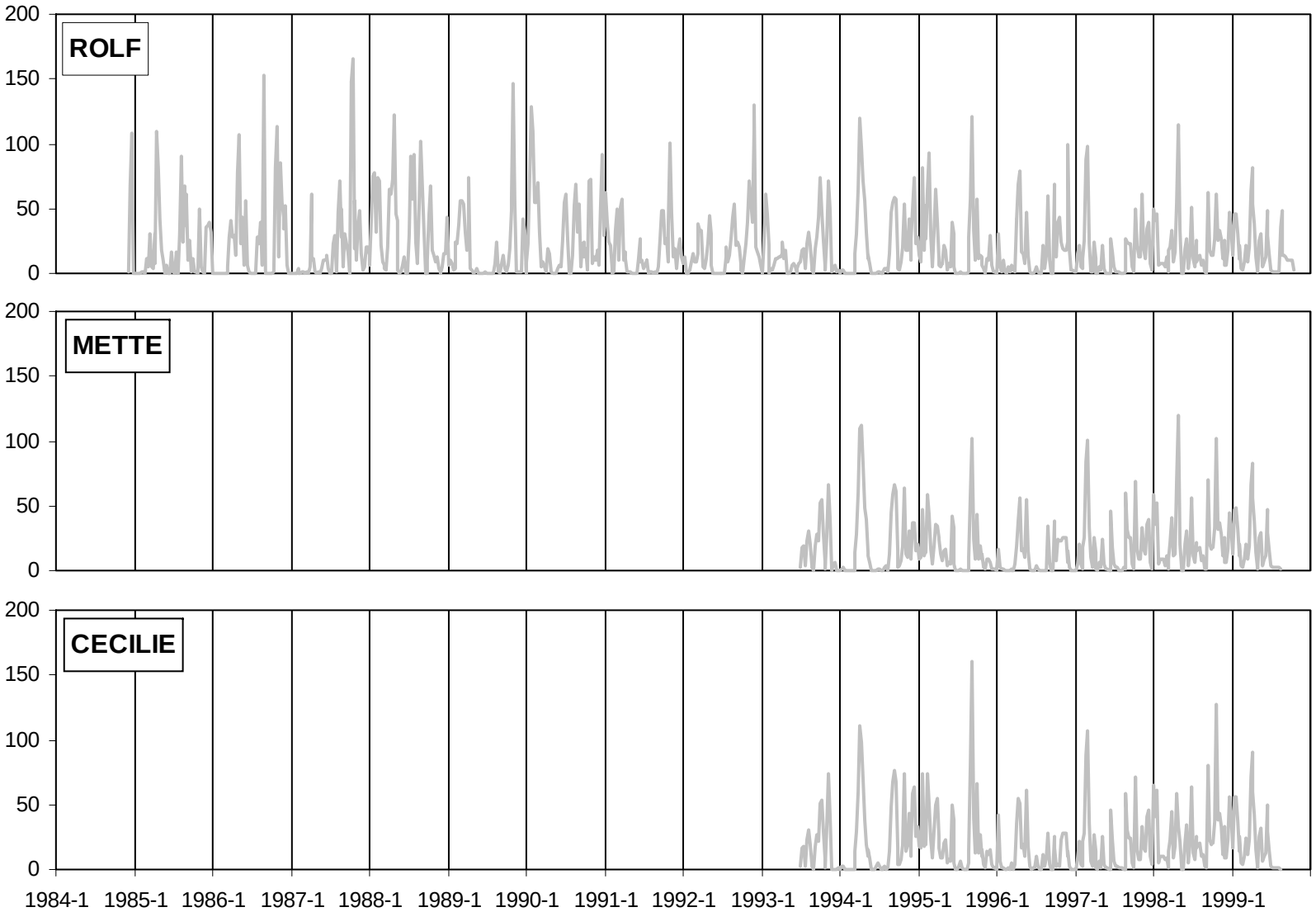
CECILIE runoff chemistry 1997-98 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R98.XLS**

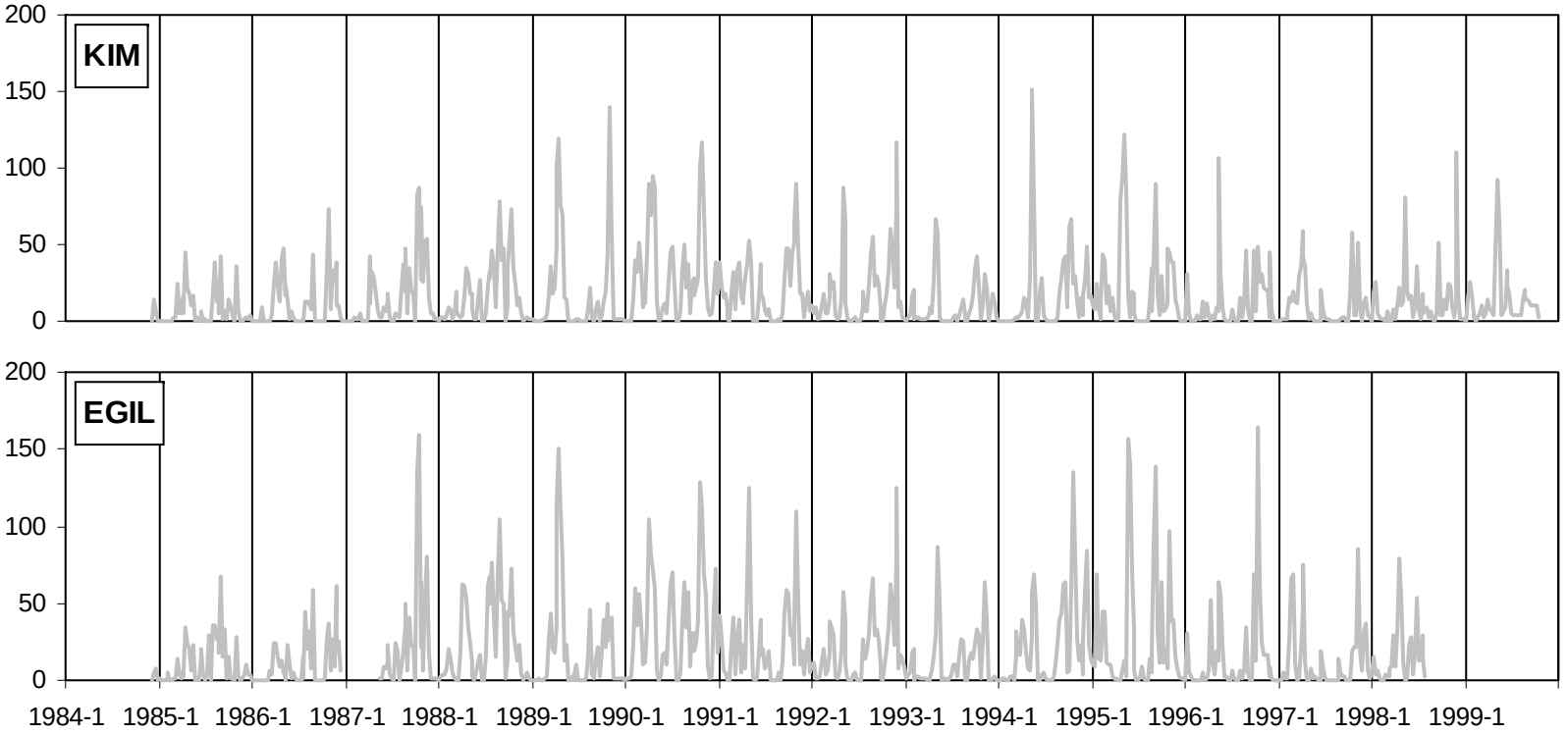
	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1997	0505	85.1	16.0	31.3	133.1	6.4	4.9	103	64.5	194.7	31.8	88.8	191.7	291.0	-99.3	268	165	1.2	7.2	705	3
1997	0507	79.4	13.0	22.2	126.6	2.6	7.1	79	58.3	160.8	8.6	102.2	171.5	227.7	-56.2	299	220	2.5	14.2	365	7
1997	0511	64.6	19.0	26.3	167.5	3.3	5.5	100	85.4	169.3	21.8	109.7	221.6	276.4	-54.8	302	202	2.1	6.5	990	54
1997	0602	26.9	12.5	15.6	202.3	2.3	16.1	39	70.8	141.1	8.9	94.1	248.8	220.7	28.1	255	216	3.0	18.3	1090	387
1997	0620	27.5	10.0	11.5	251.0	3.1	18.5	10	95.8	76.2	45.0	114.7	294.1	216.9	77.1	139	129	1.9	19.4	2000	1650
1997	0621	25.7	6.0	7.4	219.2	1.0	11.3	10	77.0	70.5	27.5	105.6	244.9	175.0	69.9	150	140	1.9	21.8	1320	695
1997	0622	23.4	4.0	5.8	189.7	0.5	6.4	11	56.2	67.7	15.0	101.8	206.3	138.9	67.4	142	131	1.9	18.5	910	354
1997	0623	42.7	6.5	9.9	198.4	0.5	8.7	14	77.0	95.9	7.6	100.0	223.9	180.6	43.4	226	212	2.4	23.1	945	206
1997	0701	44.7	10.0	14.8	270.6	0.5	3.6	11	81.2	93.1	2.1	178.8	299.5	176.4	123.1	312	301	3.0	26	685	282
1997	0722	24.0	10.0	11.5	174.9	5.9	20.0	89	64.5	101.6	12.1	157.0	222.2	178.2	44.0	310	221	2.8	25.2	1150	231
1997	0901	56.2	16.5	15.6	280.6	4.9	18.4	14	143.7	110.0	32.5	119.9	335.9	286.2	49.7	396	382	4.5	36.6	1490	112
1997	0922	12.9	13.0	10.7	178.4	2.8	54.2	-1	79.1	70.5	22.5	98.8	259.0	172.1	86.9	250	251	3.1	20.4	1630	214
1997	1019	50.1	9.5	7.4	201.0	0.5	2.6	-1	50.0	93.1	0.4	126.6	221.0	143.5	77.5	366	367	3.3	34.9	675	42
1997	1026	41.7	15.5	10.7	239.7	2.6	9.5	24	50.0	115.7	1.9	176.1	277.9	167.5	110.4	401	377	3.8	35.5	855	59
1997	1110	52.5	9.0	11.5	221.9	0.5	0.8	10	60.4	104.4	3.9	137.4	243.7	168.7	75.0	300	290	3.8	25	505	26
1997	1117	42.7	7.5	8.2	200.1	0.5	1.1	3	60.4	104.4	4.9	93.4	217.4	169.6	47.8	278	275	3.8	20.4	505	29
1997	1201	50.1	12.5	14.0	268.4	1.8	5.2	26	95.8	205.9	7.5	68.8	301.9	309.2	-7.4	278	252	2.3	16.8	550	31
1997	1215	36.3	10.5	11.5	204.0	1.3	19.1	18	83.3	143.9	23.2	50.4	246.4	250.4	-3.9	176	158	1.4	11.6	910	34
1998	112	37.2	6.5	6.6	145.7	0.8	6.3	24	60.4	64.9	27.5	74.2	165.8	152.8	13.1	156	132	1.1	10.7	710	19
1998	116	41.7	6.0	10.7	121.8	0.5	1.9	13	52.1	93.1	23.9	26.5	140.9	169.1	-28.2	113	100	0.5	6.5	580	22
1998	301	35.5	4.5	5.8	123.1	1.3	8.3	4	52.1	62.1	20.7	47.6	142.9	134.8	8.1	142	138	0.9	9.1	670	26
1998	322	38.9	12.0	14.8	223.2	1.8	8.5	26	50.0	186.2	17.5	71.5	260.2	253.7	6.6	179	153	1.6	9.9	655	22
1998	406	36.3	9.0	13.2	204.9	1.3	6.1	29	60.4	160.8	24.6	53.9	234.4	245.8	-11.4	171	142	1.4	9	670	10
1998	414	47.9	9.5	16.5	187.9	1.3	9.9	33	77.0	169.3	23.9	35.7	225.1	270.2	-45.2	169	136	1.1	8.1	830	17
1998	426	41.7	8.0	10.7	151.4	1.8	11.1	35	79.1	112.8	27.1	40.6	183.0	219.1	-36.1	136	101	0.8	6.8	730	13
1998	511	35.5	7.0	5.8	113.5	1.0	0.9	11	85.4	50.8	5.8	32.8	128.2	141.9	-13.7	158	147	0.8	10.3	380	9

CECILIE runoff chemistry 1998-99 Units: µeq/l, µgAl/l, mgSiO2/l, mgC/l, µgN/l, µgP/l **File: R99.XLS**

	Date	H+	Ca	Mg	Na	K	NH4	Al	SO4	Cl	NO3	A-	SBC	SAA	ANC	RAL	ILAL	SiO2	TOC	TOTN	TOTP
1998	601	30.9	10.0	10.7	106.1	5.6	8.3	17	60.4	48.0	16.8	63.5	140.7	125.1	15.6	180	163	1.2	13.6	775	41
1998	608	42.7	8.0	9.1	132.2	1.5	2.4	15	58.3	50.8	6.4	95.5	153.2	115.4	37.8	267	252	1.7	22.9	605	34
1998	629	37.2	8.0	4.9	127.9	0.5	0.9	-2	45.8	48.0	0.1	83.6	142.3	93.8	48.4	223	225	1.5	22	520	16
1998	713	29.5	12.0	6.6	68.3	0.8	3.1	7	27.1	16.9	14.3	68.9	90.7	58.3	32.4	186	179	1.3	16.1	1300	65
1998	728	44.7	9.0	8.2	138.3	0.8	7.6	1	39.6	70.5	6.4	93.2	164.0	116.4	47.5	280	279	1.8	27.1	765	29
1998	810	33.9	13.0	8.2	135.3	1.3	20.9	14	37.5	53.6	15.0	120.5	178.7	106.1	72.6	357	343	2.1	30.6	1130	63
1998	831	35.5	12.5	8.2	131.8	1.3	23.4	3	31.2	53.6	16.4	114.4	177.1	101.3	75.9	336	333	2.2	29	1160	41
1998	914	53.7	17.0	10.7	141.8	1.3	13.6	19	79.1	64.9	18.9	94.1	184.3	162.9	21.4	301	282	2.2	24.2	1020	27
1998	1012	60.3	12.0	9.1	157.0	0.8	12.4	-1	70.8	73.4	6.9	99.5	191.3	151.0	40.3	336	337	2.4	28.8	900	31
1998	1026	39.8	8.5	7.4	130.5	0.5	4.9	13	37.5	79.0	3.2	85.0	151.8	119.7	32.1	245	232	1.9	19.7	585	19
1998	1104	34.7	9.0	7.4	107.0	0.5	3.6	11	22.9	93.1	2.5	54.7	127.5	118.5	9.0	166	155	0.9	11.8	420	14
1998	1111	39.8	7.5	12.3	138.3	1.0	5.1	23	37.5	138.2	9.9	41.5	164.3	185.6	-21.3	168	145	1.1	9.3	510	18
1998	1218	60.3	13.0	18.1	160.1	1.3	7.7	36	66.6	155.2	38.2	36.4	200.1	260.0	-59.8	199	163	1.5	9.6	930	27
1999	106	57.5	10.5	13.2	156.6	0.5	0.5	34	68.7	158.0	6.2	39.9	181.3	232.9	-51.7	158	124	1.0	6.8	265	5
1999	121	51.3	10.0	11.5	142.2	0.5	1.2	21	52.1	141.1	4.8	39.9	165.5	197.9	-32.4	151	130	1.0	7.3	295	9
1999	214	33.1	11.0	8.2	110.9	0.8	2.9	16	35.4	95.9	3.1	48.5	133.8	134.4	-0.6	162	146	0.9	8.4	390	15
1999	306	44.7	12.0	11.5	137.9	1.5	3.4	26	47.9	124.1	4.6	60.4	166.3	176.6	-10.3	179	153	1.4	8.5	385	16
1999	322	61.7	13.5	18.9	146.2	1.3	13.1	38	91.6	118.5	31.1	51.5	193.0	241.2	-48.2	156	118	1.1	6.3	830	11
1999	406	64.9	15.5	13.2	161.0	2.3	16.4	44	79.1	118.5	33.0	86.6	208.2	230.6	-22.4	244	200	1.3	13	1140	25
1999	419	28.8	6.5	4.9	82.2	0.5	2.9	6	29.2	45.1	1.3	56.3	97.0	75.6	21.4	164	158	1.0	12.3	440	15
1999	506	30.2	8.0	6.6	113.1	1.8	14.4	30	18.7	33.9	5.8	145.6	143.8	58.4	85.4	275	245	1.6	19.4	800	73
1999	520	28.8	11.0	4.9	88.3	1.0	1.5	14	35.4	50.8	1.5	61.9	106.8	87.7	19.1	186	172	1.3	12.4	405	16

3.2 Runoff discharge (interpolated)




KIM
EGIL
200
150
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1985-1
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1992-1
1993-1
1994-1
1995-1
1996-1
1997-1
1998-1
1999-1

3.3 Hydrology weekly in and out

RISDALHEIA Sprinkled area m2: 600
"Egil"-catchment Catchment m2: 450
Year: 1990 1 tank ltr.: 382 ltr. 382

Sum mm: 1737.70 1689.29

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
27.12.89	2969.18		5018			
04.01.90	2969.18	0.00	5019	0.382	0.85	
11.01.90	2969.18	0.00	5020	0.382	0.85	
18.01.90	2969.18	0.00	5021	0.382	0.85	
02.02.90	2969.18	0.00	5026	1.91	4.24	anlegg
09.02.90	3011.90	71.19	5115	33.998	75.55	start 2/2
15.02.90	3022.28	17.31	5136	8.022	17.83	
23.02.90	3056.04	56.27	5210	28.268	62.82	
01.03.90	3084.70	47.76	5270	22.92	50.93	
08.03.90	3091.14	10.72	5279	3.438	7.64	
15.03.90	3101.49	17.25	5295	6.112	13.58	
21.03.90	3110.12	14.40	5308	4.966	11.04	
28.03.90	3116.91	11.31	5320	4.584	10.19	
04.04.90	3147.33	50.70	5383	24.066	53.48	
11.04.90	3236.01	147.80	5550	63.794	141.76	
18.04.90	3258.22	37.01	5595	17.19	38.20	
26.04.90	3334.54	127.21	5725	49.66	110.36	
03.05.90	3339.17	7.71	5737	4.584	10.19	
09.05.90	3339.17	0.00	5737	0	0.00	
16.05.90	3345.60	10.72	5737	0	0.00	
23.05.90	3348.90	5.50	5737	0	0.00	
31.05.90	3353.28	7.30	5743	2.292	5.09	
07.06.90	3377.39	40.19	5780	14.134	31.41	
14.06.90	3381.12	6.22	5780	0	0.00	
21.06.90	3404.30	38.63	5808	10.696	23.77	lekkasje
28.06.90	3441.04	61.22	5874	25.212	56.03	i nedloep
05.07.90	3487.25	77.03	5959	32.47	72.16	pumpstopp
11.07.90	3519.44	53.64	6027	25.976	57.72	
25.07.90	3524.00	7.61	6029	0.764	1.70	
02.08.90	3525.14	1.91	6029	0	0.00	
08.08.90	3525.77	1.05	6029	0	0.00	
17.08.90	3542.70	28.21	6043	5.348	11.88	tette
23.08.90	3600.78	96.80	6155	42.784	95.08	filtre
30.08.90	3601.99	2.01	6155	0	0.00	
07.09.90	3660.90	98.19	6264	41.638	92.53	
13.09.90	3661.04	0.24	6264	0	0.00	
20.09.90	3677.63	27.65	6287	8.786	19.52	
27.09.90	3705.89	47.09	6340	20.246	44.99	
05.10.90	3718.79	21.51	6355	5.73	12.73	
11.10.90	3737.16	30.62	6393	14.516	32.26	
18.10.90	3740.54	5.63	6400	2.674	5.94	start
24.10.90	3783.75	72.02	6481	30.942	68.76	ekstra
01.11.90	3877.90	156.92	6703	84.804	188.45	vannings
08.11.90	3898.08	33.63	6753	19.1	42.44	periode
14.11.90	3950.85	87.95	6857	39.728	88.28	stopp
21.11.90	3959.62	14.61	6881	9.168	20.37	
29.11.90	3959.62	0.00	6882	0.382	0.85	
06.12.90	3959.62	0.00	6885	1.146	2.55	
12.12.90	3961.29	2.79	6887	0.764	1.70	
19.12.90	3961.29	0.00	6890	1.146	2.55	
28.12.90	4011.80	84.17	7008	45.076	100.17	
		ekstra dusjing			som regn	
24.10.90		72.00			0.00	
01.11.90		21.00			135.90	
08.11.90		32.90			0.70	
14.11.90		74.00			14.00	

RISDALHEIA Sprinkled area m2: 600
"Egil"-catchment Catchment m2: 450
Year: 1991 1 tank ltr.: 382 ltr. 382

Sum mm: 1207.84 1173.16

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.91	4034.94	38.57	7069	23.302	51.78	
09.01.91	4058.82	39.79	7128	22.538	50.08	
16.01.91	4060.01	2.00	7133	1.91	4.24	
24.01.91	4063.82	6.34	7144	4.202	9.34	
01.02.91	4063.82	0.00	7145	0.382	0.85	snø
07.02.91	4063.82	0.00	7145	0	0.00	legging
15.02.91	4063.82	0.00	7145	0	0.00	
21.02.91	4063.82	0.00	7146	0.382	0.85	
01.03.91	4083.28	32.43	7222	29.032	64.52	
08.03.91	4083.28	0.00	7223	0.382	0.85	
14.03.91	4083.81	0.89	7233	3.82	8.49	
22.03.91	4111.22	45.69	7305	27.504	61.12	
27.03.91	4111.32	0.16	7310	1.91	4.24	
03.04.91	4115.97	7.75	7316	2.292	5.09	
10.04.91	4135.48	32.53	7359	16.426	36.50	
17.04.91	4136.69	2.01	7361	0.764	1.70	
25.04.91	4146.55	16.44	7376	5.73	12.73	tette
03.05.91	4245.24	164.48	7562	71.052	157.89	filtre
08.05.91	4286.48	68.74	7640	29.796	66.21	
15.05.91	4287.32	1.39	7642	0.764	1.70	
23.05.91	4287.48	0.28	7642	0	0.00	
30.05.91	4287.48	0.00	7642	0	0.00	
07.06.91	4289.12	2.73	7646	1.528	3.40	
13.06.91	4337.86	81.23	7708	23.684	52.63	
21.06.91	4347.14	15.46	7722	5.348	11.88	
26.06.91	4364.25	28.52	7747	9.55	21.22	
04.07.91	4373.92	16.12	7764	6.494	14.43	
11.07.91	4376.56	4.39	7765	0.382	0.85	
19.07.91	4407.23	51.12	7801	13.752	30.56	
25.07.91	4410.67	5.73	7802	0.382	0.85	
01.08.91	4410.67	0.00	7802	0	0.00	
08.08.91	4410.88	0.35	7802	0	0.00	
15.08.91	4410.88	0.00	7802	0	0.00	
22.08.91	4411.07	0.32	7802	0	0.00	
29.08.91	4428.50	29.05	7813	4.202	9.34	
06.09.91	4428.61	0.17	7813	0	0.00	
13.09.91	4428.61	0.00	7813	0	0.00	
19.09.91	4460.45	53.06	7854	15.662	34.80	
26.09.91	4491.32	51.46	7911	21.774	48.39	
04.10.91	4543.24	86.52	8010	37.818	84.04	
10.10.91	4550.42	11.97	8023	4.966	11.04	
17.10.91	4581.62	52.00	8085	23.684	52.63	
24.10.91	4584.88	5.43	8095	3.82	8.49	
01.11.91	4598.50	22.71	8111	6.112	13.58	
13.11.91	4699.95	169.08	8332	84.422	187.60	
22.11.91	4703.25	5.50	8340	3.056	6.79	
29.11.91	4716.66	22.36	8368	10.696	23.77	
05.12.91	4718.51	3.07	8374	2.292	5.09	
11.12.91	4718.51	0.00	8374	0	0.00	
21.12.91	4744.18	42.79	8425	19.482	43.29	
28.12.91	4745.62	2.39	8428	1.146	2.55	

	ekstra nedbør	som regn
01.02.91	66.70	0.00
25.04.91	6.70	9.70
03.05.91	160.90	3.60
08.05.91	68.70	0.00

RISDALHEIA Sprinkled area m2: 600
"Egil"-catchment Catchment m2: 450
Year: 1992 1 tank ltr.: 382 ltr. 382

Sum mm: 1177.97 1117.99

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.92	4759.64	23.38	8451	8.786	19.52	
11.01.92	4766.34	11.16	8468	6.494	14.43	
16.01.92	4766.34	0.00	8469	0.382	0.85	
24.01.92	4768.21	3.11	8470	0.382	0.85	
30.01.92	4769.21	1.66	8471	0.382	0.85	
07.02.92	4773.51	7.18	8478	2.674	5.94	
13.02.92	4791.03	29.19	8512	12.988	28.86	
19.02.92	4791.24	0.36	8515	1.146	2.55	
27.02.92	4795.60	7.26	8521	2.292	5.09	
06.03.92	4802.66	11.76	8532	4.202	9.34	
13.03.92	4824.21	35.92	8582	19.1	42.44	
20.03.92	4842.72	30.85	8617	13.37	29.71	
26.03.92	4866.30	39.31	8664	17.954	39.90	
01.04.92	4867.85	2.58	8671	2.674	5.94	
09.04.92	4869.15	2.17	8671	0	0.00	
15.04.92	4873.14	6.65	8675	1.528	3.40	
24.04.92	4877.23	6.81	8683	3.056	6.79	
30.04.92	4905.39	46.94	8736	20.246	44.99	
06.05.92	4936.29	51.50	8801	24.83	55.18	
12.05.92	4951.19	24.83	8821	7.64	16.98	
18.05.92	4951.74	0.92	8827	2.292	5.09	
29.05.92	4951.74	0.00	8827	0	0.00	
04.06.92	4954.58	4.73	8827	0	0.00	
11.06.92	4954.58	0.00	8827	0	0.00	
18.06.92	4971.58	28.34	8838	4.202	9.34	
25.06.92	4971.58	0.00	8838	0	0.00	
01.07.92	4975.58	6.66	8838	0	0.00	
09.07.92	4975.88	0.50	8838	0	0.00	
16.07.92	4990.51	24.38	8839	0.382	0.85	
17.07.92	5000.27	16.27	8858	7.258	16.13	
23.07.92	5020.33	33.43	8896	14.516	32.26	
31.07.92	5032.94	21.02	8910	5.348	11.88	
06.08.92	5049.66	27.87	8932	8.404	18.68	
12.08.92	5058.71	15.07	8947	5.73	12.73	
21.08.92	5095.30	60.99	9010	24.066	53.48	
28.08.92	5146.05	84.58	9106	36.672	81.49	
03.09.92	5163.49	29.07	9135	11.078	24.62	
09.09.92	5181.92	30.71	9164	11.078	24.62	
17.09.92	5205.72	39.67	9212	18.336	40.75	
24.09.92	5217.15	19.06	9229	6.494	14.43	
01.10.92	5218.61	2.44	9232	1.146	2.55	
07.10.92	5218.70	0.15	9233	0.382	0.85	
14.10.92	5220.64	3.23	9233	0	0.00	
23.10.92	5237.96	28.86	9261	10.696	23.77	
30.10.92	5252.00	23.40	9289	10.696	23.77	
13.11.92	5317.36	108.93	9436	56.154	124.79	
20.11.92	5325.01	12.76	9454	6.876	15.28	
27.11.92	5346.11	35.16	9504	19.1	42.44	
04.12.92	5438.24	153.55	9709	78.31	174.02	
11.12.92	5440.23	3.32	9713	1.528	3.40	
18.12.92	5449.81	15.97	9733	7.64	16.98	
31.12.92	5463.70	23.15	9764	11.842	26.32	

RISDALHEIA Sprinkled area m2: 600
"Egil"-catchment Catchment m2: 450
Year: 1993 1 tank ltr.: 382 ltr. 382

Sum mm: 650.82 618.66

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
07.01.93	5466.43	4.55	9768	1.528	3.40	
14.01.93	5466.43	0.00	9774	2.292	5.09	
20.01.93	5466.43	0.00	9778	1.528	3.40	
29.01.93	5486.58	33.59	9822	16.808	37.35	
05.02.93	5486.58	0.00	9822	0	0.00	
11.02.93	5488.31	2.88	9823	0.382	0.85	
17.02.93	5491.07	4.60	9827	1.528	3.40	
24.02.93	5492.55	2.47	9829	0.764	1.70	
19.03.93	5492.85	0.50	9834	1.91	4.24	
26.03.93	5492.92	0.12	9835	0.382	0.85	
02.04.93	5492.92	0.00	9835	0	0.00	
07.04.93	5492.92	0.00	9836	0.382	0.85	
16.04.93	5493.27	0.59	9837	0.382	0.85	
23.04.93	5510.58	28.85	9862	9.55	21.22	
30.04.93	5510.81	0.38	9865	1.146	2.55	
06.05.93	5566.20	92.31	9964	37.818	84.04	
14.05.93	5615.19	81.65	60	36.672	81.49	
19.05.93	5617.04	3.08	60	0	0.00	
28.05.93	5620.82	6.31	61	0.382	0.85	
03.06.93	5623.80	4.96	63	0.764	1.70	Trafo-
10.06.93	5623.90	0.17	63	0	0.00	brann
17.06.93	5623.90	0.00	63	0	0.00	Def:
24.06.93	5626.43	4.22	64	0.382	0.85	2/7-13/8
02.07.93	5628.63	3.67	3	1.268	2.82	estimert
09.07.93	5633.67	8.40	9	3.39725	7.55	avløp
14.07.93	5642.29	14.37	16	6.08525	13.52	"
23.07.93	5645.02	4.55	4	1.6655	3.70	"
27.07.93	5645.11	0.16	0	0	0.00	"
06.08.93	5665.50	33.98	39	14.9075	33.13	"
13.08.93	5681.86	27.26	41	15.594	34.65	
20.08.93	5685.63	6.28	67	1.146	2.55	
27.08.93	5689.59	6.61	67	0	0.00	
03.09.93	5690.17	0.96	67	0	0.00	
09.09.93	5691.14	1.62	67	0	0.00	
16.09.93	5714.95	39.68	101	12.988	28.86	
23.09.93	5718.86	6.52	106	1.91	4.24	
30.09.93	5736.54	29.47	139	12.606	28.01	
07.10.93	5744.55	13.35	161	8.404	18.68	Anlegg
14.10.93	5773.47	48.20	221	22.92	50.93	sto
21.10.93	5774.92	2.41	222	0.382	0.85	pga varme
28.10.93	5775.35	0.71	223	0.382	0.85	kabelarb
04.11.93	5777.35	3.33	224	0.382	0.85	Feil på
11.11.93	5812.20	58.09	294	26.74	59.42	dusjanl.
18.11.93	5854.19	69.98	81	31.10975	69.13	estimert
25.11.93	5854.19	0.00	396	0.382	0.85	
02.12.93	5854.19	0.00	396	0	0.00	
09.12.93	5854.19	0.00	396	0	0.00	Jordfeil
20.12.93	5854.19	0.00	400	1.528	3.40	

I perioden 4/5-8/5 ble det ekstravannet med 173 mm nedbør.

RISDALHEIA Sprinkled area m2: 600
"Egil"-catchment Catchment m2: 450
Year: 1994 1 tank ltr.: 382 ltr. 382
1 tank ltr.: 382 ltr. 394 (etter 1/9)

Sum mm: 1262.41 1214.98

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.94	5854.19	0.89	401	0.382	0.85	estim.
14.01.94	5854.19	0.89	402	0.382	0.85	innput
20.01.94	5854.19	1.78	404	0.764	1.70	"
27.01.94	5854.19	0.00	404	0	0.00	"
10.02.94	5854.19	0.00	404	0	0.00	"
17.02.94	5854.19	5.35	410	2.292	5.09	"
24.02.94	5854.19	0.00	410	0	0.00	"
03.03.94	5854.19	0.00	410	0	0.00	"
10.03.94	5854.19	41.00	456	17.572	39.05	"
17.03.94	5854.19	23.17	482	9.932	22.07	"
24.03.94	5854.19	11.59	495	4.966	11.04	"
28.03.94	5854.19	15.15	512	6.494	14.43	"
06.04.94	5854.19	57.05	576	24.448	54.33	"
14.04.94	5864.39	17.00	611	13.37	29.71	
22.04.94	5867.75	5.60	621	3.82	8.49	
28.04.94	6.64	11.06	630	3.438	7.64	
05.05.94	7.31	1.12	632	0.764	1.70	
09.05.94	28.10	34.66	676	16.808	37.35	
19.05.94	77.98	83.14	783	35.144	78.10	
26.05.94	128.90	84.86	885	38.964	86.59	
02.06.94	0.00	0.00	885	0	0.00	
09.06.94	5.94	9.89	886	0.382	0.85	
16.06.94	6.83	1.49	886	0	0.00	
23.06.94	18.71	19.80	895	3.438	7.64	
30.06.94	31.16	20.77	997	0.764	1.70	
07.07.94	31.16	0.00	997	0	0.00	
14.07.94	31.16	0.00	997	0	0.00	
21.07.94	32.97	3.01	997	0	0.00	
29.07.94	33.36	0.66	997	0	0.00	
04.08.94	0.00	0.00	998	0.382	0.85	
10.08.94	0.00	0.00	1001	1.146	2.55	
18.08.94	11.62	19.36	1023	8.404	18.68	
25.08.94	44.17	54.25	1063	15.28	33.96	
01.09.94	73.47	48.84	1117	20.628	45.84	
08.09.94	113.40	66.55	1176	17.73	39.40	
15.09.94	165.90	87.51	1281	41.37	91.93	
22.09.94	181.20	25.51	1311	11.82	26.27	
29.09.94	186.18	8.30	1312	0.394	0.88	
06.10.94	194.69	14.19	1324	4.728	10.51	
13.10.94	195.27	0.96	1324	0	0.00	
24.10.94	319.99	207.87	1567	95.742	212.76	extra w.
31.10.94	363.93	73.23	1650	32.702	72.67	
08.11.94	370.88	11.59	1674	9.456	21.01	
14.11.94	374.86	6.62	1684	3.94	8.76	
21.11.94	386.82	19.94	1712	11.032	24.52	
28.11.94	387.69	1.45	1712	0	0.00	
05.12.94	406.35	31.10	1748	14.184	31.52	
12.12.94	437.06	51.18	1820	28.368	63.04	
19.12.94	480.14	71.79	1927	39.4	87.56	
27.12.94	487.50	12.27	1942	5.91	13.13	

RISDALHEIA Sprinkled area m2: 550
"Egil"-catchment Catchment m2: 450
Year: 1995 1 tank ltr.: 382 ltr. 394

Sum 1392.75 1348.36

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks	
03.01.95	494.02	11.87	1960	7.092	15.76	3.9	Snow-melting mm
09.01.95	498.30	7.78	1967	2.758	6.13		
16.01.95	504.20	10.73	1977	3.94	8.76		
23.01.95	530.76	48.29	2067	35.46	78.80	30.5	Snow-melting mm
30.01.95	530.76	0.00	2070	1.182	2.63	2.6	Snow-melting mm
06.02.95	539.60	16.06	2113	16.942	37.65	21.6	Snow-melting mm
13.02.95	539.69	0.18	2123	3.94	8.76	8.6	Snow-melting mm
20.02.95	563.46	43.21	2180	22.458	49.91	6.7	Snow-melting mm
27.02.95	582.38	34.40	2230	19.7	43.78	9.4	Snow-melting mm
06.03.95	585.75	6.13	2237	2.758	6.13	0.0	Snow-melting mm
13.03.95	586.13	0.71	2249	4.728	10.51	9.8	Snow-melting mm
20.03.95	588.67	4.62	2260	4.334	9.63	5.0	Snow-melting mm
27.03.95	590.27	2.91	2262	0.788	1.75		
03.04.95	590.27	0.00	2263	0.394	0.88	0.9	Snow-melting mm
10.04.95	590.41	0.25	2263	0	0.00		
18.04.95	591.70	2.35	2264	0.394	0.88		
25.04.95	592.49	1.44	2266	0	0.00		
02.05.95	592.58	0.16	2266	0	0.00		
08.05.95	600.61	14.61	2274	3.152	7.00		
15.05.95	607.54	12.60	2290	6.304	14.01		
22.05.95	616.80	16.83	2291	0.394	0.88		
31.05.95	752.13	246.06	2560	105.986	235.52		
06.06.95	806.68	99.17	2666	41.764	92.81		
12.06.95	835.28	52.00	2718	20.488	45.53		
19.06.95	852.05	30.50	2752	13.396	29.77		
26.06.95	854.00	3.54	2754	0.788	1.75		
03.07.95	854.00	0.00	2754	0	0.00		
11.07.95	855.66	3.01	2754	0	0.00		
17.07.95	863.88	14.95	2757	1.182	2.63		
24.07.00	874.18	18.72	2768	4.334	9.63		
31.07.95	874.18	0.00	2768	0	0.00		
07.08.95	874.18	0.00	2768	0	0.00		
14.08.95	874.26	0.16	2768	0	0.00		
21.08.95	894.04	35.95	2786	7.092	15.76		
28.08.95	901.25	13.11	2790	1.576	3.50		
04.09.95	923.01	39.57	2818	11.032	24.52		
12.09.95	985.48	113.59	2949	51.614	114.70		
18.09.95	1049.60	116.59	3100	59.494	132.21		
26.09.95	1057.94	15.15	3115	5.91	13.13		
02.10.95	1066.37	15.33	3127	4.728	10.51		
09.10.95	1105.47	71.10	3210	32.702	72.67		
16.10.95	1107.61	3.88	3211	0.394	0.88		
23.10.95	1127.34	35.87	3238	10.638	23.64		
30.10.95	1134.09	12.27	3253	5.91	13.13		
06.11.95	1139.55	9.93	3260	2.758	6.13	extra w.	
13.11.95	1207.58	123.68	3387	50.038	111.20	extra w.	
20.11.95	1222.26	26.70	3416	11.426	25.39	extra w.	
28.11.95	1250.01	50.46	3470	21.276	47.28		
04.12.95	1250.51	0.90	3	1.576	3.50		
11.12.95	1253.51	5.45	15	3.94	8.76		

RISDALHEIA Sprinkled area m2: 550
"Egil"-catchment Catchment m2: 450
Year: 1996 1 tank ltr.: 382 ltr. 394

Sum 1362.32 1278.41

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
02.01.96	1253.60	0.17	18	1.182	2.63	
08.01.96	1253.60	0.00	18	0	0.00	
15.01.96	1268.85	27.73	59	16.154	35.90	
22.01.96	1268.85	0.00	59	0	0.00	
29.01.96	1268.85	0.00	62	1.182	2.63	
05.02.96	1268.85	0.00	62	0	0.00	
12.02.96	1268.85	0.00	62	0	0.00	
19.02.96	1268.85	0.00	62	0	0.00	
26.02.96	1268.85	0.00	62	0	0.00	
04.03.96	1268.85	0.00	62	0	0.00	
11.03.96	1273.30	8.08	69	2.758	6.13	
18.03.96	1273.30	0.00	72	1.182	2.63	
25.03.96	1273.30	0.00	72	0	0.00	
01.04.96	1273.30	0.00	0	0.394	0.90	
09.04.96	1273.30	0.00	10	3.94	8.76	
15.04.96	1314.11	74.20	78	26.792	59.54	extra water
22.04.96	1316.81	4.91	80	0.788	1.75	
29.04.96	1321.85	9.18	84	1.576	3.50	
06.05.96	1337.98	29.33	108	9.456	21.01	
14.05.96	1348.17	18.51	123	5.91	13.13	
19.05.96	1395.56	86.16	192	27.186	60.41	extra water
27.05.96	1426.88	56.95	265	28.762	63.92	extra water
03.06.96	1437.61	19.50	284	7.486	16.64	
10.06.96	1440.82	5.84	285	0.394	0.88	
17.06.96	1445.99	9.39	289	1.576	3.50	
24.06.96	1451.63	10.25	289	0	0.00	
03.07.96	1456.64	9.11	290	0.394	0.88	
08.07.96	1464.99	15.19	299	3.546	7.88	
15.07.96	1466.02	1.87	299	0	0.00	
21.07.96	1466.02	0.00	299	0	0.00	
29.07.96	1466.13	0.19	299	0	0.00	
05.08.96	1466.13	0.00	299	0	0.00	
12.08.96	1477.57	20.81	308	3.546	7.88	
19.08.96	1478.60	1.87	308	0	0.00	
26.08.96	1485.39	12.34	316	3.152	7.00	
02.09.96	1511.31	47.12	361	17.73	39.40	
09.09.96	1511.31	0.00	361	0	0.00	
16.09.96	1512.42	2.03	361	0	0.00	
23.09.96	1512.42	0.00	361	0	0.00	
30.09.96	1556.34	79.86	453	36.248	80.55	
07.10.96	1577.19	37.91	492	15.366	34.15	
14.10.96	1586.28	16.51	503	4.334	9.63	
21.10.96	1675.11	161.52	720	85.498	190.00	
28.10.96	1693.69	33.78	766	18.124	40.28	
04.11.96	1709.02	27.88	791	9.85	21.89	
25.11.96	1732.42	42.55	846	21.67	48.16	
02.12.96	1732.42	0.00	846	0	0.00	
09.12.96	0.00	12.73	858	4.728	10.51	

RISDALHEIA Sprinkled area m2: 550
"Egil"-catchment Catchment m2: 450
Year: 1997 1 tank ltr.: 382 ltr. 394

Sum 1250.53 1211.93

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks			
07.01.97	0.13	0.23	860	0.788	1.75				
13.01.97	0.70	1.03	860	0	0.00				
20.01.97	5.42	8.59	867	2.758	6.13				
27.01.97	6.10	1.24	867	0	0.00				
03.02.97	7.84	3.16	868	0.394	0.88				
10.02.97	12.17	7.87	872	1.576	3.50				
17.02.97	24.49	22.39	907	13.79	30.64				
27.02.97	27.89	6.19	1025	46.492	103.32				
03.03.97	45.05	31.19	1066	16.154	35.90				
10.03.97	47.06	3.67	1070	1.576	3.50		41667	-558	80770
17.03.97	47.40	0.60	1070	0	0.00				
24.03.97	47.77	0.68	1072	0.788	1.75				
02.04.97	68.66	37.97	1109	14.578	32.40				
07.04.97	98.97	55.11	1161	20.488	45.53	extra water	94	77	69738
14.04.97	141.42	77.18	1249	34.672	77.05	extra water			
21.04.97	141.42	0.00	1249	0	0.00				
28.04.97	143.93	4.57	1249	0	0.00				
05.05.97	144.65	1.31	1249	0	0.00				
12.05.97	155.09	18.97	1260	4.334	9.63		16	-73	4334
20.05.97	157.58	4.54	1260	0	0.00				
26.05.97	161.22	6.61	1264	1.576	3.50				
02.06.97	164.41	5.80	1265	0.394	0.88				
09.06.97	164.41	0.00	1265	0	0.00				
16.06.97	165.24	1.52	1265	0	0.00				
23.06.97	188.00	41.37	1291	10.244	22.76				
01.07.97	198.37	18.85	1301	3.94	8.76				
22.07.97	198.37	0.00	1301	0	0.00				
11.08.97	198.37	0.00	1301	0	0.00				
18.08.97	198.37	0.00	1301	0	0.00				
25.08.97	198.37	0.00	1301	0	0.00				
01.09.97	217.35	34.52	1320	7.486	16.64				
22.09.97	223.02	10.29	1330	3.94	8.76				
06.10.97	223.02	0.00	1330	0	0.00				
13.10.97	223.02	0.00	1330	0	0.00				
10.11.97	289.94	121.68	1431	39.794	88.43				
17.11.97	339.22	89.61	1540	42.946	95.44				
01.12.97	348.15	16.24	1555	5.91	13.13				
15.12.97	396.97	88.76	1638	32.702	72.67				
29.12.97	396.97	0.00	1640	0.788	1.75				

RISDALHEIA Sprinkled area m2: 550
"Egil"-catchment Catchment m2: 450
Year: 1998 1 tank ltr.: 382 ltr. 394

Sum 588.09 471.05

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
05.01.98	397.05	0.13	1652	4.728	10.51	
12.01.98	403.22	11.23	1670	7.092	15.76	
16.01.98	403.22	0.00	1670	0	0.00	
26.01.98	403.22	0.00	1681	4.334	9.63	
16.02.98	403.22	0.00	1683	0.788	1.75	
25.02.98	410.50	13.23	1690	2.758	6.13	
01.03.98	410.50	0.00	1691	0.394	0.88	
09.03.98	410.50	0.00	1695	1.576	3.50	
16.03.98	410.50	0.00	1705	3.94	8.76	
22.03.98	414.80	7.82	1714	3.546	7.88	
30.03.98	414.80	36.36	1753	15.366	34.15	est. input
06.04.98	414.80	9.09	1760	2.758	6.13	est. input
14.04.98	414.80	54.55	1808	18.912	42.03	est. input
20.04.98	415.19	90.91	1902	37.036	82.30	est. input
26.04.98	415.19	54.55	1948	18.124	40.28	est. input
03.05.98	415.19	12.73	1961	5.122	11.38	est. input
11.05.98	415.19	0.00	1963	0.788	1.75	est. input
18.05.98	0.00	0.00	1963	0	0.00	
25.05.98	0.00	0.00	1964	0.394	0.88	
01.06.98	950.00	30.24	1994	11.82	26.27	
08.06.98	1510.00	48.06	2027	13.002	28.89	
15.06.98	0.00	0.00	2027	0	0.00	
22.06.98	1300.00	41.38	2050	9.062	20.14	
29.06.98	2440.00	77.67	2117	26.398	58.66	
06.07.98	190.00	6.05	2122	1.97	4.38	
13.07.98	980.00	31.19	2139	6.698	14.88	
20.07.98	1290.00	41.06	2176	14.578	32.40	
28.07.98	690.00	21.96	2190	5.516	12.26	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1990 1 tank ltr.: 382 ltr. 378

Sum 1533.27 1425.01

Dato	Dusj vol. m3 m3	Nedb. mm	Tank nr.	Avloeps-vol. m3	Avr. mm	Merknader
27.12.89	4929.25		4143			
04.01.90	4929.25	0.00	4145	0.76	0.88	
11.01.90	4929.25	0.00	4146	0.38	0.44	
18.01.90	4929.25	0.00	4178	0.00	0.00	valgt avl
02.02.90	4929.25	0.00	4173	0.00	0.00	valgt avl
09.02.90	4979.25	42.92	4284	41.96	49.02	
15.02.90	4995.30	13.78	4320	13.61	15.90	
23.02.90	5052.88	49.43	4451	49.52	57.85	
01.03.90	5100.14	40.56	4557	40.07	46.81	
08.03.90	5111.79	10.00	4572	5.67	6.62	
15.03.90	5127.14	13.18	4600	10.58	12.36	
21.03.90	5141.41	12.25	4619	7.18	8.39	
28.03.90	5153.97	10.78	4648	10.96	12.81	
04.04.90	5228.84	64.27	4701	54.81	64.03	valgt avl
11.04.90	5349.42	103.50	4948	93.37	109.07	
18.04.90	5394.92	39.06	5037	33.64	39.30	
26.04.90	5586.83	164.73	5388	132.68	155.00	
03.05.90	5609.30	19.29	5439	19.28	22.52	
09.05.90	5609.30	0.00	5439	0.00	0.00	
16.05.90	5620.10	9.27	5439	0.00	0.00	
23.05.90	5623.50	2.92	5439	0.00	0.00	
31.05.90	5635.31	10.14	5442	1.13	1.32	
07.06.90	5675.48	34.48	5488	17.39	20.31	
14.06.90	5682.74	6.23	5490	0.76	0.88	
21.06.90	5717.70	30.01	5516	9.83	11.48	
28.06.90	5778.87	52.51	5616	37.80	44.16	
05.07.90	5847.05	58.52	5717	38.18	44.60	
11.07.90	5897.65	43.43	5824	40.45	47.25	
25.07.90	5907.02	8.04	5825	0.38	0.44	
02.08.90	5907.51	0.42	5825	0.00	0.00	
08.08.90	5908.84	1.14	5825	0.00	0.00	
17.08.90	5969.15	51.77	5858	12.47	14.57	
23.08.90	6056.42	74.91	6028	64.26	75.07	
30.08.90	6058.40	1.70	6029	0.38	0.44	
07.09.90	6141.23	71.09	6162	50.27	58.73	
13.09.90	6141.39	0.14	6162	0.00	0.00	
20.09.90	6168.45	23.23	6189	10.21	11.92	
27.09.90	6220.67	44.82	6285	36.29	42.39	
05.10.90	6243.50	19.60	6306	7.94	9.27	
11.10.90	6276.25	28.11	6376	26.46	30.91	
18.10.90	6281.86	4.82	6385	3.40	3.97	start
24.10.90	6354.10	62.01	6504	44.98	52.55	ekstra
01.11.90	6507.99	132.10	6846	129.28	151.02	vannings
08.11.90	6623.20	98.89	7065	82.78	96.71	periode
14.11.90	6655.20	27.47	7145	30.24	35.33	stopp
21.11.90	6669.95	12.66	7185	15.12	17.66	
29.11.90	6670.07	0.10	7192	2.65	3.09	
06.12.90	6670.07	0.00	7202	3.78	4.42	
12.12.90	6674.35	3.67	7208	2.27	2.65	
19.12.90	6680.47	5.25	7225	6.43	7.51	
28.12.90	6715.50	30.07	7305	30.24	35.33	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1991 1 tank ltr.: 382 ltr. 378

Sum mm: 1182.83 1071.99

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.91	6760.32	38.47	7431	47.63	55.64	
09.01.91	6794.80	29.59	7521	34.02	39.74	
16.01.91	6796.49	1.45	7533	4.54	5.30	
24.01.91	6801.28	4.11	7595	23.44	27.38	
01.02.91	6801.28	0.00	7623	10.58	12.36	
07.02.91	6801.28	0.00	7626	1.13	1.32	
15.02.91	6801.28	0.00	7627	0.38	0.44	snø
21.02.91	6801.28	129.20	7628	0.38	0.44	laging
01.03.91	6831.45	25.90	7741	42.71	49.90	
08.03.91	6831.45	0.00	7745	1.51	1.77	
14.03.91	6842.91	9.84	7790	17.01	19.87	
22.03.91	6873.77	26.49	7911	45.74	53.43	
27.03.91	6876.77	2.57	7941	11.34	13.25	
03.04.91	6883.59	5.86	7977	13.61	15.90	
10.04.91	6890.00	5.50	7996	7.18	8.39	
17.04.91	6903.34	11.45	8041	17.01	19.87	
25.04.91	6950.90	40.82	8046	1.89	40.00	valgt avl
03.05.91	7020.10	59.40	8147	38.18	44.60	
08.05.91	7099.90	68.50	8289	53.68	62.71	
15.05.91	7100.49	0.51	8291	0.76	0.88	
23.05.91	7100.51	0.02	8291	0.00	0.00	
30.05.91	7100.51	0.00	8291	0.00	0.00	
07.06.91	7117.78	14.82	8292	0.38	0.44	
13.06.91	7186.78	59.22	8394	38.56	45.04	
21.06.91	7203.26	14.15	8440	17.39	20.31	
26.06.91	7230.37	23.27	8470	11.34	13.25	
04.07.91	7246.97	14.25	8505	13.23	15.46	
11.07.91	7252.67	4.90	8505	0.00	0.00	
19.07.91	7302.23	42.54	8532	10.21	11.92	
25.07.91	7311.59	8.03	8534	0.76	0.88	
01.08.91	7311.61	0.02	8534	0.00	0.00	
08.08.91	7327.92	14.00	8535	0.38	0.44	
15.08.91	7334.80	5.90	8536	0.38	0.44	
22.08.91	7336.35	1.32	8536	0.00	0.00	
29.08.91	7354.02	15.18	8541	1.89	2.21	
06.09.91	7354.13	0.09	8541	0.00	0.00	
13.09.91	7354.13	0.00	8541	0.00	0.00	
19.09.91	7405.64	44.22	8580	14.74	17.22	
26.09.91	7452.26	40.02	8659	29.86	34.89	
04.10.91	7535.03	71.04	8822	61.61	71.98	
10.10.91	7547.87	11.03	8841	7.18	8.39	
17.10.91	7596.95	42.13	8935	35.53	41.51	
24.10.91	7662.50	56.27	9048	42.71	49.90	
01.11.91	7732.71	60.27	9189	53.30	62.26	
13.11.91	7881.95	128.10	9539	132.30	154.56	
22.11.91	7898.03	13.80	9585	17.39	20.31	
29.11.91	7923.52	21.88	9640	20.79	24.29	
05.12.91	7923.69	0.15	9646	2.27	2.65	
11.12.91	7923.69	0.00	9647	0.38	0.44	
21.12.91	7961.30	32.28	9718	26.84	31.35	
28.12.91	7961.72	0.36	9724	2.27	2.65	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1992 1 tank ltr.: 382 ltr. 378

Sum mm: 1050.54 1006.82

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.92	7987.80	22.39	9773	18.52	21.64	
11.01.92	7999.00	9.61	9784	4.16	4.86	
16.01.92	8002.83	3.29	9806	8.32	9.71	
24.01.92	8006.41	3.07	9811	1.89	2.21	
30.01.92	8007.69	1.10	9812	0.38	0.44	
07.02.92	8014.61	5.93	9822	3.78	4.42	
13.02.92	8044.22	25.42	9874	19.66	22.96	
19.02.92	8045.33	0.95	9885	4.16	4.86	
27.02.92	8049.50	3.58	9895	3.78	4.42	
06.03.92	8057.73	7.06	9911	6.05	7.07	
13.03.92	8096.93	33.65	9997	32.51	37.98	
20.03.92	8118.06	18.13	30	12.47	14.57	
26.03.92	8154.80	31.54	109	29.86	34.89	
01.04.92	8157.02	1.90	122	4.91	5.74	
09.04.92	8158.67	1.42	124	0.76	0.88	
15.04.92	8165.62	5.96	128	1.51	1.77	
24.04.92	8172.48	5.89	137	3.40	3.97	
30.04.92	8217.32	38.49	227	34.02	39.74	
06.05.92	8348.99	113.02	504	104.71	122.32	
12.05.92	8365.90	14.52	518	5.29	6.18	
18.05.92	8372.33	5.52	545	10.21	11.92	
29.05.92	8372.67	0.30	545	0.00	0.00	
04.06.92	8372.67	0.00	545	0.00	0.00	
11.06.92	8372.67	0.00	545	0.00	0.00	
18.06.92	8410.34	32.33	553	3.02	3.53	
25.06.92	8410.54	0.17	554	0.38	0.44	
01.07.92	8417.01	5.55	554	0.00	0.00	
09.07.92	8418.94	1.66	554	0.00	0.00	
16.07.92	8445.07	22.43	561	2.65	3.09	
17.07.92	8458.06	11.15	564	1.13	1.32	
23.07.92	8496.57	33.05	617	20.03	23.40	
31.07.92	8518.32	18.67	639	8.32	9.71	
06.08.92	8544.39	22.37	645	2.27	2.65	
12.08.92	8562.34	15.41	664	7.18	8.39	
21.08.92	8622.25	51.42	764	37.80	44.16	
28.08.92	8711.51	76.62	919	58.59	68.45	
03.09.92	8740.13	24.57	963	16.63	19.43	
09.09.92	8769.14	24.90	1007	16.63	19.43	
17.09.92	8814.23	38.70		32.89	38.42	Beregnet
24.09.92	8832.56	15.74		10.96	12.81	Beregnet
01.10.92	8835.63	2.63		0.76	0.88	Beregnet
07.10.92	8835.78	0.13		0.00	0.00	Beregnet
14.10.92	8838.91	2.68		0.00	0.00	Beregnet
23.10.92	8869.54	26.30		18.90	22.08	Beregnet
30.10.92	8893.57	20.63		18.90	22.08	Beregnet
13.11.92	8991.74	84.27		103.95	121.44	Beregnet
20.11.92	9006.76	12.90	4024	11.72	13.69	Beregnet
27.11.92	9042.43	30.62	4118	35.53	41.51	
04.12.92	9186.86	123.97	4483	137.97	161.18	
11.12.92	9190.40	3.04	4495	4.54	5.30	
18.12.92	9206.35	13.69	4531	13.61	15.90	
31.12.92	9211.68	4.57	4544	4.91	5.74	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1993 1 tank ltr.: 382 ltr. 378
1 tank ltr.: 382 ltr. 376 (etter 2/7)

