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Monitoring meteorology and air quality in the surroundings of Outokumpu Norzink AS and Tinfos Titan & Iron KS in Odda

February – May 2003

Ivar Haugsbakk

Norwegian Institute for
Air Research

Contents

Summary

The Norwegian Institute for Air Research (NILU) has on the instructions of Outokumpu Norzink AS, Tinfos Titan & Iron KS and Odda Municipality carried out measurements of meteorology and air quality for three months during spring 2003. Meteorological measurements have been carried out at Eitrheimsneset, while the air quality measurements have been performed at and around the industrial sites in Odda. Monitoring air quality included particulate matter measurements (4 stations), precipitation collectors (8 stations) and subsequent analysis of particulate matter weight and contents of the following metallic compounds: Mercury (Hg), zink (Zn), lead (Pb), cadmium (Cd), copper (Cu), arsenic(As), chrome (Cr), nickel (Ni), titanium (Ti), manganese (Mn) and iron (Fe).

This report is an English translation of NILU OR 83/2003.

Meteorology
The dominating wind directions for the period were from the south-southeast (37,8%), from the south (23,2%) and from the north (22,5%). Conditions were calm during 1,4% of the time. The mean wind force for the period was 2,9 m/s, and the highest mean wind force, one hour mean, was 12,6 m/s from the north-northwest direction. The wind monitor also registered 2 seconds values of wind speed (gust). The highest gust value was 25,5 m/s, and was registered on the 8th of May at 08:00. The wind monitoring data were quite normal considering the season in which they were measured.

Stable atmospheric conditions cause poor dispersion conditions, while unstable atmospheric conditions are good for dispersion. Unstable atmospheric conditions increased from 2,1% in February to 17,8% in April. In May the occurrence of unstable atmospheric conditions was 10,3%. The results from monitoring stability conditions, compared to earlier measurements, indicates that the dispersion conditions have been worse than normal for this time of the year.

The monthly mean temperature raised in the whole monitoring period from 0,1°C in February till 3,8°C in March, 7,5°C in April and 9,2°C in May. Precipitation was approximately 100 mm in each of the months except from March which had approximately 40 mm. Relative humidity as a monthly mean varied from 53% in April to 69% in May. Maximum hourly mean of relative humidity was 96% on the 6th of March at 09:00, and a minimum relative humidity was 21% on the 10th of April at 17:00. The results from monitoring temperature indicate that the period was milder than normal for the season.

The results from monitoring precipitation show normal precipitation values in February, twice as much as normal in April and May, and half as much in March. The relative humidity was quite normal for the season.

Particulate matter (PM_{10})
Particulate matter measurements were performed at 4 monitoring stations:

a) Kindergarten at Eitrheim, b) Harbour at Tokheim situated between Eitrheimsneset and Odda, c) School in Odda and d) Festiviteten in Tyssedal. The kindergarten had the highest mean value during the monitoring period as a whole with 34,2 µg/m^3, second was Festiviteten with 29,8 µg/m^3, the harbour with 27,4 µg/m^3 and finally the school in Odda with 23,9 µg/m^3. At the kindergarten and the harbour, the highest values were registered at 141,4 and 141,7 µg/m^3 respectively, followed by Festiviteten and the school in Odda with 86,0 and 85,8 µg/m^3. The limit value is 50 µg/m^3, but this value is allowed to be exceeded a set number of times each year (more of this in the description of the monitoring results in the report).

The PM_{10} monitoring showed for all measuring stations that the levels were high in the beginning of the monitoring period (February), but were decreasing during the spring. It should be noted that studded tyres for vehicles are permitted during the winter until 27. April. The decline of particulate matter levels was most significant for the two stations that were closest to traffic, the Kindergarten and the harbour site. Of these two stations, the kindergarten is located farthest from the road (RV 550), but the wind monitoring showed that the most common wind direction is from the road against the kindergarten. These two monitoring stations, as well as the monitoring station by the school in Odda, had the same particulate matter level when the season for studded tyres ended. The monitoring stations at Festiviteten in Tyssedal, which is less influenced by traffic than the other stations, had a much higher level (compared to the other monitoring stations) after the season for studded tyres had ended. This indicates that Tinfos Titan & Iron KS in Tyssedal is the main source for particulate matter concentration in ambient air in Tyssedal.

The results from particulate matter measurements indicates that the contribution from traffic were in the levels of 60-85% at the monitoring stations at the Eitrheim kindergarten, at Tokheim harbour and in Odda. At the monitoring station at Festiviteten in Tyssedal the contribution from traffic seems to be approximately 30%. In 1985/86 and 1987/88 particulate matter measurements were carried out at Tinfos Titan & Iron KS in Tyssedal (named KS Ilmenittsmelteverket AS at that time). Maximum daily mean of particulate matter in January/February 1986 was 60 µg/m^3 and in March 1987 66 µg/m^3, while results from March 2003 was 86 µg/m^3. This was an increase of 30% from the maximum value in 1987. The measurements in 1985/86 and 1987/88 (before and after the start up of the facilities in Tyssedal) were carried out at Gamle Oddaveg 3 (at that time the administration building for KS Ilmenittsmelteverket AS). Regarding the 2003 monitoring of particulate matter in Tyssedal, measurements were carried out at Festiviteten, which is close to the industrial area and therefore not representative for the housing situation in Tyssedal. Previous dust fall measurements in the residential area indicated much lower values than at Festiviteten.

Metallic analysis

Particulate matter sampling on filters at 4 monitoring stations were investigated regarding contents of metallic compounds. Metallic analyses were carried out for one 24 hour sample each week for all 4 monitoring stations. Metallic analyses were also carried out for 8 monitoring stations from collected monthly precipitation (one of these was a background station). The following metallic compounds were investigated from particulate matter filters and collected: mercury (Hg), zink (Zn), lead (Pb), cadmium (Cd), copper (Cu), arsenic(As), chrome (Cr), nickel (Ni), titanium (Ti), manganese (Mn) and iron (Fe).

Precipitation measurements

The results from the measurements indicate that the monitoring station with the biggest load for each component had 100 times the concentration of the background station. The contribution of metallic compounds can then be presumed to originate from the industrial sites in the area. Outokumpu Norzink AS and Tinfos Titan & Iron KS were the main sources regarding raised levels of metallic compounds in the area of the inner site of Sørfjorden. The results from the monitoring program indicates that Outokumpu Norzink AS at Eitrheimsneset was the main source regarding 7 of the investigated metallic components (Pb, Hg, Cd, Mn, Cu, Zn and As), and Tinfos Titan & Iron KS in Tyssedal was the main source for 4 of the investigated components (Cr, Fe, Ni and Ti). Analysis of mercury in the precipitation samples does not specifically point out just one source, but the analysis of the particulate matter measurements indicate that Outokumpu Norzink AS is the main source.

Particulate matter measurements

Analysis of metallic compounds from particulate matter sampling filters more or less points in the same direction as the analysis from precipitation samples regarding both sources and maximum levels. The exception is Ni, where Tinfos Titan & Iron KS seem to be the main source, while results from precipitations indicate that Outokumpu Norzink AS was the main source. Contribution to Ni could potentially be equal from both sources.

The EU has recommended maximum measured values (”target values” – a value that is not desirable to exceed) for the following metallic compounds:

Arsenic(As)	6 ng/m^3
Cadmium (Cd)	5 ng/m^3
Nickel (Ni)	20 ng/m^3

All values listed are as annual means from the PM_{10}-fraction of particulate matter.

Compared to the metallic analysis, the following is clear:

Maximum daily mean for arsenic was less than 5 ng/m^3, for cadmium less than 60 ng/m^3 and nickel less than 15 ng/m^3. The measurements do not indicate exceedance for neither arsenic nor nickel. On the other hand, there is good reason to believe that EU’s target value regarding cadmium will be exceeded at the kindergarten at Eitrheim.

Conclusion

NILU recommends to continue monitoring particulate matter (PM_{10}) at the kindergarten at Eitrheim as daily mean measurements for a year to evaluate the air quality regarding particulate matter. It is also recommended to analyse for content of cadmium in at least 50% of the filters from the monitoring program. As much as 23 days with exceedance of the limit value of 50 µg/m^3 from PM_{10} were registered during this monitoring period of three months. The new provision allows 35 exceedances within one year. This demand is to be met by 01.01.2005. Within 01.01.2010 the demand is sharpened, and allows only 7 exceedances. The particulate matter level at the kindergarten is higher than the monitoring station Iladalen in Oslo, which is highly affected by particulate matter from wood combustion.

Particulate matter monitoring has been performed in the period of the year where most of the exceedances is normally measured (winter and spring). It is difficult to conclude whether one full year of measurements would have lead to more limit value exceedances, and eventually how many more exceedances would have occurred in the 9 other months. The precipitation in April and May was double normal values, and with less precipitation the numbers of exceedances of limit value could have been more. In these two months there were only one exceedance of the limit value at the kindergarten at Eitrheim. On the other hand the precipitation was only 50% of normal in March which had 10 exceedances of the limit value. The precipitation was as normal in February, but all the precipitation came in the beginning of the month before the monitoring period started. 12 exceedances were registered in 15 days at the kindergarten at Eitrheim. At the other monitoring stations in Tyssedal, in Odda and at Tokheim the pollution level was acceptable with 2, 5 and 8 exceedances. Based upon the total number exceedances it is recommended to follow up the monitoring with more measurements at the Kindergarten at Eitrheim.

Metallic analysis from particulate matter filters (PM_{10}) indicates a risk of exceeding the EU target value of a yearly mean of 5 ng cadmium/m^3 at the kindergarten at Eitrheim. On this background, we recommend continuing monitoring of particulate matter and metallic analysis of cadmium from filters.

The following comparisons can be made between elevated concentrations of metallic compounds, registered incidents at Outokumpu Norzink AS and Tinfos Titan & Iron KS, and wind speed and direction at Eitrheimsneset.

It is likely that pollution can be transported from Eitrheimsneset to Tyssedal and vice versa. In the spring the wind is often blowing from the south at night time and from the north during the day. There are two main sources to elevated concentrations of pollutants at Sørfjorden; Outokumpu Norzink AS and Tinfos Titan & Iron KS. The climatic conditions in the area makes both sources accountable for elevated pollution on both sides of Sørfjorden.

Monitoring meteorology and air quality in the surroundings of Outokumpu Norzink AS and Tinfos Titan & Iron KS in Odda

February – May 2003

1 Introduction

The Norwegian Institute for Air Research (NILU) has been commissioned by Outokumpu Norzink AS, Tinfos Titan & Iron KS and Odda municipality to carry out a program for monitoring meteorology and air quality for three months during the Spring of 2003. Meteorological monitoring has been carried out at Eitrheimsneset, and air quality monitoring has been performed at and around the industrial sites as well as in Odda.

2 Monitoring program

The monitoring program took place during the period 14. February - 31. May 2003. Monitoring meteorology at Eitrheimsneset included the following parameters: temperature, temperature difference (10-2 m, a measure for stability), wind direction, wind speed, wind gust, precipitation and relative humidity. These measurements were performed continuously during the period with hourly mean values.

Air quality measurements included 8 stations with sampling of fall-out dust in precipitation collectors, as monthly mean values, for analysis of metallic compounds. At 4 of these stations the particulate matter (PM_{10} = particle diameter less than 10 µm) were also monitored continuously on filters as daily mean values. Some of the particulate matter filters and the precipitation samples were analyzed regarding content of metallic compounds:

- Mercury (Hg)
- Zink (Zn)
- Lead (Pb)
- Cadmium (Cd)
- Copper (Cu)
- Arsenic (As)
- Chrome (Cr)
- Nickel (Ni)
- Titanium (Ti)
- Manganese (Mn)
- Iron (Fe)

Monitoring station locations (see Figure 1) were determined after discussions with the employer as well as a survey of the actual area. The combined monitoring station coverage is regarded as giving a fairly good overview of the air quality along Sørfjorden. The main task was also to cover the two main industrial sources to air pollution in the area - Outokumpu Norzink AS, Tinfos Titan & Iron KS and also the Odda urban area.

3 Meteorological measurements

Table 1 gives an overview of the monitoring period and the meteorological parameters collected at Eitrheimsneset.

Table 1: Overview of monitoring program and meteorological parameters at Eitrheimsneset during spring 2003.

Parameter	Unit	Instrument	Monitoring mean	Monitoring period
Temperature (TT)	°C	Aanderaa	1 hour	14.2-31.5.2003
Temperature difference (dT)	°C	”	”	”
Wind direction (DD)	degrees	”	”	”
Wind force (FF)	m/s	”	”	”
Gust	m/s	”	”	”
Precipitation	mm	”	”	”
Relative humidity	%	”	”	”

Meteorological parameters collected are listed in Table 2. All data collected is compiled and listed in Appendix A.

Table 2: Data covarage in percent of time for the meteorological parameters at Eitrheimsneset during the period 14.Februar - 31. May 2003.

Parameter	Period (2003)			
	February*	March	April	May
Temperature	100	100	100	100
Temperature difference	100	100	100	100
Wind direction	100	98,3	100	100
Wind force	100	100	100	100
Gust	100	100	100	100
Precipitation	0	0	66,7	100
Relative humidity	100	100	100	100

*14.-28. February

The data coverage was very good for all parameters except from precipitation, which did not function properly until 11th April 2003.

The meteorological parameters measured are, when possible, compared to earlier NILU investigations in the Odda area in 1972/73 (Skogvold, 1974) and 1976/77 (Skaug and Hagen, 1977), and also with the Norwegian Meteorological Institute’s (MI) measurements of temperature and precipitation at Ullensvang 1962-88.

Air quality and meteorological parameters are normally stated as a concentration during a time period. The time interval is the averaging time obtaining results as hourly mean, daily mean, monthly mean or annual mean.

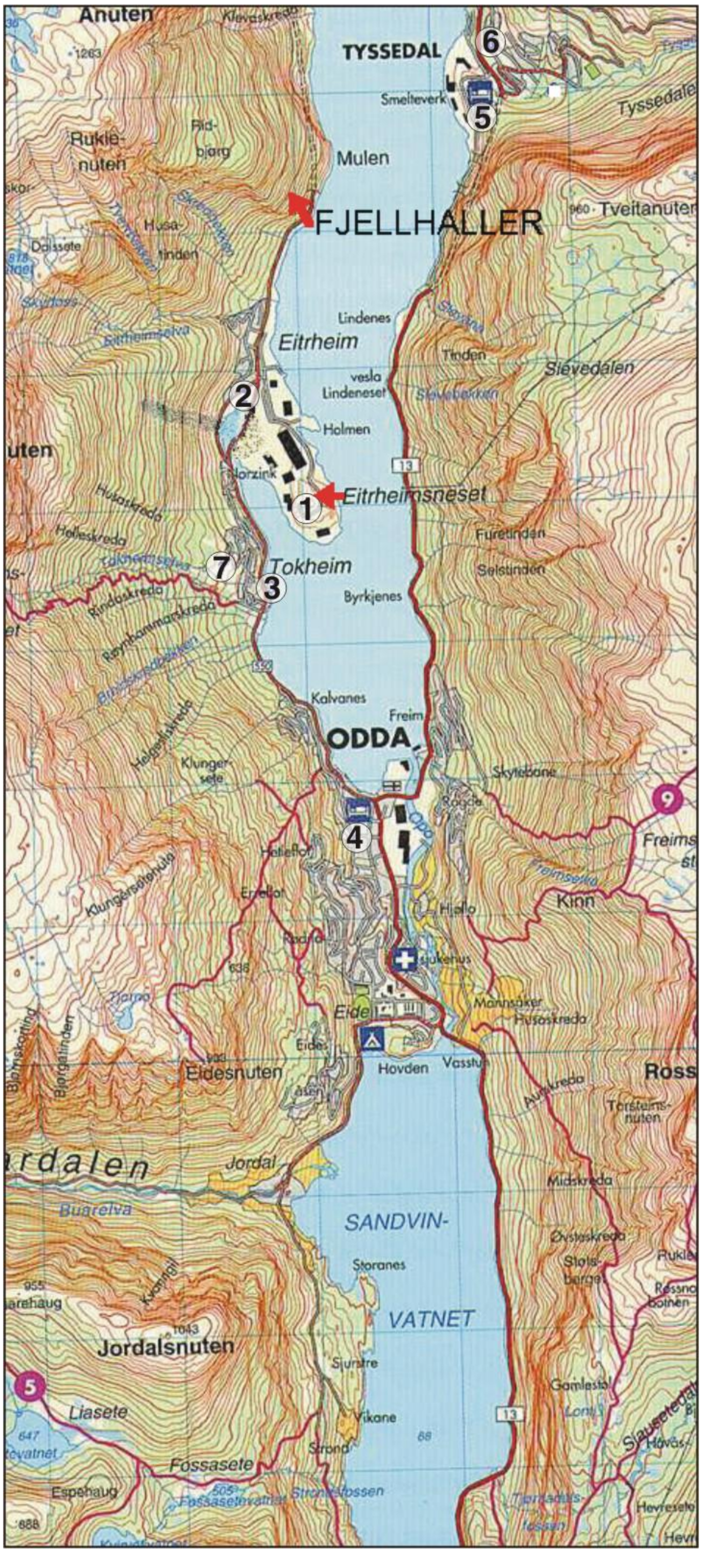


Figure 1: Monitoring stations (all measuring precipitation, in addition to others mentioned). 1) Eitrheimsneset (also meteorology), 2) Eitrheim kindergarten (also particulate matter), 3) Harbour/Tokheim (also particulate matter), 4) Odda school (also particulate matter), 5) Festiviteten (also particulate matter), 6) Tyssedal, 7) Tokheim, 8) Kvinherad (background station outside the map).

3.1 Wind direction and wind speed

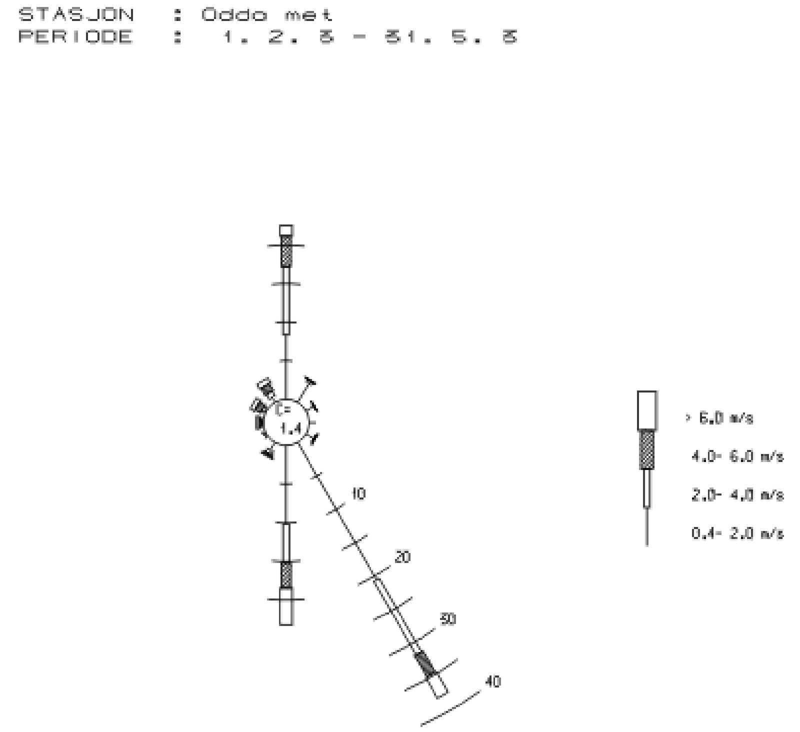
The wind direction is given from a direction with increasing values in degrees clockwise. Wind from the north is thus indicated as 0°/360°.

A frequency distribution of wind direction for the period as well as monthly frequency distributions are shown in Figure 2. More detailed statistic data is shown in Appendix B. Figure 2 indicates that the dominating wind directions for the whole period were from the south-southeast (37,8%), from the south (23,3%) and from the north (22,5%). Calm conditions (<0,5 m/s) occurred only 1,4% of the time. The mean wind speed for the whole period was 2,9 m/s. The highest hourly mean wind speed was 5,2 m/s from the west-northwest. The wind monitoring indicates strong canalizing along Sørfjorden, which is quite normal for Odda.

The instrument measuring wind also registered 2-second values of wind speed (wind gust). The highest value recorded was 25,5 m/s, at 08:00 on 8. May 2003.

Previous wind monitoring in the area concludes the following:

The prevailing wind in the Odda area is blowing in the direction of the valley, from both the southern and northern directions. In the winter season the prevailing wind is from southern direction, while it is both from north and south during the summer. The occurrence of wind speed less than 2,0 m/s is around 50% of the total monitoring period. The occurrence of strong winds is much more frequent during winter season than in the summer season. This is of course very important regarding the air pollution situation in the area. Strong winds make the dispersion of pollutants much better in a period of the year when normally the pollution problem is largest. The day/night shift of the wind direction in the summer time is also of importance, where during the night time winds are from south out of Sørfjorden, and winds are from north towards Odda in the day time.



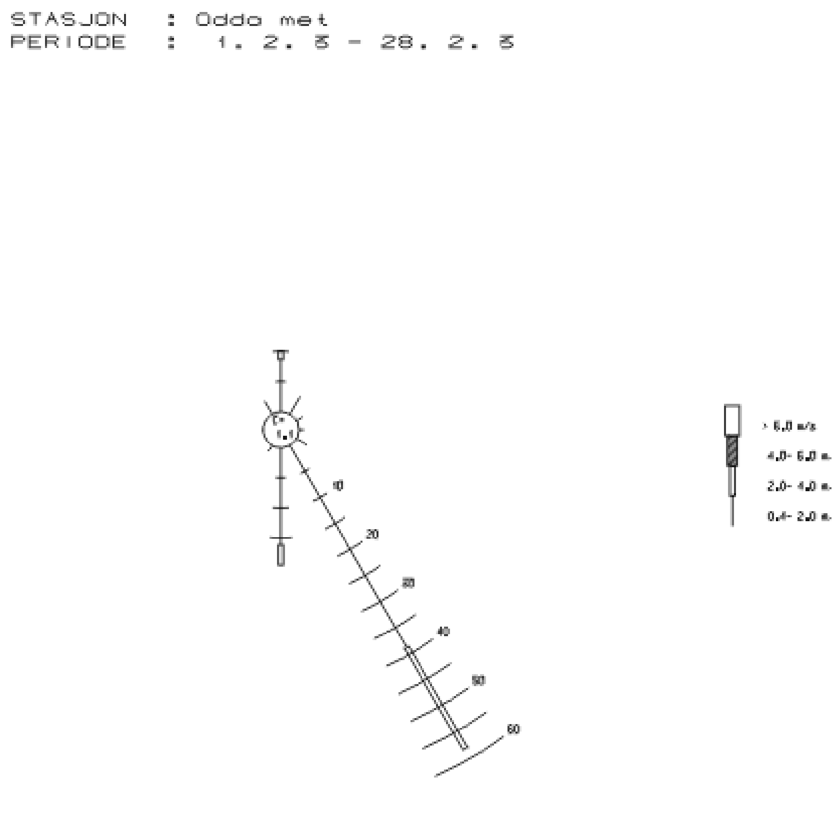
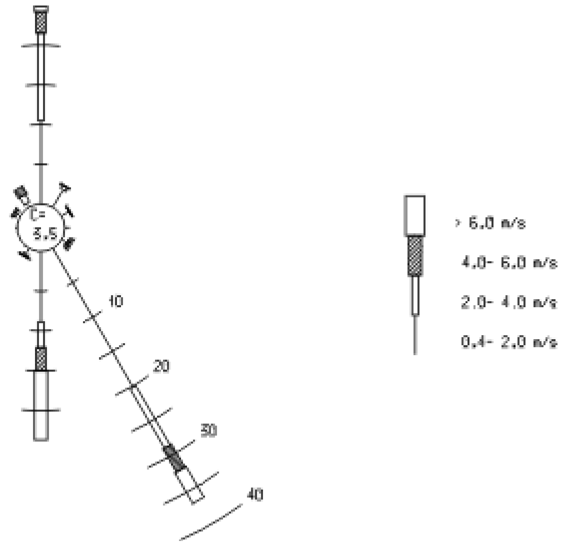


Figure 2: Frequency distribution of wind direction distributed on 30°-sectors from Eitrheimsneset during the period 14.2 – 31.5.2003. Wind roses show percentage distribution, indicating from which direction the winds blow. C=calm.

STASJON : Oddo met
PERIODE : 1. 3. 3 - 31. 3. 3



STASJON : Oddo met
PERIODE : 1. 4. 3 - 30. 4. 3

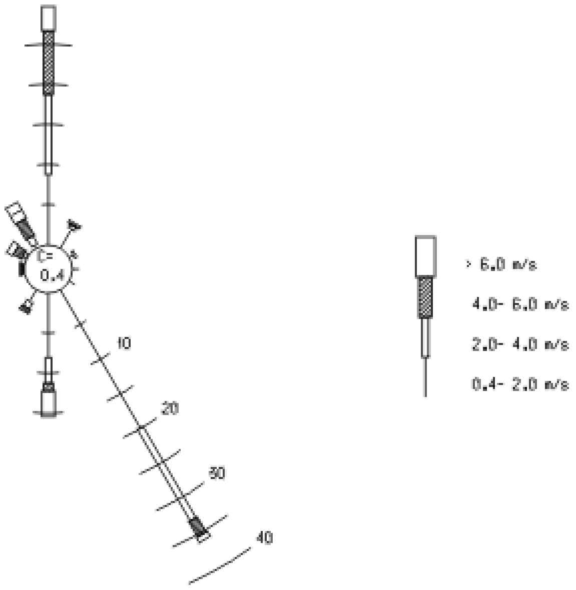


Figure 2: Cont.

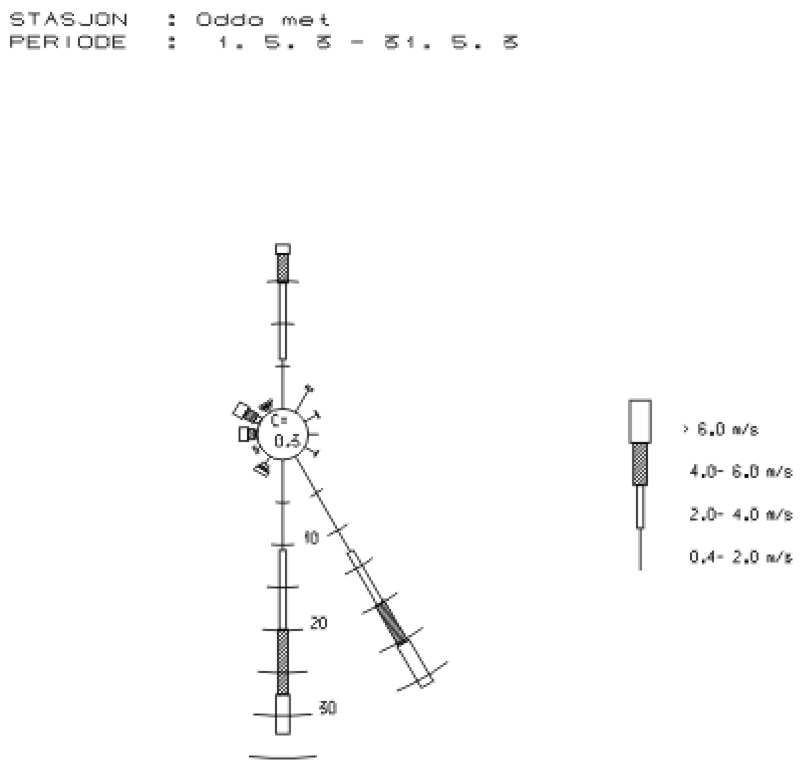


Figure 2: Cont.

Table 3 shows wind statistics from Eitrheimsneset during the entire period.

Table 3: Wind speed statistics (m/s) from Eitrheimsneset.

Month	Calm (%)	Mean wind force (m/s)	Maximum wind force (m/s)	Time for max wind force Date. hour	Maximum gust (m/s)	Time for gust Date. hour
Feb 2003*	1,1	1,6	3,9	15. 01	6,2	14. 14
Mar 2003	3,5	2,9	10,7	9. 21	19,0	30. 08
Apr 2003	0,4	3,1	12,6	4. 18	22,7	5. 08
Mai 2003	0,3	3,3	10,6	9. 02/03	25,5	8. 24

*14.-28. February

Average wind speed during spring 1977 was 2,4 m/s.

As previous stated, all available wind data can be found in Appendix B.

Wind speed as a function of wind direction at Eitrheimsneset is shown in Figure 3. Maximum wind speed occurred with wind from west to northwest. This might indicate falling winds from Folgefonna. The wind is rarely blowing in these directions, but when it occurs, the wind speed is often high. These falling winds are rare and can improve the air quality by transporting pollution from land out onto the fjord.

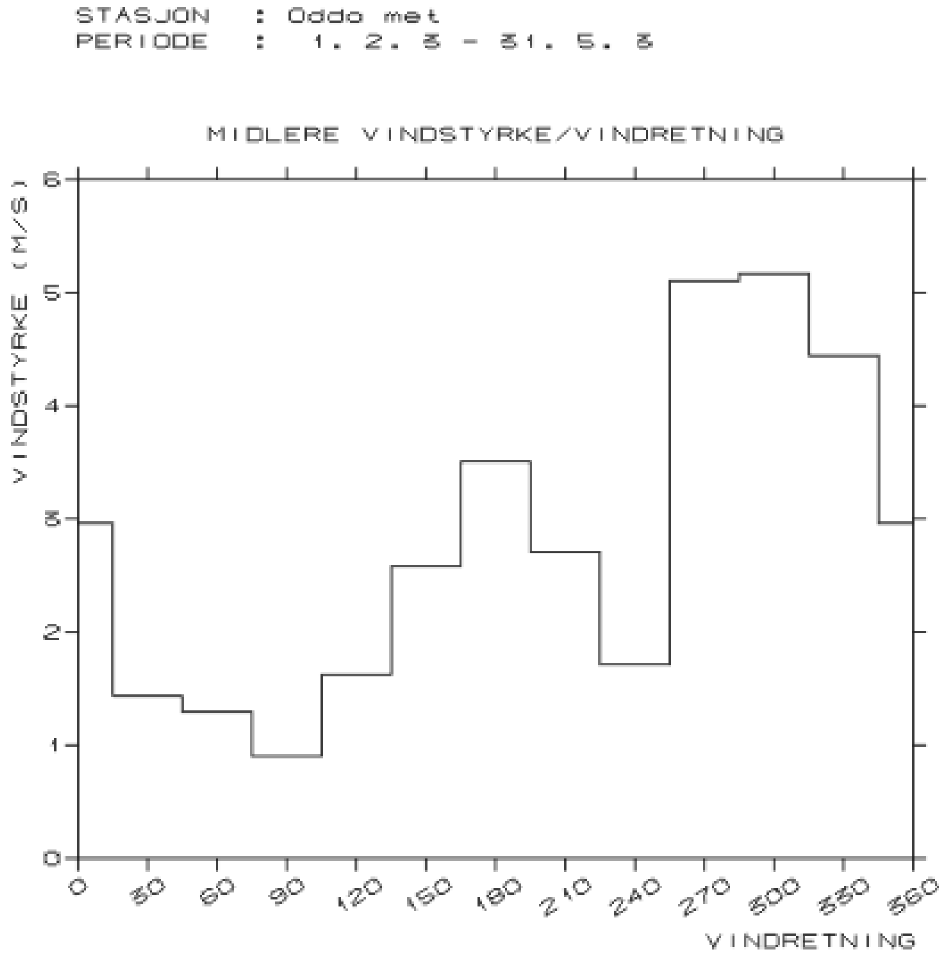


Figure 3: Middle wind speed distributed on twelve 30°-sectors at Eitrheimsneset during the period 14. February - 31. May 2003.

3.2 Stability

Estimating the stability of the atmosphere is based upon hourly measurements of the difference in temperature between 10 m and 2 m above the ground level. The occurrence of four stability classes at Eitrheimsneset during the period 14. February – 31. May 2003 is given in Table 4. Unstable and neutral conditions normally causes good dispersion of pollutants in the air.

Typical features regarding the different stability classes are summarized as follows:

Unstable atmospheric conditions occur most often during daytime and in the summer with clear weather and low wind speed, and when cold air is transported onto warm sea/land. The sea/land will warm up the cold air from below and vertical directed turbulent air is created which gives good vertical dispersion of air pollutants.

Neutral atmospheric conditions occur at moderate and high wind speeds and often in cloudy weather. High wind speed and less warming of the ground makes both vertical and horizontal dispersion. High wind speed makes turbulent air by friction against the ground, and the air is well mixed.

Stable atmospheric condition is typical for quiet clear nights and winter situations with cooling of ground and the bottom air layer, or when the atmosphere is cooled from beyond because of cold sea water. The temperature is increasing with height above ground level, and this gives poor vertical dispersion in the stable air layer.

Table 4: Occurrence of four stability classes at Eitrheimsneset during the period 14. February - 31.Mayi 2003.

Month	Unstable layer $\Delta T<-0,5°C$	Neutral layer $-0,5°C \leq \Delta T<0°C$	Light stable layer $0°C \leq \Delta T<0,5°C$	Stable layer $0,5°C \leq \Delta T$	Sum light stable and stable layer
Feb 2003*	2,8	31,1	46,4	19,7	66,1
Mar 2003	4,2	48,8	42,7	4,3	47,0
Apr 2003	17,1	38,5	38,6	5,8	44,4
May 2003	10,3	54,7	31,9	3,1	35,0

*14.-28. February

During the Spring of 1972 the stability distribution was as follows: 6% unstable, 80% neutral, 14% light stable and 0% stable. There were more stable atmospheric conditions and thereby not so good dispersion conditions during the monitoring period of Spring 2003 in comparison to Spring 1972.

Table 4 indicates that occurrence of neutral conditions, which occur at strong wind and cloudy weather, was predominant in May 2003. Unstable air layers usually occur when the sun is warming in the daytime and are predominant in the summertime. Unstable air layers increased from 2,8% in February to 17,1% in April. Table 4 indicates that the dispersion conditions were poor in February, but increasing month by month during the monitoring period.

Data regarding atmospheric stability is listed in Appendix C.

A statistical package of all data in regards to wind and stability is given in Appendix D. The occurrence of unstable, neutral, and stable air layers distributed according to wind direction within the 12 wind sectors is shown in Figure 4.

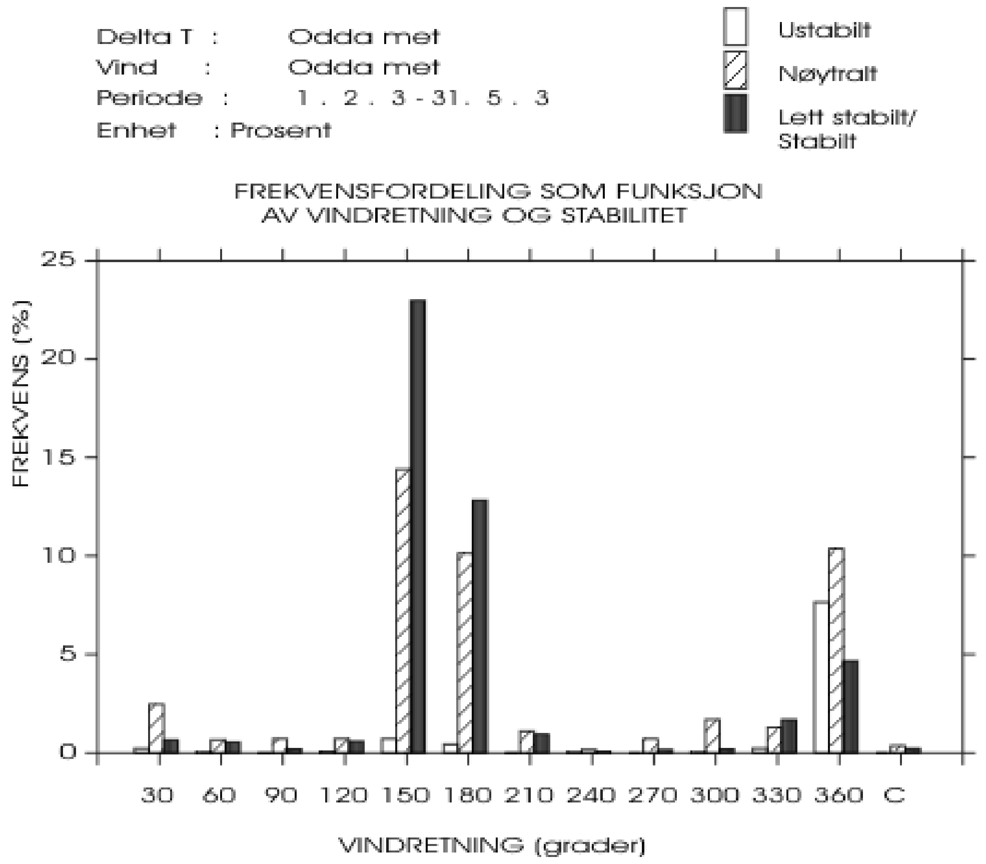


Figure 4: Frequency of unstable, neutral and stable atmospheric conditions distributed on wind directions in the 12 wind sectors at Eitrheimsneset during the 14. February-31. May 2003.

