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PRECIPITATION AND AIR CHEMISTRY  
AT THE NORWEGIAN  
BACKGROUND STATIONS, 1986

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PRECIPITATION AND AIR CHEMISTRY AT THE NORWEGIAN  
BACKGROUND STATIONS, 1986

This report presents precipitation and air chemistry data for 1986, based on samples collected at 26 background stations in Norway. Air measurements of sulphur dioxide and particulate sulphate were made at 11 stations.

Fourteen of the stations were operated as part of the Norwegian national environmental monitoring programme (Statlig program for forurensningsovervåking) which started in 1981 with The State Pollution Control Authority (SFT) as responsible for the co-ordination and implementation of the programme. Eight of these stations are also part of the Co-operative programme for Monitoring and Evaluation of the Long Range Transmission of Air Pollution in Europe (EMEP), in operation from 1978. Three stations, established in 1986 for the Norwegian forestry monitoring programme, are also included.

The present data report is a supplement to the SFT yearly report for 1986 (Statens forurensningstilsyn, 1987), and include the precipitation chemistry data from ten supplementary NILU stations. Of these, four stations have daily sampling (Lista, Vatnedalen, Løken, Lillestrøm II has daily sampling except in the weekends), five have weekly sampling (Risdalsheia, Lillestrøm I, Kaupanger, Kise (week), Ny-Ålesund) and two stations have monthly sampling (Ås and Kise (month)).

The air samples of sulphur dioxide and particulate sulphate are made daily at six stations (Birkenes, Skreådalen, Hummelfjell, Kårvatn, Tustervatn, Jergul) and with sampling sequence 2+2+3 days in succession at five stations (Prestebakke, Nordmoen, Svanvik, Bjørnøya, Ny-Ålesund).

The Norwegian background measurements of zinc, cadmium and lead in precipitation at five stations are only presented in the SFT report. Reference is also made to the SFT report for description of analytical methods and the discussion of the data.

The data are presented as monthly and annual values. The daily values are available at NILU.

At the monthly precipitation sampling stations at Ås and Kise the monthly mean concentrations of the main components are generally higher than measured at the stations with daily precipitation sampling. This is probably due to greater dry deposition from local and long-range transported pollutants when using monthly bulk sampling. In addition, the evaporation from the bulk sampler may cause higher concentrations particularly in the summer season and with small precipitation amounts.

## REFERENCES

Statens forurensningstilsyn (1987) Overvåking av langtransportert forurenset luft og nedbør. Årsrapport 1986. Oslo. (Statlig program for forurensningsovervåking. Rapport nr. 296/87).

Schjoldager, J., Schaug, J., Joranger, E. and Hoem, K. (1973-87) Precipitation and air chemistry at the Norwegian background stations. Lillestrøm, NILU.

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nov. 1971-June 1972	NILU TN 52/73
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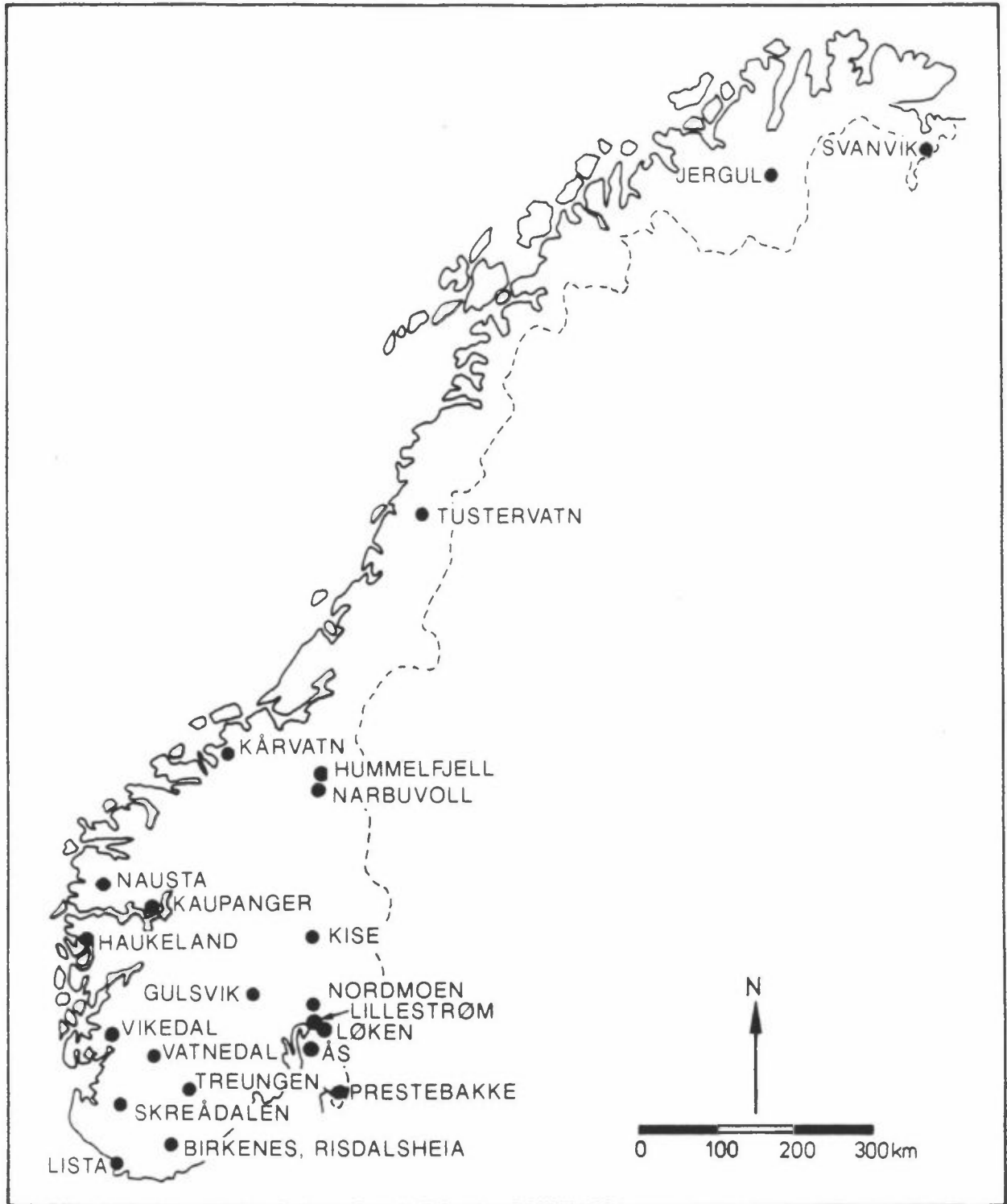


Figure 1: Norwegian background stations, 1986.

Table 1: Background stations in Norway 1977-86. The sites of the stations operating in 1986 are shown in Figure 1.

Station	County	Precipi. normal * 1931-60  mm	m.a.s.l.	Lat. (N)	Long. (E)		Measurements			
							Air	Precipitation		
								D	W 1 2	M
Skreådalen *	Vest-Agder	2015	475	58° 49'	6° 43'	Nov 71-	x	x		
Lista	"	1049	13	58° 06'	6° 34'	Nov 71-		x		
Birkenes	Aust-Agder	(1305)	190	58° 23'	8° 15'	Nov 71-	x	x	x	
Risdalsheia	"	(1305)	340	58° 24'	8° 19'	Nov 84-				x
Vatnedalen	"	(945)	800	59° 28'	7° 23'	Nov 73-		x		
Gjerstad *	"	1250	240	58° 53'	8° 57'	Nov 71-Sep 77		x		
Tovdal	"	1253	227	58° 48'	8° 14'	Nov 71-May 79		x		
Treungen	Telemark	(1005)	270	59° 01'	8° 32'	Sep 73-		x		
Vasser *	Vestfold	(775)	35	59° 04'	10° 26'	Apr 72-May 79	x	x		
Grimelid *	Buskerud	846	367	60° 08'	9° 36'	Mar 72-Sep 77		x		
Bakko	"	760	969	60° 41'	8° 01'	Mar 77-Apr 79		x		
Gulsvik	"	(760)	260	60° 22'	9° 39'	Sep 74-		x		
Løken	Akershus	(774)	150	59° 48'	11° 27'	Feb 72-		x		
Ås	"	785	95	59° 40'	10° 47'	1954-				x
Lillestrøm I	"	(810)	100	59° 58'	11° 02'	Sep 83-				x
Lillestrøm II	"	(810)	100	59° 58'	11° 02'	Mar 85-		x		
Nordmoen	"	(792)	200	60° 16'	11° 06'	Mar 86-	x		x	x
Prestebakke *	Østfold	831	160	59° 00'	11° 32'	Nov 85-	x			x
Tågmyra	Hedmark	670	526	61° 25'	12° 04'	Dec 71-Sep 77		x		
Narbuvooll	"	(534)	768	62° 21'	11° 28'	Apr 77-		x	x	
Hummelfjell	"	-	1539	62° 27'	11° 16'	Mar 73-	x			
Kise (week)	"	(534)	128	60° 46'	10° 48'	Jan 82-				x
Kise (month)	"	(534)	128	60° 46'	10° 48'	1956-				x
Vikedal I	Rogaland	(2650)	156	59° 33'	6° 00'	Mar 82-Dec 83				x
Vikedal II	"	(2650)	60	59° 32'	5° 58'	Jan 84		x		
Fitjar *	Hordaland	1590	20	59° 55'	5° 19'	Jul 72-Dec 81		x		
Haukeland	"	3225	204	60° 49'	5° 35'	Aug 81-		x		
Skei i Jølster *	Sogn og Fj.	1600	205	61° 34'	6° 29'	Jun 71-Jan 79		x		
Kaupanger	"	(910)	500	61° 09'	7° 06'	Jul 83-				x
Gaular	"	(1820)	240	61° 19'	6° 13'	Dec 83-Dec 84				x
Nausta	"	(2110)	265	61° 35'	5° 54'	Jan 85-				x
Kårvatn *	Møre og Romsd.	(1467)	210	62° 47'	8° 53'	Feb 78-	x	x	x	
Tusteryvatn *	Nordland	1100	439	65° 50'	13° 55'	Dec 71-	x	x		
Skrova	"	742	18	68° 09'	14° 39'	Sep 82-Jul 84	x			x
Alterneset	"	(1432)	10	66° 18'	11° 01'	Dec 83-Nov 84				x
Dividalen	Troms	(325)	140	68° 57'	19° 30'	Dec 76-Apr 79		x		
Jergul *	Finmark	(370)	255	69° 24'	24° 36'	Nov 76-	x	x	x	
Børselv *	"	442	10	70° 19'	25° 33'	Dec 76-Jan 78		x		
Vesterelv *	"	380	14	70° 09'	28° 34'	Dec 76-Dec 77		x		
Gornitak	"	375	20	70° 11'	28° 43'	Feb 78-Dec 80		x		
Vardø	"	(545)	60	70° 23'	31° 09'	Sep 82-Apr 85	x			x
Svanvik *	"	(398)	30	69° 27'	30° 02'	Aug 86-	x			x
Bjørnøya	Svalbard		20	74° 31'	19° 01'	Jul 77-	x			
Ny-Ålesund I	"		8	78° 55'	11° 56'	74-			x	
Ny-Ålesund II	"		42	78° 55'	11° 55'	74-	x			

D: Daily sampling      Analyses:  
W: Weekly sampling    Air, daily and three times  
M: Monthly sampling    a week (see text)      : SO<sub>2</sub> and SO<sub>4</sub>  
Precipitation D        : Amount (mm)<sup>4</sup>, pH, conductivity, SO<sub>4</sub>, NH<sub>4</sub>, NO<sub>3</sub>, Ca, K, Mg, Cl, Na  
Precipitation W 1      : Amount (mm), Pb, Cd, Zn  
Precipitation W 2      : Amount (mm), pH, conductivity, SO<sub>4</sub>, NH<sub>4</sub>, NO<sub>3</sub>, Ca, K, Mg, Cl, Na  
Precipitation M        : Amount (mm), pH, conductivity, SO<sub>4</sub>, NH<sub>4</sub>, NO<sub>3</sub>, Ca, K, Mg, Cl, Na

\* Precipitation stations for the Norwegian Meteorological Institute (DNMI)  
( ) the nearest DNMI station

Table 2: Annual weighted mean concentrations ( $\mu\text{eq/l}$ ) of precipitation components and the ion balances, measured at the Norwegian background stations, 1986.