Sum 658 507.09

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
07.01.93	9211.68	0.00	4546	0.76	0.88	Anlegg
14.01.93	9211.68	0.00	4556	3.78	4.42	står, is
20.01.93	9211.68	0.00	4563	2.65	3.09	startet
29.01.93	9249.17	32.18	4643	30.24	35.33	stoppet
05.02.93	9249.17	0.00	4645	0.76	0.88	startet
11.02.93	9252.70	3.04	4650	1.89	2.21	
17.02.93	9258.20	4.71	4657	2.65	3.09	
24.02.93	9260.72	2.17	4661	1.51	1.77	
19.03.93	9266.03	4.56	4670	3.40	3.97	
26.03.93	9272.04	5.16	4676	2.27	2.65	
02.04.93	9272.02	-0.01	4679	1.13	1.32	
07.04.93	9289.61	15.10	4709	11.34	13.25	
16.04.93	9289.61	0.00	4714	1.89	2.21	
23.04.93	9311.94	19.17	4744	11.34	13.25	Ekstra
30.04.93	9396.73	72.78	4868	46.87	54.76	vann
06.05.93	9497.84	86.79	5059	72.20	84.34	26/4-4/5
14.05.93	9497.84	0.00	5069	3.78	4.42	
19.05.93	9497.85	0.00	5069	0.00	0.00	
28.05.93	9497.85	0.00	5069	0.00	0.00	
03.06.93	9497.85	0.00	5069	0.00	0.00	
10.06.93	9497.85	0.00	5069	0.00	0.00	
17.06.93	9497.85	0.00	5069	0.00	0.00	
24.06.93	9497.85	0.00	5069	0.00	0.00	nytt
02.07.93	9515.86	15.46	5069	0.00	0.00	avløp
09.07.93	9522.87	6.01	0	0.00	0.00	
14.07.93	9557.78	29.97	11	4.14	4.83	
23.07.93	9566.86	7.80	13	0.75	0.88	
27.07.93	9566.86	0.00	13	0.00	0.00	
06.08.93	9594.42	23.65	32	7.14	8.35	
13.08.93	9631.46	31.79	71	14.66	17.13	
20.08.93	9648.34	14.50	84	4.89	5.71	
27.08.93	9655.21	5.90	84	0.00	0.00	
03.09.93	9656.10	0.76	84	0.00	0.00	
09.09.93	9659.35	2.80	84	0.00	0.00	
16.09.93	9695.91	31.38	108	9.02	10.54	
23.09.93	9711.13	13.06	127	7.14	8.35	
30.09.93	9744.29	28.47	188	22.94	26.79	Vann i
07.10.93	9795.71	44.14	289	37.98	44.36	overløp
14.10.93	9836.16	34.72	376	32.71	38.21	
21.10.93	9838.77	2.24	379	1.13	1.32	
28.10.93	9845.22	5.54	386	2.63	3.07	
04.11.93	9845.22	0.00	386	0.00	0.00	
11.11.93	9878.47	28.54	55	20.92	24.44	estimert
18.11.93	9935.78	49.19	86	32.34	37.78	avøp
25.11.93	9935.78	0.00	87	0.38	0.44	
02.12.93	9935.78	0.00	87	0.00	0.00	
09.12.93	9958.41	19.43	137	18.80	21.96	
20.12.93	9978.25	17.03	185	18.05	21.08	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1994 1 tank ltr.: 382 ltr. 376

Sum mm: 1190.51 973.33

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.94	9978.25	0.00	187	0.75	0.88	
14.01.94	0.00	0.00	187	0.00	0.00	
20.01.94	0.00	0.00	188	0.38	0.44	
27.01.94	0.00	0.00	188	0.00	0.00	
10.02.94	0.00	0.00	188	0.00	0.00	
17.02.94	0.00	0.00	190	0.75	0.88	
24.02.94	0.00	0.00	190	0.00	0.00	
03.03.94	0.00	0.00	197	2.63	3.07	
10.03.94	0.00	0.00	198	0.38	0.44	
17.03.94	0.00	0.00	201	1.13	1.32	
24.03.94	0.00	0.00	211	3.76	4.39	
28.03.94	0.00	0.00	214	1.13	1.32	
06.04.94	0.00	0.00	235	7.90	9.22	
14.04.94	25.46	21.86	291	21.06	24.60	
21.04.94	27.02	1.34	293	0.75	0.88	
28.04.94	37.53	9.02	306	4.89	5.71	
05.05.94	114.31	65.90	441	50.76	59.30	
09.05.94	264.55	128.97	455	5.26	129.00	estim.out
19.05.94	492.56	195.72	909	170.70	199.42	
26.05.94	493.81	1.07	910	0.38	0.44	
02.06.94	493.81	0.00	910	0.00	0.00	
09.06.94	493.81	0.00	910	0.00	0.00	
16.06.94	585.01	78.28	1015	39.48	46.12	
23.06.94	607.25	19.09	1028	4.89	5.71	
30.06.94	621.17	11.95	1034	2.26	2.64	
07.07.94	621.18	0.00	1034	0.00	0.00	
14.07.94	621.18	0.00	1034	0.00	0.00	
21.07.94	623.28	1.81	1034	0.00	0.00	
29.07.94	629.90	5.68	1034	0.00	0.00	
04.08.94	648.00	15.54	1034	0.00	0.00	
10.08.94	652.38	3.76	1034	0.00	0.00	
18.08.94	657.99	4.82	1034	0.00	0.00	
25.08.94	675.00	14.60	1050	6.02	7.03	
01.09.94	750.89	65.14	1125	28.20	32.94	
08.09.94	797.54	40.04	1176	19.18	22.40	
15.09.94	871.14	63.17	1316	52.64	61.50	
22.09.94	894.17	19.77	1351	13.16	15.37	
29.09.94	896.61	2.09	1351	0.00	0.00	
06.10.94	998.36	87.34	1426	28.20	32.94	extra w.
13.10.94	47.32	120.17	1651	84.60	98.83	0-stillet
24.10.94	94.89	40.84	1738	32.71	38.21	10.10.94
31.10.94	131.78	31.67	2733	26.00	30.37	estim.
08.11.94	144.80	11.18	2733	9.00	10.51	r.off
14.11.94	144.80	0.00	2733	0.00	0.00	"
21.11.94	165.11	17.43	2733	15.00	17.52	"
28.11.94	166.26	0.99	2733	1.00	1.17	"
05.12.94	190.39	20.72	2733	16.00	18.69	"
12.12.94	230.17	34.14	48	23.69	27.67	"
19.12.94	283.44	45.72	167	44.74	52.27	
27.12.94	295.90	10.70	190	8.65	10.10	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1995 1 tank ltr.: 382 ltr. 376

Sum mm: 1267.04 1109.36

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.95	313.64	15.23	236	17.30	20.21	
09.01.95	321.69	6.90	249	4.89	5.71	
16.01.95	329.73	6.90	266	6.39	7.47	
23.01.95	382.18	45.02	329	23.69	27.67	
30.01.95	382.18	0.00	338	3.38	3.95	
06.02.95	388.54	5.46	340	0.75	0.88	
13.02.95	400.93	10.64	372	12.03	14.06	
20.02.95	441.02	34.41	484	42.11	49.20	
27.02.95	470.64	25.42	571	32.71	38.21	
06.03.95	493.82	19.90	588	6.39	7.47	
13.03.95	508.45	12.56	615	10.15	11.86	
20.03.95	509.10	0.56	621	2.26	2.64	
27.03.95	530.65	18.50	662	15.42	18.01	
03.04.95	533.23	2.21	665	1.13	1.32	
10.04.95	534.24	0.87	665	0.00	0.00	
18.04.95	534.24	0.00	665	0.00	0.00	
25.04.95	546.83	10.80	675	3.76	4.39	
02.05.95	683.92	117.68	925	94.00	109.81	
08.05.95	772.22	75.80	1094	63.54	74.23	
15.05.95	908.04	116.58	1384	109.04	127.38	
22.05.95	995.99	75.49	1564	67.68	79.07	
31.05.95	1015.68	16.91	1580	6.02	7.03	
06.06.95	1021.28	4.81	1582	0.75	0.88	
12.06.95	1061.53	34.55	1635	19.93	23.28	
19.06.95	1085.74	20.78	1671	13.54	15.81	
26.06.95	1094.25	7.31	1678	2.63	3.07	
03.07.95	1095.35	0.95	1678	0.00	0.00	
11.07.95	1097.85	2.14	1678	0.00	0.00	
17.07.95	1103.24	4.63	1678	0.00	0.00	
24.07.00	1122.77	16.76	1678	0.00	0.00	
31.07.95	1122.77	0.00	1678	0.00	0.00	
07.08.95	1122.77	0.00	1678	0.00	0.00	
14.08.95	1124.76	1.71	1678	0.00	0.00	35m3 extra
21.08.95	1160.74	30.88	1712	12.78	14.93	water
28.08.95	1241.56	69.37	1800	33.09	38.65	
04.09.95	1251.72	8.72	1801	0.38	0.44	
12.09.95	1338.30	74.32	1929	48.13	56.22	
18.09.95	1446.61	92.97	2137	78.21	91.36	
26.09.95	1458.88	10.53	2145	3.01	3.51	
02.10.95	1471.23	10.60	2153	3.01	3.51	
09.10.95	1512.45	35.38	2230	28.95	33.82	
16.10.95	1512.45	0.00	2233	1.13	1.32	
23.10.95	1512.45	0.00	2252	7.14	8.35	
30.10.95	1541.17	24.65	2280	10.53	12.30	
06.11.95	1611.66	60.51	2400	45.12	52.71	extra water
13.11.95	1662.75	43.86			43.00	extra water
20.11.95	1707.37	38.30			38.00	extra water
28.11.95	1759.64	44.87			44.00	
04.12.95	1762.07	2.08	4547	3.38	3.95	
11.12.95	1772.00	8.52	4569	8.27	9.66	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1996 1 tank ltr.: 363

Sum mm: 1265.30 1097.46

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
02.01.96	1772.00	0.00	4569	0.00	0.00	
08.01.95	1772.00	0.00	4570	0.36	0.42	
15.01.96	1823.69	44.37	85	30.86	36.05	estim.
22.01.96	1823.69	0.00	0	0.00	0.00	estim.
29.01.96	1823.69	0.00	5596	0.00	0.00	
05.02.96	1823.69	0.00	5596	0.00	0.00	
12.02.96	1823.69	0.00	5596	0.00	0.00	
19.02.96	1823.69	0.00	5607	3.99	4.66	
26.02.96	1823.69	0.00	5607	0.00	0.00	
04.03.96	1823.69	0.00	5611	1.45	1.70	
11.03.96	1823.69	0.00	5644	11.98	13.99	
18.03.96	1823.79	0.09	5650	2.18	2.54	
25.03.96	1827.49	3.17	5657	2.54	2.97	
01.04.96	1898.50	60.96	5686	10.53	12.30	
09.04.96	1910.76	10.52	6	2.18	2.54	
15.04.96	1910.76	0.00	6	0.00	0.00	
22.04.96	1926.39	13.42	17	3.99	4.66	
29.04.96	1926.39	0.00	19	0.73	0.85	
06.05.96	1944.21	15.30	43	8.71	10.18	
13.05.96	1956.45	10.50	58	5.45	6.36	
19.05.96	2069.60	97.13	308	90.75	106.02	extra water
27.05.96	2122.94	45.78	391	30.13	35.20	extra water
03.06.96	2134.64	10.04	405	5.08	5.94	
10.06.96	2136.87	1.92	406	0.36	0.42	
17.06.96	2145.24	7.18	406	0.00	0.00	
24.06.96	2145.46	0.19	406	0.00	0.00	
03.07.96	2160.47	12.88	408	0.73	0.85	
08.07.96	2187.42	23.14	430	7.99	9.33	
15.07.96	2189.45	1.74	430	0.00	0.00	
21.07.96	2189.80	0.30	430	0.00	0.00	
29.07.96	2189.81	0.01	430	0.00	0.00	
05.08.96	2214.90	21.53	431	0.36	0.42	
12.08.96	2250.98	30.98	474	15.61	18.23	
19.08.96	2251.34	0.31	474	0.00	0.00	
26.08.96	2291.19	34.20	506	11.62	13.57	
02.09.96	2360.60	59.58	626	43.56	50.89	
09.09.96	2360.60	0.00	626	0.00	0.00	
23.09.96	2361.90	1.12	627	0.36	0.42	
30.09.96	2445.87	72.08	755	46.46	54.28	
07.10.96	2477.81	27.42	810	19.97	23.32	
14.10.96	2487.34	8.18	819	3.27	3.82	
21.10.96	2542.98	47.76	950	47.55	55.55	estim. out
28.10.96	2562.98	17.17	1000	18.15	21.20	estim. out
04.11.96	2597.00	29.20	1075	27.23	31.80	estim. in
25.11.96	2666.80	59.91	1217	51.55	60.22	
02.12.96	2666.80	0.00	1217	0.00	0.00	
09.12.96	2716.00	42.23	1339	44.29	51.74	estim.

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1997 1 tank ltr.: 363

Sum mm: 1309.45 1042.17

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
07.01.97	2717.70	1.45	1343	1.45	1.70	
13.01.97	2721.39	3.17	1346	1.09	1.27	
20.01.97	2727.44	5.19	1349	1.09	1.27	
27.01.97	2727.44	0.00	1352	1.09	1.27	
03.02.97	2731.87	3.81	1356	1.45	1.70	
10.02.97	2737.77	5.06	1369	4.72	5.51	
17.02.97	2757.10	16.59	1410	14.88	17.39	
27.02.97	14.85	12.74	1449	14.16	16.54	
03.03.97	28.82	17.99	1490	14.88	17.39	estim. in
10.03.97	41.30	10.72	1514	8.71	10.18	
17.03.97	55.22	11.94	1541	9.80	11.45	extra water
24.03.97	128.40	62.82	1616	27.23	31.80	extra water
02.04.97	153.39	21.45	1728	40.66	47.50	extra water
07.04.97	234.83	69.90	1855	46.10	53.86	extra water
14.04.97	313.14	67.22	1940	30.86	36.05	extra water
21.04.97	348.18	30.08	2025	30.86	36.05	extra water
28.04.97	358.66	9.00	2040	5.45	6.36	
05.05.97	358.66	0.00	2040	0.00	0.00	
12.05.97	376.06	14.94	2054	5.08	5.94	
20.05.97	377.68	1.38	2055	0.36	0.42	
26.05.97	382.17	3.85	2055	0.00	0.00	
02.06.97	388.78	5.67	2056	0.36	0.42	
09.06.97	388.78	0.00	2056	0.00	0.00	
16.06.97	390.92	1.84	2057	0.36	0.42	
23.06.97	448.65	49.55	2115	21.05	24.60	
01.07.97	473.91	21.68	2132	6.17	7.21	
22.07.97	487.55	11.71	2137	1.82	2.12	
11.08.97	505.39	15.31	2137	0.00	0.00	
18.08.97	505.39	0.00	2137	0.00	0.00	
25.08.97	517.07	10.03	2137	0.00	0.00	
01.09.97	517.07	0.00	2137	0.00	0.00	
22.09.97	555.38	32.88	2152	5.45	6.36	
06.10.97	564.86	8.13	2153	0.36	0.42	
13.10.97	595.56	26.36	2160	18.15	21.20	est.run-off
20.10.97	699.17	88.93	2170	54.45	63.61	est.run-off
10.11.97	720.00	17.88	2183	10.89	12.72	est.
17.11.97	813.08	79.90	2238	50.82	59.37	est.run-off
01.12.97	831.85	16.11	2240	0.73	0.85	
15.12.97	881.73	42.81	2310	25.41	29.68	
29.12.97	888.46	5.78	2320	3.63	4.24	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1998 1 tank ltr.: 363

Sum mm: 993.27 739.15

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
05.01.98	888.93	0.40	2322	0.03	0.04	
12.01.98	916.73	23.86	2375	19.24	22.48	
16.01.98	941.74	21.47	2425	18.15	21.20	
26.01.98	945.50	3.23	2441	5.81	6.79	
16.02.98	953.50	6.87	2452	3.99	4.66	
25.02.98	955.49	1.71	2452	0.00	0.00	
01.03.98	966.63	9.56	2468	5.81	6.79	
09.03.98	966.82	0.16	2469	0.36	0.42	
16.03.98	971.99	4.44	2469	2.54	2.97	est.run-off
22.03.98	972.90	0.78	2469	0.00	0.00	
30.03.98	987.50	12.53	2489	7.26	8.48	
06.04.98	987.50	0.00	2490	0.36	0.42	
14.04.98	1010.63	19.85	2523	11.98	13.99	
20.04.98	1042.88	27.68	2575	18.88	22.05	
26.04.98	1055.49	10.82	2589	5.08	5.94	
03.05.98	1072.01	14.18	2620	11.25	13.15	
11.05.98	1226.12	132.29	2819	72.24	84.39	
18.05.98	1337.17	95.32	3013	70.42	82.27	
25.05.98	1357.83	17.73	3033	7.26	8.48	
01.06.98	1399.08	35.41	3070	13.43	15.69	
08.06.98	1432.59	28.77	3109	14.16	16.54	
15.06.98	1432.59	0.00	3109	0.00	0.00	
22.06.98	1454.11	18.47	3133	8.71	10.18	
29.06.98	1515.73	52.89	3228	34.49	40.29	
06.07.98	1515.73	0.00	3229	0.36	0.42	
13.07.98	1542.88	23.31	3233	1.45	1.70	
20.07.98	1573.63	26.39	3235	18.15	21.20	est.run-off
28.07.98	1587.66	12.04	3242	2.54	2.97	
10.08.98	1627.85	34.50	3284	15.25	17.81	
17.08.98	1638.60	9.23	3288	1.45	1.70	
24.08.98	1650.60	10.30	3304	5.81	6.79	est.in
31.08.98	1655.10	3.85	3304	0.00	0.00	
07.09.98	1655.10	0.00	3304	0.00	0.00	
14.09.98	1730.04	64.33	3318	5.08	5.94	
21.09.98	1747.96	15.38	3455	49.73	58.10	
12.10.98	1771.23	19.98	3482	9.80	11.45	
19.10.98	1793.51	19.12	3519	13.43	15.69	
26.10.98	1796.77	2.80	3533	5.08	5.94	
04.11.98	1837.61	35.06	3616	30.13	35.20	
11.11.98	1862.37	21.25	3661	16.34	19.08	
18.11.98	1862.37	0.00	3665	1.45	1.70	
23.11.98	1864.65	1.96	3667	2.18	2.54	
29.11.98	1876.35	10.04	3694	9.80	11.45	
07.12.98	2045.63	145.30	3992	108.17	126.37	
18.12.98	2045.63	0.00	3994	0.73	0.85	

RISDALHEIA Sprinkled area m2: 1165
"Kim"-catchment Catchment m2: 856
Year: 1999 1 tank ltr.: 363

Sum mm: 606.90 480.04

Date	Spr.vol. m3	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.99	2046.10	0.40	4006	4.36	5.09	
21.01.99	2111.05	55.75	4134	46.46	54.28	
30.01.99	2115.02	3.41	4147	4.72	5.51	
08.02.99	2118.62	3.09	4154	2.54	2.97	
14.02.99	2119.42	0.69	4154	0.00	0.00	
26.02.99	2129.72	8.83	4164	3.63	4.24	
06.03.99	2143.40	11.74	4195	11.25	13.15	
12.03.99	2144.22	0.71	4197	0.73	0.85	
22.03.99	2155.69	9.85	4215	6.53	7.63	
30.03.99	2177.95	19.11	4256	14.88	17.39	
06.04.99	2183.17	4.48	4268	4.36	5.09	
13.04.99	2198.60	13.25	4290	7.99	9.33	
19.04.99	2200.64	1.75	4301	3.99	4.66	
26.04.99	2208.74	6.95	4309	2.90	3.39	
06.05.99	2354.00	124.69	4497	68.24	79.72	extra water
12.05.99	2502.37	127.36	4784	104.18	121.71	extra water
20.05.99	2506.54	3.58	4802	6.53	7.63	
25.05.99	2510.96	3.79	4803	0.36	0.42	
07.06.99	2542.00	26.64	4840	13.43	15.69	
10.06.99	2574.66	28.04	4891	18.51	21.63	
22.06.99	2625.16	43.35	4984	33.76	39.44	
28.06.99	2653.52	24.34	5015	11.25	13.15	
11.08.99	2722.67	59.36	5070	19.97	23.32	
20.08.99	2753.13	26.15	5138	24.68	28.84	Roof off 24.08.99
09.09.99	1500.00	47.75			40.00	est. runoff
12.10.99	1850.00	58.89			50.00	est. runoff

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 380
Year: 1990

Sum mm: 1707.80 1438.82

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
27.12.89	0		2047			
04.01.90	0	3.80	2047	0.00	0.00	
11.01.90	0	20.70	2057	3.80	17.27	
18.01.90	0	31.80	2075	6.84	31.09	
02.02.90	0	251.60	2234	60.42	274.64	
09.02.90	0	63.10	2262	13.68	62.18	valgt avl
15.02.90	0	44.30	2281	7.22	32.82	noe snoe
23.02.90	0	59.90	2332	19.38	88.09	snoe tint
01.03.90	0	40.80	2358	9.88	44.91	
08.03.90	0	7.00	2360	0.76	3.45	
15.03.90	0	10.50	2365	1.90	8.64	
21.03.90	0	8.60	2369	1.52	6.91	
28.03.90	0	7.00	2374	1.90	8.64	
04.04.90	0	4.50	2375	0.38	1.73	
11.04.90	0	9.90	2376	0.38	1.73	
18.04.90	0	42.00	2395	7.22	32.82	
26.04.90	0	3.50	2396	0.38	1.73	
03.05.90	0	2.90	2396	0.00	0.00	
09.05.90	0	0.00	2396	0.00	0.00	
16.05.90	0	9.60	2396	0.00	0.00	
23.05.90	0	9.60	2396	0.00	0.00	
31.05.90	0	4.50	2396	0.00	0.00	
07.06.90	0	38.90	2402	2.28	10.36	
14.06.90	0	6.70	2403	0.38	1.73	
21.06.90	0	36.30	2408	1.90	8.64	
28.06.90	0	73.20	2436	10.64	48.36	
05.07.90	0	91.70	2472	13.68	62.18	
11.07.90	0	59.20	2502	11.40	51.82	
25.07.90	0	8.00	2503	0.38	1.73	
02.08.90	0	0.60	2503	0.00	0.00	
08.08.90	0	0.60	2503	0.00	0.00	
17.08.90	0	80.60	2522	7.22	32.82	
23.08.90	0	116.20	2582	22.80	103.64	
30.08.90	0	1.60	2582	0.00	0.00	
07.09.90	0	106.70	2631	18.62	84.64	
13.09.90	0	0.30	2631	0.00	0.00	
20.09.90	0	25.80	2638	2.66	12.09	
27.09.90	0	50.60	2660	8.36	38.00	
05.10.90	0	20.70	2664	1.52	6.91	
11.10.90	0	31.50	2679	5.70	25.91	
18.10.90	0	3.80	2681	0.76	3.45	
24.10.90	0	0.30	2681	0.00	0.00	
01.11.90	0	152.90	2763	31.16	141.64	
08.11.90	0	4.50	2765	0.76	3.45	
14.11.90	0	14.00	2771	2.28	10.36	
21.11.90	0	14.30	2778	2.66	12.09	
29.11.90	0	25.80	2784	2.28	10.36	snoe
06.12.90	0	0.60	2800	6.08	27.64	noe snoe
12.12.90	0	9.60	2802	0.76	3.45	snoe
19.12.90	0	4.80	2807	1.90	8.64	snoe
28.12.90	0	92.40	2872	24.70	112.27	

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 380
Year: 1991

Sum mm: 1155.78 931.00

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.91	2580	82.12	2922	19.00	86.36	
09.01.91	3150	100.27	2961	14.82	67.36	
16.01.91	370	11.78	2967	2.28	10.36	
24.01.91	95	3.02	2990	8.74	39.73	
01.02.91	30	0.95	2993	1.14	5.18	
07.02.91	170	5.41	2993	0.00	0.00	
15.02.91	40	1.27	2993	0.00	0.00	
21.02.91	70	2.23	2996	1.14	5.18	
01.03.91	1160	36.92	3042	17.48	79.45	
08.03.91	1610	51.25	3042	0.00	0.00	
14.03.91	350	11.14	3059	6.46	29.36	
22.03.91	1580	50.29	3108	18.62	84.64	
27.03.91	0	0.00	3115	2.66	12.09	
03.04.91	215	6.84	3118	1.14	5.18	
10.04.91	920	29.28	3133	5.70	25.91	
17.04.91	40	1.27	3134	0.38	1.73	
25.04.91	750	23.87	3135	0.38	1.73	
03.05.91	240	7.64	3136	0.38	1.73	
08.05.91	0	0.00	3136	0.00	0.00	
15.05.91	40	1.27	3136	0.00	0.00	
23.05.91	0	0.00	3136	0.00	0.00	
30.05.91	0	0.00	3136	0.00	0.00	
07.06.91	560	17.83	3136	0.00	0.00	
13.06.91	2110	67.16	3156	7.60	34.55	
21.06.91	430	13.69	3161	1.90	8.64	
26.06.91	870	27.69	3167	2.28	10.36	
04.07.91	520	16.55	3172	1.90	8.64	
11.07.91	140	4.46	3172	0.00	0.00	
19.07.91	1560	49.66	3182	3.80	17.27	
25.07.91	110	3.50	3182	0.00	0.00	
01.08.91	0	0.00	3182	0.00	0.00	
08.08.91	450	14.32	3183	0.38	1.73	
15.08.91	180	5.73	3183	0.00	0.00	
22.08.91	40	1.27	3183	0.00	0.00	
29.08.91	550	17.51	3184	0.38	1.73	
06.09.91	0	0.00	3184	0.00	0.00	
13.09.91	0	0.00	3184	0.00	0.00	
19.09.91	1560	49.66	3193	3.42	15.55	
26.09.91	1450	46.15	3215	8.36	38.00	
04.10.91	3000	95.49	3257	15.96	72.55	
10.10.91	290	9.23	3262	1.90	8.64	
17.10.91	1450	46.15	3286	9.12	41.45	
24.10.91	180	5.73	3290	1.52	6.91	
01.11.91	780	24.83	3297	2.66	12.09	
13.11.91	5310	169.02	3397	38.00	172.73	
22.11.91	660	21.01	3403	2.28	10.36	
29.11.91	590	18.78	3417	5.32	24.18	
05.12.91	70	2.23	3420	1.14	5.18	
11.12.91	30	0.95	3421	0.38	1.73	
21.12.91	1600	50.93	3445	9.12	41.45	
28.12.91	290	9.23	3452	2.66	12.09	

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 380
Year: 1992

Sum mm: 1226.61 1062.27

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.92	700	22.28	3461	3.42	15.55	
11.01.92	540	17.19	3471	3.80	17.27	
16.01.92	0	0.00	3471	0.00	0.00	
24.01.92	0	0.00	3471	0.00	0.00	
30.01.92	150	4.77	3472	0.38	1.73	
07.02.92	210	6.68	3474	0.76	3.45	
13.02.92	810	25.78	3486	4.56	20.73	
19.02.92	20	0.64	3488	0.76	3.45	
27.02.92	150	4.77	3496	3.04	13.82	
06.03.92	210	6.68	3499	1.14	5.18	
13.03.92	1250	39.79	3524	9.50	43.18	
20.03.92	780	24.83	3538	5.32	24.18	
26.03.92	1600	50.93	3565	10.26	46.64	
01.04.92	95	3.02	3568	1.14	5.18	
09.04.92	190	6.05	3571	1.14	5.18	
15.04.92	870	27.69	3573	0.76	3.45	snow
24.04.92	160	5.09	3586	4.94	22.45	
30.04.92	1290	41.06	3605	7.22	32.82	
06.05.92	1520	48.38	3631	9.88	44.91	
12.05.92	690	21.96	3638	2.66	12.09	
18.05.92	0	0.00	3640	0.76	3.45	
29.05.92	0	0.00	3640	0.00	0.00	
04.06.92	130	4.14	3640	0.00	0.00	
11.06.92	0	0.00	3640	0.00	0.00	
18.06.92	80	2.55	3640	0.00	0.00	
25.06.92	0	0.00	3640	0.00	0.00	
01.07.92	200	6.37	3640	0.00	0.00	
09.07.92	10	0.32	3640	0.00	0.00	
16.07.92	780	24.83	3640	0.00	0.00	
23.07.92	1870	59.52	3658	6.84	31.09	
31.07.92	670	21.33	3663	1.90	8.64	
06.08.92		0.00	3669	2.28	10.36	
12.08.92	600	19.10	3677	3.04	13.82	
21.08.92	1850	58.89	3703	9.88	44.91	
28.08.92	2720	86.58	3739	13.68	62.18	
01.09.92	890	28.33	3750	4.18	19.00	
09.09.92	870	27.69	3761	4.18	19.00	
17.09.92	1230	39.15	3781	7.60	34.55	
24.09.92	550	17.51	3786	1.90	8.64	
01.10.92	60	1.91	3789	1.14	5.18	
07.10.92	0	0.00	3789	0.00	0.00	
14.10.92	80	2.55	3789	0.00	0.00	
23.10.92	1250	39.79	3804	5.70	25.91	
30.10.92	1440	45.84	3820	6.08	27.64	
13.11.92	3420	108.86	3902	31.16	141.64	
20.11.92	1360	43.29	3914	4.56	20.73	
27.11.92	1750	55.70	3964	19.00	86.36	
04.12.92	5400	171.89	4064	38.00	172.73	
11.12.92	450	14.32	4076	4.56	20.73	
18.12.92	510	16.23	4087	4.18	19.00	
31.12.92	540	17.19	4100	4.94	22.45	

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 380
Year: 1993

Sum mm: 949.52 854.46

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
07.01.93	340	10.82	4100	0.00	0.00	
14.01.93	2530	80.53	4134	12.92	58.73	
20.01.93	1650	52.52	4166	12.16	55.27	
29.01.93	1260	40.11	4189	8.74	39.73	
05.02.93	10	0.32	4189	0.00	0.00	
11.02.93	50	1.59	4190	0.38	1.73	
17.02.93	50	1.59	4193	1.14	5.18	
24.02.93	45	1.43	4193	0.00	0.00	
19.03.93	930	29.60	4214	7.98	36.27	
26.03.93	140	4.46	4224	3.80	17.27	
02.04.93	360	11.46	4225	0.38	1.73	
07.04.93	1130	35.97	4245	7.60	34.55	
16.04.93	0	0.00	4250	1.90	8.64	
23.04.93	760	24.19	4264	5.32	24.18	estimert
30.04.93	0	0.00			0.00	avløp
06.05.93	170	5.41			0.00	estimert
14.05.93	0	0.00			0.00	avløp mm
19.05.93	110	3.50			2.50	"
28.05.93	330	10.50			9.50	"
03.06.93	250	7.96			6.96	"
10.06.93	0	0.00			0.00	"
17.06.93		0.00			0.00	"
24.06.93	280	8.91			7.91	"
02.07.93	340	10.82			9.82	"
09.07.93	360	11.46			10.46	"
14.07.93	890	28.33			27.33	"
23.07.93	250	7.96			6.96	"
27.07.93	0	0.00			0.00	"
06.08.93	1500	47.75			46.75	"
13.08.93	900	28.65			27.65	"
20.08.93	190	6.05			5.05	"
27.08.93	170	5.41			4.41	"
03.09.93	10	0.32			0.00	"
09.09.93	0	0.00			0.00	"
16.09.93	1420	45.20			44.20	"
23.09.93	270	8.59			7.59	"
30.09.93	1430	45.52	53	20.14	91.55	
07.10.93	2030	64.62	83	11.40	51.82	
14.10.93	1410	44.88	106	8.74	39.73	
21.10.93	520	16.55	110	1.52	6.91	
28.10.93	0	0.00	112	0.76	3.45	
04.11.93	0	0.00	112	0.00	0.00	
11.11.93	2200	70.03	147	13.30	60.45	
18.11.93	2600	82.76	197	19.00	86.36	
25.11.93	20	0.64	198	0.38	1.73	
02.12.93	850	27.06	198	0.00	0.00	
09.12.93	1075	34.22	204	2.28	10.36	jordfeil
20.12.93	1000	31.83	205	0.38	1.73	

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 380 1/1-19/5
Year: 1994 1 tank ltr.: 382 ltr. 398 19/5-31/12

Sum mm: 1397.06 1143.13

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.94	2270	72.26	208	1.14	5.18	
14.01.94	2245	71.46	210	0.76	3.45	
20.01.94	280	8.91	210	0.00	0.00	
27.01.94	925	29.44	210	0.00	0.00	
10.02.94	2050	65.25	210	0.00	0.00	
17.02.94	125	3.98	210	0.00	0.00	
24.02.94	0	0.00	210	0.00	0.00	
03.03.94	550	17.51	210	0.00	0.00	
10.03.94	1370	43.61	210	0.00	0.00	
17.03.94	500	15.92	231	7.98	36.27	
24.03.94	620	19.74	245	5.32	24.18	
06.04.94	440	14.01	374	49.02	222.82	
14.04.94	3260	103.77	427	20.14	91.55	
21.04.94	60	1.91	462	13.30	60.45	
28.04.94	510	16.23	491	11.02	50.09	
05.05.94	10	0.32	496	1.90	8.64	
19.05.94	960	30.56	512	6.08	27.64	
26.05.94	0	0.00	517	0.00	0.00	
02.06.94	110	3.50	517	0.00	0.00	
09.06.94	220	7.00	517	0.00	0.00	
16.06.94	40	1.27	517	0.00	0.00	
23.06.94	830	26.42	517	0.00	0.00	
30.06.94	560	17.83	518	0.40	1.81	
07.07.94	0	0.00	518	0.00	0.00	
14.07.94	0	0.00	518	0.00	0.00	
21.07.94	80	2.55	518	0.00	0.00	
29.07.94	430	13.69	520	0.80	3.62	
04.08.94	990	31.51	520	0.00	5.00	estim.
10.08.94	215	6.84	529	0.00	0.00	r.off mm
18.08.94	250	7.96	537	0.40	1.81	
25.08.94	2100	66.85	555	7.16	32.56	
01.09.94	2500	79.58	591	14.33	65.13	
08.09.94	2150	68.44	617	8.76	39.80	
15.09.94	3050	97.08	663	18.31	83.22	
22.09.94	1140	36.29	676	5.17	23.52	
29.09.94	220	7.00	677	0.40	1.81	
06.10.94	460	14.64	680	1.19	5.43	
13.10.94	0	0.00	680	0.00	0.00	
24.10.94	1500	47.75	698	7.16	32.56	
31.10.94	2250	71.62	731	13.13	59.70	
08.11.94	230	7.32	738	2.79	12.66	
14.11.94	1190	37.88	748	3.98	18.09	
21.11.94	920	29.28	773	9.95	45.23	
28.11.94	50	1.59	775	0.80	3.62	
05.12.94	900	28.65	792	6.77	30.75	
12.12.94	2110	67.16	821	11.54	52.46	
19.12.94	2320	73.85	864	17.11	77.79	
27.12.94	900	28.65	873	3.58	16.28	

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 398
Year: 1995

Sum mm: 1289.79 1137.92

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.95	1000	31.83	892	7.56	34.37	snow
09.01.95	320	10.19	895	1.19	5.43	
16.01.95	400	12.73	900	1.99	9.05	
23.01.95	4000	127.32	952	20.70	94.07	
30.01.95	65	2.07	955	1.19	5.43	
06.02.95	900	28.65	988	13.13	59.70	
13.02.95	600	19.10	1000	4.78	21.71	
20.02.95	2200	70.03	1040	15.92	72.36	
27.02.95	2040	64.94	1093	21.09	95.88	
06.03.95	760	24.19	1103	3.98	18.09	
13.03.95	1550	49.34	1105	0.80	3.62	
20.03.95	1140	36.29	1126	8.36	37.99	
27.03.95	0	0.00	1164	15.12	68.75	
03.04.95	20	0.64	1183	7.56	34.37	
10.04.95	0	0.00	1187	1.59	7.24	
18.04.95	400	12.73	1191	1.59	7.24	
25.04.95	130	4.14	1194	1.19	5.43	
02.05.95	200	6.37	1199	1.99	9.05	
08.05.95	1190	37.88	1212	5.17	23.52	
15.05.95	650	20.69	1221	3.58	16.28	
22.05.95	230	7.32	1221	0.00	0.00	
31.05.95	760	24.19	1227	2.39	10.85	
06.06.95	220	7.00	1228	0.40	1.81	
12.06.95	2390	76.08	1254	10.35	47.04	
19.06.95	1160	36.92	1269	5.97	27.14	
26.06.95	130	4.14	1270	0.40	1.81	
03.07.95	0	0.00	1270	0.00	0.00	
11.07.95	95	3.02	1270	0.00	0.00	
17.07.95	650	20.69	1270	0.00	0.00	
24.07.00	650	20.69	1271	0.40	1.81	
31.07.95	0	0.00	1271	0.00	0.00	
07.08.95	0	0.00	1271	0.00	0.00	
14.08.95	0	0.00	1271	0.00	0.00	
21.08.95	0	0.00	1271	0.00	0.00	
28.08.95	640	20.37	1272	0.40	1.81	
04.09.95	1310	41.70	1290	7.16	32.56	
12.09.95	3690	117.46	1329	15.52	70.55	
18.09.95	4100	130.51	1398	27.46	124.83	
26.09.95	620	19.74	1407	3.58	16.28	
02.10.95	520	16.55	1411	1.59	7.24	
09.10.95	2220	70.66	1447	14.33	65.13	
16.10.95	120	3.82	1448	0.40	1.81	
23.10.95	900	28.65	1457	3.58	16.28	
30.10.95	620	19.74	1464	2.79	12.66	
06.11.95	340	10.82	1467	1.19	5.43	
13.11.95	140	4.46	1469	0.80	3.62	
20.11.95	100	3.18	1469	0.00	0.00	
28.11.95	530	16.87	1477	3.18	14.47	
04.12.95	0	0.00	1481	1.59	7.24	
11.12.95	820	26.10	1499	7.16	32.56	30 cm snow

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 398
Year: 1996

Sum mm: 1465.76 922.64

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
02.01.96	0	0.00	1502	1.19	5.43	
08.01.96	960	30.56	1502	0.00	0.00	30 cm snow
15.01.96	1660	52.84	1522	7.96	36.18	
22.01.96	0	0.00	1522	0.00	0.00	
29.01.96	130	4.14	1523	0.40	1.81	
05.02.96	20	0.64	1529	2.39	10.85	
19.02.96	500	15.92	1529	0.00	0.00	
26.02.96	1660	52.84	1532	1.19	5.43	
04.03.96	0	0.00	1532	0.00	0.00	
11.03.96	0	0.00	1536	1.59	7.24	
18.03.96	160	5.09	1537	0.40	1.81	
25.03.96	0	0.00	1540	1.19	5.43	
01.04.96	220	7.00	0	0.00	0.00	
09.04.96	0	0.00	31	12.34	56.08	
15.04.96	0	0.00	67	14.33	65.13	
22.04.96	55	1.75	111	17.51	79.60	
29.04.96	100	3.18	114	1.19	5.43	
06.05.96	670	21.33	123	3.58	16.28	
14.05.96	280	8.91	127	1.59	7.24	
19.05.96	495	15.76	131	1.59	7.24	
27.05.96	1840	58.57	161	11.94	54.27	
03.06.96	190	6.05	166	1.99	9.05	
10.06.96	0	0.00	166	0.00	0.00	
17.06.96	270	8.59	166	0.00	0.00	
24.06.96	470	14.96	166	0.00	0.00	
03.07.96	0	0.00	167	0.40	1.81	
08.07.96	0	0.00	170	1.19	5.43	
15.07.96	0	0.00	170	0.00	0.00	
05.08.96	0	0.00	170	0.00	0.00	
12.08.96	2300	73.21	184	5.57	25.33	
19.08.96	0	0.00	184	0.00	0.00	
26.08.96	1550	49.34	193	3.58	16.28	
02.09.96	2810	89.45	230	14.73	66.94	
09.09.96	0	0.00	230	0.00	0.00	
16.09.96	50	1.59	230	0.00	0.00	
23.09.96	0	0.00	230	0.00	0.00	
30.09.96	3260	103.77	274	17.51	79.60	
07.10.96	1460	46.47	294	7.96	36.18	
14.10.96	280	8.91	299	1.99	9.05	
21.10.96	1750	55.70	324	9.95	45.23	
28.10.96	1260	40.11	348	9.55	43.42	
04.11.96	820	26.10	360	4.78	21.71	
25.11.96	3690	117.46	390	11.94	54.27	
02.12.96	0	0.00	404	5.57	25.33	
09.12.96	2310	73.53	466	24.68	112.16	

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 398
Year: 1997

Sum mm: 1516.98 1304.85

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
07.01.97	130	4.14	472	2.39	10.85	
13.01.97	240	7.64	482	3.98	18.09	
20.01.97	65	2.07	494	4.78	21.71	
27.01.97	100	3.18	495	0.40	1.81	
03.02.97	220	7.00	497	0.80	3.62	
10.02.97	340	10.82	504	2.79	12.66	
17.02.97	0	0.00	519	5.97	27.14	
27.02.97	4560	145.15	596	30.65	139.30	
03.03.97	0	0.00	627	12.34	56.08	
10.03.97	0	0.00	633	2.39	10.85	
17.03.97	0	0.00	633	0.00	0.00	
24.03.97	90	2.86	634	0.40	1.81	
02.04.97	690	21.96	654	7.96	36.18	
07.04.97	0	0.00	654	0.00	0.00	
14.04.97	0	0.00	654	0.00	0.00	
21.04.97	0	0.00	654	0.00	0.00	
28.04.97	480	15.28	657	1.19	5.43	
05.05.97	0	0.00	658	0.40	1.81	
12.05.97	1120	35.65	672	5.57	25.33	
20.05.97	110	3.50	672	0.00	0.00	
26.05.97	0	0.00	672	0.00	0.00	
02.06.97	0	0.00	672	0.00	0.00	
09.06.97	0	0.00	672	0.00	0.00	
16.06.97	90	2.86	672	0.00	0.00	
23.06.97	2520	80.21	689	6.77	30.75	
01.07.97	1150	36.61	698	3.58	16.28	
22.07.97	650	20.69	700	0.80	3.62	est.tanknr.
11.08.97	800	25.46	701	0.40	1.81	
18.08.97	0	0.00	701	0.00	0.00	
25.08.97	530	16.87	702	0.40	1.81	
01.09.97	3100	98.68	719	6.77	30.75	
22.09.97	3070	97.72	757	15.12	68.75	
06.10.97		5.00	759	0.80	3.62	est.precip.
13.10.97	3260	103.77	791	12.74	57.89	
20.10.97	600	19.10	800	3.58	16.28	est.tanknr.
10.11.97	1630	51.88	822	8.76	39.80	
17.11.97	2270	72.26	860	15.12	68.75	
01.12.97	550	17.51	872	4.78	21.71	
15.12.97	2100	66.85	915	17.11	77.79	
29.12.97	1520	48.38	918	1.19	5.43	

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 398
Year: 1998

Sum mm: 1302.68 1110.84

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
05.01.98	2420	77.03	982	25.47	115.78	
12.01.98	720	22.92	998	6.37	28.95	
16.01.98	1200	38.20	1020	8.76	39.80	
26.01.98	0	0.00	1025	1.99	9.05	
16.02.98	430	13.69	1038	5.17	23.52	
25.02.98	20	0.64	1041	1.19	5.43	
01.03.98	470	14.96	1047	2.39	10.85	
09.03.98	260	8.28	1048	0.40	1.81	
16.03.98	250	7.96	1059	4.38	19.90	
22.03.98	0	0.00	1069	3.98	18.09	
30.03.98	1060	33.74	1090	8.36	37.99	
06.04.98	350	11.14	1093	1.19	5.43	
14.04.98	2360	75.12	1105	4.78	21.71	
20.04.98	1580	50.29	1138	13.13	59.70	
26.04.98	800	25.46	1196	23.08	104.93	
03.05.98	440	14.01	1214	7.16	32.56	
11.05.98	70	2.23	1215	0.40	1.81	
18.05.98	0	0.00	1215	0.00	0.00	
25.05.98	0	0.00	1215	0.00	0.00	
01.06.98	950	30.24	1227	4.78	21.71	
08.06.98	1510	48.06	1242	5.97	27.14	
15.06.98	0	0.00	1242	0.00	0.00	
22.06.98	1300	41.38	1251	3.58	16.28	
29.06.98	2440	77.67	1282	12.34	56.08	
06.07.98	190	6.05	1284	0.80	3.62	
13.07.98	980	31.19	1287	1.19	5.43	
20.07.98	1290	41.06	1303	6.37	28.95	
28.07.98	690	21.96	1307	1.59	7.24	
10.08.98	540	17.19	1322	5.97	27.14	
17.08.98	830	26.42	1325	1.19	5.43	
24.08.98	440	14.01	1331	2.39	10.85	
31.08.98	230	7.32	1331	0.00	0.00	
07.09.98	320	10.19	1331	0.00	0.00	
14.09.98	3240	103.13	1371	15.92	72.36	
21.09.98	220	7.00	1376	1.99	9.05	
12.10.98	2310	73.53	1400	9.55	43.42	
19.10.98	1320	42.02	1416	6.37	28.95	
26.10.98	3830	121.91	1453	14.73	66.94	
04.11.98	810	25.78	1466	5.17	23.52	
11.11.98	1800	57.30	1491	9.95	45.23	
18.11.98	0	0.00			12.91	est.:
23.11.98	850	27.06			7.47	Average of
29.11.98	400	12.73			23.84	Mette, Cec
07.12.98	300	9.55			7.45	and Egil
18.12.98	375	11.94			10.26	"

RISDALHEIA Catchment m2: 220
"Rolf"-catchment 1 tank ltr.: 382 ltr. 398
Year: 1999

Sum mm: 1038.96 808.05

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks	
06.01.99	3750	119.37			128.09	"	
21.01.99	3150	100.27			97.73	"	
30.01.99	670	21.33			13.48	"	
08.02.99	460	14.64			27.26	"	
14.02.99	20	0.64			0.49	"	
26.02.99	1620	51.57			4.63	"	
06.03.99	2530	80.53			27.47	"	
12.03.99	440	14.01			3.97	"	
22.03.99	1360	43.29			28.51	"	
30.03.99	750	23.87			81.58	"	
06.04.99	200	6.37			85.06	"	
13.04.99	1050	33.42			40.04	"	
19.04.99	940	29.92			31.54	"	
26.04.99	330	10.50			8.94	"	
06.05.99	0	0.00			0.27	average of	
12.05.99	1900	60.48			50.24	Mette and	
20.05.99	180	5.73			9.73	"	
25.05.99	330	10.50			0.46	"	
07.06.99	980	31.19			22.95	"	
10.06.99	1910	60.80			34.11	"	
22.06.99	2240	71.30			50.78	"	
28.06.99	1980	63.03			8.97	"	
11.08.99	3000	95.49			9.85	"	ca prec.
20.08.99	3250	103.45			80.00	est. runoff	
09.09.99	1500	47.75			40.00	est. runoff	
12.10.99	1850	58.89			50.00		

RISDALHEIA Catchment m2: 648
"Mette"-catchment 1 tank ltr.: 348
Year: 1993

Sum mm: 618.64 493.06

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
02.07.93	340	10.82		6.01	9.28	estim.
09.07.93	360	11.46		6.43	9.92	runoff
14.07.93	890	28.33		17.36	26.79	"
23.07.93	250	7.96		4.16	6.41	"
27.07.93	0	0.00		0.00	0.00	"
06.08.93	1500	47.75		29.94	46.20	"
13.08.93	900	28.65		17.56	27.10	"
20.08.93	190	6.05		2.92	4.50	"
27.08.93	170	5.41		2.51	3.87	"
03.09.93	10	0.32		0.00	0.00	"
09.09.93	0	0.00		0.00	0.00	"
16.09.93	1420	45.20		28.29	43.66	"
23.09.93	270	8.59		4.57	7.05	"
30.09.93	1430	45.52		28.50	43.98	"
07.10.93	2030	64.62		40.87	63.07	"
14.10.93	1410	44.88		28.08	43.34	"
21.10.93	520	16.55	16	5.57	8.59	
28.10.93	0	0.00	22	2.09	3.22	
04.11.93	0	0.00	22	0.00	0.00	
11.11.93	2200	70.03	140	41.06	63.37	
18.11.93	2600	82.76	273	46.28	71.43	
25.11.93	20	0.64	273	0.00	0.00	
02.12.93	850	27.06	273	0.00	0.00	
09.12.93	1075	34.22	293	6.96	10.74	
20.12.93	1000	31.83	294	0.35	0.54	

RISDALHEIA Catchment m2: 648
"Mette"-catchment 1 tank ltr.: 348
Year: 1994

Sum mm: 1397.06 1059.42

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.94	2270	72.26	294	0.00	0.00	
14.01.94	2245	71.46	6	2.05	3.16	estim.
20.01.94	280	8.91	0	0.00	0.00	runoff
27.01.94	925	29.44	0	0.00	0.00	"
10.02.94	2050	65.25	0	0.00	0.00	"
17.02.94	125	3.98	0	0.00	0.00	"
24.02.94	0	0.00	0	0.00	0.00	"
03.03.94	550	17.51	0	0.00	0.00	"
10.03.94	1370	43.61	0	0.00	0.00	"
17.03.94	500	15.92	62	21.53	33.22	"
24.03.94	620	19.74	41	14.35	22.15	"
06.04.94	440	14.01	380	132.23	204.05	"
14.04.94	3260	103.77	621	83.88	129.45	
21.04.94	60	1.91	699	27.14	41.89	
28.04.94	510	16.23	806	37.24	57.46	
05.05.94	10	0.32	835	10.09	15.57	
19.05.94	960	30.56	876	14.27	22.02	
26.05.94	0	0.00	876	0.00	0.00	
02.06.94	110	3.50	876	0.00	0.00	
09.06.94	220	7.00	876	0.00	0.00	
16.06.94	40	1.27	881	0.00	0.00	
23.06.94	830	26.42	882	0.35	0.54	
30.06.94	560	17.83	886	1.39	2.15	
07.07.94	0	0.00	889	0.00	0.00	Indusert
14.07.94	0	0.00	889	0.00	0.00	
21.07.94	80	2.55	889	0.00	0.00	
29.07.94	430	13.69	890	0.35	0.54	
04.08.94	990	31.51	902	4.18	6.44	
10.08.94	215	6.84	902	0.00	0.00	
18.08.94	250	7.96	902	0.00	0.00	
25.08.94	2100	66.85	905	1.04	30.00	estim.
01.09.94	2500	79.58	1025	41.76	64.44	r.off mm
08.09.94	2150	68.44	1121	33.41	51.56	
15.09.94	3050	97.08	1283	56.38	87.00	
22.09.94	1140	36.29	1331	16.70	25.78	
29.09.94	220	7.00	1332	0.35	0.54	
06.10.94	460	14.64	1344	4.18	6.44	
13.10.94	0	0.00	0	0.00	0.00	
24.10.94	1500	47.75	0	0.00	30.00	estim.
31.10.94	2250	71.62	132	45.94	70.89	r.off mm
08.11.94	230	7.32	138	2.09	3.22	
14.11.94	1190	37.88	160	7.66	11.81	
21.11.94	920	29.28	221	21.23	32.76	
28.11.94	50	1.59	229	2.78	4.30	
05.12.94	900	28.65	249	6.96	10.74	
12.12.94	2110	67.16	327	27.14	41.89	
19.12.94	2320	73.85	394	23.32	35.98	
27.12.94	900	28.65	419	8.70	13.43	

RISDALHEIA Catchment m2: 648
"Mette"-catchment 1 tank ltr.: 348
Year: 1995

Sum mm: 1289.79 861.94

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.95	1000	31.83	464	15.66	24.17	
09.01.95	320	10.19	469	1.74	2.69	
16.01.95	400	12.73	490	7.31	11.28	
23.01.95	4000	127.32	588	34.10	52.63	
30.01.95	65	2.07	596	2.78	4.30	
06.02.95	900	28.65	633	12.88	19.87	
13.02.95	600	19.10	656	8.00	12.35	
20.02.95	2200	70.03	780	43.15	66.59	
27.02.95	2040	64.94	854	25.75	39.74	
06.03.95	760	24.19	877	8.00	12.35	
13.03.95	1550	49.34	884	2.44	3.76	
20.03.95	1140	36.29	923	13.57	20.94	
27.03.95	0	0.00	993	24.36	37.59	
03.04.95	20	0.64	1055	21.58	33.30	
10.04.95	0	0.00	1100	15.66	24.17	
18.04.95	400	12.73	1153	18.44	28.46	
25.04.95	130	4.14	1166	4.52	6.98	
02.05.95	200	6.37	1181	5.22	8.06	
08.05.95	1190	37.88	1211	10.44	16.11	
15.05.95	650	20.69	1241	10.44	16.11	
22.05.95	230	7.32	1243	0.70	1.07	
31.05.95	760	24.19	1261	6.26	9.67	
06.06.95	220	7.00	1265	1.39	2.15	
12.06.95	2390	76.08	1357	32.02	49.41	
19.06.95	1160	36.92	1411	18.79	29.00	
26.06.95	130	4.14	1413	0.70	1.07	
03.07.95	0	0.00	1413	0.00	0.00	
11.07.95	95	3.02	1413	0.00	0.00	
17.07.95	650	20.69	1414	0.35	0.54	
24.07.00	650	20.69	1417	1.04	1.61	
31.07.95	0	0.00	1417	0.00	0.00	
07.08.95	0	0.00	1417	0.00	0.00	
14.08.95	0	0.00	1418	0.35	0.54	
21.08.95	0	0.00	1418	0.00	0.00	
28.08.95	640	20.37	1419	0.35	0.54	
04.09.95	1310	41.70	1440	7.31	11.28	
12.09.95	3690	117.46	1580	48.72	75.19	
18.09.95	4100	130.51	1765	64.38	99.35	
26.09.95	620	19.74	1785	6.96	10.74	
02.10.95	520	16.55	1800	5.22	8.06	
09.10.95	2220	70.66	1892	32.02	49.41	
16.10.95	120	3.82	1896	1.39	2.15	
23.10.95	900	28.65	1936	13.92	21.48	
30.10.95	620	19.74	1950	4.87	7.52	
06.11.95	340	10.82	1974	8.35	12.89	
13.11.95	140	4.46	1976	0.70	1.07	
20.11.95	100	3.18	1978	0.70	1.07	
28.11.95	530	16.87	2000	7.66	11.81	
04.12.95	0	0.00	2013	4.52	6.98	
11.12.95	820	26.10	2024	3.83	5.91	