The figure indicates that stable atmospheric conditions most often were observed during winds from the south south-east (150°) and from south (180°). Unstable conditions most often were observed at wind from the north.

3.3 Temperature

Monthly mean temperature at Eitrheimsneset during the period 14. February-31. May 2003 is shown in Table 5.

Table 5: Monthly mean temperatures at Eitrheimsneset during the period 14. February-31. May 2003.Unit: °C. N=Normal temperature from Ullensvang 1962-88.

Month	Monthly mean temperature	N	Maximum		Minimum	
			Temperature	Date / time	Temperature	Date / Time
Feb 2003	0,1	-0,4	5,9	20. 1500	-5,4	17. 0900
Mar 2003	3,8	1,7	8,9	15. 1500*	-2,4	1. 0400*
Apr 2003	7,5	5,2	18,3	23. 1600	-1,3	6. 0700
May 2003	9,2	10,2	18,4	28. 1600	1,3	13. 2200

*One of several observations.

All temperature data collected can be found in Appendix E.

Monthly mean temperatures in 1972 were –0,8°C (Feb 72), 2,7°C (Mar 72), 5,8°C (Apr 72) and 10,7°C (May 72).

Monthly mean temperatures during spring 1977 were –3,9°C (Feb 77), 2,8°C (Mar 77) and 2,1°C (Apr 77).

3.4 Precipitation

Monthly mean values of precipitation during the period 14. February-31. May are shown in Table 6.

Table 6: Monthly mean values of precipitation at Eitrheimsneset during the period 14. February-31. May 2003. Unit: mm. N=Precipitation normal from Ullensvang 1962-88.

Month	Precipitation Eitrheimsneset	Precipitation** Eitrheim kindergarten	N
Feb 2003	-	93	94***
Mar 2003	-	43	110
Apr 2003	29*	93	51
May 2003	104	-	50

* 11.-30. April (no data available before this period)
** This data is collected from the precipitation collector at the kindergarten at Eitrheim.
*** All precipitation fell before the monitoring period.

All precipitation data can be found in Appendix A.

3.5 Relative humidity

Mean relative humidity at Eitrheimsneset during the period 14. February-31. May is shown in Table 7.

Table 7: Mean relative humidity at Eitrheimsneset during the period 14. February-31. May 2003.

Month	Mean value	Maximum		Minimum	
		Humidity	Date / Time	Humidity	Date / Time
Feb 2003*	63	95	25. 1000	38	28. 1400
Mar 2003	69	96	6. 0900**	31	1. 1700
Apr 2003	53	93	2. 0500	21	10. 1700
May 2003	67	94	5. 1400	26	17. 1500

* 14. – 28. February
** one of several observations

Mean value for relative humidity Spring 1977 was 66%.

All humidity data can be found in Appendix A and E (revised).

4 New provisions and National goals for air quality

The air quality within an area can be evaluated by comparing monitoring results or calculations with limit values regarding health and/or influence on vegetation. The idea of limit values and National goals is to have numbered values in relation to degrees of pollution. Limit values are juridical tied up, while National goals are proposals.

Table 8 shows limit values and National goals for air quality regarding actual components. In this report we have compared monitored concentrations with the limit values in the new provisions and National goals for air quality.

Table 8: Limit values and National goals for air quality. Numbers in parenthesis indicate the number of times the limit value is allowed to be exceeded each year.

Component	Unit	Mean time	Norwegian limit values	National goal
PM_{10}	µg/m³	24h	50[2)] (35)	50[2)] (25)
	µg/m³	24h	50[1)] (7)	50[1)] (7)
	µg/m³	Year	40[2)]	
	µg/m³	Year	20[1)]	
Lead	µg/m³	Year	0,5	

1) Te be obtained within 1.1.2010
2) To be obtained within 1.1.2005

- Limit values have been tightened within the last ten years. This applies to both WHO, EU and Norway.
- The new Norwegian provision, by appointment in royal resolution 4. October 2002, is equal to the EU's new limit values.
- National goals for air quality in cities and rural areas were appointed by the Government during Autumn 1998. National goals are generally somewhat stricter than the new provision. The new provision and National goals permit a fixed number of exceedances each year regarding NO_2 and PM_{10}. The goal is to be reached within 1.1.2005 (NO_2: 1.1.2010).

5 Particulate matter (PM_{10})

Measurements of particulate matter have been carried out as daily mean at 4 monitoring stations:

- Kindergarten at Eitrheim
- Harbour at Tokheim between Eitrheimsneset and Odda
- School in Odda
- Festiviteten in Tyssedal

All results from monitoring particulate matter are presented in Appendix F.

A summary from the results is given in Table 9.

Table 9: Particulate matter (PM_{10}). Monthly mean values, maximum daily mean values and numbers of exceedances of 50 µg/m3 as daily mean which is the limit value for PM_{10} (>50 µg/m^3) . Unit: µg/m^3.

Period	Station											
	Kindergarten Eitrheim			Harbour Tokheim			School Odda			Festiviteten Tyssedal		
	Mid	Max	>50	Mid	Max	>50	Mid	Max	>50	Mid	Max	>50
Feb 03*	74,6	141,4	12	59,0	141,7	8	48,1	85,8	5	34,7	66,7	2
Mar 03	38,6	109,7	10	27,4	68,4	3	27,6	72,5	3	30,9	86,0	3
Apr 03	19,7	50,1	1	18,9	33,1	0	13,9	14,3	0	29,6	54,1	2
May 03**	7,6	12,8	0	8,2	12,8	0	8,6	13,3	0	21,5	36,7	0
Total	34,2	141,4	23	27,4	141,7	11	23,9	85,8	8	29,8	86,0	7

* 13.-28. February
** 1.-13. May

Measuring particulate matter for all monitoring stations has shown that the level in the beginning of the monitoring period in the winter was high, but the level decreased during the spring. The lowering of the level was most significant at the monitoring stations most influenced by traffic - the kindergarten and the harbour. Of these two stations, the kindergarten is farthest from road traffic. Monitoring of wind indicates that the most frequent wind direction is from the road (RV 550) against the kindergarten. The vegetation (trees) between the road and the kindergarten is actually somewhat shaped by the wind – trees are bending from the road against the kindergarten. The location of the kindergarten is also influenced by particulate matter from Outokumpu Norzink AS at Eitrheimsneset. The monitoring station at the harbour is close to the road (RV 550) and strongly influenced by this. The second most dominant wind direction in the area is from north, and therefore the monitoring station at the harbour might also be influenced by emissions at Outokumpu Norzink AS at Eitrheimsneset, just like the kindergarten.

The particulate matter level at the school in Odda is also influenced by the traffic in the area. The particulate matter level at all these three monitoring stations was equal or lower after the end of the season, and most likely influenced by studded tires on vehicles. The last of the four particulate matter monitoring stations, at Festiviteten at Tyssedal, was less influenced by traffic than the three other stations, and the particulate matter level was much higher at this station after the studded tires season. Even at this station in Tyssedal the particulate matter level was reduced in May 2003. This indicates that Tinfos Titan & Iron KS in Tyssedal is the main source regarding particulate matter level at this locality. The particulate matter level in Tyssedal is although “best” with least exceedances of limit value regarding particulate matter. The Norwegian limit value accepts a maximum of 35 exceedances, and this should be initiated by 1.1.2005; while approaching 1.1.2010, only 7 exceedances will be permitted. These set limits are based upon one full year of monitoring, so it is difficult to project the number of exceedances after only 3 months of monitoring. It is probable that the monitoring station at the school had at least more than 35 exceedances within a year period. Figure 5 shows the results from the monitoring of particulate matter.

Taking the particulate matter monitoring results into consideration, it is reasonable to advise further investigations of the particulate matter level at the kindergarten at Eitrheim. A record of 20 exceedances in three months have been monitored. The new provision regarding air quality accepts maximum

35 exceedances during a year within 1.1.2005, while from 1.1.2010 only 7 exceedances are accepted.

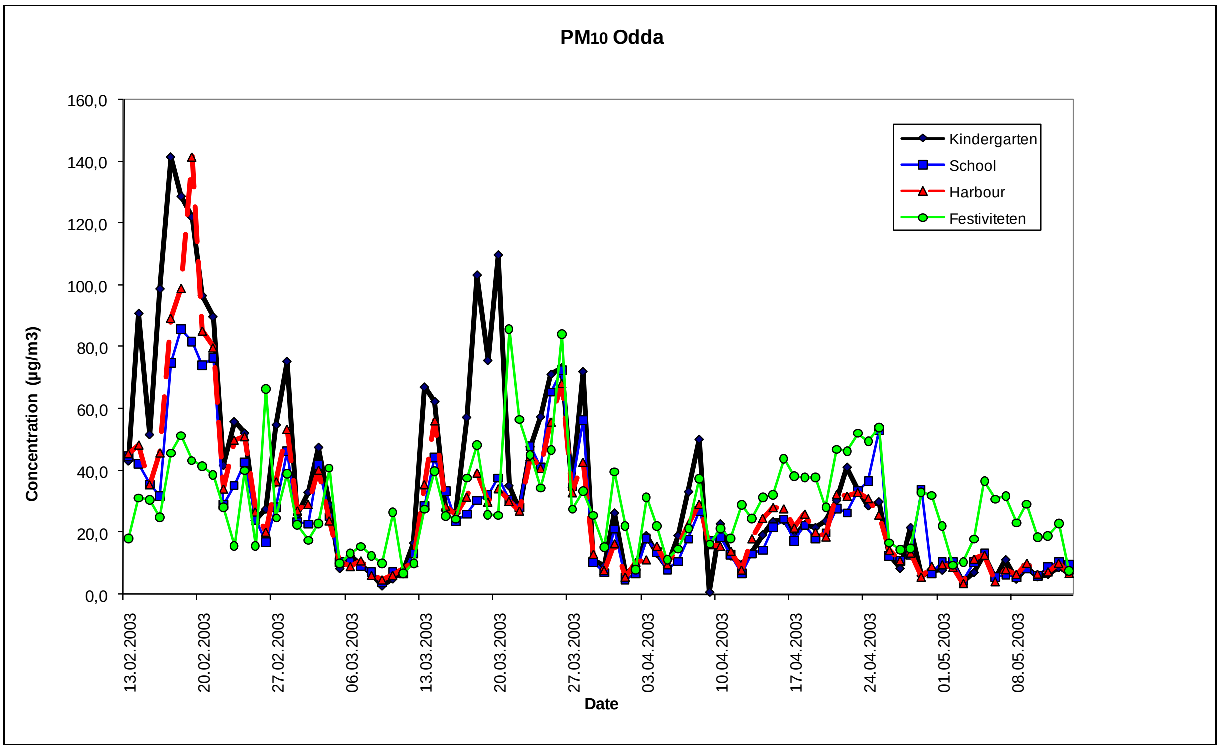


Figure 5: Monitoring particulate matter (PM_{10}) at and around Odda during the period 13. February – 13. May 2003.

6 Metallic compounds

Metallic analyses have been carried out from both 4 monitoring stations measuring daily mean of particulate matter on filters, as well as from 8 monitoring stations measuring monthly precipitation. Precipitation collectors were chosen instead of standard fall-out dust collectors as the precipitation collectors are more apt for cleaning with acid, a procedure necessary for analysis of metals. The use of precipitation collectors was hence for practical purposes. As a consequence one did not get fall-out dust levels from the eight stations and could not compare fall-out dust results with PM_{10} measurements. Results from monitoring precipitation and metallic analysis are shown in Appendix G.

6.1 Metallic analyses from precipitation collectors

8 monitoring stations with passive sampling of precipitation were located at the following stations (see also Figure 1):

1. Eitrheimsneset, Outokumpu Norzink AS
2. Kindergarten, Eitrheim
3. Harbour at Tokheim
4. School in Odda
5. Festiviteten at Tyssedal

6. Tyssedal at H. Grande
7. Tokheim at barrage
8. Background station at Kvinnherad (just after tunnel by Statkraft)

All data from the monitoring of precipitation are shown in Appendix G.

Regarding 6 of the metallic components, the monitoring results indicate Outokumpu Norzink AS at Eitrheimsneset to be the main source (Pb, Cd, Mn, Cu, Zn and As) and Tinfos Titan & Iron KS at Tyssedal regarding 4 components (Cr, Fe, Ni and Ti). Mercury were only analysed for the station at Eitrheimsneset and the harbour at Tokheim. Mercury is further mentioned in the next section regarding the particulate matter monitoring programme.

The monitoring results indicate approximately 100 times the level at the most loaded monitoring station compared to the background station. It can thus be concluded that Outokumpu Norzink AS and Tinfos Titan & Iron KS are the main sources of raised metal concentrations in the particulate matter monitored in Odda and the surrounding area.

It should be noted that the analysis marked “*Festiviteten*” 12.03.-16.04.2003 arrived at NILU without proper sealing and was not accepted for analysis. During this period it seemed that all metallic compounds were at maximum concentration at all the other stations, with some few exceptions where the concentrations were low during the whole monitoring period.

Regarding lead (Pb): The highest values were observed at Eitrheim, the kindergarten at Eitrheim, the harbour at Tokheim and the school in Odda. All stations mentioned in the order of high to low influence from the source at Eitrheimsneset.

Regarding cadmium (Cd): The highest values were observed at Eitrheim. The kindergarten at Eitrheim and the harbour at Tokheim were both equally influenced from the source at Eitrheimsneset. The school in Odda and the barrage at Tokheim were also influenced.

Regarding manganese (Mn): The highest values were observed at Eitrheim. The kindergarten at Eitrheim and the harbour at Tokheim were both equally influenced from the source at Eitrheimsneset. The school in Odda and Festiviteten in Tyssedal were also influenced. It is therefore reasonable to state that Tinfos Titan & Iron KS were a main source.

Regarding copper (Cu): The highest values were observed at Eitrheim. The kindergarten were highly influenced. Also the school in Odda, the harbour at Tokheim and Festiviteten in Tyssedal were highly influenced. It is therefore reasonable to state that Tinfos Titan & Iron KS were a main source.

Regarding zink (Zn): The, by far, highest values were observed at Eitrheim. The kindergarten at Eitrheim was highly influenced also the harbour at Tokheim and the school in Odda were influenced.

Regarding arsenic (As): Also for this component the highest values were observed at Eitrheim. The harbour at Tokheim and the school in Odda were also clearly influenced.

Regarding chrome (Cr): The highest values were observed at Festiviteten in Tyssedal. Also the school in Odda was influenced, and the values were also higher than at Eitrheimsneset in two of the three months. Also the kindergarten at Eitrheim was influenced. It is therefore reasonable to state that Tinfos Titan & Iron KS were a main source, and that monitoring stations on the other side of the fjord can be influenced if the wind direction permits this.

Regarding iron (Fe): The by far highest values were observed at Festiviteten in Tyssedal. Also the school in Odda and the monitoring station at H. Grande in Tyssedal were much influenced. The monitoring values from these stations were much higher that at Eitrheimsneset. From high to low also the harbour at Tokheim, the kindergarten at Eitrheim and the monitoring station at Eitrheimsneset were influenced.

Regarding nickel (Ni): The highest values were monitored at Festiviteten in Tyssedal. The next highest values were observed at the school in Odda, but also the kindergarten at Eitrheim was influenced in the middle monitoring period, while not in the first and last monitoring period.

Regarding titanium (Ti): Clearly the highest values were observed at Festiviteten in Tyssedal. The school in Odda, the harbour at Tokheim and the monitoring station at H. Grande in Tyssedal were in this order also clearly influenced by Tinfos Titan & Iron KS as a source.

Odda and the surroundings innermost the Sørfjorden are influenced by emission of metallic compounds from the industry in the area. Only two main industrial sources remain in the area, namely Outokumpu Norzink AS and Tinfos Titan & Iron KS.

6.2 Metallic analysis from particulate matter measurements

The four monitoring stations regarding measuring daily mean values of PM_{10} were located at the following places (see also Figure 1):

1. Kindergarten at Eitrheim
2. Harbour at Tokheim
3. School in Odda
4. Festiviteten in Tyssedal

The following dates were chosen for analysis of metallic compounds in the PM_{10} samples. The dates listed are the same as the numbers on the X-axis in figures 6 – 15.

1. 14.2-15.2 (Friday)
2. 19.2-20.2 (Wednesday)
3. 26.2-27.2 (Wednesday)

4. 5.3-6.3 (Wednesday)
5. 12.3-13.3 (Wednesday)
6. 19.3-20.3 (Wednesday)
7. 26.3-27.3 (Wednesday)
8. 2.4-3.4 (Wednesday)
9. 8.4-9.4 (Tuesday)
10. 16.4-17.4 (Wednesday)
11. 23.4-24.4 (Wednesday)
12. 30.4-1.5 (Wednesday)
13. 7.5-8.5 (Wednesday)
14. 13.5-14.5 (Tuesday)

All data can be found in Appendix H and I.

Regarding lead (Pb): The maximum values were observed at the kindergarten at Eitrheim and then at the harbour at Tokheim. See Figure 6. Also one high value was registered at Festiviteten in Tyssedal. These results confirm the results from the analysis of precipitation.

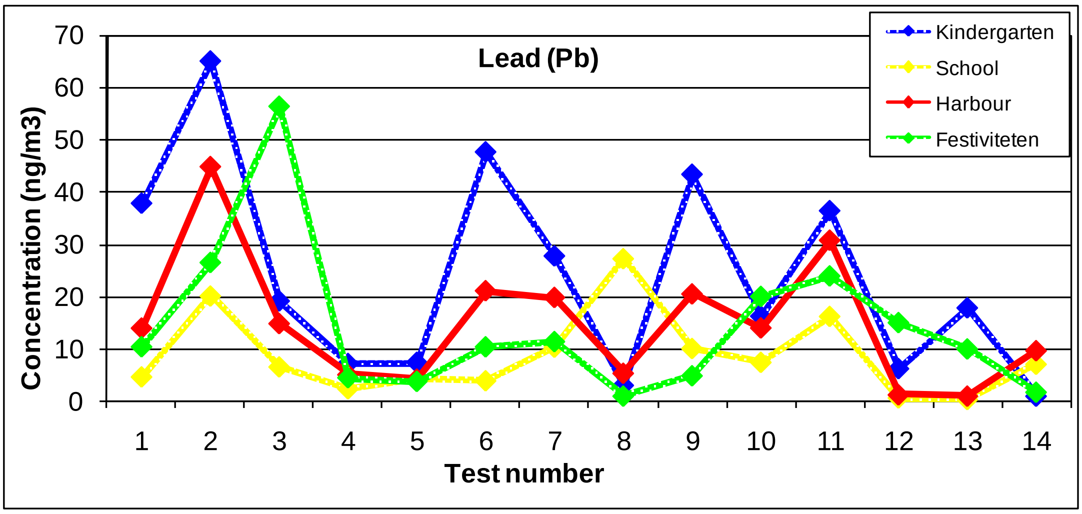


Figure 6: Analysis of lead from measuring daily mean particulate matter. Unit: ng/m³.

Regarding cadmium (Cd): The maximum values were highest at the kindergarten at Eitrheim and at the harbour at Tokheim. See Figure 7. These results confirm the results from the analysis of precipitation.

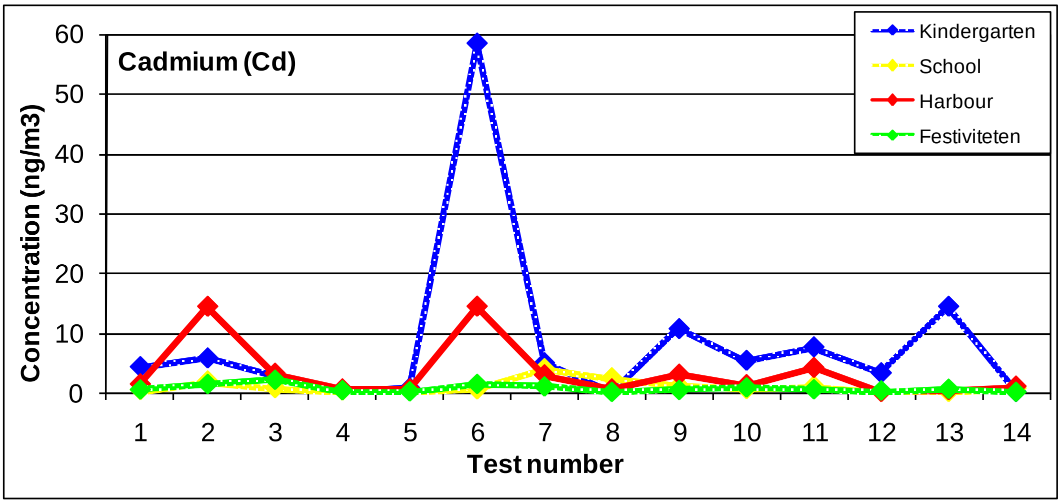


Figure 7: Analysis of cadmium from measuring daily mean particulate matter. Unit : ng/m³.

Regarding manganese (Mn): The maximum values were found at the kindergarten at Eitrheim. The results from Festiviteten in Tyssedal also had relatively high values, higher than the corresponding values at the harbour at Tokheim. See Figure 8. This confirm the assumptions from the analysis of precipitation - that both Outokumpu Norzink AS and Tinfos Titan & Iron KS are sources.

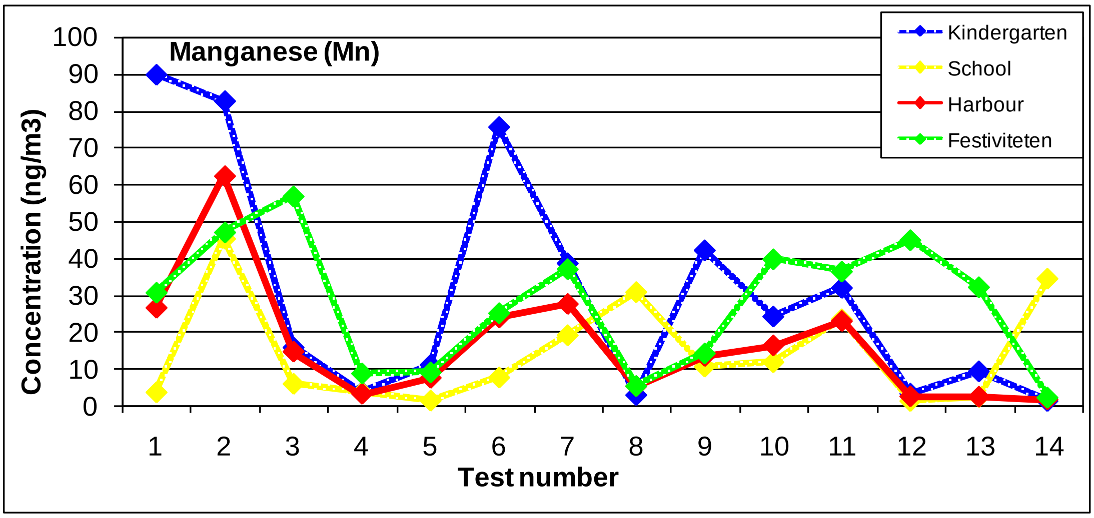


Figure 8: Analysis of manganese from measuring daily mean particulate matter. Unit: ng/m³.

Regarding copper (Cu) Also for these analyses the maximum values were observed at the kindergarten at Eitrheim and at the harbour at Tokheim. This confirms the analyses from precipitation. See Figure 9.

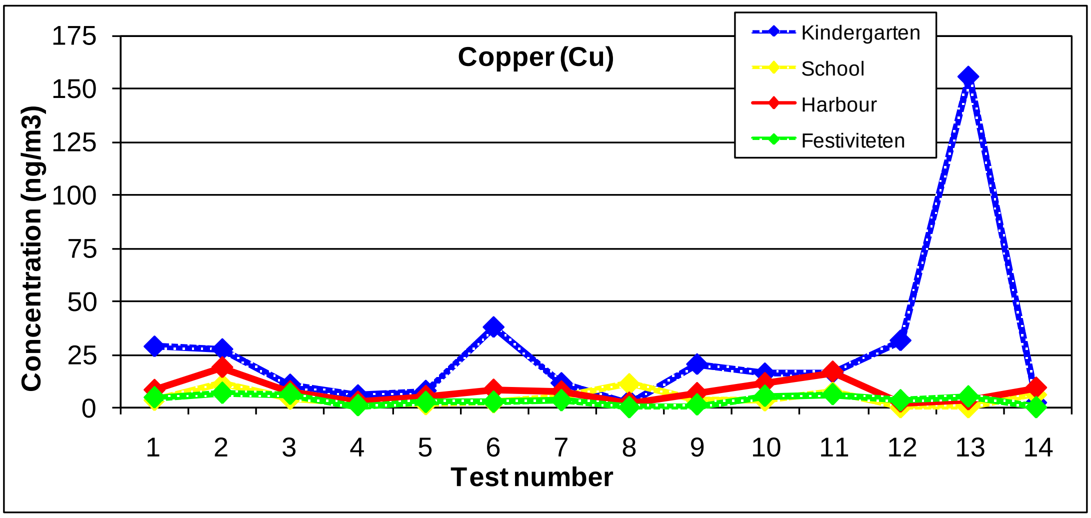


Figure 9: Analysis of copper from measuring daily mean particulate matter. Unit: ng/m3.

Regarding zinc (Zn): The highest value was observed at Festiviteten in Tyssedal, but the highest levels were observed at the kindergarten at Eitrheim. The analysis indicates that all monitoring stations in the area are influenced by the emission of Zn at Outokumpu Norzink AS. See Figure 10.

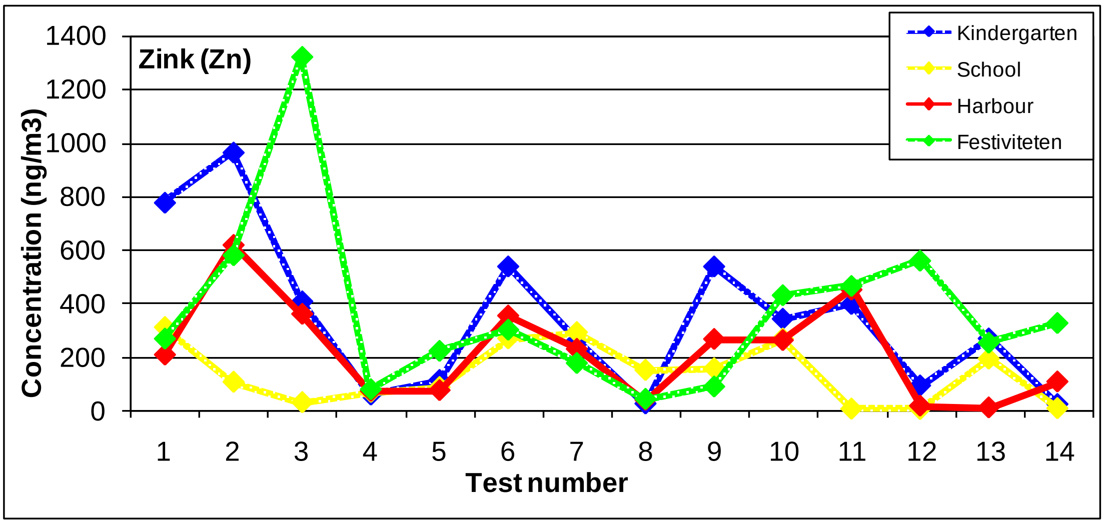


Figure 10: Analysis of zinc from measuring daily mean particulate matter. Unit: ng/m3.

Regarding arsenic (As): The highest values were observed at the kindergarten at Eitrheim. Regarding arsenic all monitoring stations were influenced, the Festiviteten the least. See Figure 11.

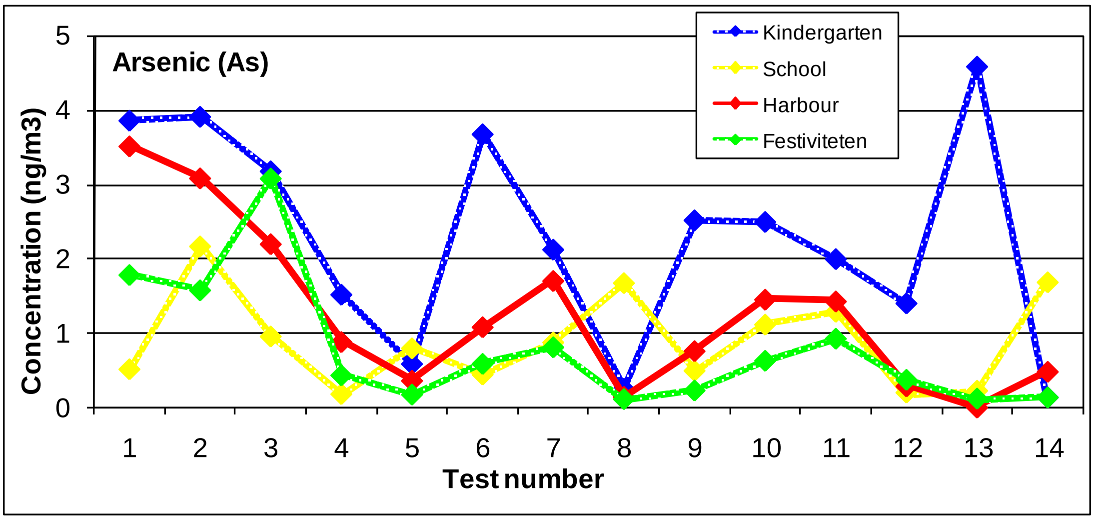


Figure 11: Analysis of arsenic from measuring daily mean particulate matter. Unit: ng/m3.

Regarding chrome (Cr): The highest mean value was observed at Festiviteten in Tyssedal, but the two highest values were observed at the kindergarten at Eitrheim and the harbour at Tokheim. See Figure 12.

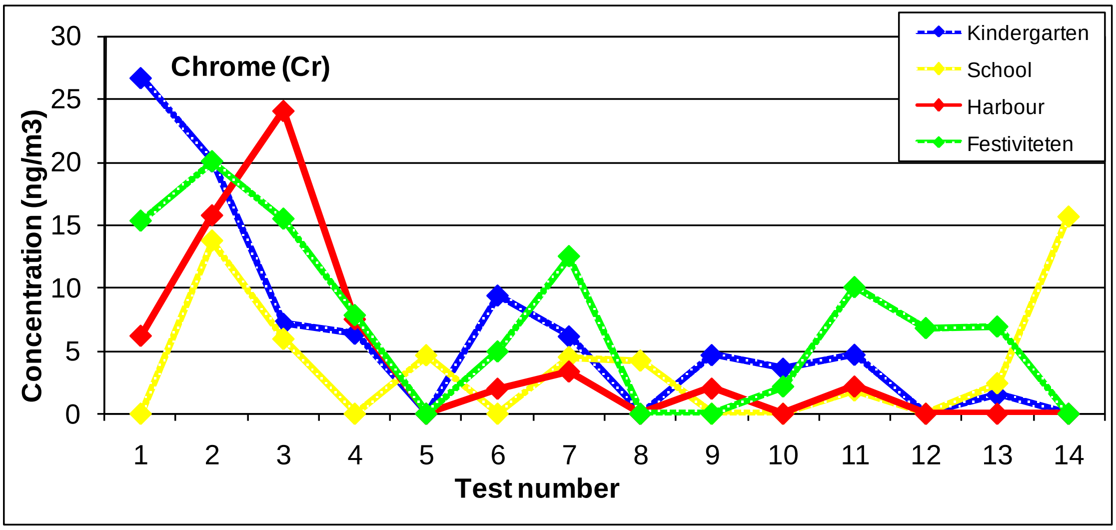


Figure 12: Analysis of chrome from measuring daily mean particulate matter. Unit: ng/m3.

<u>Regarding iron (Fe):</u> The highest level was observed at Festiviteten in Tyssedal, but the highest value was measured at the kindergarten at Eitrheim. See Figure 13.

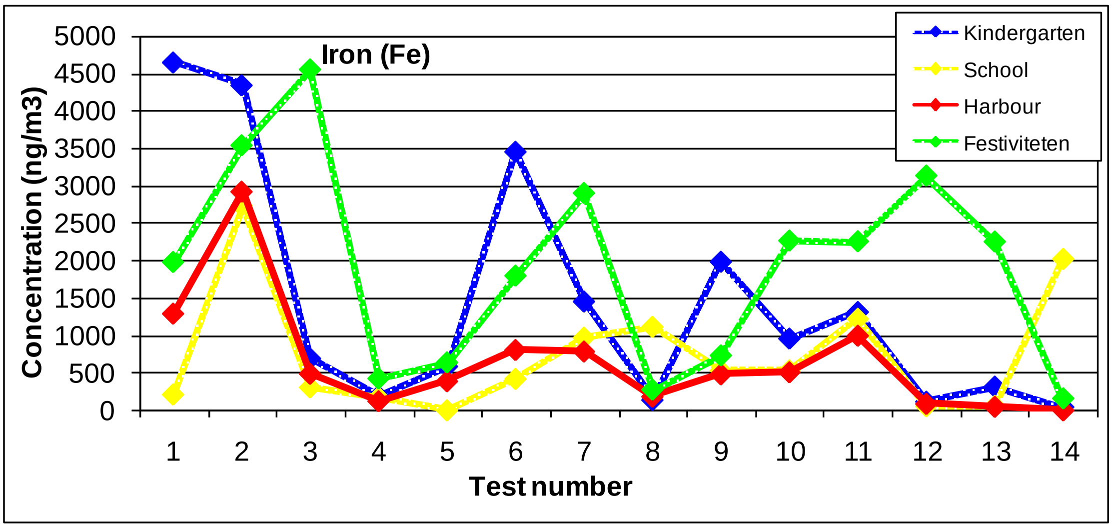


*Figure 13: Analysis of iron from measuring daily mean particulate matter.
Unit: ng/m3.*

<u>Regarding nickel (Ni):</u> The maximum value and the highest mean value were observed at the kindergarten at Eitrheim. The next highest level was observed at Festiviteten in Tyssedal. See Figure 14.The analysis from precipitation indicates Tinfos Titan & Iron KS as the main source, while the analysis from daily mean particulate matter indicates Outokumpu Norzink AS as the main source. This is the only metallic compound in which the analysis from particulate matter and precipitation indicates different main source.