Station	$\text{H}^+$	$\text{SO}_4^{2-}$	$\text{NO}_3^-$	$\text{NH}_4^+$	$\text{Ca}^{2+}$	$\text{K}^+$	Sea salt content				Total ion balance $\Sigma \text{ cation} / \Sigma \text{ anion}$
							$\text{Mg}^{2+}$	$\text{Na}^+$	$\text{Cl}^-$	$\text{SO}_4^{2-}$	
Birkenes	54	63	43	49	9	5	13	53	61	7	1.05
Skreådalen	31	33	20	21	7	5	16	70	81	8	1.06
Vikedal II	30	35	18	21	7	4	21	93	104	11	1.05
Treungen	65	66	40	45	7	3	6	20	24	3	1.10
Gulsvik	50	55	34	36	7	4	4	11	12	2	1.09
Narbuvoll	18	28	14	19	9	7	4	11	8	2	1.31
Haukeland	19	23	11	14	6	3	17	80	83	9	1.10
Kårvatn	13	13	5	9	5	3	9	39	45	5	1.15
Tustervatn	13	16	6	9	6	4	12	49	60	6	1.06
Jergul	25	30	12	16	6	3	4	13	9	2	1.26
Lista	54	59	45	41	53	26	219	885	1057	107	1.01
Vatnedalen	29	32	15	13	6	6	6	30	25	3	1.20
Løken	49	60	41	40	13	4	6	25	27	3	1.05
Lillestrøm II	60	65	41	38	9	3	5	16	21	2	1.02
Prestebakke	63	67	39	33	11	5	16	60	70	8	1.02
Nausta	18	17	7	5	4	2	13	55	64	7	1.02
Risdalsheia **	67	70	42	42	9	3	12	47	58	6	1.02
Lillestrøm I	50	78	44	70	15	9	7	25	26	4	1.16
Kaupanger	15	19	6	11	5	9	6	37	41	3	1.20
Ny-Ålesund I	11	27	5	35	27		48		199	23	
Kise (weekly)	45	53	33	38	17	6	4	9	10	2	1.21
Kise (monthly)	65	95	44	42	25	5	6	13	16	3	0.99
Ås	53	82	52	57	25	10	14	36	47	7	1.04

\*\* One month is missing.

Table 3: Annual weighted mean concentrations of precipitation components at the Norwegian background stations, 1986.

Station	H <sup>+</sup> µekv/l	SO <sub>4</sub> <sup>*</sup> -S mg S/l	NO <sub>3</sub> <sup>-</sup> -N mg N/l	NH <sub>4</sub> <sup>-</sup> -N mg N/l	Ca mg/l	K mg/l	Mg mg/l	Na mg/l	Cl mg/l
Birkenes	54	1.01	0.60	0.69	0.19	0.18	0.15	1.21	2.17
Skreådalen	31	0.53	0.29	0.30	0.15	0.18	0.19	1.60	2.87
Vikedal II	30	0.56	0.25	0.30	0.15	0.14	0.26	2.13	3.70
Treungen	65	1.07	0.57	0.63	0.14	0.12	0.07	0.47	0.84
Gulsvik	50	0.89	0.48	0.51	0.15	0.14	0.04	0.26	0.43
Narbuvoll	18	0.44	0.20	0.27	0.19	0.27	0.05	0.25	0.28
Haukeland	19	0.36	0.16	0.20	0.12	0.13	0.20	1.84	2.93
Kårvatn	13	0.20	0.07	0.13	0.10	0.11	0.11	0.89	1.61
Tustervatn	13	0.26	0.09	0.12	0.12	0.15	0.15	1.13	2.12
Jergul	25	0.49	0.16	0.23	0.12	0.13	0.04	0.31	0.33
Lista	54	0.95	0.63	0.57	1.06	1.03	2.66	20.35	37.48
Vatnedalen	29	0.51	0.21	0.19	0.13	0.22	0.07	0.68	0.90
Løken	49	0.96	0.57	0.56	0.26	0.17	0.08	0.58	0.97
Lillestrøm II	60	1.04	0.58	0.53	0.19	0.13	0.06	0.37	0.74
Prestebakke	63	1.08	0.54	0.47	0.23	0.21	0.19	1.39	2.48
Nausta	18	0.27	0.10	0.08	0.09	0.08	0.16	1.26	2.28
Risdalsheia	67	1.12	0.58	0.59	0.18	0.12	0.14	1.08	2.04
Lillestrøm I	50	1.25	0.61	0.99	0.30	0.34	0.09	0.58	0.91
Kaupanger	15	0.30	0.09	0.15	0.10	0.37	0.07	0.86	1.45
Ny-Ålesund I	11	0.43	0.07	0.49	0.55		0.58		7.04
Kise (weekly)	45	0.85	0.46	0.54	0.34	0.24	0.05	0.20	0.37
Kise (monthly)	65	1.53	0.62	0.59	0.51	0.18	0.08	0.29	0.55
Ås	53	1.32	0.73	0.80	0.50	0.41	0.17	0.83	1.66

\*\* One month is missing.

Table 4: The wet deposition of precipitation components at the Norwegian background stations, 1986.

Station	H <sup>+</sup> mekv/m <sup>2</sup>	SO <sub>4</sub> <sup>*</sup> -S g S/m <sup>2</sup>	NO <sub>3</sub> <sup>-</sup> -N g N/m <sup>2</sup>	NH <sub>4</sub> <sup>-</sup> -N g N/m <sup>2</sup>	Ca g/m <sup>2</sup>	K g/m <sup>2</sup>	Mg g/m <sup>2</sup>	Na g/m <sup>2</sup>	Cl g/m <sup>2</sup>
Birkenes	88	1.62	0.97	1.11	0.30	0.30	0.25	1.96	3.50
Skreådalen	75	1.29	0.70	0.73	0.37	0.44	0.47	3.91	7.00
Vikedal II	89	1.67	0.75	0.89	0.45	0.42	0.77	6.35	11.01
Treungen	66	1.10	0.58	0.65	0.14	0.13	0.07	0.49	0.87
Gulsvik	40	0.71	0.38	0.41	0.12	0.11	0.03	0.21	0.35
Narbuvoll	9	0.23	0.10	0.14	0.10	0.14	0.02	0.13	0.14
Haukeland	77	1.46	0.62	0.80	0.48	0.51	0.81	7.37	11.73
Kárvatn	17	0.26	0.09	0.16	0.13	0.14	0.14	1.14	2.06
Tustervatn	14	0.28	0.09	0.13	0.12	0.16	0.16	1.20	2.25
Jergul	6	0.12	0.04	0.06	0.03	0.03	0.01	0.08	0.08
Lista	69	1.23	0.82	0.74	1.36	1.33	3.44	26.32	48.45
Vatnedalen	29	0.51	0.21	0.18	0.13	0.21	0.07	0.67	0.88
Løken	34	0.67	0.40	0.39	0.18	0.12	0.05	0.41	0.68
Lillestrøm II	41	0.71	0.40	0.36	0.13	0.09	0.04	0.25	0.50
Prestebakke	44	0.75	0.38	0.33	0.16	0.15	0.13	0.97	1.74
Nausta	42	0.61	0.23	0.18	0.21	0.19	0.37	2.92	5.28
Risdalsheia **	95	1.59	0.83	0.84	0.26	0.17	0.20	1.54	2.90
Lillestrøm I	28	0.69	0.34	0.54	0.16	0.19	0.05	0.32	0.50
Kaupanger	13	0.26	0.08	0.13	0.09	0.31	0.06	0.73	1.23
Ny-Ålesund I	3	0.13	0.02	0.15	0.17		0.18		2.16
Kise (weekly)	20	0.39	0.21	0.24	0.15	0.11	0.02	0.09	0.17
Kise (monthly)	17	0.41	0.16	0.16	0.14	0.05	0.02	0.08	0.15
Ås	37	0.92	0.51	0.56	0.35	0.28	0.12	0.58	1.15

\*\* One month is missing.



Table 5: Monthly and annual weighted mean values of pH in precipitation at the Norwegian background stations, 1986.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	4.55	4.12	4.18	4.18	4.15	4.12	4.08	4.26	4.42	4.29	4.35	4.39	4.26
Skreådalen	4.92	5.02	4.45	4.41	4.36	4.43	4.12	4.24	5.00	4.55	4.62	4.72	4.51
Vikedal II	4.96	4.96	4.46	4.00	4.26	4.17	4.31	4.36	4.79	4.58	4.63	4.71	4.52
Treungen	4.50	4.13	4.05	4.16	4.13	4.16	4.00	4.10	4.73	4.33	4.18	4.41	4.19
Gulsvik	4.71	-	3.90	4.23	4.21	4.43	4.21	4.23	5.05	4.47	4.25	4.44	4.30
Narbuvoll	4.70	4.93	4.35	4.68	4.23	4.87	4.76	4.90	5.50	4.80	4.73	4.67	4.74
Haukeland	5.14	4.76	4.53	3.76	4.53	4.31	4.59	4.49	5.21	4.71	4.88	4.89	4.71
Kårvatn	4.75	5.19	5.26	4.62	4.62	4.64	4.91	4.85	5.20	4.55	5.39	5.20	4.87
Tustervatn	4.62	4.98	4.79	4.55	4.92	4.45	4.67	4.43	5.33	5.07	5.00	4.83	4.88
Jergul	4.44	5.06	4.31	4.75	4.05	4.87	4.64	4.53	4.75	4.71	4.75	4.92	4.60
Lista	4.55	-	4.20	3.98	4.17	4.24	4.24	4.14	4.61	4.31	4.18	4.43	4.27
Vatnedalen	4.87	4.33	4.54	4.11	4.24	4.11	4.52	4.35	4.87	4.84	4.71	4.99	4.54
Løken	4.53	3.69	4.32	4.67	4.09	4.13	4.28	4.22	4.90	4.35	4.35	4.29	4.31
Lillestrøm II	4.54	-	4.12	4.33	4.14	4.32	4.04	4.19	4.58	4.16	4.19	4.21	4.22
Prestebakke	4.32	3.96	4.20	4.09	4.09	4.24	4.03	4.06	4.80	4.42	4.28	4.22	4.20
Nordmoen			4.27	4.33	4.09	4.13	4.09	4.25	4.81	4.17	4.16	4.23	(4.20)
Nausta	5.08	4.90	4.65	3.91	4.54	3.92	4.48	4.41	5.16	4.77	4.97	4.91	4.74
Svanvik								4.41	4.81	4.51	4.63	4.85	(4.61)
Risdalsheia	4.42	-	4.03	4.06	4.07	4.10	4.09	4.18	4.41	4.17	4.25	4.46	4.18
Lillestrøm I	4.61	-	4.10	4.50	4.65	4.59	4.04	4.27	4.73	4.33	4.15		(4.30)
Kaupanger	4.93	5.29	4.83	4.59	4.49	4.38	4.65	4.49	5.29	5.08	4.98	5.14	4.81
Ny-Ålesund I	5.21	4.85	4.78	5.11	6.13	4.85	5.70	4.84	5.33	6.61	6.21	5.53	4.98
Kise (weekly)	4.57	4.44	3.95	4.25	4.51	4.50	4.27	4.13	5.27	4.75	4.48	4.62	4.35
Kise (monthly)	4.55	-	3.95	3.99	4.14	3.92	4.32	3.90	4.22	4.72	4.46	4.97	4.19
Ås	4.54	-	4.26	4.31	4.17	4.47	4.28	4.10	5.90	6.09	4.25	4.14	4.28