RISDALHEIA Catchment m2: 648
"Mette"-catchment 1 tank ltr.: 348
Year: 1996

Sum mm: 1223.76 782.61

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
02.01.96	0	0.00	2029	1.74	2.69	
08.01.96	960	30.56	2035	2.09	3.22	
15.01.96	1660	52.84	2071	12.53	19.33	
22.01.96	0	0.00	2071	0.00	0.00	
29.01.96	130	4.14	2073	0.70	1.07	
05.02.96	20	0.64	2075	0.70	1.07	
12.02.96		0.00	2075	0.00	0.00	
19.02.96	500	15.92	2075	0.00	0.00	
26.02.96	1660	52.84	2076	0.35	0.54	
04.03.96	0	0.00	2076	0.00	0.00	
11.03.96	0	0.00	2079	1.04	1.61	
18.03.96	160	5.09	2079	0.00	0.00	
25.03.96	0	0.00	2079	0.00	0.00	
01.04.96	220	7.00	2083	3.83	5.91	
09.04.96	0	0.00	2129	16.01	24.70	
15.04.96	0	0.00	2200	24.71	38.13	
22.04.96	55	1.75	2309	37.93	58.54	
29.04.96	100	3.18	2323	4.87	7.52	
06.05.96	670	21.33	2357	11.83	18.26	
14.05.96	280	8.91	2375	6.26	9.67	
19.05.96	495	15.76	2394	6.61	10.20	
27.05.96	1840	58.57	2510	40.37	62.30	
03.06.96	190	6.05	2526	5.57	8.59	
10.06.96	0	0.00	2527	0.35	0.54	
17.06.96	270	8.59	2528	0.35	0.54	
24.06.96	470	14.96	2528	0.00	0.00	
03.07.96	0	0.00	2529	0.35	0.54	
08.07.96	0	0.00	2538	3.13	4.83	
15.07.96	0	0.00	2538	0.00	0.00	
05.08.96	0	0.00	2538	0.00	0.00	
12.08.96	2300	73.21	2538	0.00	0.00	
19.08.96	0	0.00	2538	0.00	0.00	
26.08.96	1550	49.34	0	0.00	0.00	
02.09.96	2810	89.45	74	25.75	39.74	
09.09.96	0	0.00	75	0.35	0.54	
16.09.96	50	1.59	75	0.00	0.00	
23.09.96	0	0.00	75	0.00	0.00	
30.09.96	3260	103.77	159	29.23	45.11	
07.10.96	1460	46.47	35	12.18	18.80	
14.10.96	280	8.91	46	3.83	5.91	
21.10.96	1750	55.70	97	17.75	27.39	
28.10.96	1260	40.11	139	14.62	22.56	
04.11.96	820	26.10	181	14.62	22.56	
25.11.96	3690	117.46	322	49.07	75.72	
02.12.96	0	0.00	328	2.09	3.22	
09.12.96	2310	73.53	361	11.48	17.72	

RISDALHEIA Catchment m2: 648
"Mette"-catchment 1 tank ltr.: 348
Year: 1997

Sum mm: 1096.01 999.43

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
07.01.97	130	4.14	362	0.35	0.54	
13.01.97	240	7.64	372	3.48	5.37	
20.01.97	65	2.07	413	14.27	22.02	
27.01.97	100	3.18	416	1.04	1.61	
03.02.97	220	7.00	419	1.04	1.61	
10.02.97	340	10.82	457	13.22	20.41	
17.02.97	0	0.00	506	17.05	26.31	
27.02.97	4560	145.15	754	86.30	133.19	
03.03.97	0	0.00	873	41.41	63.91	
10.03.97	0	0.00	910	12.88	19.87	
17.03.97	0	0.00	925	5.22	8.06	
24.03.97	90	2.86	927	0.70	1.07	
02.04.97	690	21.96	998	24.71	38.13	
07.04.97	0	0.00	1000	0.70	1.07	
14.04.97	0	0.00	1002	0.70	1.07	
21.04.97	0	0.00	1002	0.00	0.00	
28.04.97	480	15.28	1017	5.22	8.06	
05.05.97	0	0.00	1019	0.70	1.07	
12.05.97	1120	35.65	1072	18.44	28.46	
20.05.97	110	3.50	1074	0.70	1.07	
26.05.97	0	0.00	1075	0.35	0.54	
02.06.97	0	0.00	1077	0.70	1.07	
09.06.97	0	0.00	1077	0.00	0.00	
16.06.97	90	2.86	1077	0.00	0.00	
23.06.97	2520	80.21	1177	34.80	53.70	
01.07.97	1150	36.61	1201	8.35	12.89	
22.07.97	650	20.69	1212	3.83	5.91	
11.08.97	800	25.46	1212	0.00	0.00	
18.08.97	0	0.00	1217	1.74	2.69	
25.08.97	530	16.87	1218	0.35	0.54	
01.09.97	3100	98.68	1218	45.24	69.81	est. run-off
22.09.97	3070	97.72	1224	48.72	75.19	est. run-off
06.10.97		5.00	1224	1.74	2.69	estimated
13.10.97	3260	103.77	1224	52.20	80.56	est. run-off
20.10.97	600	19.10		3.48	5.37	est. run-off
10.11.97	1630	51.88		17.40	26.85	est. run-off
17.11.97	2270	72.26	1304	24.36	37.59	est. run-off
01.12.97	550	17.51	1350	16.01	24.70	
15.12.97	2100	66.85	1496	50.81	78.41	
29.12.97	1520	48.38	1500	1.39	2.15	

RISDALHEIA Catchment m2: 648
"Mette"-catchment 1 tank ltr.: 348
Year: 1998

Sum mm: 1302.68 1211.56

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
05.01.98	2420	77.03	1754	88.39	136.41	
12.01.98	720	22.92	1789	12.18	18.80	
16.01.98	1200	38.20	1879	31.32	48.33	
26.01.98	0	0.00	1894	5.22	8.06	
16.02.98	430	13.69	1946	18.10	27.93	
25.02.98	20	0.64	1954	2.78	4.30	
01.03.98	470	14.96	1973	6.61	10.20	
09.03.98	260	8.28	1976	1.04	1.61	
16.03.98	250	7.96	1994	6.26	9.67	
22.03.98	0	0.00	2031	12.88	19.87	
30.03.98	1060	33.74	2119	30.62	47.26	
06.04.98	350	11.14	2130	3.83	5.91	
14.04.98	2360	75.12	2159	10.09	15.57	
20.04.98	1580	50.29	2308	51.85	80.02	
26.04.98	800	25.46	2505	68.56	105.80	
03.05.98	440	14.01	2542	12.88	19.87	
11.05.98	70	2.23	2546	1.39	2.15	
18.05.98	0	0.00	2546	0.00	0.00	
25.05.98	0	0.00	2546	0.00	0.00	
01.06.98	950	30.24	2590	15.31	23.63	
08.06.98	1510	48.06	2648	20.18	31.15	
15.06.98	0	0.00	2648	0.00	0.00	
22.06.98	1300	41.38	2679	10.79	16.65	
29.06.98	2440	77.67	2796	40.72	62.83	
06.07.98	190	6.05	2802	2.09	3.22	
13.07.98	980	31.19	2814	4.18	6.44	
20.07.98	1290	41.06	2860	16.01	24.70	
28.07.98	690	21.96	2890	10.44	16.11	
10.08.98	540	17.19	2951	21.23	32.76	
17.08.98	830	26.42	2963	4.18	6.44	
24.08.98	440	14.01	2986	8.00	12.35	
31.08.98	230	7.32	2986	0.00	0.00	
07.09.98	320	10.19	2988	0.70	1.07	
14.09.98	3240	103.13	3140	52.90	81.63	
21.09.98	220	7.00	3160	6.96	10.74	
12.10.98	2310	73.53	3261	35.15	54.24	
19.10.98	1320	42.02	3326	22.62	34.91	
26.10.98	3830	121.91	3536	73.08	112.78	
04.11.98	810	25.78	3579	14.96	23.09	
11.11.98	1800	57.30	3673	32.71	50.48	
18.11.98	0	0.00	3695	7.66	11.81	
23.11.98	850	27.06	3710	5.22	8.06	
29.11.98	400	12.73	3754	15.31	23.63	est.prec.
07.12.98	300	9.55	3767	4.52	6.98	est.prec.
18.12.98	375	11.94	3784	5.92	9.13	

RISDALHEIA Catchment m2: 648
"Mette"-catchment 1 tank ltr.: 348
Year: 1999

Sum mm: 828.88 648.74

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.99	3750	119.37	4010	78.65	121.37	
21.01.99	3150	100.27	4203	67.16	103.65	
30.01.99	670	21.33	4228	8.70	13.43	
08.02.99	460	14.64	4278	17.40	26.85	
14.02.99	20	0.64	4279	0.35	0.54	
26.02.99	1620	51.57	4288	3.13	4.83	
06.03.99	2530	80.53	4336	16.70	25.78	
12.03.99	440	14.01	4343	2.44	3.76	
22.03.99	1360	43.29	4395	18.10	27.93	
30.03.99	750	23.87	4551	54.29	83.78	
06.04.99	200	6.37	4713	56.38	87.00	
13.04.99	1050	33.42	4794	28.19	43.50	
19.04.99	940	29.92	4853	20.53	31.69	
26.04.99	330	10.50	4871	6.26	9.67	
06.05.99	0	0.00	4872	0.35	0.54	
12.05.99	1900	60.48	4965	32.36	49.94	est. runoff
20.05.99	180	5.73	4979	4.87	7.52	
25.05.99	330	10.50	4979	0.00	0.00	
07.06.99	980	31.19	5020	14.27	22.02	est. runoff
10.06.99	1910	60.80	5082	21.58	33.30	
22.06.99	2240	71.30	5177	33.06	51.02	
28.06.99	1980	63.03	5195	6.26	9.67	est. runoff
11.08.99	3000	95.49	5218	8.00	12.35	

RISDALHEIA Catchment m2: 382
"Cecilie"-catchment 1 tank ltr.: 351
Year: 1993

Sum mm: 618.64 481.08

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
02.07.93	340	10.82		3.13	8.20	estim.
09.07.93	360	11.46		3.38	8.84	runoff
14.07.93	890	28.33		9.82	25.71	"
23.07.93	250	7.96		2.04	5.34	"
27.07.93	0	0.00		0.00	0.00	"
06.08.93	1500	47.75		17.24	45.13	"
13.08.93	900	28.65		9.94	26.03	"
20.08.93	190	6.05		1.31	3.43	"
27.08.93	170	5.41		1.07	2.79	"
03.09.93	10	0.32		0.00	0.00	"
09.09.93	0	0.00		0.00	0.00	"
16.09.93	1420	45.20		16.27	42.58	"
23.09.93	270	8.59		2.28	5.98	"
30.09.93	1430	45.52		16.39	42.90	"
07.10.93	2030	64.62		23.68	62.00	"
14.10.93	1410	44.88		16.14	42.26	"
21.10.93	520	16.55	12	4.21	11.03	
28.10.93	0	0.00	14	0.70	1.84	
04.11.93	0	0.00	14	0.00	0.00	
11.11.93	2200	70.03	94	28.08	73.51	
18.11.93	2600	82.76	174	28.08	73.51	
25.11.93	20	0.64	0	0.00	0.00	
02.12.93	850	27.06	0	0.00	0.00	
09.12.93	1075	34.22	0	0.00	0.00	
20.12.93	1000	31.83	0	0.00	0.00	

RISDALHEIA Catchment m2: 382
"Cecilie"-catchment 1 tank ltr.: 351
Year: 1994

Sum mm: 1397.06 1157.76

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.94	2270	72.26	3	1.22	3.19	
14.01.94	2245	71.46	3	1.22	3.19	estim.
20.01.94	280	8.91	0	0.00	0.00	runoff
27.01.94	925	29.44	0	0.00	0.00	"
10.02.94	2050	65.25	0	0.00	0.00	"
17.02.94	125	3.98	0	0.00	0.00	"
24.02.94	0	0.00	0	0.00	0.00	"
03.03.94	550	17.51	0	0.00	0.00	"
10.03.94	1370	43.61	0	0.00	0.00	"
17.03.94	500	15.92	36	12.80	33.50	"
24.03.94	620	19.74	24	8.53	22.34	"
06.04.94	440	14.01	224	78.62	205.81	"
14.04.94	3260	103.77	111	38.96	101.99	"
21.04.94	60	1.91	159	16.85	44.10	
28.04.94	510	16.23	191	11.23	29.40	
05.05.94	10	0.32	198	2.46	6.43	
19.05.94	960	30.56	232	11.93	31.24	
26.05.94	0	0.00	232	0.00	0.00	
02.06.94	110	3.50	232	0.00	0.00	
09.06.94	220	7.00	232	0.00	0.00	
16.06.94	40	1.27	232	0.00	0.00	
23.06.94	830	26.42	238	2.11	5.51	
30.06.94	560	17.83	244	2.11	5.51	
07.07.94	0	0.00	244	0.00	0.00	
14.07.94	0	0.00	244	0.00	0.00	
21.07.94	80	2.55	244	0.00	0.00	
29.07.94	430	13.69	248	1.40	3.68	
04.08.94	990	31.51	248	0.00	0.00	
10.08.94	215	6.84	248	0.00	0.00	
18.08.94	250	7.96	250	0.70	1.84	
25.08.94	2100	66.85	253	1.05	30.00	estim.
01.09.94	2500	79.58	333	28.08	73.51	r.off mm
08.09.94	2150	68.44	399	23.17	60.64	
15.09.94	3050	97.08	505	37.21	97.40	
22.09.94	1140	36.29	536	10.88	28.48	
29.09.94	220	7.00	537	0.35	0.92	
06.10.94	460	14.64	545	2.81	7.35	
13.10.94	0	0.00	545	0.00	0.00	
24.10.94	1500	47.75	545	0.00	30.00	estim.
31.10.94	2250	71.62	635	31.59	82.70	r.off mm
08.11.94	230	7.32	638	1.05	2.76	
14.11.94	1190	37.88	662	8.42	22.05	
21.11.94	920	29.28	713	17.90	46.86	
28.11.94	50	1.59	717	1.40	3.68	
05.12.94	900	28.65	742	8.78	22.97	
12.12.94	2110	67.16	813	24.92	65.24	
19.12.94	2320	73.85	882	24.22	63.40	
27.12.94	900	28.65	906	8.42	22.05	

RISDALHEIA Catchment m2: 382
"Cecilie"-catchment 1 tank ltr.: 351
Year: 1995

Sum mm: 1289.79 1213.80

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
03.01.95	1000	31.83	948	14.74	38.59	
09.01.95	320	10.19	957	3.16	8.27	
16.01.95	400	12.73	977	7.02	18.38	
23.01.95	4000	127.32	1068	31.94	83.62	
30.01.95	65	2.07	1075	2.46	6.43	
06.02.95	900	28.65	1114	13.69	35.84	
13.02.95	600	19.10	1131	5.97	15.62	
20.02.95	2200	70.03	1222	31.94	83.62	
27.02.95	2040	64.94	1272	17.55	45.94	
06.03.95	760	24.19	1292	7.02	18.38	
13.03.95	1550	49.34	1300	2.81	7.35	
20.03.95	1140	36.29	1338	13.34	34.92	
27.03.95	0	0.00	1395	20.01	52.37	
03.04.95	20	0.64	1455	21.06	55.13	
10.04.95	0	0.00	1478	8.07	21.13	
18.04.95	400	12.73	1498	7.02	18.38	
25.04.95	130	4.14	1505	2.46	6.43	
02.05.95	200	6.37	1515	3.51	9.19	
08.05.95	1190	37.88	1538	8.07	21.13	
15.05.95	650	20.69	1562	8.42	22.05	
22.05.95	230	7.32	1564	0.70	1.84	
31.05.95	760	24.19	1577	4.56	11.95	
06.06.95	220	7.00	1580	1.05	2.76	
12.06.95	2390	76.08	1644	22.46	58.81	
19.06.95	1160	36.92	1680	12.64	33.08	
26.06.95	130	4.14	1681	0.35	0.92	
03.07.95	0	0.00	1681	0.00	0.00	
11.07.95	95	3.02	1681	0.00	0.00	
17.07.95	650	20.69	1685	1.40	3.68	
24.07.00	650	20.69	1692	2.46	6.43	
31.07.95	0	0.00	1692	0.00	0.00	
07.08.95	0	0.00	1692	0.00	0.00	
14.08.95	0	0.00	1692	0.00	0.00	
21.08.95	0	0.00	1692	0.00	0.00	
28.08.95	640	20.37	1698	2.11	5.51	
04.09.95	1310	41.70	1714	5.62	14.70	
12.09.95	3690	117.46	1830	40.72	106.59	
18.09.95	4100	130.51	2004	61.07	159.88	
26.09.95	620	19.74	2023	6.67	17.46	
02.10.95	520	16.55	2034	3.86	10.11	
09.10.95	2220	70.66	2116	28.78	75.35	
16.10.95	120	3.82	2118	0.70	1.84	
23.10.95	900	28.65	2151	11.58	30.32	
30.10.95	620	19.74	2159	2.81	7.35	
06.11.95	340	10.82	2177	6.32	16.54	
13.11.95	140	4.46	2179	0.70	1.84	
20.11.95	100	3.18	2180	0.35	0.92	
28.11.95	530	16.87	2200	7.02	18.38	
04.12.95	0	0.00	2209	3.16	8.27	
11.12.95	820	26.10	2227	6.32	16.54	

RISDALHEIA Catchment m2: 382
"Cecilie"-catchment 1 tank ltr.: 351
Year: 1996

Sum mm: 1222.76 833.60

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
02.01.96	0	0.00	2232	1.76	4.59	
08.01.96	960	30.56	2235	1.05	2.76	
15.01.96	1660	52.84	2288	18.60	48.70	
22.01.96	0	0.00	2288	0.00	0.00	
29.01.96	130	4.14	2290	0.70	1.84	
05.02.96	20	0.64	2291	0.35	0.92	
12.02.96		0.00	2291	0.00	0.00	
19.02.96	500	15.92	2291	0.00	0.00	
26.02.96	1660	52.84	2292	0.35	0.92	
04.03.96	0	0.00	2292	0.00	0.00	
11.03.96	0	0.00	2298	2.11	5.51	
18.03.96	160	5.09	2298	0.00	0.00	
25.03.96	0	0.00	2298	0.00	0.00	
01.04.96	220	7.00	2303	1.76	4.59	
09.04.96	0	0.00	2354	17.90	46.86	
15.04.96	0	0.00	2411	20.01	52.37	
22.04.96	55	1.75	2465	18.95	49.62	
29.04.96	100	3.18	2477	4.21	11.03	
06.05.96	670	21.33	2500	8.07	21.13	
14.05.96	280	8.91	2510	3.51	9.19	
19.05.96	495	15.76	2523	4.56	11.95	
27.05.96	1840	58.57	2599	26.68	69.83	
03.06.96	190	6.05	2610	3.86	10.11	
10.06.96	0	0.00	2612	0.70	1.84	
17.06.96	270	8.59	2612	0.00	0.00	
24.06.96	470	14.96	2614	0.70	1.84	
03.07.96	0	0.00	2615	0.35	0.92	
08.07.96	0	0.00	2628	4.56	11.95	
15.07.96	0	0.00	2628	0.00	0.00	
05.08.96	0	0.00	2629	0.35	0.92	
12.08.96	2300	73.21	2643	4.91	12.86	
19.08.96	0	0.00	2644	0.35	0.92	
26.08.96	1550	49.34	2655	3.86	10.11	
02.09.96	2810	89.45	2688	11.58	30.32	
09.09.96	0	0.00	2688	0.00	0.00	
16.09.96	50	1.59	2688	0.00	0.00	
23.09.96	0	0.00	2688	0.00	0.00	
30.09.96	3260	103.77	2720	11.23	29.40	
07.10.96	1460	46.47	15	5.27	13.78	
14.10.96	280	8.91	16	0.35	0.92	
21.10.96	1750	55.70	20	1.40	3.68	
28.10.96	1260	40.11	23	1.05	2.76	
04.11.96	820	26.10	52	10.18	26.65	
25.11.96	3690	117.46	145	32.64	85.45	
02.12.96	0	0.00	153	2.81	7.35	
09.12.96	2310	73.53	170	5.97	15.62	

RISDALHEIA Catchment m2: 382
"Cecilie"-catchment 1 tank ltr.: 351
Year: 1997

Sum mm: 1298.98 1193.34

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
07.01.97	130	4.14	171	0.35	0.92	
13.01.97	240	7.64	182	3.86	10.11	
20.01.97	65	2.07	207	8.78	22.97	
27.01.97	100	3.18	208	0.35	0.92	
03.02.97	220	7.00	211	1.05	2.76	
10.02.97	340	10.82	238	9.48	24.81	
17.02.97	0	0.00	269	10.88	28.48	
27.02.97	4560	145.15	420	53.00	138.75	
03.03.97	0	0.00	495	26.33	68.91	
10.03.97	0	0.00	519	8.42	22.05	
17.03.97	0	0.00	523	1.40	3.68	
24.03.97	90	2.86	525	0.70	1.84	
02.04.97	690	21.96	568	15.09	39.51	
07.04.97	0	0.00	569	0.35	0.92	
14.04.97	0	0.00	570	0.35	0.92	
21.04.97	0	0.00	570	0.00	0.00	
28.04.97	480	15.28	578	2.81	7.35	
05.05.97	0	0.00	579	0.35	0.92	
12.05.97	1120	35.65	612	11.58	30.32	
20.05.97	110	3.50	612	0.00	0.00	
26.05.97	0	0.00	614	0.70	1.84	
02.06.97	0	0.00	616	0.70	1.84	
09.06.97	0	0.00	616	0.00	0.00	
16.06.97	90	2.86	616	0.00	0.00	
23.06.97	2520	80.21	675	20.71	54.21	
01.07.97	1150	36.61	697	7.72	20.21	
22.07.97	650	20.69	704	2.46	6.43	
11.08.97	800	25.46	709	1.76	4.59	
18.08.97	0	0.00	709	0.00	0.00	
25.08.97	530	16.87	709	0.00	0.00	
01.09.97	3100	98.68	709	26.33	68.91	est. run-off
22.09.97	3070	97.72	711	28.08	73.51	est. run-off
06.10.97		5.00	711	1.05	2.76	estimated
13.10.97	3260	103.77	711	31.59	82.70	est. run-off
20.10.97	600	19.10		1.76	4.59	est. run-off
10.11.97	1630	51.88		8.78	22.97	est. run-off
17.11.97	2270	72.26	768	14.04	36.75	est. run-off
01.12.97	550	17.51	798	10.53	27.57	
15.12.97	2100	66.85	897	34.75	90.97	
29.12.97	1520	48.38	906	3.16	8.27	

RISDALHEIA Catchment m2: 382
"Cecilie"-catchment 1 tank ltr.: 351
Year: 1998

Sum mm: 1302.68 1289.14

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
05.01.98	2420	77.03	1071	57.92	151.61	
12.01.98	720	22.92	1095	8.42	22.05	
16.01.98	1200	38.20	1157	21.76	56.97	
26.01.98	0	0.00	1164	2.46	6.43	
16.02.98	430	13.69	1198	11.93	31.24	
25.02.98	20	0.64	1209	3.86	10.11	
01.03.98	470	14.96	1215	2.11	5.51	
09.03.98	260	8.28	1216	0.35	0.92	
16.03.98	250	7.96	1233	5.97	15.62	
22.03.98	0	0.00	1255	7.72	20.21	
30.03.98	1060	33.74	1310	19.31	50.54	
06.04.98	350	11.14	1314	1.40	3.68	
14.04.98	2360	75.12	1340	9.13	23.89	
20.04.98	1580	50.29	1208	23.87	62.48	est.run-off
26.04.98	800	25.46	1310	8.78	22.97	est.run-off
03.05.98	440	14.01	1333	8.07	21.13	
11.05.98	70	2.23	1335	0.70	1.84	
18.05.98	0	0.00	1335	0.00	0.00	
25.05.98	0	0.00	1335	0.00	0.00	
01.06.98	950	30.24	1361	9.13	23.89	
08.06.98	1510	48.06	1400	13.69	35.84	
15.06.98	0	0.00	1400	0.00	0.00	
22.06.98	1300	41.38	1425	8.78	22.97	
29.06.98	2440	77.67	1502	27.03	70.75	
06.07.98	190	6.05	1505	1.05	2.76	
13.07.98	980	31.19	1515	3.51	9.19	
20.07.98	1290	41.06	1545	10.53	27.57	
28.07.98	690	21.96	1564	6.67	17.46	
10.08.98	540	17.19	1605	14.39	37.67	
17.08.98	830	26.42	1614	3.16	8.27	
24.08.98	440	14.01	1627	4.56	11.95	
31.08.98	230	7.32	1628	0.35	0.92	
07.09.98	320	10.19	1630	0.70	1.84	
14.09.98	3240	103.13	1731	35.45	92.80	
21.09.98	220	7.00	1743	4.21	11.03	
12.10.98	2310	73.53	1808	22.82	59.73	
19.10.98	1320	42.02	1851	15.09	39.51	
26.10.98	3830	121.91	2006	54.41	142.42	
04.11.98	810	25.78	2036	10.53	27.57	
11.11.98	1800	57.30	2101	22.82	59.73	
18.11.98	0	0.00	2116	5.27	13.78	
23.11.98	850	27.06	2124	2.81	7.35	
29.11.98	400	12.73	2158	11.93	31.24	est.prec.
07.12.98	300	9.55	2169	3.86	10.11	est.prec.
18.12.98	375	11.94	2184	5.27	13.78	

RISDALHEIA Catchment m2: 382
"Cecilie"-catchment 1 tank ltr.: 351
Year: 1999

Sum mm: 828.88 711.19

Date	Precipit. ml	Precipit. mm	Tank nr.	R.off vol. m3	Runoff mm	Marks
06.01.99	3750	119.37	2351	58.62	153.45	
21.01.99	3150	100.27	2482	45.98	120.37	
30.01.99	670	21.33	2499	5.97	15.62	
08.02.99	460	14.64	2534	12.29	32.16	
14.02.99	20	0.64	2535	0.35	0.92	
26.02.99	1620	51.57	2542	2.46	6.43	
06.03.99	2530	80.53	2576	11.93	31.24	
12.03.99	440	14.01	2582	2.11	5.51	
22.03.99	1360	43.29	2618	12.64	33.08	
30.03.99	750	23.87	2716	34.40	90.05	
06.04.99	200	6.37	2819	36.15	94.64	
13.04.99	1050	33.42	2870	17.90	46.86	
19.04.99	940	29.92	2908	13.34	34.92	
26.04.99	330	10.50	2920	4.21	11.03	
06.05.99	0	0.00	2920	0.00	0.00	
12.05.99	1900	60.48	2975	19.31	50.54	est. runoff
20.05.99	180	5.73	2988	4.56	11.95	
25.05.99	330	10.50	2989	0.35	0.92	
07.06.99	980	31.19	3015	9.13	23.89	est. runoff
10.06.99	1910	60.80	3053	13.34	34.92	
22.06.99	2240	71.30	3108	19.31	50.54	
28.06.99	1980	63.03	3117	3.16	8.27	est. runoff
11.08.99	3000	95.49	3125	2.81	7.35	

4. INPUT - OUTPUT BUDGETS

Periods:		Start date:	Stop date:
summer	94	27.05.94	31.10.94
winter	95	01.11.94	06.06.95
summer	95	07.06.95	28.11.95
winter	96	29.11.95	02.06.96
summer	96	03.06.96	04.11.96
winter	97	05.11.96	28.04.97
summer	97	29.04.97	17.11.97
winter	98	18.11.97	24.05.98
summer	98	25.05.98	18.12.98
winter	99	19.12.98	25.05.99

4.1 Summer/winter - EGIL

EGIL summer 94 27 May 94 to 31 Oct 94 **File: S94.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		661				661	565			
H+		32	0	10	19	51	46	49	78	80
Na		31	-3	0	0	31	40	46	46	71
K		1	0	0	0	1	4	2	2	7
Ca		3	0	0	0	3	7	5	5	12
Mg		7	-1	0	0	7	11	11	11	20
Al		0	0	0	0	0	4	0	0	8
NH4		11	0	4	0	11	4	16	16	7
NO3		18	0	8	11	29	16	27	43	28
Cl		36	-3	0	0	36	33	55	55	58
SO4		34	0	6	8	42	50	52	64	88
A-		-3	0	0	0	-3	18	-4	-4	31
sum+		85	-4	14	19	104	116	129	158	205
sum-		85	-4	14	19	104	116	129	158	205
SBC		53	-4	4	0	53	66	80	80	117
SSA		88	-3	14	19	107	98	133	162	174
alk		-35	0	-10	-19	-54	-32	-53	-82	-57
TOC	mg/l						5.8			10.3
SiO2	mg/l						1.7			2.9
c.d.							3.1			3.1
RAL	µg/l						145			256
ILAL	µg/l						100			177
TOTN	µmol/l						33			58
org-N	µmol/l						13			23
C/N	g/g						32			

EGIL winter 95 01 Nov 94 to 06 June 95 **File: W95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		786				786	860			
H+		45	0	3	3	48	63	58	61	73
Na		64	31	0	31	94	94	81	120	109
K		2	1	0	1	3	4	3	4	5
Ca		5	1	0	1	6	12	6	8	14
Mg		15	7	0	7	22	19	19	28	22
Al		0	0	0	0	0	9	0	0	10
NH4		22	0	1	1	23	8	28	30	9
NO3		27	0	3	3	29	30	34	37	35
Cl		74	36	0	36	110	110	94	139	127
SO4		61	4	2	5	67	61	78	85	71
A-		-8	0	0	0	-8	8	-11	-10	9
sum+		154	40	4	44	198	209	195	251	242
sum-		154	40	4	44	198	209	195	251	242
SBC		108	40	1	41	149	137	138	190	159
SSA		162	39	4	44	206	201	206	262	233
alk		-54	0	-3	-3	-56	-64	-68	-72	-74
TOC	mg/l						4.77			5.5
SiO2	mg/l						0.91			1.1
c.d.							1.7			1.7
RAL	µg/l						163			189
ILAL	µg/l						75			87
TOTN	µmol/l						46			53
TOTP	µmol/l						4			5
org-N	µmol/l						8			9
C/N	g/g						44			

EGIL summer 95 07 June to 28. Nov 95 **File: S95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		806				806	702			
H+		32	0	9	9	41	43	40	51	61
Na		26	10	0	10	36	38	32	44	54
K		1	0	0	0	1	2	1	2	4
Ca		4	0	0	0	4	7	5	5	10
Mg		6	2	0	2	9	10	8	11	14
Al		0	0	0	0	0	3	0	0	4
NH4		13	0	4	4	17	4	16	20	5
NO3		20	0	7	7	28	19	25	34	27
Cl		29	11	0	11	41	41	36	50	58
SO4		36	1	5	6	42	34	45	52	49
A-		-4	0	0	0	-4	13	-5	-5	19
sum+		82	12	13	25	107	107	101	133	153
sum-		82	12	13	25	107	107	101	133	153
SBC		50	12	4	16	66	61	62	82	87
SSA		86	12	12	25	111	94	106	137	134
alk		-36	0	-9	-9	-45	-33	-45	-55	-47
TOC	mg/l						5.98			8.5
SiO2	mg/l						1.31			1.9
c.d.							2.2			2.2
RAL	µg/l						136			194
ILAL	µg/l						105			150
TOTN	µmol/l						35			50
TOTP	µmol/l						4			6
org-N	µmol/l						13			18
C/N	g/g						33			

EGIL winter 96 29 Nov 95 to 02 Jun 96 **File: W96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		312				312	311			
H+		18	0	3	3	21	26	57	67	82
Na		25	-1	0	-1	24	29	79	76	92
K		3	0	0	0	3	2	8	8	7
Ca		9	0	0	0	8	5	27	27	15
Mg		8	0	0	0	8	8	26	25	26
Al		0	0	0	0	0	3	0	0	8
NH4		27	0	1	1	29	4	87	91	14
NO3		23	0	3	3	26	15	74	82	49
Cl		28	-1	0	-1	27	27	89	86	86
SO4		34	0	2	2	36	28	109	115	91
A-		3	0	0	0	3	6	11	11	18
sum+		89	-1	4	3	92	76	284	294	245
sum-		89	-1	4	3	92	76	284	294	245
SBC		71	-1	1	0	71	48	227	227	154
SSA		85	-1	4	3	88	70	273	283	226
alk		0	0	-3	-3	-17	-23	0	-56	-72
TOC	mg/l						2			7.5
SiO2	mg/l						0			1.6
c.d.							2.5			2.5
RAL	µg/l						68			220
ILAL	µg/l						42			136
TOTN	µmol/l						25			80
TOTP	µmol/l						2			7
org-N	µmol/l						6			18
C/N	g/g						30			

EGIL summer 96 03 June to 04. Nov 96 **File: S96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		493				493	446			
H+		17	0	9	9	26	32	34	52	71
Na		22	4	0	4	26	25	44	53	57
K		1	0	0	0	1	1	2	2	3
Ca		3	0	0	0	3	6	6	6	13
Mg		6	1	0	1	7	8	11	13	18
Al		0	0	0	0	0	3	0	0	6
NH4		10	0	4	4	14	5	20	28	10
NO3		15	0	7	7	22	13	30	44	28
Cl		26	5	0	5	31	31	53	63	70
SO4		20	0	5	5	25	31	40	51	69
A-		-3	0	1	1	-2	5	-6	-4	11
sum+		58	5	13	18	76	80	117	154	178
sum-		58	5	13	18	76	80	117	154	178
SBC		41	5	4	9	50	45	83	102	101
SSA		61	5	12	17	78	75	123	158	167
alk		-20	0	-8	-8	-28	-29	-40	-56	-66
TOC	mg/l						3.85			8.6
SiO2	mg/l						0.72			1.6
c.d.							1.3			1.3
RAL	µg/l						92			206
ILAL	µg/l						67			150
TOTN	µmol/l						29			64
TOTP	µmol/l						4			8
org-N	µmol/l						12			26
C/N	g/g						24			

EGIL winter 97 05 Nov 96 to 28 Apr 97 **File: W97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		417				417	399			
H+		12	0	3	3	15	29	28	35	73
Na		40	10	0	10	50	45	96	119	113
K		1	0	0	0	1	2	3	3	6
Ca		3	0	0	0	3	6	6	7	14
Mg		10	2	0	2	12	10	23	28	24
Al		0	0	0	0	0	3	0	0	9
NH4		8	0	1	1	9	5	19	22	13
NO3		11	0	3	3	14	17	27	33	43
Cl		49	11	0	11	60	60	117	145	151
SO4		17	1	2	3	20	24	41	48	61
A-		-4	0	0	0	-4	-2	-10	-10	-4
sum+		73	13	4	17	90	100	174	215	251
sum-		73	13	4	17	90	100	174	215	251
SBC		61	13	1	14	75	68	147	180	170
SSA		77	13	4	17	94	102	185	225	256
alk		0	0	-3	-3	-19	-34	0	-45	-86
TOC	mg/l						2			6.1
SiO2	mg/l						1			2.0
c.d.							-0.7			-0.7
RAL	µg/l						91			228
ILAL	µg/l						57			143
TOTN	µmol/l						39			98
TOTP	µmol/l						2			5
org-N	µmol/l						17			42
C/N	g/g						10			

EGIL summer 97 29 Apr to 17. Nov 97 **File: S97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		354				354	256			
H+		8	0	9	9	17	28	24	49	108
Na		13	17	0	17	29	32	36	83	126
K		1	0	0	0	1	6	2	3	25
Ca		4	1	0	1	4	5	10	12	21
Mg		4	4	0	4	7	10	10	21	40
Al		0	0	0	0	0	8	0	0	31
NH4		10	0	4	4	14	12	28	39	46
NO3		14	0	7	7	21	38	40	60	148
Cl		13	20	0	20	33	33	38	94	129
SO4		13	2	5	7	20	34	37	57	135
A-		-2	0	1	1	-1	-4	-6	-3	-16
sum+		39	22	13	35	74	101	110	208	396
sum-		39	22	13	35	74	101	110	208	396
SBC		30	22	4	26	56	66	86	159	257
SSA		41	22	12	34	75	105	116	211	412
alk		-10	0	-8	-8	-18	-40	-30	-52	-155
TOC	mg/l						2.56			10.0
SiO2	mg/l						0.91			3.6
c.d.							-1.61			-1.6
RAL	µg/l						132			517
ILAL	µg/l						52			205
TOTN	µmol/l						57			222
TOTP	µmol/l						2			9
org-N	µmol/l						7			29
C/N	g/g						25			

EGIL winter 98 18 Nov 97 to 24 May 98 **File: W98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		396				396	370			
H+		15	0	3	3	18	30	37	45	81
Na		14	22	0	22	36	41	36	92	111
K		1	0	0	0	1	7	2	3	20
Ca		4	1	0	1	4	7	9	11	18
Mg		2	5	0	5	7	13	4	17	35
Al		0	0	0	0	0	10	0	0	26
NH4		21	0	1	1	22	5	52	55	13
NO3		20	0	3	3	22	44	49	56	118
Cl		20	26	0	26	46	46	49	115	123
SO4		26	3	2	4	31	32	67	78	85
A-		-10	0	0	0	-10	-8	-26	-25	-22
sum+		55	29	4	33	88	113	140	223	304
sum-		55	29	4	33	88	113	140	223	304
SBC		41	29	1	30	71	73	103	179	197
SSA		66	29	4	33	98	121	166	249	326
alk		0	0	-3	-3	-28	-48	0	-70	-129
TOC	mg/l						2			5.6
SiO2	mg/l						1			1.8
c.d.							-3.8			-3.8
RAL	µg/l						159			429
ILAL	µg/l						61			165
TOTN	µmol/l						54			147
TOTP	µmol/l						1			4
org-N	µmol/l						6			16
C/N	g/g						25			

4.2 Summer/winter – KIM T

KIM summer 94 27 May 94 to 31 Oct 94 **File: S94.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		627				627	394			
H+		0	0	0	0	0	24	0	0	61
Na		38	0	0	0	38	28	60	60	71
K		1	0	0	0	1	1	1	1	2
Ca		2	0	0	0	2	3	3	3	7
Mg		9	0	0	0	9	5	14	14	13
Al		0	0	0	0	0	1	0	0	2
NH4		0	0	0	0	0	1	0	0	2
NO3		0	0	0	0	0	1	0	0	3
Cl		44	0	0	0	44	31	70	70	78
SO4		5	0	0	0	5	6	7	7	14
A-		0	0	0	0	0	25	0	0	63
sum+		49	0	0	0	49	62	77	77	158
sum-		49	0	0	0	49	62	77	77	158
SBC		49	0	0	0	49	38	77	77	95
SSA		48	0	0	0	48	38	77	77	95
alk		0	0	0	0	0	0	0	0	0
TOC	mg/l						6.6			16.6
SiO2	mg/l						0.8			2.0
c.d.							3.8			3.8
RAL	µg/l						101			256
ILAL	µg/l						92			233
TOTN	µmol/l						15			38
org-N	µmol/l						13			33
C/N	g/g						36			

KIM T winter 95 01 Nov 94 to 06 June 95 **File: W95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		764				764	764			
H+		0	0	0	0	0	34	0	0	44
Na		48	0	0	0	48	50	63	63	66
K		1	0	0	0	1	2	1	1	2
Ca		2	0	0	0	2	4	3	3	6
Mg		11	0	0	0	11	8	14	14	11
Al		0	0	0	0	0	1	0	0	2
NH4		0	0	0	0	0	2	0	0	3
NO3		0	0	0	0	0	3	0	0	3
Cl		56	0	0	0	56	59	73	73	77
SO4		6	0	0	0	6	10	8	8	12
A-		0	0	0	0	0	31	1	1	41
sum+		62	0	0	0	62	102	81	81	134
sum-		62	0	0	0	62	102	81	81	134
SBC		62	0	0	0	62	67	81	81	87
SSA		62	0	0	0	62	71	81	81	93
alk		0	0	0	0	0	-4	1	1	-5
TOC	mg/l						8.40			11.0
SiO2	mg/l						1.06			1.4
c.d.							3.7			3.7
RAL	µg/l						147			193
ILAL	µg/l						133			174
TOTN	µmol/l						21			28
TOTP	µmol/l						6			8
org-N	µmol/l						17			22
C/N	g/g						36			

KIM T summer 95 07 June to 28. Nov 95 **File: S95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		634				634	471			
H+		0	0	0	0	0	24	0	0	50
Na		30	0	0	0	31	31	48	49	66
K		1	0	0	0	1	2	1	1	4
Ca		1	0	0	0	1	4	2	2	8
Mg		7	0	0	0	7	6	11	11	14
Al		0	0	0	0	0	1	0	0	2
NH4		0	0	0	0	0	2	0	0	3
NO3		0	0	0	0	0	3	0	0	7
Cl		35	0	0	0	35	31	55	55	67
SO4		4	0	0	0	4	8	6	6	16
A-		0	0	0	0	1	27	0	2	57
sum+		39	0	0	0	40	69	62	63	146
sum-		39	0	0	0	40	69	62	63	146
SBC		39	0	0	0	40	44	62	63	94
SSA		39	0	0	0	39	42	61	61	90
alk		0	0	0	0	1	2	0	2	4
TOC	mg/l						7.45			15.8
SiO2	mg/l						1.01			2.1
c.d.							3.6			3.6
RAL	µg/l						108			230
ILAL	µg/l						97			206
TOTN	µmol/l						18			38
TOTP	µmol/l						5			10
org-N	µmol/l						13			27
C/N	g/g						41			

KIM T winter 96 29 Nov 95 to 02 Jun 96 **File: W96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		320				320	259			
H+		0	0	0	0	0	21	0	0	83
Na		27	0	0	0	27	27	83	83	103
K		1	0	0	0	1	2	2	2	7
Ca		1	0	0	0	1	3	4	4	11
Mg		6	0	0	0	6	6	19	19	24
Al		0	0	0	0	0	1	0	0	4
NH4		0	0	0	0	0	3	0	0	12
NO3		0	0	0	0	0	5	0	0	21
Cl		31	0	0	0	31	33	97	97	126
SO4		3	0	0	0	3	7	10	10	27
A-		0	0	0	0	0	18	1	1	71
sum+		35	0	0	0	35	63	108	108	244
sum-		35	0	0	0	35	63	108	108	244
SBC		35	0	0	0	35	41	108	108	157
SSA		34	0	0	0	34	45	107	107	174
alk		0	0	0	0	0	-4	0	1	-16
TOC	mg/l						5			18.7
SiO2	mg/l						1			3.2
c.d.							3.8			3.8
RAL	µg/l						67			258
ILAL	µg/l						56			217
TOTN	µmol/l						18			70
TOTP	µmol/l						4			17
org-N	µmol/l						9			37
C/N	g/g						37			

KIM T summer 96 03 June to 04. Nov 96 **File: S96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		397				397	287			
H+		0	0	0	0	0	16	0	0	55
Na		21	0	0	0	31	20	53	79	71
K		0	0	0	0	0	1	1	1	2
Ca		1	0	0	0	1	2	2	2	9
Mg		5	0	0	0	5	5	12	12	16
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	1	0	0	2
NO3		0	0	0	0	0	1	0	0	5
Cl		24	0	0	0	24	20	61	61	71
SO4		3	0	0	0	3	7	6	6	26
A-		0	0	0	0	11	16	0	27	57
sum+		27	0	0	0	37	45	68	94	158
sum-		27	0	0	0	37	45	68	94	158
SBC		27	0	0	0	37	29	68	94	100
SSA		27	0	0	0	27	29	68	68	101
alk		0	0	0	0	11	0	0	27	-2
TOC	mg/l						4.63			16.1
SiO2	mg/l						0.92			3.2
c.d.							3.5			3.5
RAL	µg/l						71			248
ILAL	µg/l						63			221
TOTN	µmol/l						10			34
TOTP	µmol/l						3			10
org-N	µmol/l						8			27
C/N	g/g						42			

KIM T winter 97 05 Nov 96 to 28 Apr 97 **File: W97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		451				451	406			
H+		0	0	0	0	0	19	0	0	47
Na		28	0	0	0	28	24	63	63	59
K		1	0	0	0	1	2	1	1	5
Ca		1	0	0	0	1	3	3	3	6
Mg		6	0	0	0	6	5	14	14	13
Al		0	0	0	0	0	0	0	0	1
NH4		0	0	0	0	0	2	0	0	4
NO3		0	0	0	0	0	4	0	0	9
Cl		33	0	0	0	33	26	73	73	64
SO4		3	0	0	0	3	6	8	8	16
A-		0	0	0	0	0	19	1	1	46
sum+		37	0	0	0	37	55	81	81	135
sum-		37	0	0	0	37	55	81	81	135
SBC		37	0	0	0	37	36	81	81	88
SSA		36	0	0	0	36	36	81	81	89
alk		0	0	0	0	0	-1	0	1	-2
TOC	mg/l						6			15.2
SiO2	mg/l						1			2.0
c.d.							3.0			3.0
RAL	µg/l						78			191
ILAL	µg/l						74			183
TOTN	µmol/l						16			39
TOTP	µmol/l						4			11
org-N	µmol/l						10			25
C/N	g/g						43			

KIM T summer 97 29 Apr to 17. Nov 97 **File: S97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		390				390	205			
H+		0	0	0	0	0	13	0	0	65
Na		27	0	0	0	31	19	70	80	92
K		1	0	0	0	1	1	2	2	4
Ca		1	0	0	0	1	2	3	3	11
Mg		6	0	0	0	6	5	16	16	23
Al		0	0	0	0	0	1	0	0	5
NH4		0	0	0	0	0	1	0	0	4
NO3		0	0	0	0	0	3	0	0	13
Cl		32	0	0	0	32	25	82	82	120
SO4		3	0	0	0	3	8	8	8	37
A-		0	0	0	0	4	7	1	11	35
sum+		35	0	0	0	39	42	91	101	204
sum-		35	0	0	0	39	42	91	101	204
SBC		35	0	0	0	39	27	91	101	134
SSA		35	0	0	0	35	35	90	90	169
alk		0	0	0	0	4	-7	1	11	-35
TOC	mg/l						2.94			14.3
SiO2	mg/l						0.83			4.1
c.d.							2.42			2.4
RAL	µg/l						50			246
ILAL	µg/l						40			197
TOTN	µmol/l						9			45
TOTP	µmol/l						2			12
org-N	µmol/l						6			28
C/N	g/g						36			

KIM T winter 98 18 Nov 97 to 24 May 98 **File: W98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		468				468	339			
H+		0	0	0	0	0	16	0	0	46
Na		30	0	0	0	30	24	64	64	72
K		1	0	0	0	1	2	1	1	5
Ca		1	0	0	0	1	3	3	3	8
Mg		7	0	0	0	7	5	15	15	14
Al		0	0	0	0	0	0	0	0	1
NH4		0	0	0	0	0	2	0	0	7
NO3		0	0	0	0	0	3	0	0	9
Cl		35	0	0	0	35	23	75	75	69
SO4		4	0	0	0	4	6	8	8	18
A-		0	0	0	0	0	19	1	1	56
sum+		39	0	0	0	39	52	83	83	152
sum-		39	0	0	0	39	52	83	83	152
SBC		39	0	0	0	39	36	83	83	105
SSA		39	0	0	0	39	33	82	82	96
alk		0	0	0	0	0	3	0	1	9
TOC	mg/l						6			17.6
SiO2	mg/l						1			2.4
c.d.							3.2			3.2
RAL	µg/l						77			228
ILAL	µg/l						73			216
TOTN	µmol/l						15			43
TOTP	µmol/l						3			9
org-N	µmol/l						9			27
C/N	g/g						46			

KIM T summer 98 25 May to 18. Dec 98 **File: S98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		620				620	430			
H+		0	0	0	0	0	20	0	0	47
Na		33	0	0	0	31	30	53	51	70
K		1	0	0	0	1	2	1	1	4
Ca		1	0	0	0	1	4	2	2	10
Mg		8	0	0	0	8	7	12	12	16
Al		0	0	0	0	0	1	0	0	2
NH4		0	0	0	0	0	2	0	0	5
NO3		0	0	0	0	0	5	0	0	13
Cl		39	0	0	0	39	29	62	62	68
SO4		4	0	0	0	4	9	6	6	22
A-		0	0	0	0	-2	22	0	-2	50
sum+		43	0	0	0	41	65	69	66	152
sum-		43	0	0	0	41	65	69	66	152
SBC		43	0	0	0	41	45	69	66	104
SSA		43	0	0	0	43	44	69	69	102
alk		0	0	0	0	-2	1	0	-2	2
TOC	mg/l						7			16.2
SiO2	mg/l						1			2.4
c.d.							3.1			3.1
RAL	µg/l						99			231
ILAL	µg/l						92			213
TOTN	µmol/l						19			45
TOTP	µmol/l						5			12
org-N	µmol/l						12			28
C/N	g/g						41			

KIM T winter 99 19 Dec 98 to 25 May 99 **File: W99.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		399				399	344			
H+		0	0	0	0	0	20	0	0	58
Na		28	0	0	0	28	32	69	69	92
K		1	0	0	0	1	2	2	2	6
Ca		1	0	0	0	1	4	3	3	12
Mg		6	0	0	0	6	7	16	16	20
Al		0	0	0	0	0	1	0	0	2
NH4		0	0	0	0	0	2	0	0	5
NO3		0	0	0	0	0	4	0	0	11
Cl		32	0	0	0	32	38	81	81	111
SO4		3	0	0	0	3	9	8	8	26
A-		0	0	0	0	0	17	1	1	48
sum+		36	0	0	0	36	67	90	90	196
sum-		36	0	0	0	36	67	90	90	196
SBC		36	0	0	0	36	47	90	90	136
SSA		36	0	0	0	36	51	89	89	147
alk		0	0	0	0	0	-4	0	1	-12
TOC	mg/l						5			15.5
SiO2	mg/l						1			2.3
c.d.							3.1			3.1
RAL	µg/l						85			248
ILAL	µg/l						78			226
TOTN	µmol/l						17			48
TOTP	µmol/l						6			17
org-N	µmol/l						11			32
C/N	g/g						34			

4.3 Summer/winter – KIM C

KIMC summer 94 27 May 94 to 31 Oct 94 **File: S94.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		627				627	394			
H+		0	0	0	0	0	21	0	0	53
Na		38	0	0	0	38	25	60	60	63
K		1	0	0	0	1	1	1	1	1
Ca		2	0	0	0	2	3	3	3	8
Mg		9	0	0	0	9	4	14	14	11
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	0	0	0	1
NO3		0	0	0	0	0	0	0	0	0
Cl		44	0	0	0	44	29	70	70	73
SO4		5	0	0	0	5	4	7	7	10
A-		0	0	0	0	0	22	0	0	57
sum+		49	0	0	0	49	55	77	77	140
sum-		49	0	0	0	49	55	77	77	140
SBC		49	0	0	0	49	33	77	77	85
SSA		48	0	0	0	48	33	77	77	83
alk		0	0	0	0	0	1	0	0	2
TOC	mg/l						5.2			13.1
SiO2	mg/l						0.5			1.2
c.d.							4.3			4.3
RAL	µg/l						88			223
ILAL	µg/l						77			195
TOTN	µmol/l						10			26
org-N	µmol/l						10			25
C/N	g/g						38			

KIM C winter 95 01 Nov 94 to 06 June 95 **File: W95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		764				764	764			
H+		0	0	0	0	0	29	0	0	38
Na		48	0	0	0	48	52	63	63	69
K		1	0	0	0	1	2	1	1	2
Ca		2	0	0	0	2	4	3	3	5
Mg		11	0	0	0	11	9	14	14	12
Al		0	0	0	0	0	3	0	0	3
NH4		0	0	0	0	0	0	0	0	1
NO3		0	0	0	0	0	0	0	0	0
Cl		56	0	0	0	56	64	73	73	83
SO4		6	0	0	0	6	15	8	8	20
A-		0	0	0	0	0	20	1	1	26
sum+		62	0	0	0	62	99	81	81	130
sum-		62	0	0	0	62	99	81	81	130
SBC		62	0	0	0	62	68	81	81	89
SSA		62	0	0	0	62	79	81	81	104
alk		0	0	0	0	0	-11	1	1	-15
TOC	mg/l						5.96			7.8
SiO2	mg/l						0.81			1.1
c.d.							3.4			3.4
RAL	µg/l						129			169
ILAL	µg/l						102.4			134
TOTN	µmol/l						14.35			19
TOTP	µmol/l						5.653			7
org-N	µmol/l						14			18
C/N	g/g						31			

KIM C summer 95 07 June to 28. Nov 95 **File: S95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		634				634	471			
H+		0	0	0	0	0	19	0	0	40
Na		30	0	0	0	31	29	48	49	62
K		1	0	0	0	1	1	1	1	3
Ca		1	0	0	0	1	2	2	2	5
Mg		7	0	0	0	7	5	11	11	11
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	1	0	0	2
NO3		0	0	0	0	0	0	0	0	0
Cl		35	0	0	0	35	29	55	55	62
SO4		4	0	0	0	4	7	6	6	14
A-		0	0	0	0	1	23	0	2	50
sum+		39	0	0	0	40	59	62	63	126
sum-		39	0	0	0	40	59	62	63	126
SBC		39	0	0	0	40	39	62	63	83
SSA		39	0	0	0	39	36	61	61	76
alk		0	0	0	0	1	3	0	2	7
TOC	mg/l						6.50			13.8
SiO2	mg/l						0.76			1.6
c.d.							3.6			3.6
RAL	µg/l						104			220
ILAL	µg/l						90			190
TOTN	µmol/l						14			30
TOTP	µmol/l						8			16
org-N	µmol/l						13			27
C/N	g/g						36			

KIM C winter 96 29 Nov 95 to 02 Jun 96 **File: W96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		320				320	259			
H+		0	0	0	0	0	14	0	0	53
Na		27	0	0	0	27	23	83	83	89
K		1	0	0	0	1	1	2	2	4
Ca		1	0	0	0	1	2	4	4	7
Mg		6	0	0	0	6	5	19	19	19
Al		0	0	0	0	0	1	0	0	4
NH4		0	0	0	0	0	0	0	0	1
NO3		0	0	0	0	0	1	0	0	3
Cl		31	0	0	0	31	28	97	97	107
SO4		3	0	0	0	3	8	10	10	31
A-		0	0	0	0	0	9	1	1	36
sum+		35	0	0	0	35	46	108	108	177
sum-		35	0	0	0	35	46	108	108	177
SBC		35	0	0	0	35	31	108	108	120
SSA		34	0	0	0	34	37	107	107	141
alk		0	0	0	0	0	-5	0	1	-21
TOC	mg/l						3			9.9
SiO2	mg/l						0			1.9
c.d.							3.6			3.6
RAL	µg/l						51			195
ILAL	µg/l						41			159
TOTN	µmol/l						6			25
TOTP	µmol/l						3			11
org-N	µmol/l						5			20
C/N	g/g						35			