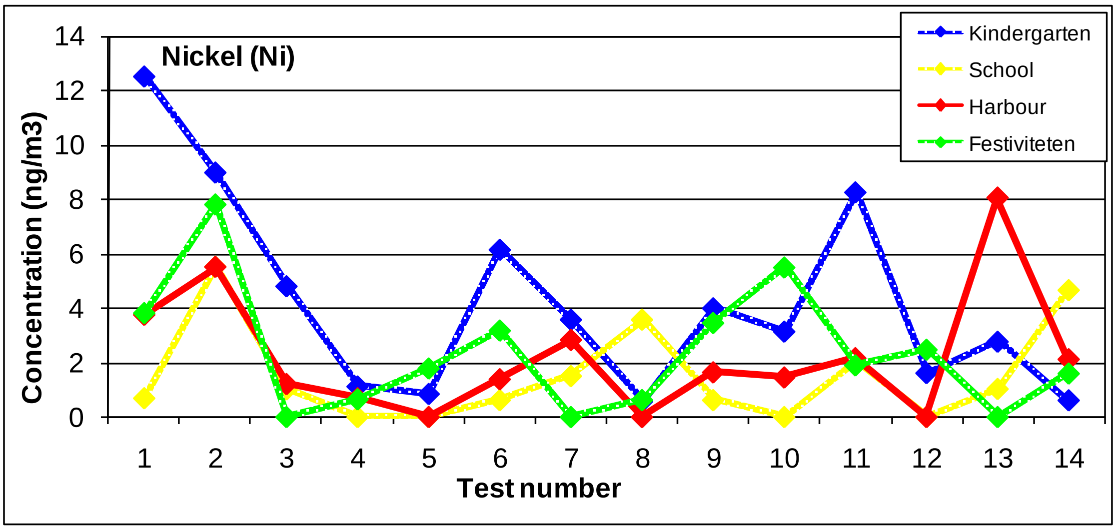


*Figure 14: Analysis of nickel from measuring daily mean particulate matter.
Unit ng/m3.*

Regarding titanium (Ti): The clearly highest level and also the highest values were observed at Festiviteten in Tyssedal. See Figure 15.

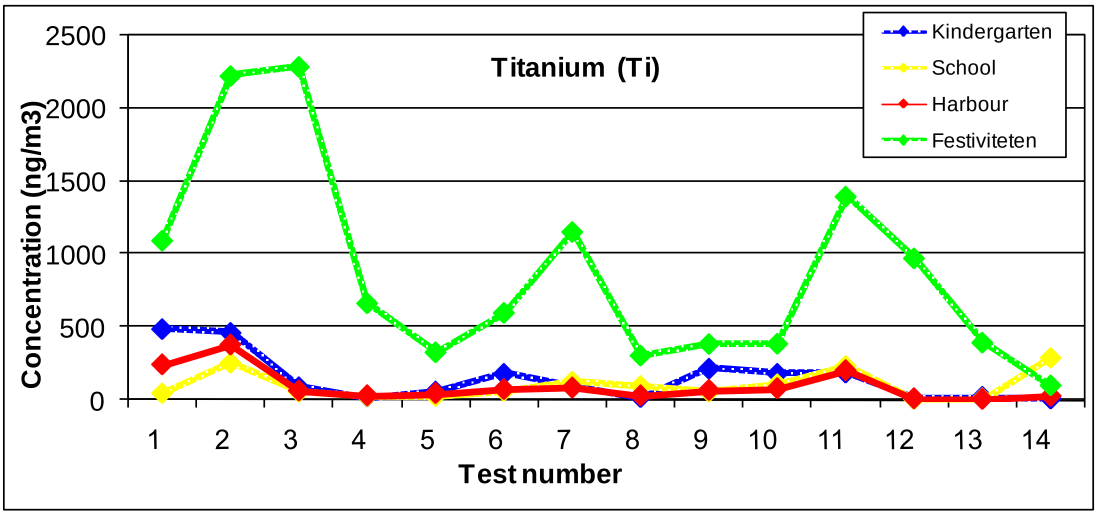


Figure 15: Analysis of titanium from measuring daily mean particulate matter. Unit ng/m3.

Regarding mercury (Hg): The highest value was observed at the school in Odda. The highest level was registered at the harbour at Tokheim, and then at the kindergarten at Eitrheim. See Figure 16.

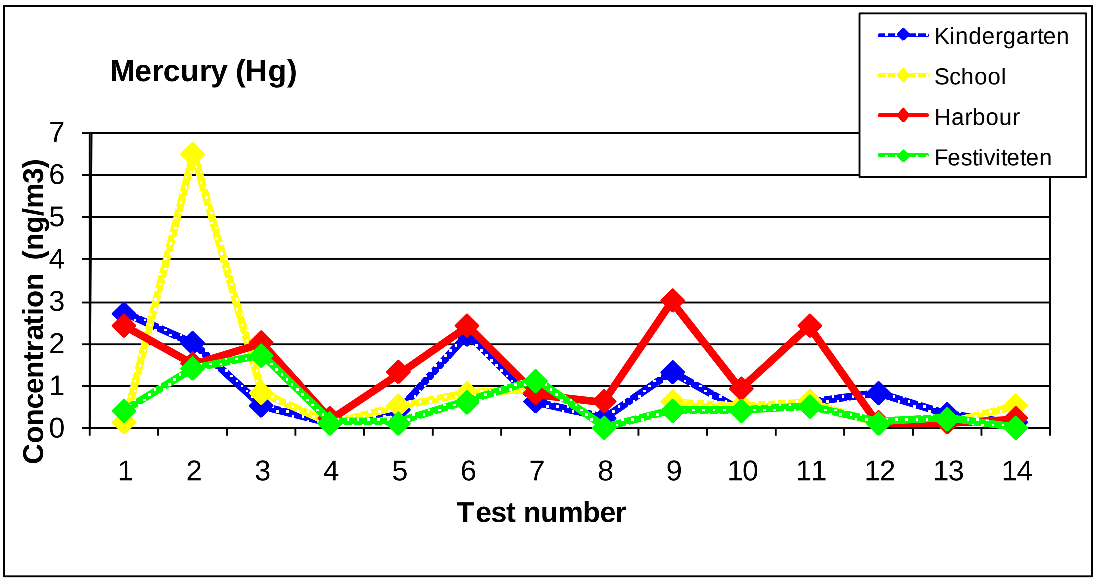


Figure 16:Analysis of mercury from measuring daily mean particulate matter. Unit: ng/m3.

We took a closer look at some of the monitoring results and compared high concentrations of metallic compounds with wind data and noticed events at Tinfos Titan & Iron KS and Outokumpu Norzink AS:

Test number. 1 (14.2-15.2):
Elevated values of Ni, As, Fe, Zn, Cr, Mn and Pb at the kindergarten at Eitrheim. Noticed event was stop in several production lines at Tinfos Titan & Iron KS. Main wind direction against north.

Test number 2 (19.2-20.2):
Elevated values of Ni, Cr, As, Fe, Zn, Mg, Pb at the kindergarten at Eitrheim, and elevated values of Hg at the school in Odda. Noticed event was high unloading activity at the harbour at Eitrheimsneset. Also high values of Ti and Fe at Festiviteten in Tyssedal. Noticed event was stop in several production lines at Tinfos Titan & Iron IS. Main wind direction against north.

Test number 3 (26.2-27.2):
Elevated values of Zn, Ti, As, Mn and Pb at Festiviteten in Tyssedal. High values of Cr at the harbour at Tokheim. Noticed events were unloading activity and stop in the production at Tinfos Titan & Iron KS. Main wind direction against north.

Test number 6 (19.3-20.3):
Elevated values of Ni, As, Fe, Zn, Mn, Cu, Cr, Pb and Cd at the kindergarten at Eitrheim. Noticed events were unloading activity and stop in production at Tinfos Titan & Iron KS. Main wind direction against north at morning and at evening, and the opposite direction in the middle of the day. This makes dispersion possible from Tyssedal to Eitrheimsneset.

Test number 7 (26.3-27.3):
Elevated values of Ti, Cr, Cu and Mn at Festiviteten in Tyssedal. Noticed event was unloading activity at Tinfos Titan & Iron KS. Also stop in one production line at Outokumpu Norzink AS, but this might cause elevated values of Pb and Hg. Main wind direction against north, but also some wind from the opposite direction.

Test number 9 (8.4-9.4):
Elevated values of Ni, As, Zn, Mn and Pb at the kindergarten at Eitrheim. Noticed events were stop in the production line and loading activity at Tinfos Titan & Iron KS. Main wind direction against north in the morning and also in the afternoon, while the wind direction was opposite in the rest of the day. This makes dispersion possible from Tyssedal to Eitrheim.

Test number 11 (23.4-24.4):
Elevated values of Ti, Fe, Zn, Mn and Pb at Festiviteten in Tyssedal. High values of Ni, Pb, Mn and Fe at the kindergarten at Eitrheim. Noticed events were unloading and stop in production line at Tinfos Titan & Iron KS, and also unloading at Outokumpu Norzink AS at Eitrheimsneset. Main wind direction against north in the morning and also in the evening, while the wind direction was opposite during the rest of the day.

Test number 12 (30.4-1.5):
Elevated values of Fe, Zn and Mn at Festiviteten in Tyssedal. Noticed event was unloading at Outokumpu Norzink AS at Eitrheimsneset. Main wind direction against north first day, night and the next morning, and then wind in the opposite direction. This makes dispersion possible from Eitrheim to Tyssedal.

Test number 13 (7.5-8.5):
Elevated values of As, Cu and Cd at the kindergarten at Eitrheim. Noticed event was stop in the production line at Tinfos & Iron KS. Main wind direction against north all the time.

Test number 14 (13.5-14.5):
Elevated values of Cr, Fe, Ti, Ni, As and Mn at the harbour at Tokheim. Noticed events were loading and stop and also disturbances in the production line at Tinfos Titan & Iron KS. Main wind direction against north in the night time and opposite the rest of the time. Wind pattern might explain dispersion from Tyssedal to harbour at Tokheim.

EU target values regarding the following components:

Arsenic (As):	6 ng/m^3
Cadmium (Cd):	5 ng/m^3
Nickel (Ni):	20 ng/m^3

All values as year mean in the PM_{10}-fraction of particulate matter.

Results from analysis of maximum daily mean values of the following metallic compounds:

Arsenic:	$<$ 5 ng/m^3
Cadmium	$<$60 ng/m^3
Nickel	$<$15 ng/m^3

The results do not indicate that annual mean values of neither arsenic nor nickel will exceed suggested values from EU. On the contrary, it is reason to believe that the annual mean value of cadmium will exceed the value suggested by EU at the kindergarten at Eitrheim. This fact strengthens the advice to continue monitoring particulate matter (PM_{10}) in this area.

Regarding the 8 other metallic compounds, it is only lead which has a set limit value. The new description for local air quality states 0,5 µg/m^3 as an upper limit for annual mean. Results from the monitoring programme as maximum daily mean were $<$70 ng/m^3 ($<$0,07 µg/m^3), which are a little more than 10% of the limit value.

7 References

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SFT (1998) Guidelines to regulation on limit values for local air pollution and noice. Oslo, Statens forurensningstilsyn (SFT-veiledning 98:03). (In Norwegian).

Skogvold, O.F. (1974) Meteorological investigations in the Odda-area . Lillestrøm (NILU OR 74/74). (In Norwegian).

Appendix A

A synoptic listing of meteorological data

TT:	Temperature
dT	Temperature difference (10-2 m)
DD:	Wind direction
FF:	Wind speed
Gust:	Maximum – 2 second wind speed
Nedbør:	Precipitation
Rel-fukt:	Relative humidity

PERIODE: 1/ 2 2003 - 28/ 2 2003

Par. 1: TT 2m, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 2: dT , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 3: DD , Stasjon 1442, Odda met , Skal.faktor: 10.000
Par. 4: FF , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 5: Gust , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 6: nedbo, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 7: Rel-f, Stasjon 1442, Odda met , Skal.faktor: 1.000

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	2	14	1	1.9	0.2	357.	2.8	4.0	-9900.0	79.2
2003	2	14	2	1.7	0.2	0.	2.6	3.7	-9900.0	75.5
2003	2	14	3	1.6	0.2	357.	2.0	3.4	-9900.0	70.6
2003	2	14	4	1.2	0.3	360.	1.3	3.1	-9900.0	71.0
2003	2	14	5	0.8	0.2	10020.	1.2	2.8	-9900.0	74.7
2003	2	14	6	0.4	0.2	166.	1.6	3.4	-9900.0	73.4
2003	2	14	7	-0.1	0.2	159.	2.1	3.7	-9900.0	74.3
2003	2	14	8	-0.5	0.2	153.	2.0	4.0	-9900.0	76.3
2003	2	14	9	-0.8	0.1	159.	3.2	5.3	-9900.0	75.3
2003	2	14	10	-1.1	0.1	154.	3.0	5.3	-9900.0	75.0
2003	2	14	11	-1.1	-0.1	154.	2.4	4.0	-9900.0	75.1
2003	2	14	12	0.3	-0.7	151.	1.8	4.4	-9900.0	70.0
2003	2	14	13	1.0	-0.6	28.	0.8	2.8	-9900.0	65.2
2003	2	14	14	0.6	-0.4	357.	3.4	6.5	-9900.0	70.6
2003	2	14	15	0.8	0.2	348.	2.2	6.2	-9900.0	69.3
2003	2	14	16	0.4	0.1	10081.	0.6	2.8	-9900.0	69.9
2003	2	14	17	0.1	0.1	169.	0.8	1.6	-9900.0	72.2
2003	2	14	18	-0.4	0.2	161.	0.9	1.9	-9900.0	74.1
2003	2	14	19	-0.8	0.2	155.	1.0	1.6	-9900.0	77.2
2003	2	14	20	-1.4	0.2	158.	1.3	3.4	-9900.0	78.7
2003	2	14	21	-1.6	0.2	153.	1.9	3.1	-9900.0	74.0
2003	2	14	22	-1.9	0.2	154.	2.2	3.7	-9900.0	74.1
2003	2	14	23	-2.2	0.2	161.	2.4	4.0	-9900.0	73.4
2003	2	14	24	-2.4	0.2	144.	1.1	3.1	-9900.0	73.4
2003	2	15	1	-2.6	0.1	155.	3.9	6.5	-9900.0	72.4
2003	2	15	2	-2.7	0.2	150.	1.3	4.7	-9900.0	70.9
2003	2	15	3	-2.8	0.2	159.	1.3	3.4	-9900.0	76.2
2003	2	15	4	-3.0	0.1	157.	2.6	5.0	-9900.0	72.4
2003	2	15	5	-3.1	0.2	160.	1.9	4.0	-9900.0	75.1
2003	2	15	6	-3.1	0.1	147.	2.0	4.0	-9900.0	72.8
2003	2	15	7	-3.0	0.1	155.	1.7	3.1	-9900.0	73.9
2003	2	15	8	-3.2	0.1	157.	2.9	4.7	-9900.0	72.4
2003	2	15	9	-3.5	0.1	164.	3.3	5.3	-9900.0	72.4
2003	2	15	10	-3.8	0.1	153.	3.8	6.2	-9900.0	71.2
2003	2	15	11	-3.7	0.0	151.	2.0	5.6	-9900.0	69.2
2003	2	15	12	-1.7	-0.8	153.	0.8	2.5	-9900.0	64.3
2003	2	15	13	-1.8	-0.5	13.	1.0	2.5	-9900.0	64.9
2003	2	15	14	-1.1	-0.3	10161.	1.3	2.8	-9900.0	64.4
2003	2	15	15	-1.3	0.0	173.	1.2	2.2	-9900.0	64.0
2003	2	15	16	-0.9	0.1	10003.	1.0	2.2	-9900.0	60.6
2003	2	15	17	-0.8	0.2	1.	0.9	2.8	-9900.0	65.0
2003	2	15	18	-1.3	0.2	10145.	0.9	1.9	-9900.0	66.9
2003	2	15	19	-1.7	0.3	165.	1.8	2.8	-9900.0	67.6
2003	2	15	20	-2.1	0.2	154.	2.7	4.7	-9900.0	67.0
2003	2	15	21	-2.3	0.2	162.	2.3	4.4	-9900.0	64.0
2003	2	15	22	-2.5	0.1	168.	1.2	2.5	-9900.0	63.2
2003	2	15	23	-2.9	0.2	10074.	0.6	1.9	-9900.0	64.3
2003	2	15	24	-3.1	0.2	156.	1.4	3.1	-9900.0	66.3

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	2	16	1	-3.3	0.2	160.	2.3	4.0	-9900.0	63.8
2003	2	16	2	-3.5	0.2	140.	1.5	4.0	-9900.0	61.2
2003	2	16	3	-3.6	0.2	154.	1.2	2.2	-9900.0	63.3
2003	2	16	4	-3.7	0.3	160.	1.9	3.1	-9900.0	61.9
2003	2	16	5	-3.9	0.2	162.	1.8	2.8	-9900.0	62.0
2003	2	16	6	-4.0	0.2	162.	2.2	3.7	-9900.0	61.2
2003	2	16	7	-3.9	0.2	148.	1.3	2.8	-9900.0	59.6
2003	2	16	8	-4.2	0.2	161.	0.8	1.9	-9900.0	62.6
2003	2	16	9	-4.3	0.2	141.	0.5	1.2	-9900.0	63.8
2003	2	16	10	-4.3	0.1	165.	0.8	1.9	-9900.0	66.6
2003	2	16	11	-3.9	0.0	156.	1.7	3.1	-9900.0	65.8
2003	2	16	12	-2.4	-0.6	157.	1.9	3.4	-9900.0	57.6
2003	2	16	13	-0.9	-0.9	133.	0.7	2.2	-9900.0	47.9
2003	2	16	14	-1.7	-0.5	11.	1.5	3.1	-9900.0	49.8
2003	2	16	15	-1.6	-0.1	347.	1.4	2.8	-9900.0	55.6
2003	2	16	16	-1.7	0.3	1.	0.9	2.2	-9900.0	58.8
2003	2	16	17	-1.9	0.2	10153.	0.8	1.6	-9900.0	58.0
2003	2	16	18	-2.0	0.2	163.	1.7	2.8	-9900.0	57.6
2003	2	16	19	-2.3	0.3	158.	1.4	2.2	-9900.0	58.3
2003	2	16	20	-2.6	0.3	158.	2.5	4.0	-9900.0	59.4
2003	2	16	21	-2.9	0.2	165.	2.0	4.7	-9900.0	55.3
2003	2	16	22	-3.2	0.2	157.	1.8	3.7	-9900.0	56.9
2003	2	16	23	-3.4	0.2	159.	1.4	3.1	-9900.0	57.4
2003	2	16	24	-3.9	0.1	168.	0.8	2.2	-9900.0	63.6
2003	2	17	1	-4.0	0.3	161.	1.6	3.1	-9900.0	61.7
2003	2	17	2	-4.2	0.2	163.	1.9	3.4	-9900.0	62.7
2003	2	17	3	-4.4	0.2	156.	1.1	2.5	-9900.0	63.2
2003	2	17	4	-4.7	0.2	157.	1.2	2.2	-9900.0	66.7
2003	2	17	5	-4.8	0.2	157.	1.9	3.7	-9900.0	65.4
2003	2	17	6	-5.0	0.2	160.	1.7	3.1	-9900.0	64.8
2003	2	17	7	-5.2	0.2	161.	1.1	2.2	-9900.0	67.2
2003	2	17	8	-5.3	0.2	156.	2.0	3.7	-9900.0	65.4
2003	2	17	9	-5.4	0.3	168.	1.5	3.1	-9900.0	66.6
2003	2	17	10	-5.2	0.2	160.	1.4	3.1	-9900.0	64.6
2003	2	17	11	-4.5	0.2	10081.	0.7	2.5	-9900.0	63.7
2003	2	17	12	-2.7	-0.5	10149.	0.8	1.9	-9900.0	58.9
2003	2	17	13	-2.2	-0.5	169.	1.5	2.5	-9900.0	53.0
2003	2	17	14	-0.8	-0.5	163.	1.0	2.5	-9900.0	43.9
2003	2	17	15	-1.7	0.1	353.	1.6	3.1	-9900.0	51.2
2003	2	17	16	-1.8	0.3	359.	1.4	2.8	-9900.0	58.0
2003	2	17	17	-2.0	0.2	166.	1.6	2.8	-9900.0	57.3
2003	2	17	18	-2.0	0.3	162.	1.4	2.2	-9900.0	60.6
2003	2	17	19	-2.1	0.4	163.	1.7	2.8	-9900.0	57.5
2003	2	17	20	-2.5	0.3	158.	1.7	3.1	-9900.0	62.2
2003	2	17	21	-2.5	0.3	164.	1.8	3.4	-9900.0	59.2
2003	2	17	22	-2.4	0.3	161.	2.5	3.7	-9900.0	57.6
2003	2	17	23	-2.2	0.3	161.	2.7	4.4	-9900.0	55.4
2003	2	17	24	-2.2	0.3	10013.	1.1	2.8	-9900.0	58.6
2003	2	18	1	-2.3	0.4	168.	1.1	2.2	-9900.0	58.0
2003	2	18	2	-2.5	0.4	152.	0.7	1.9	-9900.0	59.6
2003	2	18	3	-2.7	0.5	167.	1.5	3.4	-9900.0	61.8
2003	2	18	4	-2.4	0.4	158.	0.9	2.2	-9900.0	61.8
2003	2	18	5	-2.6	0.4	161.	1.3	3.1	-9900.0	64.1
2003	2	18	6	-2.6	0.5	157.	2.3	3.7	-9900.0	66.3
2003	2	18	7	-2.6	0.4	138.	2.0	5.3	-9900.0	66.9
2003	2	18	8	-2.6	0.4	10017.	1.1	2.5	-9900.0	67.5
2003	2	18	9	-2.4	0.5	159.	2.3	4.4	-9900.0	67.5
2003	2	18	10	-2.5	0.4	10009.	1.3	3.7	-9900.0	69.0
2003	2	18	11	-2.2	0.2	176.	1.2	2.5	-9900.0	67.6
2003	2	18	12	-0.1	-0.6	152.	1.4	2.8	-9900.0	56.5
2003	2	18	13	0.5	-0.1	10011.	1.0	2.8	-9900.0	53.9
2003	2	18	14	1.2	-0.1	10183.	0.9	2.5	-9900.0	52.2
2003	2	18	15	1.2	0.2	353.	0.9	2.5	-9900.0	52.3
2003	2	18	16	0.7	0.4	10353.	0.8	2.2	-9900.0	60.8
2003	2	18	17	0.9	0.4	160.	1.8	3.4	-9900.0	58.2
2003	2	18	18	1.0	0.5	162.	1.3	2.5	-9900.0	57.8
2003	2	18	19	1.3	0.5	168.	2.2	3.7	-9900.0	54.2
2003	2	18	20	1.3	0.5	165.	2.4	5.0	-9900.0	54.0
2003	2	18	21	1.4	0.6	165.	1.2	2.8	-9900.0	53.1
2003	2	18	22	1.0	0.3	165.	1.0	2.8	-9900.0	55.2
2003	2	18	23	0.8	0.6	176.	1.2	4.0	-9900.0	57.4
2003	2	18	24	1.1	0.6	173.	1.7	4.0	-9900.0	55.0

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	2	19	1	0.5	0.5	10062.	1.0	2.8	-9900.0	59.3
2003	2	19	2	0.4	0.6	161.	1.8	4.0	-9900.0	60.5
2003	2	19	3	0.5	0.5	158.	2.3	5.0	-9900.0	59.7
2003	2	19	4	0.9	0.6	168.	1.9	3.7	-9900.0	57.0
2003	2	19	5	0.5	0.7	10155.	1.3	3.4	-9900.0	60.1
2003	2	19	6	0.6	0.6	166.	2.1	4.7	-9900.0	58.5
2003	2	19	7	0.6	0.7	166.	2.0	4.4	-9900.0	59.0
2003	2	19	8	0.2	0.6	10159.	0.9	1.9	-9900.0	61.3
2003	2	19	9	-0.3	0.5	123.	0.7	1.9	-9900.0	64.6
2003	2	19	10	-0.7	0.4	10028.	0.7	1.9	-9900.0	71.0
2003	2	19	11	-0.1	0.3	166.	1.0	1.6	-9900.0	66.9
2003	2	19	12	2.5	-0.4	153.	0.8	1.9	-9900.0	55.3
2003	2	19	13	2.7	-0.1	10358.	0.8	2.2	-9900.0	54.6
2003	2	19	14	3.2	0.1	10350.	0.6	2.5	-9900.0	52.4
2003	2	19	15	2.3	0.4	341.	0.8	2.5	-9900.0	59.9
2003	2	19	16	2.7	0.4	20172.	0.5	2.2	-9900.0	58.3
2003	2	19	17	3.1	0.7	153.	1.3	2.8	-9900.0	55.5
2003	2	19	18	3.1	0.8	176.	1.1	2.2	-9900.0	54.8
2003	2	19	19	2.5	0.8	165.	1.2	3.4	-9900.0	59.5
2003	2	19	20	2.8	1.0	161.	2.2	3.7	-9900.0	54.2
2003	2	19	21	2.1	0.6	150.	3.4	6.2	-9900.0	56.9
2003	2	19	22	2.5	0.8	164.	2.2	5.6	-9900.0	54.8
2003	2	19	23	1.3	0.7	352.	1.2	3.1	-9900.0	64.2
2003	2	19	24	0.8	0.6	163.	1.8	3.4	-9900.0	63.8
2003	2	20	1	1.0	0.6	168.	2.1	4.4	-9900.0	59.3
2003	2	20	2	1.1	0.6	164.	2.3	4.7	-9900.0	57.9
2003	2	20	3	0.6	0.5	151.	0.9	3.1	-9900.0	62.4
2003	2	20	4	0.6	0.5	164.	1.2	2.5	-9900.0	60.3
2003	2	20	5	0.6	0.6	161.	1.9	3.4	-9900.0	59.5
2003	2	20	6	1.0	0.7	170.	1.7	4.0	-9900.0	57.4
2003	2	20	7	0.6	0.5	182.	0.6	2.5	-9900.0	62.7
2003	2	20	8	0.1	0.4	196.	0.5	1.6	-9900.0	64.7
2003	2	20	9	0.2	0.4	187.	0.7	2.2	-9900.0	63.5
2003	2	20	10	0.8	0.8	166.	2.2	4.0	-9900.0	58.4
2003	2	20	11	1.4	0.3	161.	1.8	3.1	-9900.0	56.7
2003	2	20	12	4.0	-0.4	10126.	0.6	2.2	-9900.0	50.3
2003	2	20	13	4.7	-0.6	150.	1.3	2.5	-9900.0	47.7
2003	2	20	14	5.8	-0.1	149.	1.1	2.5	-9900.0	43.4
2003	2	20	15	5.9	0.3	10209.	1.0	3.1	-9900.0	43.9
2003	2	20	16	4.7	0.8	10202.	0.7	2.2	-9900.0	51.8
2003	2	20	17	5.2	0.8	166.	1.7	2.8	-9900.0	48.3
2003	2	20	18	5.8	1.3	172.	1.8	4.0	-9900.0	44.6
2003	2	20	19	5.0	1.1	166.	2.5	5.0	-9900.0	46.9
2003	2	20	20	4.9	0.9	174.	2.0	5.0	-9900.0	47.3
2003	2	20	21	3.3	0.7	132.	1.4	2.8	-9900.0	53.8
2003	2	20	22	3.0	0.6	150.	1.4	3.7	-9900.0	53.6
2003	2	20	23	3.4	0.8	167.	2.1	4.7	-9900.0	49.6
2003	2	20	24	3.4	0.7	161.	2.2	4.0	-9900.0	48.1
2003	2	21	1	3.6	1.0	159.	2.7	5.6	-9900.0	46.8
2003	2	21	2	3.0	0.8	148.	1.7	4.4	-9900.0	49.6
2003	2	21	3	2.9	0.8	159.	2.7	5.3	-9900.0	46.9
2003	2	21	4	1.8	0.6	10155.	1.1	2.8	-9900.0	53.3
2003	2	21	5	1.7	0.7	10344.	1.4	2.8	-9900.0	53.2
2003	2	21	6	1.0	0.8	10164.	1.4	2.8	-9900.0	62.0
2003	2	21	7	1.3	0.7	166.	2.7	5.3	-9900.0	51.9
2003	2	21	8	1.7	0.8	10133.	1.9	3.7	-9900.0	47.5
2003	2	21	9	2.4	1.2	168.	2.3	3.7	-9900.0	43.5
2003	2	21	10	2.9	0.7	174.	2.2	3.7	-9900.0	39.7
2003	2	21	11	2.8	0.4	142.	1.2	3.1	-9900.0	42.8
2003	2	21	12	3.1	-0.3	351.	0.9	3.1	-9900.0	47.8
2003	2	21	13	4.1	-0.7	336.	0.6	2.5	-9900.0	41.6
2003	2	21	14	5.0	-0.5	325.	0.5	1.9	-9900.0	38.2
2003	2	21	15	4.1	0.3	344.	1.6	3.1	-9900.0	40.8
2003	2	21	16	3.8	0.5	10337.	0.8	1.9	-9900.0	44.6
2003	2	21	17	3.3	0.4	10329.	1.0	3.4	-9900.0	47.4
2003	2	21	18	2.6	0.4	10137.	0.8	2.2	-9900.0	54.8
2003	2	21	19	2.2	0.4	166.	1.7	3.7	-9900.0	54.3
2003	2	21	20	1.6	0.4	179.	1.0	2.5	-9900.0	58.2
2003	2	21	21	1.1	0.5	10000.	1.0	2.8	-9900.0	62.6
2003	2	21	22	0.9	0.5	158.	1.5	2.2	-9900.0	64.4
2003	2	21	23	0.8	0.5	157.	1.4	2.8	-9900.0	67.3
2003	2	21	24	0.6	0.2	159.	1.9	4.0	-9900.0	68.7

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	2	22	1	0.9	0.2	166.	1.7	3.4	-9900.0	67.9
2003	2	22	2	0.9	0.2	164.	1.5	3.1	-9900.0	68.3
2003	2	22	3	1.0	0.2	157.	1.7	3.7	-9900.0	67.7
2003	2	22	4	0.8	0.2	153.	1.5	3.1	-9900.0	67.9
2003	2	22	5	0.6	0.1	150.	1.8	3.1	-9900.0	67.8
2003	2	22	6	0.5	0.1	160.	2.1	3.7	-9900.0	67.3
2003	2	22	7	0.3	0.1	162.	2.4	4.4	-9900.0	67.0
2003	2	22	8	0.0	0.1	147.	1.7	3.7	-9900.0	66.4
2003	2	22	9	-0.5	0.2	154.	2.2	3.7	-9900.0	68.2
2003	2	22	10	-0.9	0.1	152.	2.1	3.4	-9900.0	68.9
2003	2	22	11	-0.5	-0.1	151.	1.9	3.4	-9900.0	66.3
2003	2	22	12	1.2	-0.4	155.	1.1	2.5	-9900.0	62.2
2003	2	22	13	1.5	-0.4	10150.	0.9	2.2	-9900.0	60.6
2003	2	22	14	1.7	-0.2	19.	0.6	1.9	-9900.0	58.4
2003	2	22	15	1.7	0.1	20317.	0.4	1.2	-9900.0	60.5
2003	2	22	16	1.3	0.2	10170.	0.5	1.2	-9900.0	64.4
2003	2	22	17	0.9	0.2	166.	0.5	1.9	-9900.0	66.1
2003	2	22	18	0.6	0.4	160.	1.4	1.9	-9900.0	67.0
2003	2	22	19	0.0	0.4	161.	2.5	4.4	-9900.0	69.8
2003	2	22	20	-0.3	0.3	159.	3.2	5.0	-9900.0	69.3
2003	2	22	21	-0.6	0.2	150.	3.3	5.6	-9900.0	68.4
2003	2	22	22	-0.7	0.3	155.	1.9	3.4	-9900.0	67.9
2003	2	22	23	-0.9	0.3	157.	1.8	3.1	-9900.0	67.7
2003	2	22	24	-1.0	0.3	155.	2.6	4.7	-9900.0	66.9
2003	2	23	1	-1.1	0.3	157.	2.1	3.7	-9900.0	66.0
2003	2	23	2	-1.2	0.3	154.	2.2	4.0	-9900.0	65.4
2003	2	23	3	-1.2	0.4	153.	2.3	4.0	-9900.0	63.7
2003	2	23	4	-1.7	0.3	177.	1.0	2.5	-9900.0	67.7
2003	2	23	5	-1.7	0.3	170.	1.2	2.2	-9900.0	65.5
2003	2	23	6	-1.9	0.4	159.	1.5	3.4	-9900.0	64.7
2003	2	23	7	-2.1	0.4	153.	2.8	4.4	-9900.0	64.8
2003	2	23	8	-2.0	0.4	156.	2.2	4.0	-9900.0	64.0
2003	2	23	9	-1.8	0.4	157.	2.3	4.0	-9900.0	62.4
2003	2	23	10	-1.3	0.3	167.	1.9	5.0	-9900.0	59.2
2003	2	23	11	-1.1	0.2	10000.	0.8	1.9	-9900.0	60.5
2003	2	23	12	1.5	-0.2	72.	0.4	1.2	-9900.0	50.1
2003	2	23	13	2.4	-0.6	133.	0.5	1.9	-9900.0	46.3
2003	2	23	14	2.7	-0.5	10188.	0.5	1.9	-9900.0	44.5
2003	2	23	15	2.6	0.1	20217.	0.4	1.2	-9900.0	49.0
2003	2	23	16	2.5	0.4	179.	1.2	2.5	-9900.0	47.9
2003	2	23	17	2.0	0.8	164.	1.6	4.0	-9900.0	48.8
2003	2	23	18	1.8	0.7	167.	1.8	4.4	-9900.0	50.1
2003	2	23	19	1.7	0.7	157.	2.3	5.3	-9900.0	50.4
2003	2	23	20	1.4	0.6	160.	1.8	3.7	-9900.0	50.8
2003	2	23	21	1.3	0.5	152.	0.8	2.5	-9900.0	49.1
2003	2	23	22	0.7	0.6	10274.	0.7	2.2	-9900.0	56.0
2003	2	23	23	0.4	0.8	10328.	1.0	3.1	-9900.0	57.3
2003	2	23	24	0.0	0.5	10176.	0.8	2.2	-9900.0	56.6
2003	2	24	1	-0.3	0.4	10188.	0.7	2.2	-9900.0	53.4
2003	2	24	2	-0.6	0.5	174.	0.7	1.6	-9900.0	52.7
2003	2	24	3	-0.3	0.7	162.	1.1	2.5	-9900.0	52.9
2003	2	24	4	0.2	0.7	10175.	1.3	3.1	-9900.0	49.9
2003	2	24	5	0.5	0.4	13.	0.6	1.9	-9900.0	51.5
2003	2	24	6	0.1	0.2	4.	1.3	2.8	-9900.0	66.0
2003	2	24	7	0.4	0.4	21.	0.7	2.5	-9900.0	63.6
2003	2	24	8	0.5	0.3	166.	1.1	2.2	-9900.0	59.2
2003	2	24	9	0.8	0.3	159.	1.3	2.5	-9900.0	56.6
2003	2	24	10	1.5	0.2	155.	0.9	1.9	-9900.0	52.7
2003	2	24	11	1.9	0.1	164.	1.6	2.8	-9900.0	52.8
2003	2	24	12	2.4	0.0	160.	1.3	4.0	-9900.0	57.4
2003	2	24	13	2.5	-0.1	149.	1.6	3.7	-9900.0	61.4
2003	2	24	14	2.7	0.1	159.	1.5	3.1	-9900.0	67.8
2003	2	24	15	3.0	0.1	159.	1.4	2.8	-9900.0	68.3
2003	2	24	16	2.8	0.1	148.	1.7	3.4	-9900.0	77.3
2003	2	24	17	2.7	0.2	165.	1.3	2.5	-9900.0	81.8
2003	2	24	18	2.7	0.3	158.	2.2	3.4	-9900.0	87.3
2003	2	24	19	3.0	0.3	168.	2.1	3.4	-9900.0	90.4
2003	2	24	20	3.3	0.3	162.	1.4	2.5	-9900.0	90.1
2003	2	24	21	2.6	0.3	356.	1.6	3.4	-9900.0	91.1
2003	2	24	22	2.4	0.2	354.	2.0	4.4	-9900.0	88.7
2003	2	24	23	2.3	0.2	10172.	0.8	1.9	-9900.0	88.2
2003	2	24	24	2.1	0.2	160.	1.9	3.1	-9900.0	91.1