Table 6: Monthly and annual weighted mean concentrations of excess sulphate ( $\text{SO}_4$ ) in precipitation at the Norwegian background stations, 1986.  
Unit: mg S/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	0.43	1.29	1.35	1.38	1.56	1.75	1.35	0.73	0.76	0.81	0.94	0.84	1.01
Skreådalen	0.17	0.46	0.62	0.77	0.89	0.90	0.99	0.81	0.16	0.48	0.41	0.39	0.53
Vikedal II	0.15	0.65	0.63	2.27	1.09	1.56	0.87	0.72	0.31	0.40	0.40	0.46	0.56
Treungen	0.25	1.04	1.49	0.97	1.27	1.75	1.69	0.97	0.50	0.81	1.05	0.85	1.07
Gulsvik	0.19	-	2.38	1.80	1.19	1.40	1.14	0.71	0.12	0.64	0.91	0.63	0.89
Narbuvoll	0.21	0.67	1.01	0.46	1.68	0.66	0.48	0.38	0.17	0.35	0.31	0.26	0.44
Haukeland	0.13	0.56	0.58	2.91	0.62	1.08	0.57	0.61	0.11	0.30	0.21	0.28	0.36
Kårvatn	0.20	0.16	0.16	0.42	0.56	0.64	0.26	0.28	0.08	0.11	0.07	0.08	0.20
Tustervatn	0.25	0.20	0.21	0.73	0.39	1.13	0.53	0.43	0.05	0.15	0.17	0.18	0.26
Jergul	0.24	0.18	0.82	0.74	2.42	0.62	0.51	0.36	0.39	0.39	0.28	0.08	0.49
Lista	0.67	-	1.06	1.51	1.58	1.29	0.90	0.99	0.30	0.95	0.92	0.71	0.95
Vatnedalen	0.15	0.42	0.34	0.90	0.97	1.55	0.69	0.52	0.27	0.32	0.27	0.46	0.51
Løken	0.35	3.96	1.19	0.55	2.24	1.36	1.28	0.88	0.47	0.89	0.73	0.83	0.96
Lillestrøm II	0.33	-	1.30	0.97	1.78	1.01	2.00	0.91	0.52	1.27	0.95	1.01	1.04
Prestebakke	0.60	1.88	1.21	1.69	1.97	1.47	1.43	1.07	0.67	0.61	0.70	1.08	1.08
Nordmoen			0.72	0.75	1.59	1.46	1.42	0.65	0.26	1.15	0.96	0.95	(0.99)
Nausta	0.13	0.19	0.35	2.05	0.46	2.00	0.44	0.41	0.11	0.23	0.15	0.17	0.27
Svanvik								1.35	0.47	0.64	0.32	0.31	(0.62)
Risdalsheia	0.48	-	1.85	1.71	1.69	1.60	1.16	0.73	0.93	1.09	0.98	0.98	1.12
Lillestrøm I	0.57	-	1.86	1.47	2.30	1.18	1.48	0.93	0.77	1.08	1.29		(1.25)
Kaupanger	0.21	0.50	0.33	0.75	0.56	0.80	0.52	0.44	0.13	0.22	0.19	0.14	0.30
Ny-Ålesund I	0.42	0.52	0.32	0.75	2.59	0.66	0.60	0.47	0.25	0.30	0.01	0.46	0.43
Kise (weekly)	0.39	0.90	2.35	1.34	1.51	1.36	1.41	0.65	0.33	0.79	0.64	0.55	0.85
Kise (monthly)	0.38	-	3.28	2.46	2.79	3.14	2.04	1.57	1.53	0.96	0.92	0.92	1.53
Ås	0.54	-	1.78	1.56	1.73	1.74	1.63	1.04	3.46	1.29	0.90	1.44	1.32

Table 7: Monthly and annual weighted mean concentrations of nitrate ( $\text{NO}_3^-$ ) in precipitation at the Norwegian background stations, 1986.

Unit: mg N/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	0.39	0.76	0.75	1.11	0.90	0.73	0.73	0.33	0.55	0.55	0.66	0.49	0.60
Skreådalen	0.10	0.60	0.41	0.68	0.39	0.41	0.56	0.35	0.08	0.28	0.22	0.20	0.29
Vikedal II	0.09	0.30	0.36	1.33	0.44	0.59	0.30	0.31	0.11	0.25	0.19	0.17	0.25
Treungen	0.40	0.78	0.82	0.71	0.54	0.55	0.90	0.45	0.20	0.47	0.64	0.54	0.57
Gulsvik	0.57	-	1.68	1.07	0.42	0.43	0.48	0.32	0.09	0.34	0.58	0.45	0.48
Narbuvoll	0.22	0.30	1.08	0.17	0.52	0.14	0.12	0.11	0.02	0.26	0.24	0.23	0.20
Haukeland	0.09	0.36	0.34	1.41	0.23	0.31	0.22	0.27	0.02	0.13	0.08	0.13	0.16
Kårvatn	0.09	0.05	0.07	0.09	0.22	0.17	0.09	0.10	0.02	0.08	0.03	0.03	0.07
Tustervatn	0.28	0.05	0.13	0.17	0.12	0.30	0.13	0.15	0.01	0.05	0.05	0.18	0.09
Jergul	0.47	0.08	0.32	0.22	0.43	0.11	0.11	0.09	0.05	0.20	0.21	0.07	0.16
Lista	0.45	-	0.66	1.31	0.92	0.80	0.84	0.57	0.31	0.69	0.52	0.51	0.63
Vatnedalen	0.16	0.58	0.28	0.65	0.39	0.47	0.28	0.20	0.10	0.13	0.14	0.10	0.21
Løken	0.42	1.64	0.88	0.53	0.87	0.41	0.40	0.57	0.24	0.57	0.47	0.59	0.57
Lillestrøm II	0.38	-	0.92	0.77	0.71	0.38	0.76	0.38	0.27	0.69	0.62	0.63	0.58
Prestebakke	0.46	1.10	0.84	1.27	0.88	0.59	0.50	0.28	0.01	0.30	0.49	0.59	0.54
Nordmoen			0.60	0.63	0.68	0.38	0.49	0.21	0.18	0.58	0.65	0.53	(0.49)
Nausta	0.07	0.13	0.18	0.84	0.19	0.46	0.07	0.07	0.01	0.11	0.03	0.09	0.10
Svanvik								0.05	0.08	0.30	0.20	0.10	(0.14)
Risdalsheia	0.42	-	0.91	1.53	0.83	0.70	0.50	0.26	0.04	0.64	0.68	0.49	0.58
Lillestrøm I	0.49	-	1.10	1.04	0.87	0.45	0.60	0.32	0.19	0.58	0.69		(0.61)
Kaupanger	0.18	0.37	0.26	0.23	0.12	0.10	0.08	0.06	0.04	0.02	0.06	0.09	0.09
Ny-Ålesund I	0.07	0.08	0.04	0.08	0.62	0.10	0.08	0.05	0.04	0.03	0.06	0.08	0.07
Kise (weekly)	0.50	0.76	1.47	0.93	0.57	0.37	0.46	0.27	0.20	0.52	0.43	0.41	0.46
Kise (monthly)	0.70	-	1.52	1.23	0.89	0.60	0.55	0.55	0.60	0.55	0.47	0.36	0.62
Ås	0.49	-	1.16	1.38	0.80	0.58	0.64	0.47	0.71	0.69	0.74	0.74	0.73

Table 8: Monthly and annual weighted mean concentrations of ammonium ( $\text{NH}_4$ ) in precipitation at the Norwegian background stations, 1986. Unit: mg N/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	0.33	0.44	0.98	1.01	1.07	0.94	0.68	0.39	0.66	0.71	0.76	0.55	0.69
Skreådalen	0.09	-	0.47	0.46	0.44	0.51	0.51	0.42	0.10	0.25	0.22	0.27	0.30
Vikedal II	0.08	0.57	0.37	1.48	0.55	0.84	0.46	0.39	0.18	0.23	0.19	0.22	0.30
Treungen	0.17	0.23	0.91	0.53	0.61	0.94	0.84	0.54	1.28	0.56	0.62	0.59	0.63
Gulsvik	0.40	-	1.81	1.08	0.53	1.03	0.55	0.33	0.20	0.31	0.56	0.36	0.51
Narbuvoll	0.08	0.60	0.76	0.15	0.76	0.47	0.45	0.27	0.07	0.15	0.09	0.09	0.27
Haukeland	0.11	0.46	0.38	1.36	0.37	0.48	0.40	0.30	0.03	0.09	0.14	0.14	0.20
Kårvatn	0.05	0.10	0.09	0.09	0.41	0.31	0.26	0.41	0.03	0.04	0.03	0.05	0.13
Tustervatn	0.07	0.07	0.06	0.36	0.18	0.51	0.41	0.07	0.03	0.04	0.06	0.06	0.12
Jergul	0.04	0.02	0.34	0.06	0.19	0.31	0.25	0.10	0.05	0.12	0.98	0.03	0.23
Lista	0.59	-	0.68	0.68	1.02	0.63	0.55	0.60	0.22	0.57	0.44	0.40	0.57
Vatnedalen	0.11	0.17	0.17	0.37	0.35	0.58	0.20	0.16	0.02	0.05	0.12	0.17	0.19
Løken	0.26	-	0.98	0.40	1.23	0.51	0.64	0.44	0.40	0.58	0.33	0.44	0.56
Lillestrøm II	0.20	-	0.90	0.84	0.88	0.44	0.80	0.44	0.21	0.67	0.28	0.50	0.53
Prestebakke	0.34	0.93	0.92	1.19	1.05	0.59	0.38	0.17	0.02	0.08	0.37	0.42	0.47
Nordmoen			0.54	0.48	0.79	0.42	0.39	0.12	0.11	0.65	0.44	0.40	(0.41)
Nausta	0.07	0.12	0.17	0.63	0.18	0.37	0.02	0.02	0.02	0.06	0.02	0.06	0.08
Svanvik								0.32	0.15	0.25	0.08	0.18	(0.19)
Risdalsheia	0.30	-	1.21	1.34	0.98	0.86	0.33	0.23	0.42	0.53	0.62	0.59	0.59
Lillestrøm I	0.51	-	1.32	1.18	2.60	0.91	0.81	0.93	0.52	0.65	0.55		(0.99)
Kaupanger	0.31	0.58	0.30	0.40	0.12	0.23	0.28	0.06	0.15	0.03	0.06	0.17	0.15
Ny-Ålesund I	0.06	0.14	0.05	0.21	1.08	0.13	3.10	1.66	0.21	0.44	0.17	0.02	0.49
Kise (weekly)	0.28	0.76	1.53	0.71	1.11	0.70	0.85	0.34	0.41	0.86	0.38	0.26	0.54
Kise (monthly)	0.22	-	1.80	0.78	1.32	0.62	1.24	0.56	0.80	0.56	0.36	0.02	0.59
Ås	0.28	-	1.40	1.30	0.96	1.18	0.90	0.90	-	0.74	0.32	0.60	(0.80)

Table 9: Monthly and annual weighted mean concentrations of calcium (Ca) in precipitation at the Norwegian background stations, 1986.

Unit: mg/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	0.10	0.29	0.19	0.28	0.34	0.25	0.19	0.12	0.18	0.14	0.23	0.17	0.19
Skreådalen	0.14	0.29	0.15	0.53	0.19	0.15	0.14	0.12	0.05	0.08	0.18	0.16	0.15
Vikedal II	0.18	0.25	0.16	0.38	0.23	0.27	0.10	0.10	0.06	0.12	0.17	0.19	0.15
Treungen	0.06	0.24	0.14	0.13	0.18	0.25	0.17	0.13	0.10	0.06	0.13	0.17	0.14
Gulsvik	0.10	-	0.36	0.85	0.18	0.21	0.16	0.08	0.16	0.11	0.10	0.08	0.15
Narbuvoll	0.14	0.33	0.59	0.23	0.46	0.20	0.11	0.10	0.31	0.20	0.22	0.09	0.19
Haukeland	0.14	0.16	0.17	0.31	0.11	0.12	0.19	0.12	0.04	0.11	0.11	0.16	0.12
Kårvatn	0.08	0.08	0.10	0.09	0.22	0.10	0.07	0.11	0.05	0.17	0.15	0.04	0.10
Tustervatn	0.10	0.13	0.13	0.14	0.15	0.24	0.07	0.08	0.02	0.10	0.17	0.10	0.12
Jergul	0.09	0.09	0.17	0.29	0.29	0.14	0.11	0.05	0.08	0.14	0.16	0.09	0.12
Lista	0.82	-	0.82	0.60	0.49	0.36	0.48	0.43	1.11	1.14	1.34	2.49	1.06
Vatnedalen	0.08	0.16	0.11	0.08	0.21	0.20	0.19	0.08	0.52	0.17	0.10	0.08	0.13
Løken	0.14	0.44	0.60	0.47	0.55	0.16	0.24	0.12	0.20	0.16	0.16	0.14	0.26
Lillestrøm II	0.12	-	0.21	0.25	0.49	0.22	0.52	0.13	0.15	0.14	0.13	0.17	0.19
Prestebakke	0.61	0.31	0.20	0.37	0.35	0.39	0.24	0.17	0.36	0.23	0.15	0.16	0.23
Nordmoen			0.10	0.12	0.40	0.16	0.24	0.05	0.06	0.10	0.14	0.09	(0.13)
Nausta	0.09	0.04	0.10	0.25	0.08	0.18	0.07	0.05	0.03	0.09	0.11	0.10	0.09
Svanvik								0.20	0.10	0.18	0.08	0.24	(0.14)
Risdalsheia	0.18	-	0.21	0.55	0.28	0.19	0.14	0.13	0.23	0.13	0.20	0.23	0.18
Lillestrøm I	0.21	-	0.41	0.52	0.68	0.32	0.34	0.10	0.29	0.21	0.24		(0.30)
Kaupanger	0.14	0.22	0.15	0.18	0.10	0.07	0.11	0.07	0.08	0.09	0.08	0.12	0.10
Ny-Ålesund I	0.67	0.37	0.12	0.38	1.37	0.58	0.68	0.47	2.00	2.26	1.08	0.75	0.55
Kise (weekly)	0.48	0.61	0.60	0.63	0.59	0.51	0.49	0.09	0.44	0.51	0.18	0.20	0.34
Kise (monthly)	0.44	-	0.64	0.90	1.08	0.93	0.57	0.19	0.23	0.44	0.24	0.77	0.51
Ås	0.40	-	0.67	0.76	0.38	0.54	0.41	0.18	3.32	1.72	0.33	0.22	0.50