KIM C summer 96 03 June to 02. Dec 96 **File: S96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		397				397	287			
H+		0	0	0	0	0	14	0	0	49
Na		21	0	0	0	31	18	53	79	63
K		0	0	0	0	0	0	1	1	1
Ca		1	0	0	0	1	1	2	2	5
Mg		5	0	0	0	5	3	12	12	12
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	0	0	0	1
NO3		0	0	0	0	0	0	0	0	1
Cl		24	0	0	0	24	19	61	61	65
SO4		3	0	0	0	3	5	6	6	17
A-		0	0	0	0	11	15	0	27	52
sum+		27	0	0	0	37	38	68	94	134
sum-		27	0	0	0	37	38	68	94	134
SBC		27	0	0	0	37	23	68	94	82
SSA		27	0	0	0	27	24	68	68	82
alk		0	0	0	0	11	0	0	27	-1
TOC	mg/l						4.46			15.5
SiO2	mg/l						0.80			2.8
c.d.							3.3			3.3
RAL	µg/l						77			270
ILAL	µg/l						68			237
TOTN	µmol/l						8			29
TOTP	µmol/l						3			11
org-N	µmol/l						8			27
C/N	g/g						41			

KIM C winter 97 05 Nov 96 to 28 Apr 97 **File: W97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		451				451	406			
H+		0	0	0	0	0	14	0	0	33
Na		28	0	0	0	28	23	63	63	56
K		1	0	0	0	1	1	1	1	3
Ca		1	0	0	0	1	2	3	3	5
Mg		6	0	0	0	6	5	14	14	12
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	0	0	0	1
NO3		0	0	0	0	0	0	0	0	1
Cl		33	0	0	0	33	28	73	73	68
SO4		3	0	0	0	3	7	8	8	16
A-		0	0	0	0	0	11	1	1	26
sum+		37	0	0	0	37	46	81	81	112
sum-		37	0	0	0	37	46	81	81	112
SBC		37	0	0	0	37	31	81	81	76
SSA		36	0	0	0	36	35	81	81	86
alk		0	0	0	0	0	-4	0	1	-10
TOC	mg/l						4			9.0
SiO2	mg/l						0			1.1
c.d.							2.9			2.9
RAL	µg/l						64			158
ILAL	µg/l						53			130
TOTN	µmol/l						8			20
TOTP	µmol/l						4			9
org-N	µmol/l						7			18
C/N	g/g						36			

KIM C summer 97 29 Apr to 17. Nov 97 **File: S97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		390				390	205			
H+		0	0	0	0	0	10	0	0	50
Na		27	0	0	0	31	18	70	80	89
K		1	0	0	0	1	1	2	2	3
Ca		1	0	0	0	1	1	3	3	7
Mg		6	0	0	0	6	4	16	16	18
Al		0	0	0	0	0	1	0	0	6
NH4		0	0	0	0	0	0	0	0	2
NO3		0	0	0	0	0	0	0	0	0
Cl		32	0	0	0	32	22	82	82	107
SO4		3	0	0	0	3	5	8	8	25
A-		0	0	0	0	4	9	1	11	43
sum+		35	0	0	0	39	36	91	101	176
sum-		35	0	0	0	39	36	91	101	176
SBC		35	0	0	0	39	25	91	101	120
SSA		35	0	0	0	35	27	90	90	133
alk		0	0	0	0	4	-3	1	11	-13
TOC	mg/l						3.29			16.1
SiO2	mg/l						0.58			2.8
c.d.							2.69			2.7
RAL	µg/l						52			255
ILAL	µg/l						41			200
TOTN	µmol/l						8			38
TOTP	µmol/l						4			20
org-N	µmol/l						7			36
C/N	g/g						32			

KIM C winter 98 18 Nov 97 to 24 May 98 **File: W98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		468				468	339			
H+		0	0	0	0	0	11	0	0	34
Na		30	0	0	0	30	23	64	64	68
K		1	0	0	0	1	1	1	1	3
Ca		1	0	0	0	1	2	3	3	5
Mg		7	0	0	0	7	4	15	15	12
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	0	0	0	1
NO3		0	0	0	0	0	0	0	0	0
Cl		35	0	0	0	35	23	75	75	68
SO4		4	0	0	0	4	6	8	8	19
A-		0	0	0	0	0	13	1	1	38
sum+		39	0	0	0	39	42	83	83	125
sum-		39	0	0	0	39	42	83	83	125
SBC		39	0	0	0	39	30	83	83	88
SSA		39	0	0	0	39	30	82	82	87
alk		0	0	0	0	0	0	0	1	1
TOC	mg/l						4			12.6
SiO2	mg/l						1			1.6
c.d.							3.0			3.0
RAL	µg/l						74			218
ILAL	µg/l						64			189
TOTN	µmol/l						7			22
TOTP	µmol/l						2			7
org-N	µmol/l						7			21
C/N	g/g						44			

KIM C summer 98 25 May to 18. Dec 98 **File: S98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		620				620	430			
H+		0	0	0	0	0	16	0	0	37
Na		33	0	0	0	31	26	53	51	61
K		1	0	0	0	1	0	1	1	1
Ca		1	0	0	0	1	3	2	2	6
Mg		8	0	0	0	8	5	12	12	12
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	0	0	0	1
NO3		0	0	0	0	0	0	0	0	0
Cl		39	0	0	0	39	27	62	62	62
SO4		4	0	0	0	4	6	6	6	14
A-		0	0	0	0	-2	19	0	-2	45
sum+		43	0	0	0	41	52	69	66	121
sum-		43	0	0	0	41	52	69	66	121
SBC		43	0	0	0	41	35	69	66	81
SSA		43	0	0	0	43	33	69	69	76
alk		0	0	0	0	-2	2	0	-2	5
TOC	mg/l						6			14.9
SiO2	mg/l						1			2.0
c.d.							3.0			3.0
RAL	µg/l						107			250
ILAL	µg/l						96			223
TOTN	µmol/l						13			30
TOTP	µmol/l						5			11
org-N	µmol/l						12			29
C/N	g/g						37			

4.4 Summer/winter – ROLF

ROLF summer 94 27 May 94 to 31 Oct 94 **File: S94.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		608				608	358			
H+		20	0	10	10	30	33	33	49	93
Na		20	1	0	1	21	31	32	34	86
K		1	0	0	0	1	1	2	2	3
Ca		3	0	0	0	3	5	5	5	13
Mg		5	0	0	0	5	9	8	8	24
Al		0	0	0	0	0	2	0	0	6
NH4		12	0	4	4	16	2	19	26	5
NO3		16	0	8	8	23	5	26	39	14
Cl		24	2	0	2	26	26	40	42	72
SO4		25	0	6	6	31	23	40	50	65
A-		-4	0	0	0	-4	29	-7	-7	80
sum+		60	2	14	15	75	83	99	124	232
sum-		60	2	14	15	75	83	99	124	232
SBC		40	2	4	6	46	47	66	75	133
SSA		65	2	14	15	80	54	106	131	151
alk		-25	0	-10	-10	-34	-7	-40	-56	-19
TOC	mg/l						7.5			20.9
SiO2	mg/l						1.0			2.8
c.d.							3.9			3.9
RAL	µg/l						116			323
ILAL	µg/l						95			266
TOTN	µmol/l						20			56
org-N	µmol/l						13			36
C/N	g/g						41			

ROLF winter 95 01 Nov 94 to 06 Jun 95 **File: W95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		869				869	905			
H+		28	0	3	3	31	61	32	36	67
Na		71	42	0	42	113	104	82	130	115
K		2	1	0	1	3	4	2	3	5
Ca		6	2	0	2	8	11	7	9	12
Mg		16	10	0	10	26	21	18	29	24
Al		0	0	0	0	0	5	0	0	5
NH4		28	0	1	1	30	12	33	34	13
NO3		32	0	3	3	35	24	37	40	26
Cl		80	49	0	49	129	129	92	148	142
SO4		42	5	2	7	49	47	48	56	52
A-		-3	0	0	0	-3	18	-3	-3	20
sum+		151	54	4	58	209	217	174	241	240
sum-		151	54	4	58	209	217	174	241	240
SBC		123	54	1	55	178	152	142	205	167
SSA		154	54	4	58	212	200	177	244	220
alk		-31	0	-3	-3	-34	-48	-36	-39	-53
TOC	mg/l						6.74			7.4
SiO2	mg/l						0.71			0.8
c.d.							2.6			2.6
RAL	µg/l						146			161
ILAL	µg/l						99			110
TOTN	µmol/l						47			52
TOTP	µmol/l						4			4
org-N	µmol/l						12			13
C/N	g/g						40			

ROLF summer 95 07 June to 28. Nov 95 **File: S95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		666				666	444			
H+		19	0	9	9	28	31	29	42	70
Na		19	11	0	11	30	38	29	46	86
K		1	0	0	0	1	3	1	2	6
Ca		4	0	0	0	4	5	5	6	11
Mg		5	3	0	3	7	9	7	11	20
Al		0	0	0	0	0	2	0	0	5
NH4		13	0	4	4	17	4	19	25	8
NO3		19	0	7	7	27	5	29	40	11
Cl		21	13	0	13	34	34	32	51	77
SO4		25	1	5	6	31	27	37	47	62
A-		-4	0	0	0	-4	26	-6	-6	58
sum+		61	14	13	27	88	92	91	132	207
sum-		61	14	13	27	88	92	91	132	207
SBC		42	14	4	18	60	59	62	90	132
SSA		65	14	12	27	92	66	98	138	149
alk		-23	0	-9	-9	-32	-8	-35	-48	-17
TOC	mg/l						7.26			16.3
SiO2	mg/l						0.96			2.2
c.d.							3.5			3.5
RAL	µg/l						113			254
ILAL	µg/l						89			201
TOTN	µmol/l						22			50
TOTP	µmol/l						4			9
org-N	µmol/l						14			31
C/N	g/g						38			

ROLF winter 96 29 Nov 95 to 02 Jun 96 **File: W96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		311				311	413			
H+		17	0	3	3	20	30	54	64	73
Na		21	10	0	10	31	41	69	100	100
K		1	0	0	0	1	4	4	5	10
Ca		5	0	0	0	5	5	15	16	12
Mg		6	2	0	2	8	11	20	27	26
Al		0	0	0	0	0	3	0	0	7
NH4		19	0	1	1	20	6	61	65	16
NO3		19	0	3	3	22	21	63	71	51
Cl		26	11	0	11	37	37	82	119	89
SO4		28	1	2	3	31	32	90	100	77
A-		-4	0	0	0	-4	11	-13	-13	27
sum+		69	12	4	17	86	101	222	276	244
sum-		69	12	4	17	86	101	222	276	244
SBC		52	12	1	14	66	68	168	212	164
SSA		73	12	4	17	90	90	235	289	217
alk		-21	0	-3	-3	-24	-22	-67	-77	-53
TOC	mg/l						4			8.5
SiO2	mg/l						1			1.2
c.d.							3.1			3.1
RAL	µg/l						79			191
ILAL	µg/l						50			121
TOTN	µmol/l						36			86
TOTP	µmol/l						2			5
org-N	µmol/l						8			19
C/N	g/g						31			

ROLF summer 96 03 June to 04. Nov 96 **File: S96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		566				566	354			
H+		17	0	9	9	26	26	30	46	73
Na		18	2	0	2	20	23	32	36	66
K		1	0	0	0	1	1	2	2	2
Ca		4	0	0	0	4	4	7	7	12
Mg		5	1	0	1	6	7	9	10	21
Al		0	0	0	0	0	2	0	0	4
NH4		12	0	4	4	16	2	22	29	6
NO3		16	0	7	7	23	3	29	41	9
Cl		22	3	0	3	25	25	39	44	70
SO4		23	0	5	5	28	20	40	49	58
A-		-4	0	1	1	-3	17	-7	-5	47
sum+		57	3	13	16	73	65	101	130	184
sum-		57	3	13	16	73	65	101	130	184
SBC		40	3	4	7	48	38	72	84	106
SSA		61	3	12	15	76	48	108	135	137
alk		-21	0	-8	-8	-29	-11	-36	-51	-31
TOC	mg/l						5.77			16.3
SiO2	mg/l						0.75			2.1
c.d.							2.9			2.9
RAL	µg/l						81			229
ILAL	µg/l						66			186
TOTN	µmol/l						15			43
TOTP	µmol/l						4			10
org-N	µmol/l						10			28
C/N	g/g						41			

ROLF winter 97 05 Nov 96 to 28 Apr 97 **File: W97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		441				441	535			
H+		10	0	3	3	13	40	22	29	75
Na		55	13	0	13	68	59	125	155	110
K		2	0	0	0	2	2	4	5	4
Ca		4	1	0	1	4	6	8	10	12
Mg		14	3	0	3	17	14	31	38	27
Al		0	0	0	0	0	3	0	0	5
NH4		10	0	1	1	11	4	23	26	7
NO3		14	0	3	3	16	11	31	36	21
Cl		69	16	0	16	84	84	156	192	158
SO4		19	2	2	3	22	24	43	51	45
A-		-8	0	0	0	-8	8	-17	-17	15
sum+		94	17	4	22	115	128	213	262	238
sum-		94	17	4	22	115	128	213	262	238
SBC		84	17	1	19	103	85	191	233	159
SSA		101	17	4	22	123	120	230	279	224
alk		-17	0	-3	-3	-20	-35	-39	-46	-65
TOC	mg/l						4			7.5
SiO2	mg/l						0			0.9
c.d.							1.9			1.9
RAL	µg/l						84			157
ILAL	µg/l						57			106
TOTN	µmol/l						22			41
TOTP	µmol/l						2			5
org-N	µmol/l						7			13
C/N	g/g						41			

ROLF summer 97 29 Apr to 17. Nov 97 **File: S97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		670				670	369			
H+		14	0	9	9	23	27	21	35	72
Na		14	16	0	16	30	40	20	44	108
K		1	0	0	0	1	2	2	2	4
Ca		5	1	0	1	6	5	8	9	13
Mg		5	4	0	4	8	9	7	13	23
Al		0	0	0	0	0	1	0	0	4
NH4		17	0	4	4	21	4	25	31	11
NO3		22	0	7	7	29	6	32	43	17
Cl		17	19	0	19	36	36	26	54	98
SO4		24	2	5	7	31	25	35	46	68
A-		-7	0	1	1	-6	19	-10	-8	53
sum+		56	21	13	34	90	87	84	134	236
sum-		56	21	13	34	90	87	84	134	236
SBC		42	21	4	25	67	59	62	99	159
SSA		63	21	12	33	95	67	94	142	183
alk		-21	0	-8	-8	-29	-9	-31	-43	-24
TOC	mg/l						7.13			19.4
SiO2	mg/l						1.10			3.0
c.d.							2.7			2.7
RAL	µg/l						99			269
ILAL	µg/l						84			229
TOTN	µmol/l						23			64
TOTP	µmol/l						4			12
org-N	µmol/l						13			36
C/N	g/g						38			

ROLF winter 98 18 Nov 97 to 24 May 98 **File: W98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		528				528	641			
H+		18	0	3	3	21	40	34	39	63
Na		28	32	0	32	60	60	52	113	94
K		1	1	0	1	2	3	3	4	4
Ca		4	1	0	1	6	7	8	11	11
Mg		2	7	0	7	9	15	3	17	23
Al		0	0	0	0	0	3	0	0	5
NH4		23	0	1	1	24	4	43	46	6
NO3		24	0	3	3	27	20	46	51	31
Cl		33	37	0	37	71	71	63	134	110
SO4		29	4	2	6	34	31	54	65	49
A-		-10	0	0	0	-10	9	-20	-19	15
sum+		76	41	4	46	122	131	144	231	205
sum-		76	41	4	46	122	131	144	231	205
SBC		58	41	1	43	101	88	110	191	138
SSA		86	41	4	46	132	122	164	250	190
alk		-28	0	-3	-3	-31	-34	-53	-59	-53
TOC	mg/l						5			7.2
SiO2	mg/l						1			1.0
c.d.							2.0			2.0
RAL	µg/l						109			170
ILAL	µg/l						79			123
TOTN	µmol/l						30			47
TOTP	µmol/l						2			4
org-N	µmol/l						7			10
C/N	g/g						49			

ROLF summer 98 25 May to 18. Dec 98 **File: S98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		904				904	568			
H+		23	0	9	9	32	36	25	35	63
Na		39	-6	0	-6	33	40	43	36	70
K		3	0	0	0	3	1	4	3	1
Ca		8	0	0	0	8	6	9	9	11
Mg		5	-1	0	-1	4	11	6	4	19
Al		0	0	0	0	0	1	0	0	2
NH4		19	0	4	4	23	2	21	25	4
NO3		25	0	7	7	32	4	28	36	7
Cl		48	-7	0	-7	41	41	53	46	73
SO4		34	-1	5	4	38	25	38	42	44
A-		-12	0	1	1	-11	27	-13	-12	47
sum+		96	-8	13	5	102	97	106	112	170
sum-		96	-8	13	5	102	97	106	112	170
SBC		74	-8	4	-4	70	60	81	77	105
SSA		108	-8	12	4	112	70	119	124	124
alk		-34	0	-8	-8	-42	-10	-38	-47	-18
TOC	mg/l						10			16.8
SiO2	mg/l						1			1.8
c.d.							2.8			2.8
RAL	µg/l						125			220
ILAL	µg/l						112			197
TOTN	µmol/l						25			44
TOTP	µmol/l						9			15
org-N	µmol/l						18			32
C/N	g/g						37			

ROLF winter 99 19 Dec 98 to 25 May 99 **File: W99.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		626				626	635			
H+		13	0	3	3	16	34	21	26	53
Na		40	15	0	15	55	57	64	89	90
K		3	0	0	0	3	1	4	5	2
Ca		6	1	0	1	7	7	9	10	11
Mg		1	4	0	4	5	12	2	7	18
Al		0	0	0	0	0	2	0	0	3
NH4		16	0	1	1	17	4	26	28	6
NO3		18	0	3	3	21	13	30	34	21
Cl		45	18	0	18	63	63	72	101	100
SO4		23	2	2	4	27	30	37	42	48
A-		-8	0	0	0	-8	10	-12	-12	15
sum+		79	20	4	24	103	116	126	165	183
sum-		79	20	4	24	103	116	126	165	183
SBC		65	20	1	21	87	80	105	139	127
SSA		87	20	4	24	111	107	138	177	168
alk		-21	0	-3	-3	-24	-26	-34	-39	-42
TOC	mg/l						4			6.8
SiO2	mg/l						0			0.7
c.d.							2.2			2.2
RAL	µg/l						92			145
ILAL	µg/l						70			111
TOTN	µmol/l						27			42
TOTP	µmol/l						4			6
org-N	µmol/l						10			16
C/N	g/g						31			

4.5 Summer/winter – METTE

METTE summer 94 27 May 94 to 31 Oct 94 **File: S94.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		608				608	377			
H+		20	0	10	10	30	32	33	49	85
Na		20	1	0	1	20	29	32	33	78
K		1	0	0	0	1	1	2	2	2
Ca		3	0	0	0	3	4	5	5	10
Mg		5	0	0	0	5	6	8	8	15
Al		0	0	0	0	0	3	0	0	7
NH4		12	0	4	4	16	1	19	26	4
NO3		16	0	8	8	23	4	26	39	10
Cl		24	1	0	1	25	25	40	41	66
SO4		25	0	6	6	31	23	40	50	61
A-		-4	0	0	0	-4	24	-7	-7	64
sum+		60	1	14	14	74	76	99	122	202
sum-		60	1	14	14	74	76	99	122	202
SBC		40	1	4	5	45	41	66	74	109
SSA		65	1	14	14	79	52	106	130	137
alk		-25	0	-10	-10	-34	-11	-40	-56	-28
TOC	mg/l						6.8			18.1
SiO2	mg/l						1.0			2.6
c.d.							3.6			3.6
RAL	µg/l						143			380
ILAL	µg/l						116			307
TOTN	µmol/l						17			45
org-N	µmol/l						12			31
C/N	g/g						42			

METTE winter 95 01 Nov 94 to 06 Jun 95 **File: W95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		872				872	616			
H+		28	0	3	3	31	41	32	36	66
Na		71	42	0	0	71	61	82	82	99
K		2	1	0	0	2	3	2	2	5
Ca		6	2	0	0	6	6	7	7	10
Mg		16	10	0	0	16	12	18	18	20
Al		0	0	0	0	0	6	0	0	10
NH4		28	0	1	1	30	5	33	34	7
NO3		32	0	3	3	35	16	37	40	26
Cl		80	49	0	0	80	72	92	92	118
SO4		42	5	2	0	42	34	48	48	55
A-		-3	0	0	0	-3	11	-3	-3	18
sum+		152	0	4	0	152	134	174	174	217
sum-		152	0	4	0	152	134	174	174	217
SBC		124	0	1	0	124	87	142	142	141
SSA		155	0	4	0	155	122	177	177	199
alk		-31	0	-3	0	-31	-36	-36	-36	-58
TOC	mg/l						4.31			7.0
SiO2	mg/l						0.56			0.9
c.d.							2.6			2.6
RAL	µg/l						157			255
ILAL	µg/l						96			156
TOTN	µmol/l						29			47
TOTP	µmol/l						3			4
org-N	µmol/l						8			14
C/N	g/g						36			

METTE summer 95 07 June to 28. Nov 95 **File: S95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		666				666	388			
H+		18	0	9	9	27	24	27	40	61
Na		17	4	0	4	21	27	26	32	70
K		1	0	0	0	1	2	1	1	6
Ca		3	0	0	0	4	4	5	5	9
Mg		4	1	0	1	5	6	7	8	14
Al		0	0	0	0	0	2	0	0	6
NH4		13	0	4	4	16	2	19	25	5
NO3		18	0	7	7	26	4	27	38	11
Cl		19	5	0	5	24	24	28	36	61
SO4		23	1	5	6	29	19	35	43	50
A-		-4	0	0	0	-4	19	-6	-5	50
sum+		56	5	13	18	74	67	84	112	172
sum-		56	5	13	18	74	67	84	112	172
SBC		38	5	4	9	48	41	58	72	105
SSA		60	5	12	18	78	47	90	117	122
alk		-22	0	-9	-9	-30	-7	-33	-45	-17
TOC	mg/l						5.66			14.6
SiO2	mg/l						0.87			2.3
c.d.							3.4			3.4
RAL	µg/l						122			314
ILAL	µg/l						99			255
TOTN	µmol/l						17			45
TOTP	µmol/l						3			8
org-N	µmol/l						11			29
C/N	g/g						36			

METTE winter 96 29 Nov 95 to 02 Jun 96 **File: W96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		311				311	281			
H+		17	0	3	3	20	21	54	64	74
Na		21	-4	0	-4	17	23	69	56	82
K		1	0	0	0	1	3	4	4	9
Ca		5	0	0	0	4	3	15	14	10
Mg		6	-1	0	-1	5	6	20	17	21
Al		0	0	0	0	0	2	0	0	8
NH4		19	0	1	1	20	5	61	65	17
NO3		19	0	3	3	22	11	63	71	39
Cl		26	-5	0	-5	21	21	83	67	74
SO4		28	0	2	1	29	21	90	94	76
A-		-4	0	0	0	-4	9	-13	-13	31
sum+		69	-5	4	-1	68	62	222	219	221
sum-		69	-5	4	-1	68	62	222	219	221
SBC		52	-5	1	-4	48	39	168	155	138
SSA		73	-5	4	-1	72	53	235	232	190
alk		-21	0	-3	-3	-24	-14	-67	-77	-51
TOC	mg/l						3			9.0
SiO2	mg/l						0			1.5
c.d.							3.5			3.5
RAL	µg/l						75			267
ILAL	µg/l						52			184
TOTN	µmol/l						20			72
TOTP	µmol/l						1			4
org-N	µmol/l						5			16
C/N	g/g						39			

METTE summer 96 03 June to 04. Nov 96 **File: S96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		557				557	329			
H+		17	0	9	9	26	23	30	46	69
Na		18	0	0	0	18	22	32	33	68
K		1	0	0	0	1	1	2	2	2
Ca		4	0	0	0	4	3	7	7	9
Mg		5	0	0	0	5	5	9	9	17
Al		0	0	0	0	0	2	0	0	6
NH4		12	0	4	4	16	1	22	30	3
NO3		16	0	7	7	23	1	29	42	4
Cl		22	0	0	0	22	22	40	40	68
SO4		23	0	5	5	28	19	40	49	59
A-		-4	0	1	1	-3	14	-7	-5	43
sum+		57	0	13	13	70	57	103	126	174
sum-		57	0	13	13	70	57	103	126	174
SBC		40	0	4	4	45	32	73	80	98
SSA		61	0	12	12	73	43	110	132	131
alk		-21	0	-8	-8	-29	-11	-37	-51	-33
TOC	mg/l						4.92			14.9
SiO2	mg/l						0.94			2.9
c.d.							2.9			2.9
RAL	µg/l						108			327
ILAL	µg/l						87			264
TOTN	µmol/l						10			31
TOTP	µmol/l						3			8
org-N	µmol/l						8			24
C/N	g/g						45			

METTE winter 97 05 Nov 96 to 28 Apr 97 **File: W97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		441				441	446			
H+		10	0	3	3	13	28	22	29	63
Na		55	-14	0	-14	41	36	125	94	81
K		2	0	0	0	2	2	4	4	4
Ca		4	-1	0	-1	3	4	8	7	9
Mg		14	-3	0	-3	11	8	32	25	19
Al		0	0	0	0	0	3	0	0	6
NH4		10	0	1	1	11	2	23	26	4
NO3		14	0	3	3	16	7	31	36	16
Cl		69	-16	0	-16	53	53	156	120	118
SO4		19	-2	2	0	19	19	43	43	44
A-		-7	0	0	0	-7	4	-16	-16	8
sum+		94	-18	4	-13	81	83	214	183	187
sum-		94	-18	4	-13	81	83	214	183	187
SBC		84	-18	1	-16	68	52	192	154	117
SSA		101	-18	4	-13	88	79	230	200	178
alk		-17	0	-3	-3	-20	-27	-38	-45	-61
TOC	mg/l						3			6.3
SiO2	mg/l						0			1.0
c.d.							1.3			1.3
RAL	µg/l						88			198
ILAL	µg/l						62			139
TOTN	µmol/l						15			34
TOTP	µmol/l						2			4
org-N	µmol/l						6			13
C/N	g/g						34			

METTE summer 97 29 Apr to 17. Nov 97 **File: S97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		670				670	408			
H+		14	0	9	9	23	23	21	35	57
Na		14	10	0	10	24	34	20	36	85
K		1	0	0	0	1	2	2	2	5
Ca		5	0	0	0	6	5	8	9	12
Mg		5	2	0	2	7	7	7	11	18
Al		0	0	0	0	0	2	0	0	4
NH4		17	0	4	4	21	4	25	31	11
NO3		22	0	7	7	29	9	32	43	22
Cl		17	12	0	12	29	29	26	44	72
SO4		24	1	5	6	30	25	35	45	61
A-		-7	0	1	1	-6	15	-10	-8	36
sum+		56	13	13	26	82	78	84	123	191
sum-		56	13	13	26	82	78	84	123	191
SBC		42	13	4	17	59	53	62	88	130
SSA		63	13	12	25	88	63	94	131	156
alk		-21	0	-8	-8	-29	-11	-31	-43	-26
TOC	mg/l						7.02			17.2
SiO2	mg/l						1.26			3.1
c.d.							2.07			2.1
RAL	µg/l						118			290
ILAL	µg/l						101			249
TOTN	µmol/l						38			94
TOTP	µmol/l						12			30
org-N	µmol/l						25			61
C/N	g/g						20			

METTE winter 98 18 Nov 97 to 24 May 98 **File: W98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		528				528	665			
H+		18	0	3	3	21	44	34	39	66
Na		28	29	0	29	56	55	52	107	83
K		1	1	0	1	2	3	3	4	5
Ca		4	1	0	1	6	7	8	11	10
Mg		2	7	0	7	8	14	3	16	21
Al		0	0	0	0	0	5	0	0	7
NH4		23	0	1	1	24	4	43	46	7
NO3		24	0	3	3	27	21	46	51	32
Cl		33	34	0	34	67	67	63	127	101
SO4		29	3	2	5	34	37	54	64	55
A-		-10	0	0	0	-10	8	-20	-19	12
sum+		76	37	4	42	118	133	144	223	200
sum-		76	37	4	42	118	133	144	223	200
SBC		58	37	1	39	97	84	110	183	127
SSA		86	37	4	41	128	125	164	242	188
alk		-28	0	-3	-3	-31	-41	-53	-59	-61
TOC	mg/l						5			7.5
SiO2	mg/l						1			1.2
c.d.							1.6			1.6
RAL	µg/l						150			226
ILAL	µg/l						101			151
TOTN	µmol/l						34			51
TOTP	µmol/l						2			3
org-N	µmol/l						8			12
C/N	g/g						44			

METTE summer 98 25 May to 18. Dec 98 **File: S98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		904				904	671			
H+		23	0	9	9	32	43	25	35	63
Na		39	-7	0	-7	32	42	43	35	63
K		3	0	0	0	3	1	4	3	1
Ca		8	0	0	0	8	8	9	8	11
Mg		5	-2	0	-2	3	11	6	4	16
Al		0	0	0	0	0	1	0	0	2
NH4		19	0	4	4	23	3	21	25	5
NO3		25	0	7	7	32	5	28	36	8
Cl		48	-8	0	-8	40	40	53	44	60
SO4		34	-1	5	4	38	28	38	42	42
A-		-12	0	1	1	-11	36	-13	-12	53
sum+		96	-9	13	4	100	109	106	111	162
sum-		96	-9	13	4	100	109	106	111	162
SBC		74	-9	4	-5	69	65	81	76	97
SSA		108	-9	12	3	111	73	119	123	109
alk		-34	0	-8	-8	-42	-8	-38	-47	-12
TOC	mg/l						12			18.2
SiO2	mg/l						1			2.0
c.d.							2.9			2.9
RAL	µg/l						174			260
ILAL	µg/l						161			240
TOTN	µmol/l						30			44
TOTP	µmol/l						7			10
org-N	µmol/l						21			31
C/N	g/g						42			

METTE winter 99 19 Dec 98 to 25 May 99 **File: W99.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		626				626	637			
H+		13	0	3	3	16	41	21	26	65
Na		40	17	0	17	57	61	64	91	96
K		3	0	0	0	3	2	4	5	4
Ca		6	1	0	1	7	7	9	11	12
Mg		1	4	0	4	5	12	2	8	20
Al		0	0	0	0	0	4	0	0	7
NH4		16	0	1	1	17	9	26	28	14
NO3		18	0	3	3	21	19	30	34	30
Cl		45	20	0	20	66	66	72	105	103
SO4		23	2	2	4	27	39	37	43	61
A-		-8	0	0	0	-8	15	-12	-12	23
sum+		79	22	4	27	106	138	126	169	217
sum-		79	22	4	27	106	138	126	169	217
SBC		65	22	1	24	89	92	105	142	145
SSA		87	22	4	27	113	124	138	181	194
alk		-21	0	-3	-3	-24	-31	-34	-38	-49
TOC	mg/l						5			8.2
SiO2	mg/l						1			1.0
c.d.							2.8			2.8
RAL	µg/l						158			248
ILAL	µg/l						114			179
TOTN	µmol/l						40			62
TOTP	µmol/l						4			7
org-N	µmol/l						12			18
C/N	g/g						32			

4.6 Summer/winter – CECILIE

CECILIE summer 94 27 May 94 to 31 Oct 94 **File: S94.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		608				608	428			
H+		20	0	10	10	30	37	33	49	87
Na		20	7	0	7	27	38	32	44	89
K		1	0	0	0	1	1	2	2	2
Ca		3	0	0	0	3	5	5	5	12
Mg		5	2	0	2	6	7	8	10	17
Al		0	0	0	0	0	3	0	0	7
NH4		12	0	4	4	16	2	19	26	4
NO3		16	0	8	8	23	6	26	39	14
Cl		24	8	0	8	33	33	40	54	76
SO4		25	1	6	7	31	29	40	52	68
A-		-4	0	0	0	-4	26	-7	-7	60
sum+		60	9	14	23	83	94	99	137	219
sum-		60	9	14	23	83	94	99	137	219
SBC		40	9	4	13	53	53	66	88	125
SSA		65	9	14	23	87	68	106	144	158
alk		-25	0	-10	-10	-34	-14	-40	-56	-34
TOC	mg/l						6.8			15.9
SiO2	mg/l						1.0			2.3
c.d.							3.8			3.8
RAL	µg/l						138			323
ILAL	µg/l						108			253
TOTN	µmol/l						22			51
org-N	µmol/l						14			33
C/N	g/g						34			

CECILIE winter 95 01 Nov 94 to 06 Jun 95 **File: W95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		872				872	878			
H+		28	0	3	3	31	58	32	36	66
Na		71	25	0	25	96	92	82	110	105
K		2	1	0	1	3	4	2	3	4
Ca		6	1	0	1	7	9	7	8	10
Mg		16	6	0	6	22	18	18	25	20
Al		0	0	0	0	0	7	0	0	8
NH4		28	0	1	1	30	5	33	34	5
NO3		32	0	3	3	35	22	37	40	25
Cl		80	29	0	29	109	109	92	125	125
SO4		42	3	2	5	47	46	48	54	52
A-		-3	0	0	0	-3	15	-3	-3	17
sum+		152	32	4	36	188	193	174	216	220
sum-		152	32	4	36	188	193	174	216	220
SBC		124	32	1	33	157	127	142	180	145
SSA		155	32	4	36	191	178	177	219	202
alk		-31	0	-3	-3	-34	-50	-36	-39	-57
TOC	mg/l						5.57			6.3
SiO2	mg/l						0.77			0.9
c.d.							2.7			2.7
RAL	µg/l						176			201
ILAL	µg/l						109			124
TOTN	µmol/l						34			38
TOTP	µmol/l						3			3
org-N	µmol/l						7			8
C/N	g/g						58			

CECILIE summer 95 07 June to 28. Nov 95 **File: S95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		666				666	527			
H+		18	0	9	9	27	33	27	40	64
Na		17	15	0	15	32	40	26	49	77
K		1	0	0	0	1	4	1	2	7
Ca		3	1	0	1	4	6	5	6	11
Mg		4	4	0	4	8	9	7	12	16
Al		0	0	0	0	0	3	0	0	5
NH4		13	0	4	4	16	2	19	25	4
NO3		18	0	7	7	26	8	27	38	15
Cl		19	18	0	18	37	37	28	55	70
SO4		23	2	5	7	30	31	35	45	59
A-		-4	0	0	0	-4	21	-6	-5	40
sum+		56	20	13	33	89	97	84	133	184
sum-		56	20	13	33	89	97	84	133	184
SBC		38	20	4	24	62	61	58	93	115
SSA		60	20	12	32	92	76	90	138	144
alk		-22	0	-9	-9	-30	-15	-33	-45	-29
TOC	mg/l						7.10			13.5
SiO2	mg/l						1.06			2.0
c.d.							3.0			3.0
RAL	µg/l						133			253
ILAL	µg/l						105			199
TOTN	µmol/l						24			46
TOTP	µmol/l						4			8
org-N	µmol/l						14			26
C/N	g/g						37			

CECILIE winter 96 29 Nov 95 to 02 Jun 96 **File: W96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		311				311	375			
H+		17	0	3	3	20	25	54	64	67
Na		21	1	0	1	23	30	69	73	80
K		1	0	0	0	1	3	4	4	8
Ca		5	0	0	0	5	4	15	15	11
Mg		6	0	0	0	6	7	20	21	20
Al		0	0	0	0	0	3	0	0	7
NH4		19	0	1	1	20	5	61	65	12
NO3		19	0	3	3	22	13	63	71	36
Cl		26	2	0	2	27	27	83	88	72
SO4		28	0	2	2	30	28	90	96	74
A-		-4	0	0	0	-4	9	-13	-13	24
sum+		69	2	4	6	75	77	222	242	205
sum-		69	2	4	6	75	77	222	242	205
SBC		52	2	1	3	55	49	168	178	131
SSA		73	2	4	6	79	68	235	255	182
alk		-21	0	-3	-3	-24	-19	-67	-77	-50
TOC	mg/l						3			7.7
SiO2	mg/l						0			1.2
c.d.							3.1			3.1
RAL	µg/l						76			204
ILAL	µg/l						51			136
TOTN	µmol/l						25			67
TOTP	µmol/l						2			6
org-N	µmol/l						7			19
C/N	g/g						29			

CECILIE summer 96 03 June to 04. Nov 96 **File: S96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		557				557	352			
H+		17	0	9	9	26	25	30	46	72
Na		18	2	0	2	20	26	32	37	73
K		1	0	0	0	1	1	2	2	2
Ca		4	0	0	0	4	4	7	7	12
Mg		5	1	0	1	5	7	9	10	19
Al		0	0	0	0	0	3	0	0	8
NH4		12	0	4	4	16	2	22	30	5
NO3		16	0	7	7	23	4	29	42	12
Cl		22	3	0	3	25	25	40	45	70
SO4		23	0	5	5	28	23	40	50	65
A-		-4	0	1	1	-3	15	-7	-5	42
sum+		57	3	13	16	73	67	103	131	190
sum-		57	3	13	16	73	67	103	131	190
SBC		40	3	4	7	47	39	73	85	111
SSA		61	3	12	15	76	52	110	137	148
alk		-21	0	-8	-8	-29	-13	-37	-51	-38
TOC	mg/l						5.04			14.3
SiO2	mg/l						0.93			2.6
c.d.							2.9			2.9
RAL	µg/l						113			322
ILAL	µg/l						86			243
TOTN	µmol/l						15			43
TOTP	µmol/l						3			8
org-N	µmol/l						9			26
C/N	g/g						40			

CECILIE winter 97 05 Nov 96 to 28 Apr 97 **File: W97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		441				441	479			
H+		10	0	3	3	13	31	22	29	65
Na		55	-4	0	-4	51	50	125	116	104
K		2	0	0	0	2	2	4	4	4
Ca		4	0	0	0	3	5	8	8	11
Mg		14	-1	0	-1	13	11	31	29	23
Al		0	0	0	0	0	3	0	0	7
NH4		10	0	1	1	11	3	23	26	7
NO3		14	0	3	3	16	9	31	36	19
Cl		69	-5	0	-5	64	64	156	145	134
SO4		19	0	2	1	20	26	43	46	54
A-		-8	0	0	0	-8	7	-17	-17	14
sum+		94	-5	4	-1	93	106	213	211	221
sum-		94	-5	4	-1	93	106	213	211	221
SBC		84	-5	1	-4	80	72	191	182	149
SSA		101	-5	4	-1	100	99	230	228	206
alk		-17	0	-3	-3	-20	-27	-39	-46	-57
TOC	mg/l						3			7.2
SiO2	mg/l						1			1.3
c.d.							2.0			2.0
RAL	µg/l						102			212
ILAL	µg/l						68			143
TOTN	µmol/l						22			46
TOTP	µmol/l						4			7
org-N	µmol/l						10			20
C/N	g/g						26			

CECILIE summer 97 29 Apr to 17. Nov 97 **File: S97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		670				670	414			
H+		14	0	9	9	23	15	21	35	37
Na		14	16	0	16	30	79	20	44	191
K		1	0	0	0	1	1	2	2	2
Ca		5	1	0	1	6	4	8	9	11
Mg		5	4	0	4	8	5	7	13	11
Al		0	0	0	0	0	1	0	0	2
NH4		17	0	4	4	21	6	25	31	15
NO3		22	0	7	7	29	7	32	43	17
Cl		17	19	0	19	36	36	26	54	87
SO4		24	2	5	7	31	31	35	46	76
A-		-7	0	1	1	-6	37	-10	-8	89
sum+		56	21	13	34	90	111	84	134	269
sum-		56	21	13	34	90	111	84	134	269
SBC		42	21	4	25	67	95	62	99	230
SSA		63	21	12	33	95	75	94	142	180
alk		-21	0	-8	-8	-29	21	-31	-43	50
TOC	mg/l						9.49			22.9
SiO2	mg/l						1.18			2.8
c.d.							3.87			3.9
RAL	µg/l						109			263
ILAL	µg/l						103			248
TOTN	µmol/l						30			73
TOTP	µmol/l						94			226
org-N	µmol/l						17			41
C/N	g/g						40			

CECILIE winter 98 18 Nov 97 to 24 May 98 **File: W98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		528				528	632			
H+		18	0	3	3	21	22	34	39	35
Na		28	32	0	32	59	100	52	112	158
K		1	1	0	1	2	1	3	4	1
Ca		4	1	0	1	6	5	8	11	8
Mg		2	7	0	7	9	6	3	17	10
Al		0	0	0	0	0	1	0	0	2
NH4		23	0	1	1	24	5	43	46	8
NO3		24	0	3	3	27	12	46	51	19
Cl		33	37	0	37	70	70	63	133	111
SO4		29	4	2	6	34	38	54	65	60
A-		-10	0	0	0	-10	19	-20	-19	30
sum+		76	41	4	45	121	139	144	230	221
sum-		76	41	4	45	121	139	144	230	221
SBC		58	41	1	42	100	116	110	190	184
SSA		86	41	4	45	131	120	164	249	190
alk		-28	0	-3	-3	-31	-4	-53	-59	-6
TOC	mg/l						6			9.0
SiO2	mg/l						1			1.1
c.d.							3.4			3.4
RAL	µg/l						94			149
ILAL	µg/l						82			129
TOTN	µmol/l						28			44
TOTP	µmol/l						12			20
org-N	µmol/l						11			17
C/N	g/g						37			

CECILIE summer 98 25 May to 18. Dec 98 **File: S98.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		904				904	788			
H+		23	0	9	9	32	30	25	35	38
Na		39	3	0	3	41	90	43	46	115
K		3	0	0	0	3	1	4	4	1
Ca		8	0	0	0	8	7	9	9	9
Mg		5	1	0	1	6	6	6	6	8
Al		0	0	0	0	0	1	0	0	1
NH4		19	0	4	4	23	6	21	25	7
NO3		25	0	7	7	32	7	28	36	9
Cl		48	3	0	3	51	51	53	57	65
SO4		34	0	5	5	39	34	38	44	44
A-		-12	0	1	1	-11	48	-13	-12	62
sum+		96	3	13	16	112	141	106	124	179
sum-		96	3	13	16	112	141	106	124	179
SBC		74	3	4	7	81	110	81	90	140
SSA		108	3	12	15	123	93	119	136	117
alk		-34	0	-8	-8	-42	18	-38	-46	23
TOC	mg/l						14			17.9
SiO2	mg/l						1			1.5
c.d.							3.4			3.4
RAL	µg/l						173			219
ILAL	µg/l						165			209
TOTN	µmol/l						38			48
TOTP	µmol/l						19			25
org-N	µmol/l						25			32
C/N	g/g						40			

CECILIE winter 99 19 Dec 98 to 25 May 99 **File: W99.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		626				626	734			
H+		13	0	3	3	16	33	21	26	46
Na		40	26	0	26	66	90	64	106	123
K		3	1	0	1	3	1	4	5	1
Ca		6	1	0	1	7	7	9	11	10
Mg		1	6	0	6	7	8	2	11	11
Al		0	0	0	0	0	2	0	0	3
NH4		16	0	1	1	17	4	26	28	6
NO3		18	0	3	3	21	9	30	34	12
Cl		45	31	0	31	76	76	72	121	104
SO4		23	3	2	5	28	40	37	45	55
A-		-8	0	0	0	-8	20	-12	-12	28
sum+		79	34	4	38	117	146	126	187	198
sum-		79	34	4	38	117	146	126	187	198
SBC		65	34	1	35	101	110	105	161	150
SSA		87	34	4	38	125	125	138	199	170
alk		-21	0	-3	-3	-24	-15	-34	-38	-20
TOC	mg/l						6			8.1
SiO2	mg/l						1			1.0
c.d.							3.4			3.4
RAL	µg/l						116			158
ILAL	µg/l						96			131
TOTN	µmol/l						26			36
TOTP	µmol/l						10			14
org-N	µmol/l						13			18
C/N	g/g						33			

4.7 Years – EGIL

EGIL year 94-95 28 May 94 to 6 June 95 **File: Y94-95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1447				1447	1426			
H+		78	0	13	13	90	109	54	62	76
Na		94	28	0	28	122	134	65	85	94
K		4	1	0	1	4	8	3	3	6
Ca		8	1	0	1	10	19	6	7	13
Mg		22	6	0	6	29	30	15	20	21
Al		0	0	0	0	0	13	0	0	9
NH4		33	0	5	5	38	12	23	26	8
NO3		44	0	10	10	54	46	31	38	32
Cl		110	33	0	33	143	143	76	98	100
SO4		96	3	8	11	107	111	66	74	78
A-		-11	0	0	0	-11	26	-7	-7	18
sum+		239	36	18	54	293	325	165	202	228
sum-		239	36	18	54	293	325	165	202	228
SBC		161	36	5	41	203	203	111	140	142
SSA		250	36	18	54	304	299	173	210	210
alk		-89	0	-13	-12	-101	-96	-61	-70	-67
TOC	mg/l						11			7.4
SiO2	mg/l						3			1.8
c.d.							5			2.4
RAL	µg/l						308			216
ILAL	µg/l						175			123
TOTN	µmol/l						79			55
org-N	µmol/l						21			15
inorg-N	µmol/l					92	58		64	41

EGIL year 95-96 7 June 95 to 2 June 96 **File: Y95-96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1118				1118	1013			
H+		50	0	12	12	62	69	44	55	68
Na		50	9	0	9	59	67	45	53	66
K		4	0	0	0	4	5	3	3	5
Ca		12	0	0	0	13	11	11	11	11
Mg		14	2	0	2	16	18	13	15	18
Al		0	0	0	0	0	6	0	0	6
NH4		40	0	5	5	45	8	36	40	8
NO3		43	0	10	10	53	34	39	48	34
Cl		57	10	0	10	67	67	51	60	67
SO4		70	1	7	8	78	63	63	70	62
A-		-1	0	0	0	0	19	-1	0	19
sum+		170	11	17	28	199	183	152	178	181
sum-		170	11	17	28	199	183	152	178	181
SBC		121	11	5	16	137	109	108	122	107
SSA		171	11	17	28	199	164	153	178	162
alk		-50	0	-12	-12	-62	-55	-45	-55	-55
TOC	mg/l						8			8.2
SiO2	mg/l						2			1.8
c.d.							5			2.3
RAL	µg/l						205			202
ILAL	µg/l						147			146
TOTN	µmol/l						60			59
TOTP	µmol/l						6			6
org-N	µmol/l						18			18
inorg-N	µmol/l					98	42		88	41

EGIL year 96-97 03 June 1996 to 28 April 1997 **File: Y96-97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		910				910	845			
H+		28	0	12	12	40	61	31	44	72
Na		62	14	0	14	76	70	68	83	83
K		2	0	0	0	2	4	2	3	4
Ca		5	1	0	1	6	11	6	7	13
Mg		15	3	0	3	18	18	17	20	21
Al		0	0	0	0	0	6	0	0	7
NH4		18	0	5	5	23	10	19	25	11
NO3		26	0	10	10	36	30	29	39	35
Cl		75	16	0	16	91	91	83	100	108
SO4		37	2	7	8	45	55	40	50	65
A-		-8	0	1	1	-6	3	-8	-7	4
sum+		130	18	17	35	166	180	143	182	213
sum-		130	18	17	35	166	180	143	182	213
SBC		102	18	5	23	125	113	112	138	133
SSA		138	18	16	34	172	177	152	189	209
alk		-20	0	-11	-11	-47	-64	-22	-51	-75
TOC	mg/l						6			7.4
SiO2	mg/l						2			1.8
c.d.							1			0.5
RAL	µg/l						183			216
ILAL	µg/l						124			146
TOTN	µmol/l						68			80
org-N	µmol/l						28			33
inorg-N	µmol/l					58.6	40		64.4	47

EGIL year 97-98 29 Apr 97 to 24 May 98 **File: Y97-98.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		749				749	626			
H+		23	0	12	12	35	57	31	47	92
Na		27	39	0	39	66	73	36	88	117
K		1	1	0	1	2	14	2	3	22
Ca		7	2	0	2	9	12	10	12	19
Mg		5	9	0	9	14	23	7	19	37
Al		0	0	0	0	0	18	0	0	28
NH4		30	0	5	5	36	17	41	47	27
NO3		34	0	10	10	44	82	45	58	130
Cl		33	46	0	46	79	79	44	105	126
SO4		40	5	7	11	51	66	53	68	105
A-		-12	0	0	1	-12	-12	-16	-15	-19
sum+		94	50	17	68	162	214	126	216	342
sum-		94	50	17	68	162	214	126	216	342
SBC		71	50	5	56	127	139	95	169	222
SSA		106	50	17	67	173	226	142	231	361
alk		-35	0	-12	-11	-47	-87	-47	-62	-139
TOC	mg/l						5			7.4
SiO2	mg/l						2			2.5
c.d.							-5			-2.6
RAL	µg/l						291			465
ILAL	µg/l						114			181
TOTN	µmol/l						111			178
TOTP	µmol/l						4			6
org-N	µmol/l						13			21
inorg-N	µmol/l					79	98		106	157

4.8 Years – KIM T

KIM T year 94-95 28 May 94 to 6 June 95 **File: Y94-95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1390				1390	1158			
H+		0	0	0	0	0	58	0	0	50
Na		86	-9	0	-9	77	78	62	55	68
K		2	0	0	0	2	2	1	1	2
Ca		4	0	0	0	3	7	3	2	6
Mg		20	-2	0	-2	18	13	14	13	11
Al		0	0	0	0	0	2	0	0	2
NH4		0	0	0	0	0	3	0	0	3
NO3		0	0	0	0	0	4	0	0	3
Cl		100	-10	0	-10	89	89	72	64	77
SO4		10	-1	0	-1	9	15	7	7	13
A-		1	0	0	0	1	56	1	0	49
sum+		111	-11	0	-11	99	164	80	71	142
sum-		111	-11	0	-11	99	164	80	71	142
SBC		111	-11	0	-11	99	104	80	71	90
SSA		110	-11	0	-11	99	108	79	71	93
alk		1	0	0	0	1	-4	1	0	-4
TOC	mg/l						15			12.9
SiO2	mg/l						2			1.6
c.d.							8			3.8
RAL	µg/l						248			215
ILAL	µg/l						225			194
TOTN	µmol/l						36			31
org-N	µmol/l						30			26
inorg-N	µmol/l					0	7		0	6

KIM T year 95-96 7 June 95 to 2 June 96 **File: Y95-96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		954				954	731			
H+		0	0	0	0	0	45	0	0	62
Na		57	-2	0	-2	55	58	60	58	79
K		1	0	0	0	1	4	1	1	5
Ca		2	0	0	0	2	6	3	3	9
Mg		13	0	0	0	13	13	14	13	17
Al		0	0	0	0	0	2	0	0	3
NH4		0	0	0	0	0	5	0	0	6
NO3		0	0	0	0	0	9	0	0	12
Cl		66	-2	0	-2	64	64	69	67	88
SO4		7	0	0	0	7	15	7	7	20
A-		0	0	0	0	0	45	1	0	62
sum+		74	-2	0	-2	71	132	77	75	181
sum-		74	-2	0	-2	71	132	77	75	181
SBC		74	-2	0	-2	71	85	77	75	116
SSA		73	-2	0	-2	71	87	77	74	119
alk		0	0	0	0	0	-2	1	0	-3
TOC	mg/l						12.3			16.8
SiO2	mg/l						2			2.5
c.d.							7			3.7
RAL	µg/l						175			240
ILAL	µg/l						153			210
TOTN	µmol/l						36			49
TOTP	µmol/l						9			12
org-N	µmol/l						22			31
inorg-N	µmol/l					0	13		0	18

KIM T year 96-97 03 June 1996 to 28 April 1997 **File: Y96-97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		848				848	693			
H+		0	0	0	0	0	35	0	0	50
Na		49	0	0	0	60	44	58	70	64
K		1	0	0	0	1	3	1	1	4
Ca		2	0	0	0	2	5	3	3	7
Mg		11	0	0	0	11	10	13	13	14
Al		0	0	0	0	0	1	0	0	2
NH4		0	0	0	0	0	2	0	0	3
NO3		0	0	0	0	0	5	0	0	7
Cl		57	0	0	0	57	46	68	68	67
SO4		6	0	0	0	6	14	7	7	20
A-		0	0	0	0	11	35	0	13	50
sum+		64	0	0	0	74	100	75	87	145
sum-		64	0	0	0	74	100	75	87	145
SBC		64	0	0	0	74	64	75	87	93
SSA		63	0	0	0	63	65	75	75	94
alk		0	0	0	0	11	-1	0	13	-2
TOC	mg/l						10.8			15.6
SiO2	mg/l						2			2.5
c.d.							7			3.2
RAL	µg/l						149			215
ILAL	µg/l						138			199
TOTN	µmol/l						26			37
org-N	µmol/l						18			26
inorg-N	µmol/l					0.0	7		0.0	11

KIM T year 97-98 29 Apr 97 to 24 May 98 **File: Y97-98.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		858				858	544			
H+		0	0	0	0	0	29	0	0	53
Na		57	-16	0	-16	41	43	67	48	79
K		1	0	0	0	1	2	1	1	5
Ca		2	-1	0	-1	2	5	3	2	9
Mg		13	-4	0	-4	9	9	15	11	17
Al		0	0	0	0	0	1	0	0	3
NH4		0	0	0	0	0	3	0	0	6
NO3		0	0	0	0	0	6	0	0	10
Cl		67	-19	0	-19	48	48	78	56	88
SO4		7	-2	0	-2	5	14	8	6	25
A-		0	0	0	0	0	26	1	0	48
sum+		74	-21	0	-21	53	94	86	62	172
sum-		74	-21	0	-21	53	94	86	62	172
SBC		74	-21	0	-21	53	63	86	62	116
SSA		74	-21	0	-21	53	67	86	62	124
alk		0	0	0	0	0	-4	1	0	-8
TOC	mg/l						8.9			16.4
SiO2	mg/l						2			3.0
c.d.							6			3.0
RAL	µg/l						128			235
ILAL	µg/l						114			209
TOTN	µmol/l						24			44
TOTP	µmol/l						6			10
org-N	µmol/l						15			28
inorg-N	µmol/l					0	9		0	16