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	2	25	1	2.4	0.2	158.	2.0	4.7	-9900.0	92.7
2003	2	25	2	2.9	0.3	171.	0.8	1.9	-9900.0	92.3
2003	2	25	3	2.5	0.2	3.	1.5	2.8	-9900.0	92.4
2003	2	25	4	2.2	0.1	25.	0.9	1.9	-9900.0	93.0
2003	2	25	5	1.9	0.1	6.	1.6	3.4	-9900.0	93.8
2003	2	25	6	2.0	0.3	5.	0.9	2.5	-9900.0	92.6
2003	2	25	7	1.9	0.2	158.	1.3	2.8	-9900.0	92.8
2003	2	25	8	1.7	0.1	135.	1.0	2.2	-9900.0	93.8
2003	2	25	9	1.8	0.1	71.	0.4	1.6	-9900.0	94.1
2003	2	25	10	1.9	0.1	158.	1.1	2.5	-9900.0	94.6
2003	2	25	11	2.1	-0.1	155.	2.0	4.4	-9900.0	94.3
2003	2	25	12	3.3	-0.1	170.	1.0	2.5	-9900.0	93.9
2003	2	25	13	3.9	-0.1	35.	0.8	4.7	-9900.0	88.1
2003	2	25	14	3.0	-0.2	352.	2.8	5.3	-9900.0	90.2
2003	2	25	15	3.7	0.0	20.	0.8	2.2	-9900.0	86.9
2003	2	25	16	4.0	0.2	160.	0.7	1.6	-9900.0	86.3
2003	2	25	17	3.6	0.3	10144.	0.5	1.2	-9900.0	87.9
2003	2	25	18	2.9	0.3	160.	1.6	3.1	-9900.0	90.8
2003	2	25	19	2.5	0.5	157.	1.7	3.1	-9900.0	90.5
2003	2	25	20	2.3	0.5	169.	1.8	3.7	-9900.0	88.9
2003	2	25	21	1.7	0.4	150.	2.4	4.0	-9900.0	86.5
2003	2	25	22	1.3	0.3	351.	0.9	1.9	-9900.0	88.9
2003	2	25	23	0.8	0.5	161.	1.7	2.8	-9900.0	88.9
2003	2	25	24	0.5	0.4	159.	1.9	3.7	-9900.0	87.8
2003	2	26	1	0.6	0.4	163.	2.0	4.0	-9900.0	84.4
2003	2	26	2	0.4	0.3	154.	3.2	5.6	-9900.0	83.1
2003	2	26	3	0.6	0.5	162.	2.3	4.4	-9900.0	81.3
2003	2	26	4	0.2	0.4	162.	1.4	3.1	-9900.0	83.5
2003	2	26	5	0.3	0.4	161.	1.9	3.4	-9900.0	81.7
2003	2	26	6	0.1	0.4	158.	2.1	3.7	-9900.0	81.6
2003	2	26	7	0.1	0.4	10051.	1.4	4.0	-9900.0	82.2
2003	2	26	8	-0.3	0.3	163.	2.0	4.4	-9900.0	83.6
2003	2	26	9	-0.3	0.4	163.	1.4	3.4	-9900.0	83.2
2003	2	26	10	0.0	0.5	155.	1.9	4.4	-9900.0	81.1
2003	2	26	11	1.7	0.2	160.	1.4	3.1	-9900.0	72.7
2003	2	26	12	3.1	-0.4	149.	1.9	4.0	-9900.0	67.2
2003	2	26	13	4.5	-0.3	131.	0.9	2.2	-9900.0	60.6
2003	2	26	14	5.6	0.0	10171.	1.2	2.5	-9900.0	55.7
2003	2	26	15	5.1	0.0	316.	0.8	2.8	-9900.0	60.9
2003	2	26	16	5.3	0.4	201.	0.7	2.2	-9900.0	57.1
2003	2	26	17	4.9	0.4	147.	0.9	2.8	-9900.0	58.0
2003	2	26	18	4.3	0.6	163.	1.8	3.7	-9900.0	59.1
2003	2	26	19	3.5	0.8	164.	2.2	4.4	-9900.0	60.6
2003	2	26	20	3.1	1.1	161.	2.8	5.0	-9900.0	61.1
2003	2	26	21	2.1	0.7	156.	2.2	3.7	-9900.0	64.5
2003	2	26	22	1.4	0.6	173.	1.3	3.7	-9900.0	68.0
2003	2	26	23	0.9	0.5	159.	1.9	3.7	-9900.0	68.5
2003	2	26	24	1.0	0.7	161.	2.2	5.0	-9900.0	66.0
2003	2	27	1	0.4	0.7	154.	2.0	3.7	-9900.0	67.4
2003	2	27	2	0.3	0.6	160.	2.6	4.7	-9900.0	64.8
2003	2	27	3	0.0	0.7	161.	1.9	4.4	-9900.0	64.6
2003	2	27	4	-0.5	0.4	156.	3.1	4.7	-9900.0	66.2
2003	2	27	5	-0.9	0.4	151.	2.8	4.4	-9900.0	66.4
2003	2	27	6	-1.2	0.4	152.	2.9	4.7	-9900.0	66.5
2003	2	27	7	-1.3	0.3	157.	2.9	5.0	-9900.0	65.3
2003	2	27	8	-1.6	0.3	159.	2.7	5.6	-9900.0	65.9
2003	2	27	9	-1.8	0.3	154.	2.7	5.0	-9900.0	65.8
2003	2	27	10	-1.7	0.2	156.	2.6	4.4	-9900.0	63.6
2003	2	27	11	-0.5	-0.3	156.	1.8	3.4	-9900.0	58.7
2003	2	27	12	1.5	-0.7	143.	1.1	2.5	-9900.0	49.9
2003	2	27	13	1.8	-0.3	29.	0.8	2.2	-9900.0	46.6
2003	2	27	14	2.0	-0.7	358.	1.4	2.8	-9900.0	45.3
2003	2	27	15	2.1	-0.4	355.	1.3	3.1	-9900.0	47.2
2003	2	27	16	1.8	0.2	10174.	1.1	3.4	-9900.0	48.6
2003	2	27	17	1.4	0.2	172.	0.8	1.6	-9900.0	49.6
2003	2	27	18	0.7	0.5	163.	1.8	3.4	-9900.0	54.1
2003	2	27	19	0.2	0.5	163.	1.4	2.8	-9900.0	55.3
2003	2	27	20	-0.4	0.4	165.	2.1	3.7	-9900.0	56.8
2003	2	27	21	-1.1	0.3	150.	2.5	4.4	-9900.0	58.3
2003	2	27	22	-1.3	0.2	159.	2.8	5.0	-9900.0	56.5
2003	2	27	23	-1.7	0.2	153.	2.8	4.4	-9900.0	57.9
2003	2	27	24	-1.9	0.2	154.	2.2	3.7	-9900.0	57.0

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	2	28	1	-2.3	0.4	143.	1.2	2.8	-9900.0	61.3
2003	2	28	2	-2.6	0.3	162.	1.7	3.4	-9900.0	58.4
2003	2	28	3	-3.1	0.2	155.	2.5	4.4	-9900.0	59.5
2003	2	28	4	-3.2	0.3	152.	2.1	3.7	-9900.0	59.5
2003	2	28	5	-3.3	0.3	156.	1.6	3.7	-9900.0	59.0
2003	2	28	6	-3.5	0.3	151.	1.9	3.4	-9900.0	58.8
2003	2	28	7	-3.6	0.3	157.	1.2	3.1	-9900.0	59.9
2003	2	28	8	-3.7	0.2	175.	1.6	3.1	-9900.0	61.2
2003	2	28	9	-3.6	0.3	152.	2.0	4.0	-9900.0	57.6
2003	2	28	10	-3.4	0.3	158.	1.0	2.2	-9900.0	56.5
2003	2	28	11	-0.9	-0.2	154.	0.8	1.9	-9900.0	47.0
2003	2	28	12	0.1	-0.3	10094.	0.6	1.9	-9900.0	43.2
2003	2	28	13	0.3	-0.2	32.	0.7	1.6	-9900.0	40.2
2003	2	28	14	1.2	0.0	10047.	0.6	1.9	-9900.0	37.7
2003	2	28	15	1.7	-0.2	186.	0.7	1.9	-9900.0	38.6
2003	2	28	16	1.2	0.3	10040.	0.7	1.9	-9900.0	43.7
2003	2	28	17	0.8	0.3	171.	0.7	1.6	-9900.0	44.8
2003	2	28	18	0.4	0.5	160.	1.6	2.8	-9900.0	44.7
2003	2	28	19	0.0	0.7	157.	2.3	3.7	-9900.0	47.0
2003	2	28	20	-0.2	0.5	162.	2.2	4.4	-9900.0	47.7
2003	2	28	21	-0.4	0.4	160.	2.0	3.7	-9900.0	47.7
2003	2	28	22	-0.8	0.4	159.	1.9	3.4	-9900.0	48.8
2003	2	28	23	-0.7	0.4	157.	3.3	5.0	-9900.0	46.6
2003	2	28	24	-0.9	0.4	156.	2.6	4.7	-9900.0	46.2

MANGLER(ANT)	312	312	312	312	312	672	312
MANGLER(%)	46.4	46.4	46.4	46.4	46.4	100.0	46.4

PERIODE: 1/ 3 2003 - 31/ 3 2003

Par. 1: TT 2m, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 2: dT , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 3: DD , Stasjon 1442, Odda met , Skal.faktor: 10.000
Par. 4: FF , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 5: Gust , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 6: nedbo, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 7: Rel-f, Stasjon 1442, Odda met , Skal.faktor: 1.000

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	1	1	-1.3	0.4	10153.	1.1	2.5	-9900.0	51.0
2003	3	1	2	-2.0	0.4	153.	0.6	2.2	-9900.0	53.1
2003	3	1	3	-2.0	0.5	161.	1.5	2.8	-9900.0	50.9
2003	3	1	4	-2.4	0.5	153.	2.1	3.7	-9900.0	52.5
2003	3	1	5	-2.2	0.7	160.	2.1	3.7	-9900.0	50.4
2003	3	1	6	-2.2	0.6	157.	1.8	4.4	-9900.0	49.9
2003	3	1	7	-2.4	0.4	166.	1.6	4.0	-9900.0	53.0
2003	3	1	8	-2.3	0.6	166.	1.2	3.1	-9900.0	52.4
2003	3	1	9	-2.2	0.4	152.	1.7	3.4	-9900.0	53.7
2003	3	1	10	-1.6	0.3	177.	1.2	2.8	-9900.0	49.6
2003	3	1	11	0.3	-0.4	161.	1.2	2.8	-9900.0	43.5
2003	3	1	12	1.9	-0.5	10023.	0.7	2.5	-9900.0	40.5
2003	3	1	13	2.2	-0.1	165.	1.8	4.0	-9900.0	37.4
2003	3	1	14	3.0	0.1	159.	1.8	3.1	-9900.0	34.8
2003	3	1	15	4.3	0.2	164.	2.0	4.0	-9900.0	31.5
2003	3	1	16	5.5	0.3	10143.	1.3	3.4	-9900.0	31.4
2003	3	1	17	6.0	0.2	141.	2.4	6.5	-9900.0	30.8
2003	3	1	18	5.8	0.3	159.	2.3	5.6	-9900.0	35.3
2003	3	1	19	5.5	0.3	184.	4.3	12.7	-9900.0	41.1
2003	3	1	20	4.6	0.2	10183.	3.1	10.9	-9900.0	47.9
2003	3	1	21	4.3	0.3	10019.	1.4	3.1	-9900.0	51.2
2003	3	1	22	3.8	0.4	170.	1.6	5.3	-9900.0	52.7
2003	3	1	23	4.0	0.2	149.	4.4	8.4	-9900.0	49.3
2003	3	1	24	3.5	0.1	139.	5.3	9.0	-9900.0	50.3

2003	3	2	1	2.9	0.2	170.	2.5	7.8	-9900.0	52.2
2003	3	2	2	2.3	0.3	151.	1.7	3.7	-9900.0	53.6
2003	3	2	3	1.8	0.4	154.	3.1	5.9	-9900.0	53.2
2003	3	2	4	1.0	0.3	167.	2.5	5.0	-9900.0	55.9
2003	3	2	5	0.2	0.3	168.	2.3	4.0	-9900.0	59.5
2003	3	2	6	-0.3	0.3	157.	1.8	3.7	-9900.0	61.8
2003	3	2	7	-1.0	0.2	155.	2.4	4.0	-9900.0	64.9
2003	3	2	8	-1.4	0.2	153.	2.7	4.0	-9900.0	65.5
2003	3	2	9	-1.6	0.2	153.	2.4	4.0	-9900.0	66.9
2003	3	2	10	-1.6	0.1	156.	2.9	4.7	-9900.0	66.7
2003	3	2	11	0.0	-0.4	157.	2.5	3.7	-9900.0	59.1
2003	3	2	12	2.2	-0.6	158.	2.5	4.7	-9900.0	50.7
2003	3	2	13	3.7	-0.6	159.	2.7	5.0	-9900.0	45.7
2003	3	2	14	4.6	-0.4	153.	1.4	3.4	-9900.0	40.3
2003	3	2	15	4.8	-0.1	152.	1.2	2.5	-9900.0	40.0
2003	3	2	16	4.5	0.0	10001.	1.6	4.0	-9900.0	49.0
2003	3	2	17	3.7	0.2	357.	1.9	4.0	-9900.0	56.6
2003	3	2	18	3.3	0.2	10179.	0.9	2.2	-9900.0	58.2
2003	3	2	19	2.6	0.2	175.	1.3	2.8	-9900.0	58.7
2003	3	2	20	2.3	0.6	158.	1.8	2.8	-9900.0	56.9
2003	3	2	21	2.0	0.7	159.	2.0	3.1	-9900.0	59.6
2003	3	2	22	1.9	0.4	135.	1.5	3.1	-9900.0	61.4
2003	3	2	23	1.9	0.5	168.	2.1	3.7	-9900.0	61.4
2003	3	2	24	2.2	0.3	148.	2.5	4.0	-9900.0	60.8
2003	3	3	1	2.3	0.4	10206.	0.7	2.2	-9900.0	61.3
2003	3	3	2	2.3	0.3	356.	1.1	2.5	-9900.0	69.2
2003	3	3	3	2.2	0.3	10144.	0.6	2.2	-9900.0	70.0
2003	3	3	4	1.5	0.2	157.	2.0	3.4	-9900.0	70.7
2003	3	3	5	1.3	0.2	155.	2.5	4.0	-9900.0	70.7
2003	3	3	6	1.5	0.2	156.	1.7	3.4	-9900.0	69.4
2003	3	3	7	1.6	0.2	161.	1.6	3.1	-9900.0	68.5
2003	3	3	8	1.7	0.3	157.	1.3	2.2	-9900.0	67.3
2003	3	3	9	1.6	0.2	164.	1.5	3.4	-9900.0	68.5
2003	3	3	10	2.5	0.2	142.	0.8	2.5	-9900.0	65.4
2003	3	3	11	3.6	0.0	153.	0.8	1.9	-9900.0	60.3
2003	3	3	12	4.9	-0.2	150.	0.8	1.9	-9900.0	52.3
2003	3	3	13	4.8	-0.1	17.	0.6	1.6	-9900.0	52.7
2003	3	3	14	4.8	-0.2	8.	1.2	2.2	-9900.0	50.4
2003	3	3	15	5.5	-0.3	19.	0.7	1.6	-9900.0	47.9
2003	3	3	16	5.2	0.0	10034.	0.5	1.6	-9900.0	49.6
2003	3	3	17	5.0	0.1	10073.	0.9	2.2	-9900.0	51.2
2003	3	3	18	4.5	0.3	10.	3.5	5.3	-9900.0	59.6
2003	3	3	19	3.8	0.3	18.	2.5	4.4	-9900.0	71.7
2003	3	3	20	3.1	0.3	136.	1.4	3.1	-9900.0	66.3
2003	3	3	21	2.4	0.1	156.	1.8	2.8	-9900.0	65.0
2003	3	3	22	2.1	0.1	157.	2.1	3.7	-9900.0	65.2
2003	3	3	23	2.3	0.2	146.	1.6	3.1	-9900.0	64.8
2003	3	3	24	2.4	0.1	126.	1.1	2.8	-9900.0	66.9

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	4	1	2.2	0.1	151.	0.8	2.5	-9900.0	68.6
2003	3	4	2	2.2	0.2	6.	2.4	4.0	-9900.0	72.4
2003	3	4	3	2.0	0.2	359.	2.9	4.7	-9900.0	73.6
2003	3	4	4	1.9	0.2	8.	2.2	3.7	-9900.0	72.6
2003	3	4	5	1.3	0.1	149.	1.4	2.5	-9900.0	75.6
2003	3	4	6	1.3	0.2	143.	1.5	2.5	-9900.0	75.2
2003	3	4	7	1.2	0.2	156.	0.7	1.9	-9900.0	75.1
2003	3	4	8	1.0	0.1	173.	1.8	3.1	-9900.0	77.2
2003	3	4	9	1.8	0.1	175.	3.1	6.8	-9900.0	63.4
2003	3	4	10	2.5	-0.1	171.	4.5	6.8	-9900.0	54.6
2003	3	4	11	3.9	-0.6	155.	3.8	7.1	-9900.0	49.6
2003	3	4	12	4.6	-0.9	138.	4.0	8.4	-9900.0	46.6
2003	3	4	13	4.3	-0.6	144.	6.9	10.3	-9900.0	45.6
2003	3	4	14	4.2	-0.6	148.	7.7	10.6	-9900.0	43.9
2003	3	4	15	4.2	-0.3	152.	7.1	10.9	-9900.0	43.1
2003	3	4	16	4.1	-0.1	150.	6.4	9.6	-9900.0	42.8
2003	3	4	17	3.6	0.0	150.	5.8	8.7	-9900.0	44.6
2003	3	4	18	3.1	0.1	150.	6.5	10.9	-9900.0	43.4
2003	3	4	19	2.5	0.1	162.	4.0	8.7	-9900.0	46.4
2003	3	4	20	2.4	0.1	166.	5.1	8.1	-9900.0	44.8
2003	3	4	21	2.5	0.1	180.	4.2	6.8	-9900.0	44.1
2003	3	4	22	2.7	0.1	197.	2.9	5.0	-9900.0	44.2
2003	3	4	23	3.0	0.2	169.	2.6	6.8	-9900.0	45.7

2003	3	4	24	3.2	0.1	178.	5.0	10.9	-9900.0	45.3
2003	3	5	1	0.9	0.0	163.	4.6	11.2	-9900.0	69.7
2003	3	5	2	-0.4	0.0	186.	1.5	5.6	-9900.0	88.5
2003	3	5	3	-0.4	0.0	180.	1.7	4.7	-9900.0	91.7
2003	3	5	4	-0.4	0.0	166.	2.0	5.3	-9900.0	93.0
2003	3	5	5	-0.4	0.0	178.	1.9	4.4	-9900.0	93.8
2003	3	5	6	0.1	0.1	275.	1.1	3.1	-9900.0	93.9
2003	3	5	7	0.1	0.1	20083.	0.2	1.6	-9900.0	92.7
2003	3	5	8	0.0	0.1	-9900.	0.0	0.0	-9900.0	92.8
2003	3	5	9	0.4	0.2	-9900.	0.0	0.3	-9900.0	92.2
2003	3	5	10	1.1	0.4	163.	1.0	2.5	-9900.0	85.4
2003	3	5	11	1.9	0.5	10167.	0.9	2.5	-9900.0	75.4
2003	3	5	12	2.7	0.3	348.	1.2	2.8	-9900.0	71.7
2003	3	5	13	3.2	0.3	10018.	2.5	9.6	-9900.0	70.3
2003	3	5	14	5.2	0.3	182.	5.0	12.7	-9900.0	59.0
2003	3	5	15	5.1	0.4	193.	8.0	14.9	-9900.0	65.3
2003	3	5	16	4.3	0.4	159.	4.0	9.6	-9900.0	71.3
2003	3	5	17	3.7	0.3	182.	2.7	7.5	-9900.0	76.1
2003	3	5	18	3.7	0.4	10203.	3.4	6.2	-9900.0	76.8
2003	3	5	19	3.2	0.2	10190.	1.5	5.0	-9900.0	83.3
2003	3	5	20	3.2	0.3	182.	2.0	5.3	-9900.0	82.7
2003	3	5	21	2.9	0.2	303.	1.0	2.8	-9900.0	83.7
2003	3	5	22	2.4	0.1	176.	1.1	2.5	-9900.0	86.8
2003	3	5	23	1.7	0.1	20137.	0.4	1.6	-9900.0	90.2
2003	3	5	24	0.4	0.0	9.	0.9	1.9	-9900.0	91.8
2003	3	6	1	-0.3	0.1	7.	0.5	1.6	-9900.0	93.1
2003	3	6	2	-0.3	0.1	-9900.	0.0	0.0	-9900.0	93.9
2003	3	6	3	-0.3	0.1	-9900.	0.0	0.0	-9900.0	94.3
2003	3	6	4	-0.3	0.1	-9900.	0.0	0.0	-9900.0	94.7
2003	3	6	5	-0.1	0.1	-9900.	0.0	0.0	-9900.0	94.8
2003	3	6	6	-0.1	0.1	-9900.	0.0	0.0	-9900.0	94.9
2003	3	6	7	-0.1	0.1	-9900.	0.0	0.0	-9900.0	95.0
2003	3	6	8	-0.2	0.1	-9900.	0.0	0.0	-9900.0	95.4
2003	3	6	9	-0.2	0.1	-9900.	0.0	0.0	-9900.0	95.6
2003	3	6	10	-0.1	0.1	-9900.	0.0	0.0	-9900.0	95.6
2003	3	6	11	0.0	0.1	-9900.	0.0	0.0	-9900.0	95.6
2003	3	6	12	0.1	0.0	-9900.	0.0	0.0	-9900.0	95.6
2003	3	6	13	0.3	0.0	170.	0.5	1.2	-9900.0	95.6
2003	3	6	14	0.4	0.0	157.	0.7	1.2	-9900.0	95.6
2003	3	6	15	0.5	-0.1	147.	0.6	1.2	-9900.0	95.6
2003	3	6	16	0.6	0.0	163.	0.8	1.6	-9900.0	95.6
2003	3	6	17	0.8	0.1	157.	1.1	1.9	-9900.0	94.9
2003	3	6	18	1.3	0.2	146.	0.8	2.5	-9900.0	94.2
2003	3	6	19	1.6	0.2	10164.	1.0	3.4	-9900.0	92.0
2003	3	6	20	1.9	0.2	171.	1.4	5.6	-9900.0	88.9
2003	3	6	21	2.4	0.3	178.	2.3	6.8	-9900.0	84.8
2003	3	6	22	3.1	0.4	164.	4.3	8.7	-9900.0	78.9
2003	3	6	23	2.6	0.4	134.	2.3	5.6	-9900.0	82.7
2003	3	6	24	3.6	0.4	154.	4.6	8.4	-9900.0	77.4

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	7	1	4.3	0.4	177.	6.8	12.1	-9900.0	74.2
2003	3	7	2	4.8	0.4	189.	9.2	13.7	-9900.0	72.1
2003	3	7	3	4.3	0.4	187.	8.7	14.6	-9900.0	78.7
2003	3	7	4	5.4	0.5	189.	9.7	16.5	-9900.0	69.8
2003	3	7	5	5.2	0.4	182.	7.6	13.7	-9900.0	70.8
2003	3	7	6	4.3	0.3	163.	6.4	12.7	-9900.0	79.7
2003	3	7	7	4.5	0.3	178.	4.9	10.6	-9900.0	79.6
2003	3	7	8	3.8	0.2	163.	6.1	10.6	-9900.0	84.8
2003	3	7	9	4.7	0.3	159.	8.0	12.4	-9900.0	79.6
2003	3	7	10	5.0	0.3	159.	9.1	13.1	-9900.0	79.5
2003	3	7	11	5.3	0.2	163.	8.5	12.7	-9900.0	80.5
2003	3	7	12	6.3	0.2	169.	6.5	10.9	-9900.0	75.6
2003	3	7	13	7.2	0.3	174.	6.3	10.9	-9900.0	67.8
2003	3	7	14	6.7	0.3	168.	5.6	10.9	-9900.0	72.4
2003	3	7	15	4.8	0.0	10357.	4.1	7.8	-9900.0	80.9
2003	3	7	16	3.5	0.0	353.	3.0	6.8	-9900.0	89.4
2003	3	7	17	5.0	0.2	10333.	1.9	6.5	-9900.0	83.7
2003	3	7	18	6.4	0.2	155.	3.1	8.7	-9900.0	71.3
2003	3	7	19	6.6	0.3	171.	4.2	7.5	-9900.0	64.7
2003	3	7	20	6.3	0.3	165.	4.5	8.1	-9900.0	64.0
2003	3	7	21	6.2	0.3	171.	4.0	8.4	-9900.0	61.1
2003	3	7	22	4.6	0.4	352.	2.5	5.0	-9900.0	79.0
2003	3	7	23	5.7	0.5	10163.	1.6	4.0	-9900.0	64.8
2003	3	7	24	6.6	0.5	175.	4.7	9.6	-9900.0	57.0
2003	3	8	1	7.2	0.4	194.	5.7	10.9	-9900.0	51.4
2003	3	8	2	6.2	0.5	169.	3.6	6.2	-9900.0	56.9
2003	3	8	3	5.7	0.5	169.	1.4	4.7	-9900.0	59.9
2003	3	8	4	3.8	0.3	10003.	1.6	3.1	-9900.0	78.3
2003	3	8	5	5.2	0.8	156.	1.5	3.7	-9900.0	62.8
2003	3	8	6	6.1	0.6	165.	2.5	5.3	-9900.0	58.3
2003	3	8	7	5.8	0.7	10306.	1.7	3.1	-9900.0	60.6
2003	3	8	8	6.2	0.6	10180.	1.3	3.1	-9900.0	54.3
2003	3	8	9	6.4	0.4	159.	2.2	4.7	-9900.0	52.8
2003	3	8	10	6.3	0.2	152.	2.7	7.1	-9900.0	56.5
2003	3	8	11	6.1	0.1	154.	2.5	7.5	-9900.0	59.4
2003	3	8	12	6.1	-0.1	173.	2.3	5.6	-9900.0	61.0
2003	3	8	13	5.9	0.0	141.	5.0	9.6	-9900.0	60.8
2003	3	8	14	5.3	0.1	173.	4.0	7.8	-9900.0	65.6
2003	3	8	15	4.6	0.0	156.	3.4	7.1	-9900.0	73.2
2003	3	8	16	4.8	0.0	182.	1.2	4.0	-9900.0	71.8
2003	3	8	17	4.7	0.0	174.	1.2	2.2	-9900.0	73.6
2003	3	8	18	5.2	0.3	164.	2.0	5.0	-9900.0	65.7
2003	3	8	19	5.1	0.3	175.	1.8	3.4	-9900.0	61.4
2003	3	8	20	4.3	0.3	0.	1.9	3.4	-9900.0	73.7
2003	3	8	21	3.7	0.3	5.	1.2	3.1	-9900.0	78.8
2003	3	8	22	3.4	0.3	164.	1.3	2.8	-9900.0	77.0
2003	3	8	23	3.4	0.4	161.	1.5	3.4	-9900.0	74.5
2003	3	8	24	3.6	0.4	155.	2.8	6.2	-9900.0	70.9
2003	3	9	1	4.4	0.4	163.	6.0	9.0	-9900.0	65.4
2003	3	9	2	5.6	0.3	170.	6.6	11.2	-9900.0	61.7
2003	3	9	3	5.7	0.3	176.	6.4	10.9	-9900.0	62.0
2003	3	9	4	5.0	0.1	159.	5.7	9.9	-9900.0	67.0
2003	3	9	5	4.7	0.1	158.	5.4	9.3	-9900.0	70.5
2003	3	9	6	4.5	0.1	10146.	3.5	8.7	-9900.0	74.7
2003	3	9	7	3.5	0.2	356.	3.6	6.8	-9900.0	81.7
2003	3	9	8	3.5	0.2	3.	2.6	6.8	-9900.0	82.4
2003	3	9	9	3.6	0.1	348.	1.0	3.4	-9900.0	81.1
2003	3	9	10	3.5	-0.1	355.	2.1	4.4	-9900.0	82.9
2003	3	9	11	3.9	0.0	4.	2.2	5.0	-9900.0	81.1
2003	3	9	12	3.8	-0.3	355.	4.0	6.5	-9900.0	81.9
2003	3	9	13	3.9	-0.3	354.	3.4	6.2	-9900.0	81.3
2003	3	9	14	4.9	-0.1	10008.	1.5	4.4	-9900.0	77.9
2003	3	9	15	5.7	0.0	162.	3.4	7.8	-9900.0	76.6
2003	3	9	16	5.4	0.0	175.	4.2	6.5	-9900.0	82.2
2003	3	9	17	5.7	0.1	183.	3.3	7.8	-9900.0	82.5
2003	3	9	18	6.3	0.2	152.	5.3	11.2	-9900.0	79.5
2003	3	9	19	6.1	0.2	163.	7.7	12.4	-9900.0	81.9
2003	3	9	20	7.0	0.3	177.	9.1	16.5	-9900.0	78.2
2003	3	9	21	7.4	0.3	183.	10.7	15.9	-9900.0	74.0
2003	3	9	22	7.7	0.3	181.	9.8	15.2	-9900.0	73.0
2003	3	9	23	8.0	0.3	186.	9.7	16.5	-9900.0	73.1
2003	3	9	24	8.2	0.3	195.	10.5	14.9	-9900.0	70.9

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	3	10	1	7.8	0.3	190.	10.6	16.5	-9900.0	73.2
2003	3	10	2	7.2	0.2	183.	9.3	14.3	-9900.0	77.0
2003	3	10	3	7.6	0.3	185.	9.8	16.8	-9900.0	73.9
2003	3	10	4	7.9	0.2	166.	8.1	12.4	-9900.0	74.9
2003	3	10	5	8.1	0.3	167.	8.6	14.6	-9900.0	71.1
2003	3	10	6	8.1	0.4	176.	7.6	14.6	-9900.0	69.8
2003	3	10	7	8.4	0.4	167.	7.3	14.6	-9900.0	63.2
2003	3	10	8	7.7	0.3	157.	7.5	13.7	-9900.0	67.2
2003	3	10	9	7.4	0.3	152.	8.1	15.2	-9900.0	68.7
2003	3	10	10	6.8	0.2	181.	6.7	11.5	-9900.0	74.1
2003	3	10	11	7.0	0.2	182.	6.6	11.5	-9900.0	74.3
2003	3	10	12	7.5	0.2	190.	9.3	15.2	-9900.0	69.3
2003	3	10	13	7.4	0.1	189.	8.3	12.7	-9900.0	72.5
2003	3	10	14	7.2	0.1	188.	9.0	14.6	-9900.0	73.5
2003	3	10	15	7.0	0.2	189.	8.3	13.4	-9900.0	73.4
2003	3	10	16	7.1	0.2	180.	7.5	12.1	-9900.0	73.3
2003	3	10	17	7.4	0.2	179.	6.5	13.4	-9900.0	70.3
2003	3	10	18	6.7	0.2	174.	8.0	13.7	-9900.0	75.6
2003	3	10	19	6.1	0.2	177.	6.2	10.3	-9900.0	80.1
2003	3	10	20	6.2	0.2	178.	6.7	13.1	-9900.0	78.8
2003	3	10	21	5.6	0.2	163.	5.6	9.9	-9900.0	81.6
2003	3	10	22	6.3	0.3	171.	6.0	10.6	-9900.0	76.0
2003	3	10	23	6.4	0.3	172.	6.1	11.8	-9900.0	74.5
2003	3	10	24	5.6	0.2	167.	7.7	12.7	-9900.0	78.3
2003	3	11	1	5.0	0.2	163.	7.9	13.1	-9900.0	82.5
2003	3	11	2	6.2	0.2	171.	7.8	11.8	-9900.0	74.4
2003	3	11	3	6.0	0.3	172.	6.1	11.2	-9900.0	76.7
2003	3	11	4	7.0	0.3	187.	8.6	12.7	-9900.0	68.5
2003	3	11	5	5.6	0.2	170.	6.6	9.9	-9900.0	78.6
2003	3	11	6	5.7	0.3	168.	4.6	8.4	-9900.0	76.8
2003	3	11	7	5.7	0.3	160.	3.8	8.7	-9900.0	75.8
2003	3	11	8	5.7	0.3	10157.	2.4	5.6	-9900.0	75.7
2003	3	11	9	5.7	0.1	159.	2.9	7.1	-9900.0	76.1
2003	3	11	10	5.1	0.0	154.	6.1	10.6	-9900.0	79.2
2003	3	11	11	5.5	-0.1	179.	2.9	5.9	-9900.0	78.5
2003	3	11	12	6.6	-0.2	148.	4.9	8.4	-9900.0	71.5
2003	3	11	13	6.6	-0.2	10005.	2.7	7.1	-9900.0	73.6
2003	3	11	14	5.1	-0.1	5.	7.0	10.3	-9900.0	84.4
2003	3	11	15	5.0	-0.1	10.	5.3	8.1	-9900.0	85.5
2003	3	11	16	4.8	-0.1	10.	5.7	7.8	-9900.0	86.3
2003	3	11	17	4.7	0.0	7.	4.1	6.2	-9900.0	87.6
2003	3	11	18	4.6	-0.1	8.	3.7	5.6	-9900.0	90.2
2003	3	11	19	4.6	0.1	4.	3.4	5.0	-9900.0	90.0
2003	3	11	20	4.6	0.1	357.	3.7	6.5	-9900.0	89.1
2003	3	11	21	4.4	0.2	12.	2.1	4.4	-9900.0	90.2
2003	3	11	22	4.2	0.1	31.	0.6	2.5	-9900.0	90.4
2003	3	11	23	4.0	0.1	171.	1.0	2.2	-9900.0	91.5
2003	3	11	24	3.6	0.1	156.	1.2	2.8	-9900.0	92.1
2003	3	12	1	3.7	0.2	157.	1.2	2.8	-9900.0	91.6
2003	3	12	2	3.7	0.2	154.	0.9	1.9	-9900.0	90.5
2003	3	12	3	3.5	0.1	0.	3.2	8.4	-9900.0	92.0
2003	3	12	4	4.0	0.2	354.	5.8	10.3	-9900.0	91.7
2003	3	12	5	4.4	0.4	348.	5.5	9.6	-9900.0	86.9
2003	3	12	6	5.2	0.4	320.	4.7	7.8	-9900.0	62.9
2003	3	12	7	4.6	0.6	344.	3.9	7.8	-9900.0	64.9
2003	3	12	8	4.7	0.4	325.	4.9	9.9	-9900.0	56.3
2003	3	12	9	4.5	0.2	323.	5.5	9.6	-9900.0	53.6
2003	3	12	10	4.6	0.1	335.	5.4	9.3	-9900.0	50.7
2003	3	12	11	5.0	-0.2	344.	5.9	10.3	-9900.0	46.8
2003	3	12	12	5.2	-0.3	349.	6.3	10.6	-9900.0	44.8
2003	3	12	13	5.3	-0.4	350.	6.0	9.0	-9900.0	43.8
2003	3	12	14	5.6	-0.3	343.	5.5	8.7	-9900.0	42.4
2003	3	12	15	5.6	-0.4	347.	5.1	8.7	-9900.0	41.6
2003	3	12	16	5.3	0.1	340.	4.8	9.3	-9900.0	43.3
2003	3	12	17	5.0	0.0	299.	5.9	11.2	-9900.0	41.0
2003	3	12	18	4.7	0.1	295.	5.5	11.2	-9900.0	41.7
2003	3	12	19	4.6	0.1	290.	3.9	7.1	-9900.0	44.1
2003	3	12	20	4.4	0.2	290.	3.4	5.9	-9900.0	45.2
2003	3	12	21	4.0	0.2	325.	3.6	6.8	-9900.0	47.7
2003	3	12	22	4.0	0.3	326.	3.1	5.3	-9900.0	50.1
2003	3	12	23	3.2	0.5	357.	2.3	4.4	-9900.0	57.7
2003	3	12	24	3.7	0.3	328.	2.6	5.3	-9900.0	54.2