Table 10: Monthly and annual weighted mean concentrations of potassium (K) in precipitation at the Norwegian background stations, 1986.  
Unit: mg/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	0.19	0.25	0.14	0.15	0.21	0.22	0.23	0.09	0.64	0.15	0.30	0.18	0.18
Skreådalen	0.26	-	0.18	0.17	0.13	0.13	0.13	0.16	0.13	0.13	0.25	0.19	0.18
Vikedal II	0.16	0.55	0.20	0.14	0.09	0.13	0.06	0.08	0.08	0.13	0.20	0.16	0.14
Treungen	0.19	0.06	0.19	0.10	0.09	0.19	0.08	0.07	0.51	0.08	0.11	0.12	0.12
Gulsvik	0.10	-	0.24	0.16	0.13	0.29	0.12	0.06	0.34	0.13	0.15	0.14	0.14
Narbuvoll	0.09	0.17	0.34	0.11	0.16	0.15	0.13	0.18	1.20	0.17	0.13	0.08	0.27
Haukeland	0.17	0.09	0.18	0.14	0.16	0.08	0.20	0.08	0.05	0.11	0.15	0.12	0.13
Kårvatn	0.13	0.13	0.11	0.11	0.13	0.15	0.07	0.18	0.06	0.15	0.15	0.08	0.11
Tustervatn	0.17	0.14	0.13	0.40	0.10	0.29	0.19	0.07	0.06	0.11	0.20	0.10	0.15
Jergul	0.29	0.06	0.24	0.27	0.12	0.29	0.07	0.03	0.05	0.07	0.34	0.11	0.13
Lista	0.86	-	1.26	0.38	0.20	0.23	0.26	0.34	0.91	1.25	1.36	2.36	1.03
Vatnedalen	0.29	0.21	0.07	0.05	0.14	0.11	0.18	0.05	0.64	0.43	0.14	0.33	0.22
Løken	0.29	-	0.15	0.20	0.21	0.20	0.15	0.13	0.22	0.12	0.17	0.13	0.17
Lillestrøm II	0.09	-	0.08	0.12	0.21	0.30	0.20	0.14	0.22	0.11	0.08	0.09	0.13
Prestebakke	0.37	0.15	0.22	0.09	0.12	0.37	0.15	0.13	0.64	0.38	0.17	0.11	0.21
Nordmoen			0.07	0.05	0.16	0.13	0.05	0.05	0.11	0.06	0.15	0.11	(0.09)
Nausta	0.08	0.01	0.06	0.08	0.07	0.08	0.03	0.01	0.10	0.09	0.09	0.11	0.08
Svanvik								0.19	0.11	0.09	0.08	0.27	(0.14)
Risdalsheia	0.16	-	0.12	0.32	0.09	0.10	0.08	0.05	0.16	0.16	0.17	0.17	0.12
Lillestrøm I	0.10	-	0.30	0.21	1.44	0.47	0.23	0.25	0.35	0.15	0.15		(0.34)
Kaupanger	0.69	1.28	0.54	0.11	0.06	0.11	0.37	0.27	0.55	0.25	0.30	0.44	0.37
Ny-Ålesund I					0.71								
Kise (weekly)	0.47	0.28	0.33	0.10	0.21	0.29	0.19	0.13	0.35	0.51	0.11	0.14	0.24
Kise (monthly)	0.04	-	0.27	0.09	0.22	0.41	0.59	0.04	0.35	0.28	0.07	0.15	0.18
Ås	0.06	-	0.12	0.18	0.36	0.49	0.32	0.26	-	2.65	0.15	0.15	(0.41)

Table 11: Monthly and annual weighted mean concentrations of magnesium (Mg) in precipitation at the Norwegian background stations, 1986.

Unit: mg/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	0.21	0.18	0.14	0.18	0.11	0.07	0.06	0.07	0.10	0.21	0.22	0.19	0.15
Skreådalen	0.30	0.34	0.25	0.23	0.11	0.04	0.05	0.09	0.09	0.16	0.27	0.25	0.19
Vikedal II	0.42	0.31	0.33	0.11	0.17	0.06	0.08	0.08	0.12	0.29	0.39	0.33	0.26
Treungen	0.03	0.04	0.04	0.09	0.07	0.06	0.04	0.05	0.05	0.08	0.11	0.09	0.07
Gulsvik	0.02	-	0.10	0.11	0.03	0.05	0.04	0.03	0.03	0.05	0.07	0.03	0.04
Narbuvooll	0.03	0.10	0.11	0.02	0.06	0.04	0.03	0.02	0.12	0.06	0.05	0.03	0.05
Haukeland	0.38	0.27	0.36	0.10	0.11	0.05	0.08	0.09	0.09	0.22	0.23	0.27	0.20
Kárvatn	0.17	0.14	0.14	0.07	0.04	0.03	0.04	0.07	0.08	0.20	0.21	0.07	0.11
Tustervatn	0.03	0.22	0.23	0.06	0.03	0.12	0.09	0.02	0.02	0.22	0.27	0.09	0.15
Jergul	0.03	0.09	0.05	0.04	0.06	0.04	0.02	0.03	0.04	0.03	0.12	0.08	0.04
Lista	2.34	-	2.07	0.83	0.39	0.43	0.77	0.91	3.40	3.29	3.64	6.28	2.66
Vatnedalen	0.05	0.05	0.07	0.01	0.06	0.03	0.06	0.02	0.10	0.13	0.08	0.09	0.07
Løken	0.09	0.11	0.06	0.05	0.11	0.07	0.06	0.04	0.05	0.11	0.14	0.06	0.08
Lillestrøm II	0.04	-	0.05	0.04	0.07	0.05	0.08	0.04	0.02	0.08	0.09	0.06	0.06
Prestebakke	0.40	0.12	0.09	0.06	0.11	0.16	0.11	0.09	0.45	0.28	0.26	0.23	0.19
Nordmoen			0.04	0.04	0.07	0.04	0.04	0.01	0.00	0.05	0.09	0.05	(0.04)
Nausta	0.17	0.07	0.23	0.07	0.09	0.05	0.04	0.02	0.07	0.22	0.17	0.19	0.16
Svanvik								0.11	0.14	0.11	0.05	0.46	(0.14)
Risdalsheia	0.26	-	0.14	0.40	0.10	0.06	0.04	0.08	0.11	0.16	0.21	0.24	0.14
Lillestrøm I	0.07	-	0.08	0.06	0.20	0.12	0.08	0.05	0.04	0.12	0.12		(0.09)
Kaupanger	0.08	0.13	0.06	0.04	0.05	0.02	0.03	0.02	0.05	0.16	0.10	0.08	0.07
Ny-Ålesund I	1.17	0.55	0.27	0.25	0.74	0.30	0.40	0.25	0.81	1.76	1.36	0.98	0.58
Kise (weekly)	0.06	0.05	0.10	0.07	0.09	0.07	0.07	0.02	0.05	0.10	0.05	0.03	0.05
Kise (monthly)	0.05	-	0.13	0.21	0.18	0.12	0.08	0.05	0.02	0.09	0.06	0.05	0.08
Ås	0.10	-	0.13	0.16	0.11	0.13	0.09	0.06	0.51	0.74	0.20	0.15	0.17

Table 12: Monthly and annual weighted mean concentrations of sodium (Na) in precipitation at the Norwegian background stations, 1986.  
Unit: mg/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	1.85	1.73	1.15	1.37	0.78	0.40	0.37	0.49	0.98	1.69	1.77	1.59	1.21
Skreådalen	2.57	3.50	2.17	0.50	0.78	0.35	0.37	0.76	0.90	1.33	2.20	2.29	1.60
Vikedal II	3.45	2.10	3.08	0.62	1.26	0.27	0.51	0.52	1.08	2.19	3.10	2.93	2.13
Treungen	0.34	0.23	0.39	0.70	0.47	0.22	0.16	0.24	0.24	0.58	0.83	0.71	0.47
Gulsvik	0.22	-	1.50	0.41	0.15	0.16	0.17	0.11	0.06	0.28	0.46	0.26	0.26
Narbuvoll	0.26	0.70	0.68	0.26	0.45	0.15	0.27	0.14	0.23	0.25	0.29	0.19	0.25
Haukeland	3.09	2.08	3.01	0.63	0.83	0.30	0.42	0.48	0.79	1.79	1.93	3.64	1.84
Kårvatn	1.41	1.27	1.28	0.67	0.27	0.20	0.24	0.25	0.78	1.68	1.73	0.62	0.89
Tustervatn	0.32	1.81	1.88	0.57	0.18	0.74	0.08	0.16	0.25	1.62	2.09	0.73	1.13
Jergul	0.42	0.83	0.92	0.79	0.31	0.31	0.10	0.17	0.32	0.17	0.36	0.78	0.31
Lista	19.60	-	17.25	6.48	3.02	3.41	5.88	6.31	27.20	20.98	27.26	51.86	20.35
Vatnedalen	0.65	0.54	0.63	0.14	0.49	0.22	0.68	0.20	0.30	0.61	0.63	1.42	0.68
Løken	0.94	0.58	0.48	0.32	0.59	0.40	0.26	0.25	0.49	0.89	1.14	0.46	0.58
Lillestrøm II	0.35	-	0.36	0.26	0.38	0.27	0.27	0.21	0.20	0.58	0.68	0.34	0.37
Prestebakke	2.14	0.84	1.07	0.26	0.61	0.89	0.58	0.56	3.58	1.82	2.02	1.96	1.39
Nordmoen			0.54	0.29	0.42	0.14	0.22	0.09	0.10	0.35	0.58	0.39	(0.32)
Nausta	1.42	0.62	1.75	0.50	0.77	0.21	0.34	0.12	0.65	1.80	1.32	1.58	1.26
Svanvik								0.46	1.11	0.63	0.31	3.81	(1.01)
Risdalsheia	2.05	-	1.18	3.04	0.71	0.30	0.30	0.47	0.86	1.20	1.68	1.79	1.08
Lillestrøm I	0.48	-	0.73	0.49	1.60	0.22	0.30	0.17	0.32	0.77	0.86		(0.58)
Kaupanger	1.40	2.62	1.01	0.12	0.37	0.11	0.26	0.29	0.89	1.37	1.08	1.03	0.86
Ny-Ålesund I					3.76								
Kise (weekly)	0.20	0.30	0.47	0.34	0.37	0.11	0.14	0.11	0.12	0.33	0.26	0.14	0.20
Kise (monthly)	0.20	-	0.96	0.68	0.54	0.18	0.15	0.18	0.34	0.40	0.34	0.15	0.29
Ås	0.68	-	1.00	0.82	0.46	0.46	0.40	0.28	2.60	1.50	1.44	1.15	0.83



Table 13: Monthly and annual weighted mean concentrations of chloride (Cl) in precipitation at the Norwegian background stations, 1986.  
Unit: mg/l.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	2.92	2.94	2.11	2.44	1.38	0.61	0.70	0.94	1.92	2.98	3.26	2.98	2.17
Skreådalen	3.93	-	3.61	1.00	1.38	0.44	0.70	1.42	1.46	2.67	4.04	4.28	2.87
Vikedal II	5.65	3.10	4.28	1.54	2.14	0.48	0.89	0.90	2.00	4.35	5.66	5.00	3.70
Treungen	0.49	0.25	0.68	1.34	0.62	0.30	0.38	0.40	0.49	1.20	1.59	1.28	0.84
Gulsvik	0.28	-	1.36	0.72	0.27	0.20	0.27	0.21	0.13	0.63	0.96	0.44	0.43
Narbuvoll	0.38	1.43	0.76	0.32	0.29	0.11	0.14	0.17	0.33	0.40	0.39	0.30	0.28
Haukeland	5.09	3.38	4.82	1.15	1.43	0.55	0.79	0.86	1.47	3.22	3.43	4.30	2.93
Kårvatn	2.41	2.22	2.24	1.32	0.39	0.16	0.47	0.44	1.48	3.07	3.21	1.05	1.61
Tustervatn	0.27	3.21	3.26	1.09	0.28	1.25	0.15	0.16	0.42	3.47	3.86	1.03	2.12
Jergul	0.38	1.07	0.29	0.31	0.18	0.43	0.10	0.30	0.37	0.22	0.35	1.12	0.33
Lista	33.24	-	26.52	11.69	5.29	6.55	6.87	13.88	45.16	36.63	55.20	100.59	37.48
Vatnedalen	1.01	0.88	1.05	0.88	0.87	0.28	0.47	0.23	0.69	1.32	1.10	1.20	0.90
Løken	1.45	-	0.91	0.55	0.68	0.39	0.44	0.38	0.90	1.66	1.96	0.82	0.97
Lillestrøm II	0.67	-	0.97	0.60	0.63	0.21	0.50	0.36	0.43	1.10	1.39	0.70	0.74
Prestebakke	5.08	1.43	1.36	0.62	0.98	1.17	1.01	0.90	5.76	3.64	3.79	3.51	2.48
Nordmoen			0.76	0.59	0.37	0.20	0.39	0.16	0.25	0.76	1.04	0.52	(0.51)
Nausta	2.38	1.07	3.14	1.16	1.30	0.35	0.60	0.25	1.21	3.26	2.43	2.86	2.28
Svanvik								1.07	1.99	1.58	0.62	6.95	(1.97)
Risdalsheia	3.52	-	2.10	5.20	1.26	0.40	0.48	0.88	1.60	2.45	3.14	3.85	2.04
Lillestrøm I	0.77	-	1.46	0.87	1.07	0.38	0.52	0.32	0.56	1.80	1.56		(0.91)
Kaupanger	2.18	3.80	1.67	0.30	0.59	0.15	0.38	0.53	1.56	2.57	1.97	1.51	1.45
Ny-Ålesund I	15.83	7.28	4.05	3.45	5.00	2.79	2.89	0.80	2.92	21.67	16.45	12.56	7.04
Kise (weekly)	0.39	0.53	1.02	0.75	0.42	0.26	0.27	0.19	0.37	0.69	0.52	0.24	0.37
Kise (monthly)	0.38	-	0.83	0.96	0.56	0.42	0.36	0.32	0.96	0.79	0.55	0.83	0.55
Ås	1.38	-	1.87	1.73	0.75	0.73	0.88	0.48	-	3.94	2.96	1.99	(1.66)