KIM T year 98-99 98 25 May to 25 May 99 **File: Y98-99.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		1020				1020	774			
H+		0	0	0	0	0	40	0	0	52
Na		61	-3	0	-3	58	62	60	56	80
K		1	0	0	0	1	4	1	1	5
Ca		3	0	0	0	3	8	3	2	11
Mg		14	-1	0	-1	13	14	14	13	17
Al		0	0	0	0	0	2	0	0	2
NH4		0	0	0	0	0	4	0	0	5
NO3		0	0	0	0	0	9	0	0	12
Cl		71	-4	0	-4	67	67	70	66	87
SO4		7	0	0	0	7	18	7	7	24
A-		1	0	0	0	1	38	1	0	49
sum+		79	-4	0	-4	75	133	77	73	171
sum-		79	-4	0	-4	75	133	77	73	171
SBC		79	-4	0	-4	75	91	77	73	118
SSA		78	-4	0	-4	74	94	77	73	122
alk		1	0	0	0	1	-3	1	0	-4
TOC	mg/l						12.3			15.9
SiO2	mg/l						2			2.4
c.d.							6			3.1
RAL	µg/l						185			239
ILAL	µg/l						169			219
TOTN	µmol/l						36			47
TOTP	µmol/l						11			14
org-N	µmol/l						23			30
inorg-N	µmol/l					0	13		0	17

4.9 Years – KIM C

KIM C year 94-95 28 May 94 to 6 June 95 **File: Y94-95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1390				1390	1158			
H+		0	0	0	0	0	50	0	0	43
Na		86	-6	0	-6	79	77	62	57	67
K		2	0	0	0	2	2	1	1	2
Ca		4	0	0	0	3	7	3	2	6
Mg		20	-1	0	-1	18	14	14	13	12
Al		0	0	0	0	0	4	0	0	3
NH4		0	0	0	0	0	1	0	0	1
NO3		0	0	0	0	0	0	0	0	0
Cl		100	-7	0	-7	92	92	72	66	80
SO4		10	-1	0	-1	10	19	7	7	17
A-		1	0	0	0	1	43	1	0	37
sum+		111	-8	0	-8	103	154	80	74	133
sum-		111	-8	0	-8	103	154	80	74	133
SBC		111	-8	0	-8	103	101	80	74	87
SSA		110	-8	0	-8	102	112	79	73	97
alk		1	0	0	0	1	-11	1	0	-9
TOC	mg/l						11			9.6
SiO2	mg/l						1			1.1
c.d.							8			3.8
RAL	µg/l						217			187
ILAL	µg/l						179			155
TOTN	µmol/l						24			21
org-N	µmol/l						23			20
inorg-N	µmol/l					0	1		0	1

KIM C year 95-96 7 June 95 to 2 June 96 **File: Y95-96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		954				954	731			
H+		0	0	0	0	0	33	0	0	45
Na		57	-8	0	-8	49	53	60	51	72
K		1	0	0	0	1	2	1	1	3
Ca		2	0	0	0	2	4	3	2	6
Mg		13	-2	0	-2	11	10	14	12	13
Al		0	0	0	0	0	2	0	0	3
NH4		0	0	0	0	0	1	0	0	2
NO3		0	0	0	0	0	1	0	0	1
Cl		66	-9	0	-9	57	57	69	60	78
SO4		7	-1	0	-1	6	15	7	6	20
A-		0	0	0	0	0	33	0	0	45
sum+		74	-10	0	-10	63	105	77	66	144
sum-		74	-10	0	-10	63	105	77	66	144
SBC		74	-10	0	-10	63	70	77	66	96
SSA		73	-10	0	-10	63	73	77	66	99
alk		0	0	0	0	0	-2	0	0	-3
TOC	mg/l						9			12.4
SiO2	mg/l						1			1.7
c.d.							7			3.6
RAL	µg/l						154			211
ILAL	µg/l						131			179
TOTN	µmol/l						20			28
TOTP	µmol/l						11			14
org-N	µmol/l						18			25
inorg-N	µmol/l					0	2		0	3

KIM C year 96-97 03 June 1996 to 28 April 1997 **File: Y96-97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		848				848	693			
H+		0	0	0	0	0	28	0	0	40
Na		49	0	0	0	60	41	58	70	59
K		1	0	0	0	1	1	1	1	2
Ca		2	0	0	0	2	3	3	3	5
Mg		11	0	0	0	11	8	13	13	12
Al		0	0	0	0	0	2	0	0	3
NH4		0	0	0	0	0	1	0	0	1
NO3		0	0	0	0	0	1	0	0	1
Cl		57	0	0	0	57	46	68	68	67
SO4		6	0	0	0	6	12	7	7	17
A-		0	0	0	0	11	25	0	13	37
sum+		64	0	0	0	74	84	75	87	121
sum-		64	0	0	0	74	84	75	87	121
SBC		64	0	0	0	74	54	75	87	78
SSA		63	0	0	0	63	59	75	75	85
alk		0	0	0	0	11	-4	0	13	-6
TOC	mg/l						8.1			11.7
SiO2	mg/l						1			1.8
c.d.							6			3.1
RAL	µg/l						142			204
ILAL	µg/l						121			174
TOTN	µmol/l						26			37
org-N	µmol/l						24			35
inorg-N	µmol/l					0.0	1		0.0	2

KIM C year 97-98 29 Apr 97 to 24 May 98 **File: Y97-98.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		858				858	544			
H+		0	0	0	0	0	22	0	0	40
Na		57	-19	0	-19	39	41	67	45	76
K		1	0	0	0	1	2	1	1	3
Ca		2	-1	0	-1	2	3	3	2	6
Mg		13	-4	0	-4	9	8	15	10	14
Al		0	0	0	0	0	2	0	0	4
NH4		0	0	0	0	0	1	0	0	1
NO3		0	0	0	0	0	0	0	0	0
Cl		67	-22	0	-22	45	45	78	52	83
SO4		7	-2	0	-2	5	12	8	5	21
A-		0	0	0	0	0	22	1	0	40
sum+		74	-24	0	-24	50	78	86	58	144
sum-		74	-24	0	-24	50	78	86	58	144
SBC		74	-24	0	-24	50	55	86	58	100
SSA		74	-24	0	-24	50	57	86	58	104
alk		0	0	0	0	0	-2	1	0	-4
TOC	mg/l						8			13.9
SiO2	mg/l						1			2.0
c.d.							6			2.9
RAL	µg/l						126			232
ILAL	µg/l						105			193
TOTN	µmol/l						15			28
TOTP	µmol/l						7			12
org-N	µmol/l						14			26
inorg-N	µmol/l					0	1		0	2

4.10 Years – ROLF

ROLF year 94-95 28 May 94 to 6 June 95 **File: Y94-95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1476				1476	1263			
H+		48	0	13	13	61	94	33	41	75
Na		91	43	0	43	134	135	61	90	107
K		3	1	0	1	4	5	2	3	4
Ca		9	2	0	2	11	15	6	7	12
Mg		21	10	0	10	30	30	14	21	24
Al		0	0	0	0	0	7	0	0	5
NH4		40	0	5	5	45	14	27	31	11
NO3		48	0	10	10	58	29	33	39	23
Cl		104	50	0	50	154	154	71	105	122
SO4		66	5	8	13	79	70	45	54	56
A-		-7	0	0	0	-7	46	-5	-5	37
sum+		211	56	18	73	285	300	143	193	238
sum-		211	55	18	73	285	300	143	193	238
SBC		163	56	5	61	224	199	110	152	158
SSA		219	55	18	73	292	254	148	198	201
alk		-55	0	-13	-12	-68	-55	-38	-46	-43
TOC	mg/l						14.2			11.2
SiO2	mg/l						2			1.3
c.d.							6			3.3
RAL	µg/l						262			207
ILAL	µg/l						194			154
TOTN	µmol/l						67			53
org-N	µmol/l						25			20
inorg-N	µmol/l					103	42		70	34

ROLF year 95-96 7 June 95 to 2 June 96 **File: Y95-96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		976				976	857			
H+		36	0	12	12	48	61	37	49	71
Na		41	21	0	21	61	80	42	63	93
K		2	0	0	0	3	7	2	3	8
Ca		8	1	0	1	9	10	8	9	12
Mg		11	5	0	5	16	20	11	16	23
Al		0	0	0	0	0	5	0	0	6
NH4		32	0	5	5	37	10	33	38	12
NO3		39	0	10	10	49	26	40	50	30
Cl		47	24	0	24	71	71	48	73	83
SO4		53	2	7	9	62	59	54	63	69
A-		-8	0	0	0	-8	37	-8	-8	43
sum+		130	27	17	44	174	193	133	178	225
sum-		130	27	17	44	174	193	133	178	225
SBC		94	27	5	32	126	126	96	129	147
SSA		138	27	17	43	181	156	142	186	182
alk		-44	0	-12	-12	-56	-30	-45	-57	-35
TOC	mg/l						10.8			12.6
SiO2	mg/l						1			1.7
c.d.							7			3.4
RAL	µg/l						191			223
ILAL	µg/l						139			163
TOTN	µmol/l						58			67
TOTP	µmol/l						6			7
org-N	µmol/l						22			25
inorg-N	µmol/l					85	36		87	42

ROLF year 96-97 03 June 1996 to 28 April 1997 **File: Y96-97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1006				1006	888			
H+		26	0	12	12	38	66	26	38	74
Na		73	16	0	16	89	82	73	88	92
K		3	0	0	0	3	3	3	3	3
Ca		8	1	0	1	8	10	8	8	12
Mg		19	4	0	4	22	22	18	22	25
Al		0	0	0	0	0	4	0	0	5
NH4		22	0	5	5	28	6	22	28	6
NO3		30	0	10	10	39	14	30	39	16
Cl		91	18	0	18	109	109	90	109	123
SO4		42	2	7	9	50	45	41	50	50
A-		-11	0	1	1	-10	24	-11	-10	27
sum+		151	20	17	38	189	193	150	187	217
sum-		151	20	17	38	189	193	150	187	217
SBC		125	20	5	26	150	122	124	149	138
SSA		162	20	16	37	199	168	161	198	189
alk		-38	0	-11	-11	-49	-46	-38	-48	-52
TOC	mg/l						10			11.0
SiO2	mg/l						1			1.4
c.d.							5			2.5
RAL	µg/l						165			186
ILAL	µg/l						123			138
TOTN	µmol/l						26			29
org-N	µmol/l						6			6
inorg-N	µmol/l					67	20		67	22

ROLF year 97-98 29 Apr 97 to 24 May 98 **File: Y97-98.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1197				1197	1009			
H+		32	0	12	12	44	67	27	37	66
Na		41	48	0	48	89	100	34	75	99
K		3	1	0	1	4	4	2	3	4
Ca		10	2	0	2	12	12	8	10	12
Mg		7	11	0	11	18	23	5	15	23
Al		0	0	0	0	0	5	0	0	4
NH4		40	0	5	5	45	8	33	38	8
NO3		46	0	10	10	56	26	39	47	26
Cl		51	56	0	56	107	107	42	89	106
SO4		52	6	7	13	65	57	44	54	56
A-		-17	0	0	1	-16	29	-14	-14	29
sum+		132	62	17	79	211	218	110	176	216
sum-		132	62	17	79	211	218	110	176	216
SBC		100	62	5	67	167	147	83	140	145
SSA		149	62	17	79	228	189	124	190	188
alk		-49	0	-12	-11	-60	-42	-41	-50	-42
TOC	mg/l						11.7			11.6
SiO2	mg/l						2			1.7
c.d.							5			2.5
RAL	µg/l						208			206
ILAL	µg/l						163			162
TOTN	µmol/l						54			53
TOTP	µmol/l						7			7
org-N	µmol/l						20			20
inorg-N	µmol/l					101	34		84	33

ROLF year 98-99 98 25 May to 25 May 99 **File: Y98-99.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		1529				1529	1203			
H+		36	0	12	12	48	69	23	31	58
Na		79	10	0	10	88	97	51	58	81
K		6	0	0	0	6	2	4	4	2
Ca		14	0	0	0	14	13	9	9	11
Mg		6	2	0	2	8	22	4	5	19
Al		0	0	0	0	0	3	0	0	3
NH4		35	0	5	5	40	6	23	26	5
NO3		44	0	10	10	54	17	29	35	14
Cl		93	11	0	11	105	105	61	68	87
SO4		57	1	7	8	65	55	37	42	46
A-		-19	0	0	0	-19	36	-13	-12	30
sum+		175	12	17	29	204	213	114	134	177
sum-		175	12	17	29	204	213	114	134	177
SBC		139	12	5	17	157	140	91	102	117
SSA		194	12	17	29	223	177	127	146	147
alk		-55	0	-12	-12	-67	-37	-36	-44	-30
TOC	mg/l						13.9			11.6
SiO2	mg/l						1			1.2
c.d.							5			2.6
RAL	µg/l						217			180
ILAL	µg/l						182			152
TOTN	µmol/l						52			43
TOTP	µmol/l						13			11
org-N	µmol/l						28			24
inorg-N	µmol/l					94	23		61	19

4.11 Years – METTE

METTE year 94-95 28 May 94 to 6 June 95 **File: Y94-95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1480				1480	993			
H+		48	0	13	13	61	73	33	41	74
Na		91	-6	0	-6	85	90	61	57	91
K		3	0	0	0	3	4	2	2	4
Ca		9	0	0	0	9	9	6	6	10
Mg		21	-1	0	-1	19	18	14	13	18
Al		0	0	0	0	0	9	0	0	9
NH4		40	0	5	5	45	6	27	31	6
NO3		48	0	10	10	58	20	33	39	20
Cl		105	-7	0	-7	97	97	71	66	98
SO4		66	-1	8	7	74	57	45	50	57
A-		-7	0	0	0	-7	36	-5	-5	36
sum+		212	-8	18	10	222	210	143	150	211
sum-		212	-8	18	10	222	210	143	150	211
SBC		164	-8	5	-3	161	128	111	109	129
SSA		219	-8	18	10	229	174	148	155	175
alk		-56	0	-13	-13	-68	-46	-38	-46	-47
TOC	mg/l						11.1			11.2
SiO2	mg/l						2			1.5
c.d.							6			3.2
RAL	µg/l						300			302
ILAL	µg/l						212			213
TOTN	µmol/l						46			46
org-N	µmol/l						20			20
inorg-N	µmol/l					103	26		70	26

METTE year 95-96 7 June 95 to 2 June 96 **File: Y95-96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		977				977	669			
H+		35	0	12	12	47	45	35	48	67
Na		38	0	0	0	39	50	39	40	75
K		2	0	0	0	2	5	2	2	7
Ca		8	0	0	0	8	6	8	8	9
Mg		11	0	0	0	11	12	11	11	17
Al		0	0	0	0	0	5	0	0	7
NH4		32	0	5	5	37	7	32	38	10
NO3		38	0	10	10	47	15	38	49	23
Cl		44	0	0	0	45	45	46	46	67
SO4		51	0	7	7	58	41	52	59	61
A-		-8	0	0	0	-8	28	-8	-8	42
sum+		125	0	17	17	142	129	128	146	193
sum-		125	0	17	17	142	129	128	146	193
SBC		91	0	5	5	96	80	93	98	119
SSA		133	0	17	17	150	101	136	154	151
alk		-43	0	-12	-12	-54	-21	-44	-55	-31
TOC	mg/l						8.2			12.2
SiO2	mg/l						1			1.9
c.d.							7			3.4
RAL	µg/l						197			294
ILAL	µg/l						151			225
TOTN	µmol/l						38			56
TOTP	µmol/l						4			6
org-N	µmol/l						16			23
inorg-N	µmol/l					84	22		86	33

METTE year 96-97 03 June 1996 to 28 April 1997 **File: Y96-97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		997				997	775			
H+		26	0	12	12	38	51	26	39	66
Na		73	-14	0	-14	59	59	73	60	76
K		3	0	0	0	3	2	3	3	3
Ca		8	-1	0	-1	7	7	8	7	9
Mg		19	-3	0	-3	16	14	19	16	18
Al		0	0	0	0	0	5	0	0	6
NH4		22	0	5	5	28	3	23	28	4
NO3		30	0	10	10	39	9	30	40	11
Cl		91	-16	0	-16	75	75	91	75	97
SO4		42	-2	7	5	47	39	42	47	50
A-		-11	0	1	1	-10	18	-11	-10	23
sum+		151	-18	17	0	151	140	152	151	181
sum-		151	-18	17	0	151	140	152	151	181
SBC		125	-18	5	-12	113	85	125	113	109
SSA		162	-18	16	-1	161	123	163	162	158
alk		-37	0	-11	-11	-49	-38	-38	-49	-49
TOC	mg/l						7.8			10.0
SiO2	mg/l						1			1.8
c.d.							4			2.3
RAL	µg/l						196			253
ILAL	µg/l						149			192
TOTN	µmol/l						26			33
org-N	µmol/l						14			18
inorg-N	µmol/l					67.2	12		67.4	15

METTE year 97-98 29 Apr 97 to 24 May 98 **File: Y97-98.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		1198				1198	1073			
H+		32	0	12	12	44	67	27	37	63
Na		41	39	0	39	80	90	34	67	84
K		3	1	0	1	3	5	2	3	5
Ca		10	2	0	2	12	12	8	10	11
Mg		7	9	0	9	16	21	5	13	20
Al		0	0	0	0	0	7	0	0	6
NH4		40	0	5	5	45	9	33	38	8
NO3		46	0	10	10	56	30	39	47	28
Cl		51	46	0	46	96	96	42	80	90
SO4		52	5	7	12	64	62	44	53	57
A-		-17	0	0	1	-16	23	-14	-14	21
sum+		132	51	17	68	200	211	110	167	197
sum-		132	50	17	68	200	211	110	167	197
SBC		100	51	5	56	156	137	83	130	128
SSA		149	50	17	67	216	188	124	180	176
alk		-49	0	-12	-11	-60	-51	-41	-50	-48
TOC	mg/l						12.0			11.2
SiO2	mg/l						2			1.9
c.d.							4			1.9
RAL	µg/l						268			250
ILAL	µg/l						202			188
TOTN	µmol/l						72			67
TOTP	µmol/l						14			13
org-N	µmol/l						33			31
inorg-N	µmol/l					101	39		84	37

METTE year 98-99 98 25 May to 25 May 99 **File: Y98-99.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		1529				1529	1308			
H+		36	0	12	12	48	84	23	31	64
Na		79	10	0	10	89	104	51	58	79
K		6	0	0	0	6	3	4	4	2
Ca		14	0	0	0	14	15	9	9	12
Mg		6	2	0	2	9	23	4	6	18
Al		0	0	0	0	0	6	0	0	4
NH4		35	0	5	5	40	12	23	26	9
NO3		44	0	10	10	54	25	29	35	19
Cl		93	12	0	12	106	106	61	69	81
SO4		57	1	7	8	65	67	37	43	51
A-		-19	0	0	0	-19	50	-13	-12	38
sum+		175	13	17	31	206	247	114	134	189
sum-		175	13	17	31	206	247	114	134	189
SBC		139	13	5	19	158	157	91	103	120
SSA		194	13	17	30	224	197	127	147	151
alk		-55	0	-12	-12	-67	-40	-36	-44	-30
TOC	mg/l						17.5			13.4
SiO2	mg/l						2			1.5
c.d.							6			2.9
RAL	µg/l						332			254
ILAL	µg/l						275			210
TOTN	µmol/l						69			53
TOTP	µmol/l						11			8
org-N	µmol/l						32			25
inorg-N	µmol/l					94	37		61	28

4.12 Years – CECILIE

CECILIE year 94-95 28 May 94 to 6 June 95 **File: Y94-95.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		1480				1480	1306			
H+		48	0	13	13	61	95	33	41	73
Na		91	32	0	32	123	130	61	83	100
K		3	1	0	1	4	5	2	3	4
Ca		9	1	0	1	10	14	6	7	11
Mg		21	7	0	7	28	25	14	19	19
Al		0	0	0	0	0	10	0	0	8
NH4		40	0	5	5	45	6	27	31	5
NO3		48	0	10	10	58	28	33	39	22
Cl		105	38	0	38	142	142	71	96	109
SO4		66	4	8	12	78	75	45	53	58
A-		-7	0	0	0	-7	41	-5	-5	31
sum+		212	42	18	59	271	286	143	183	219
sum-		212	41	18	59	271	286	143	183	219
SBC		164	42	5	47	210	181	111	142	139
SSA		219	41	18	59	278	246	148	188	188
alk		-56	0	-13	-12	-68	-65	-38	-46	-49
TOC	mg/l						12.4			9.5
SiO2	mg/l						2			1.3
c.d.							7			3.3
RAL	µg/l						315			241
ILAL	µg/l						217			166
TOTN	µmol/l						56			43
org-N	µmol/l						21			16
inorg-N	µmol/l					103	35		70	27

CECILIE year 95-96 7 June 95 to 2 June 96 **File: Y95-96.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		Wet.	mar.	part.	subtot.	total	total	Wet	total	total
H2O		977				977	903			
H+		35	0	12	12	47	59	35	48	65
Na		38	17	0	17	55	71	39	56	78
K		2	0	0	0	2	7	2	3	8
Ca		8	1	0	1	9	10	8	9	11
Mg		11	4	0	4	14	16	11	15	18
Al		0	0	0	0	0	5	0	0	6
NH4		32	0	5	5	37	7	32	38	8
NO3		38	0	10	10	47	21	38	49	24
Cl		44	19	0	19	64	64	46	65	71
SO4		51	2	7	9	60	59	52	61	65
A-		-8	0	0	0	-8	30	-8	-8	33
sum+		125	22	17	39	164	174	128	168	193
sum-		125	21	17	39	164	174	128	168	193
SBC		91	22	5	27	117	110	93	120	122
SSA		133	21	17	38	171	144	136	175	160
alk		-43	0	-12	-12	-54	-34	-44	-55	-38
TOC	mg/l						10.0			11.1
SiO2	mg/l						2			1.7
c.d.							6			3.0
RAL	µg/l						210			233
ILAL	µg/l						156			173
TOTN	µmol/l						49			55
TOTP	µmol/l						7			7
org-N	µmol/l						21			23
inorg-N	µmol/l					84	28		86	31

CECILIE year 96-97 03 June 1996 to 28 April 1997 **File: Y96-97.XLS**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		997				997	831			
H+		26	0	12	12	38	56	26	39	68
Na		73	-2	0	-2	71	76	73	71	91
K		3	0	0	0	3	3	3	3	3
Ca		8	0	0	0	7	10	8	8	12
Mg		19	0	0	0	18	18	19	18	21
Al		0	0	0	0	0	6	0	0	7
NH4		22	0	5	5	28	5	23	28	6
NO3		30	0	10	10	39	13	30	40	16
Cl		91	-2	0	-2	89	89	91	89	107
SO4		42	0	7	7	48	49	42	48	59
A-		-11	0	1	1	-10	22	-11	-10	26
sum+		151	-2	17	15	166	173	151	167	208
sum-		151	-2	17	15	166	173	151	167	208
SBC		125	-2	5	3	128	110	125	128	133
SSA		162	-2	16	14	177	151	163	177	182
alk		-38	0	-11	-11	-49	-41	-38	-49	-49
TOC	mg/l						8.5			10.2
SiO2	mg/l						2			1.9
c.d.							5			2.6
RAL	µg/l						215			259
ILAL	µg/l						154			186
TOTN	µmol/l						37			44
org-N	µmol/l						19			22
inorg-N	µmol/l					67.2	18		67.4	22

CECILIE year 97-98 29 Apr 97 to 24 May 98 **File: Y97-98.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		1198				1198	1046			
H+		32	0	12	12	44	37	27	37	36
Na		41	48	0	48	89	179	34	74	171
K		3	1	0	1	4	2	2	3	2
Ca		10	2	0	2	12	9	8	10	9
Mg		7	11	0	11	17	11	5	15	10
Al		0	0	0	0	0	2	0	0	2
NH4		40	0	5	5	45	11	33	38	11
NO3		46	0	10	10	56	19	39	47	18
Cl		51	56	0	56	106	106	42	89	102
SO4		52	6	7	13	65	70	44	54	66
A-		-17	0	0	1	-16	56	-14	-14	53
sum+		132	62	17	79	211	251	110	176	240
sum-		132	61	17	79	211	251	110	176	240
SBC		100	62	5	67	167	212	83	139	202
SSA		149	61	17	78	227	195	124	190	186
alk		-49	0	-12	-11	-60	17	-41	-50	16
TOC	mg/l						15.2			14.5
SiO2	mg/l						2			1.8
c.d.							7			3.7
RAL	µg/l						203			194
ILAL	µg/l						184			176
TOTN	µmol/l						58			56
TOTP	µmol/l						106			102
org-N	µmol/l						28			27
inorg-N	µmol/l					101	30		84	29

CECILIE year 98-99 98 25 May to 25 May 99 **File: Y98-99.xls**

		FLUX						CONCENTRATION		
			dry			In	Out		In	Out
Param.		**Wet.**	**mar.**	**part.**	**subtot.**	**total**	**total**	**Wet**	**total**	**total**
H2O		1529				1529	1522			
H+		36	0	12	12	48	63	23	31	42
Na		79	29	0	29	107	180	51	70	118
K		6	1	0	1	6	2	4	4	1
Ca		14	1	0	1	15	15	9	10	10
Mg		6	7	0	7	13	14	4	8	9
Al		0	0	0	0	0	3	0	0	2
NH4		35	0	5	5	40	10	23	26	7
NO3		44	0	10	10	54	16	29	35	11
Cl		93	34	0	34	127	127	61	83	84
SO4		57	3	7	10	67	74	37	44	49
A-		-19	0	0	1	-19	69	-13	-12	45
sum+		175	37	17	54	229	287	114	150	188
sum-		175	37	17	54	229	287	114	150	188
SBC		139	37	5	42	182	221	91	119	145
SSA		194	37	17	54	248	218	127	162	143
alk		-55	0	-12	-11	-67	3	-36	-44	2
TOC	mg/l						20.0			13.2
SiO2	mg/l						2			1.3
c.d.							7			3.4
RAL	µg/l						289			190
ILAL	µg/l						261			172
TOTN	µmol/l						64			42
TOTP	µmol/l						30			20
org-N	µmol/l						38			25
inorg-N	µmol/l					94	26		61	17

5. METROLOGY

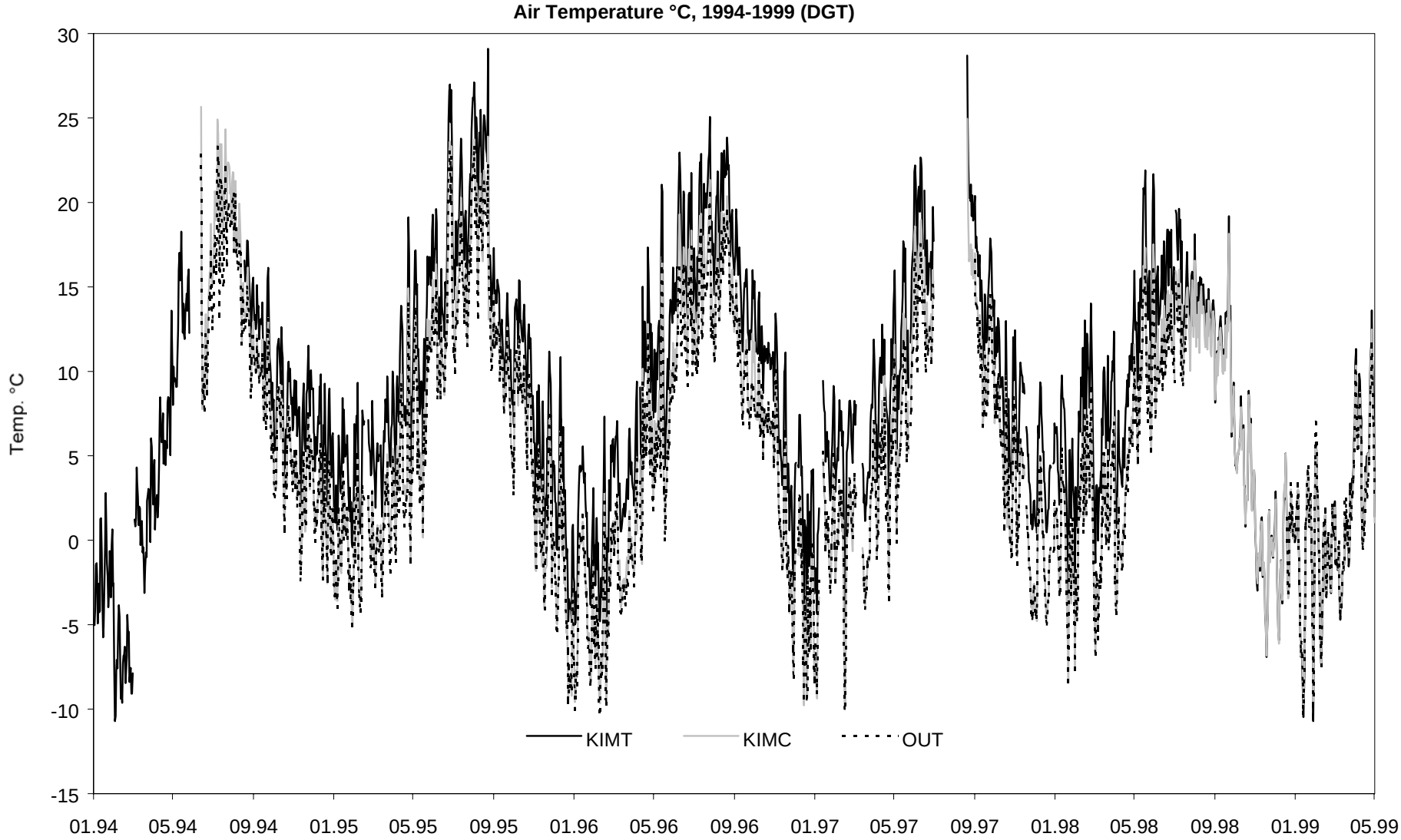
5.1 Contents CLIMEX - database

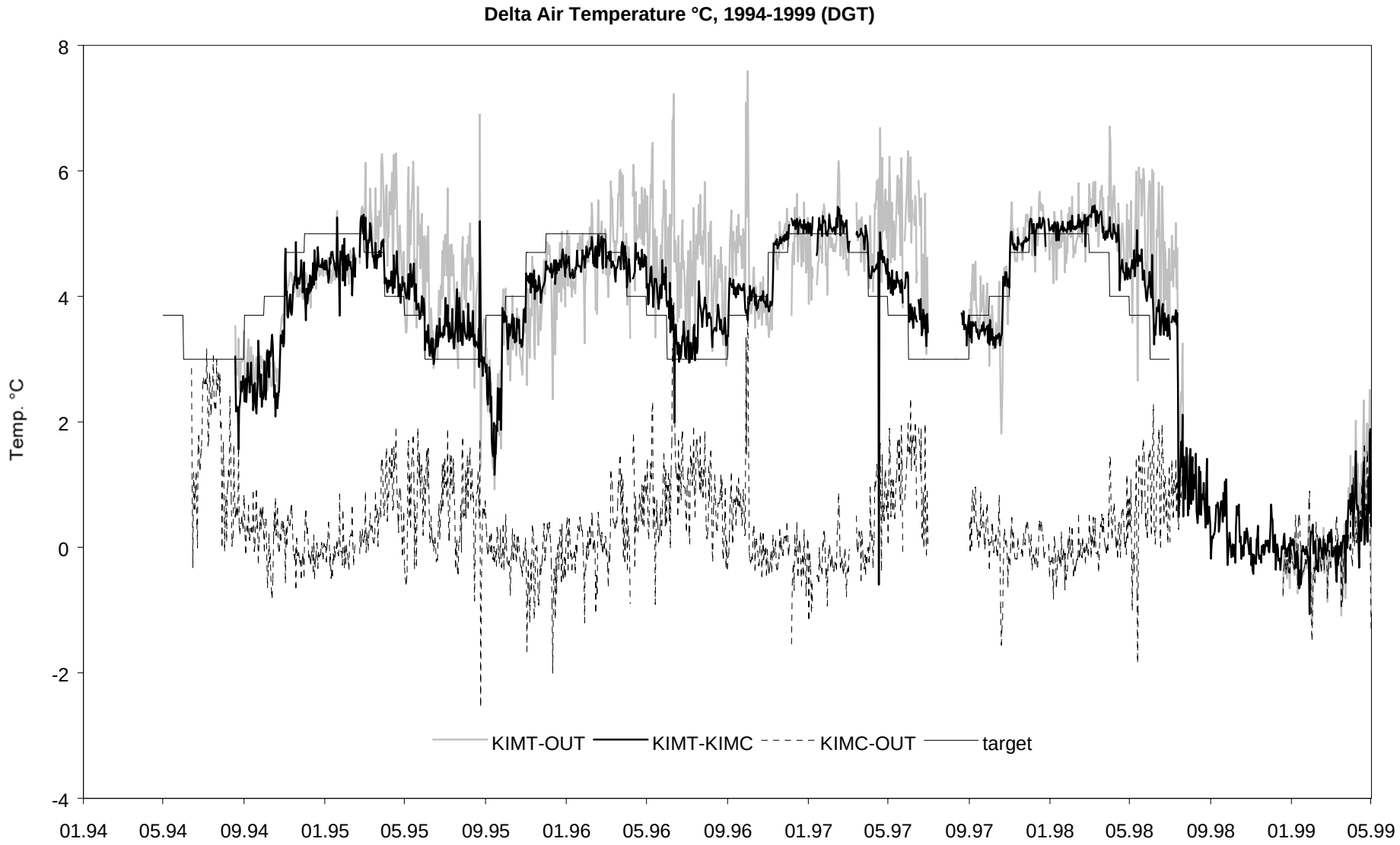
Code	Log	Param	Field	Point	Depth	Medium	Unit	Table	From:	To:
001	DGT	Temp	KIM-T	m	m	Air	°C	t_temp	01.01.94	01.05.99
002	DGT	Temp	KIM-C	m	m	Air	°C	t_temp	13.06.94	01.05.99
003	DGT	Temp	OUT	m	m	Air	°C	t_temp	13.06.94	01.05.99
004	DGT	Temp	KIM-T	1	m	m	°C	t_spot1-6	13.06.94	01.05.99
005	DGT	Temp	KIM-T	2	m	m	°C	t_spot1-6	13.06.94	01.05.99
006	DGT	Temp	KIM-T	3	m	m	°C	t_spot1-6	13.06.94	01.05.99
007	DGT	Temp	KIM-T	4	m	m	°C	t_spot1-6	13.06.94	01.05.99
008	DGT	Temp	KIM-T	5	m	m	°C	t_spot1-6	13.06.94	01.05.99
009	DGT	Temp	KIM-T	6	m	m	°C	t_spot1-6	13.06.94	01.05.99
010	DGT	Temp	KIM-C	1	m	m	°C	t_spot1-6	13.06.94	01.05.99
011	DGT	Temp	KIM-C	4	m	m	°C	t_spot1-6	09.03.95	01.05.99
012	DGT	Temp	KIM-C	5	m	m	°C	t_spot1-6	09.03.95	01.05.99
013	DGT	Temp	KIM-C	6	m	m	°C	t_spot1-6	09.03.95	01.05.99
014	AAC	Temp	KIM-T	1	m	Air	°C	t_spot1-19	08.04.94	05.01.96
015	AAC	Temp	KIM-T	2	m	Air	°C	t_spot1-19	08.04.94	05.01.96
016	AAC	Temp	KIM-T	3	m	Air	°C	t_spot1-19	08.04.94	05.01.96
017	AAC	Temp	KIM-T	4	m	Air	°C	t_spot1-19	08.04.94	05.01.96
018	AAC	Temp	KIM-T	5	m	Air	°C	t_spot1-19	08.04.94	05.01.96
019	AAC	Temp	KIM-T	6	m	Air	°C	t_spot1-19	08.04.94	05.01.96
020	AAC	Temp	KIM-T	7	m	Air	°C	t_spot1-19	08.04.94	05.01.96
021	AAC	Temp	KIM-T	8	m	Air	°C	t_spot1-19	08.04.94	05.01.96
022	AAC	Temp	KIM-T	9	m	Air	°C	t_spot1-19	08.04.94	05.01.96
023	AAC	Temp	KIM-T	10	m	Air	°C	t_spot1-19	08.04.94	05.01.96
024	AAC	Temp	KIM-T	11	m	Air	°C	t_spot1-19	08.04.94	05.01.96
025	AAC	Temp	KIM-T	12	m	Air	°C	t_spot1-19	08.04.94	05.01.96
026	AAC	Temp	KIM-T	13	m	Air	°C	t_spot1-19	08.04.94	05.01.96
027	AAC	Temp	KIM-T	14	m	Air	°C	t_spot1-19	08.04.94	05.01.96
028	AAC	Temp	KIM-T	15	m	Air	°C	t_spot1-19	08.04.94	05.01.96
029	AAC	Temp	KIM-T	16	m	Air	°C	t_spot1-19	08.04.94	05.01.96
030	AAC	Temp	KIM-T	17	m	Air	°C	t_spot1-19	08.04.94	05.01.96
031	AAC	Temp	KIM-T	18	m	Air	°C	t_spot1-19	08.04.94	05.01.96
032	AAC	Temp	KIM-T	19	m	Air	°C	t_spot1-19	08.04.94	05.01.96
033	CR-10	Temp	EGIL-C	Ref	-30	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
034	CR-10	Temp	EGIL-T	A1	-30	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
035	CR-10	Temp	EGIL-T	A2	-30	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
036	CR-10	Temp	EGIL-T	A3	-30	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
037	CR-10	Temp	EGIL-C	Ref	-15	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
038	CR-10	Temp	EGIL-T	A1	-15	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
039	CR-10	Temp	EGIL-T	A2	-15	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
040	CR-10	Temp	EGIL-T	A3	-15	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
041	CR-10	Temp	EGIL-C	Ref	-5	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
042	CR-10	Temp	EGIL-T	A1	-5	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
043	CR-10	Temp	EGIL-T	A2	-5	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
044	CR-10	Temp	EGIL-T	A3	-5	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
045	CR-10	Temp	EGIL-C	Ref	0	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
046	CR-10	Temp	EGIL-T	A1	0	Soil	°C	t_soilheat_EGIL	01.06.94	18.04.98

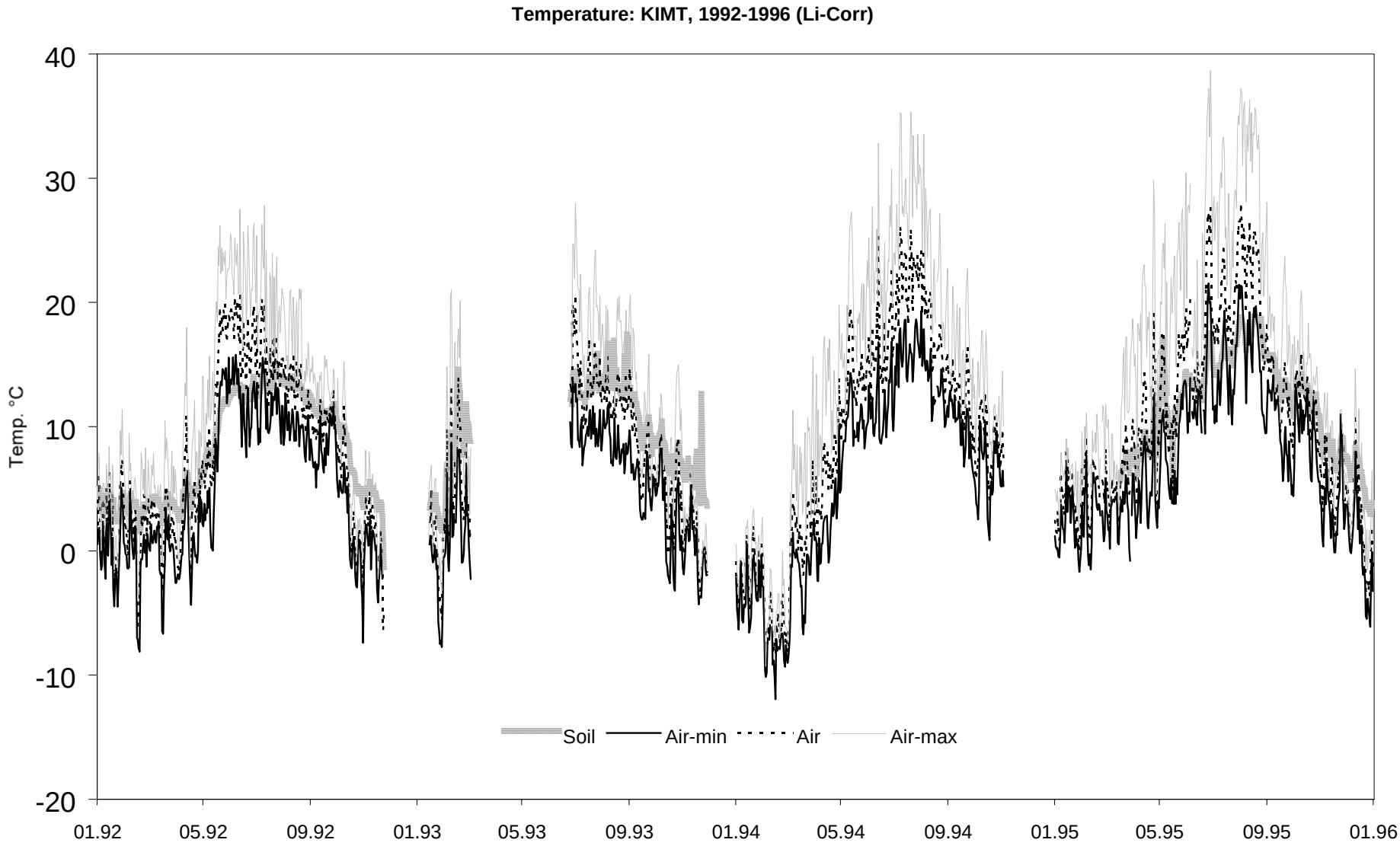
Code	Log	Param	Field	Point	Depth	Medium	Unit	Table	From:	To:
047	CR-10	Temp	EGIL-T	A2	0	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
048	CR-10	Temp	EGIL-T	A3	0	Soil	°C	t_soilheat_EGIL	08.05.94	18.04.98
049	CR-10	Temp	EGIL-C	Ref	+10	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
050	CR-10	Temp	EGIL-T	A1	+10	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
051	CR-10	Temp	EGIL-T	A2	+10	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
052	CR-10	Temp	EGIL-T	A3	+10	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
053	CR-10	Temp	EGIL-C	Ref	+25	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
054	CR-10	Temp	EGIL-T	A1	+25	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
055	CR-10	Temp	EGIL-T	A2	+25	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
056	CR-10	Temp	EGIL-T	A3	+25	Air	°C	t_soilheat_EGIL	08.05.94	18.04.98
057	AAC	Light	KIM-T	m	m	m	W/m2	t_light	01.01.95	09.01.97
058	AAC	Light	EGIL-T	m	m	m	W/m2	t_light	01.01.95	09.01.97
059	AAC	Light	OUT	m	m	m	W/m2	t_light	01.01.95	09.01.97
060	DGT	Light	OUT	m	m	m	W/m2	t_light	13.06.94	01.05.99
061	DGT	Hum	KIM-T	m	m	m	%	t_hum	28.06.94	01.05.99
062	DGT	Hum	KIM-C	m	m	m	%	t_hum	30.05.94	01.05.99
063	DGT	Hum	OUT	m	m	m	%	t_hum	10.04.96	03.12.96
064	AACtt	Hum	KIM-T	alt	m	m	%	t_hum	10.08.94	31.12.94
065	AACtt	Hum	OUT	fix	m	m	%	t_hum	28.06.94	06.05.96
066	DGT	CO2	KIM-T	m	m	m	ppm/10	t_co2	30.06.94	17.12.97
067	DGT	CO2	KIM-C	m	m	m	ppm/10	t_co2	09.06.95	12.07.98
068	DGT	CO2	OUT	m	m	m	ppm/10	t_co2	09.06.95	12.07.98
069	DGT	Wind	OUT	m	m	m	m/s	t_wind	13.06.94	01.05.99
070	DGT	Vent	KIM-T	m	m	m	%	t_vents	13.06.94	01.05.99
071	man	Precip	ROLF	m	m	m	mm	t_hydr_man	30.07.84	11.10.99
072	man	Runoff	ROLF	m	m	m	mm	t_hydr_man	14.12.84	11.10.99
073	man	Precip	METTE	m	m	m	mm	t_hydr_man	02.07.93	10.08.99
074	man	Runoff	METTE	m	m	m	mm	t_hydr_man	02.07.93	10.08.99
075	man	Precip	CECILIE	m	m	m	mm	t_hydr_man	02.07.93	10.08.99
076	man	Runoff	CECILIE	m	m	m	mm	t_hydr_man	02.07.93	10.08.99
077	man	Precip	KIM	m	m	m	mm	t_hydr_man	30.07.84	11.10.99
078	man	Runoff	KIM	m	m	m	mm	t_hydr_man	14.12.84	11.10.99
079	man	Precip	EGIL	m	m	m	mm	t_hydr_man	30.07.84	27.07.98
080	man	Runoff	EGIL	m	m	m	mm	t_hydr_man	14.12.84	27.07.98
081	CR-10	Temp	KIM-T	m	-30	Soil	°C	t_soilheat_KIM	02.10.95	31.05.97
082	CR-10	Temp	KIM-T	m	-15	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
083	CR-10	Temp	KIM-T	m	-5	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
084	CR-10	Temp	KIM-T	m	0	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
085	CR-10	Temp	KIM-T	m	+10	Air	°C	t_soilheat_KIM	27.09.95	31.05.97
086	CR-10	Temp	KIM-T	m	+25	Air	°C	t_soilheat_KIM	27.09.95	31.05.97
087	CR-10	Temp	KIM-C	m	-30	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
088	CR-10	Temp	KIM-C	m	-15	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
089	CR-10	Temp	KIM-C	m	-5	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
090	CR-10	Temp	KIM-C	m	0	Soil	°C	t_soilheat_KIM	02.10.95	31.05.97
091	CR-10	Temp	KIM-C	m	+10	Air	°C	t_soilheat_KIM	02.10.95	31.05.97
092	CR-10	Temp	KIM-C	m	+25	Air	°C	t_soilheat_KIM	02.10.95	31.05.97
093	CR-10	Temp	OUT	m	-30	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
094	CR-10	Temp	OUT	m	-15	Soil	°C	t_soilheat_KIM	02.10.95	31.05.97
095	CR-10	Temp	OUT	m	-5	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
096	CR-10	Temp	OUT	m	0	Soil	°C	t_soilheat_KIM	27.09.95	31.05.97
097	CR-10	Temp	OUT	m	+10	Air	°C	t_soilheat_KIM	27.09.95	31.05.97
098	CR-10	Temp	OUT	m	+25	Air	°C	t_soilheat_KIM	27.09.95	31.05.97

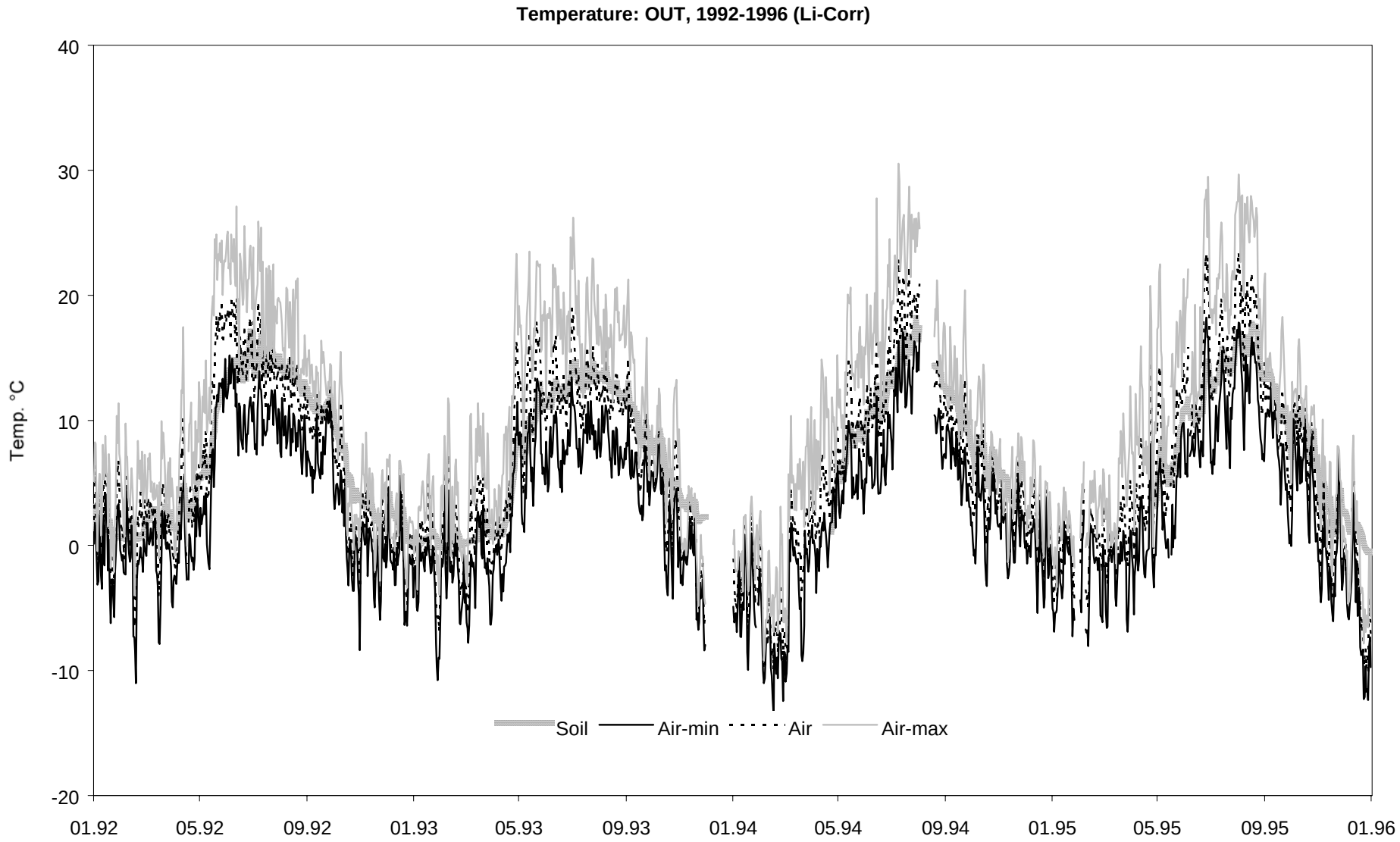
099	AAC	Precip	KIM	m	m	m	ltr	t_hydr_AAC	08.04.94	26.06.97
Code	**Log**	**Param**	**Field**	**Point**	**Depth**	**Medium**	**Unit**	**Table**	**From:**	**To:**
100	AAC	Runoff	KIM	m	m	m	ltr	t_hydr_AAC	17.04.94	26.06.97
101	AAC	Precip	EGIL	m	m	m	ltr	t_hydr_AAC	26.05.94	26.06.97
102	AAC	Runoff	EGIL	m	m	m	ltr	t_hydr_AAC	16.05.94	26.06.97
103	AAC	Precip	METTE	m	m	m	ltr	t_hydr_AAC	28.11.94	26.06.97
104	AAC	Runoff	METTE	m	m	m	ltr	t_hydr_AAC	12.12.94	26.06.97
B01	LI-CORR	Temp	KIM-T	m	m	Soil	°C	t_li-corr	01.01.92	31.12.95
B02	LI-CORR	Temp	KIM-T	m	m	Air-min	°C	t_li-corr	01.01.92	31.12.95
B03	LI-CORR	Temp	KIM-T	m	m	Air	°C	t_li-corr	01.01.92	31.12.95
B04	LI-CORR	Temp	KIM-T	m	m	Air-max	°C	t_li-corr	01.01.92	31.12.95
B05	LI-CORR	Temp	EGIL-T	m	m	Soil	°C	t_li-corr	01.01.92	31.12.95
B06	LI-CORR	Temp	EGIL-T	m	m	Air-min	°C	t_li-corr	01.01.92	31.12.95
B07	LI-CORR	Temp	EGIL-T	m	m	Air	°C	t_li-corr	01.01.92	31.12.95
B08	LI-CORR	Temp	EGIL-T	m	m	Air-max	°C	t_li-corr	01.01.92	31.12.95
B09	LI-CORR	Temp	OUT	m	m	Soil	°C	t_li-corr	01.01.92	31.12.95
B10	LI-CORR	Temp	OUT	m	m	Air-min	°C	t_li-corr	01.01.92	31.12.95
B11	LI-CORR	Temp	OUT	m	m	Air	°C	t_li-corr	01.01.92	31.12.95
B12	LI-CORR	Temp	OUT	m	m	Air-max	°C	t_li-corr	01.01.92	31.12.95
B13	LI-CORR	Light	KIM-T	m	m	m	MJoule	t_li-corr	01.01.92	31.12.95
B14	LI-CORR	Light	EGIL-T	m	m	m	MJoule	t_li-corr	01.01.92	31.12.95
B15	LI-CORR	Light	OUT	m	m	m	MJoule	t_li-corr	01.01.92	30.11.94