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	3	13	1	3.1	0.2	4.	1.9	4.0	-9900.0	60.3
2003	3	13	2	2.4	0.3	10313.	1.5	4.0	-9900.0	65.3
2003	3	13	3	1.6	0.3	165.	1.4	4.0	-9900.0	67.6
2003	3	13	4	1.2	0.3	10156.	1.5	3.4	-9900.0	71.3
2003	3	13	5	1.0	0.3	153.	1.3	3.1	-9900.0	71.4
2003	3	13	6	0.6	0.3	150.	2.1	3.7	-9900.0	73.6
2003	3	13	7	0.4	0.3	148.	1.2	2.5	-9900.0	74.0
2003	3	13	8	0.0	0.4	157.	2.2	4.0	-9900.0	75.3
2003	3	13	9	0.0	0.3	157.	0.9	3.1	-9900.0	76.2
2003	3	13	10	0.4	-0.1	154.	1.9	3.1	-9900.0	74.2
2003	3	13	11	3.5	-0.3	163.	0.7	1.9	-9900.0	59.7
2003	3	13	12	3.3	-0.5	4.	1.2	2.8	-9900.0	59.4
2003	3	13	13	3.9	-0.5	13.	1.2	2.5	-9900.0	55.7
2003	3	13	14	5.2	-0.5	17.	0.9	2.5	-9900.0	50.0
2003	3	13	15	6.2	-0.6	10182.	1.4	3.1	-9900.0	50.2
2003	3	13	16	5.9	0.0	192.	0.6	1.9	-9900.0	53.8
2003	3	13	17	5.9	0.0	178.	0.7	1.6	-9900.0	54.5
2003	3	13	18	5.2	0.2	167.	1.8	3.1	-9900.0	59.6
2003	3	13	19	4.4	0.4	10123.	1.3	2.8	-9900.0	64.3
2003	3	13	20	3.6	0.4	145.	1.1	1.9	-9900.0	67.7
2003	3	13	21	2.6	0.6	159.	2.1	4.4	-9900.0	71.3
2003	3	13	22	2.2	0.3	155.	2.8	5.0	-9900.0	72.1
2003	3	13	23	2.2	0.3	160.	3.0	6.2	-9900.0	69.2
2003	3	13	24	2.3	0.5	157.	2.9	5.3	-9900.0	65.6
2003	3	14	1	2.2	0.4	153.	2.0	3.7	-9900.0	63.3
2003	3	14	2	1.5	0.3	10176.	0.8	2.8	-9900.0	68.9
2003	3	14	3	1.2	0.4	10149.	1.0	2.8	-9900.0	68.7
2003	3	14	4	0.8	0.3	163.	0.4	1.9	-9900.0	71.1
2003	3	14	5	0.3	0.4	161.	1.6	3.7	-9900.0	72.6
2003	3	14	6	0.4	0.5	146.	2.0	3.7	-9900.0	70.0
2003	3	14	7	0.4	0.4	10223.	0.6	1.9	-9900.0	72.2
2003	3	14	8	0.3	0.4	180.	1.3	3.1	-9900.0	70.9
2003	3	14	9	0.7	0.4	170.	1.5	4.0	-9900.0	66.2
2003	3	14	10	1.1	0.2	10358.	1.0	3.4	-9900.0	66.6
2003	3	14	11	2.7	-0.3	10154.	1.4	2.8	-9900.0	63.4
2003	3	14	12	5.4	-0.1	10090.	0.8	2.5	-9900.0	50.3
2003	3	14	13	5.8	-0.2	10030.	0.6	1.9	-9900.0	46.1
2003	3	14	14	5.7	-0.4	359.	1.2	3.7	-9900.0	46.2
2003	3	14	15	7.3	-0.2	10321.	0.6	2.5	-9900.0	42.6
2003	3	14	16	6.9	0.0	204.	0.3	1.6	-9900.0	45.1
2003	3	14	17	6.3	0.4	170.	1.2	1.9	-9900.0	48.6
2003	3	14	18	4.9	0.3	357.	3.0	6.5	-9900.0	58.0
2003	3	14	19	4.6	0.3	153.	2.1	4.7	-9900.0	58.1
2003	3	14	20	4.8	0.4	159.	1.8	4.7	-9900.0	57.7
2003	3	14	21	4.1	0.5	10000.	1.5	3.7	-9900.0	65.0
2003	3	14	22	3.6	0.4	166.	0.8	1.9	-9900.0	66.7
2003	3	14	23	3.3	0.6	161.	2.4	4.4	-9900.0	66.4
2003	3	14	24	3.2	0.4	159.	2.9	5.0	-9900.0	65.9
2003	3	15	1	3.5	0.3	155.	2.9	5.3	-9900.0	63.7
2003	3	15	2	3.6	0.4	200.	0.8	2.5	-9900.0	64.2
2003	3	15	3	3.0	0.4	195.	0.9	2.2	-9900.0	67.1
2003	3	15	4	2.6	0.3	171.	0.6	1.6	-9900.0	68.0
2003	3	15	5	2.4	0.3	165.	1.5	3.1	-9900.0	67.1
2003	3	15	6	1.9	0.4	10356.	1.1	2.8	-9900.0	73.3
2003	3	15	7	2.1	0.7	162.	2.0	3.7	-9900.0	69.1
2003	3	15	8	2.1	0.5	159.	2.5	4.4	-9900.0	67.2
2003	3	15	9	2.5	0.4	166.	0.9	2.2	-9900.0	65.0
2003	3	15	10	3.4	0.3	139.	0.7	1.9	-9900.0	62.4
2003	3	15	11	5.0	-0.1	100.	0.6	1.6	-9900.0	55.5
2003	3	15	12	6.8	-0.3	35.	0.4	1.9	-9900.0	50.8
2003	3	15	13	6.7	0.3	6.	0.8	1.9	-9900.0	45.1
2003	3	15	14	7.4	0.1	5.	0.6	1.6	-9900.0	41.3
2003	3	15	15	8.9	-0.2	20015.	0.3	1.9	-9900.0	36.6
2003	3	15	16	8.1	-0.1	357.	0.7	3.7	-9900.0	42.0
2003	3	15	17	6.0	0.2	0.	3.7	6.2	-9900.0	54.1
2003	3	15	18	5.8	0.2	10357.	1.2	3.7	-9900.0	55.9
2003	3	15	19	5.7	0.2	159.	1.0	2.2	-9900.0	55.9
2003	3	15	20	5.1	0.5	166.	1.9	3.4	-9900.0	57.7
2003	3	15	21	5.0	0.6	10183.	0.8	2.8	-9900.0	61.0
2003	3	15	22	4.9	0.5	178.	0.8	1.9	-9900.0	59.1
2003	3	15	23	3.9	0.6	10003.	0.7	1.6	-9900.0	66.1
2003	3	15	24	3.6	0.7	167.	1.2	1.9	-9900.0	66.4

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	16	1	3.6	0.6	144.	1.7	3.1	-9900.0	62.2
2003	3	16	2	3.6	0.4	149.	0.7	2.5	-9900.0	60.9
2003	3	16	3	3.4	0.4	97.	0.4	0.9	-9900.0	61.4
2003	3	16	4	1.6	0.6	1.	2.0	3.7	-9900.0	78.3
2003	3	16	5	1.2	0.5	10185.	0.8	1.9	-9900.0	81.7
2003	3	16	6	0.9	0.3	2.	0.7	1.9	-9900.0	84.4
2003	3	16	7	0.6	0.5	10123.	0.6	2.2	-9900.0	85.0
2003	3	16	8	0.7	0.3	10132.	0.4	1.6	-9900.0	84.6
2003	3	16	9	0.6	0.3	10352.	0.8	2.2	-9900.0	84.5
2003	3	16	10	1.4	0.0	155.	1.7	3.1	-9900.0	80.7
2003	3	16	11	3.1	-0.2	10153.	1.1	4.7	-9900.0	68.9
2003	3	16	12	2.2	-0.3	360.	3.6	7.5	-9900.0	77.5
2003	3	16	13	3.0	-0.2	359.	1.9	5.0	-9900.0	70.8
2003	3	16	14	3.7	-0.6	355.	2.8	6.2	-9900.0	67.9
2003	3	16	15	4.8	-0.5	353.	3.5	7.5	-9900.0	63.1
2003	3	16	16	6.1	-0.2	344.	4.4	7.5	-9900.0	58.8
2003	3	16	17	6.7	-0.1	10349.	2.7	9.9	-9900.0	54.8
2003	3	16	18	6.0	0.1	162.	2.5	5.0	-9900.0	57.9
2003	3	16	19	5.8	0.2	10010.	3.9	8.1	-9900.0	64.7
2003	3	16	20	5.4	0.3	345.	2.2	4.4	-9900.0	71.1
2003	3	16	21	5.1	0.2	10355.	1.2	3.7	-9900.0	71.0
2003	3	16	22	4.7	0.3	10153.	1.5	3.4	-9900.0	71.4
2003	3	16	23	4.1	0.3	10173.	2.2	5.0	-9900.0	75.1
2003	3	16	24	3.6	0.4	10066.	0.9	3.1	-9900.0	76.6
2003	3	17	1	2.9	0.3	154.	1.3	3.1	-9900.0	78.7
2003	3	17	2	2.5	0.4	168.	1.1	2.5	-9900.0	80.0
2003	3	17	3	2.3	0.6	160.	1.3	2.8	-9900.0	81.0
2003	3	17	4	1.5	0.4	171.	1.0	3.7	-9900.0	83.0
2003	3	17	5	1.1	0.4	156.	2.0	4.4	-9900.0	83.9
2003	3	17	6	1.1	0.4	163.	1.7	3.1	-9900.0	82.3
2003	3	17	7	0.7	0.3	161.	1.1	2.8	-9900.0	83.0
2003	3	17	8	0.6	0.2	178.	0.8	1.9	-9900.0	83.5
2003	3	17	9	0.8	0.1	169.	1.8	3.4	-9900.0	80.5
2003	3	17	10	1.7	-0.1	154.	2.2	4.0	-9900.0	73.6
2003	3	17	11	3.9	-0.5	159.	1.4	3.1	-9900.0	65.3
2003	3	17	12	3.5	-0.6	359.	2.7	5.6	-9900.0	69.9
2003	3	17	13	4.7	-0.6	345.	2.5	5.3	-9900.0	66.6
2003	3	17	14	5.7	-0.8	343.	2.2	5.0	-9900.0	63.9
2003	3	17	15	5.9	-0.4	358.	2.9	7.5	-9900.0	64.9
2003	3	17	16	6.3	-0.2	10023.	1.1	3.7	-9900.0	62.6
2003	3	17	17	6.5	0.2	162.	1.1	1.9	-9900.0	60.9
2003	3	17	18	6.0	0.3	162.	0.6	1.6	-9900.0	63.8
2003	3	17	19	5.3	0.3	167.	0.5	1.6	-9900.0	67.8
2003	3	17	20	4.5	0.5	161.	1.7	2.8	-9900.0	69.7
2003	3	17	21	4.1	0.5	157.	2.3	4.0	-9900.0	70.1
2003	3	17	22	3.6	0.3	161.	2.4	4.7	-9900.0	70.6
2003	3	17	23	3.1	0.3	157.	2.2	3.7	-9900.0	71.5
2003	3	17	24	2.8	0.3	147.	1.4	3.7	-9900.0	72.7
2003	3	18	1	2.6	0.4	161.	1.7	3.1	-9900.0	72.6
2003	3	18	2	1.9	0.2	84.	0.6	1.9	-9900.0	75.6
2003	3	18	3	1.6	0.3	178.	0.9	2.5	-9900.0	77.4
2003	3	18	4	1.7	0.5	157.	1.7	2.8	-9900.0	74.4
2003	3	18	5	1.2	0.4	156.	2.5	5.0	-9900.0	76.7
2003	3	18	6	1.1	0.3	156.	2.3	5.6	-9900.0	76.0
2003	3	18	7	1.2	0.4	352.	1.7	4.0	-9900.0	80.5
2003	3	18	8	0.8	0.3	164.	2.0	3.7	-9900.0	82.0
2003	3	18	9	0.8	0.2	155.	1.5	3.7	-9900.0	78.3
2003	3	18	10	2.4	0.1	152.	0.7	1.9	-9900.0	71.5
2003	3	18	11	3.3	-0.2	36.	0.8	1.9	-9900.0	66.3
2003	3	18	12	4.4	-0.3	10021.	0.9	2.8	-9900.0	64.8
2003	3	18	13	4.1	-0.6	2.	1.4	3.1	-9900.0	65.2
2003	3	18	14	5.3	-0.1	14.	0.7	1.9	-9900.0	58.8
2003	3	18	15	6.4	-0.3	12.	0.8	2.8	-9900.0	54.7
2003	3	18	16	5.9	-0.3	6.	1.2	2.8	-9900.0	59.0
2003	3	18	17	5.4	0.1	10005.	0.9	2.5	-9900.0	61.2
2003	3	18	18	5.2	0.2	161.	0.8	1.2	-9900.0	62.7
2003	3	18	19	4.7	0.3	159.	1.4	2.5	-9900.0	66.2
2003	3	18	20	3.7	0.4	156.	0.7	3.1	-9900.0	71.5
2003	3	18	21	2.9	0.4	158.	1.9	3.7	-9900.0	73.4
2003	3	18	22	2.8	0.4	166.	2.0	3.4	-9900.0	71.2
2003	3	18	23	2.2	0.2	156.	3.0	5.3	-9900.0	72.6
2003	3	18	24	2.1	0.3	161.	1.9	4.0	-9900.0	72.5

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	19	1	1.5	0.2	152.	1.0	2.5	-9900.0	75.2
2003	3	19	2	1.1	0.3	156.	1.2	1.9	-9900.0	76.9
2003	3	19	3	0.7	0.3	159.	2.6	3.7	-9900.0	75.6
2003	3	19	4	0.6	0.3	161.	2.2	3.7	-9900.0	75.6
2003	3	19	5	0.4	0.3	158.	1.5	3.1	-9900.0	76.9
2003	3	19	6	0.2	0.3	170.	1.3	2.8	-9900.0	77.7
2003	3	19	7	-0.1	0.2	158.	0.8	2.5	-9900.0	77.4
2003	3	19	8	-0.4	0.3	154.	1.3	2.2	-9900.0	79.2
2003	3	19	9	-0.5	0.2	163.	2.1	3.4	-9900.0	78.2
2003	3	19	10	1.2	-0.1	148.	1.0	2.2	-9900.0	70.1
2003	3	19	11	2.1	-0.3	21.	1.2	3.1	-9900.0	65.4
2003	3	19	12	2.3	-1.0	355.	3.2	5.6	-9900.0	72.4
2003	3	19	13	2.7	-0.9	356.	4.4	7.5	-9900.0	71.8
2003	3	19	14	3.0	-0.4	2.	6.7	8.7	-9900.0	70.9
2003	3	19	15	3.4	-0.2	3.	7.7	11.8	-9900.0	69.4
2003	3	19	16	4.0	-0.1	3.	7.5	10.6	-9900.0	68.0
2003	3	19	17	4.4	0.0	355.	5.5	8.4	-9900.0	60.1
2003	3	19	18	4.5	0.1	352.	4.2	6.8	-9900.0	58.7
2003	3	19	19	4.3	0.3	329.	2.8	4.7	-9900.0	58.7
2003	3	19	20	3.7	0.3	10000.	1.2	2.8	-9900.0	60.1
2003	3	19	21	2.6	0.3	142.	0.9	2.5	-9900.0	65.0
2003	3	19	22	1.7	0.3	154.	1.6	3.1	-9900.0	70.2
2003	3	19	23	1.1	0.3	153.	1.8	3.1	-9900.0	72.5
2003	3	19	24	0.7	0.3	153.	1.5	2.8	-9900.0	75.0
2003	3	20	1	0.4	0.2	161.	2.9	5.9	-9900.0	75.1
2003	3	20	2	0.5	0.3	159.	2.1	4.0	-9900.0	74.0
2003	3	20	3	0.5	0.2	161.	2.4	4.0	-9900.0	72.4
2003	3	20	4	0.4	0.2	155.	1.6	4.0	-9900.0	72.6
2003	3	20	5	0.0	0.3	143.	0.8	1.9	-9900.0	75.6
2003	3	20	6	-0.2	0.3	161.	1.4	2.5	-9900.0	74.9
2003	3	20	7	-0.3	0.4	161.	1.9	3.1	-9900.0	74.4
2003	3	20	8	-0.1	0.3	139.	0.7	2.5	-9900.0	73.3
2003	3	20	9	0.0	0.2	159.	1.0	2.2	-9900.0	73.9
2003	3	20	10	1.5	-0.2	143.	1.5	3.1	-9900.0	66.1
2003	3	20	11	2.1	-0.7	356.	2.5	5.0	-9900.0	67.5
2003	3	20	12	3.1	-0.7	357.	1.9	4.7	-9900.0	65.0
2003	3	20	13	5.2	-0.7	2.	0.8	2.8	-9900.0	52.8
2003	3	20	14	5.8	-0.8	5.	1.0	2.2	-9900.0	46.5
2003	3	20	15	5.5	-0.7	354.	2.4	4.4	-9900.0	49.8
2003	3	20	16	5.7	-0.4	348.	2.7	5.0	-9900.0	48.4
2003	3	20	17	5.7	0.0	10345.	1.7	3.7	-9900.0	48.5
2003	3	20	18	5.1	0.1	177.	0.7	1.9	-9900.0	52.1
2003	3	20	19	4.5	0.4	165.	1.5	2.5	-9900.0	55.5
2003	3	20	20	4.0	0.5	179.	2.1	4.7	-9900.0	55.7
2003	3	20	21	3.5	0.3	170.	2.7	5.6	-9900.0	56.5
2003	3	20	22	3.1	0.3	172.	3.1	6.2	-9900.0	57.6
2003	3	20	23	3.3	0.4	193.	3.0	6.2	-9900.0	55.2
2003	3	20	24	2.7	0.3	10102.	1.3	3.4	-9900.0	57.8
2003	3	21	1	2.5	0.4	118.	0.8	2.5	-9900.0	57.3
2003	3	21	2	2.5	0.3	139.	0.8	1.9	-9900.0	56.7
2003	3	21	3	1.9	0.4	10175.	0.4	1.6	-9900.0	60.4
2003	3	21	4	1.4	0.4	0.	1.0	2.5	-9900.0	70.6
2003	3	21	5	1.1	0.4	10007.	0.6	1.6	-9900.0	72.0
2003	3	21	6	0.9	0.2	1.	0.6	2.2	-9900.0	74.3
2003	3	21	7	0.7	0.2	161.	0.7	1.9	-9900.0	74.9
2003	3	21	8	0.8	0.2	161.	0.8	2.2	-9900.0	72.8
2003	3	21	9	1.4	0.2	10148.	0.9	2.5	-9900.0	70.5
2003	3	21	10	2.9	0.1	150.	1.9	7.8	-9900.0	62.1
2003	3	21	11	4.3	-0.2	167.	6.3	10.6	-9900.0	53.3
2003	3	21	12	4.8	-0.2	160.	7.9	13.1	-9900.0	54.7
2003	3	21	13	5.0	-0.3	167.	7.4	12.7	-9900.0	57.3
2003	3	21	14	5.0	-0.2	170.	7.9	13.1	-9900.0	59.6
2003	3	21	15	5.0	0.0	179.	6.9	11.2	-9900.0	61.5
2003	3	21	16	5.3	0.0	168.	5.8	9.9	-9900.0	62.1
2003	3	21	17	5.4	0.0	160.	6.7	11.2	-9900.0	62.7
2003	3	21	18	5.3	0.0	162.	6.0	9.9	-9900.0	62.9
2003	3	21	19	5.2	0.1	169.	6.8	12.1	-9900.0	63.2
2003	3	21	20	5.0	0.1	183.	7.3	11.5	-9900.0	63.1
2003	3	21	21	5.1	0.1	180.	6.7	10.6	-9900.0	61.2
2003	3	21	22	5.2	0.1	177.	7.3	11.2	-9900.0	60.4
2003	3	21	23	5.2	0.1	178.	6.5	12.1	-9900.0	61.0
2003	3	21	24	5.1	0.1	161.	6.8	12.1	-9900.0	62.5

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	22	1	5.0	0.1	168.	7.4	11.5	-9900.0	63.4
2003	3	22	2	4.9	0.1	175.	6.9	12.1	-9900.0	62.8
2003	3	22	3	4.9	0.1	181.	7.4	11.5	-9900.0	63.0
2003	3	22	4	5.0	0.1	194.	7.3	12.1	-9900.0	62.0
2003	3	22	5	5.2	0.2	188.	7.3	12.4	-9900.0	60.4
2003	3	22	6	5.1	0.1	176.	6.5	12.1	-9900.0	62.5
2003	3	22	7	5.1	0.1	183.	5.7	9.3	-9900.0	64.6
2003	3	22	8	5.2	0.1	186.	5.9	9.6	-9900.0	66.0
2003	3	22	9	5.5	0.0	179.	5.6	9.9	-9900.0	65.2
2003	3	22	10	5.8	-0.1	151.	6.0	10.9	-9900.0	64.8
2003	3	22	11	6.1	-0.1	143.	6.1	10.9	-9900.0	63.3
2003	3	22	12	6.9	-0.2	157.	8.3	14.0	-9900.0	60.4
2003	3	22	13	6.9	-0.4	160.	9.0	14.3	-9900.0	60.8
2003	3	22	14	6.8	-0.2	163.	8.0	13.7	-9900.0	60.4
2003	3	22	15	6.8	-0.2	157.	8.2	13.1	-9900.0	59.9
2003	3	22	16	6.9	-0.1	155.	9.5	14.6	-9900.0	58.9
2003	3	22	17	7.2	-0.1	160.	7.4	14.0	-9900.0	58.2
2003	3	22	18	7.3	0.1	151.	6.0	9.9	-9900.0	58.2
2003	3	22	19	5.4	0.1	348.	3.9	9.3	-9900.0	71.0
2003	3	22	20	4.6	0.2	357.	3.6	6.5	-9900.0	77.1
2003	3	22	21	4.5	0.3	357.	2.7	4.4	-9900.0	78.0
2003	3	22	22	4.2	0.4	354.	1.7	3.4	-9900.0	79.7
2003	3	22	23	3.8	0.3	10358.	1.0	2.5	-9900.0	81.1
2003	3	22	24	3.5	0.4	347.	1.5	2.8	-9900.0	83.0
2003	3	23	1	3.1	0.3	22.	0.7	2.2	-9900.0	84.5
2003	3	23	2	2.9	0.3	10001.	1.0	2.2	-9900.0	85.4
2003	3	23	3	2.7	0.4	359.	1.8	7.5	-9900.0	87.3
2003	3	23	4	2.7	0.3	357.	4.5	8.1	-9900.0	87.7
2003	3	23	5	2.5	0.4	354.	3.0	5.9	-9900.0	88.9
2003	3	23	6	2.3	0.4	3.	1.4	3.1	-9900.0	88.4
2003	3	23	7	2.1	0.4	10359.	1.0	3.4	-9900.0	88.9
2003	3	23	8	1.8	0.3	10160.	0.9	1.9	-9900.0	89.7
2003	3	23	9	2.0	0.2	346.	1.9	5.6	-9900.0	89.3
2003	3	23	10	3.5	-0.1	18.	0.8	2.8	-9900.0	82.8
2003	3	23	11	4.2	-0.5	357.	1.2	3.4	-9900.0	76.9
2003	3	23	12	4.4	-0.8	359.	2.4	5.0	-9900.0	76.5
2003	3	23	13	4.1	-0.3	359.	3.1	6.2	-9900.0	79.5
2003	3	23	14	4.1	-0.2	3.	5.1	9.3	-9900.0	79.6
2003	3	23	15	4.7	-0.3	10000.	2.2	5.9	-9900.0	75.7
2003	3	23	16	5.3	-0.2	10002.	3.1	7.8	-9900.0	73.5
2003	3	23	17	5.3	-0.1	5.	2.6	8.4	-9900.0	73.6
2003	3	23	18	4.7	-0.1	3.	3.8	7.1	-9900.0	79.1
2003	3	23	19	4.6	0.1	4.	3.0	5.3	-9900.0	81.7
2003	3	23	20	4.6	0.1	11.	1.5	3.4	-9900.0	82.4
2003	3	23	21	4.3	0.1	161.	1.0	2.5	-9900.0	83.8
2003	3	23	22	4.2	0.2	155.	1.5	2.2	-9900.0	82.8
2003	3	23	23	4.3	0.2	10176.	1.1	2.2	-9900.0	83.6
2003	3	23	24	3.8	0.1	0.	2.9	5.0	-9900.0	90.0
2003	3	24	1	3.7	0.1	10.	1.0	2.8	-9900.0	91.6
2003	3	24	2	3.5	0.1	3.	2.2	3.7	-9900.0	92.2
2003	3	24	3	3.5	0.0	10.	2.2	3.4	-9900.0	93.2
2003	3	24	4	3.4	0.0	10014.	0.9	2.5	-9900.0	93.9
2003	3	24	5	3.3	0.0	174.	1.0	2.2	-9900.0	94.0
2003	3	24	6	3.2	0.0	155.	1.6	3.1	-9900.0	94.5
2003	3	24	7	3.4	0.1	167.	1.9	3.7	-9900.0	94.3
2003	3	24	8	3.6	0.1	161.	1.4	3.1	-9900.0	91.4
2003	3	24	9	3.9	0.0	10164.	0.7	1.6	-9900.0	88.7
2003	3	24	10	5.3	-0.2	146.	0.6	1.9	-9900.0	83.7
2003	3	24	11	6.5	-0.6	10056.	0.8	2.2	-9900.0	76.8
2003	3	24	12	6.2	-0.6	10002.	2.7	7.1	-9900.0	77.3
2003	3	24	13	5.8	-0.8	353.	2.8	7.1	-9900.0	80.7
2003	3	24	14	6.5	-0.9	354.	2.3	3.7	-9900.0	75.6
2003	3	24	15	7.6	-0.8	5.	1.4	2.8	-9900.0	69.2
2003	3	24	16	7.4	-0.6	347.	2.3	4.4	-9900.0	71.3
2003	3	24	17	6.8	0.1	0.	1.8	5.0	-9900.0	75.7
2003	3	24	18	6.9	0.1	160.	0.6	1.6	-9900.0	75.2
2003	3	24	19	6.6	0.4	160.	1.5	3.1	-9900.0	75.2
2003	3	24	20	6.5	0.6	142.	1.4	2.8	-9900.0	71.0
2003	3	24	21	6.0	0.4	156.	1.2	2.5	-9900.0	67.4
2003	3	24	22	5.4	0.3	157.	1.3	2.5	-9900.0	65.8
2003	3	24	23	4.7	0.4	155.	1.6	3.4	-9900.0	66.8
2003	3	24	24	3.9	0.4	151.	2.5	4.4	-9900.0	69.3

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	25	1	3.6	0.3	164.	1.9	3.4	-9900.0	69.7
2003	3	25	2	3.5	0.5	155.	1.6	2.8	-9900.0	69.0
2003	3	25	3	2.9	0.5	160.	1.9	4.7	-9900.0	70.6
2003	3	25	4	2.6	0.3	161.	2.1	4.0	-9900.0	70.8
2003	3	25	5	2.3	0.4	146.	1.0	2.2	-9900.0	72.6
2003	3	25	6	1.9	0.3	164.	1.1	2.2	-9900.0	73.4
2003	3	25	7	1.6	0.4	160.	1.5	2.5	-9900.0	73.1
2003	3	25	8	1.6	0.3	158.	1.4	3.1	-9900.0	72.7
2003	3	25	9	1.9	0.2	166.	0.9	2.5	-9900.0	72.1
2003	3	25	10	3.0	-0.1	142.	1.4	3.4	-9900.0	66.0
2003	3	25	11	4.0	-0.4	2.	1.2	3.1	-9900.0	65.7
2003	3	25	12	5.3	-0.5	10025.	1.4	4.7	-9900.0	59.8
2003	3	25	13	5.1	-1.0	360.	2.2	4.4	-9900.0	60.6
2003	3	25	14	5.6	-0.7	352.	2.1	3.7	-9900.0	57.4
2003	3	25	15	7.1	-0.5	10021.	0.8	2.2	-9900.0	51.6
2003	3	25	16	6.4	-0.4	358.	1.9	3.7	-9900.0	53.4
2003	3	25	17	6.1	-0.3	347.	2.7	4.7	-9900.0	58.0
2003	3	25	18	6.4	0.1	29.	1.3	3.1	-9900.0	57.2
2003	3	25	19	6.1	0.2	164.	1.3	2.5	-9900.0	59.3
2003	3	25	20	5.7	0.4	163.	1.6	3.1	-9900.0	62.1
2003	3	25	21	5.4	0.5	160.	2.0	3.7	-9900.0	63.1
2003	3	25	22	5.1	0.4	145.	0.7	2.2	-9900.0	65.8
2003	3	25	23	4.9	0.5	357.	1.0	2.8	-9900.0	69.1
2003	3	25	24	4.4	0.4	356.	1.4	3.1	-9900.0	72.3
2003	3	26	1	4.3	0.5	353.	1.2	2.5	-9900.0	74.0
2003	3	26	2	4.1	0.4	343.	1.3	3.1	-9900.0	76.1
2003	3	26	3	3.9	0.3	345.	1.4	3.4	-9900.0	77.1
2003	3	26	4	3.9	0.4	340.	0.8	3.1	-9900.0	77.3
2003	3	26	5	4.1	0.6	5.	1.6	6.2	-9900.0	77.9
2003	3	26	6	3.8	0.1	3.	2.8	6.8	-9900.0	80.5
2003	3	26	7	4.3	0.1	44.	0.9	2.8	-9900.0	77.4
2003	3	26	8	4.3	0.2	10138.	0.7	1.9	-9900.0	77.3
2003	3	26	9	4.5	0.1	158.	1.0	1.9	-9900.0	75.6
2003	3	26	10	5.3	0.1	20154.	0.3	1.2	-9900.0	73.4
2003	3	26	11	5.6	-0.3	6.	0.9	2.5	-9900.0	70.8
2003	3	26	12	6.0	-0.9	357.	2.2	3.7	-9900.0	69.0
2003	3	26	13	6.9	-0.7	348.	2.4	4.4	-9900.0	66.8
2003	3	26	14	8.5	0.0	10009.	2.2	6.2	-9900.0	62.8
2003	3	26	15	8.7	0.5	10068.	2.0	7.5	-9900.0	61.5
2003	3	26	16	6.8	-0.2	1.	2.6	6.5	-9900.0	68.7
2003	3	26	17	6.6	-0.1	1.	2.4	5.9	-9900.0	70.2
2003	3	26	18	6.7	0.0	350.	2.9	4.7	-9900.0	70.4
2003	3	26	19	6.7	0.1	6.	2.1	4.4	-9900.0	70.7
2003	3	26	20	6.6	0.2	355.	1.5	4.4	-9900.0	72.3
2003	3	26	21	7.2	0.4	10138.	1.9	5.9	-9900.0	68.0
2003	3	26	22	8.7	0.3	163.	5.2	9.3	-9900.0	59.7
2003	3	26	23	8.8	0.2	160.	6.0	9.6	-9900.0	60.6
2003	3	26	24	8.9	0.1	169.	6.7	10.3	-9900.0	61.0
2003	3	27	1	8.2	0.1	154.	5.8	9.9	-9900.0	66.2
2003	3	27	2	7.7	0.1	157.	4.3	8.1	-9900.0	69.8
2003	3	27	3	7.3	0.1	166.	2.7	6.8	-9900.0	70.9
2003	3	27	4	6.6	0.2	10010.	2.3	5.3	-9900.0	74.8
2003	3	27	5	6.0	0.2	352.	1.8	4.4	-9900.0	79.6
2003	3	27	6	6.2	0.3	7.	1.9	5.0	-9900.0	78.2
2003	3	27	7	6.8	0.2	10074.	1.1	3.7	-9900.0	73.5
2003	3	27	8	6.2	0.2	3.	1.6	4.4	-9900.0	77.4
2003	3	27	9	5.7	0.0	1.	3.2	7.1	-9900.0	81.6
2003	3	27	10	5.3	-0.1	357.	3.2	6.2	-9900.0	85.5
2003	3	27	11	5.0	-0.2	359.	4.6	7.1	-9900.0	88.4
2003	3	27	12	5.0	-0.2	0.	4.1	5.9	-9900.0	89.3
2003	3	27	13	4.9	-0.3	1.	4.7	6.8	-9900.0	90.0
2003	3	27	14	5.1	-0.4	1.	3.0	5.6	-9900.0	90.6
2003	3	27	15	5.1	-0.4	0.	4.7	6.8	-9900.0	90.8
2003	3	27	16	5.5	-0.3	2.	2.7	5.9	-9900.0	88.6
2003	3	27	17	5.9	-0.2	10357.	1.4	5.3	-9900.0	86.0
2003	3	27	18	5.8	0.0	3.	3.9	6.2	-9900.0	85.8
2003	3	27	19	5.8	0.2	354.	3.3	6.2	-9900.0	83.5
2003	3	27	20	5.7	0.3	342.	2.6	5.0	-9900.0	83.1
2003	3	27	21	5.1	0.3	1.	1.8	5.3	-9900.0	84.5
2003	3	27	22	4.3	0.3	163.	1.0	2.2	-9900.0	85.4
2003	3	27	23	3.8	0.4	161.	0.9	1.9	-9900.0	85.3
2003	3	27	24	3.4	0.4	173.	0.9	1.9	-9900.0	85.0