Table 14: Monthly and annual amounts of precipitation at the Norwegian background stations, 1986.  
Unit: mm, NILU-sampler.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year	% of normal
														DNMI
Birkenes	150	11	175	58	140	86	82	268	12	219	212	202	1613	110*
Skreådalen	205	2	229	63	248	82	129	136	149	370	422	404	2439	117
Vikedal II	243	6	302	29	210	111	195	173	378	430	499	399	2975	127*
Treungen	74	6	96	32	95	91	45	185	14	115	144	132	1030	98*
Gulsvik	32	0	28	29	97	42	72	162	39	73	74	158	804	101*
Narbuvoll	38	4	13	16	25	43	98	73	64	33	36	75	518	112*
Haukeland	182	21	361	28	387	114	222	115	567	576	913	524	4009	129
Kårvatn	118	35	14	89	54	63	120	117	273	134	150	112	1277	106*
Tustervatn	19	100	69	51	91	25	104	12	137	213	185	56	1060	97
Jergul	15	10	6	13	10	13	58	44	19	27	24	10	250	73*
Lista	134	0	103	22	128	77	80	108	71	217	197	157	1293	123
Vatnedalen	90	7	99	16	74	64	68	117	29	102	135	188	987	117*
Løken	65	1	94	41	43	32	56	119	27	72	83	68	701	100*
Lillestrøm II	79	0	71	30	47	28	27	138	28	83	78	77	685	95*
Prestebakke	24	4	78	24	62	34	58	92	23	74	165	63	699	116
Nordmoen			61	30	53	35	79	127	33	83	83	119	(703)	99*
Nausta	100	47	289	9	210	35	66	81	230	345	587	316	2314	112*
Svanvik								20	29	17	24	11	(101)	110*
Risdalsheia	99	0	130	18	131	93	86	300	11	227	217	110	1422	110*
Lillestrøm I	75	1	62	30	51	30	51	118	28	45	64		554	95*
Kaupanger	33	12	45	24	64	37	49	83	110	88	148	156	849	132*
Ny-Ålesund I	34	40	99	16	1	14	28	21	10	12	12	19	307	
Kise (weekly)	53	2	21	16	29	33	26	121	34	29	37	57	456	93*
Kise (monthly)	29	0	11	8	17	17	22	62	9	22	31	41	267	93*
Ås	75	0	88	22	70	30	84	99	2	55	97	73	696	91

\* Nearest DNMI-Station.

Table 15: Monthly and annual wet deposition of strong acid ( $H^+$ ) at the Norwegian background stations, 1986.  
Unit: meq/m<sup>2</sup>.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	4.20	0.80	11.52	3.80	9.82	6.58	6.91	14.62	0.45	11.23	9.57	8.28	87.80
Skreådalen	2.49	0.01	8.19	2.44	10.92	3.08	9.87	7.78	1.51	10.49	10.20	7.67	74.65
Vikedal II	2.65	0.07	10.39	2.89	11.49	7.60	9.49	7.47	6.13	11.45	11.58	7.80	89.01
Treungen	2.34	0.48	8.55	2.26	7.02	6.25	4.44	14.86	0.26	5.39	9.47	5.17	66.49
Gulsvik	0.63	0.00	3.51	1.69	5.95	1.57	4.44	9.53	0.35	2.46	4.20	5.79	40.11
Narbuvoll	0.76	0.05	0.60	0.34	1.45	0.57	1.72	0.93	0.20	0.53	0.67	1.60	9.42
Haukeland	1.30	0.36	10.76	4.89	11.33	5.65	5.75	3.70	3.54	11.35	12.09	6.76	77.46
Kårvatn	2.08	0.22	0.08	2.13	1.28	1.45	1.46	1.65	1.71	3.80	0.61	0.70	17.18
Tustervatn	0.47	1.05	1.13	1.44	1.09	0.88	2.22	0.44	0.63	1.84	1.87	0.84	13.88
Jergul	0.55	0.09	0.29	0.24	0.84	0.17	1.32	1.29	0.35	0.53	0.43	0.12	6.23
Lista	3.79	~0	6.45	2.36	8.66	4.48	4.57	7.89	1.74	10.62	13.14	5.77	69.48
Vatnedalen	1.22	0.34	2.87	1.27	4.24	4.98	2.04	5.19	0.39	1.48	2.64	1.91	28.57
Løken	1.91	0.25	4.45	0.87	3.44	2.40	2.92	7.25	0.35	3.22	3.68	3.47	34.21
Lillestrøm II	2.26	~0	5.42	1.37	3.36	1.34	2.44	8.84	0.75	5.69	5.05	4.78	41.28
Prestebakke	1.13	0.38	4.88	1.94	5.07	1.97	5.36	8.11	0.37	2.79	8.55	3.77	44.33
Norømoen			3.27	1.40	4.26	2.59	6.50	7.14	0.50	5.52	5.73	6.99	(43.93)
Nausta	0.83	0.59	6.49	1.16	6.00	4.13	2.20	3.14	1.58	5.88	6.32	3.88	42.21
Svanvik								0.77	0.45	0.53	0.55	0.16	( 2.45)
Risdalsheia	3.81	0	12.23	1.57	11.26	7.37	7.07	19.94	0.42	15.36	12.13	3.85	95.00
Lillestrøm I	1.84	~0	4.97	0.96	1.15	0.77	4.64	6.33	0.52	2.15	4.52		27.85
Kaupanger	0.38	0.06	0.68	0.61	2.04	1.55	1.12	2.70	0.56	0.74	1.55	1.12	13.11
Ny-Ålesund I	0.21	0.56	1.66	0.13	0.00	0.20	0.06	0.30	0.05	0.00	0.01	0.06	3.23
Kise (weekly)	1.43	0.06	2.38	0.92	0.89	1.02	1.42	8.92	0.18	0.51	1.23	1.37	20.31
Kise (monthly)	0.82	0	1.27	0.81	1.22	2.03	1.03	7.82	0.51	0.41	1.06	0.44	17.42
Ås	2.17	0	4.84	1.08	4.74	1.01	4.42	7.90	0.00	0.04	5.43	5.32	36.95

Table 16: Monthly and annual wet deposition of excess sulphate ( $\text{SO}_4$ )  
at the Norwegian background stations, 1986.  
Unit:  $\text{mg S/m}^2$ .

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	64	14	235	79	218	151	111	195	9	177	200	170	1622
Skreådalen	34	1	141	49	221	74	128	110	24	177	175	156	1289
Vikedal II	37	4	190	66	228	173	169	124	119	172	200	184	1666
Treungen	18	7	144	31	121	159	76	179	7	93	151	112	1097
Gulsvik	6	0	66	51	115	59	82	114	5	47	68	99	711
Narbuvoll	8	3	13	7	41	28	47	28	11	12	11	20	229
Haukeland	23	12	208	83	241	123	127	70	63	175	188	147	1459
Kárvatn	24	6	2	38	30	40	31	33	23	15	11	9	260
Tustervatn	5	20	14	37	35	28	55	5	7	31	31	10	278
Jergul	4	2	5	10	23	8	30	16	8	10	7	1	122
Lista	90	~0	108	34	201	100	72	107	21	205	181	112	1230
Vatnedalen	14	3	34	15	72	99	47	61	8	33	36	86	506
Løken	23	5	112	22	95	44	71	105	13	64	60	56	671
Lillestrøm II	26	~0	92	29	83	28	53	126	15	105	74	78	709
Prestebakke	14	7	93	40	122	50	83	99	15	45	116	68	753
Nordmoen			44	22	84	51	112	82	9	95	80	113	(692)
Nausta	13	9	101	19	97	69	29	33	25	78	85	55	614
Svanvik								27	14	11	8	3	(62)
Risdalsheia	48	0	241	31	222	149	100	219	10	248	213	107	1586
Lillestrøm I	42	~0	115	45	118	35	75	110	21	49	82		693
Kaupanger	7	6	15	18	35	30	26	37	14	19	27	22	256
Ny-Ålesund I	14	20	32	12	4	9	17	10	3	4	0	9	133
Kise (weekly)	21	1	50	22	43	44	37	79	11	23	24	31	385
Kise (monthly)	11	0	37	19	47	53	44	97	13	21	28	38	409
Ås	41	0	157	34	121	52	137	103	8	70	87	106	916

Table 17: Monthly and annual wet deposition of nitrate ( $\text{NO}_3$ ) at the Norwegian background stations, 1986.  
Unit:  $\text{mg N/m}^2$ .

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	59	8	132	64	125	63	60	90	6	119	140	100	966
Skreådalen	21	1	94	43	98	33	72	48	12	104	93	80	698
Vikedal II	22	2	107	39	93	65	58	53	41	105	94	68	748
Treungen	29	5	79	23	51	50	40	82	3	54	92	72	582
Gulsvik	18	0	46	30	41	18	35	51	3	25	43	72	382
Narbuvooll	8	1	14	3	13	6	12	8	1	9	9	18	101
Haukeland	16	7	123	40	89	35	49	30	13	75	73	70	621
Kårvatn	10	2	1	8	12	11	11	11	4	11	4	3	89
Tustervatn	5	5	9	8	11	7	14	2	2	11	10	10	94
Jergul	7	1	2	3	4	1	6	4	1	5	5	1	40
Lista	60	~0	67	29	117	62	67	61	22	149	102	80	816
Vatnedalen	14	4	28	11	29	30	19	23	3	13	19	19	212
Løken	27	2	83	22	37	13	22	67	6	41	39	40	399
Lillestrøm II	30	~0	65	23	33	11	20	53	8	57	48	49	396
Prestebakke	11	4	65	30	54	20	29	26	0	23	81	37	380
Nordmoen			37	19	36	14	39	26	6	48	54	64	(342)
Nausta	7	6	52	8	39	16	5	6	2	38	19	29	227
Svanvik								1	2	5	5	1	(14)
Risdalsheia	41	0	118	28	108	65	43	79	0	145	148	54	830
Lillestrøm I	37	~0	68	31	45	13	30	38	5	26	44		338
Kaupanger	6	4	12	5	8	4	4	5	4	2	9	14	77
Ny-Ålesund I	3	3	4	1	1	1	2	1	0	0	1	2	20
Kise (weekly)	26	1	31	15	16	12	12	33	7	15	16	23	208
Kise (monthly)	20	0	17	10	15	10	12	34	5	12	14	15	165
Ås	37	0	102	30	56	17	54	47	2	38	71	54	509

Table 18: Monthly and annual wet deposition of ammonium ( $\text{NH}_4$ ) at the Norwegian background stations, 1986.  
Unit:  $\text{mg N/m}^2$ .