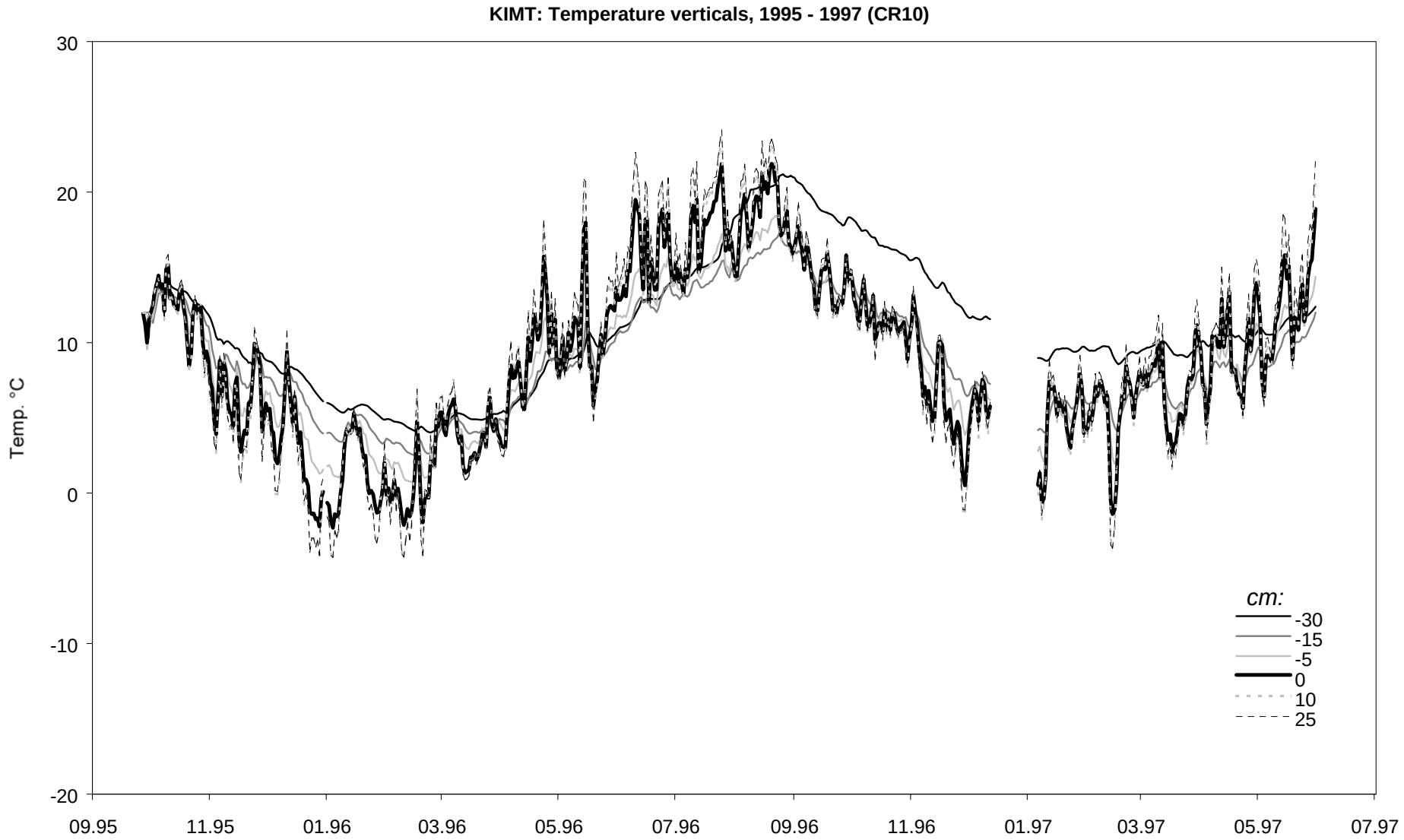
5.2 List of figures

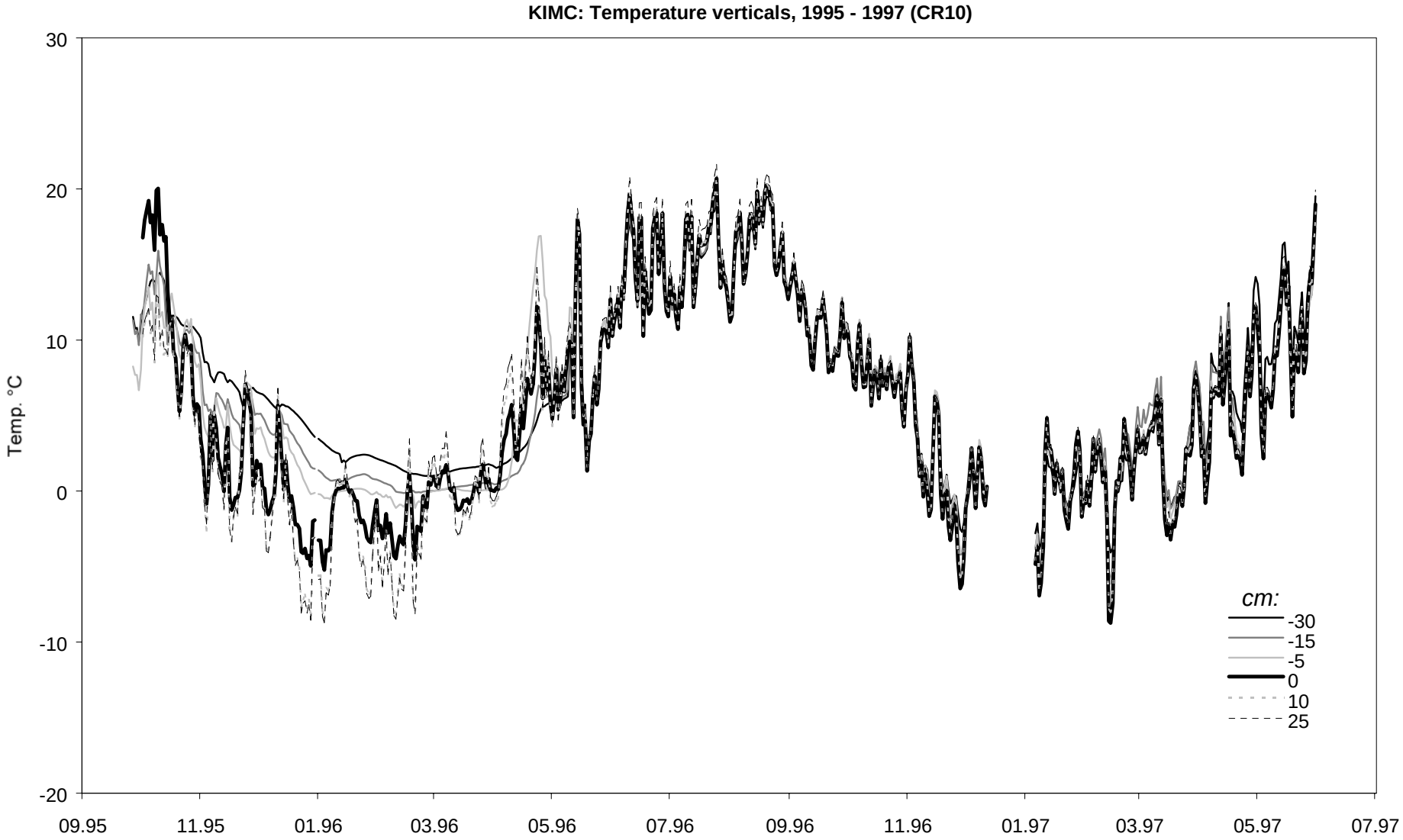

Air Temperature °C, 1994-1999 (DGT)
Temp. °C
30
25
20
15
10
5
0
-5
-10
-15
01.94
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
09.98
01.99
05.99
KIMT
KIMC
OUT

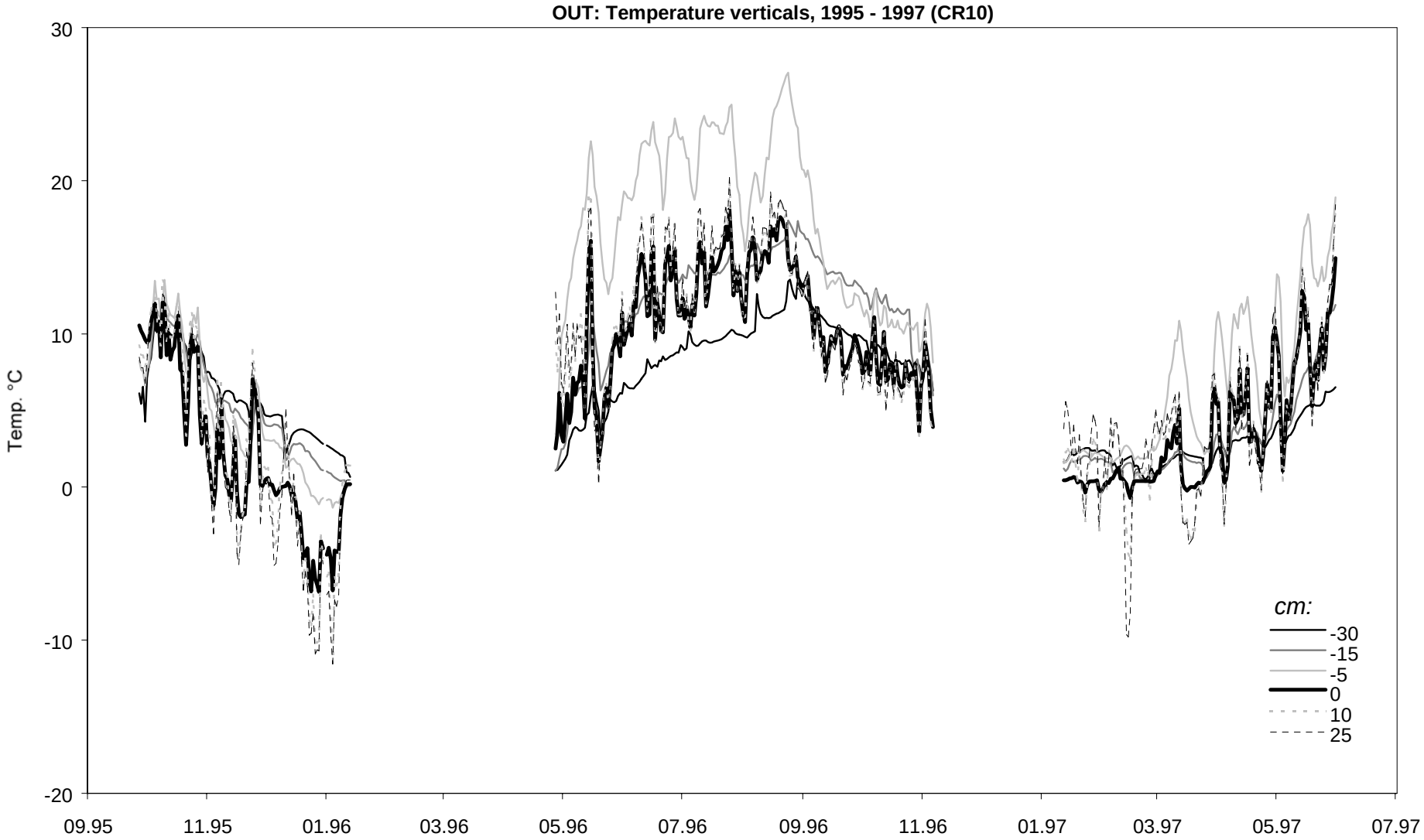

Delta Air Temperature °C, 1994-1999 (DGT)
Temp. °C
8
6
4
2
0
-2
-4
01.94
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
09.98
01.99
05.99
KIMT-OUT
KIMT-KIMC
KIMC-OUT
target

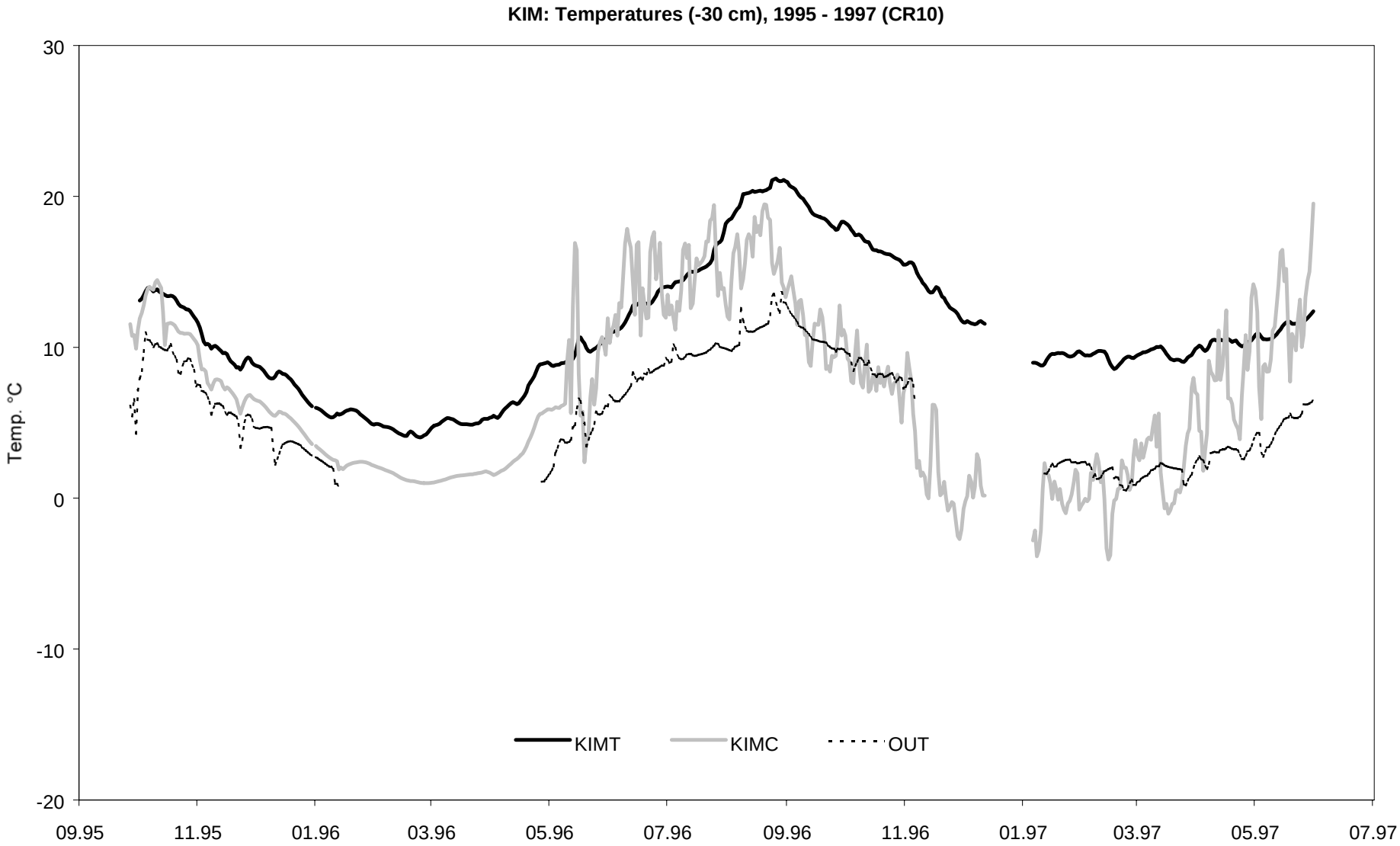

Temperature: KIMT, 1992-1996 (Li-Corr)
Temp. °C
40
30
20
10
0
-10
-20
01.92
05.92
09.92
01.93
05.93
09.93
01.94
05.94
09.94
01.95
05.95
09.95
01.96
Soil
Air-min
Air
Air-max

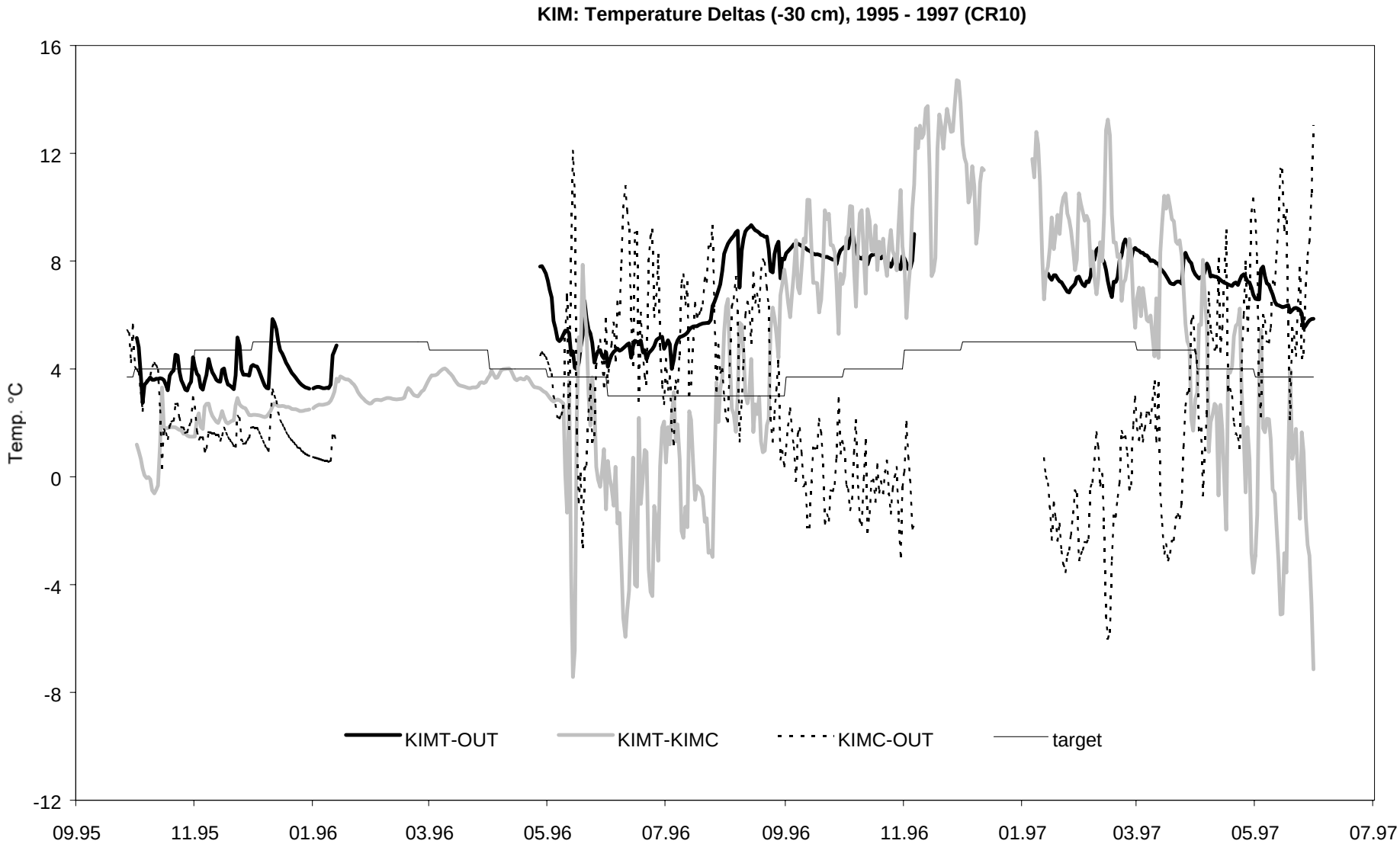

Temperature: OUT, 1992-1996 (Li-Corr)
Temp. °C
40
30
20
10
0
-10
-20
01.92
05.92
09.92
01.93
05.93
09.93
01.94
05.94
09.94
01.95
05.95
09.95
01.96
Soil
Air-min
Air
Air-max

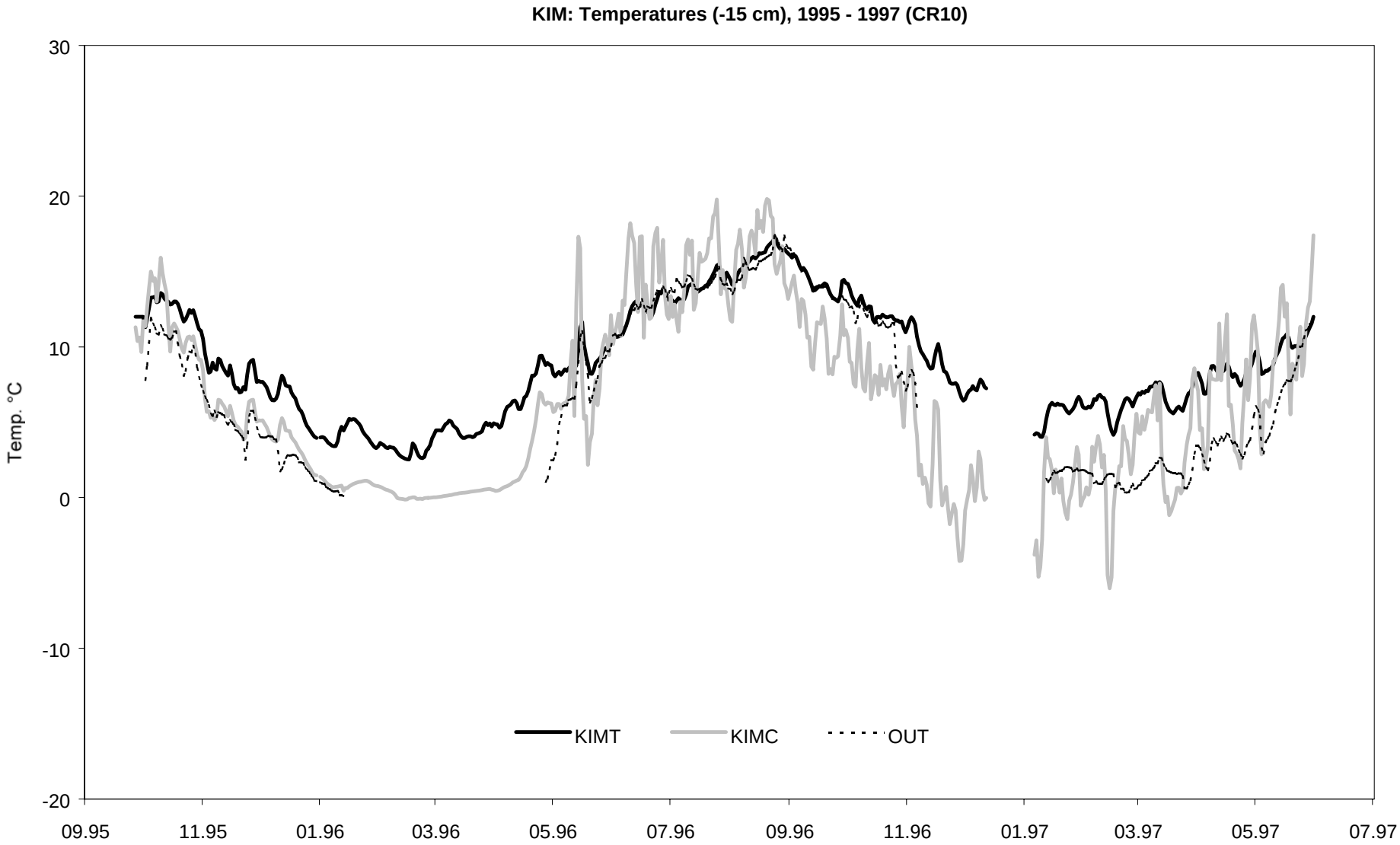

KIMT: Temperature verticals, 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
cm:
-30
-15
-5
0
10
25

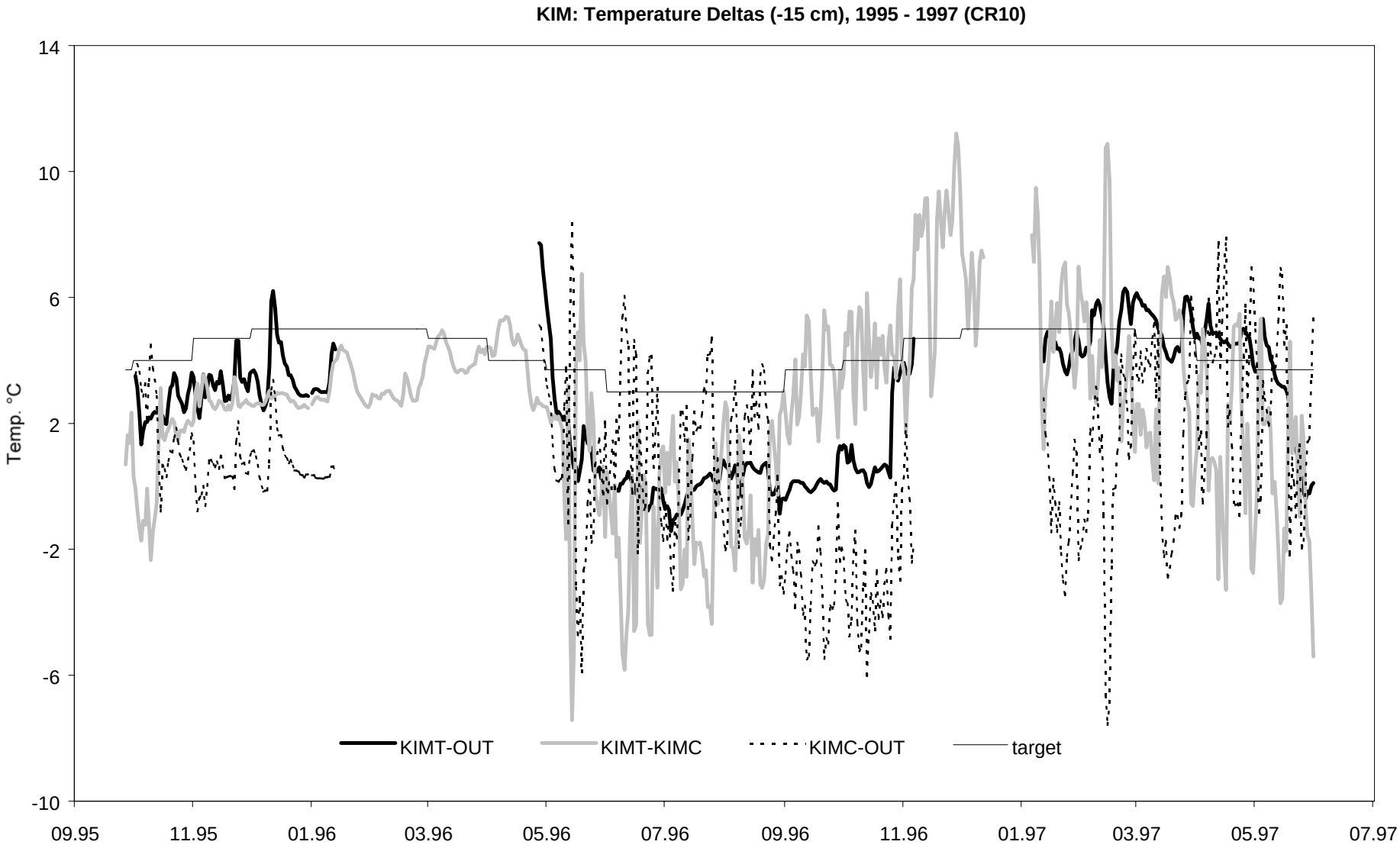

KIMC: Temperature verticals, 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
cm:
-30
-15
-5
0
10
25

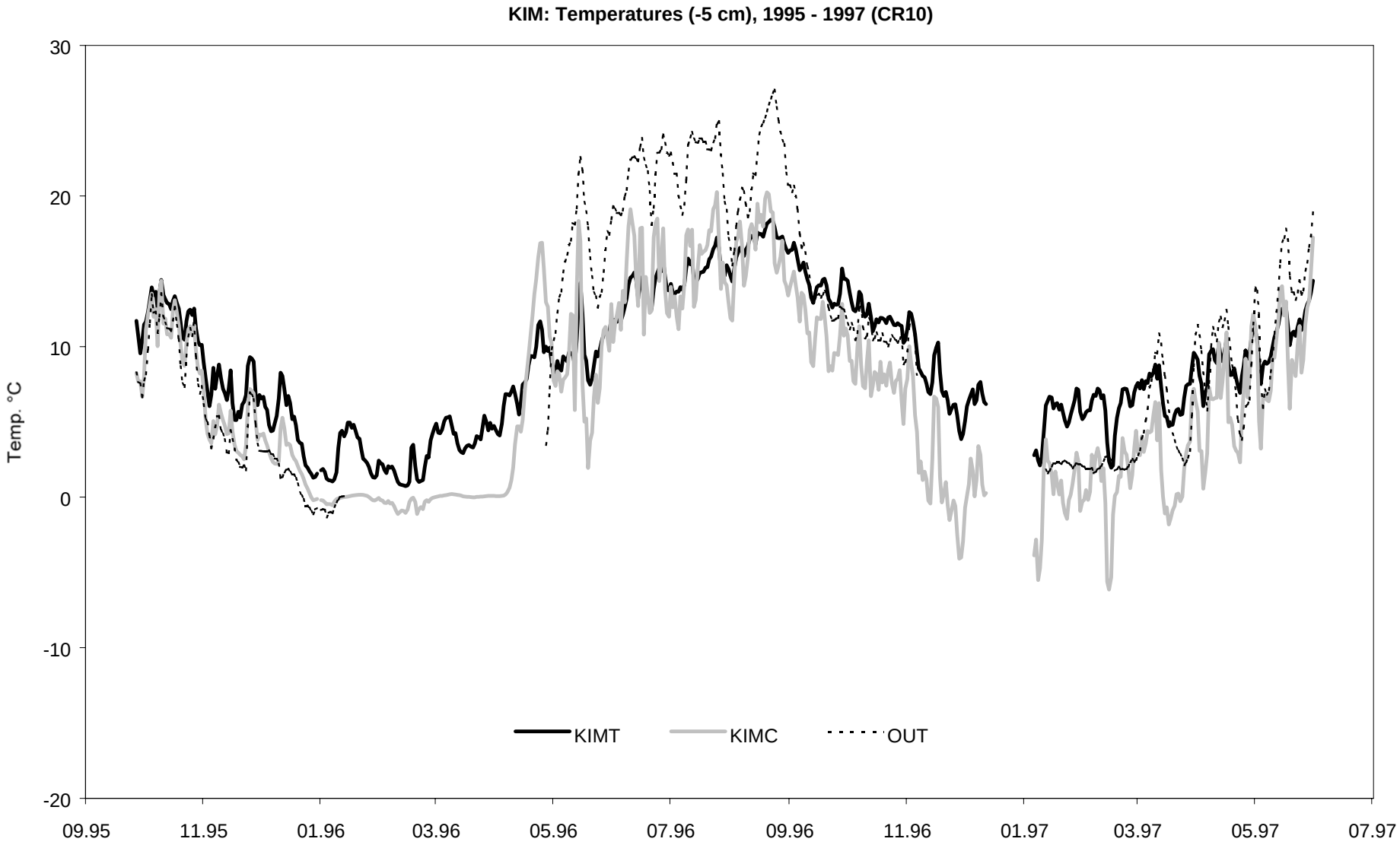

OUT: Temperature verticals, 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
cm:
-30
-15
-5
0
10
25

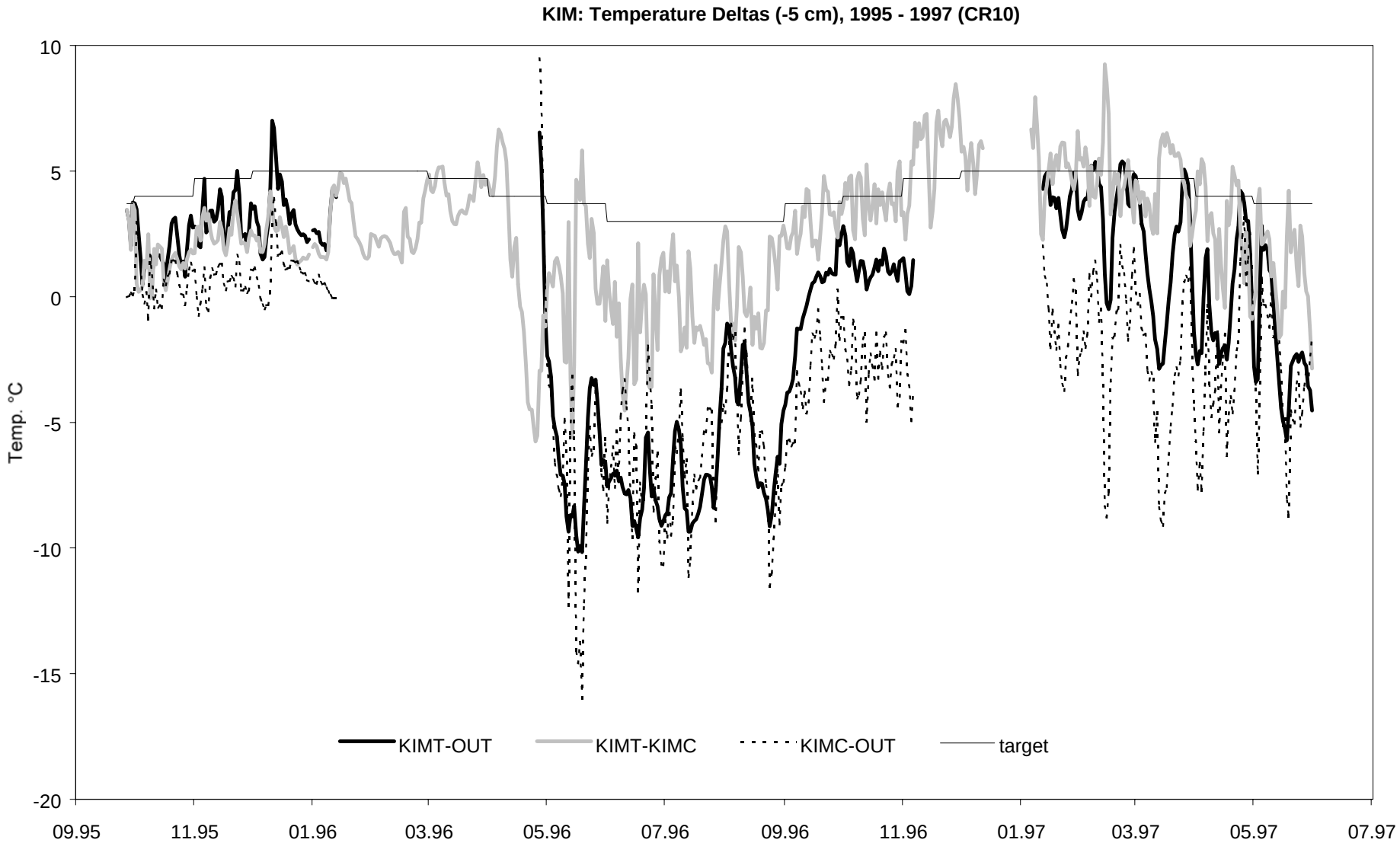

KIM: Temperatures (-30 cm), 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT
KIMC
OUT

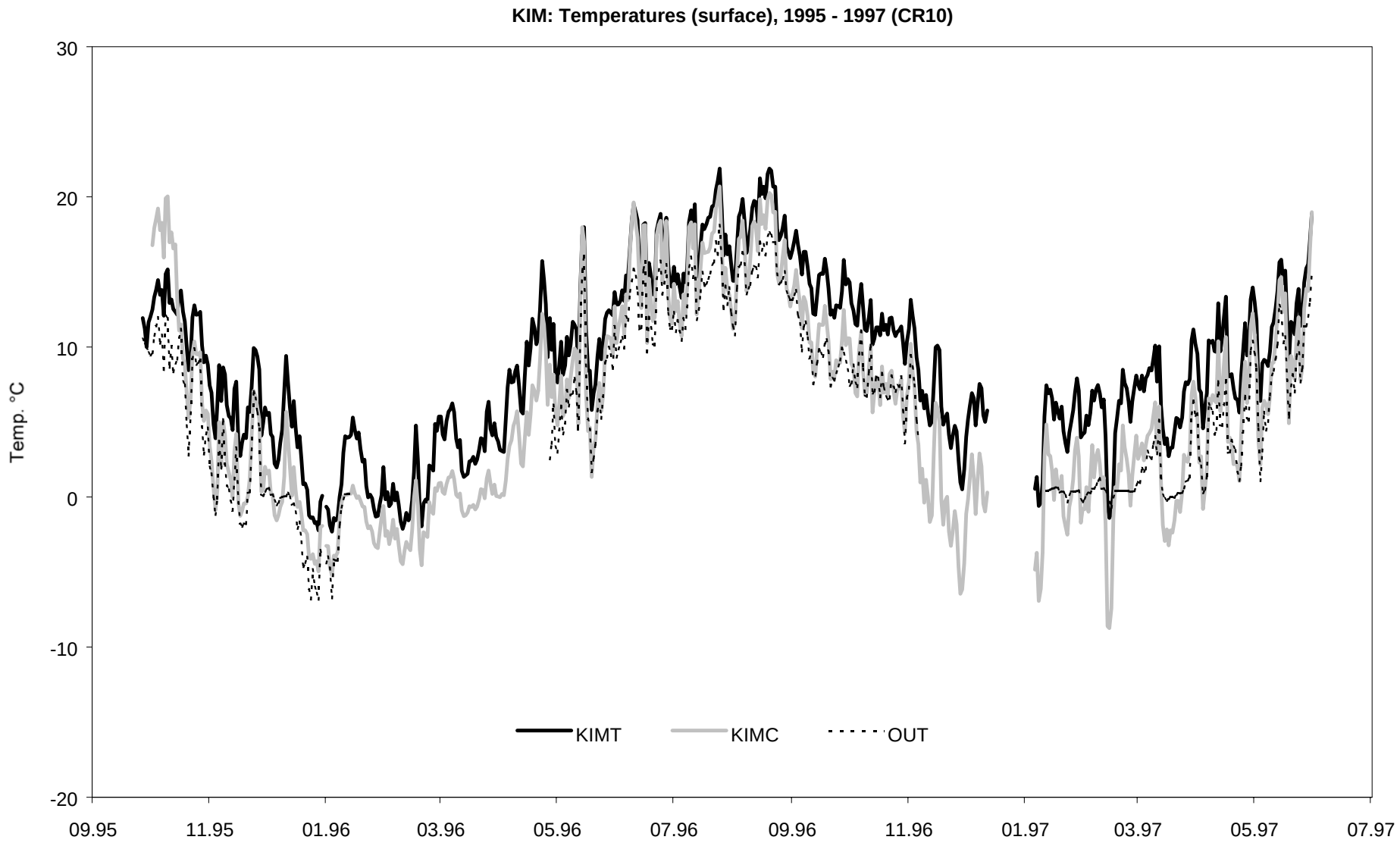

KIM: Temperature Deltas (-30 cm), 1995 - 1997 (CR10)
Temp. °C
16
12
8
4
0
-4
-8
-12
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT-OUT
KIMT-KIMC
KIMC-OUT
target

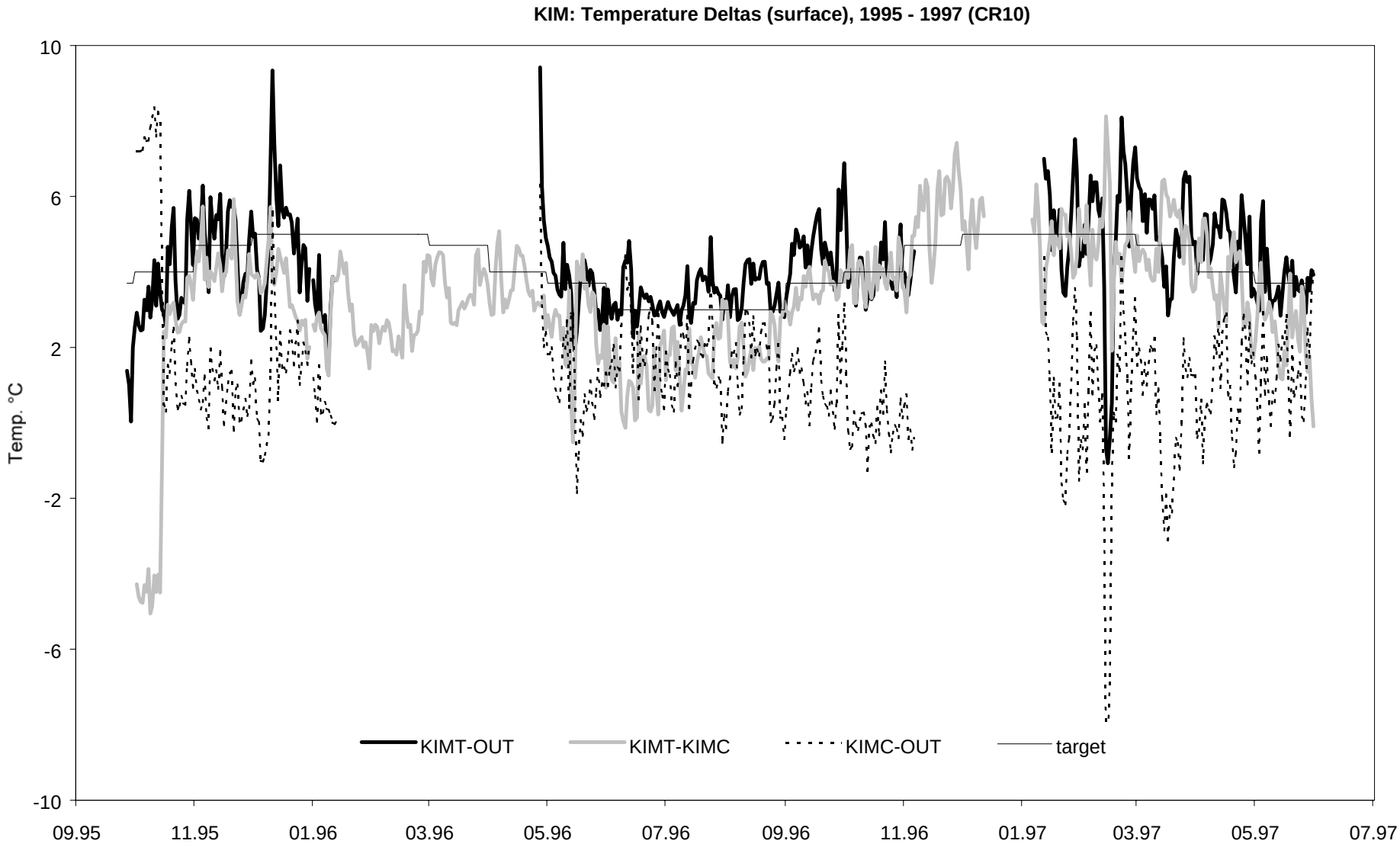

KIM: Temperatures (-15 cm), 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT
KIMC
OUT

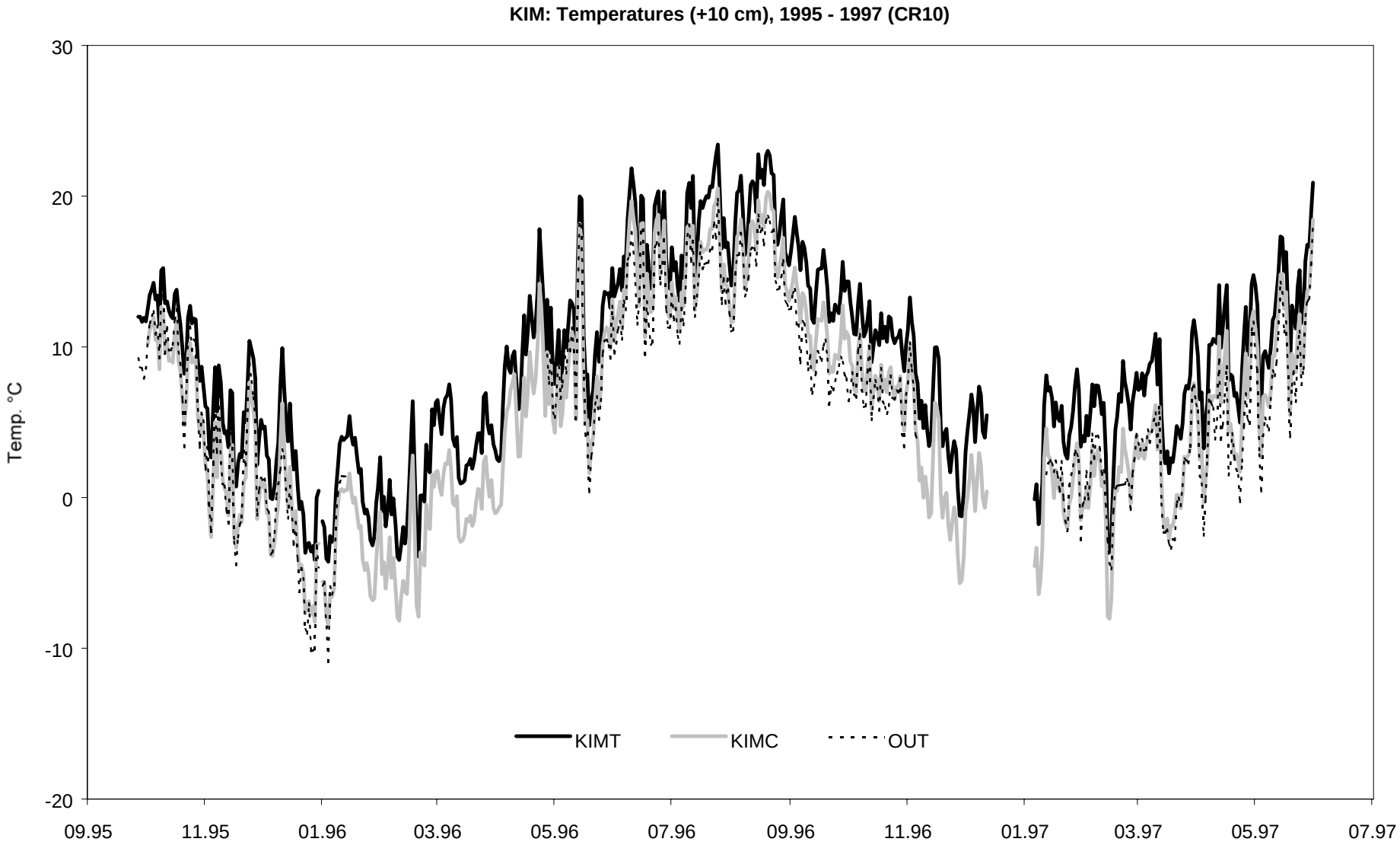

KIM: Temperature Deltas (-15 cm), 1995 - 1997 (CR10)
Temp. °C
14
10
6
2
-2
-6
-10
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT-OUT
KIMT-KIMC
KIMC-OUT
target

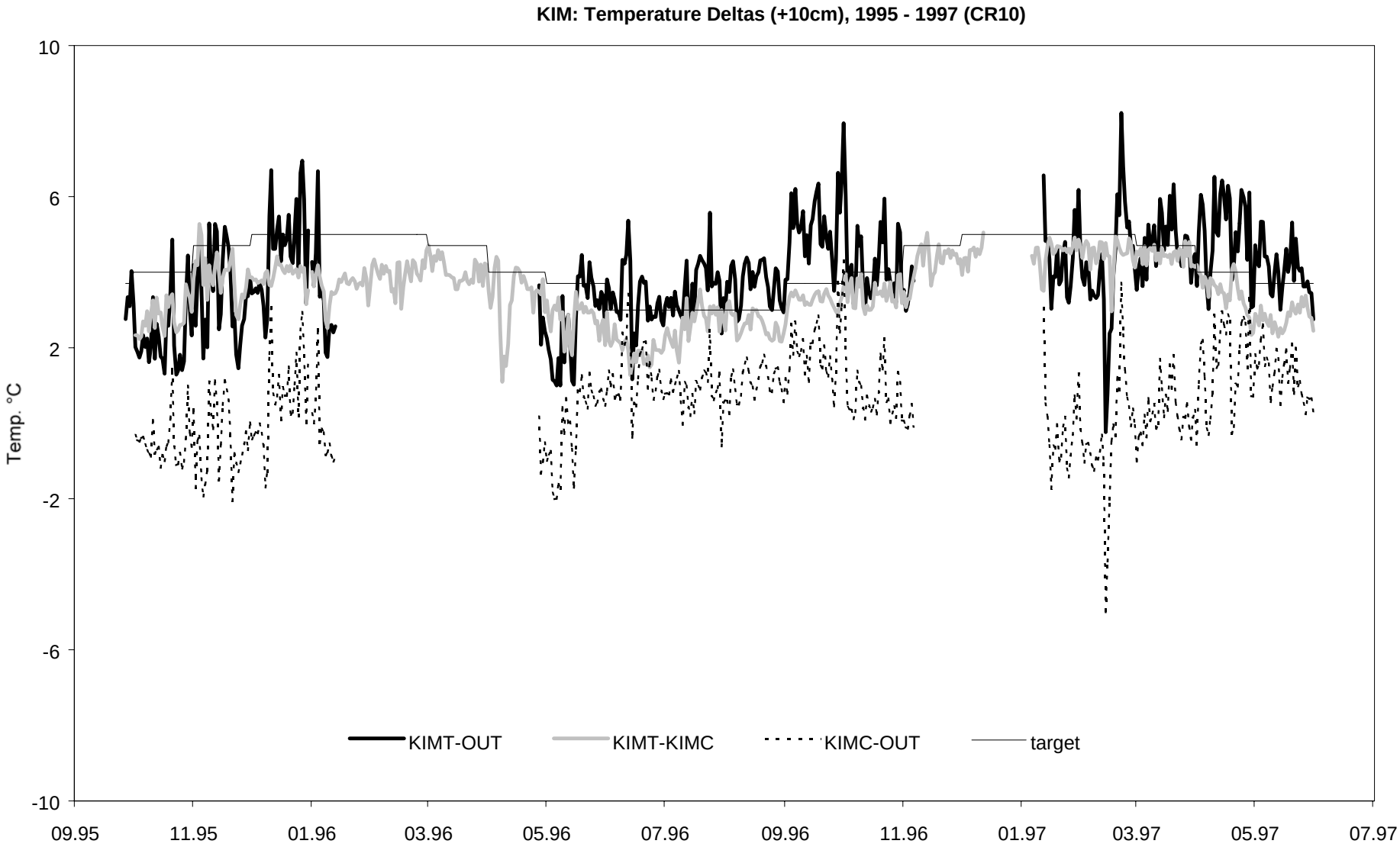

KIM: Temperatures (-5 cm), 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT
KIMC
OUT

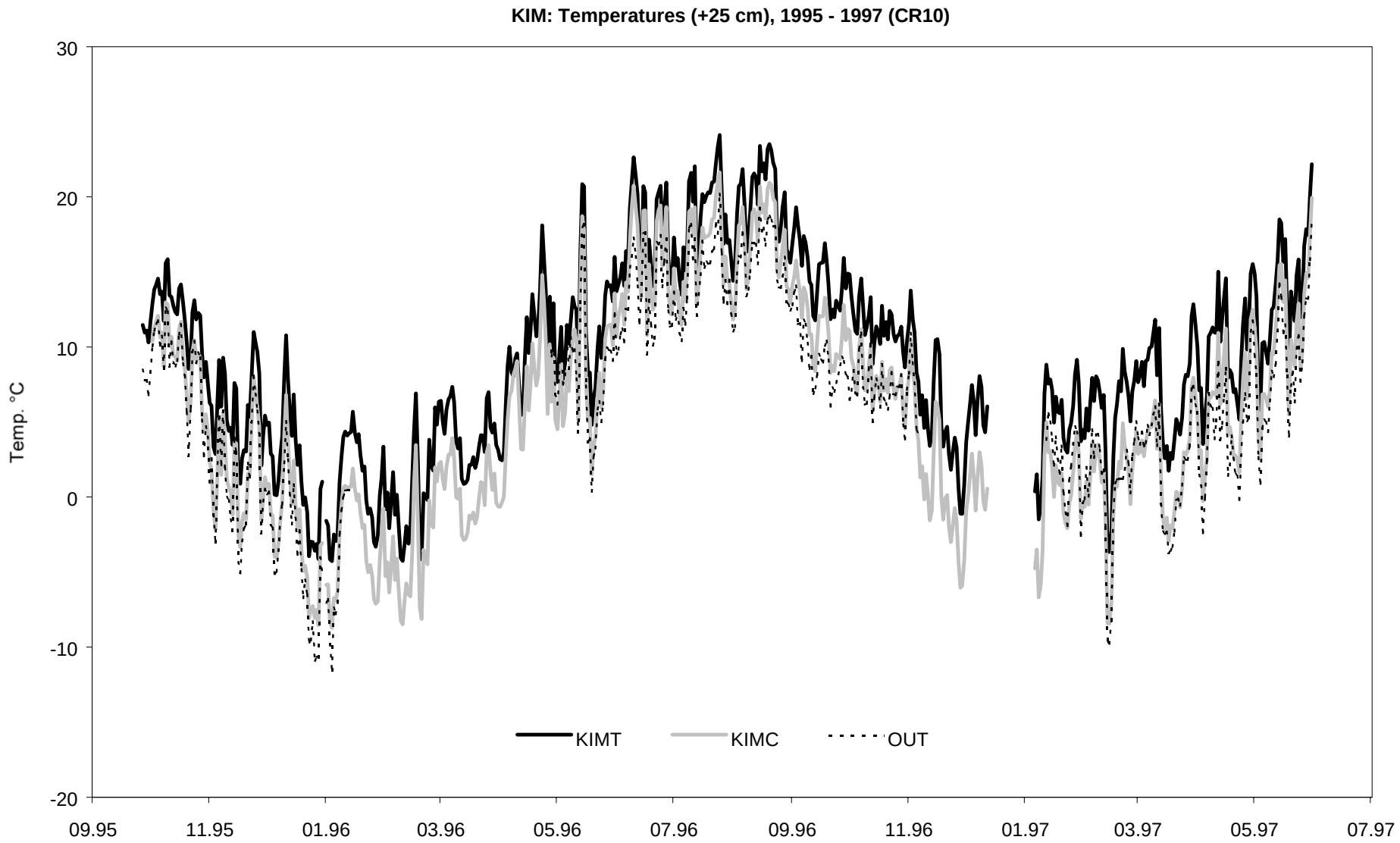

KIM: Temperature Deltas (-5 cm), 1995 - 1997 (CR10)
Temp. °C
10
5
0
-5
-10
-15
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT-OUT
KIMT-KIMC
KIMC-OUT
target

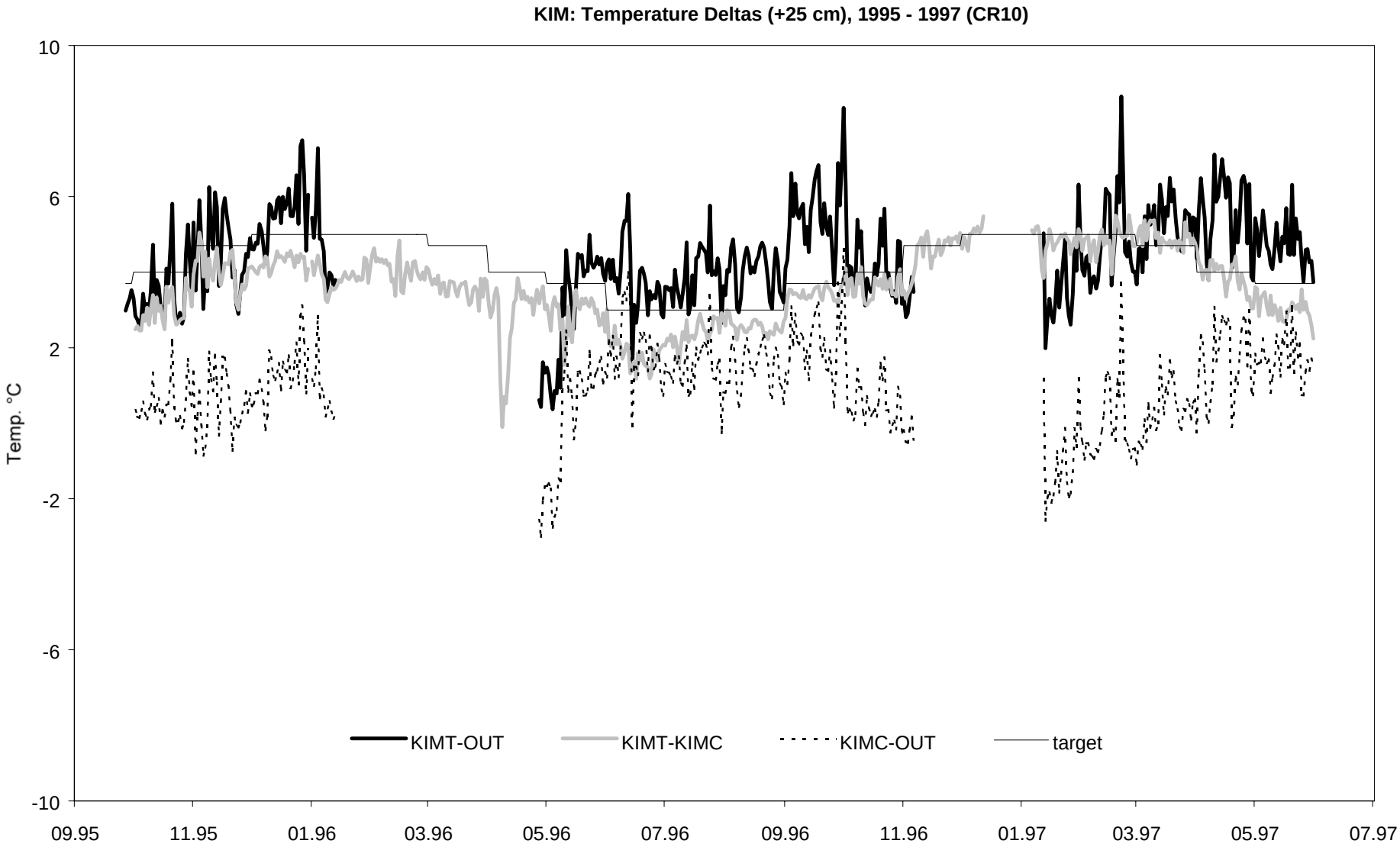

KIM: Temperatures (surface), 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT
KIMC
OUT