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	3	28	1	2.7	0.4	168.	0.9	1.9	-9900.0	86.0
2003	3	28	2	2.4	0.4	157.	1.4	3.1	-9900.0	83.7
2003	3	28	3	1.9	0.3	163.	1.4	2.8	-9900.0	83.1
2003	3	28	4	1.8	0.3	172.	1.5	3.1	-9900.0	79.8
2003	3	28	5	1.4	0.4	169.	1.9	4.0	-9900.0	77.7
2003	3	28	6	1.3	0.3	165.	1.6	3.7	-9900.0	76.3
2003	3	28	7	1.5	0.3	10071.	1.4	3.4	-9900.0	75.0
2003	3	28	8	1.9	0.2	10077.	1.0	2.5	-9900.0	73.7
2003	3	28	9	2.3	-0.1	68.	0.7	1.9	-9900.0	71.6
2003	3	28	10	3.1	-0.1	68.	0.5	1.2	-9900.0	68.4
2003	3	28	11	3.2	-0.1	10085.	0.4	1.6	-9900.0	67.6
2003	3	28	12	3.5	-0.1	181.	0.8	1.6	-9900.0	66.9
2003	3	28	13	4.0	-0.2	10037.	0.4	1.6	-9900.0	66.4
2003	3	28	14	4.4	-0.3	10016.	1.1	3.4	-9900.0	62.8
2003	3	28	15	3.9	-0.5	359.	2.7	4.7	-9900.0	69.1
2003	3	28	16	4.0	-0.5	0.	2.8	4.7	-9900.0	67.1
2003	3	28	17	4.8	-0.3	359.	1.6	2.8	-9900.0	59.4
2003	3	28	18	4.9	-0.2	1.	1.0	2.2	-9900.0	57.9
2003	3	28	19	4.8	0.0	10170.	0.4	1.6	-9900.0	58.9
2003	3	28	20	4.8	0.1	164.	0.9	1.9	-9900.0	61.2
2003	3	28	21	4.7	0.2	165.	1.0	1.9	-9900.0	62.7
2003	3	28	22	4.8	0.2	169.	1.5	2.8	-9900.0	62.7
2003	3	28	23	5.5	0.6	10165.	1.0	3.4	-9900.0	64.2
2003	3	28	24	4.8	0.6	10355.	1.6	3.7	-9900.0	70.1
2003	3	29	1	3.5	0.3	355.	2.7	5.0	-9900.0	74.7
2003	3	29	2	3.2	0.3	0.	3.3	5.0	-9900.0	79.2
2003	3	29	3	3.1	0.3	354.	1.1	3.1	-9900.0	78.9
2003	3	29	4	4.2	0.5	10006.	1.4	7.8	-9900.0	73.1
2003	3	29	5	8.0	0.5	180.	6.7	12.1	-9900.0	55.5
2003	3	29	6	7.0	0.3	168.	6.6	9.9	-9900.0	58.6
2003	3	29	7	8.0	0.3	183.	8.4	12.4	-9900.0	51.6
2003	3	29	8	8.1	0.2	184.	7.8	11.8	-9900.0	50.5
2003	3	29	9	7.6	0.2	177.	7.0	15.2	-9900.0	58.9
2003	3	29	10	6.0	0.2	178.	7.5	14.6	-9900.0	73.9
2003	3	29	11	5.5	0.1	174.	7.6	11.8	-9900.0	76.8
2003	3	29	12	5.2	0.1	162.	5.1	9.3	-9900.0	76.0
2003	3	29	13	4.1	-0.2	357.	4.3	8.7	-9900.0	85.0
2003	3	29	14	3.4	-0.4	1.	5.8	8.1	-9900.0	87.3
2003	3	29	15	3.2	-0.5	358.	5.3	9.9	-9900.0	87.2
2003	3	29	16	3.4	-0.5	356.	4.0	8.1	-9900.0	86.5
2003	3	29	17	4.1	-0.3	358.	3.0	7.5	-9900.0	84.8
2003	3	29	18	5.1	0.1	336.	2.3	7.5	-9900.0	79.4
2003	3	29	19	6.7	0.2	172.	5.9	13.1	-9900.0	68.9
2003	3	29	20	6.5	0.2	184.	7.4	12.4	-9900.0	70.7
2003	3	29	21	6.6	0.3	155.	6.4	13.4	-9900.0	69.8
2003	3	29	22	6.3	0.2	168.	8.6	14.0	-9900.0	69.6
2003	3	29	23	6.4	0.2	160.	8.3	14.9	-9900.0	69.9
2003	3	29	24	6.8	0.3	158.	9.0	17.4	-9900.0	66.8
2003	3	30	1	6.4	0.3	138.	10.4	17.4	-9900.0	70.8
2003	3	30	2	4.9	0.2	10152.	4.6	13.1	-9900.0	78.4
2003	3	30	3	4.0	0.2	10191.	2.8	11.2	-9900.0	75.6
2003	3	30	4	4.3	0.2	146.	7.4	14.3	-9900.0	75.7
2003	3	30	5	3.2	0.1	152.	6.4	11.5	-9900.0	82.2
2003	3	30	6	4.3	0.2	156.	6.6	16.5	-9900.0	75.8
2003	3	30	7	4.6	0.2	148.	7.9	17.1	-9900.0	71.4
2003	3	30	8	5.2	0.4	122.	7.1	19.0	-9900.0	55.4
2003	3	30	9	4.6	0.2	117.	6.3	17.4	-9900.0	60.2
2003	3	30	10	2.8	0.1	147.	5.8	12.4	-9900.0	76.0
2003	3	30	11	2.5	0.1	126.	4.8	12.4	-9900.0	80.2
2003	3	30	12	3.3	0.0	127.	4.3	17.7	-9900.0	64.3
2003	3	30	13	4.3	-0.1	58.	6.6	15.2	-9900.0	53.1
2003	3	30	14	2.0	-0.2	16.	4.8	9.6	-9900.0	73.3
2003	3	30	15	1.5	-0.2	10281.	1.6	4.4	-9900.0	88.7
2003	3	30	16	3.7	0.1	10008.	3.0	8.7	-9900.0	61.1
2003	3	30	17	3.9	0.1	10030.	2.9	9.9	-9900.0	55.7
2003	3	30	18	3.8	0.0	10122.	1.2	4.4	-9900.0	59.9
2003	3	30	19	2.1	0.0	10155.	2.0	4.7	-9900.0	76.0
2003	3	30	20	1.7	0.1	164.	1.0	2.5	-9900.0	81.6
2003	3	30	21	1.9	0.1	158.	1.2	2.5	-9900.0	82.3
2003	3	30	22	1.7	0.1	160.	1.6	4.0	-9900.0	83.7
2003	3	30	23	1.6	0.1	164.	1.6	3.1	-9900.0	83.2
2003	3	30	24	1.3	0.2	10211.	1.1	2.5	-9900.0	84.6

	TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003 3 31 1	0.8	0.2	10204.	1.0	2.2	-9900.0	85.8
2003 3 31 2	0.7	0.2	154.	2.1	4.7	-9900.0	83.1
2003 3 31 3	0.6	0.2	177.	1.9	4.4	-9900.0	82.0
2003 3 31 4	0.2	0.2	158.	2.7	5.0	-9900.0	81.6
2003 3 31 5	-0.1	0.2	162.	2.5	5.0	-9900.0	80.9
2003 3 31 6	-0.1	0.2	159.	2.8	5.0	-9900.0	78.8
2003 3 31 7	-0.4	0.2	159.	2.9	5.3	-9900.0	77.5
2003 3 31 8	-0.5	0.1	161.	2.6	5.0	-9900.0	76.2
2003 3 31 9	-0.3	0.0	157.	2.3	4.4	-9900.0	73.2
2003 3 31 10	1.3	-0.3	159.	1.6	3.1	-9900.0	67.1
2003 3 31 11	2.7	-0.6	10143.	1.4	3.1	-9900.0	58.9
2003 3 31 12	2.5	-0.9	3.	2.5	3.7	-9900.0	63.4
2003 3 31 13	3.0	-0.9	0.	2.9	4.4	-9900.0	60.4
2003 3 31 14	3.6	-0.9	1.	2.8	4.4	-9900.0	60.3
2003 3 31 15	3.9	-1.0	359.	3.5	5.3	-9900.0	64.5
2003 3 31 16	4.4	-0.8	359.	2.8	5.0	-9900.0	60.4
2003 3 31 17	4.5	-0.2	9.	1.6	3.7	-9900.0	62.8
2003 3 31 18	4.8	-0.1	12.	1.2	4.0	-9900.0	62.8
2003 3 31 19	5.3	0.0	167.	3.1	7.5	-9900.0	56.1
2003 3 31 20	4.9	0.1	171.	6.0	10.9	-9900.0	58.5
2003 3 31 21	4.4	0.1	177.	6.7	10.9	-9900.0	63.0
2003 3 31 22	3.8	0.0	141.	5.9	10.6	-9900.0	69.8
2003 3 31 23	3.6	0.1	161.	5.9	10.9	-9900.0	74.7
2003 3 31 24	4.9	0.1	174.	9.5	16.2	-9900.0	65.1

MANGLER(ANT)	0	0	13	0	0	744	0
MANGLER(%)	0.0	0.0	1.7	0.0	0.0	100.0	0.0

PERIODE: 1/ 4 2003 - 30/ 4 2003

Par. 1: TT 2m, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 2: dT , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 3: DD , Stasjon 1442, Odda met , Skal.faktor: 10.000
Par. 4: FF , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 5: Gust , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 6: nedbo, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 7: Rel-f, Stasjon 1442, Odda met , Skal.faktor: 1.000

	TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003 4 1 1	5.8	0.2	175.	10.0	15.2	-9900.0	59.3
2003 4 1 2	6.1	0.2	187.	8.6	14.6	-9900.0	55.1
2003 4 1 3	6.1	0.3	176.	9.1	14.9	-9900.0	57.4
2003 4 1 4	5.5	0.3	193.	9.0	14.3	-9900.0	68.5
2003 4 1 5	6.0	0.4	189.	6.7	12.1	-9900.0	67.8
2003 4 1 6	5.9	0.3	203.	3.3	7.8	-9900.0	72.2
2003 4 1 7	6.2	0.3	171.	4.4	14.0	-9900.0	70.4
2003 4 1 8	5.2	0.2	184.	4.9	12.7	-9900.0	77.8
2003 4 1 9	4.8	0.2	188.	4.3	9.9	-9900.0	79.5
2003 4 1 10	4.8	0.2	200.	3.8	9.3	-9900.0	79.1
2003 4 1 11	4.9	0.2	212.	4.4	9.0	-9900.0	77.3
2003 4 1 12	4.4	0.2	197.	4.9	8.7	-9900.0	80.5
2003 4 1 13	4.3	0.1	188.	4.7	6.5	-9900.0	84.8
2003 4 1 14	4.4	0.1	164.	5.2	8.4	-9900.0	84.9
2003 4 1 15	4.6	0.1	154.	5.6	9.9	-9900.0	83.2
2003 4 1 16	4.4	0.1	158.	4.5	8.7	-9900.0	84.9
2003 4 1 17	5.2	0.1	142.	3.2	8.4	-9900.0	78.0
2003 4 1 18	5.4	0.1	156.	4.9	10.6	-9900.0	76.3
2003 4 1 19	4.9	0.2	171.	6.2	9.6	-9900.0	78.7
2003 4 1 20	4.9	0.2	151.	6.0	10.6	-9900.0	79.4
2003 4 1 21	4.7	0.2	170.	3.9	9.0	-9900.0	80.9
2003 4 1 22	4.2	0.2	10010.	1.6	3.7	-9900.0	84.3
2003 4 1 23	3.9	0.2	10.	1.8	4.7	-9900.0	90.0
2003 4 1 24	3.6	0.2	10022.	1.0	4.0	-9900.0	91.1
2003 4 2 1	3.1	0.2	165.	1.7	2.8	-9900.0	91.2
2003 4 2 2	3.2	0.2	151.	0.9	2.5	-9900.0	90.9

2003	4	2	3	3.1	0.2	10135.	0.8	2.5	-9900.0	92.1
2003	4	2	4	3.0	0.2	155.	1.1	2.5	-9900.0	92.9
2003	4	2	5	2.9	0.1	168.	1.4	2.5	-9900.0	93.1
2003	4	2	6	2.9	0.2	143.	0.8	2.8	-9900.0	92.7
2003	4	2	7	2.8	0.2	165.	1.4	3.1	-9900.0	92.4
2003	4	2	8	3.0	0.1	151.	1.4	3.1	-9900.0	91.6
2003	4	2	9	3.3	0.1	154.	1.2	2.8	-9900.0	89.8
2003	4	2	10	3.6	0.1	153.	1.9	5.9	-9900.0	86.6
2003	4	2	11	4.2	0.0	10148.	3.1	6.8	-9900.0	78.0
2003	4	2	12	5.6	-0.1	311.	3.9	8.4	-9900.0	57.2
2003	4	2	13	6.1	-0.2	345.	5.6	13.4	-9900.0	52.9
2003	4	2	14	6.2	-0.2	351.	7.2	11.8	-9900.0	50.2
2003	4	2	15	6.5	-0.3	336.	5.6	9.3	-9900.0	51.4
2003	4	2	16	7.1	-0.2	317.	5.9	13.7	-9900.0	46.9
2003	4	2	17	7.1	0.1	293.	7.6	13.7	-9900.0	47.3
2003	4	2	18	6.9	0.1	301.	6.0	13.4	-9900.0	48.0
2003	4	2	19	6.2	0.1	281.	9.5	17.4	-9900.0	49.7
2003	4	2	20	5.6	0.1	281.	9.6	17.4	-9900.0	48.2
2003	4	2	21	5.8	0.2	308.	6.0	12.1	-9900.0	42.5
2003	4	2	22	5.4	0.3	349.	5.3	10.9	-9900.0	43.5
2003	4	2	23	4.8	0.3	1.	4.8	12.1	-9900.0	45.1
2003	4	2	24	4.3	0.4	7.	5.1	10.3	-9900.0	46.2
2003	4	3	1	4.2	0.3	334.	4.3	7.8	-9900.0	46.9
2003	4	3	2	3.9	0.2	322.	5.0	9.9	-9900.0	44.7
2003	4	3	3	3.6	0.2	329.	4.7	11.2	-9900.0	44.0
2003	4	3	4	3.5	0.3	330.	4.6	8.4	-9900.0	41.2
2003	4	3	5	3.2	0.4	4.	5.0	9.3	-9900.0	42.2
2003	4	3	6	2.9	0.3	322.	4.1	7.5	-9900.0	42.9
2003	4	3	7	2.6	0.2	297.	4.4	9.0	-9900.0	42.1
2003	4	3	8	2.5	0.2	312.	4.5	9.0	-9900.0	42.7
2003	4	3	9	2.6	0.3	348.	3.7	6.5	-9900.0	44.1
2003	4	3	10	3.3	-0.3	14.	4.4	7.8	-9900.0	41.6
2003	4	3	11	3.7	-0.7	359.	4.0	6.5	-9900.0	40.9
2003	4	3	12	4.1	-0.9	2.	3.1	5.0	-9900.0	41.2
2003	4	3	13	4.7	-0.7	346.	3.9	10.3	-9900.0	37.4
2003	4	3	14	5.1	-0.3	315.	6.1	11.2	-9900.0	33.4
2003	4	3	15	5.3	-0.4	332.	4.7	11.5	-9900.0	34.5
2003	4	3	16	5.8	-0.5	357.	5.0	9.3	-9900.0	35.1
2003	4	3	17	5.9	-0.4	356.	3.3	8.1	-9900.0	36.5
2003	4	3	18	5.8	-0.2	10329.	2.0	5.6	-9900.0	41.2
2003	4	3	19	5.5	0.0	10216.	2.0	4.7	-9900.0	43.4
2003	4	3	20	5.1	0.1	179.	2.4	5.3	-9900.0	47.8
2003	4	3	21	4.9	0.1	166.	4.0	7.1	-9900.0	49.4
2003	4	3	22	4.7	0.1	172.	5.8	10.9	-9900.0	53.2
2003	4	3	23	4.7	0.1	170.	6.9	11.5	-9900.0	51.8
2003	4	3	24	4.9	0.2	177.	8.4	14.3	-9900.0	46.1

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	4	4	1	4.8	0.2	179.	8.9	13.7	-9900.0	48.6
2003	4	4	2	4.3	0.1	166.	8.4	14.0	-9900.0	58.0
2003	4	4	3	4.2	0.1	156.	8.8	14.3	-9900.0	63.8
2003	4	4	4	3.3	0.1	145.	8.3	13.7	-9900.0	72.3
2003	4	4	5	3.6	0.1	10161.	3.9	10.6	-9900.0	73.8
2003	4	4	6	2.4	0.1	1.	5.0	8.4	-9900.0	86.6
2003	4	4	7	2.1	0.1	4.	2.6	5.9	-9900.0	88.8
2003	4	4	8	2.5	0.2	10203.	1.4	3.7	-9900.0	88.6
2003	4	4	9	3.4	0.2	356.	1.9	6.5	-9900.0	88.4
2003	4	4	10	3.4	-0.2	354.	2.8	5.6	-9900.0	90.7
2003	4	4	11	5.8	0.0	359.	2.4	14.3	-9900.0	82.8
2003	4	4	12	8.7	0.3	18.	4.7	12.1	-9900.0	45.6
2003	4	4	13	9.1	-0.2	1.	6.7	15.9	-9900.0	42.0
2003	4	4	14	9.1	-0.2	319.	10.0	19.3	-9900.0	43.8
2003	4	4	15	8.9	-0.1	320.	11.8	19.0	-9900.0	41.8
2003	4	4	16	8.5	-0.2	359.	11.7	20.2	-9900.0	43.4
2003	4	4	17	8.2	-0.1	357.	11.2	19.3	-9900.0	44.7
2003	4	4	18	8.0	0.1	319.	12.6	21.1	-9900.0	40.8
2003	4	4	19	7.5	0.2	321.	11.6	19.3	-9900.0	39.3
2003	4	4	20	7.0	0.2	315.	12.2	19.6	-9900.0	41.4
2003	4	4	21	6.1	0.3	330.	11.3	20.2	-9900.0	42.1
2003	4	4	22	5.6	0.3	353.	11.9	22.4	-9900.0	43.1
2003	4	4	23	5.3	0.2	326.	8.2	20.2	-9900.0	43.5
2003	4	4	24	4.9	0.3	335.	7.4	18.6	-9900.0	42.9

2003	4	5	1	4.6	0.3	349.	8.8	19.3	-9900.0	43.4
2003	4	5	2	4.6	0.3	350.	8.4	16.8	-9900.0	44.0
2003	4	5	3	4.5	0.2	344.	8.1	18.3	-9900.0	44.3
2003	4	5	4	4.6	0.2	330.	7.4	17.1	-9900.0	44.1
2003	4	5	5	4.5	0.2	319.	7.2	16.2	-9900.0	42.4
2003	4	5	6	4.5	0.2	321.	8.3	22.4	-9900.0	40.7
2003	4	5	7	4.0	0.2	301.	10.4	20.5	-9900.0	43.0
2003	4	5	8	3.5	0.1	301.	11.7	22.7	-9900.0	43.2
2003	4	5	9	3.4	0.1	342.	9.9	17.1	-9900.0	41.5
2003	4	5	10	3.3	-0.3	15.	7.6	16.8	-9900.0	39.2
2003	4	5	11	3.5	-0.6	13.	5.5	11.5	-9900.0	39.6
2003	4	5	12	4.1	-0.9	359.	4.4	8.4	-9900.0	38.9
2003	4	5	13	4.5	-1.0	347.	5.3	8.7	-9900.0	37.7
2003	4	5	14	4.6	-1.0	355.	5.5	9.0	-9900.0	37.4
2003	4	5	15	4.6	-0.8	356.	5.7	9.6	-9900.0	35.5
2003	4	5	16	5.1	-0.7	346.	4.7	9.0	-9900.0	35.0
2003	4	5	17	5.0	-0.5	333.	4.7	8.4	-9900.0	35.6
2003	4	5	18	4.3	0.0	305.	5.8	9.9	-9900.0	32.8
2003	4	5	19	3.9	0.1	291.	6.6	9.6	-9900.0	33.5
2003	4	5	20	3.6	0.1	289.	6.9	9.9	-9900.0	34.5
2003	4	5	21	3.3	0.1	294.	5.4	9.9	-9900.0	36.2
2003	4	5	22	2.8	0.2	298.	3.6	6.5	-9900.0	37.7
2003	4	5	23	1.5	0.3	159.	1.8	3.7	-9900.0	47.6
2003	4	5	24	0.8	0.4	146.	1.9	3.7	-9900.0	52.5
2003	4	6	1	0.3	0.3	155.	2.5	4.7	-9900.0	55.4
2003	4	6	2	0.0	0.3	150.	2.0	4.0	-9900.0	55.2
2003	4	6	3	-0.3	0.3	158.	2.0	3.7	-9900.0	55.5
2003	4	6	4	-0.7	0.3	150.	1.9	4.0	-9900.0	57.5
2003	4	6	5	-0.8	0.3	156.	1.8	4.0	-9900.0	57.3
2003	4	6	6	-1.1	0.3	161.	1.7	4.4	-9900.0	58.9
2003	4	6	7	-1.3	0.3	10171.	1.3	3.1	-9900.0	60.5
2003	4	6	8	-1.0	0.3	140.	1.2	3.7	-9900.0	60.2
2003	4	6	9	-0.6	0.1	155.	2.0	3.7	-9900.0	57.5
2003	4	6	10	1.6	-0.2	156.	1.2	2.8	-9900.0	45.5
2003	4	6	11	2.5	-0.7	13.	1.6	5.0	-9900.0	37.9
2003	4	6	12	2.2	-1.0	3.	4.1	6.2	-9900.0	48.9
2003	4	6	13	2.8	-1.1	4.	3.8	5.6	-9900.0	44.4
2003	4	6	14	3.3	-1.0	6.	3.6	5.0	-9900.0	42.9
2003	4	6	15	3.8	-0.9	9.	3.1	4.4	-9900.0	40.3
2003	4	6	16	4.4	-1.0	0.	3.4	5.3	-9900.0	37.5
2003	4	6	17	4.1	-0.4	4.	4.9	7.1	-9900.0	45.4
2003	4	6	18	4.1	0.0	357.	5.3	7.1	-9900.0	44.6
2003	4	6	19	4.1	0.3	347.	5.2	7.5	-9900.0	42.4
2003	4	6	20	3.8	0.4	348.	4.0	6.2	-9900.0	40.3
2003	4	6	21	3.4	0.3	327.	2.3	5.0	-9900.0	41.4
2003	4	6	22	2.3	0.3	160.	2.4	5.0	-9900.0	49.6
2003	4	6	23	1.8	0.2	165.	2.6	5.3	-9900.0	49.7
2003	4	6	24	1.5	0.2	153.	2.0	4.4	-9900.0	48.8

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	4	7	1	1.5	0.2	164.	2.4	4.7	-9900.0	47.9
2003	4	7	2	1.4	0.2	158.	1.6	4.0	-9900.0	49.3
2003	4	7	3	1.3	0.2	164.	1.8	3.4	-9900.0	47.5
2003	4	7	4	1.2	0.2	161.	2.0	3.4	-9900.0	47.9
2003	4	7	5	0.9	0.2	163.	1.0	2.8	-9900.0	49.8
2003	4	7	6	0.6	0.3	149.	1.1	1.9	-9900.0	52.4
2003	4	7	7	0.3	0.3	168.	1.7	3.4	-9900.0	53.2
2003	4	7	8	0.5	0.1	165.	1.7	2.8	-9900.0	52.8
2003	4	7	9	1.8	-0.1	153.	2.2	4.0	-9900.0	43.0
2003	4	7	10	4.3	-0.6	94.	1.3	2.5	-9900.0	29.8
2003	4	7	11	3.5	-0.8	7.	2.4	3.7	-9900.0	38.6
2003	4	7	12	3.6	-1.1	0.	3.2	4.4	-9900.0	39.5
2003	4	7	13	4.4	-1.2	2.	3.2	4.7	-9900.0	36.4
2003	4	7	14	4.7	-0.9	3.	3.4	5.3	-9900.0	36.6
2003	4	7	15	5.3	-0.8	3.	4.5	6.2	-9900.0	36.1
2003	4	7	16	5.4	-0.6	4.	4.3	5.9	-9900.0	41.1
2003	4	7	17	5.7	-0.4	3.	4.3	5.9	-9900.0	37.3
2003	4	7	18	5.5	-0.2	4.	4.9	6.5	-9900.0	38.7
2003	4	7	19	5.2	0.1	4.	4.3	6.5	-9900.0	42.7
2003	4	7	20	5.1	0.6	357.	2.4	4.7	-9900.0	41.7
2003	4	7	21	4.0	0.3	149.	1.2	3.1	-9900.0	44.9
2003	4	7	22	3.2	0.4	156.	2.3	3.7	-9900.0	49.2
2003	4	7	23	2.4	0.3	157.	2.5	4.4	-9900.0	52.9
2003	4	7	24	2.0	0.3	165.	2.0	3.4	-9900.0	53.8
2003	4	8	1	1.5	0.2	166.	2.0	4.0	-9900.0	56.5
2003	4	8	2	1.5	0.2	160.	1.9	3.7	-9900.0	55.9
2003	4	8	3	1.3	0.2	158.	2.0	4.0	-9900.0	57.8
2003	4	8	4	1.0	0.2	159.	1.6	3.4	-9900.0	58.7
2003	4	8	5	0.6	0.3	160.	1.4	2.5	-9900.0	59.0
2003	4	8	6	0.3	0.3	154.	1.3	2.2	-9900.0	60.1
2003	4	8	7	0.0	0.3	157.	1.5	3.4	-9900.0	62.4
2003	4	8	8	0.0	0.2	159.	1.8	3.4	-9900.0	61.6
2003	4	8	9	0.8	0.0	145.	1.5	3.1	-9900.0	58.3
2003	4	8	10	2.7	-0.2	18.	1.2	3.1	-9900.0	49.0
2003	4	8	11	3.1	-0.6	6.	1.8	3.7	-9900.0	50.3
2003	4	8	12	4.1	-0.6	0.	1.6	4.7	-9900.0	49.5
2003	4	8	13	5.6	-0.5	28.	1.0	2.2	-9900.0	45.1
2003	4	8	14	6.0	-0.9	9.	1.8	3.1	-9900.0	44.7
2003	4	8	15	6.0	-0.8	3.	3.5	7.5	-9900.0	47.4
2003	4	8	16	5.9	-0.5	8.	5.4	7.5	-9900.0	50.1
2003	4	8	17	6.4	-0.6	5.	4.2	6.2	-9900.0	48.5
2003	4	8	18	6.9	0.2	352.	2.8	5.9	-9900.0	45.6
2003	4	8	19	6.9	0.3	344.	2.5	5.3	-9900.0	42.7
2003	4	8	20	6.1	0.3	10359.	1.5	4.7	-9900.0	45.9
2003	4	8	21	4.7	0.6	160.	1.6	3.1	-9900.0	52.4
2003	4	8	22	3.6	0.4	154.	2.7	4.7	-9900.0	58.0
2003	4	8	23	3.4	0.3	157.	2.8	4.7	-9900.0	57.1
2003	4	8	24	2.9	0.3	158.	2.6	5.6	-9900.0	57.9
2003	4	9	1	2.3	0.3	154.	2.7	4.7	-9900.0	60.5
2003	4	9	2	2.1	0.3	159.	2.4	4.7	-9900.0	60.4
2003	4	9	3	1.8	0.3	154.	2.1	4.0	-9900.0	61.2
2003	4	9	4	1.6	0.3	166.	1.2	3.7	-9900.0	61.9
2003	4	9	5	1.3	0.4	149.	1.2	2.5	-9900.0	63.5
2003	4	9	6	1.0	0.5	163.	1.9	3.1	-9900.0	65.3
2003	4	9	7	0.8	0.4	149.	1.3	3.1	-9900.0	66.6
2003	4	9	8	1.2	0.4	10147.	0.9	2.8	-9900.0	64.6
2003	4	9	9	1.7	0.2	164.	1.2	3.1	-9900.0	63.0
2003	4	9	10	5.1	-0.3	10015.	1.6	12.4	-9900.0	49.9
2003	4	9	11	7.1	-0.2	21.	9.9	15.2	-9900.0	29.1
2003	4	9	12	7.7	-0.4	14.	5.9	16.2	-9900.0	33.2
2003	4	9	13	8.4	-0.8	353.	4.0	10.6	-9900.0	34.1
2003	4	9	14	8.8	-0.5	313.	4.8	10.3	-9900.0	34.6
2003	4	9	15	9.4	-0.6	334.	4.3	10.3	-9900.0	34.9
2003	4	9	16	9.9	-0.9	330.	3.4	8.1	-9900.0	33.5
2003	4	9	17	10.4	-0.4	284.	4.5	10.6	-9900.0	31.1
2003	4	9	18	10.0	0.1	308.	6.3	15.2	-9900.0	30.9
2003	4	9	19	9.8	0.3	337.	6.8	19.9	-9900.0	30.0
2003	4	9	20	9.3	0.5	10325.	3.6	7.8	-9900.0	29.6
2003	4	9	21	8.6	0.4	10073.	2.5	12.7	-9900.0	30.7
2003	4	9	22	9.1	0.4	354.	7.2	17.7	-9900.0	27.4
2003	4	9	23	8.5	0.4	340.	7.0	12.7	-9900.0	28.0
2003	4	9	24	7.8	0.5	7.	7.0	13.7	-9900.0	30.3

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	4	10	1	7.1	0.5	2.	5.9	12.1	-9900.0	31.6
2003	4	10	2	6.4	0.4	7.	6.2	12.1	-9900.0	33.5
2003	4	10	3	5.9	0.4	10357.	3.3	9.9	-9900.0	34.7
2003	4	10	4	5.0	0.6	185.	1.3	3.7	-9900.0	36.3
2003	4	10	5	5.0	0.6	10073.	2.9	10.9	-9900.0	37.7
2003	4	10	6	4.9	0.4	327.	2.1	7.1	-9900.0	36.7
2003	4	10	7	5.2	0.4	322.	2.5	8.7	-9900.0	33.7
2003	4	10	8	5.5	0.4	343.	4.1	9.6	-9900.0	32.1
2003	4	10	9	5.9	0.1	345.	7.4	12.4	-9900.0	32.0
2003	4	10	10	5.6	-0.5	1.	6.4	9.9	-9900.0	35.6
2003	4	10	11	5.4	-0.6	0.	7.3	9.6	-9900.0	39.9
2003	4	10	12	6.4	-0.6	0.	6.5	9.0	-9900.0	33.4
2003	4	10	13	8.2	-1.1	354.	2.8	5.3	-9900.0	29.1
2003	4	10	14	8.5	-1.0	0.	3.1	5.6	-9900.0	29.6
2003	4	10	15	8.3	-0.9	3.	3.8	6.5	-9900.0	33.7
2003	4	10	16	9.8	-0.6	355.	1.3	3.4	-9900.0	25.9
2003	4	10	17	10.6	-0.6	10153.	2.7	6.8	-9900.0	20.7
2003	4	10	18	9.6	0.1	10234.	1.9	6.2	-9900.0	22.2
2003	4	10	19	9.0	0.3	357.	2.7	6.8	-9900.0	24.8
2003	4	10	20	8.5	0.3	347.	4.5	9.6	-9900.0	25.6
2003	4	10	21	7.9	0.2	10359.	3.7	12.4	-9900.0	28.1
2003	4	10	22	6.6	0.1	358.	3.6	11.2	-9900.0	34.7
2003	4	10	23	5.2	0.1	314.	5.3	13.4	-9900.0	42.4
2003	4	10	24	5.2	0.1	324.	5.3	12.7	-9900.0	42.1
2003	4	11	1	5.1	0.1	316.	5.2	13.4	0.0	40.6
2003	4	11	2	4.6	0.1	335.	5.3	15.5	0.0	39.7
2003	4	11	3	4.3	0.2	331.	4.3	12.4	0.0	39.4
2003	4	11	4	3.8	0.2	352.	6.1	13.7	0.0	41.6
2003	4	11	5	3.2	0.2	347.	5.6	14.0	0.0	40.4
2003	4	11	6	3.1	0.1	317.	4.2	13.1	0.0	39.7
2003	4	11	7	3.0	0.1	5.	4.1	9.0	0.0	42.2
2003	4	11	8	3.4	-0.1	359.	4.6	8.7	0.0	41.4
2003	4	11	9	3.6	-0.2	358.	4.5	9.0	0.0	39.5
2003	4	11	10	3.8	-0.5	360.	4.9	9.3	0.0	39.2
2003	4	11	11	3.9	-0.6	355.	5.6	9.9	0.0	39.7
2003	4	11	12	4.2	-0.8	1.	5.3	8.7	0.0	39.7
2003	4	11	13	4.6	-0.6	10353.	3.5	8.7	0.0	36.5
2003	4	11	14	4.9	-0.5	205.	4.2	11.5	0.0	35.2
2003	4	11	15	5.0	-0.4	217.	3.4	8.4	0.0	35.1
2003	4	11	16	5.1	-0.3	215.	2.2	9.3	0.0	36.4
2003	4	11	17	5.0	-0.2	198.	2.3	5.6	0.0	37.3
2003	4	11	18	4.8	-0.1	10174.	1.8	5.3	0.0	38.7
2003	4	11	19	4.6	0.0	175.	2.6	6.8	0.0	40.2
2003	4	11	20	4.5	0.2	188.	2.9	6.2	0.0	41.2
2003	4	11	21	4.3	0.2	10204.	2.0	7.5	0.0	42.4
2003	4	11	22	3.9	0.3	287.	0.7	2.8	0.0	45.6
2003	4	11	23	3.5	0.3	10148.	0.7	2.5	0.0	48.1
2003	4	11	24	3.3	0.3	156.	1.4	3.4	0.0	49.1
2003	4	12	1	3.5	0.3	179.	1.6	3.4	0.0	49.3
2003	4	12	2	3.0	0.3	169.	1.1	2.8	0.0	52.8
2003	4	12	3	2.9	0.3	171.	0.8	1.9	0.0	53.8
2003	4	12	4	2.9	0.3	157.	0.9	2.5	0.0	55.6
2003	4	12	5	3.2	0.3	163.	1.1	2.2	0.0	53.1
2003	4	12	6	2.9	0.3	165.	0.8	1.6	0.0	54.2
2003	4	12	7	2.9	0.3	150.	0.9	2.5	0.0	56.7
2003	4	12	8	3.2	0.2	175.	1.3	2.5	0.0	55.3
2003	4	12	9	4.7	-0.2	151.	1.4	2.8	0.0	49.8
2003	4	12	10	6.2	-0.2	150.	1.1	2.5	0.0	44.3
2003	4	12	11	7.7	-0.9	144.	2.8	5.6	0.0	39.7
2003	4	12	12	8.2	-0.7	150.	2.5	5.0	0.0	38.7
2003	4	12	13	9.0	-0.9	171.	2.6	5.6	0.0	36.8
2003	4	12	14	9.2	-1.0	179.	3.8	7.5	0.0	36.0
2003	4	12	15	8.7	-0.5	216.	4.5	8.1	0.0	37.8
2003	4	12	16	8.4	-0.4	161.	4.3	8.4	0.0	41.8
2003	4	12	17	8.2	-0.2	155.	5.3	8.1	0.0	43.6
2003	4	12	18	8.0	0.0	154.	6.2	9.3	0.0	47.3
2003	4	12	19	7.8	0.0	152.	5.6	8.7	0.0	50.6
2003	4	12	20	7.4	0.1	161.	5.1	7.8	0.0	54.5
2003	4	12	21	7.1	0.1	146.	5.1	7.8	0.0	57.2
2003	4	12	22	6.5	0.1	146.	5.0	9.6	0.0	63.8
2003	4	12	23	6.5	0.1	156.	4.0	8.7	0.0	65.5
2003	4	12	24	6.2	0.2	167.	2.7	5.6	0.0	68.4