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	50	5	171	58	149	81	56	106	8	154	161	110	1108
Skreådalen	18	~0	107	29	109	42	66	58	15	91	92	108	734
Vikedal II	20	4	110	43	116	93	91	68	69	99	95	87	894
Treungen	13	1	88	17	58	85	38	100	18	64	90	78	650
Gulsvik	13	0	50	31	52	43	39	53	8	23	41	57	409
Narbuvoll	3	2	10	2	19	20	44	20	4	5	3	7	139
Haukeland	21	10	137	39	145	55	89	34	18	52	125	72	796
Kårvatn	6	3	1	8	22	20	31	48	7	5	5	5	162
Tustervatn	1	7	4	19	17	13	43	1	4	9	11	3	131
Jergul	1	0	2	1	2	4	15	4	1	3	24	0	56
Lista	78	~0	69	15	131	49	43	65	16	125	86	62	739
Vatnedalen	10	1	16	6	26	37	14	19	1	6	16	32	183
Løken	17	~0	92	16	52	16	35	52	11	42	28	30	391
Lillestrøm II	16	~0	64	25	41	12	21	61	6	56	22	39	363
Prestebakke	8	3	71	28	65	20	22	16	0	6	61	26	328
Nordmoen			33	14	42	15	31	15	3	54	37	48	(291)
Nausta	7	6	50	6	38	13	1	2	5	19	12	17	176
Svanvik								6	4	4	2	2	(19)
Risdalsheia	30	0	158	24	128	81	28	68	5	121	133	65	840
Lillestrøm I	38	~0	81	36	134	27	41	110	14	29	35		545
Kaupanger	10	7	13	9	8	9	14	5	17	3	9	26	130
Ny-Ålesund I	2	5	5	3	2	2	86	35	2	5	2	0	150
Kise (weekly)	15	1	33	11	32	23	22	41	14	25	14	15	245
Kise (monthly)	6	0	20	6	22	10	27	35	7	12	11	1	158
Ås	21	0	123	29	67	35	76	89	~0	41	31	44	556

Table 19: Monthly and annual wet deposition of calcium (Ca) at the Norwegian background stations, 1986.  
Unit: mg/m<sup>2</sup>.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	15	3	33	16	48	22	16	31	2	30	49	34	299
Skreådalen	29	0	34	33	46	13	18	16	8	30	74	64	366
Vikedal II	44	2	49	11	49	30	19	18	23	50	84	76	454
Treungen	4	2	13	4	17	23	8	24	1	7	18	23	144
Gulsvik	3	0	10	24	17	9	12	13	6	8	8	12	122
Narbuvoll	5	1	8	4	11	8	11	7	20	7	8	7	97
Haukeland	26	3	62	9	41	13	41	14	24	63	99	85	481
Kårvatn	9	3	1	8	12	6	8	13	15	22	23	5	126
Tustervatn	2	13	9	7	14	6	7	1	3	22	32	6	122
Jergul	1	1	1	4	3	2	7	2	1	4	4	1	31
Lista	110	~0	84	14	63	28	38	46	78	248	264	391	1365
Vatnedalen	8	1	11	1	15	13	13	10	15	17	13	15	132
Løken	9	1	56	19	23	5	13	15	5	11	14	10	181
Lillestrøm II	10	~0	15	7	23	6	14	18	4	11	10	13	132
Prestebakke	15	1	15	9	22	13	14	16	8	17	24	10	164
Nordmoen			6	4	21	6	19	6	2	8	12	10	(93)
Nausta	9	2	30	2	17	6	5	4	7	30	66	31	210
Svanvik								4	3	3	2	3	(14)
Risdalsheia	18	0	28	10	36	17	12	38	3	29	42	25	258
Lillestrøm I	15	~0	25	16	35	10	17	12	8	9	16		164
Kaupanger	5	3	7	4	6	3	5	6	9	8	12	18	86
Ny-Ålesund I	23	15	12	6	2	8	19	10	20	28	13	14	169
Kise (weekly)	25	1	13	10	17	16	13	11	15	14	7	12	154
Kise (monthly)	13	0	7	7	18	16	12	12	2	9	7	32	136
Ås	30	0	59	17	27	16	35	18	8	94	32	16	351

Table 20: Monthly and annual wet deposition of potassium (K) at the Norwegian background stations, 1986.  
Unit:  $\text{mg}/\text{m}^2$ .

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	29	3	25	9	29	19	19	24	8	32	64	37	295
Skreådalen	53	~0	42	11	34	11	17	22	19	48	106	76	437
Vikedal II	40	4	60	4	18	14	12	14	29	57	101	64	417
Treungen	14	0	19	3	8	17	4	12	7	10	16	15	125
Gulsvik	3	0	7	5	12	12	8	9	13	9	11	22	113
Narbuvoll	4	1	5	2	4	6	12	13	76	6	5	6	140
Haukeland	32	2	63	4	60	9	44	9	27	62	140	62	514
Kårvatn	15	4	2	10	7	9	9	21	17	20	22	9	145
Tustervatn	3	14	9	20	9	7	19	1	8	24	38	6	159
Jergul	4	1	1	4	1	4	4	1	1	2	8	1	32
Lista	116	~0	129	8	26	18	21	37	64	272	268	370	1328
Vatnedalen	26	2	7	1	11	7	12	6	18	44	19	62	214
Løken	19	~0	14	8	9	6	8	15	6	9	14	9	117
Lillestrøm II	7	~0	6	3	10	8	5	19	6	9	7	7	88
Prestebakke	9	1	17	2	7	13	9	12	15	28	27	7	146
Nordmoen			5	1	8	5	4	7	4	5	13	14	(64)
Nausta	8	0	16	1	14	3	2	1	23	30	55	34	188
Svanvik								4	3	2	2	3	(14)
Risdalsheia	16	0	16	6	12	10	7	14	2	36	37	19	174
Lillestrøm I	8	~0	18	6	74	14	11	29	10	7	10		187
Kaupanger	23	15	24	3	4	4	18	23	60	22	45	69	311
Ny Ålesund I					1								
Kise (weekly)	25	0	7	2	6	9	5	15	12	15	4	8	108
Kise (monthly)	1	0	3	1	4	7	13	2	3	6	2	6	48
Ås	5	0	11	4	25	15	27	26	~0	145	14	11	282



Table 21: Monthly and annual wet deposition of magnesium (Mg) at the Norwegian background stations, 1986.  
Unit: mg/m<sup>2</sup>.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	31.6	1.9	24.3	10.1	14.7	6.2	4.7	19.9	1.1	46.7	46.8	38.8	246.8
Skreådalen	61.6	0.5	56.9	14.5	26.4	3.1	6.1	11.7	13.1	59.9	114.3	102.2	470.2
Vikedal II	101.6	2.0	99.6	3.0	35.0	6.9	14.8	13.0	45.9	123.9	192.5	131.2	769.5
Treungen	2.2	0.2	3.8	2.8	6.5	5.1	1.8	8.4	0.7	9.3	16.2	11.7	68.8
Gulsvik	0.5	0.0	2.8	3.0	3.1	2.0	3.1	4.3	1.2	4.0	5.4	5.0	34.3
Narbuvoll	1.0	0.4	1.5	0.4	1.4	1.6	3.2	1.7	7.5	1.9	1.7	2.3	24.5
Haukeland	69.7	5.7	130.2	2.8	42.4	5.5	18.5	10.0	48.7	124.9	211.5	142.0	811.8
Kárvatn	19.6	4.8	2.0	6.5	2.3	1.6	4.7	8.6	23.0	26.7	31.1	8.2	139.0
Tustervatn	0.6	21.7	15.8	3.2	3.1	2.9	8.9	0.3	2.5	47.5	49.1	5.0	160.6
Jergul	0.4	0.9	0.3	0.6	0.5	0.5	1.4	1.3	0.7	0.7	2.9	0.9	11.1
Lista	313.2	~0	212.3	18.5	50.2	33.4	61.1	98.6	240.7	714.9	716.4	984.5	3443.7
Vatnedalen	4.4	0.4	6.4	0.2	4.2	1.8	3.8	2.4	2.9	13.2	11.0	16.4	67.1
Løken	5.5	0.1	5.5	2.0	4.7	2.2	3.0	4.3	1.4	8.2	11.5	4.0	52.4
Lillestrøm II	3.2	~0	3.4	1.0	3.5	1.5	2.2	5.1	0.7	6.4	7.2	4.3	38.6
Prestebakke	9.4	0.4	7.0	1.3	6.7	5.3	6.1	8.6	10.4	20.7	42.8	14.7	133.5
Nordmoen			2.4	1.1	3.4	1.5	3.2	1.8	0.1	4.4	7.1	5.4	(30.4)
Nausta	17.4	3.4	66.1	0.6	19.5	1.7	2.6	1.3	15.1	75.0	101.5	61.1	365.1
Svanvik								2.1	3.9	1.9	1.1	5.1	(14.1)
Risdalsheia	25.5	0	18.6	7.3	12.8	5.6	3.8	22.4	1.2	35.2	46.1	26.2	204.5
Lillestrøm I	5.0	~0	5.0	1.8	10.5	3.5	3.8	5.4	1.2	5.2	7.8		49.2
Kaupanger	2.6	1.5	2.9	0.8	2.9	0.8	1.6	1.7	5.8	14.5	14.5	12.4	61.9
Ny-Ålesund I	40.1	21.8	26.9	4.1	1.0	4.3	11.1	5.2	8.2	21.8	15.9	18.4	178.9
Kise (weekly)	3.0	0.1	2.1	1.1	2.6	2.2	1.8	2.7	1.6	2.8	1.8	1.5	23.3
Kise (monthly)	1.5	0	1.4	1.7	3.1	2.1	1.7	2.9	0.2	1.9	2.0	2.1	20.5
Ås	7.5	0	11.1	3.5	7.6	3.8	7.7	5.8	1.2	40.6	19.5	10.7	118.9

Table 22: Monthly and annual wet deposition of sodium (Na) at the Norwegian background stations, 1986.  
Unit: mg/m<sup>2</sup>.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	277	18	201	79	109	34	30	131	12	370	375	321	1957
Skreådalen	526	5	495	32	194	29	48	103	134	492	929	925	3913
Vikedal II	837	13	930	18	266	30	99	90	407	944	1545	1169	6347
Treungen	25	1	38	23	45	20	7	44	3	67	120	94	488
Gulsvik	7	0	41	12	14	7	12	17	2	21	34	40	207
Narbuvoll	10	3	9	4	11	6	26	10	15	8	10	14	127
Haukeland	562	43	1086	18	323	35	92	55	450	1032	1765	1909	7370
Kárvatn	166	44	18	60	15	13	29	29	213	224	260	70	1141
Tustervatn	6	180	129	29	17	18	9	2	35	345	385	41	1196
Jergul	6	9	5	11	3	4	6	7	6	5	9	8	78
Lista	2624	~0	1768	145	385	264	468	680	1926	4556	5373	8127	26315
Vatnedalen	59	4	62	2	36	14	46	23	8	63	85	267	670
Løken	62	1	45	13	25	13	14	30	13	64	95	31	407
Lillestrøm II	28	~0	25	8	18	7	7	29	6	48	53	26	255
Prestebakke	51	3	83	6	38	30	33	51	82	135	332	124	969
Nordmoen			33	9	22	5	18	11	3	29	48	47	(224)
Nausta	141	29	504	5	162	7	22	10	149	619	774	498	2920
Svanvik								9	32	11	7	43	(102)
Risdalsheia	203	0	154	55	93	28	26	141	9	273	363	197	1542
Lillestrøm I	36	~0	45	15	82	6	15	20	9	35	55		319
Kaupanger	46	31	46	3	23	4	13	24	98	121	159	161	729
Ny-Ålesund I					5								
Kise (weekly)	11	0	10	5	11	4	4	13	4	9	10	8	89
Kise (monthly)	6	0	11	5	9	3	3	11	3	9	10	6	77
Ås	51	0	88	18	32	14	34	28	6	82	139	84	577

Table 23: Monthly and annual wet deposition of chloride (Cl) at the Norwegian background stations, 1986.  
Unit: mg/m<sup>2</sup>.

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	438	31	369	141	192	53	57	253	23	651	690	601	3497
Skreådalen	805	~0	825	63	343	36	91	193	217	986	1705	1731	6995
Vikedal II	1370	20	1294	44	449	53	173	156	754	1874	2824	1994	11006
Treungen	36	2	66	43	59	27	17	73	7	138	229	169	867
Gulsvik	9	0	38	21	26	8	19	35	5	46	71	70	348
Narbuvooll	14	6	10	5	7	5	13	13	21	13	14	22	145
Haukeland	926	71	1740	33	555	63	175	99	834	1853	3129	2252	11730
Kárvatn	284	78	31	117	21	10	56	52	404	411	481	118	2062
Tustervatn	5	320	224	55	25	31	16	2	58	740	711	58	2246
Jergul	6	11	2	4	2	5	6	13	7	6	8	12	82
Lista	4451	~0	2718	262	675	507	546	1497	3197	7955	10881	15763	48452
Vatnedalen	92	6	104	14	64	18	32	27	20	135	149	225	885
Løken	95	~0	86	22	29	13	24	45	25	119	163	55	676
Lillestrøm II	53	~0	69	18	29	6	13	50	12	91	108	54	503
Prestebakke	121	5	106	15	61	40	58	83	132	270	624	222	1735
Nordmoen			46	18	19	7	31	20	8	63	87	62	(361)
Nausta	237	50	907	11	272	12	40	21	279	1124	1428	904	5283
Svanvik								21	58	27	14	78	(198)
Risdalsheia	349	0	273	94	165	37	42	265	17	557	681	422	2902
Lillestrøm I	58	~0	90	26	55	11	27	38	16	82	99		501
Kaupanger	72	45	76	7	38	5	19	44	172	227	291	236	1231
Ny-Ålesund I	543	288	402	56	7	40	80	17	30	269	192	235	2158
Kise (weekly)	21	1	22	12	12	8	7	22	13	20	19	14	170
Kise (monthly)	11	0	9	8	9	7	8	20	8	17	17	34	148
Ås	104	0	165	38	53	22	74	48	~0	216	286	146	1151

Table 24: Annual weighted mean concentrations and wet depositions of main components in precipitation at the Norwegian background stations, 1973-1986.