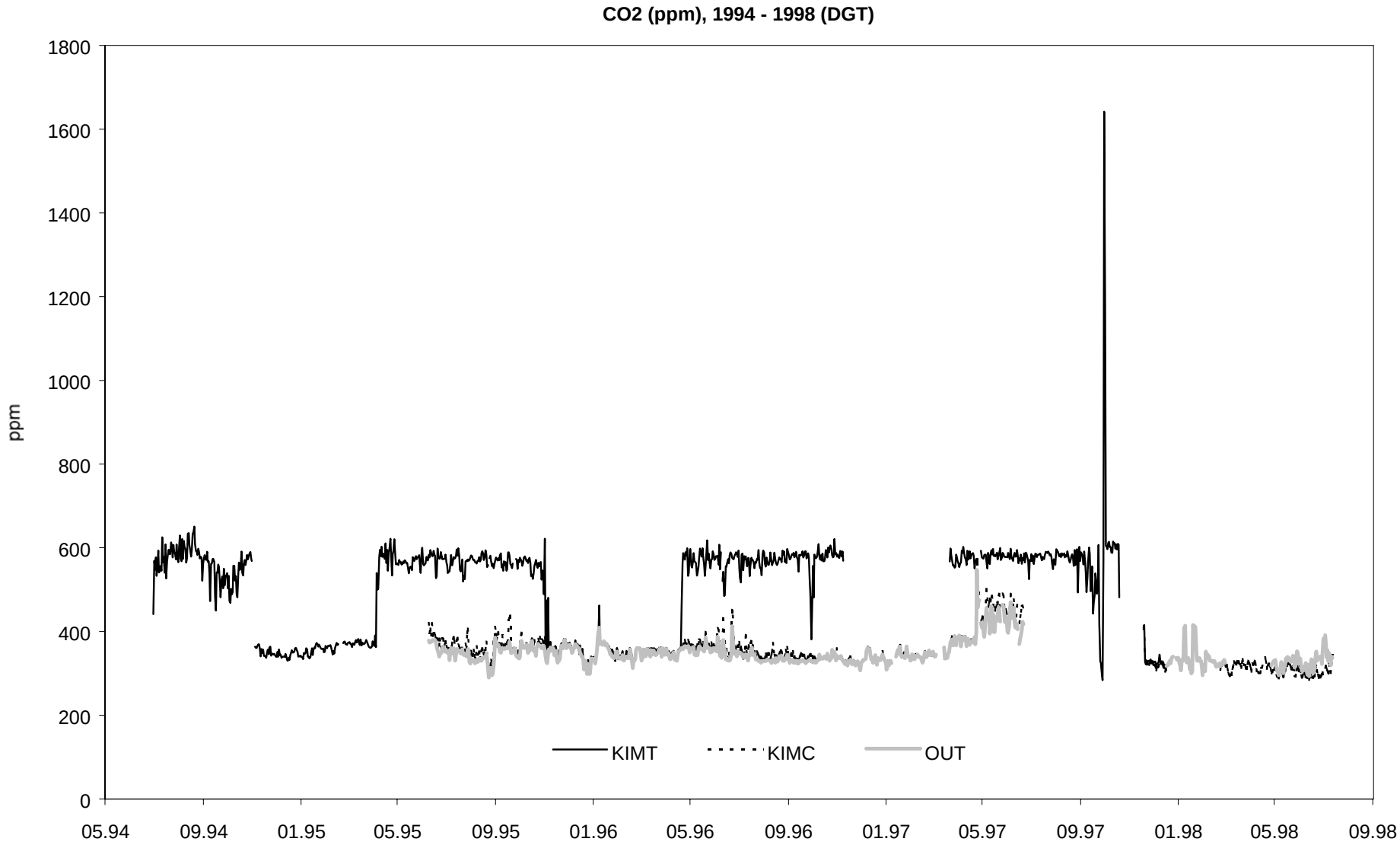

KIM: Temperature Deltas (surface), 1995 - 1997 (CR10)
Temp. °C
10
6
2
-2
-6
-10
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT-OUT
KIMT-KIMC
KIMC-OUT
target

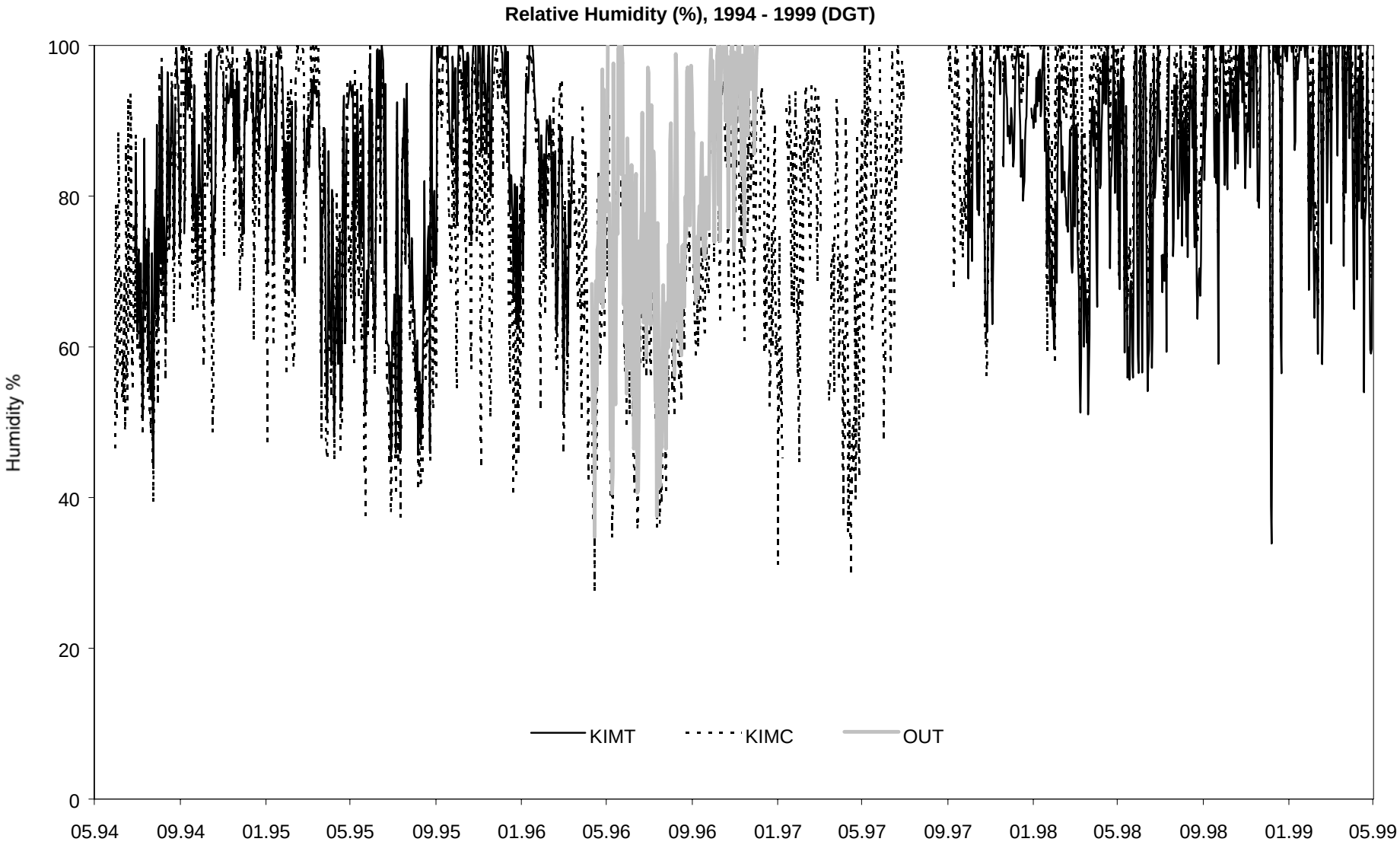

KIM: Temperatures (+10 cm), 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT
KIMC
OUT

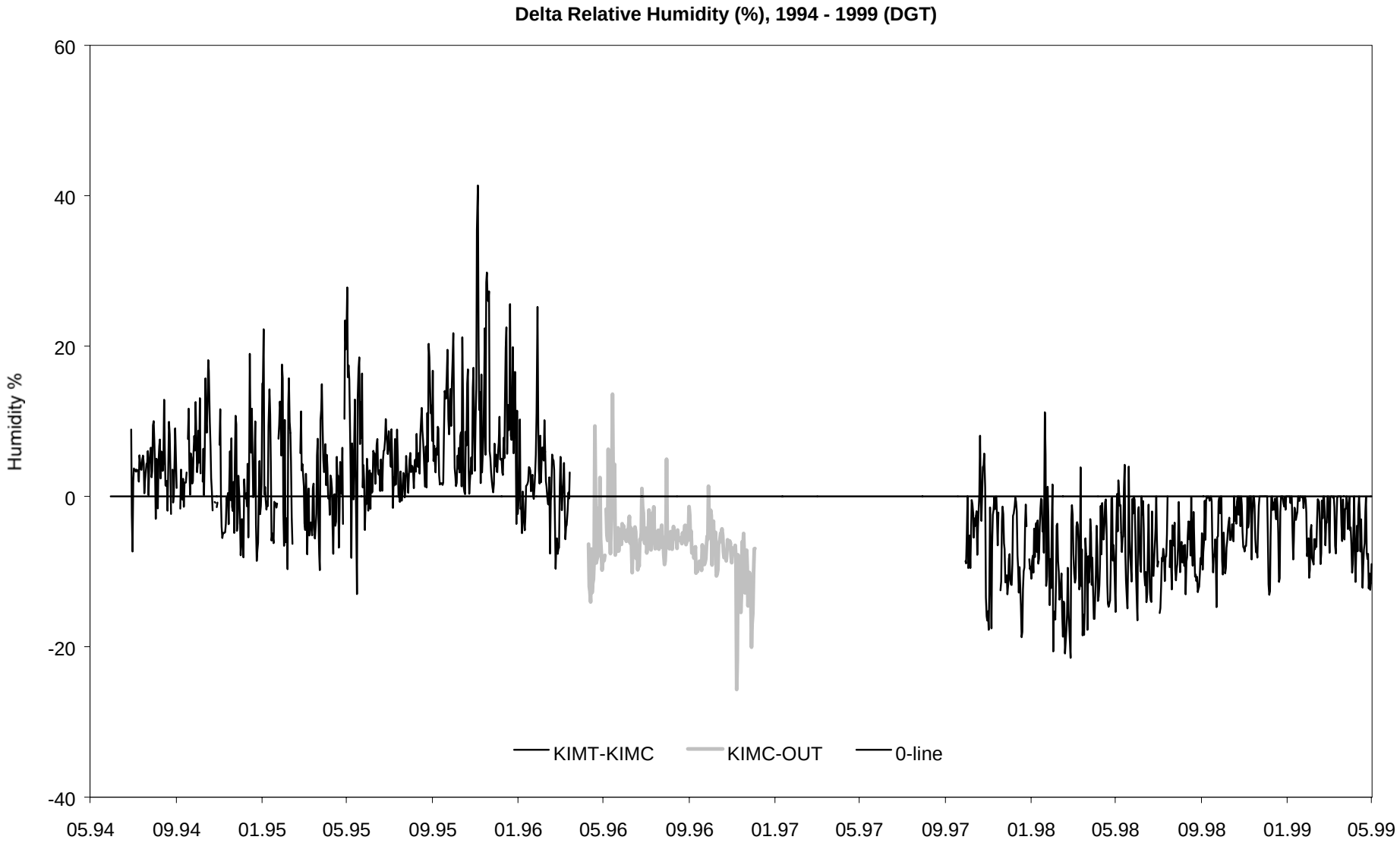

KIM: Temperature Deltas (+10cm), 1995 - 1997 (CR10)
Temp. °C
10
6
2
-2
-6
-10
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT-OUT
KIMT-KIMC
KIMC-OUT
target

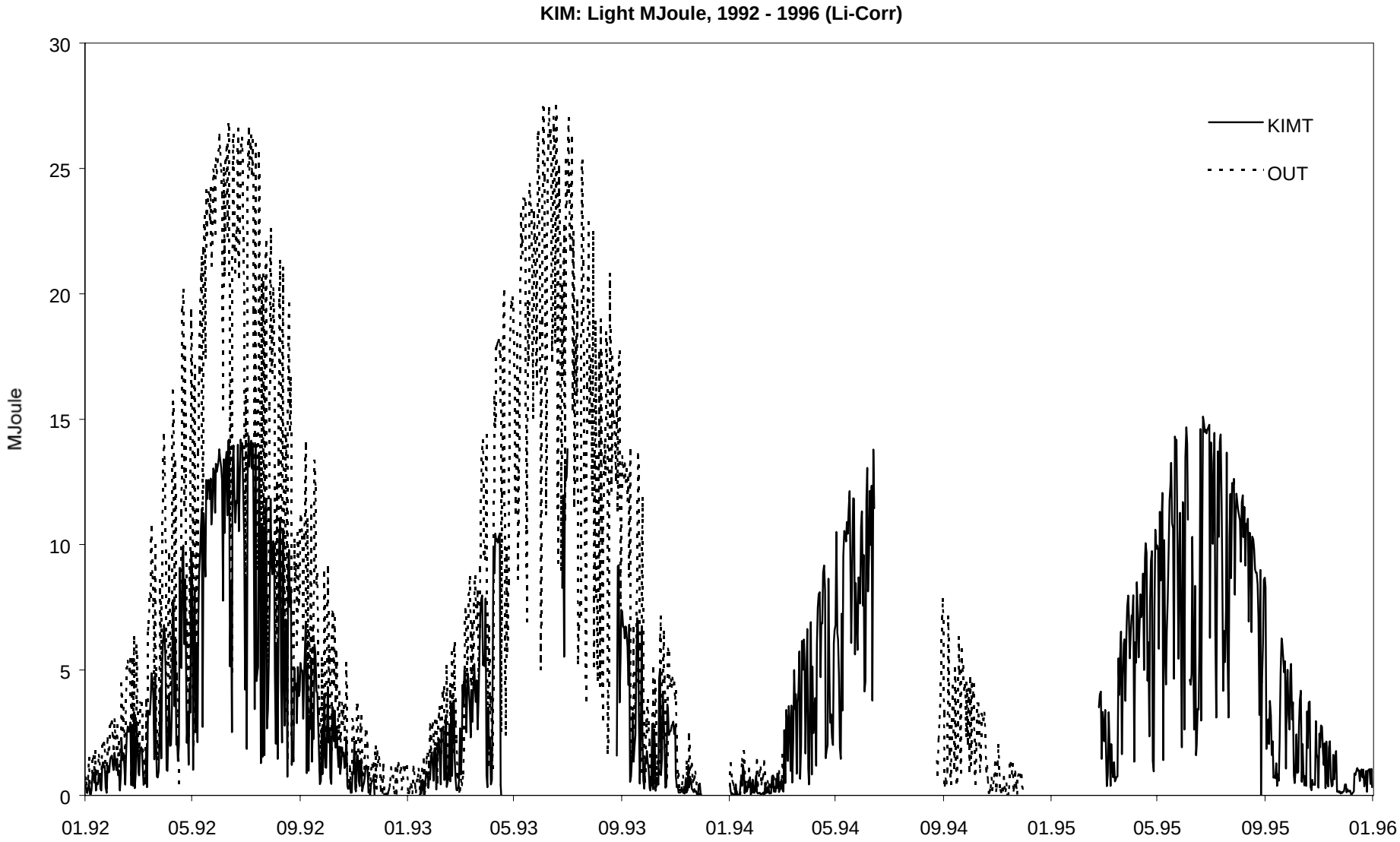

KIM: Temperatures (+25 cm), 1995 - 1997 (CR10)
Temp. °C
30
20
10
0
-10
-20
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT
KIMC
OUT

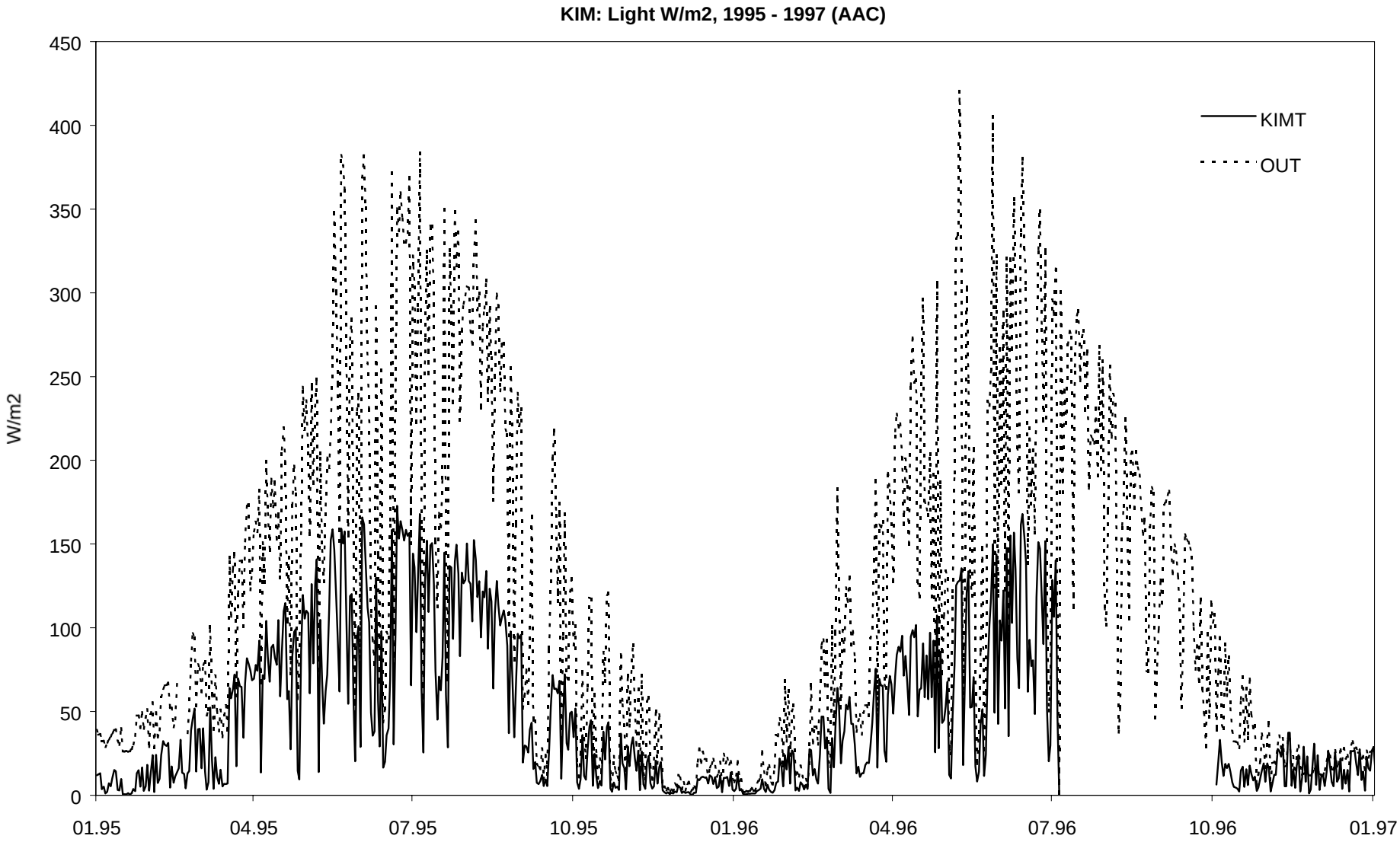

KIM: Temperature Deltas (+25 cm), 1995 - 1997 (CR10)
Temp. °C
10
6
2
-2
-6
-10
09.95
11.95
01.96
03.96
05.96
07.96
09.96
11.96
01.97
03.97
05.97
07.97
KIMT-OUT
KIMT-KIMC
KIMC-OUT
target

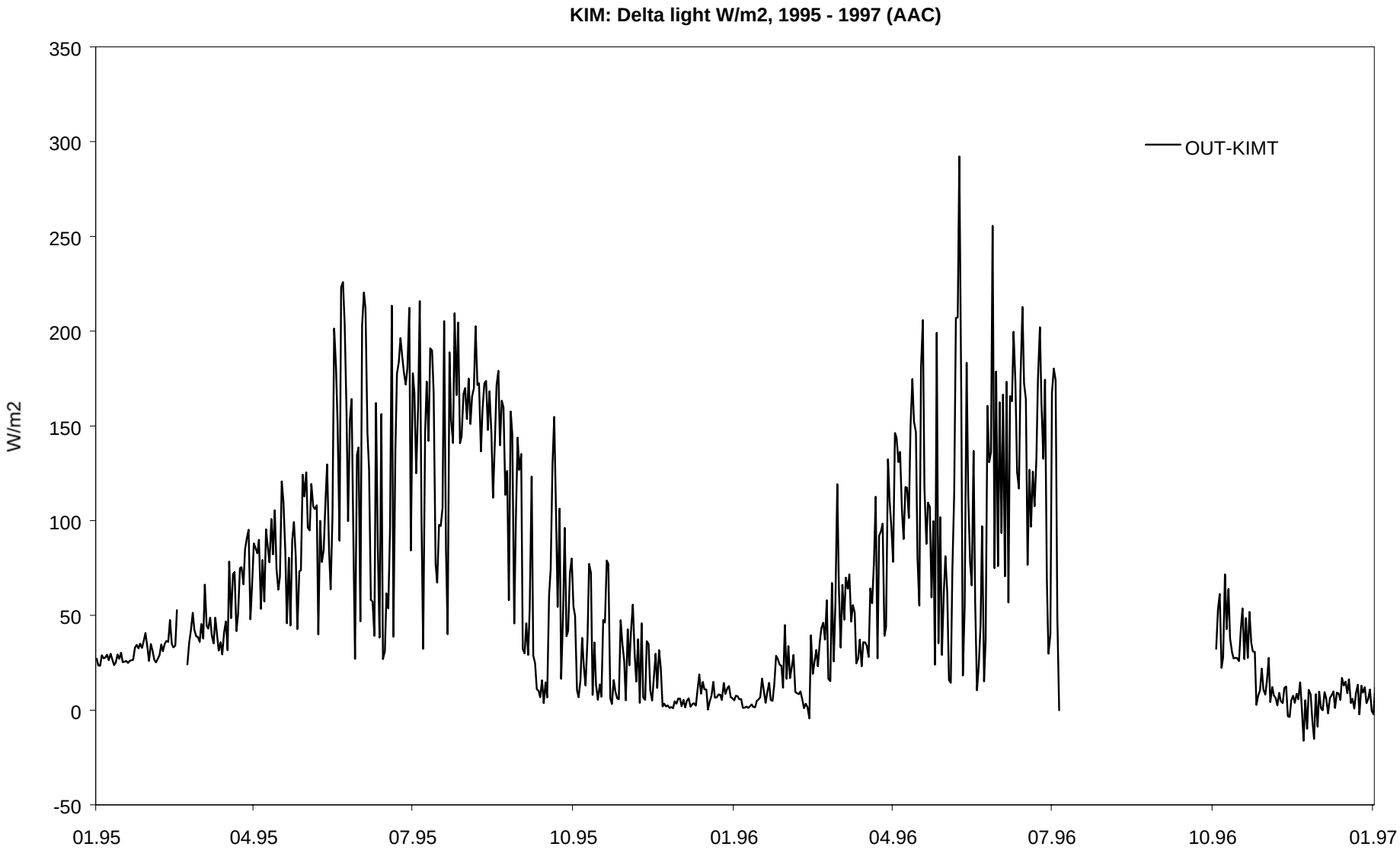

CO2 (ppm), 1994 - 1998 (DGT)
ppm
1800
1600
1400
1200
1000
800
600
400
200
0
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
09.98
KIMT
KIMC
OUT

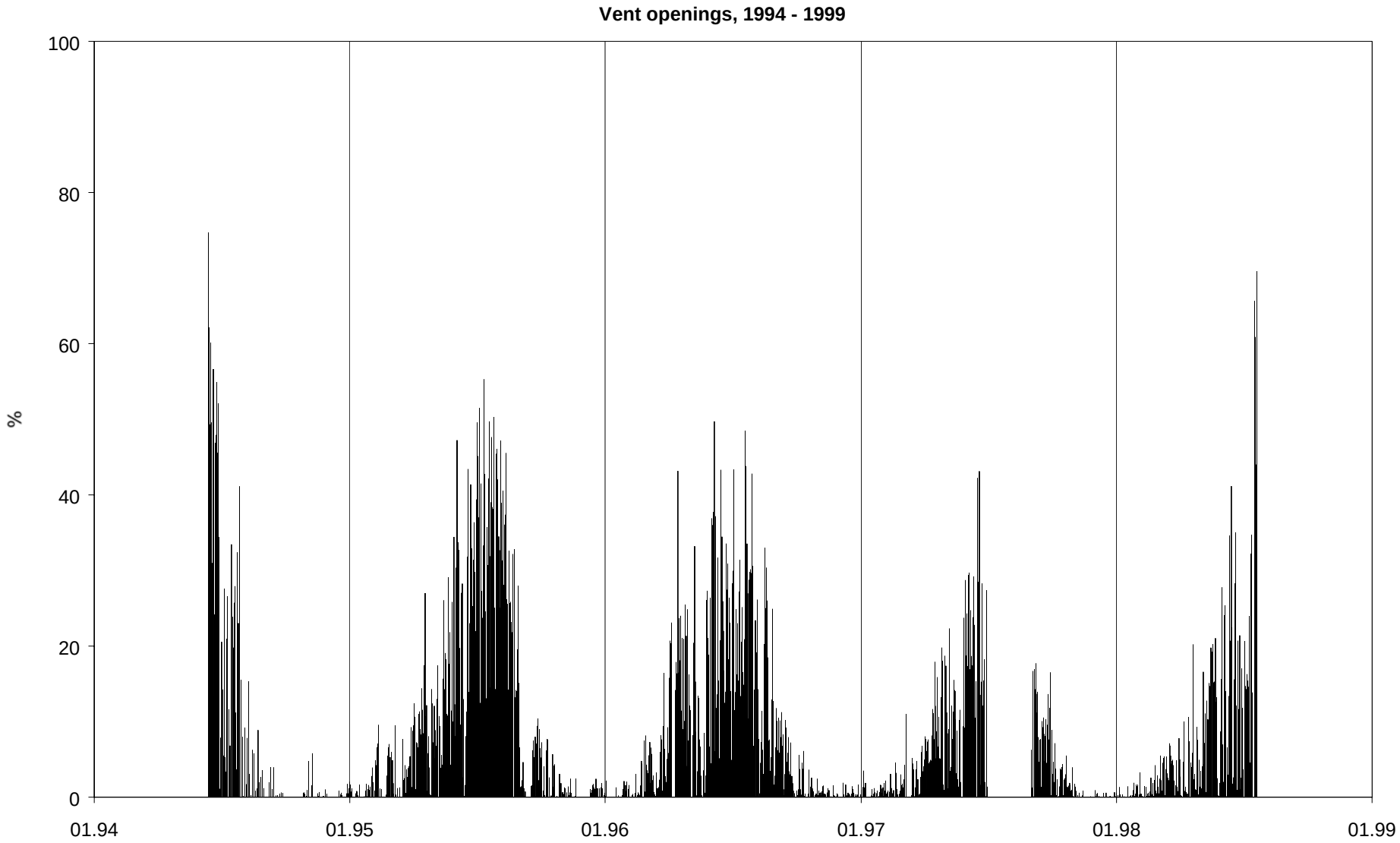

Relative Humidity (%), 1994 - 1999 (DGT)
Humidity %
100
80
60
40
20
0
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
09.98
01.99
05.99
KIMT
KIMC
OUT

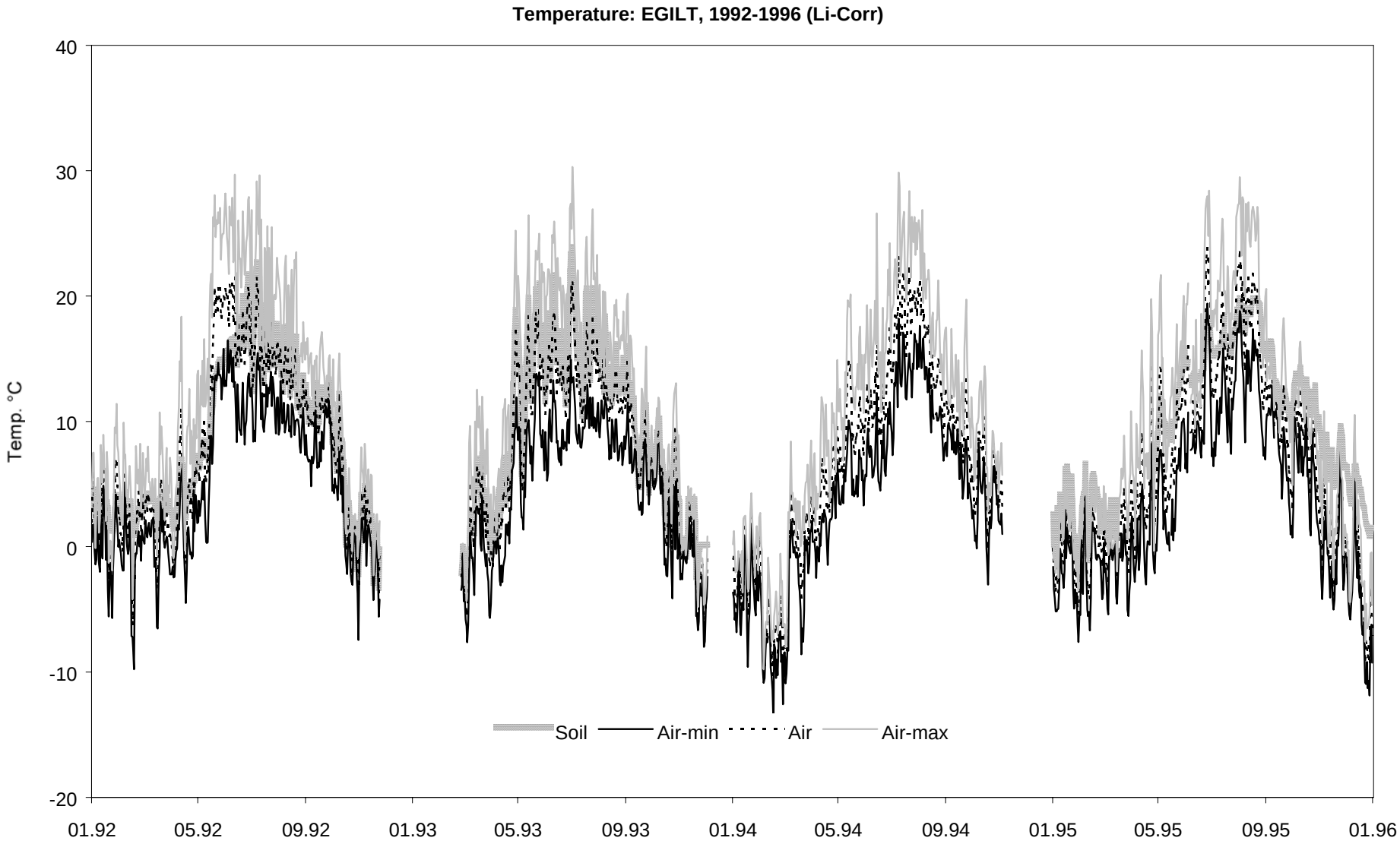

Delta Relative Humidity (%), 1994 - 1999 (DGT)
Humidity %
60
40
20
0
-20
-40
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
09.98
01.99
05.99
KIMT-KIMC
KIMC-OUT
0-line

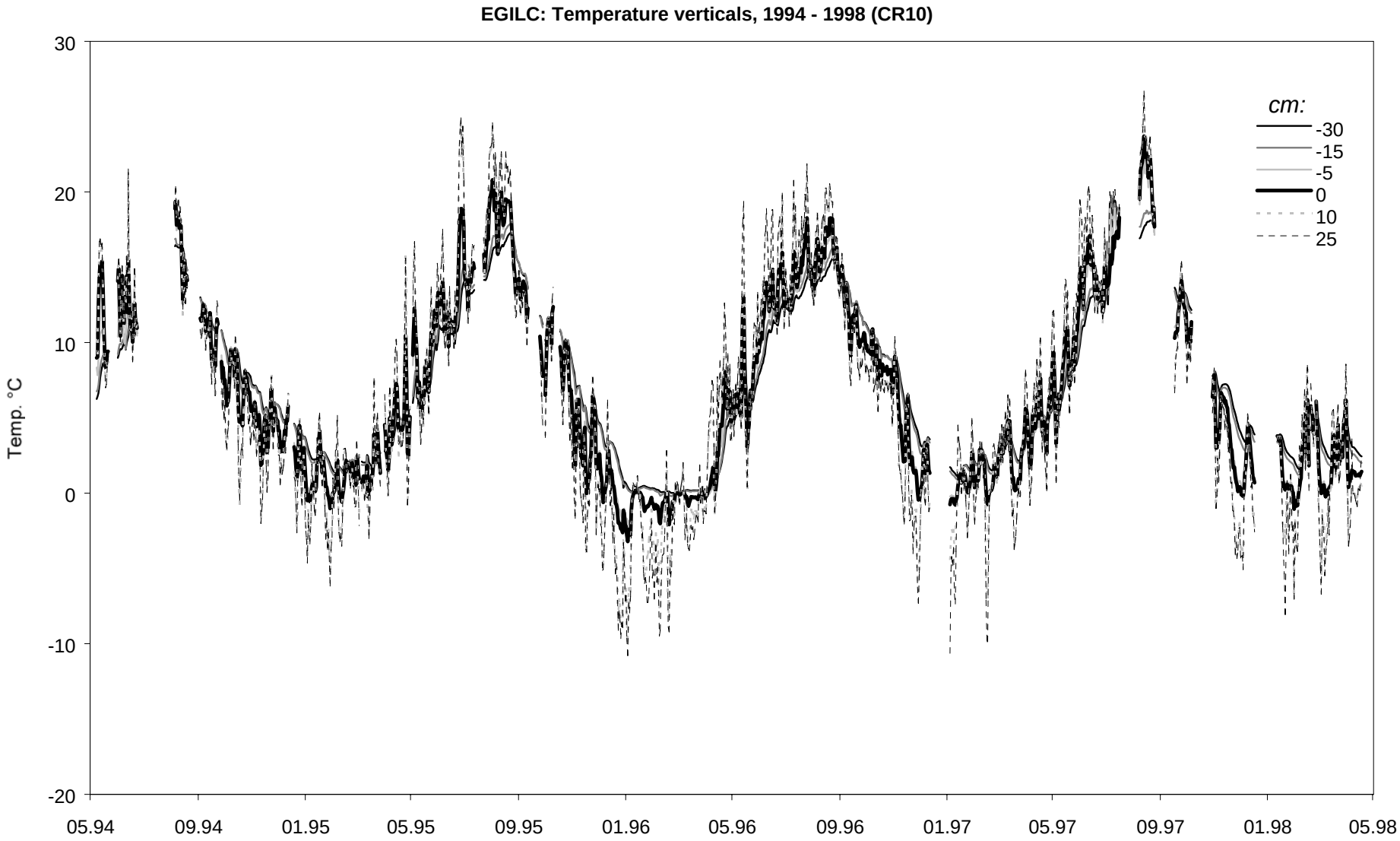

KIM: Light MJoule, 1992 - 1996 (Li-Corr)
MJoule
30
25
20
15
10
5
0
01.92
05.92
09.92
01.93
05.93
09.93
01.94
05.94
09.94
01.95
05.95
09.95
01.96
KIMT
OUT

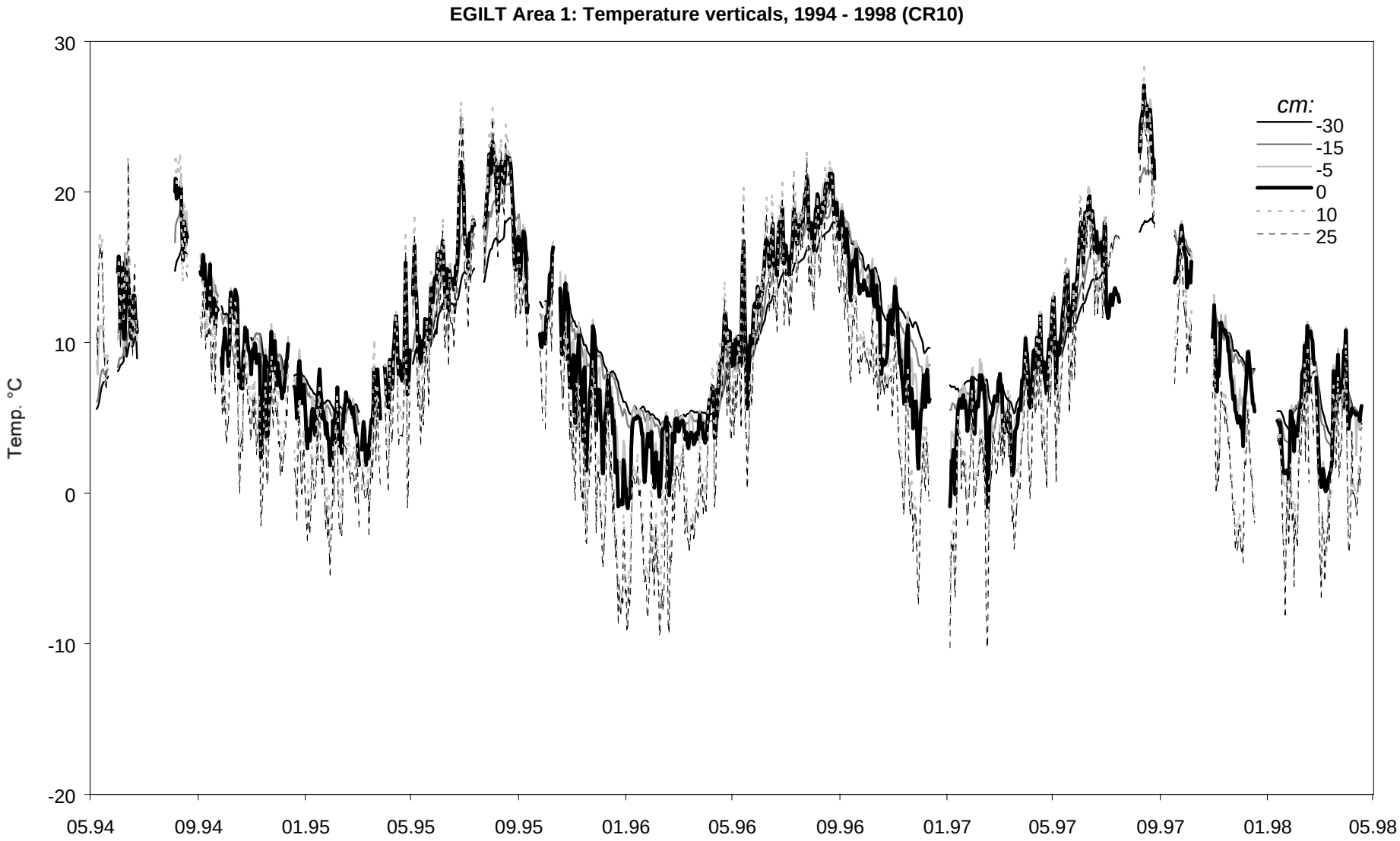

KIM: Light W/m2, 1995 - 1997 (AAC)
W/m2
450
400
350
300
250
200
150
100
50
0
01.95
04.95
07.95
10.95
01.96
04.96
07.96
10.96
01.97
KIMT
OUT

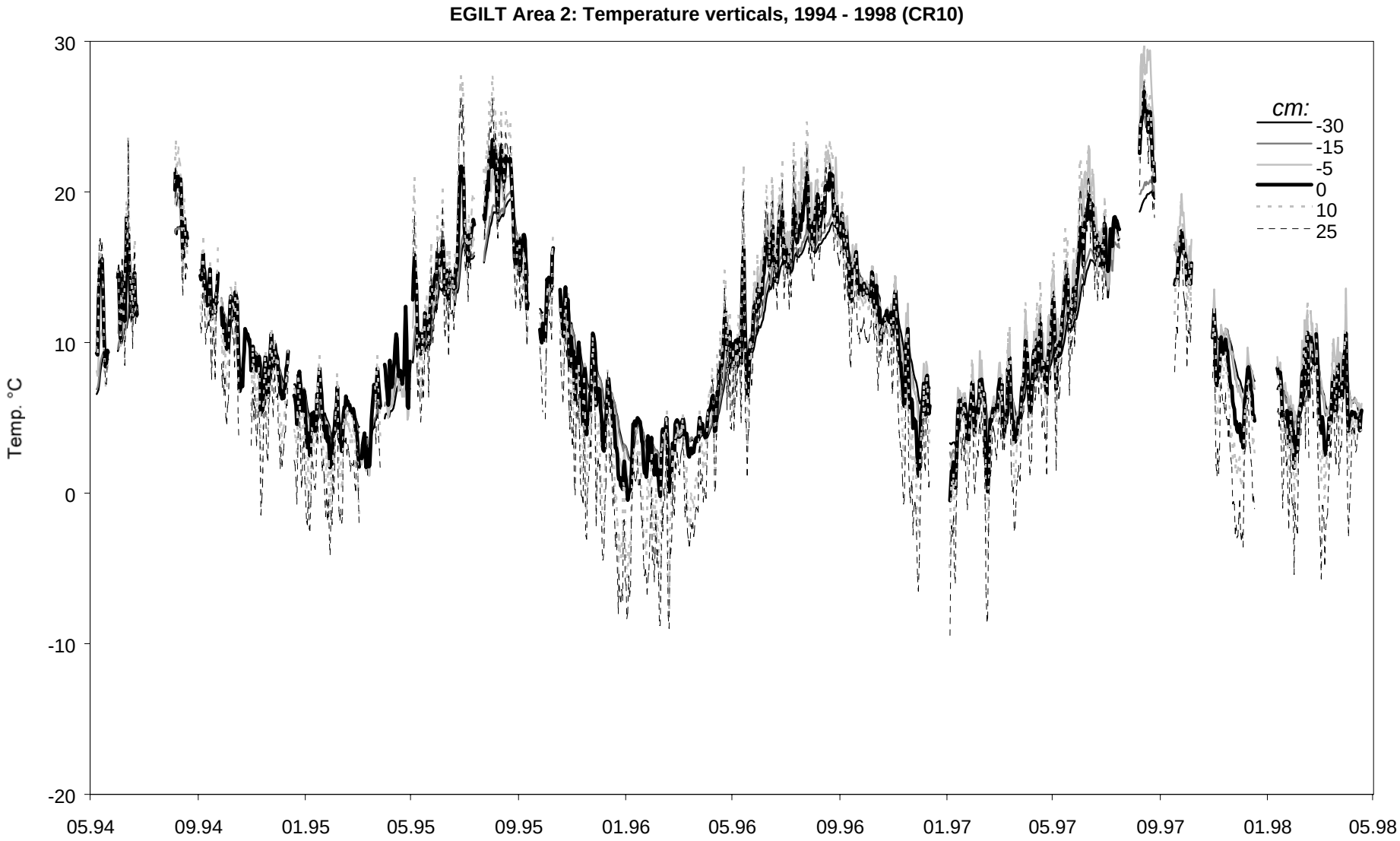

KIM: Delta light W/m2, 1995 - 1997 (AAC)
W/m2
350
300
250
200
150
100
50
0
-50
01.95
04.95
07.95
10.95
01.96
04.96
07.96
10.96
01.97
OUT-KIMT

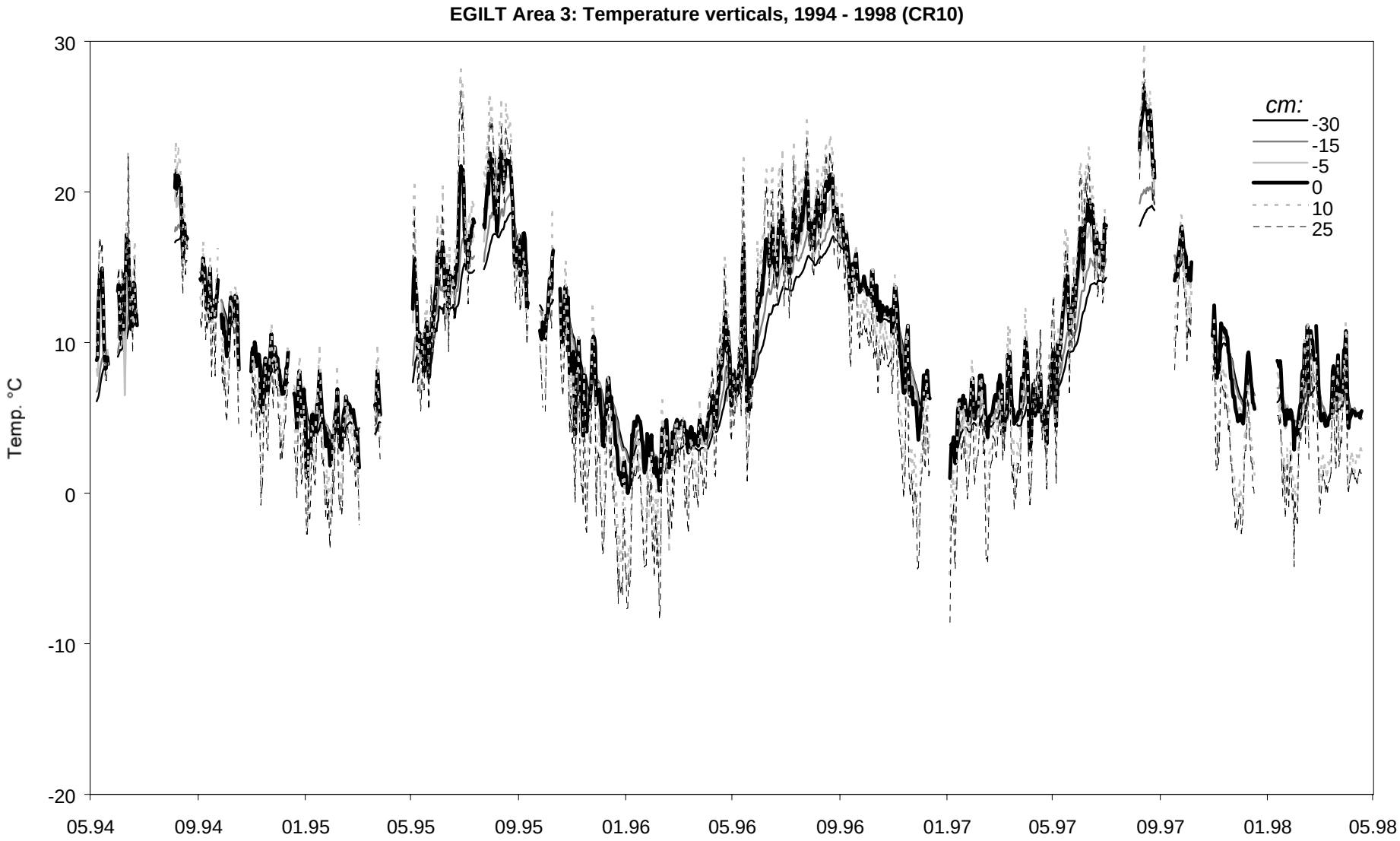

Vent openings, 1994 - 1999
100
80
60
40
20
0
%
01.94
01.95
01.96
01.97
01.98
01.99

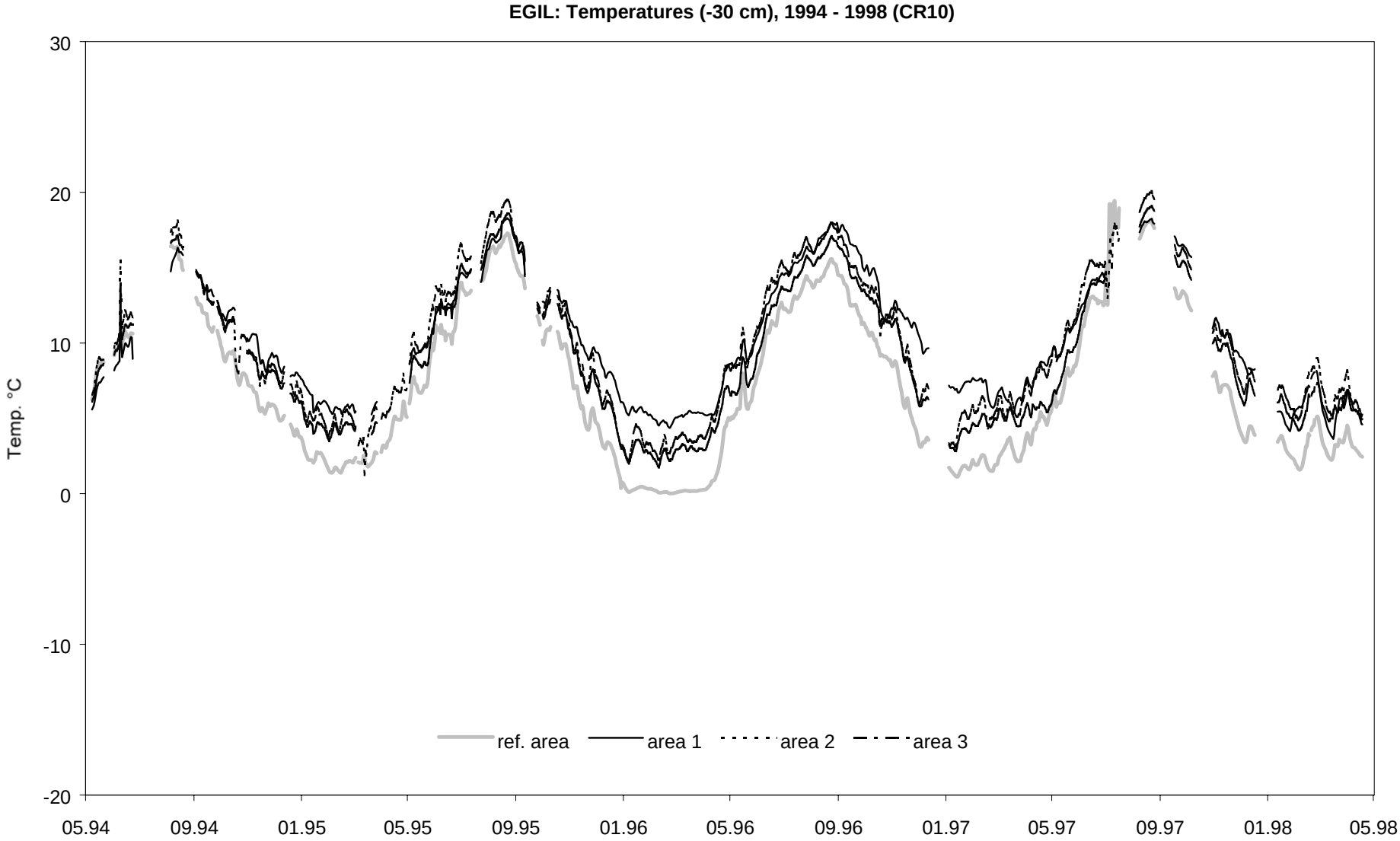

Temperature: EGILT, 1992-1996 (Li-Corr)
Temp. °C
40
30
20
10
0
-10
-20
01.92
05.92
09.92
01.93
05.93
09.93
01.94
05.94
09.94
01.95
05.95
09.95
01.96
Soil
Air-min
Air
Air-max

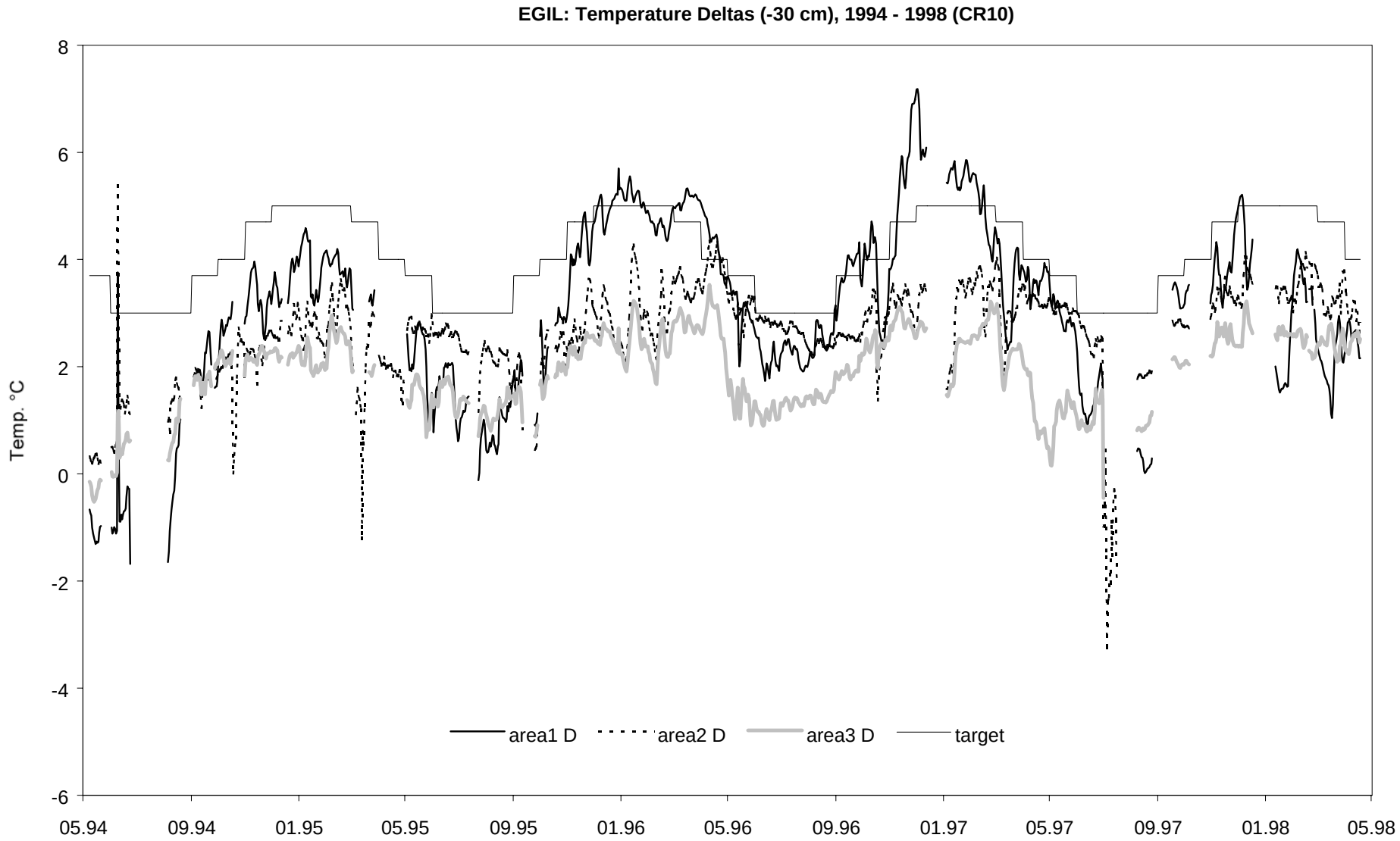

EGILC: Temperature verticals, 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
cm:
-30
-15
-5
0
10
25