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	4	13	1	6.5	0.2	156.	4.3	7.5	0.0	67.7
2003	4	13	2	5.8	0.1	19.	3.6	7.5	0.0	74.5
2003	4	13	3	5.2	0.1	2.	3.8	7.1	0.0	80.2
2003	4	13	4	4.9	0.2	4.	4.3	6.2	0.0	83.0
2003	4	13	5	4.9	0.2	3.	3.4	5.9	0.0	83.9
2003	4	13	6	4.6	0.1	2.	3.9	5.9	0.0	86.3
2003	4	13	7	4.5	0.1	358.	1.7	4.7	0.6	88.1
2003	4	13	8	4.6	0.0	19.	1.0	2.5	0.0	89.6
2003	4	13	9	4.9	-0.1	148.	1.0	1.9	0.0	87.9
2003	4	13	10	5.8	-0.3	10009.	1.6	5.3	0.0	83.1
2003	4	13	11	5.7	-0.8	0.	3.7	5.6	0.0	82.4
2003	4	13	12	6.3	-0.9	1.	4.0	6.2	0.0	78.2
2003	4	13	13	6.7	-0.6	4.	5.9	7.8	0.0	73.7
2003	4	13	14	7.1	-0.6	6.	6.3	8.4	0.0	71.7
2003	4	13	15	7.7	-0.9	3.	3.9	7.1	0.0	66.4
2003	4	13	16	8.5	-1.1	358.	2.3	4.4	0.0	59.8
2003	4	13	17	8.4	-1.0	1.	2.6	5.0	0.0	60.1
2003	4	13	18	7.8	-0.2	354.	3.3	5.6	0.0	65.2
2003	4	13	19	7.3	0.3	355.	3.3	5.9	0.0	69.6
2003	4	13	20	7.1	0.4	15.	1.7	4.4	0.0	67.7
2003	4	13	21	6.4	0.4	159.	1.3	2.8	0.0	68.2
2003	4	13	22	5.5	0.6	162.	1.9	4.4	0.0	68.5
2003	4	13	23	4.5	0.4	157.	2.4	4.0	0.0	71.2
2003	4	13	24	4.0	0.4	159.	2.3	3.7	0.0	70.8
2003	4	14	1	3.7	0.4	154.	2.2	4.4	0.0	69.7
2003	4	14	2	3.3	0.3	158.	2.6	4.0	0.0	69.5
2003	4	14	3	3.1	0.3	156.	2.4	4.4	0.0	68.5
2003	4	14	4	2.9	0.4	158.	2.5	4.4	0.0	67.1
2003	4	14	5	2.7	0.4	154.	2.4	3.7	0.0	66.2
2003	4	14	6	2.3	0.3	156.	2.4	4.4	0.0	67.5
2003	4	14	7	2.1	0.3	153.	1.0	2.5	0.0	69.4
2003	4	14	8	2.2	0.4	158.	1.3	2.5	0.0	67.8
2003	4	14	9	3.4	0.1	157.	2.2	3.7	0.0	58.6
2003	4	14	10	5.9	-0.2	10173.	1.3	3.4	0.0	51.3
2003	4	14	11	8.9	-0.2	84.	0.6	2.2	0.0	40.1
2003	4	14	12	7.6	-0.7	359.	1.8	3.4	0.0	43.1
2003	4	14	13	10.6	-0.1	10018.	0.9	2.5	0.0	37.8
2003	4	14	14	12.6	-0.6	166.	2.7	6.2	0.0	30.5
2003	4	14	15	12.5	-0.7	174.	3.8	7.8	0.0	29.4
2003	4	14	16	12.4	-0.5	196.	4.0	8.4	0.0	29.3
2003	4	14	17	12.7	-0.3	175.	2.2	4.7	0.0	29.4
2003	4	14	18	12.3	-0.1	198.	1.9	3.7	0.0	31.5
2003	4	14	19	11.6	0.1	191.	1.8	3.7	0.0	34.5
2003	4	14	20	11.0	0.2	186.	2.6	4.4	0.0	35.8
2003	4	14	21	10.3	0.2	153.	1.1	3.4	0.0	39.0
2003	4	14	22	9.5	0.3	163.	2.0	4.0	0.0	42.7
2003	4	14	23	8.5	0.2	139.	2.4	4.7	0.0	47.0
2003	4	14	24	8.4	0.2	161.	2.1	3.7	0.0	47.1
2003	4	15	1	8.9	0.4	159.	2.6	5.3	0.0	43.8
2003	4	15	2	9.0	0.3	154.	2.8	4.7	0.0	43.0
2003	4	15	3	8.7	0.3	10133.	1.6	4.0	0.0	44.3
2003	4	15	4	7.8	0.3	136.	1.2	2.5	0.0	48.4
2003	4	15	5	7.3	0.4	172.	2.1	3.4	0.0	50.0
2003	4	15	6	7.1	0.4	163.	1.5	3.4	0.0	48.2
2003	4	15	7	7.3	0.3	152.	1.2	2.5	0.0	45.8
2003	4	15	8	8.1	0.2	160.	1.1	2.2	0.0	42.0
2003	4	15	9	7.8	-0.2	10357.	2.1	4.4	0.0	48.3
2003	4	15	10	8.6	-0.6	1.	1.8	2.8	0.0	44.5
2003	4	15	11	9.5	-0.5	8.	1.4	2.5	0.0	40.2
2003	4	15	12	10.4	-0.8	8.	1.7	4.0	0.0	35.4
2003	4	15	13	10.9	-1.0	358.	2.0	3.7	0.0	33.0
2003	4	15	14	11.2	-1.2	356.	2.7	4.7	0.0	33.4
2003	4	15	15	11.7	-1.3	352.	2.8	5.0	0.0	34.1
2003	4	15	16	13.0	-1.4	0.	1.9	3.1	0.0	29.4
2003	4	15	17	14.2	-1.2	10347.	1.3	2.8	0.0	29.3
2003	4	15	18	13.7	0.1	211.	1.8	3.4	0.0	28.1
2003	4	15	19	12.8	0.3	199.	1.3	3.1	0.0	30.2
2003	4	15	20	12.0	0.4	158.	1.4	3.7	0.0	31.6
2003	4	15	21	10.7	0.4	174.	1.4	3.1	0.0	35.5
2003	4	15	22	9.4	0.4	158.	2.0	3.4	0.0	40.6
2003	4	15	23	8.7	0.4	164.	2.4	4.4	0.0	43.2
2003	4	15	24	7.8	0.4	159.	2.8	4.7	0.0	46.3

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	4	16	1	7.3	0.5	156.	2.3	5.0	0.0	48.8
2003	4	16	2	7.4	0.4	162.	2.3	3.7	0.0	48.4
2003	4	16	3	7.5	0.6	159.	1.5	3.1	0.0	48.4
2003	4	16	4	6.6	0.4	10120.	0.7	2.2	0.0	54.4
2003	4	16	5	5.7	0.5	94.	0.5	1.2	0.0	59.5
2003	4	16	6	5.4	0.5	150.	1.6	2.8	0.0	58.5
2003	4	16	7	5.4	0.4	161.	0.9	2.8	0.0	59.8
2003	4	16	8	6.1	0.4	159.	0.8	1.6	0.0	55.7
2003	4	16	9	7.7	0.2	148.	0.5	1.9	0.0	50.0
2003	4	16	10	9.6	-0.1	10048.	0.5	1.6	0.0	44.2
2003	4	16	11	10.9	-0.3	10133.	0.8	2.2	0.0	37.0
2003	4	16	12	11.3	-0.4	10.	1.4	3.7	0.0	36.5
2003	4	16	13	10.6	-1.0	349.	3.2	4.4	0.0	39.2
2003	4	16	14	12.1	-1.2	350.	2.7	4.4	0.0	34.0
2003	4	16	15	13.7	-1.1	357.	1.8	2.8	0.0	30.1
2003	4	16	16	14.3	-1.2	1.	1.4	2.5	0.0	29.6
2003	4	16	17	15.6	-0.3	10014.	0.5	1.6	0.0	29.7
2003	4	16	18	14.8	-0.1	177.	0.8	1.6	0.0	32.2
2003	4	16	19	14.1	0.3	169.	0.9	1.9	0.0	35.4
2003	4	16	20	13.0	0.6	157.	1.9	3.7	0.0	38.0
2003	4	16	21	11.7	0.5	158.	3.1	5.0	0.0	40.4
2003	4	16	22	10.4	0.3	157.	4.1	6.2	0.0	44.3
2003	4	16	23	9.8	0.4	157.	3.2	5.6	0.0	46.4
2003	4	16	24	9.1	0.5	153.	2.7	4.7	0.0	49.3
2003	4	17	1	8.7	0.5	153.	2.0	3.7	0.0	51.1
2003	4	17	2	8.0	0.4	219.	1.1	2.5	0.0	55.6
2003	4	17	3	7.6	0.5	157.	2.2	4.4	0.0	55.3
2003	4	17	4	7.5	0.6	160.	2.4	5.0	0.0	55.8
2003	4	17	5	7.4	0.4	10147.	2.3	5.0	0.0	57.4
2003	4	17	6	7.2	0.4	154.	1.2	3.1	0.0	58.7
2003	4	17	7	6.8	0.4	154.	2.5	4.0	0.0	59.4
2003	4	17	8	7.6	0.3	155.	1.2	2.5	0.0	57.6
2003	4	17	9	8.7	0.0	150.	1.9	3.4	0.0	52.8
2003	4	17	10	11.3	-0.2	160.	1.6	3.7	0.0	45.2
2003	4	17	11	13.1	-0.3	357.	0.9	2.2	0.0	41.2
2003	4	17	12	11.6	-0.5	352.	2.4	5.6	0.0	46.3
2003	4	17	13	12.5	-0.9	346.	3.1	6.5	0.0	44.9
2003	4	17	14	15.4	-1.0	353.	1.3	2.5	0.0	33.3
2003	4	17	15	16.6	-1.1	357.	1.6	3.1	0.0	30.5
2003	4	17	16	16.9	-1.4	352.	2.0	3.4	0.0	30.9
2003	4	17	17	16.3	-0.8	0.	2.2	4.0	0.0	31.7
2003	4	17	18	15.8	-0.3	351.	1.6	3.1	0.0	33.5
2003	4	17	19	15.0	0.2	10345.	0.9	2.2	0.0	36.4
2003	4	17	20	14.0	0.4	164.	2.1	5.0	0.0	39.0
2003	4	17	21	12.4	0.3	158.	3.6	5.6	0.0	42.5
2003	4	17	22	11.2	0.3	159.	3.5	5.9	0.0	46.2
2003	4	17	23	10.1	0.3	154.	3.5	5.9	0.0	49.9
2003	4	17	24	9.8	0.4	159.	3.2	5.6	0.0	50.9
2003	4	18	1	9.1	0.4	156.	1.7	4.4	0.0	53.9
2003	4	18	2	8.6	0.4	165.	1.7	4.0	0.0	55.7
2003	4	18	3	8.2	0.5	156.	1.5	4.0	0.0	56.8
2003	4	18	4	7.8	0.6	162.	1.5	3.4	0.0	58.2
2003	4	18	5	7.4	0.6	157.	1.7	3.4	0.0	59.6
2003	4	18	6	7.0	0.5	156.	1.5	2.8	0.0	61.3
2003	4	18	7	7.0	0.5	149.	1.9	3.7	0.0	60.8
2003	4	18	8	7.6	0.5	171.	0.8	2.2	0.0	59.8
2003	4	18	9	8.8	0.3	157.	2.1	3.7	0.0	53.2
2003	4	18	10	10.3	-0.5	10146.	2.1	4.4	0.0	49.4
2003	4	18	11	10.0	-1.0	353.	2.6	4.7	0.0	52.0
2003	4	18	12	12.4	-0.8	1.	1.3	2.2	0.0	42.6
2003	4	18	13	14.0	-0.9	1.	1.3	2.2	0.0	37.8
2003	4	18	14	14.4	-1.2	352.	2.2	4.0	0.0	36.4
2003	4	18	15	15.4	-1.1	360.	1.8	3.7	0.0	35.6
2003	4	18	16	17.0	-1.1	1.	0.8	2.5	0.0	33.2
2003	4	18	17	17.2	-0.4	18.	0.7	1.6	0.0	32.5
2003	4	18	18	16.1	-0.4	10023.	0.4	1.2	0.0	36.0
2003	4	18	19	14.8	0.1	10168.	0.6	2.5	0.0	38.8
2003	4	18	20	13.8	0.3	151.	0.9	2.8	0.0	43.0
2003	4	18	21	12.5	0.6	165.	2.2	5.3	0.0	46.4
2003	4	18	22	11.6	0.4	160.	2.8	5.3	0.0	48.4
2003	4	18	23	10.7	0.5	151.	2.1	4.7	0.0	51.9
2003	4	18	24	10.1	0.4	158.	2.9	5.3	0.0	53.7

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	4	19	1	10.0	0.4	156.	2.5	5.3	0.0	53.6
2003	4	19	2	10.0	0.5	167.	2.4	5.3	0.0	54.2
2003	4	19	3	9.4	0.5	163.	1.5	3.4	0.0	56.8
2003	4	19	4	8.6	0.3	134.	0.9	2.5	0.0	60.3
2003	4	19	5	8.0	0.5	153.	1.7	4.0	0.0	62.4
2003	4	19	6	7.4	0.5	137.	1.4	3.1	0.0	64.9
2003	4	19	7	6.9	0.3	7.	0.8	2.2	0.0	71.0
2003	4	19	8	6.8	0.3	165.	1.1	2.2	0.0	70.9
2003	4	19	9	8.5	0.0	154.	0.9	3.1	0.0	63.5
2003	4	19	10	9.4	-0.8	4.	1.8	4.7	0.0	60.4
2003	4	19	11	9.9	-0.9	10.	2.3	4.0	0.0	59.1
2003	4	19	12	11.1	-0.9	355.	2.6	5.0	0.0	52.9
2003	4	19	13	11.6	-1.1	356.	2.6	5.3	0.0	52.3
2003	4	19	14	12.2	-0.8	13.	3.0	5.3	0.0	49.2
2003	4	19	15	15.0	-0.8	347.	4.2	7.8	0.0	32.8
2003	4	19	16	15.1	-1.0	347.	4.2	6.5	0.0	32.1
2003	4	19	17	15.2	-0.6	329.	4.2	8.1	0.0	31.1
2003	4	19	18	14.7	0.1	1.	5.6	11.8	0.0	34.8
2003	4	19	19	14.0	0.2	10320.	2.5	6.5	0.0	37.2
2003	4	19	20	12.4	0.4	149.	1.6	4.0	0.0	40.8
2003	4	19	21	10.9	0.5	165.	2.5	4.7	0.0	45.5
2003	4	19	22	9.6	0.4	159.	2.6	4.7	0.0	50.5
2003	4	19	23	8.6	0.5	165.	2.4	5.6	0.0	54.9
2003	4	19	24	7.8	0.4	146.	2.0	4.4	0.0	58.1
2003	4	20	1	7.3	0.5	160.	1.5	3.1	0.0	60.7
2003	4	20	2	6.9	0.4	166.	2.3	5.3	0.0	60.9
2003	4	20	3	6.6	0.6	150.	2.6	4.0	0.0	61.7
2003	4	20	4	6.2	0.6	148.	1.9	4.0	0.0	62.7
2003	4	20	5	6.0	0.6	156.	1.7	4.4	0.0	63.6
2003	4	20	6	5.4	0.6	161.	1.8	3.1	0.0	64.3
2003	4	20	7	5.5	0.5	165.	1.2	2.8	0.0	64.9
2003	4	20	8	5.8	0.5	167.	1.8	4.0	0.0	61.7
2003	4	20	9	7.0	0.1	158.	3.1	4.7	0.0	56.2
2003	4	20	10	9.7	-0.5	6.	1.5	3.4	0.0	47.6
2003	4	20	11	11.9	-0.4	2.	0.9	3.1	0.0	39.9
2003	4	20	12	13.0	-0.7	2.	1.4	3.1	0.0	34.2
2003	4	20	13	14.1	-0.9	6.	2.0	4.7	0.0	29.6
2003	4	20	14	14.2	-1.1	1.	4.0	7.5	0.0	29.7
2003	4	20	15	15.1	-1.2	18.	2.2	5.9	0.0	27.1
2003	4	20	16	15.0	-0.9	16.	3.3	12.4	0.0	30.7
2003	4	20	17	14.5	-0.7	4.	4.6	12.1	0.0	33.1
2003	4	20	18	14.2	-0.1	10300.	3.6	7.5	0.0	33.4
2003	4	20	19	13.4	0.4	353.	2.7	5.3	0.0	36.6
2003	4	20	20	12.9	0.5	10353.	2.7	6.5	0.0	37.6
2003	4	20	21	12.2	0.4	10262.	1.2	3.1	0.0	39.7
2003	4	20	22	12.0	0.4	10316.	1.0	2.8	0.0	39.3
2003	4	20	23	11.0	0.4	10154.	1.4	4.7	0.0	41.9
2003	4	20	24	9.8	0.7	152.	1.9	4.7	0.0	46.0
2003	4	21	1	9.0	0.4	160.	1.4	3.4	0.0	47.7
2003	4	21	2	8.6	0.6	163.	1.6	4.0	0.0	49.4
2003	4	21	3	8.1	0.8	160.	1.8	3.7	0.0	50.9
2003	4	21	4	7.7	0.6	198.	1.2	4.0	0.0	53.7
2003	4	21	5	7.3	0.7	176.	1.3	3.4	0.0	54.5
2003	4	21	6	7.2	0.9	162.	1.7	3.4	0.0	54.5
2003	4	21	7	6.9	0.6	186.	1.2	2.8	0.0	57.1
2003	4	21	8	7.3	0.7	170.	1.5	4.0	0.0	54.9
2003	4	21	9	9.0	0.3	151.	2.1	4.0	0.0	50.0
2003	4	21	10	10.9	-0.7	356.	0.8	1.9	0.0	44.3
2003	4	21	11	12.9	-0.3	7.	0.9	1.9	0.0	36.3
2003	4	21	12	14.5	-0.1	13.	0.8	1.9	0.0	30.1
2003	4	21	13	16.0	-0.5	20.	0.8	1.9	0.0	24.5
2003	4	21	14	16.0	-1.0	10.	2.1	4.0	0.0	22.3
2003	4	21	15	16.5	-0.9	14.	2.1	3.7	0.0	22.2
2003	4	21	16	16.3	-1.4	356.	2.1	4.7	0.0	24.8
2003	4	21	17	17.0	-0.7	10023.	1.2	4.7	0.0	24.0
2003	4	21	18	15.4	-0.3	10025.	0.7	3.1	0.0	26.5
2003	4	21	19	13.4	0.0	10063.	1.0	3.4	0.0	34.0
2003	4	21	20	12.5	0.2	161.	0.7	1.9	0.0	35.4
2003	4	21	21	11.2	0.5	160.	2.2	4.7	0.0	38.3
2003	4	21	22	9.7	0.4	161.	3.0	6.2	0.0	43.9
2003	4	21	23	8.6	0.4	155.	2.9	5.6	0.0	48.0
2003	4	21	24	7.9	0.4	158.	2.6	4.7	0.0	50.0

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	4	22	1	7.4	0.4	157.	2.8	5.0	0.0	51.6
2003	4	22	2	6.9	0.4	160.	2.6	5.0	0.0	52.8
2003	4	22	3	6.6	0.4	157.	2.6	4.7	0.0	53.2
2003	4	22	4	6.2	0.4	156.	2.8	5.6	0.0	54.0
2003	4	22	5	6.0	0.5	157.	1.9	4.7	0.0	54.0
2003	4	22	6	5.5	0.4	156.	1.3	2.5	0.0	55.8
2003	4	22	7	5.4	0.5	150.	1.4	3.1	0.0	55.0
2003	4	22	8	5.4	0.5	153.	1.6	3.7	0.0	54.0
2003	4	22	9	7.1	0.1	155.	1.4	3.1	0.0	47.4
2003	4	22	10	10.9	-0.3	41.	0.5	1.9	0.0	37.0
2003	4	22	11	10.2	-0.7	6.	1.4	2.5	0.0	35.8
2003	4	22	12	11.4	-0.7	4.	1.6	2.5	0.0	31.4
2003	4	22	13	12.8	-0.9	5.	1.7	2.8	0.0	28.2
2003	4	22	14	13.8	-1.4	355.	2.2	3.1	0.0	26.9
2003	4	22	15	15.0	-1.0	8.	1.9	3.1	0.0	24.2
2003	4	22	16	16.4	-0.8	23.	1.0	2.5	0.0	22.9
2003	4	22	17	16.0	-0.8	31.	1.0	2.2	0.0	24.7
2003	4	22	18	14.9	-0.2	27.	1.1	2.5	0.0	25.2
2003	4	22	19	13.5	0.3	171.	1.2	3.7	0.0	28.8
2003	4	22	20	13.0	0.4	164.	1.7	3.4	0.0	28.4
2003	4	22	21	11.6	0.5	162.	2.0	4.0	0.0	32.6
2003	4	22	22	10.0	0.4	162.	2.3	4.7	0.0	38.9
2003	4	22	23	9.2	0.4	159.	3.0	5.3	0.0	41.6
2003	4	22	24	8.3	0.4	155.	2.7	4.4	0.0	45.6
2003	4	23	1	8.0	0.5	156.	2.5	5.0	0.0	46.4
2003	4	23	2	7.3	0.5	150.	2.4	3.7	0.0	49.5
2003	4	23	3	6.9	0.5	153.	2.9	4.0	0.0	51.6
2003	4	23	4	6.8	0.4	158.	2.6	4.7	0.0	51.4
2003	4	23	5	6.6	0.4	157.	2.9	6.2	0.0	52.5
2003	4	23	6	6.6	0.5	161.	2.3	4.4	0.0	52.3
2003	4	23	7	6.3	0.5	152.	2.0	4.0	0.0	54.4
2003	4	23	8	7.0	0.3	157.	2.6	4.7	0.0	52.6
2003	4	23	9	8.6	-0.1	10008.	1.2	3.1	0.0	49.0
2003	4	23	10	9.3	-0.6	9.	1.1	3.1	0.0	46.9
2003	4	23	11	10.8	-0.4	12.	1.0	2.8	0.0	42.3
2003	4	23	12	11.6	-0.8	4.	1.7	3.1	0.0	38.3
2003	4	23	13	12.5	-1.1	1.	1.9	3.4	0.0	34.9
2003	4	23	14	13.5	-0.9	359.	1.9	3.4	0.0	32.0
2003	4	23	15	15.1	-0.4	359.	1.1	2.2	0.0	29.8
2003	4	23	16	18.3	-1.2	360.	0.9	3.1	0.0	25.7
2003	4	23	17	17.5	-0.8	331.	2.9	5.6	0.0	26.6
2003	4	23	18	16.3	-0.2	10331.	0.7	3.1	0.0	29.3
2003	4	23	19	15.7	0.2	184.	1.3	3.4	0.0	30.2
2003	4	23	20	14.6	0.4	166.	1.8	3.7	0.0	32.4
2003	4	23	21	13.1	0.3	164.	2.3	4.7	0.0	36.9
2003	4	23	22	11.8	0.3	160.	2.7	5.3	0.0	40.7
2003	4	23	23	10.8	0.4	164.	2.3	5.3	0.0	43.7
2003	4	23	24	10.0	0.5	161.	2.5	4.0	0.0	45.9
2003	4	24	1	9.0	0.6	155.	2.4	4.4	0.0	49.5
2003	4	24	2	8.4	0.5	158.	2.6	5.0	0.0	51.6
2003	4	24	3	8.1	0.6	155.	2.1	3.7	0.0	52.5
2003	4	24	4	7.5	0.6	153.	2.2	3.7	0.0	54.3
2003	4	24	5	7.2	0.7	148.	1.4	3.4	0.0	55.6
2003	4	24	6	6.8	0.6	154.	1.4	2.8	0.0	58.1
2003	4	24	7	6.8	0.6	154.	1.8	4.0	0.0	57.2
2003	4	24	8	6.5	0.4	10042.	0.7	1.9	0.0	60.1
2003	4	24	9	9.4	0.1	40.	0.4	1.6	0.0	50.8
2003	4	24	10	11.1	-0.2	18.	0.7	1.9	0.0	43.4
2003	4	24	11	12.2	-0.3	20.	0.9	2.5	0.0	38.6
2003	4	24	12	12.7	-1.0	359.	1.9	3.4	0.0	36.7
2003	4	24	13	12.1	-1.3	357.	3.3	5.6	0.0	38.0
2003	4	24	14	12.5	-1.3	357.	3.8	7.5	0.0	38.7
2003	4	24	15	12.4	-0.8	6.	5.9	7.8	0.0	45.6
2003	4	24	16	12.5	-0.6	8.	6.3	9.6	0.0	48.6
2003	4	24	17	12.6	-0.4	3.	6.5	9.3	0.0	48.4
2003	4	24	18	12.7	-0.3	355.	4.2	7.5	0.0	47.4
2003	4	24	19	12.6	0.1	1.	1.4	4.7	0.0	46.8
2003	4	24	20	12.2	0.2	11.	0.8	2.8	0.0	48.3
2003	4	24	21	11.2	0.3	167.	1.2	2.5	0.0	51.1
2003	4	24	22	10.5	0.5	166.	2.0	3.4	0.0	53.3
2003	4	24	23	9.3	0.3	159.	2.4	4.4	0.0	57.3
2003	4	24	24	8.5	0.4	157.	2.0	3.4	0.0	60.0

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	4	25	1	7.9	0.4	159.	1.9	3.4	0.0	62.3
2003	4	25	2	7.2	0.4	160.	1.4	3.1	0.0	64.4
2003	4	25	3	6.7	0.4	149.	1.9	3.1	0.0	66.2
2003	4	25	4	6.2	0.4	166.	0.9	3.4	0.0	68.3
2003	4	25	5	5.7	0.3	171.	1.4	3.1	0.0	70.4
2003	4	25	6	5.4	0.4	147.	2.3	3.7	0.0	70.2
2003	4	25	7	5.6	0.3	177.	0.9	2.2	0.0	70.5
2003	4	25	8	5.7	0.2	20200.	0.3	0.9	0.0	71.0
2003	4	25	9	8.4	0.2	131.	0.5	1.6	0.0	61.3
2003	4	25	10	9.8	-0.4	10029.	0.9	2.2	0.0	54.0
2003	4	25	11	10.1	-0.5	12.	1.2	2.2	0.0	54.4
2003	4	25	12	10.4	-1.2	1.	2.3	3.7	0.0	53.5
2003	4	25	13	10.9	-1.2	357.	2.7	4.4	0.0	52.0
2003	4	25	14	12.0	-1.2	354.	2.6	4.4	0.0	47.2
2003	4	25	15	13.1	-1.4	354.	2.6	4.4	0.0	44.0
2003	4	25	16	13.8	-1.0	0.	2.1	4.4	0.0	44.2
2003	4	25	17	15.2	-0.6	170.	3.1	7.5	0.0	36.5
2003	4	25	18	13.5	-0.1	158.	4.9	8.4	0.0	39.0
2003	4	25	19	12.6	0.1	152.	5.3	8.7	0.0	41.2
2003	4	25	20	11.5	0.2	166.	3.9	7.5	0.0	45.3
2003	4	25	21	11.3	0.3	176.	4.4	7.5	0.0	45.2
2003	4	25	22	10.2	0.3	176.	2.0	4.7	0.0	48.7
2003	4	25	23	9.1	0.3	150.	2.3	4.7	0.0	54.1
2003	4	25	24	8.1	0.4	160.	2.0	4.0	0.0	57.6
2003	4	26	1	7.5	0.4	156.	2.5	3.7	0.0	59.9
2003	4	26	2	6.8	0.4	162.	1.6	3.1	0.0	63.3
2003	4	26	3	7.2	0.6	152.	1.7	3.4	0.0	61.1
2003	4	26	4	7.3	0.4	160.	2.4	3.7	0.0	60.9
2003	4	26	5	7.3	0.5	10003.	1.4	3.7	0.0	62.6
2003	4	26	6	6.9	0.4	10174.	1.1	2.2	0.0	67.7
2003	4	26	7	7.4	0.3	178.	1.5	3.4	0.0	63.7
2003	4	26	8	8.3	0.2	157.	1.2	3.7	0.0	58.2
2003	4	26	9	9.6	0.3	353.	1.2	2.8	0.0	51.6
2003	4	26	10	9.9	0.2	10003.	1.2	3.1	0.0	51.5
2003	4	26	11	9.1	0.2	132.	2.0	7.5	0.1	58.0
2003	4	26	12	7.2	0.2	10206.	1.9	5.0	1.5	75.5
2003	4	26	13	6.7	0.1	10160.	1.2	3.4	0.8	82.3
2003	4	26	14	6.8	0.0	159.	1.3	3.1	0.8	84.6
2003	4	26	15	7.2	0.1	10046.	1.1	3.4	0.0	82.2
2003	4	26	16	7.7	0.2	159.	0.9	2.2	0.0	79.0
2003	4	26	17	7.9	0.1	10349.	1.7	5.0	0.0	79.2
2003	4	26	18	8.1	0.0	10163.	0.7	2.8	0.0	79.2
2003	4	26	19	8.1	0.1	167.	0.8	1.9	0.0	78.3
2003	4	26	20	8.1	0.3	168.	1.4	2.2	0.0	78.6
2003	4	26	21	8.0	0.3	168.	1.0	1.9	0.0	75.3
2003	4	26	22	7.4	0.4	182.	1.0	1.9	0.0	73.2
2003	4	26	23	6.6	0.4	159.	1.1	2.2	0.0	76.1
2003	4	26	24	5.9	0.3	159.	1.8	3.4	0.0	77.4
2003	4	27	1	6.3	0.4	151.	1.8	4.7	0.0	73.2
2003	4	27	2	6.2	0.4	166.	1.2	2.8	0.0	72.8
2003	4	27	3	5.9	0.4	182.	0.8	2.8	0.0	75.6
2003	4	27	4	5.6	0.4	10151.	0.8	2.8	0.0	78.6
2003	4	27	5	5.5	0.4	157.	1.7	3.1	0.0	78.2
2003	4	27	6	5.6	0.3	148.	1.0	2.2	0.0	77.6
2003	4	27	7	5.6	0.2	164.	1.3	4.0	0.0	78.0
2003	4	27	8	6.5	0.2	158.	0.5	1.9	0.0	73.9
2003	4	27	9	6.8	0.1	154.	0.7	1.6	0.0	73.4
2003	4	27	10	7.7	-0.2	9.	1.0	3.4	0.0	68.5
2003	4	27	11	8.2	-0.5	359.	3.9	6.8	0.0	62.9
2003	4	27	12	9.1	-0.8	356.	4.9	7.1	0.0	55.5
2003	4	27	13	9.3	-0.9	357.	5.0	7.5	0.0	52.9
2003	4	27	14	9.7	-0.9	355.	5.4	8.1	0.0	51.2
2003	4	27	15	8.9	-0.3	4.	8.8	12.1	0.0	60.4
2003	4	27	16	8.4	0.0	11.	8.3	11.8	0.0	62.7
2003	4	27	17	8.2	0.0	5.	6.8	9.3	0.0	66.1
2003	4	27	18	8.3	0.1	5.	5.2	6.8	0.0	64.8
2003	4	27	19	8.4	0.1	4.	4.0	6.2	0.0	63.4
2003	4	27	20	8.0	0.1	10166.	2.1	4.0	0.0	66.5
2003	4	27	21	7.3	0.2	157.	2.1	3.7	0.0	73.8
2003	4	27	22	7.0	0.2	163.	1.8	2.8	0.0	77.6
2003	4	27	23	6.9	0.2	148.	1.9	3.1	0.0	78.8
2003	4	27	24	6.9	0.2	174.	1.5	3.1	0.0	79.2

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	4	28	1	7.3	0.2	174.	1.9	3.7	0.0	76.6
2003	4	28	2	7.3	0.2	176.	1.9	4.4	0.0	76.3
2003	4	28	3	7.2	0.2	169.	2.5	5.0	0.0	76.9
2003	4	28	4	7.3	0.2	164.	3.4	6.5	0.0	75.8
2003	4	28	5	7.3	0.2	178.	2.0	5.3	0.0	74.5
2003	4	28	6	7.3	0.2	176.	1.7	4.0	0.0	73.3
2003	4	28	7	7.4	0.1	10167.	1.1	4.4	0.0	72.5
2003	4	28	8	7.5	0.0	10104.	1.3	3.1	0.0	74.4
2003	4	28	9	8.0	-0.6	10.	1.9	4.4	0.0	74.2
2003	4	28	10	8.0	-1.2	3.	4.1	6.5	0.0	76.1
2003	4	28	11	8.4	-1.1	8.	5.3	7.1	0.0	75.0
2003	4	28	12	9.4	-1.4	5.	4.9	6.8	0.0	67.9
2003	4	28	13	9.8	-1.3	4.	5.7	8.4	0.0	66.8
2003	4	28	14	10.4	-1.1	2.	6.2	8.4	0.0	62.2
2003	4	28	15	10.7	-0.6	3.	6.0	9.0	0.0	59.4
2003	4	28	16	11.3	-0.7	11.	5.0	6.8	0.0	55.9
2003	4	28	17	11.3	-0.8	5.	4.7	6.2	0.0	57.1
2003	4	28	18	11.4	-0.3	359.	4.6	7.5	0.0	55.3
2003	4	28	19	11.6	0.1	350.	4.1	6.8	0.0	53.2
2003	4	28	20	11.5	0.2	353.	2.8	5.3	0.0	52.5
2003	4	28	21	10.9	0.3	10067.	1.0	2.8	0.0	53.7
2003	4	28	22	10.2	0.3	161.	0.7	2.2	0.0	56.4
2003	4	28	23	9.6	0.3	159.	0.8	2.5	0.0	58.9
2003	4	28	24	9.3	0.3	163.	1.4	3.1	0.0	60.2
2003	4	29	1	9.2	0.4	10160.	1.3	3.4	0.0	61.4
2003	4	29	2	9.0	0.2	164.	1.8	4.7	0.0	61.9
2003	4	29	3	9.0	0.3	158.	1.5	4.0	0.0	62.6
2003	4	29	4	8.9	0.3	163.	1.5	3.7	0.0	64.6
2003	4	29	5	9.1	0.5	10168.	1.6	4.4	0.0	63.4
2003	4	29	6	9.0	0.3	174.	2.0	4.7	0.0	66.5
2003	4	29	7	8.2	0.2	168.	1.4	3.4	0.2	75.9
2003	4	29	8	7.6	0.2	167.	1.2	3.4	1.5	80.8
2003	4	29	9	7.2	0.1	10083.	1.2	3.7	2.5	85.4
2003	4	29	10	7.5	0.2	347.	2.8	5.6	0.1	77.9
2003	4	29	11	7.4	0.1	5.	4.1	8.1	0.0	78.3
2003	4	29	12	7.7	0.0	10145.	1.0	2.8	0.0	78.5
2003	4	29	13	8.3	0.0	158.	1.3	2.8	0.0	75.3
2003	4	29	14	9.1	-0.1	10208.	1.2	4.4	0.0	70.5
2003	4	29	15	8.8	0.0	156.	2.6	6.2	0.0	71.3
2003	4	29	16	7.8	0.0	155.	2.6	5.3	0.9	75.7
2003	4	29	17	7.0	0.0	210.	1.6	3.1	1.5	82.0
2003	4	29	18	6.8	0.0	198.	1.3	3.7	0.9	82.0
2003	4	29	19	6.6	0.0	10090.	0.6	1.6	0.6	84.9
2003	4	29	20	6.3	0.1	6.	3.1	5.9	0.8	87.7
2003	4	29	21	5.9	0.1	19.	1.7	3.7	1.1	89.6
2003	4	29	22	5.9	0.1	181.	0.9	5.3	0.1	90.5
2003	4	29	23	8.0	0.3	184.	4.6	7.5	0.5	82.9
2003	4	29	24	8.0	0.3	172.	7.1	13.4	0.8	82.8
2003	4	30	1	8.7	0.4	171.	9.9	17.4	0.8	74.7
2003	4	30	2	9.4	0.4	160.	10.9	17.7	0.8	68.6
2003	4	30	3	9.3	0.4	165.	10.7	18.6	0.7	68.4
2003	4	30	4	8.3	0.3	183.	9.7	15.9	1.4	75.6
2003	4	30	5	8.4	0.3	190.	10.3	15.9	0.5	73.6
2003	4	30	6	8.9	0.3	191.	10.2	14.6	0.1	69.2
2003	4	30	7	8.8	0.3	183.	10.2	15.9	0.0	70.4
2003	4	30	8	8.8	0.2	180.	10.0	14.9	0.0	68.3
2003	4	30	9	8.9	0.1	179.	9.7	14.6	0.0	67.8
2003	4	30	10	9.5	0.0	165.	9.2	15.2	0.0	62.6
2003	4	30	11	9.8	0.0	165.	8.8	16.8	0.0	60.6
2003	4	30	12	9.4	0.0	174.	8.1	14.6	0.0	65.6
2003	4	30	13	9.3	-0.2	173.	7.5	12.1	2.6	68.2
2003	4	30	14	9.9	-0.2	161.	6.8	11.5	2.9	63.4
2003	4	30	15	9.4	-0.1	146.	5.0	9.6	0.0	66.1
2003	4	30	16	9.7	0.0	164.	3.8	5.9	0.0	64.8
2003	4	30	17	8.5	0.1	163.	3.3	6.2	1.1	76.9
2003	4	30	18	7.7	0.1	161.	1.7	3.4	1.5	83.5
2003	4	30	19	7.2	0.1	154.	1.4	2.8	0.7	85.2
2003	4	30	20	6.9	0.1	156.	1.4	2.5	0.5	86.5
2003	4	30	21	6.7	0.1	163.	1.1	1.9	0.4	89.4
2003	4	30	22	6.2	0.2	159.	1.5	2.5	0.1	90.5
2003	4	30	23	6.0	0.1	163.	1.9	3.7	0.2	91.1
2003	4	30	24	5.9	0.1	145.	1.7	3.1	0.1	90.9