Station	Annual mean concentrations (mg/l)					Annual means pH	Annual prec. mm	Wet deposition				
	Year	SO <sub>4</sub> -S	NO <sub>3</sub> -N	NH <sub>4</sub> -N	Ca			Mg	SO <sub>4</sub> -S mg/m <sup>2</sup>	NO <sub>3</sub> -N mg/m <sup>2</sup>	NH <sub>4</sub> -N mg/m <sup>2</sup>	H <sup>+</sup> meq/m <sup>2</sup>
Birkenes	1973	1.06				0.11	4.27	1072	1136			58
	1974	1.11	0.50	0.52	0.23	0.19	4.25	1563	1735	782	813	88
	1975	1.01	0.49	0.45	0.19	0.17	4.27	1341	1354	657	603	72
	1976	1.18	0.63	0.50	0.17	0.12	4.21	1434	1692	903	717	88
	1977	1.04	0.54	0.54	0.17	0.17	4.27	1597	1661	862	862	86
	1978	1.17	0.62	0.57	0.17	0.12	4.11	1242	1453	770	708	96
	1979	1.25	0.57	0.65	0.22	0.15	4.09	1560	1950	889	1014	127
	1980	1.23	0.57	0.63	0.22	0.11	4.16	1160	1427	661	731	80
	1981	1.04	0.52	0.53	0.20	0.13	4.21	1316	1369	684	697	81
	1982	1.05	0.56	0.72	0.22	0.21	4.27	1592	1663	887	1140	86
	1983	0.91	0.49	0.50	0.24	0.17	4.33	1313	1195	646	650	62
	1984	1.09	0.57	0.63	0.21	0.19	4.24	1603	1755	905	1003	93
	1985	0.98	0.58	0.57	0.16	0.09	4.24	1409	1375	810	805	80
1986	1.01	0.60	0.69	0.19	0.15	4.26	1613	1622	966	1108	88	
Skreådalen	1973	0.50				0.19	4.60	2185	1093			55
	1974	0.55				0.18	4.47	2460	1350			83
	1975	0.57	0.18	0.17		0.19	4.55	2436	1389	438	414	69
	1976	0.60	0.24	0.23		0.17	4.55	1687	1012	405	388	48
	1977	0.57	0.27	0.28	0.15	0.13	4.55	2051	1169	554	574	58
	1978	0.49	0.20	0.26	0.20	0.29	4.52	1769	867	354	460	53
	1979	0.61	0.26	0.28	0.16	0.14	4.33	2311	1410	601	647	108
	1980	0.48	0.21	0.21	0.15	0.17	4.54	1949	936	409	409	56
	1981	0.49	0.20	0.28	0.16	0.18	4.58	2260	1107	452	633	59
	1982	0.57	0.28	0.37	0.17	0.22	4.52	2519	1436	709	933	76
	1983	0.43	0.19	0.26	0.18	0.23	4.70	2843	1221	551	734	57
	1984	0.46	0.24	0.23	0.16	0.21	4.59	1762	802	415	401	46
	1985	0.59	0.32	0.33	0.15	0.12	4.48	1895	1117	610	616	63
1986	0.53	0.29	0.30	0.15	0.19	4.51	2439	1289	698	734	75	
Vikedal II	1984	0.51	0.24	0.27	0.24	0.25	4.57	1932	985	465	516	52
	1985	0.63	0.30	0.33	0.21	0.20	4.45	2223	1390	672	734	79
	1986	0.56	0.25	0.30	0.15	0.26	4.52	2975	1666	748	894	89
Treungen	1974	0.94	0.38	0.33	0.14	0.07	4.27	1039	977	395	343	56
	1975	0.91	0.37	0.34	0.15	0.06	4.26	894	814	331	304	49
	1976	1.05	0.50	0.42	0.11	0.06	4.20	706	741	353	297	45
	1977	0.81	0.44	0.39	0.11	0.05	4.32	1165	944	513	454	56
	1978	0.87	0.38	0.41	0.14	0.04	4.21	945	822	359	387	58
	1979	-	-	-	-	-	-	-	-	-	-	-
	1980	0.88	0.37	0.39	0.14	0.04	4.23	759	668	281	296	45
	1981	0.86	0.39	0.46	0.12	0.05	4.29	949	816	370	437	49
	1982	0.84	0.45	0.50	0.14	0.07	4.32	1130	948	504	563	54
	1983	0.83	0.40	0.43	0.18	0.05	4.35	1091	908	431	471	48
	1984	0.77	0.36	0.27	0.15	0.05	4.27	1196	919	436	325	64
1985	0.68	0.39	0.37	0.13	0.04	4.33	892	608	350	333	41	
1986	1.07	0.57	0.63	0.14	0.07	4.19	1030	1097	582	650	66	

Table 24: Cont.

Station	Annual mean concentrations (mg/l)						Annual means pH	Annual prec. mm	Wet deposition			
	Year	SO <sub>4</sub> -S	NO <sub>3</sub> -N	NH <sub>4</sub> -N	Ca	Mg			SO <sub>4</sub> -S mg/m <sup>2</sup>	NO <sub>3</sub> -N mg/m <sup>2</sup>	NH <sub>4</sub> -N mg/m <sup>2</sup>	H <sup>+</sup> meq/m <sup>2</sup>
Gulsvik	1974	0.81	0.38	0.28	0.13	0.04	4.28	783	634	298	219	41
	1975	0.89	0.40	0.34	0.21	0.05	4.36	560	498	224	190	24
	1976	0.85	0.38	0.30	0.10	0.03	4.35	641	545	244	192	29
	1977	0.77	0.39	0.35	0.13	0.03	4.35	683	526	266	239	31
	1978	0.94	0.40	0.38	0.16	0.03	4.22	693	651	277	263	42
	1979	1.27	0.53	0.62	0.23	0.04	4.11	790	1003	419	490	61
	1980	0.78	0.25	0.27	0.13	0.03	4.33	667	520	167	180	31
	1981	0.86	0.35	0.40	0.13	0.03	4.30	628	540	220	251	31
	1982	0.89	0.44	0.52	0.22	0.05	4.38	778	696	346	408	33
	1983	0.94	0.40	0.58	0.25	0.05	4.39	664	623	263	384	27
	1984	0.87	0.40	0.58	0.25	0.04	4.41	946	819	382	547	37
	1985	0.73	0.35	0.72	0.16	0.04	4.55	686	499	240	492	20
	1986	0.89	0.48	0.51	0.15	0.04	4.30	804	711	382	409	40
Narbuvoll	1978	0.34	0.16	0.15	0.18	0.03	4.71	380	129	61	57	7
	1979	0.59	0.23	0.22	0.31	0.04	4.49	422	249	97	93	14
	1980	0.40	0.15	0.14	0.23	0.04	4.80	600	240	90	84	10
	1981	0.41	0.18	0.28	0.23	0.04	4.83	541	222	97	151	8
	1982	0.49	0.28	0.36	0.25	0.06	4.71	358	176	101	129	7
	1983	0.38	0.16	0.19	0.18	0.05	4.76	613	232	98	114	11
	1984	0.47	0.20	0.36	0.21	0.04	4.73	725	342	141	262	14
	1985	0.40	0.17	0.28	0.19	0.04	4.76	671	266	114	190	12
	1986	0.44	0.20	0.27	0.19	0.05	4.74	518	229	101	139	9
Haukeland	74/75*	0.31	0.13	0.15	0.17	0.29	4.70	3901	1207	522	582	78
	75/76*	0.36	0.10	0.17	0.17	0.37	4.73	4551	1636	431	753	85
	76/77*	0.59	0.23	0.45	0.18	0.25	4.59	1808	1060	417	813	46
	1982	0.48	0.18	0.20	0.14	0.24	4.56	3688	1756	674	722	101
	1983	0.32	0.14	0.14	0.15	0.26	4.70	4769	1536	647	687	96
	1984	0.42	0.16	0.28	0.20	0.22	4.63	2792	1157	454	783	65
	1985	0.44	0.21	0.26	0.13	0.15	4.61	2930	1276	606	768	71
	1986	0.36	0.16	0.20	0.12	0.20	4.71	4009	1459	621	796	77
Kårvatn	1978**	0.16	0.05	0.09	0.11	0.13	4.98	1317	211	66	119	14
	1979	0.23	0.09	0.08	0.10	0.10	4.63	1248	287	112	100	29
	1980	0.20	0.07	0.08	0.11	0.13	4.88	1225	245	86	98	16
	1981	0.20	0.08	0.15	0.17	0.25	4.96	1101	220	88	165	12
	1982	0.26	0.08	0.11	0.15	0.16	4.87	995	256	78	112	13
	1983	0.14	0.05	0.06	0.18	0.20	5.08	1918	265	100	106	16
	1984	0.24	0.10	0.18	0.22	0.18	5.04	914	216	91	166	8
	1985	0.20	0.07	0.10	0.15	0.11	5.00	1462	298	100	149	15
	1986	0.20	0.07	0.13	0.10	0.11	4.87	1277	260	89	162	17

\* From July the first year and to June the next year. Sulphate in precipitation is corrected for sea salt with Cl (instead of Mg).

\*\* One month is missing.

Table 24: Cont.

Station	Annual mean concentrations (mg/l)					Annual means pH	Annual prec. mm	Wet deposition				
	Year	SO <sub>4</sub> -S	NO <sub>3</sub> -N	NH <sub>4</sub> -N	Ca			Mg	SO <sub>4</sub> -S mg/m <sup>2</sup>	NO <sub>3</sub> -N mg/m <sup>2</sup>	NH <sub>4</sub> -N mg/m <sup>2</sup>	H <sup>+</sup> meq/m <sup>2</sup>
Tustervatn	1973	0.24				0.18	4.94	1336	321			15
	1974	0.28				0.11	4.88	695	195			9
	1975	0.25				0.33	4.91	1756	439			22
	1976	0.27				0.16	4.97	1064	287			11
	1977	0.30	0.09	0.11	0.17	0.16	4.91	1111	333	100	122	14
	1978	0.23	0.08	0.10	0.16	0.16	4.85	1128	259	90	113	16
	1979	0.28	0.08	0.13	0.15	0.11	4.73	1168	327	93	152	22
	1980	0.29	0.09	0.16	0.14	0.12	4.91	858	249	77	137	11
	1981	0.18	0.07	0.10	0.21	0.15	5.00	1099	198	77	110	11
	1982	0.16	0.08	0.09	0.22	0.47	4.98	1385	227	109	121	15
	1983	0.20	0.06	0.09	0.16	0.22	4.90	1665	337	101	142	21
	1984	0.24	0.09	0.09	0.12	0.10	4.85	1056	250	94	89	15
	1985	0.22	0.08	0.10	0.12	0.15	4.93	1344	298	107	132	16
1986	0.26	0.09	0.12	0.12	0.15	4.88	1060	278	94	131	14	
Jergul	1977	0.45	0.13	0.11	0.20	0.04	4.75	344	155	45	38	6
	1978	0.43	0.10	0.11	0.13	0.02	4.52	351	151	35	39	11
	1979	0.59	0.18	0.13	0.14	0.03	4.33	306	181	55	40	14
	1980	0.42	0.12	0.09	0.12	0.03	4.57	262	110	31	24	7
	1981	0.46	0.13	0.12	0.11	0.02	4.57	434	200	56	52	12
	1982	0.36	0.13	0.14	0.10	0.03	4.65	473	172	62	65	11
	1983	0.41	0.11	0.11	0.13	0.04	4.60	382	156	41	43	10
	1984	0.50	0.15	0.22	0.14	0.03	4.50	342	172	50	76	11
	1985	0.43	0.12	0.34	0.13	0.05	4.63	406	174	49	137	10
	1986	0.49	0.16	0.23	0.12	0.04	4.60	250	122	40	56	6
Lista	1973	1.01				1.31	4.33	851	860			40
	1974	1.06				1.00	4.28	1208	1280			63
	1975	1.10				1.06	4.30	1109	1220			56
	1976	1.37				1.21	4.23	922	1263			54
	1977	0.95				1.09	4.34	1114	1058			51
	1978	1.01	0.50	0.45	0.54	1.18	4.27	931	940	466	419	50
	1979	1.27	0.63	0.57	0.53	1.04	4.09	1157	1469	729	659	94
	1980	1.05	0.59	0.54	0.47	1.00	4.22	953	1001	562	515	57
	1981	0.90	0.47	0.50	0.60	1.36	4.34	1037	933	487	519	47
	1982	1.09	0.65	0.60	0.85	1.82	4.29	1070	1161	699	645	55
	1983	0.88	0.49	0.40	0.77	1.69	4.36	1198	1051	584	480	53
	1984	0.92	0.61	0.47	0.86	2.12	4.28	1002	923	613	474	53
	1985	1.11	0.80	0.68	0.76	1.74	4.20	996	1110	793	681	63
1986	0.95	0.63	0.57	1.06	2.66	4.27	1293	1230	816	739	69	

\*\* One month is missing.