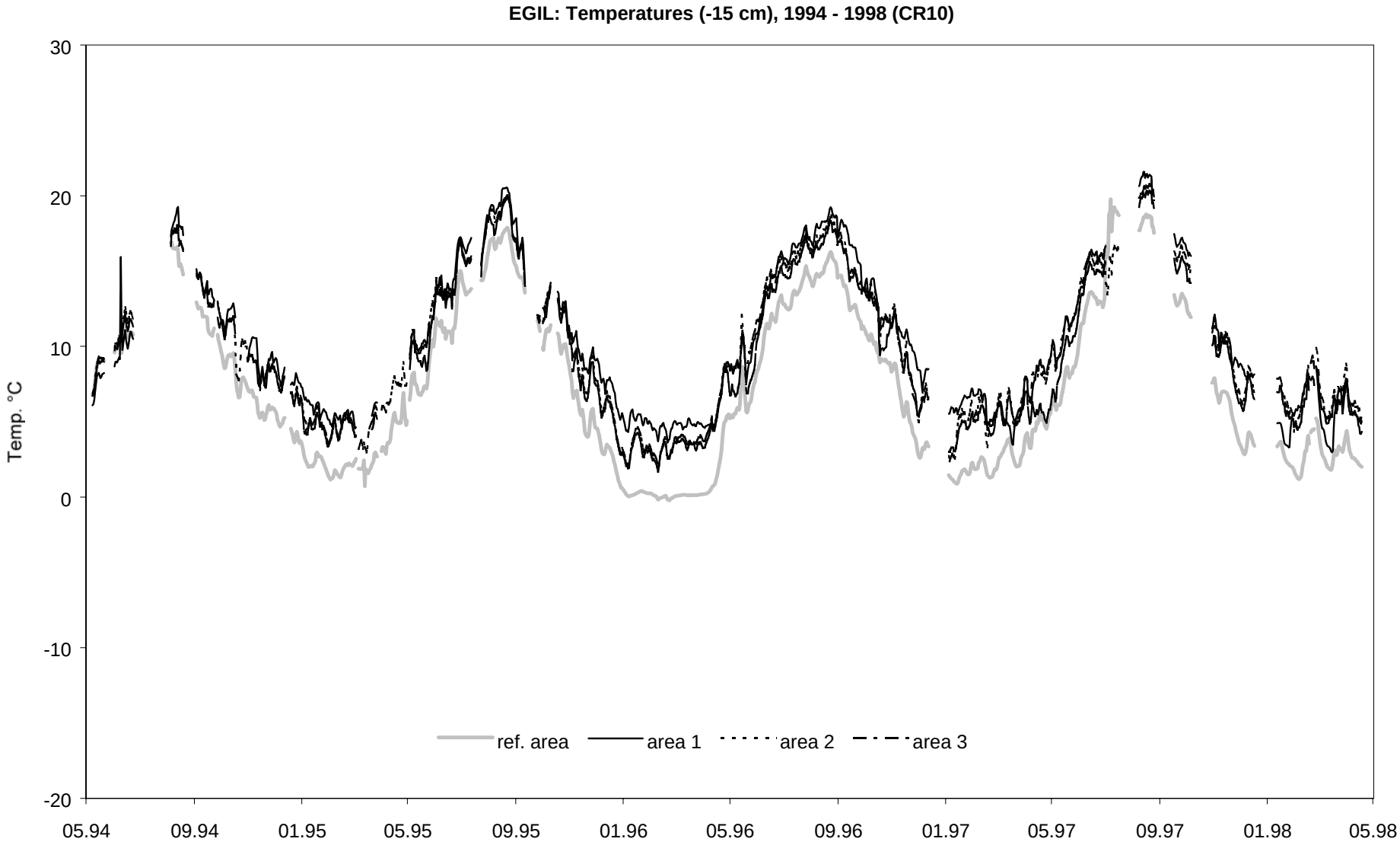

EGILT Area 1: Temperature verticals, 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
cm:
-30
-15
-5
0
10
25

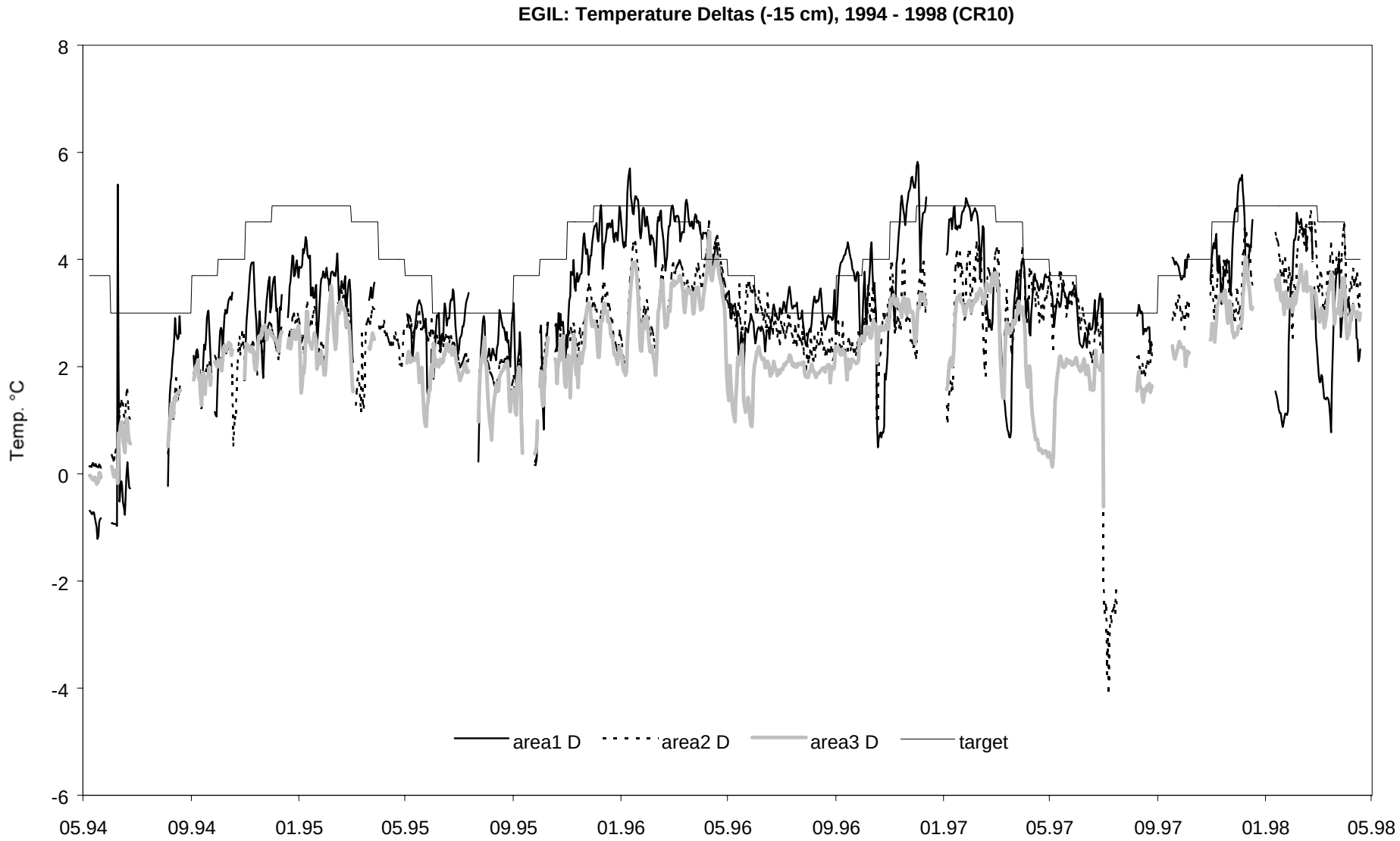

EGILT Area 2: Temperature verticals, 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
cm:
-30
-15
-5
0
10
25

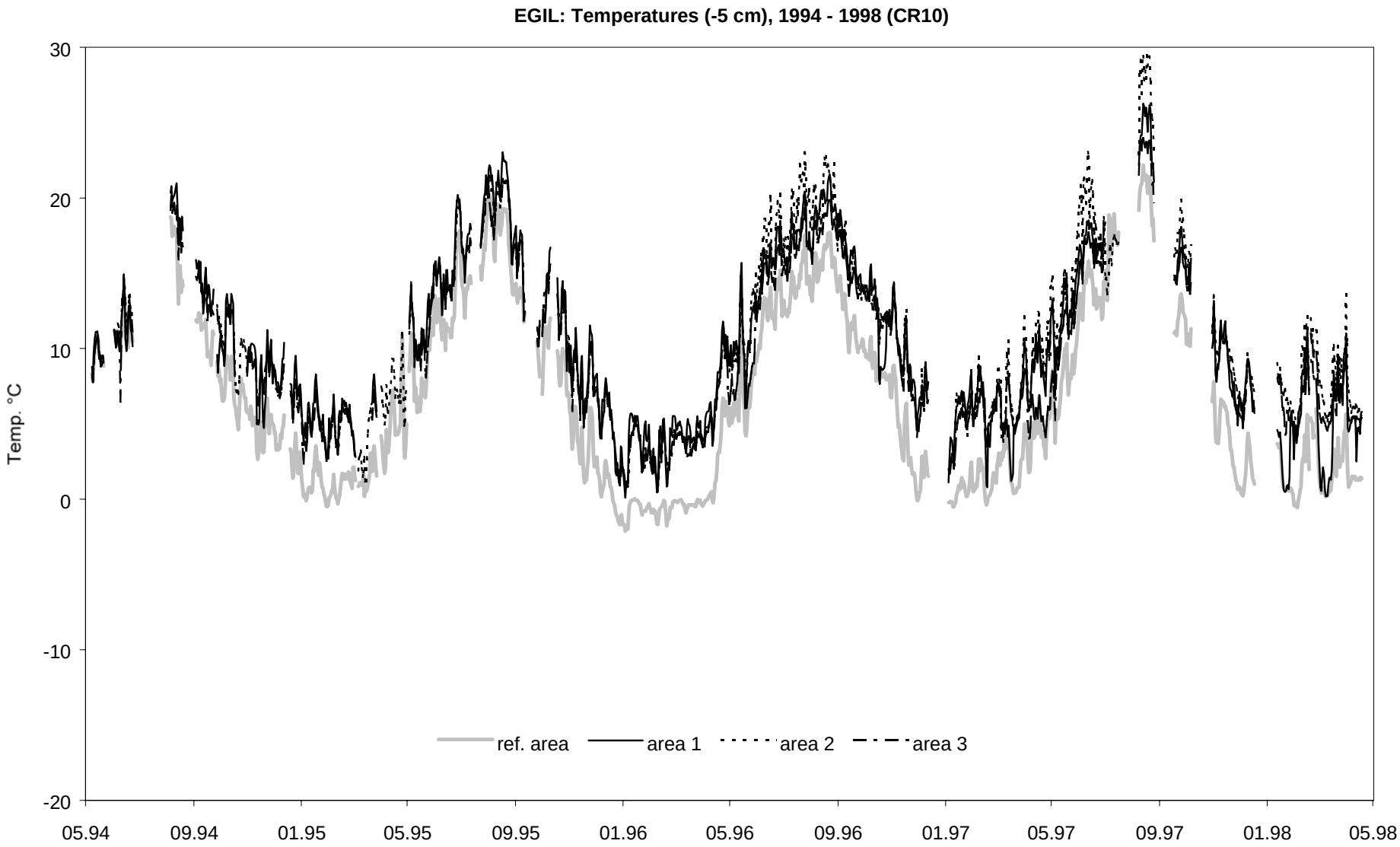

EGILT Area 3: Temperature verticals, 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
cm:
-30
-15
-5
0
10
25

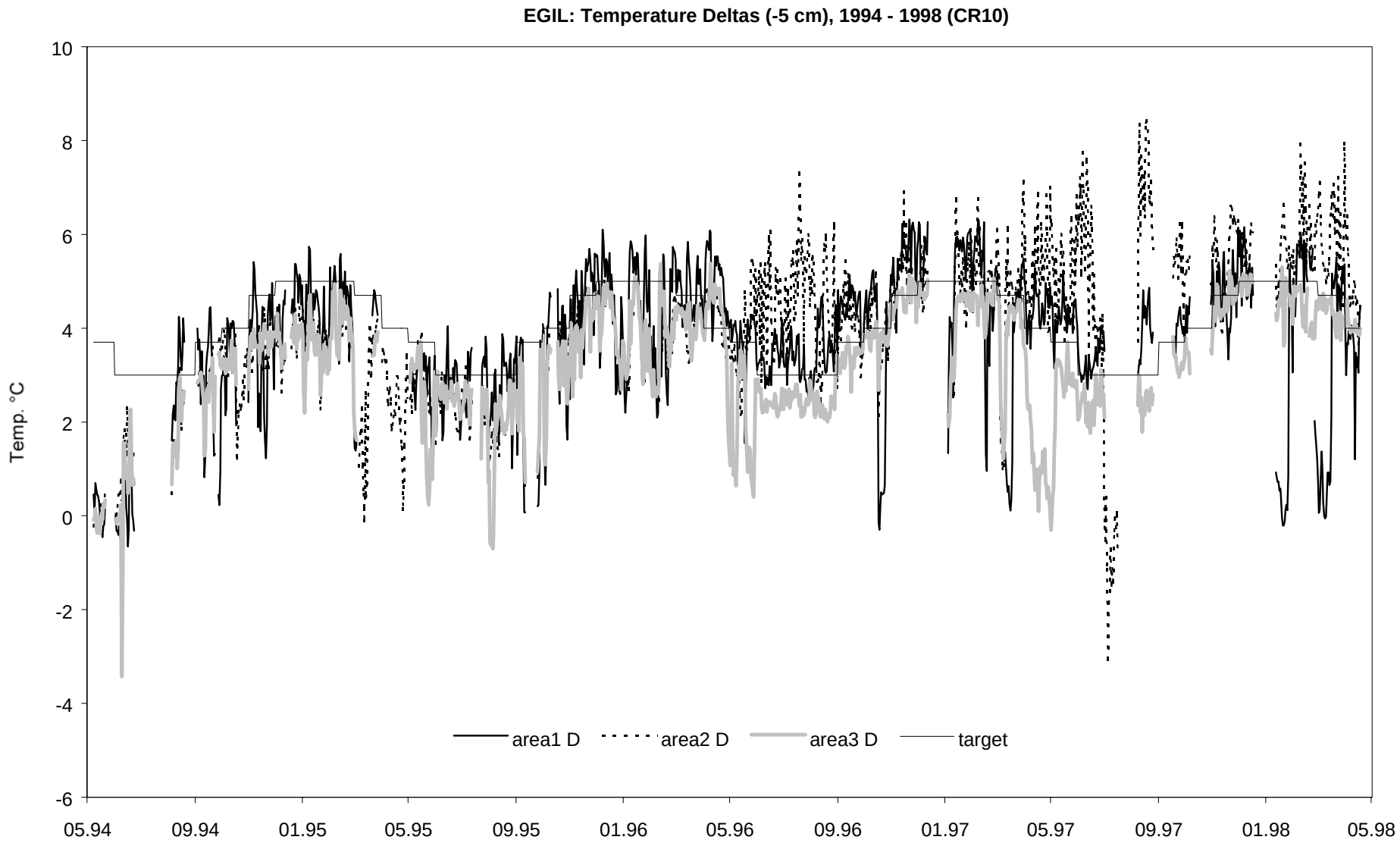

EGIL: Temperatures (-30 cm), 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
ref. area
area 1
area 2
area 3

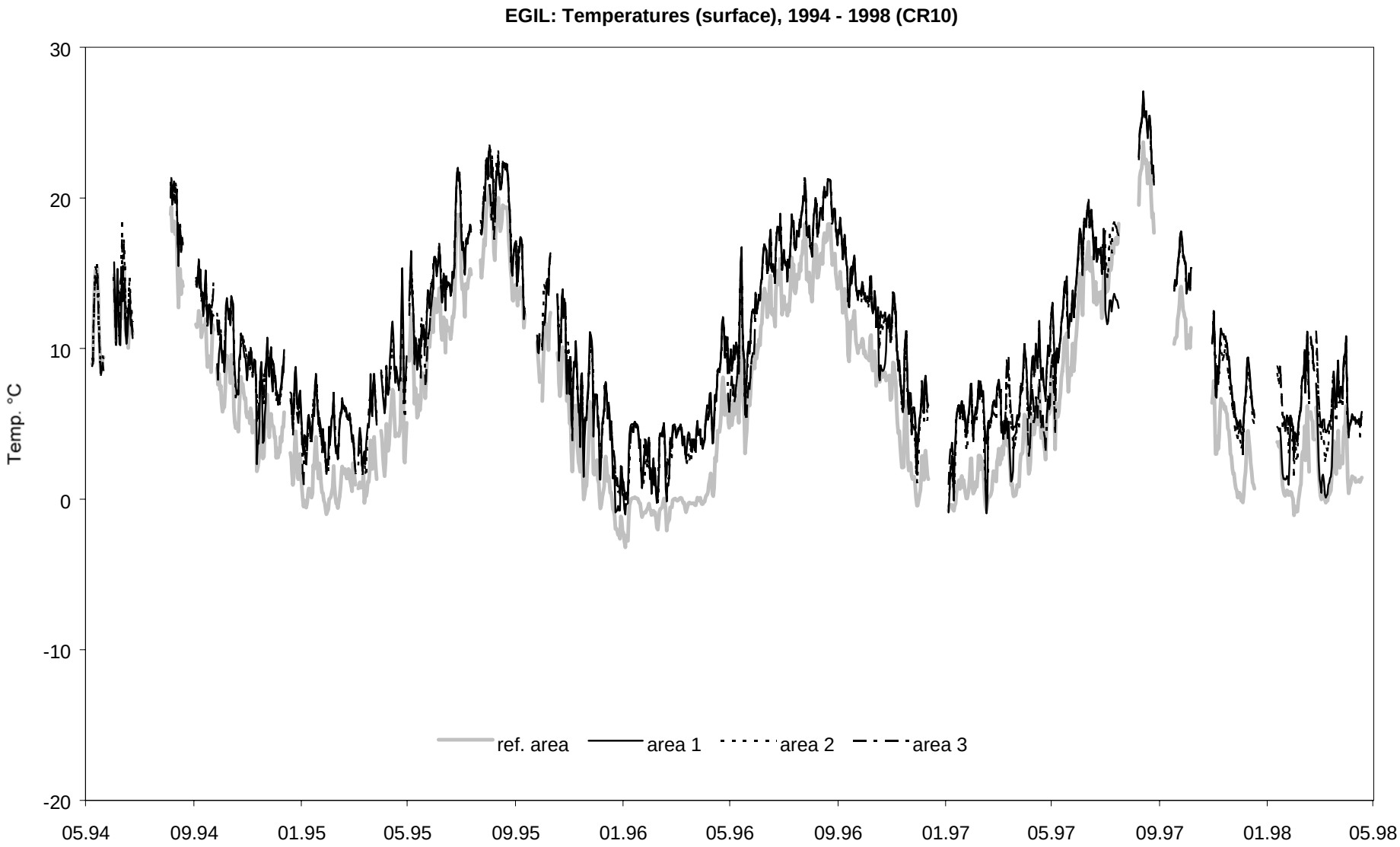

EGIL: Temperature Deltas (-30 cm), 1994 - 1998 (CR10)
Temp. °C
8
6
4
2
0
-2
-4
-6
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
area1 D
area2 D
area3 D
target

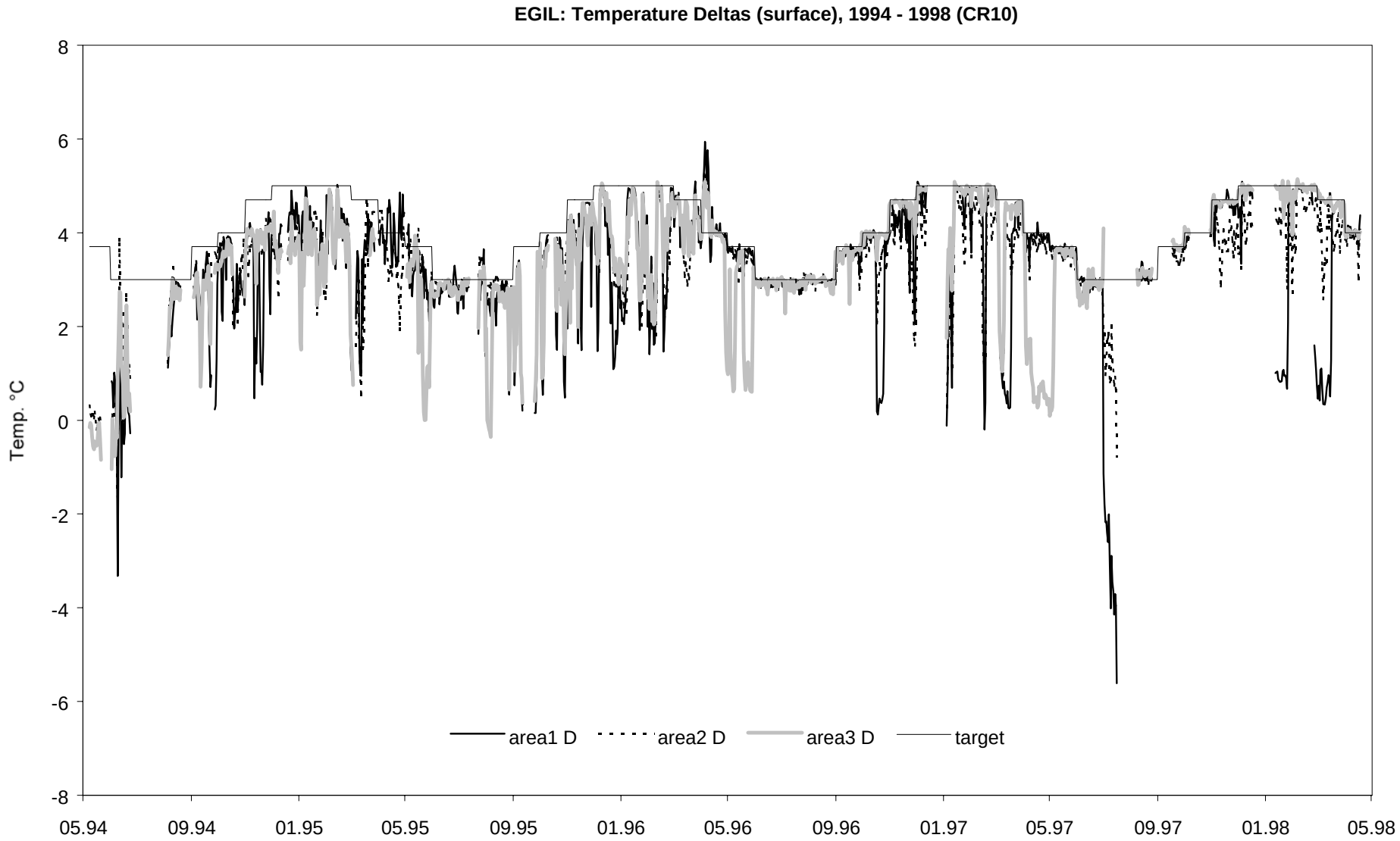

EGIL: Temperatures (-15 cm), 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
ref. area
area 1
area 2
area 3

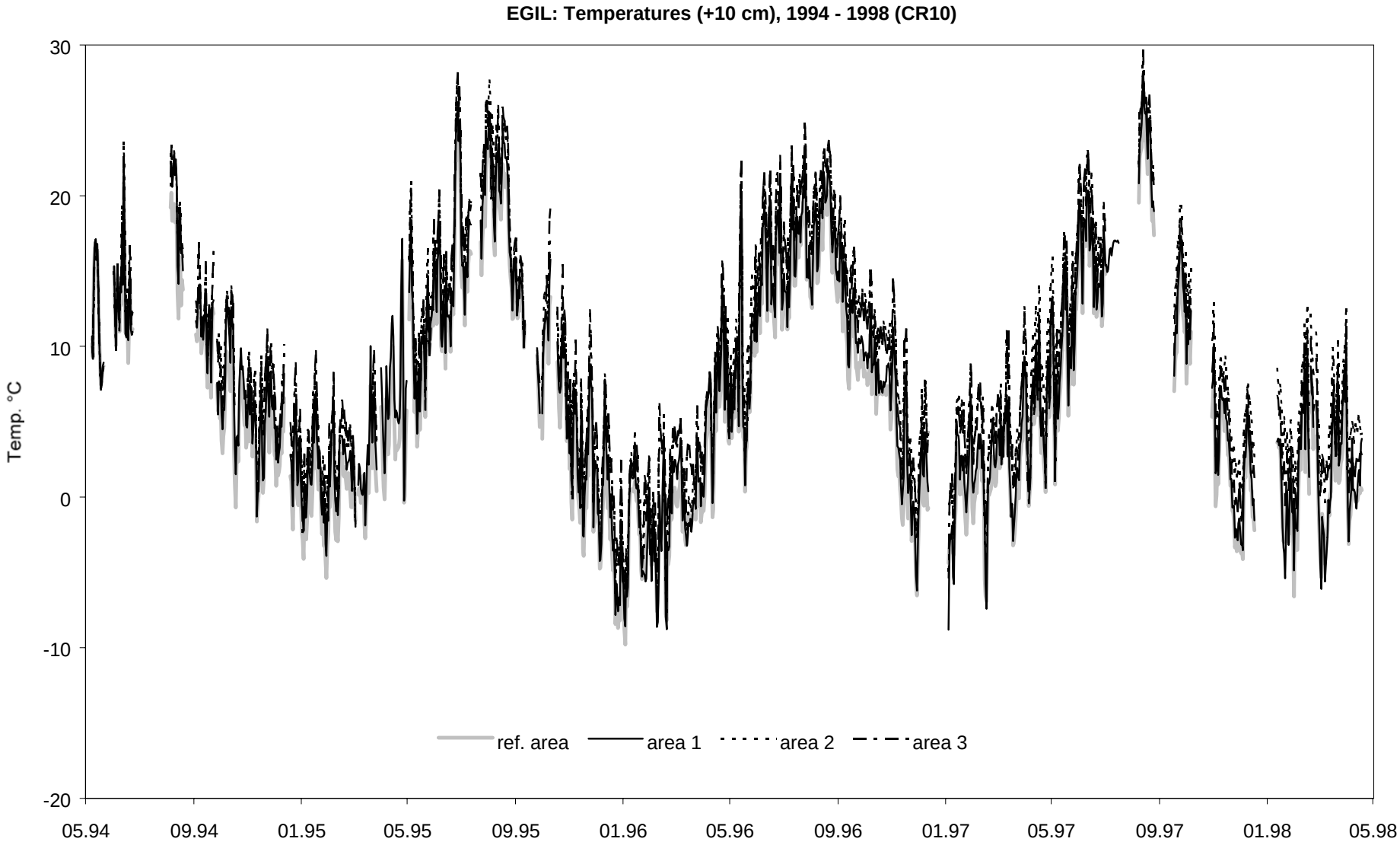

EGIL: Temperature Deltas (-15 cm), 1994 - 1998 (CR10)
Temp. °C
8
6
4
2
0
-2
-4
-6
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
area1 D
area2 D
area3 D
target

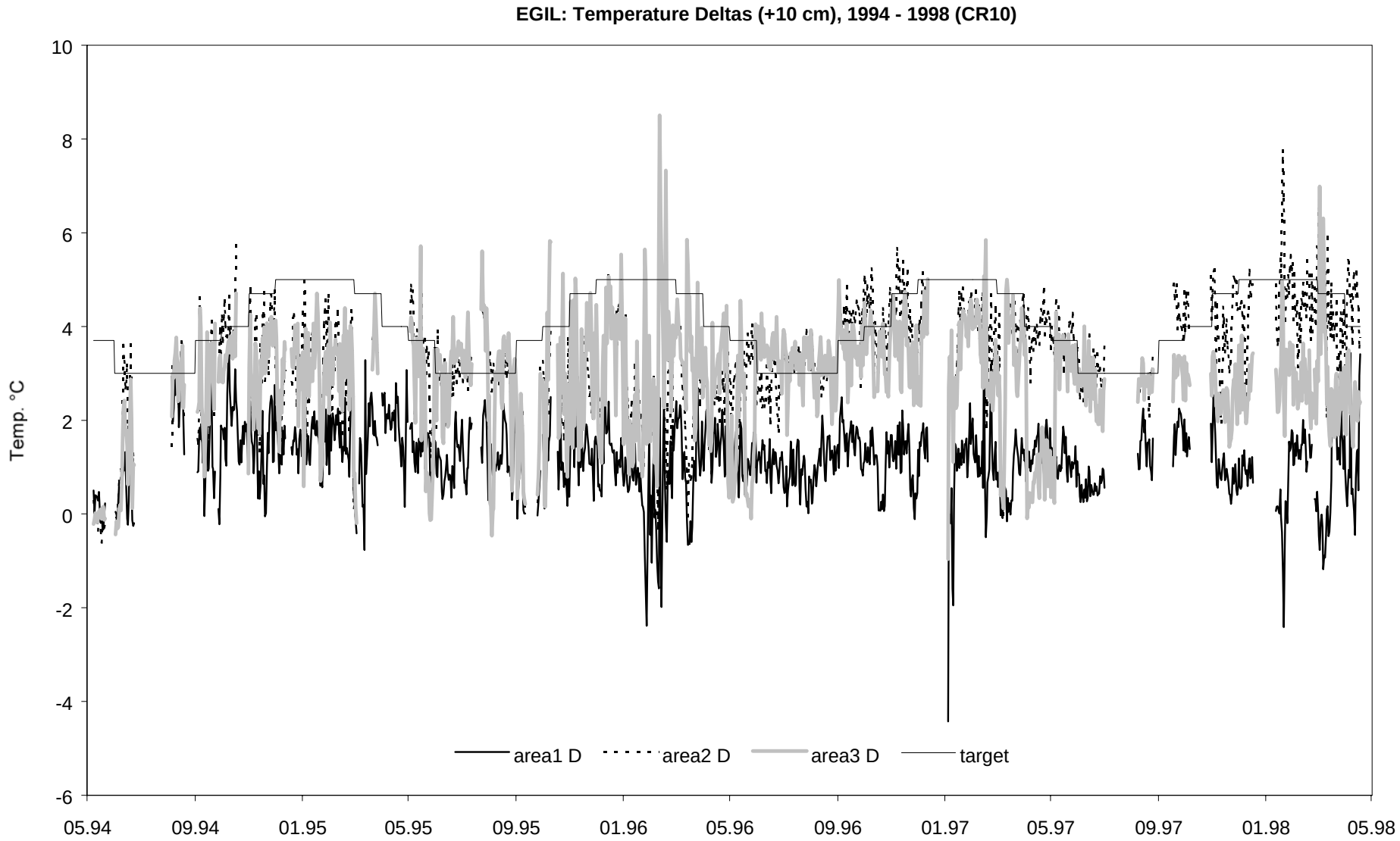

EGIL: Temperatures (-5 cm), 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
ref. area
area 1
area 2
area 3

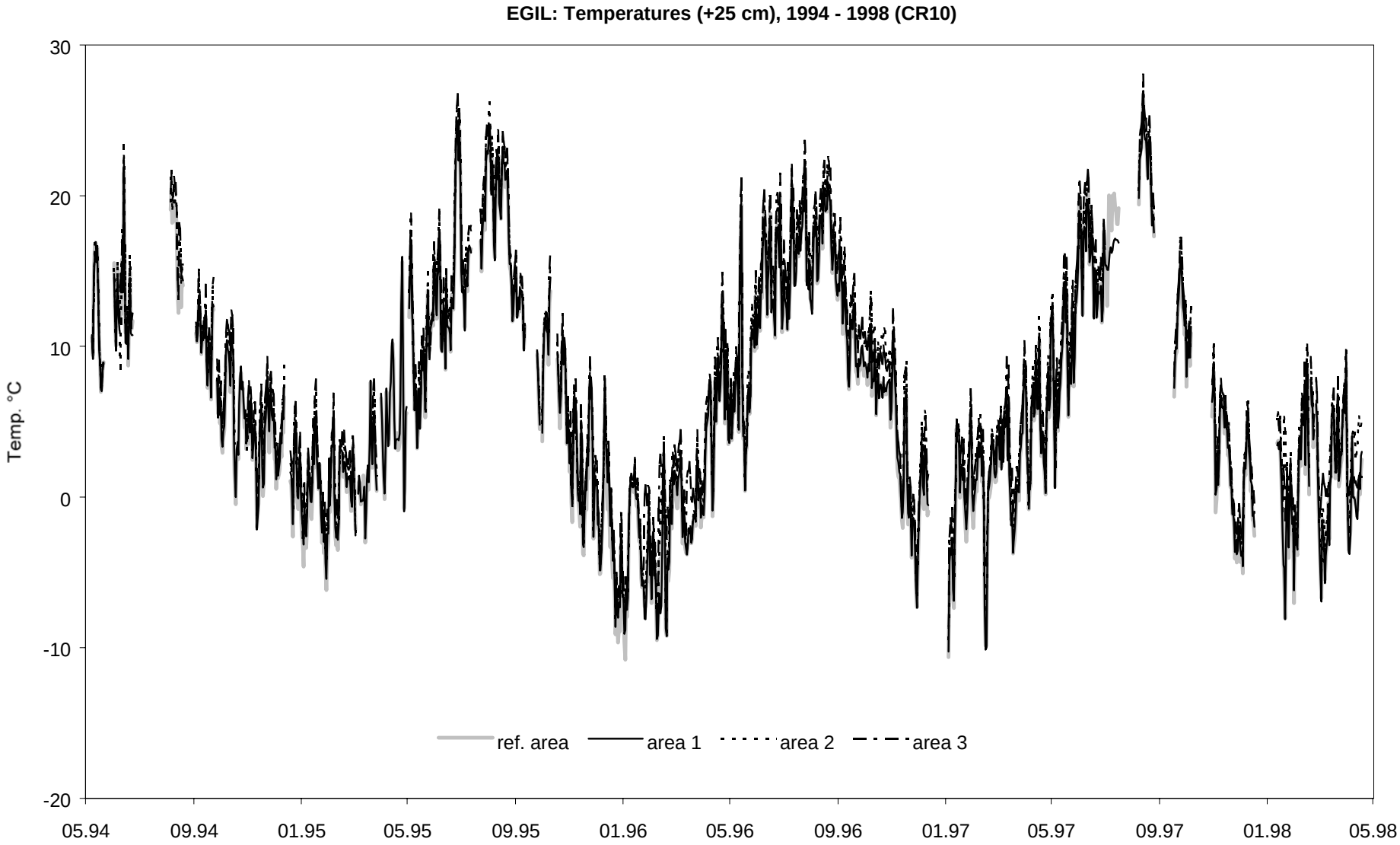

EGIL: Temperature Deltas (-5 cm), 1994 - 1998 (CR10)
Temp. °C
10
8
6
4
2
0
-2
-4
-6
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
area1 D
area2 D
area3 D
target

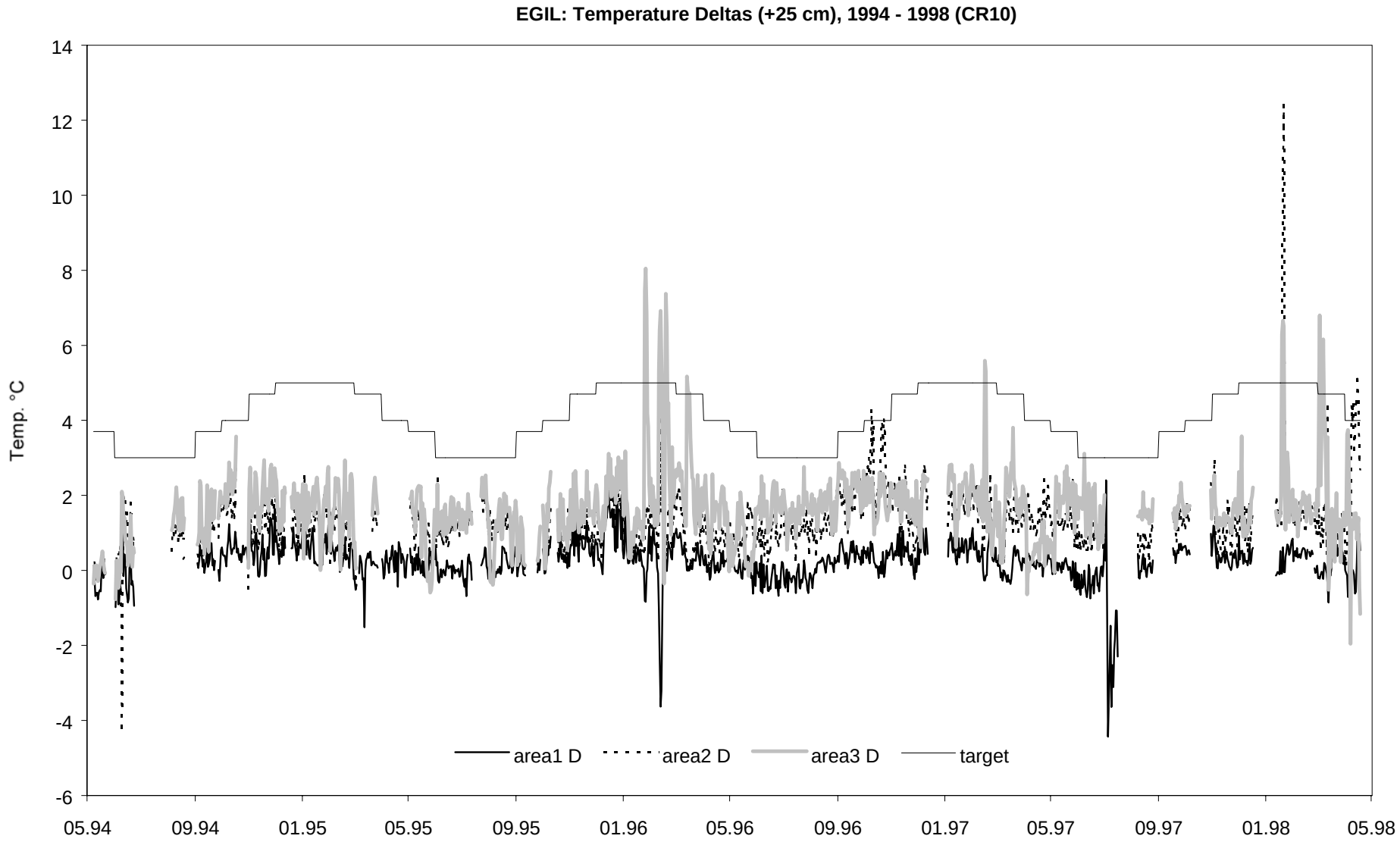

EGIL: Temperatures (surface), 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
ref. area
area 1
area 2
area 3

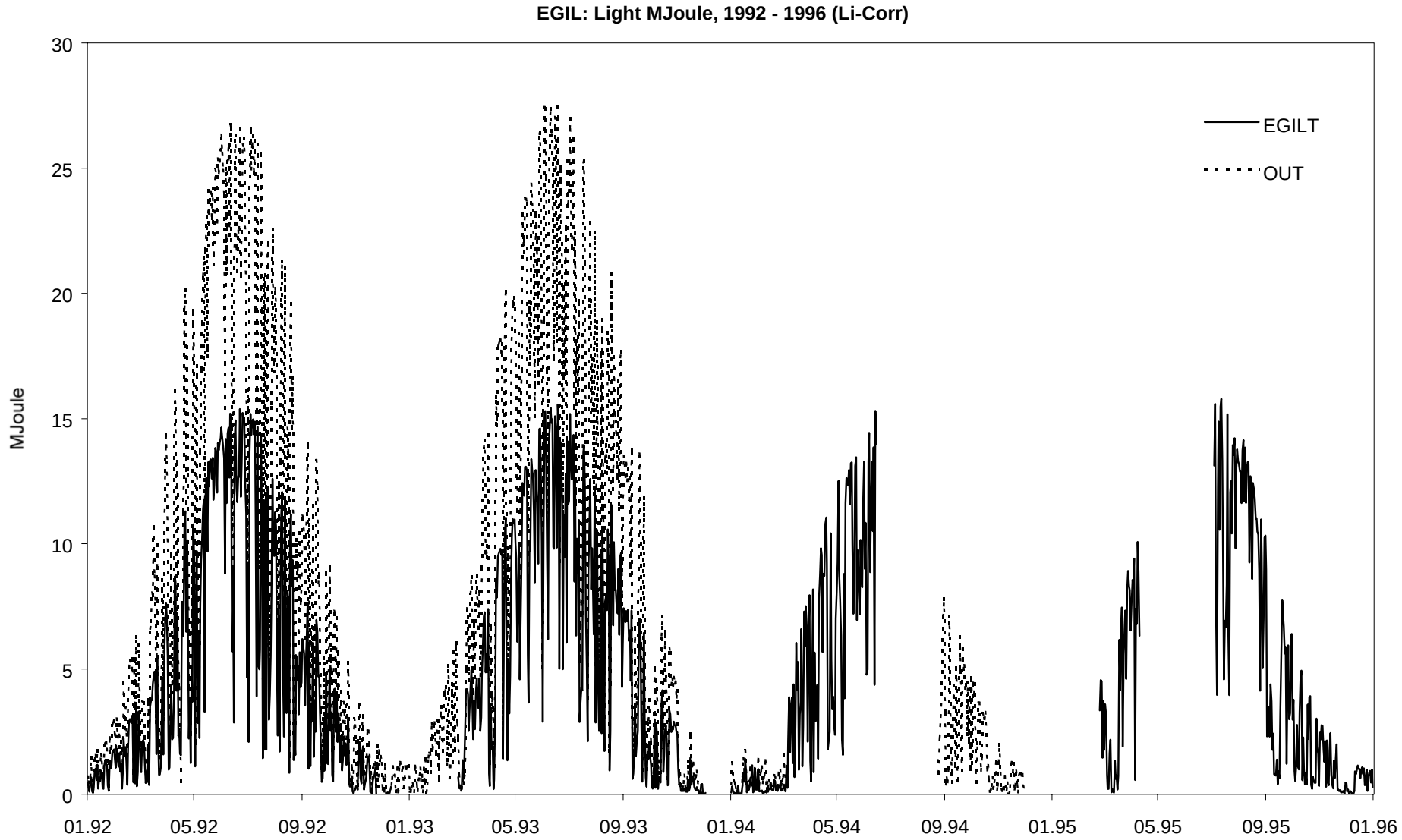

EGIL: Temperature Deltas (surface), 1994 - 1998 (CR10)
Temp. °C
8
6
4
2
0
-2
-4
-6
-8
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
area1 D
area2 D
area3 D
target

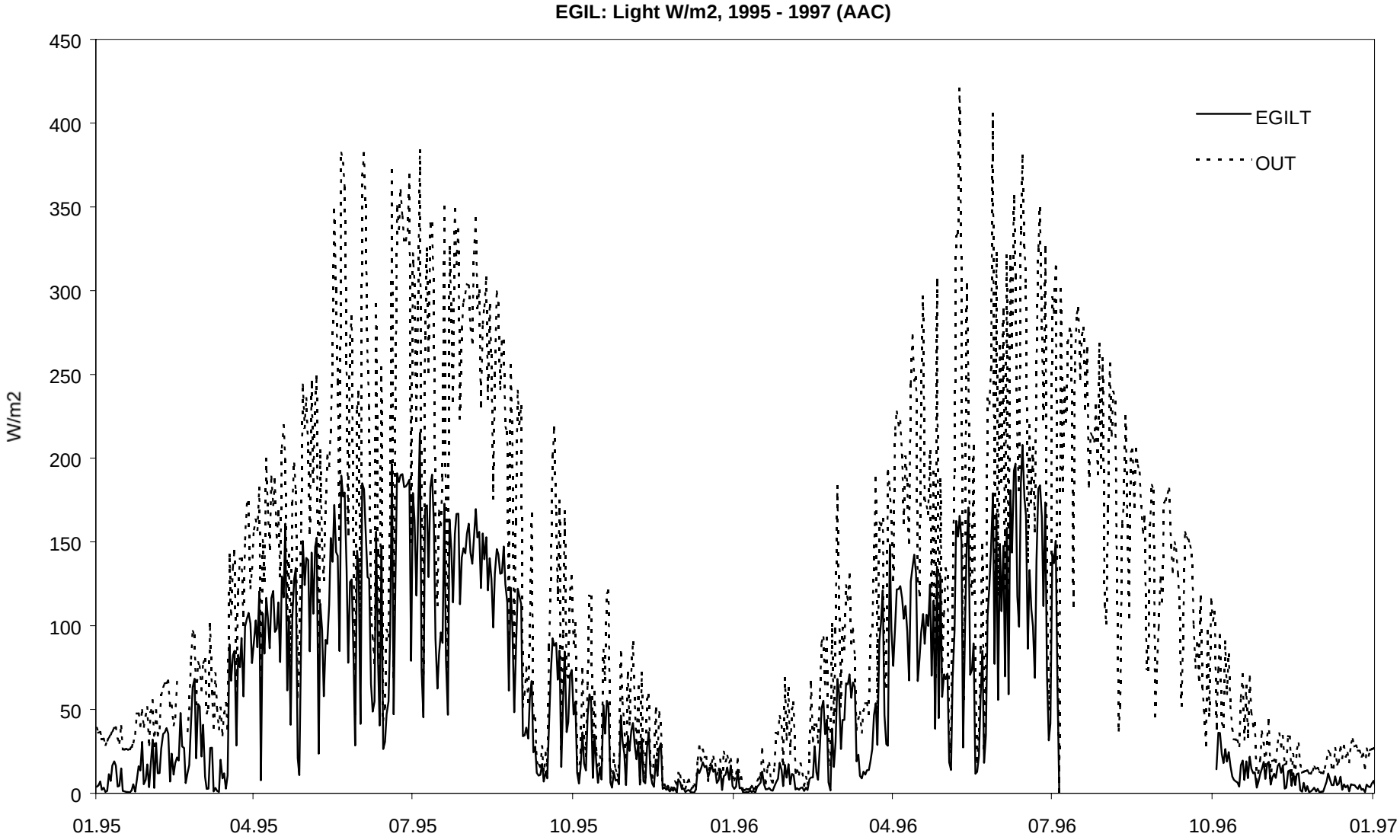

EGIL: Temperatures (+10 cm), 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
ref. area
area 1
area 2
area 3

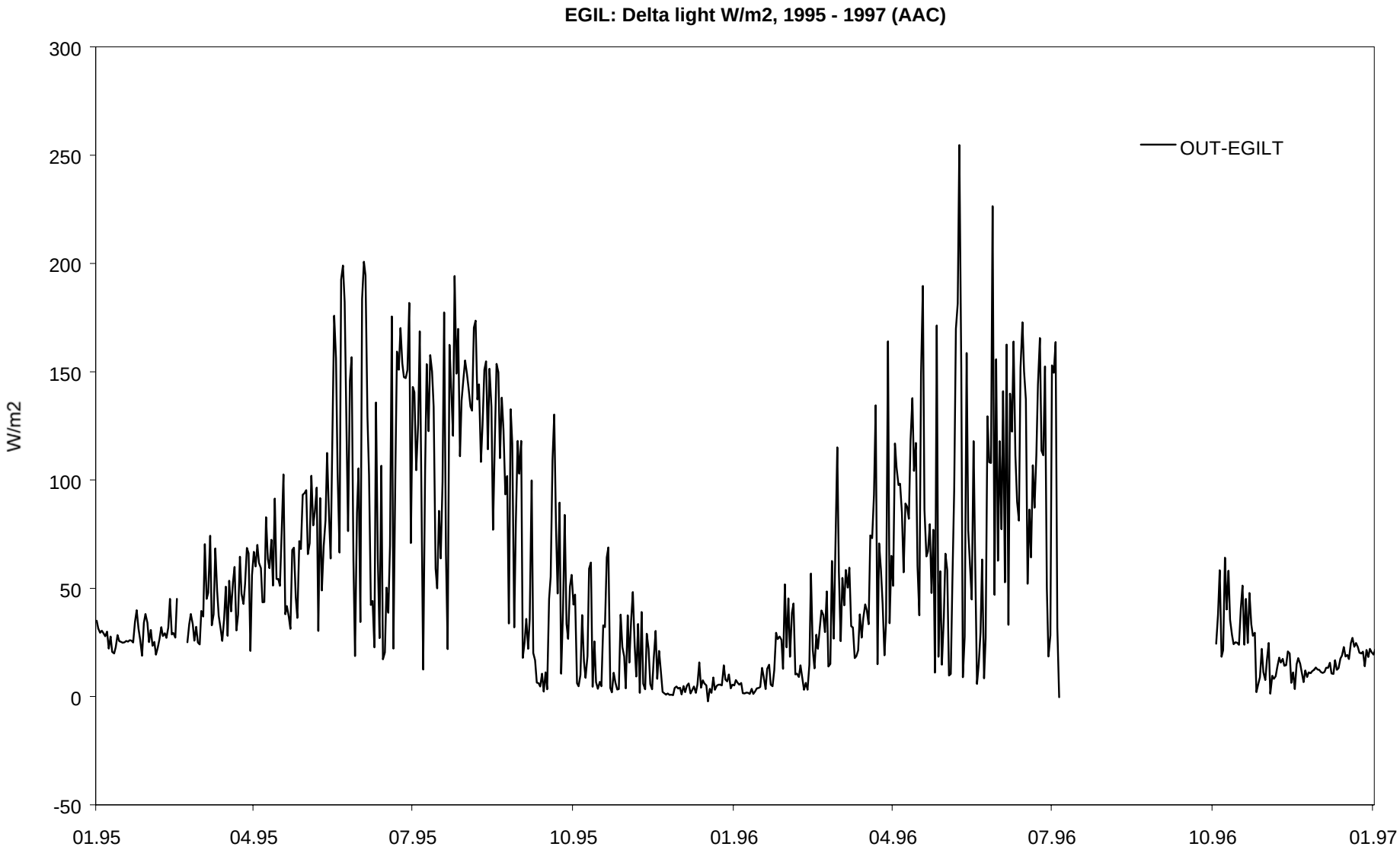

EGIL: Temperature Deltas (+10 cm), 1994 - 1998 (CR10)
Temp. °C
10
8
6
4
2
0
-2
-4
-6
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
area1 D
area2 D
area3 D
target


EGIL: Temperatures (+25 cm), 1994 - 1998 (CR10)
Temp. °C
30
20
10
0
-10
-20
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
ref. area
area 1
area 2
area 3


EGIL: Temperature Deltas (+25 cm), 1994 - 1998 (CR10)
Temp. °C
14
12
10
8
6
4
2
0
-2
-4
-6
05.94
09.94
01.95
05.95
09.95
01.96
05.96
09.96
01.97
05.97
09.97
01.98
05.98
area1 D
area2 D
area3 D
target


EGIL: Light MJoule, 1992 - 1996 (Li-Corr)
MJoule
30
25
20
15
10
5
0
01.92
05.92
09.92
01.93
05.93
09.93
01.94
05.94
09.94
01.95
05.95
09.95
01.96
EGILT
OUT


EGIL: Light W/m2, 1995 - 1997 (AAC)
W/m2
450
400
350
300
250
200
150
100
50
0
01.95
04.95
07.95
10.95
01.96
04.96
07.96
10.96
01.97
EGILT
OUT


EGIL: Delta light W/m2, 1995 - 1997 (AAC)
W/m2
300
250
200
150
100
50
0
-50
01.95
04.95
07.95
10.95
01.96
04.96
07.96
10.96
01.97
OUT-EGILT

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Appendix A. List of publications from the RAIN and CLIMEX projects

RAIN PROJECT publications December1994

1. Wright, R.F. 1985. RAIN project. Annual report for 1984. Acid Rain Res. Rept. 7/1985 (Norwegian Institute for Water Research, Oslo), 39 pp.

2. Lotse, E., and E. Otabbong, 1985. Physiochemical properties of soils at Risdalsheia and Sogndal. RAIN project. Acid Rain Res. Rept. 8/1985 (Norwegian Institute for Water Research, Oslo), 48 pp.

3. Wright, R.F. 1985. RAIN-prosjektet. Limnos nr. 1: 15-20 (in Norwegian).

4. Wright, R.F., E. Gjessing, N. Christophersen, E. Lotse, H.M. Seip, A. Semb, and B. Sletaune, 1986. Project RAIN: Changing acid deposition to whole catchments. The first year of treatment. Water Air Soil Pollut. 30: 47-64.

5. Wright, R.F. and E. Gjessing 1986. RAIN project. Annual report for 1985. Acid Rain Res. Rept. 9/1986 (Norwegian Institute for Water Research, Oslo), 33 pp.

6. Wright, R.F., E. Gjessing, A. Semb and B. Sletaune. 1986. RAIN project. Data report 1983-85. Acid Rain Res. Rept. 10/86 (Norwegian Institute for Water Research, Oslo), 62 pp.

7. Wright, R.F. and B. J. Cosby, 1987. Use of a process-oriented model to predict acidification at manipulated catchments in Norway. Atmos. Environ. 21: 727-730.

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9. Hauhs, M. 1986. Relation between chemistry of soil solution and runoff in two contrasting watersheds: Lange Bramke (West Germany) and Risdalsheia (Norway), p. 207-217, In S. Haldorsen and E.J. Berntsen (eds.) Water in the Unsaturated Zone (Nordic Hydrologic Programme Report 15, P.O. Box 5091, 0301 Oslo), 284 pp.

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11. Wright, R.F., 1987. RAIN project. Annual report for 1986. Acid Rain Res. Rept. 13/87 (Norwegian Inst. Water Research, Oslo, Norway), 90pp.

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13. Hauhs, M. 1988. Water and ion movement through a minicatchment at Risdalsheia, Norway (RAIN project). Acid Rain Res. Rept. 14/88 (Norwegian Inst. Water Research, Oslo, Norway), 74pp.

14. Wright, R.F., 1988. RAIN project. Annual report for 1987. Acid Rain Res. Rept. 16/88 (Norwegian Inst. Water Research, Oslo, Norway), 77pp.

15. Wright, R.F., Norton, S.A., Brakke, D.F and Frogner, T. 1988. Experimental verification of episodic acidification of freshwaters by seasalts. Nature 334: 422-424.

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18. Lotse, E. 1989. Soil chemistry 1983-86 at the RAIN project catchments. Acid Rain Research Report 18/1989 (Norwegian Institute for Water Research, Oslo), 66 pp.

19. Reuss, J.O. 1989. Interpretation of soil data from the RAIN project. Acid Rain Research Report 19/1989 (Norwegian Institute for Water Research, Oslo), 81 pp.

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26. Wohlfeil, I.C. and Müller, D.I. 1992. RAIN project: vegetation mapping at Risdalsheia 1991. Acid Rain Research Report 26/92 (Norwegian Institute for Water Research, Oslo), 42 pp.

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29. Cosby, B.J., Wright, R.F., and Gjessing, E. 1995. An acidification model (MAGIC) with organic acids evaluated using whole-catchment manipulations in Norway. J. Hydrol. 170: 101-122.

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