Table 24: Cont.

Station	Year	Annual mean conc. mg/l					Annual means pH	Annual prec. mm	Wet deposition			
		SO <sub>4</sub> -S	NO <sub>3</sub> -N	NH <sub>4</sub> -N	Ca	Mg			SO <sub>4</sub> -S mg/m <sup>2</sup>	NO <sub>3</sub> -N mg/m <sup>2</sup>	NH <sub>4</sub> -N mg/m <sup>2</sup>	H <sup>+</sup> mekv/m <sup>2</sup>
Vatnedalen	1974	0.54				0.06	4.59	884	477			23
	1975	0.53	0.17	0.22		0.09	4.85	994	527	169	219	14
	1976	0.50	0.20	0.36	0.12	0.10	4.85	715	358	143	257	10
	1977	0.44	0.21	0.25	0.13	0.06	4.71	761	335	160	190	15
	1978	0.41	0.17	0.23	0.14	0.10	4.62	862	353	147	198	21
	1979	0.56	0.22	0.20	0.20	0.06	4.38	948	531	209	190	40
	1980	0.45	0.16	0.10	0.14	0.06	4.55	799	360	128	80	23
	1981	0.49	0.19	0.18	0.14	0.09	4.49	900	441	171	162	29
	1982	0.38	0.18	0.17	0.13	0.08	4.62	967	366	174	159	23
	1983	0.29	0.13	0.10	0.14	0.08	4.76	1249	363	166	130	22
	1984	0.40	0.18	0.13	0.16	0.08	4.59	762	306	138	102	20
	1985	0.43	0.22	0.18	0.15	0.04	4.57	794	343	173	145	21
	1986	0.51	0.21	0.19	0.13	0.07	4.54	987	506	212	183	29
Løken	1973	1.03				0.06	4.48	569	586			19
	1974	0.94				0.08	4.43	831	781			31
	1975	1.03	0.41	0.42		0.08	4.32	657	677	269	276	31
	1976	1.20	0.49	0.50	0.40	0.09	4.39	533	640	261	267	22
	1977	0.96	0.41	0.43	0.22	0.07	4.41	699	671	287	301	27
	1978	1.10	0.48	0.52	0.24	0.07	4.25	597	657	287	310	34
	1979	1.03	0.49	0.57	0.30	0.07	4.22	784	808	384	447	47
	1980	0.97	0.39	0.49	0.25	0.08	4.33	695	674	271	341	33
	1981	0.77	0.36	0.51	0.20	0.06	4.48	700	539	252	357	23
	1982	1.06	0.60	0.79	0.24	0.11	4.33	585	908	515	679	40
	1983	0.91	0.47	0.62	0.28	0.10	4.42	656	595	311	404	25
	1984	0.91	0.49	0.76	0.30	0.10	4.45	747	678	365	567	27
	1985	0.86	0.47	0.51	0.30	0.09	4.36	894	768	421	459	39
1986	0.96	0.57	0.56	0.26	0.08	4.31	701	671	399	391	34	
Risdalsheia	1985	0.99	0.54	0.55	0.16	0.10	4.19	1290	1282	701	705	84
	1986	1.12	0.58	0.59	0.18	0.14	4.18	1422	1586	830	840	95
Lillestrøm I	1984	1.04	0.45	0.62	0.36	0.06	4.41	741	767	332	458	29
	1985	1.07	0.43	0.90	0.35	0.07	4.46	801	854	347	722	28
	1986**	1.25	0.61	0.99	0.30	0.09	4.30	554	693	338	545	28
Kaupanger	1984	0.31	0.12	0.12	0.12	0.10	4.79	734	230	87	88	12
	1985	0.35	0.14	0.12	0.09	0.05	4.68	769	267	109	90	16
	1986	0.30	0.09	0.15	0.10	0.07	4.81	849	256	77	130	13
Kise (week)	1982	0.96	0.53	0.74	0.24	0.04	4.34	484	464	255	357	22
	1983	0.97	0.43	0.67	0.33	0.06	4.45	394	362	161	249	13
	1984	0.79	0.36	0.56	0.31	0.05	4.63	629	497	223	354	15
	1985	0.72	0.39	0.45	0.31	0.05	4.47	715	518	277	318	24
	1986	0.85	0.46	0.54	0.34	0.05	4.35	456	385	208	245	20

\*\* One month is missing.

Table 24: Cont.

Station	Year	Annual mean conc. mg/l					Annual means pH	Annual prec. mm	Wet deposition			
		SO <sub>4</sub> -S	NO <sub>3</sub> -N	NH <sub>4</sub> -N	Ca	Mg			SO <sub>4</sub> -S mg/m <sup>2</sup>	NO <sub>3</sub> -N mg/m <sup>2</sup>	NH <sub>4</sub> -N mg/m <sup>2</sup>	H <sup>+</sup> mekv/m <sup>2</sup>
Kise (month)	1975	0.88	0.10	0.35	0.24	0.05	4.36	335	295	34	117	15
	1976	1.24	0.40	0.61	0.36	0.07	4.40	378	469	151	231	15
	1977	1.32	0.34	0.73	0.32	0.07	4.50	344	454	117	251	11
	1978	1.97	0.49	0.83	0.56	0.10	4.24	203	400	99	168	12
	1979	1.40	0.38	0.81	0.39	0.05	4.33	399	559	152	323	19
	1980	1.10	0.35	1.68	0.55	0.17	4.60	457	503	160	768	11
	1981	1.24	0.42	0.55	0.53	0.06	4.38	325	403	137	179	14
	1982	1.25	0.55	0.81	0.71	0.07	4.44	319	400	177	258	12
	1983	1.49	0.49	0.83	0.57	0.10	4.44	295	441	145	244	11
	1984	1.27	0.44	0.66	0.47	0.06	4.37	456	580	199	300	19
	1985	1.23	0.50	0.57	0.30	0.05	4.25	410	505	205	234	23
	1986	1.53	0.62	0.59	0.51	0.08	4.19	267	409	165	158	17
As	1975	1.58	0.13	0.59	0.42	0.15	4.25	484	765	63	286	27
	1976	1.62	0.57	0.79	0.73	0.18	4.44	506	820	288	400	18
	1977	1.50	0.55	1.06	0.78	0.22	4.50	522	783	287	553	17
	1978	1.71	0.62	0.90	0.60	0.13	4.20	496	848	308	446	31
	1979	2.11	0.88	1.27	0.89	0.25	4.15	454	958	400	577	32
	1980	1.82	0.64	0.75	0.79	0.21	4.22	483	879	309	362	29
	1981	1.11	0.53	0.76	0.47	0.16	4.48	534	593	283	406	18
	1982**	1.30	0.59	0.82	0.51	0.18	4.47	695	901	411	572	23
	1983	1.52	0.71	0.67	0.77	0.23	4.38	458	694	324	308	19
	1984	1.50	0.68	1.01	0.73	0.23	4.47	573	857	389	580	19
	1985	1.00	0.57	0.53	0.46	0.10	4.39	782	782	449	416	32
	1986	1.32	0.73	0.80	0.50	0.17	4.28	696	916	509	556	37

\*\* One month is missing.



Table 25: Monthly and annual mean concentrations of sulphur dioxide ( $\text{SO}_2$ ) in air at the Norwegian background stations, 1986.  
Unit:  $\mu\text{g S/m}^3$ .

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	1.1	0.7	1.4	0.6	0.7	0.7	0.3	0.3	0.1	0.5	0.8	1.2	0.7
Skreådalen	1.3	0.4	3.4	0.6	0.7	0.7	0.3	0.3	0.2	0.5	0.6	1.0	0.8
Hummelfjell	0.6	0.2	1.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.7	0.3
Kårvatn	0.8	0.3	0.9	0.4	0.1	0.3	0.1	0.1	0.2	0.2	0.3	1.0	0.4
Tustervatn	1.4	0.3	0.9	0.3	0.2	0.2	0.1	0.2	0.3	0.3	0.2	1.4	0.5
Jergul	3.4	1.2	1.7	0.8	1.1	0.2	0.4	0.6	0.3	0.2	0.2	1.9	1.0
Prestebakke	1.8	1.1	2.0	0.6	1.1	0.7	0.5	0.3	0.4	1.3	1.1	2.1	1.1
Nordmoen			1.3	0.5	0.5	0.5	0.3	0.1	0.1	0.4	0.3	1.2	(0.5)
Svanvik								9.5	8.7	3.6	2.8	9.4	(6.7)
Bjørnøya	0.6	0.4	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.2
Ny-Ålesund II	0.5	0.4	0.5	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.5	0.3

Table 26: Monthly and annual mean concentrations of sulphate ( $\text{SO}_4$ ) in air at the Norwegian background stations, 1986.  
Unit:  $\mu\text{g S/m}^3$ .

Station	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Birkenes	0.5	0.6	1.5	0.9	1.2	1.5	0.8	0.5	0.2	0.7	0.6	0.8	0.8
Skreådalen	0.6	0.5	1.6	1.1	1.2	1.6	0.8	0.6	0.2	0.6	0.4	0.7	0.8
Hummelfjell	0.3	0.2	1.2	0.4	0.6	0.6	0.4	0.2	0.1	0.2	0.1	0.5	0.4
Kårvatn	0.4	0.3	0.7	0.7	0.5	0.8	0.4	0.4	0.1	0.2	0.2	0.4	0.4
Tustervatn	0.6	0.3	0.6	0.5	0.5	0.6	0.3	0.3	0.2	0.3	0.2	0.6	0.4
Jergul	1.3	0.5	1.5	0.7	0.6	0.7	0.6	0.5	0.3	0.4	0.3	0.8	0.7
Prestebakke	1.1	1.0	2.0	1.1	1.7	1.7	1.2	0.7	0.3	1.1	1.2	1.3	1.2
Nordmoen			1.5	1.1	1.2	1.4	1.0	0.6	0.2	0.8	0.5	1.0	(0.9)
Svanvik								0.9	0.5	0.6	0.3	1.2	(0.7)
Bjørnøya	1.0	0.8	1.0	0.9	0.7	0.3	0.2	0.1	0.3	0.4	0.3	0.5	0.6
Ny-Ålesund II	0.5	0.4	0.6	0.7	0.4	0.2	0.2	0.1	0.2	0.2	0.3	0.5	0.3

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TITTEL  Precipitation and air chemistry at the Norwegian background stations, 1986		PROSJEKTLEDER E. Joranger	
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3 STIKKORD (à maks. 20 anslag) Background stations      Acid precipitation      Air chemistry, 1986			
REFERAT (maks. 300 anslag, 7 linjer) Rapporten inneholder nedbørdata for 26 norske bakgrunnstasjoner i 1986. Den kjemiske sammensetning av nedbørprøvene er presentert som måneds- og årsverdier. Årsverdiene er også gitt for hver stasjon fra deres start. Luftkonsentrasjonene av svoveldioksid og partikulært sulfat er målt på 11 stasjoner, og presentert som måneds- og årsmiddelverdier.			

TITLE Precipitation and air chemistry at the Norwegian background stations, 1986.
ABSTRACT (max. 300 characters, 7 lines)  The precipitation quality data measured in 1986 at 26 Norwegian background stations are presented. The chemical compositions are given as monthly and annual values. Annual values from the start of each station are also given. Air concentrations of sulphur dioxide and particulate sulphate were measured at 11 stations, and presented as monthly and annual averages.

\* Kategorier: Åpen - kan bestilles fra NILU      A  
                   Må bestilles gjennom oppdragsgiver      B  
                   Kan ikke utleveres      C