MANGLER(ANT)	0	0	0	0	0	240	0
MANGLER(%)	0.0	0.0	0.0	0.0	0.0	33.3	0.0

PERIODE: 1/ 5 2003 - 31/ 5 2003

Par. 1: TT 2m, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 2: dT , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 3: DD , Stasjon 1442, Odda met , Skal.faktor: 10.000
Par. 4: FF , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 5: Gust , Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 6: nedbo, Stasjon 1442, Odda met , Skal.faktor: 1.000
Par. 7: Rel-f, Stasjon 1442, Odda met , Skal.faktor: 1.000

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	5	1	1	5.8	0.2	159.	1.6	2.8	0.1	91.0
2003	5	1	2	5.8	0.2	163.	1.6	2.8	0.1	90.1
2003	5	1	3	5.9	0.2	156.	1.6	2.8	0.2	88.9
2003	5	1	4	5.8	0.2	163.	1.2	2.2	0.1	89.6
2003	5	1	5	5.8	0.2	159.	1.0	1.9	0.0	91.0
2003	5	1	6	5.8	0.2	199.	0.7	1.6	0.0	91.4
2003	5	1	7	5.9	0.0	10108.	0.5	1.9	0.0	91.5
2003	5	1	8	6.2	0.1	133.	0.6	1.2	0.2	90.9
2003	5	1	9	6.8	0.0	10034.	0.6	1.6	0.0	88.8
2003	5	1	10	6.9	-0.1	3.	1.0	2.5	0.0	86.9
2003	5	1	11	7.0	-0.1	0.	1.9	4.4	0.2	86.3
2003	5	1	12	6.9	-0.4	0.	3.7	5.6	0.0	88.7
2003	5	1	13	7.2	-0.6	2.	4.3	6.8	0.0	86.5
2003	5	1	14	7.8	-0.9	2.	4.2	6.8	0.0	83.1
2003	5	1	15	10.3	-0.6	10161.	4.5	9.3	0.0	56.0
2003	5	1	16	10.5	-0.2	166.	5.9	10.6	0.0	47.0
2003	5	1	17	10.0	-0.1	10288.	4.8	10.3	0.0	50.0
2003	5	1	18	9.7	0.0	279.	4.9	12.7	0.0	49.1
2003	5	1	19	9.2	0.1	290.	6.1	15.9	0.0	46.3
2003	5	1	20	8.2	0.1	274.	6.0	14.9	0.0	48.6
2003	5	1	21	7.3	0.2	269.	7.6	14.3	0.0	47.0
2003	5	1	22	6.4	0.2	285.	5.2	13.4	0.0	47.6
2003	5	1	23	5.8	0.2	263.	6.8	13.1	0.0	44.2
2003	5	1	24	5.3	0.2	298.	3.3	9.3	0.0	46.1
2003	5	2	1	4.8	0.3	323.	4.4	13.1	0.0	47.3
2003	5	2	2	4.5	0.2	298.	5.4	13.1	0.0	46.7
2003	5	2	3	4.2	0.2	303.	7.2	15.5	0.0	46.2
2003	5	2	4	4.0	0.2	281.	9.0	15.9	0.0	45.2
2003	5	2	5	3.9	0.2	283.	7.6	16.2	0.0	43.4
2003	5	2	6	3.4	0.2	10262.	5.5	13.1	0.0	46.3
2003	5	2	7	4.0	0.1	288.	7.5	14.6	0.0	41.9
2003	5	2	8	3.4	0.2	10142.	2.6	13.7	0.0	49.4
2003	5	2	9	5.0	-0.5	25.	1.4	3.1	0.0	41.7
2003	5	2	10	5.0	-1.0	10.	3.3	5.6	0.0	44.3
2003	5	2	11	5.3	-1.1	9.	3.8	6.5	0.0	45.7
2003	5	2	12	5.5	-1.3	3.	4.7	6.5	0.0	47.4
2003	5	2	13	6.1	-1.2	6.	4.8	7.1	0.0	45.4
2003	5	2	14	6.8	-1.4	353.	5.2	7.5	0.0	42.4
2003	5	2	15	7.1	-1.2	357.	5.6	8.1	0.0	41.5
2003	5	2	16	7.3	-1.0	3.	5.9	8.1	0.0	40.9
2003	5	2	17	7.8	-1.0	359.	4.9	7.8	0.0	37.9
2003	5	2	18	7.5	-0.6	353.	3.7	5.9	0.0	43.0
2003	5	2	19	7.4	0.1	357.	3.1	5.6	0.0	41.6
2003	5	2	20	7.2	0.3	2.	3.5	5.6	0.0	41.7
2003	5	2	21	6.9	0.4	350.	2.1	3.7	0.0	41.9
2003	5	2	22	6.4	0.4	349.	1.8	3.4	0.0	45.2
2003	5	2	23	5.8	0.3	15.	1.0	2.8	0.0	52.0
2003	5	2	24	5.5	0.3	2.	1.4	4.0	0.0	54.3
2003	5	3	1	5.0	0.2	89.	0.8	2.5	0.0	55.3
2003	5	3	2	4.7	0.2	10173.	0.4	1.2	0.0	56.6
2003	5	3	3	4.7	0.2	15.	0.9	2.8	0.0	58.6
2003	5	3	4	4.8	0.2	6.	1.6	4.0	0.0	58.1

2003	5	3	5	4.8	0.2	163.	1.5	3.4	0.0	55.7
2003	5	3	6	6.3	0.5	10008.	1.9	6.2	0.0	48.3
2003	5	3	7	8.2	0.2	328.	5.8	13.7	0.0	41.6
2003	5	3	8	8.2	0.1	316.	7.2	17.4	0.0	41.9
2003	5	3	9	7.7	0.1	301.	7.2	15.2	0.0	44.7
2003	5	3	10	7.4	0.0	292.	7.2	15.2	0.0	46.3
2003	5	3	11	7.8	-0.1	296.	6.7	15.5	0.0	42.8
2003	5	3	12	8.1	-0.1	280.	6.2	16.2	0.0	41.0
2003	5	3	13	8.2	-0.1	301.	6.8	13.4	0.0	41.0
2003	5	3	14	7.8	-0.1	316.	6.1	14.6	0.0	44.6
2003	5	3	15	7.9	-0.1	296.	4.4	10.6	0.0	45.2
2003	5	3	16	7.2	-0.1	280.	4.3	9.0	0.0	51.1
2003	5	3	17	6.8	-0.2	329.	3.9	7.8	0.0	56.4
2003	5	3	18	6.3	-0.1	16.	3.4	5.6	0.0	60.4
2003	5	3	19	5.8	0.0	13.	3.1	5.6	0.1	65.3
2003	5	3	20	5.4	0.1	20.	0.9	3.4	0.0	70.7
2003	5	3	21	4.8	0.2	147.	1.0	1.9	0.0	76.9
2003	5	3	22	4.1	0.2	168.	1.4	2.8	0.0	80.9
2003	5	3	23	3.4	0.2	159.	2.4	4.7	0.0	84.1
2003	5	3	24	3.2	0.3	164.	1.9	3.7	0.0	82.4

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	5	4	1	2.8	0.4	151.	1.4	4.0	0.0	82.0
2003	5	4	2	2.5	0.3	161.	1.6	3.1	0.0	80.4
2003	5	4	3	2.4	0.3	167.	1.7	3.1	0.0	76.4
2003	5	4	4	1.9	0.4	167.	1.8	3.1	0.0	77.9
2003	5	4	5	1.8	0.3	161.	2.2	3.7	0.0	76.4
2003	5	4	6	1.9	0.3	162.	1.7	2.8	0.0	74.3
2003	5	4	7	2.5	0.1	161.	1.6	3.1	0.0	71.2
2003	5	4	8	3.6	0.0	163.	1.7	3.1	0.0	63.9
2003	5	4	9	5.1	-0.1	168.	1.7	2.5	0.0	56.2
2003	5	4	10	6.3	-0.3	10149.	1.1	3.1	0.0	52.3
2003	5	4	11	5.5	-0.4	358.	2.2	5.9	0.0	61.0
2003	5	4	12	5.2	0.1	168.	4.0	8.4	1.2	69.1
2003	5	4	13	3.9	0.0	170.	3.4	6.2	1.4	80.6
2003	5	4	14	3.9	-0.2	119.	1.5	4.0	1.2	86.1
2003	5	4	15	4.1	-0.3	80.	1.3	2.8	2.0	88.5
2003	5	4	16	4.6	-0.2	103.	0.7	1.9	2.5	89.7
2003	5	4	17	4.9	-0.1	10118.	0.5	1.9	3.8	90.8
2003	5	4	18	6.3	0.2	176.	4.0	7.8	2.1	87.0
2003	5	4	19	6.6	0.2	10170.	2.7	6.2	0.1	84.7
2003	5	4	20	5.2	0.1	0.	2.0	4.4	0.0	90.2
2003	5	4	21	5.6	0.3	10008.	2.0	6.8	0.0	90.2
2003	5	4	22	8.3	0.6	169.	5.2	10.6	0.1	76.7
2003	5	4	23	8.2	0.5	10161.	3.2	9.3	0.0	71.0
2003	5	4	24	10.0	0.8	181.	2.7	6.8	0.0	61.4
2003	5	5	1	11.4	1.0	176.	3.2	7.8	0.0	56.7
2003	5	5	2	8.8	1.4	10131.	1.5	3.7	0.0	69.7
2003	5	5	3	7.4	0.7	357.	2.0	5.0	0.0	78.8
2003	5	5	4	7.0	0.7	10335.	1.7	4.7	0.0	83.5
2003	5	5	5	8.8	1.2	299.	1.3	3.1	0.0	76.0
2003	5	5	6	8.6	1.0	10031.	1.9	5.0	0.0	77.7
2003	5	5	7	9.9	1.1	10173.	1.1	4.4	0.0	74.3
2003	5	5	8	10.7	0.5	182.	2.0	4.4	2.1	71.9
2003	5	5	9	9.9	0.3	10188.	1.9	7.1	2.5	82.5
2003	5	5	10	9.5	0.3	47.	0.5	1.6	3.0	86.7
2003	5	5	11	9.0	0.3	10352.	1.3	3.4	5.0	90.2
2003	5	5	12	8.4	0.2	351.	1.9	4.7	3.7	92.2
2003	5	5	13	8.4	0.2	16.	0.9	2.5	1.3	93.3
2003	5	5	14	8.9	0.2	10239.	1.0	2.8	0.0	93.9
2003	5	5	15	12.1	0.5	191.	2.6	9.3	0.0	80.4
2003	5	5	16	14.4	0.2	178.	5.9	12.1	0.0	53.9
2003	5	5	17	14.1	0.1	169.	6.6	11.8	0.0	52.3
2003	5	5	18	13.6	0.2	157.	6.7	12.1	0.0	52.2
2003	5	5	19	13.2	0.2	163.	4.8	9.3	0.0	53.6
2003	5	5	20	13.0	0.3	171.	4.6	8.7	0.0	52.7
2003	5	5	21	12.7	0.3	180.	4.7	8.4	0.0	52.9
2003	5	5	22	12.0	0.3	175.	4.8	9.0	0.0	55.7
2003	5	5	23	11.2	0.3	178.	4.5	8.1	0.0	60.3
2003	5	5	24	11.0	0.3	175.	5.0	9.6	0.0	59.5
2003	5	6	1	9.8	0.3	175.	5.8	9.9	0.1	65.1
2003	5	6	2	8.9	0.4	175.	5.2	9.6	1.9	70.6

2003	5	6	3	8.5	0.4	178.	5.7	9.6	0.3	70.9
2003	5	6	4	8.5	0.4	174.	5.9	9.6	0.3	71.2
2003	5	6	5	9.6	0.4	167.	5.0	11.5	0.0	60.3
2003	5	6	6	9.4	0.3	167.	4.5	9.3	0.0	58.1
2003	5	6	7	9.4	0.3	161.	5.4	9.9	0.0	56.5
2003	5	6	8	8.3	0.2	170.	5.9	14.3	0.1	65.5
2003	5	6	9	8.1	0.2	197.	5.8	9.6	0.2	70.9
2003	5	6	10	8.5	0.2	190.	4.9	8.7	0.1	68.6
2003	5	6	11	8.9	0.2	171.	5.9	13.1	0.1	66.2
2003	5	6	12	9.0	0.0	175.	6.8	11.5	0.3	67.1
2003	5	6	13	9.5	0.0	169.	7.6	14.0	0.0	63.7
2003	5	6	14	9.5	-0.3	172.	8.3	13.4	0.0	63.6
2003	5	6	15	9.4	-0.1	175.	7.6	12.4	0.0	66.0
2003	5	6	16	9.1	0.1	171.	7.5	12.1	0.8	70.1
2003	5	6	17	8.8	0.1	176.	7.4	12.7	0.8	71.6
2003	5	6	18	9.4	0.2	167.	7.5	13.7	0.2	66.8
2003	5	6	19	8.4	0.2	163.	4.7	12.4	1.2	73.6
2003	5	6	20	7.9	0.2	10062.	2.1	4.4	0.6	76.5
2003	5	6	21	7.3	0.3	161.	1.5	3.7	0.0	79.2
2003	5	6	22	6.9	0.3	168.	2.5	5.0	0.3	78.6
2003	5	6	23	6.7	0.4	169.	1.9	4.4	0.3	76.2
2003	5	6	24	6.2	0.3	172.	2.4	5.6	0.0	78.0

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	5	7	1	6.3	0.4	174.	2.6	5.6	0.0	76.0
2003	5	7	2	7.0	0.3	165.	5.4	11.8	0.0	68.8
2003	5	7	3	6.7	0.3	148.	6.5	10.9	0.0	69.6
2003	5	7	4	6.6	0.2	150.	4.3	8.4	0.1	69.8
2003	5	7	5	6.4	0.3	177.	2.5	6.2	0.0	71.6
2003	5	7	6	6.7	0.3	164.	3.7	9.3	0.0	66.8
2003	5	7	7	7.1	0.2	159.	3.9	8.4	0.0	65.4
2003	5	7	8	7.7	0.1	168.	6.1	11.5	0.0	60.1
2003	5	7	9	7.7	0.1	163.	6.3	10.9	0.0	58.7
2003	5	7	10	7.8	0.0	169.	4.8	8.4	0.0	59.4
2003	5	7	11	7.2	-0.1	150.	5.9	10.3	0.0	68.1
2003	5	7	12	7.5	-0.1	158.	6.3	12.4	0.2	70.8
2003	5	7	13	8.1	-0.2	164.	6.1	12.4	0.0	69.2
2003	5	7	14	8.5	-0.3	157.	8.1	13.7	0.0	66.9
2003	5	7	15	9.4	-0.8	152.	5.6	13.7	0.0	62.3
2003	5	7	16	10.2	-0.7	10165.	5.4	12.1	0.0	54.6
2003	5	7	17	10.1	-0.5	161.	6.6	12.7	0.0	50.6
2003	5	7	18	9.4	-0.1	161.	6.7	11.2	0.0	56.0
2003	5	7	19	9.0	0.0	169.	7.1	12.4	0.0	57.7
2003	5	7	20	8.4	0.1	149.	4.2	9.9	0.0	61.1
2003	5	7	21	7.8	0.2	172.	2.3	4.7	0.0	63.1
2003	5	7	22	7.7	0.2	167.	4.8	10.3	0.0	63.9
2003	5	7	23	7.3	0.2	162.	4.6	7.8	0.0	64.5
2003	5	7	24	7.0	0.2	163.	4.4	7.5	0.0	67.6
2003	5	8	1	6.9	0.2	167.	4.1	6.2	0.0	67.0
2003	5	8	2	6.9	0.2	173.	3.4	5.3	0.0	66.2
2003	5	8	3	6.6	0.2	168.	3.9	8.1	0.0	68.2
2003	5	8	4	6.9	0.2	173.	4.0	6.5	0.0	65.6
2003	5	8	5	7.2	0.2	174.	3.4	6.8	0.0	61.8
2003	5	8	6	7.6	0.3	159.	1.0	3.1	0.0	55.8
2003	5	8	7	7.8	0.1	179.	2.4	5.0	0.0	54.4
2003	5	8	8	7.5	0.3	183.	2.6	7.5	0.6	58.3
2003	5	8	9	5.8	0.2	10126.	1.8	5.9	1.4	75.2
2003	5	8	10	5.7	0.1	221.	1.7	3.7	0.8	78.5
2003	5	8	11	6.2	0.3	10007.	1.2	3.1	0.4	79.3
2003	5	8	12	5.9	0.2	10009.	1.4	3.4	0.3	84.3
2003	5	8	13	7.0	0.6	176.	2.2	4.0	0.4	80.7
2003	5	8	14	9.4	0.5	184.	5.0	12.1	0.1	69.9
2003	5	8	15	9.8	0.3	191.	6.1	10.3	0.6	68.0
2003	5	8	16	9.9	0.3	178.	5.0	10.3	0.2	68.3
2003	5	8	17	9.9	0.3	182.	6.4	11.8	0.3	68.0
2003	5	8	18	9.7	0.2	179.	7.2	12.7	0.1	70.3
2003	5	8	19	9.7	0.3	195.	9.3	13.4	0.3	70.2
2003	5	8	20	9.4	0.4	184.	9.1	13.7	0.4	67.4
2003	5	8	21	8.8	0.4	184.	8.5	15.5	0.3	66.6
2003	5	8	22	8.4	0.4	185.	10.2	15.9	0.9	68.4
2003	5	8	23	8.8	0.4	164.	10.2	20.2	0.2	63.4
2003	5	8	24	8.9	0.4	161.	9.4	25.5	0.1	61.6

2003	5	9	1	8.6	0.3	149.	10.2	18.6	0.0	63.4
2003	5	9	2	9.3	0.4	147.	10.6	19.6	0.1	57.2
2003	5	9	3	8.9	0.4	148.	10.6	19.3	0.0	60.7
2003	5	9	4	8.8	0.3	148.	8.9	16.5	0.0	59.5
2003	5	9	5	8.9	0.3	159.	9.1	17.4	0.0	59.2
2003	5	9	6	8.2	0.3	145.	5.5	9.9	0.1	64.2
2003	5	9	7	7.2	0.3	150.	6.0	12.1	0.2	73.2
2003	5	9	8	7.0	0.2	145.	4.8	8.7	0.0	76.3
2003	5	9	9	7.3	0.1	169.	2.6	6.5	0.1	77.4
2003	5	9	10	7.8	-0.2	10021.	1.7	4.4	0.4	76.8
2003	5	9	11	7.8	-0.2	356.	2.9	7.5	0.8	77.2
2003	5	9	12	9.3	-0.3	10175.	5.1	13.7	0.0	63.1
2003	5	9	13	10.3	-0.6	153.	6.8	14.3	0.0	52.2
2003	5	9	14	10.1	-0.6	153.	7.5	12.4	0.0	51.7
2003	5	9	15	10.5	-0.5	175.	6.0	11.2	0.0	47.8
2003	5	9	16	11.0	-0.4	170.	4.2	8.1	0.0	43.1
2003	5	9	17	10.5	-0.5	172.	6.8	14.6	0.0	49.6
2003	5	9	18	8.4	-0.2	164.	8.4	14.9	0.0	65.6
2003	5	9	19	8.2	0.0	169.	3.9	9.0	0.0	67.2
2003	5	9	20	8.2	0.1	166.	5.1	7.5	0.0	67.9
2003	5	9	21	7.9	0.2	169.	3.8	6.2	0.0	67.7
2003	5	9	22	7.4	0.3	10183.	2.3	9.0	0.1	69.3
2003	5	9	23	7.5	0.3	166.	3.3	6.8	0.0	68.7
2003	5	9	24	7.6	0.2	169.	4.4	8.1	0.0	64.3

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	5	10	1	7.5	0.2	174.	3.6	5.9	0.0	63.3
2003	5	10	2	6.9	0.2	166.	3.4	5.9	0.0	67.9
2003	5	10	3	7.1	0.2	166.	5.3	9.6	0.0	66.7
2003	5	10	4	7.2	0.3	161.	4.9	8.1	0.0	65.4
2003	5	10	5	6.8	0.3	181.	3.8	7.1	1.4	69.2
2003	5	10	6	5.1	0.2	189.	3.0	7.5	2.9	81.2
2003	5	10	7	5.4	0.2	188.	2.7	4.7	0.4	79.1
2003	5	10	8	5.6	0.2	185.	4.8	10.9	2.8	77.9
2003	5	10	9	5.7	0.1	185.	5.9	10.9	0.7	77.0
2003	5	10	10	6.5	0.1	184.	7.8	12.7	0.5	73.8
2003	5	10	11	7.8	0.2	172.	8.6	15.5	0.3	65.1
2003	5	10	12	7.9	0.2	166.	6.9	14.3	0.9	66.8
2003	5	10	13	8.1	0.0	184.	8.4	14.9	0.0	66.2
2003	5	10	14	8.5	-0.1	156.	8.0	14.9	0.2	62.6
2003	5	10	15	8.0	0.1	185.	5.1	11.2	0.7	65.8
2003	5	10	16	8.0	-0.2	10022.	2.2	6.2	0.4	67.5
2003	5	10	17	10.3	-0.6	10188.	2.7	9.9	0.0	56.9
2003	5	10	18	9.8	-0.1	176.	4.8	8.1	0.0	52.0
2003	5	10	19	9.3	0.2	174.	6.0	10.9	0.0	55.9
2003	5	10	20	7.5	0.1	167.	7.4	13.4	0.0	69.0
2003	5	10	21	6.4	0.2	176.	2.7	5.6	0.2	79.9
2003	5	10	22	6.8	0.3	160.	3.4	5.9	0.0	73.6
2003	5	10	23	6.7	0.3	160.	4.5	7.5	0.0	66.5
2003	5	10	24	6.5	0.3	179.	4.3	7.1	0.0	67.6
2003	5	11	1	6.5	0.3	167.	4.1	7.1	0.0	67.2
2003	5	11	2	6.6	0.3	165.	3.2	6.5	0.0	66.3
2003	5	11	3	6.4	0.3	161.	5.1	7.8	0.0	66.3
2003	5	11	4	6.7	0.3	177.	4.6	6.5	0.0	63.0
2003	5	11	5	6.5	0.3	173.	4.0	6.2	0.0	61.2
2003	5	11	6	6.4	0.2	164.	4.2	6.2	0.0	61.4
2003	5	11	7	6.9	0.2	165.	3.6	5.9	0.0	57.9
2003	5	11	8	7.8	0.2	154.	3.7	7.8	0.0	52.4
2003	5	11	9	9.0	-0.1	158.	3.3	6.5	0.0	48.4
2003	5	11	10	10.1	-0.4	169.	4.0	7.8	0.0	43.5
2003	5	11	11	10.5	-0.2	168.	6.3	10.9	0.0	42.3
2003	5	11	12	10.3	0.0	190.	6.9	11.5	0.0	44.9
2003	5	11	13	9.7	0.1	195.	6.3	11.2	0.0	50.9
2003	5	11	14	9.6	0.1	172.	2.9	7.8	0.0	54.7
2003	5	11	15	8.6	0.2	10194.	3.7	9.6	0.6	65.8
2003	5	11	16	8.3	0.2	10119.	0.8	2.2	0.0	73.2
2003	5	11	17	8.4	0.3	10046.	1.4	3.4	0.2	73.4
2003	5	11	18	8.5	0.3	10184.	1.4	4.0	0.0	73.9
2003	5	11	19	9.4	0.4	149.	2.2	4.7	0.0	64.7
2003	5	11	20	9.7	0.5	162.	1.7	3.4	0.0	62.6
2003	5	11	21	10.1	0.8	170.	2.8	6.8	0.0	60.7
2003	5	11	22	11.5	0.5	209.	7.3	12.4	0.0	51.8
2003	5	11	23	11.2	0.4	203.	5.6	10.9	0.0	51.5

2003	5	11	24	10.4	0.3	176.	3.4	7.1	0.0	55.4
2003	5	12	1	9.2	0.3	167.	5.7	9.9	0.1	66.1
2003	5	12	2	7.9	0.3	172.	3.3	6.5	0.2	75.8
2003	5	12	3	7.6	0.4	166.	1.8	3.1	0.0	78.0
2003	5	12	4	7.5	0.5	344.	1.8	3.7	0.0	79.7
2003	5	12	5	7.2	0.4	10015.	1.0	2.2	0.0	81.7
2003	5	12	6	6.7	0.3	156.	1.2	2.8	0.0	84.0
2003	5	12	7	6.8	0.2	213.	1.1	2.8	0.0	85.2
2003	5	12	8	7.0	0.1	169.	1.4	2.8	0.0	84.0
2003	5	12	9	8.1	0.0	167.	1.0	2.2	0.0	78.7
2003	5	12	10	9.3	-0.2	10161.	1.0	2.5	0.0	71.1
2003	5	12	11	9.6	-0.3	10096.	1.2	3.4	0.0	68.5
2003	5	12	12	9.9	-0.4	357.	1.6	3.7	0.0	63.8
2003	5	12	13	10.5	0.0	9.	1.1	2.8	0.0	60.6
2003	5	12	14	10.6	0.2	182.	2.8	8.4	0.0	58.9
2003	5	12	15	10.4	-0.2	140.	2.0	4.7	0.0	59.8
2003	5	12	16	10.6	0.0	156.	1.5	3.4	0.0	56.5
2003	5	12	17	10.1	0.1	150.	2.5	5.9	0.0	59.1
2003	5	12	18	9.6	0.1	161.	2.1	6.8	0.0	63.6
2003	5	12	19	8.2	0.2	164.	5.1	10.9	1.4	72.2
2003	5	12	20	7.4	0.2	159.	5.0	7.8	0.0	76.5
2003	5	12	21	7.1	0.2	170.	4.8	8.7	0.6	78.8
2003	5	12	22	6.8	0.3	166.	4.1	7.8	0.1	75.6
2003	5	12	23	6.8	0.3	161.	5.7	8.7	0.2	75.4
2003	5	12	24	6.6	0.3	168.	4.2	7.5	0.0	73.4

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	5	13	1	6.6	0.3	163.	3.9	6.5	0.0	72.8
2003	5	13	2	7.0	0.3	166.	5.4	8.4	0.0	67.6
2003	5	13	3	7.6	0.3	169.	5.0	9.0	0.0	61.7
2003	5	13	4	7.3	0.3	163.	4.4	6.5	0.0	63.5
2003	5	13	5	7.3	0.3	163.	4.3	7.5	0.0	62.4
2003	5	13	6	7.7	0.3	169.	2.4	5.6	0.0	60.2
2003	5	13	7	7.4	0.1	10008.	2.3	6.2	0.0	65.8
2003	5	13	8	7.3	0.0	4.	2.2	5.6	0.0	70.1
2003	5	13	9	7.6	-0.5	359.	2.2	4.4	0.0	67.4
2003	5	13	10	7.8	-0.8	0.	3.0	5.6	0.0	66.4
2003	5	13	11	8.2	-0.8	0.	3.5	5.6	0.0	63.0
2003	5	13	12	9.2	-0.4	7.	2.7	4.7	0.0	53.4
2003	5	13	13	10.3	-0.4	31.	1.6	5.9	0.0	46.3
2003	5	13	14	9.5	-0.3	14.	4.3	10.9	0.0	51.0
2003	5	13	15	8.3	0.0	359.	6.1	9.9	0.0	57.9
2003	5	13	16	6.5	0.2	355.	4.4	8.4	1.3	72.8
2003	5	13	17	5.5	0.3	353.	3.9	7.1	3.1	78.8
2003	5	13	18	5.1	0.2	346.	3.3	5.9	2.8	82.5
2003	5	13	19	4.7	0.2	326.	2.8	6.5	3.5	82.2
2003	5	13	20	4.2	0.2	296.	2.3	4.4	4.1	84.0
2003	5	13	21	3.3	0.1	259.	2.3	6.2	3.5	85.5
2003	5	13	22	1.3	0.0	164.	3.5	7.1	2.1	89.9
2003	5	13	23	2.2	0.1	190.	2.6	5.0	0.3	89.3
2003	5	13	24	3.4	0.3	243.	1.4	4.4	0.0	85.5
2003	5	14	1	4.3	0.3	10164.	1.4	4.0	0.0	80.0
2003	5	14	2	5.0	0.3	160.	3.8	8.7	0.0	76.3
2003	5	14	3	5.2	0.3	156.	3.4	7.5	0.0	76.1
2003	5	14	4	5.1	0.2	152.	4.9	8.4	0.1	78.1
2003	5	14	5	5.0	0.2	149.	4.8	8.7	0.2	78.4
2003	5	14	6	4.3	0.1	1.	3.3	6.2	0.1	85.4
2003	5	14	7	4.1	0.0	358.	4.0	7.5	0.3	88.9
2003	5	14	8	4.3	-0.1	3.	5.5	7.8	0.1	89.0
2003	5	14	9	4.5	-0.3	0.	4.1	6.8	0.5	89.0
2003	5	14	10	4.8	-0.5	2.	2.3	4.7	1.0	89.4
2003	5	14	11	6.0	-0.2	174.	2.0	6.8	0.5	85.7
2003	5	14	12	7.4	0.1	157.	4.6	7.1	0.0	72.5
2003	5	14	13	7.8	0.0	139.	1.8	5.0	0.1	69.6
2003	5	14	14	7.8	-0.2	141.	2.4	5.9	0.1	69.9
2003	5	14	15	8.4	-0.2	10179.	1.2	3.7	0.0	65.7
2003	5	14	16	7.5	-0.5	5.	3.1	5.0	0.2	74.0
2003	5	14	17	7.6	-0.5	1.	2.9	4.4	0.0	74.4
2003	5	14	18	7.6	-0.3	2.	3.9	8.1	0.0	74.7
2003	5	14	19	7.1	0.1	0.	6.9	11.2	0.2	80.6
2003	5	14	20	6.9	0.2	359.	3.9	7.1	0.1	83.1
2003	5	14	21	7.1	0.3	351.	2.3	4.4	0.0	79.8

2003	5	14	22	6.8	0.3	17.	1.9	4.7	0.0	80.6
2003	5	14	23	6.6	0.4	10295.	0.4	1.6	0.0	81.6
2003	5	14	24	6.4	0.5	359.	1.3	2.2	0.0	82.6
2003	5	15	1	6.0	0.4	355.	1.4	2.5	0.0	85.3
2003	5	15	2	5.5	0.2	14.	1.6	4.7	0.0	87.4
2003	5	15	3	5.5	0.3	10017.	1.0	3.1	0.0	87.5
2003	5	15	4	5.0	0.3	10158.	1.6	4.4	0.0	87.2
2003	5	15	5	4.9	0.2	165.	1.3	3.4	0.0	86.2
2003	5	15	6	5.1	0.2	151.	1.1	2.5	0.0	84.1
2003	5	15	7	5.7	0.1	158.	0.6	1.6	0.0	82.0
2003	5	15	8	6.2	0.1	10167.	0.6	1.6	0.0	79.6
2003	5	15	9	7.3	-0.8	357.	1.8	5.0	0.0	73.7
2003	5	15	10	7.6	-0.5	5.	4.9	7.1	0.0	64.3
2003	5	15	11	8.2	-1.0	3.	6.2	8.7	0.0	60.9
2003	5	15	12	9.1	-1.3	1.	6.5	8.7	0.0	53.9
2003	5	15	13	9.1	-1.1	4.	6.9	9.0	0.0	58.2
2003	5	15	14	9.8	-1.4	2.	5.9	8.1	0.0	54.0
2003	5	15	15	10.6	-1.5	357.	4.5	7.1	0.0	49.6
2003	5	15	16	11.0	-1.7	356.	4.2	6.5	0.0	48.0
2003	5	15	17	11.5	-0.7	285.	6.0	10.9	0.0	41.1
2003	5	15	18	10.8	-0.2	283.	6.7	11.5	0.0	42.6
2003	5	15	19	10.7	-0.1	282.	5.1	9.0	0.0	42.9
2003	5	15	20	10.5	0.0	281.	4.9	8.4	0.0	44.5
2003	5	15	21	10.0	0.2	304.	2.9	6.5	0.0	44.9
2003	5	15	22	8.9	0.4	10341.	1.4	4.0	0.0	48.8
2003	5	15	23	7.6	0.5	155.	1.3	2.2	0.0	55.1
2003	5	15	24	6.3	0.5	165.	2.2	3.4	0.0	62.1

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	5	16	1	5.7	0.4	164.	2.1	3.1	0.0	65.9
2003	5	16	2	5.0	0.3	154.	2.2	4.4	0.0	69.0
2003	5	16	3	4.4	0.3	153.	2.0	3.4	0.0	70.6
2003	5	16	4	3.9	0.3	155.	2.1	3.4	0.0	72.3
2003	5	16	5	3.5	0.3	153.	2.1	3.4	0.0	72.7
2003	5	16	6	3.3	0.2	157.	2.2	3.1	0.0	73.6
2003	5	16	7	3.4	0.2	154.	2.0	3.4	0.0	73.2
2003	5	16	8	4.6	0.3	152.	1.8	3.1	0.0	66.9
2003	5	16	9	7.2	-0.6	26.	0.8	2.2	0.0	53.9
2003	5	16	10	7.0	-1.2	6.	2.0	3.7	0.0	53.6
2003	5	16	11	8.2	-1.8	358.	2.3	3.7	0.0	50.8
2003	5	16	12	8.9	-2.0	0.	2.9	4.4	0.0	46.2
2003	5	16	13	10.0	-2.2	0.	2.8	3.7	0.0	41.4
2003	5	16	14	10.6	-1.8	2.	2.3	3.7	0.0	40.2
2003	5	16	15	10.8	-1.0	3.	3.1	4.7	0.0	39.7
2003	5	16	16	11.0	-0.8	3.	3.2	5.0	0.0	39.2
2003	5	16	17	12.0	-1.4	3.	2.2	3.1	0.0	34.0
2003	5	16	18	11.4	-0.6	4.	2.4	3.7	0.0	38.5
2003	5	16	19	11.0	-0.1	1.	2.7	4.0	0.0	41.4
2003	5	16	20	10.7	0.0	15.	1.8	3.7	0.0	45.0
2003	5	16	21	10.3	0.2	174.	1.2	2.2	0.0	45.4
2003	5	16	22	9.4	0.3	156.	1.2	2.8	0.0	47.3
2003	5	16	23	8.4	0.2	161.	1.6	3.7	0.0	50.4
2003	5	16	24	7.0	0.3	157.	2.0	3.7	0.0	57.3
2003	5	17	1	6.2	0.3	152.	1.6	2.8	0.0	60.1
2003	5	17	2	5.4	0.3	149.	2.0	3.7	0.0	63.7
2003	5	17	3	4.8	0.3	163.	2.3	4.0	0.0	65.9
2003	5	17	4	4.4	0.3	153.	2.1	4.4	0.0	68.2
2003	5	17	5	4.2	0.2	152.	1.8	2.8	0.0	68.5
2003	5	17	6	4.7	0.2	165.	1.3	2.8	0.0	66.5
2003	5	17	7	5.7	0.1	163.	1.2	2.5	0.0	61.0
2003	5	17	8	6.2	-0.7	1.	2.1	4.0	0.0	62.4
2003	5	17	9	7.6	-1.6	0.	2.3	3.7	0.0	54.0
2003	5	17	10	8.4	-1.6	1.	2.6	4.4	0.0	49.7
2003	5	17	11	10.5	-1.3	357.	2.4	5.0	0.0	42.4
2003	5	17	12	12.8	-0.8	174.	4.6	9.6	0.0	28.7
2003	5	17	13	13.1	-0.9	179.	5.3	9.9	0.0	27.5
2003	5	17	14	13.3	-0.7	179.	6.0	10.3	0.0	26.2
2003	5	17	15	13.3	-0.4	180.	5.3	10.9	0.0	26.1
2003	5	17	16	13.4	-0.3	187.	6.3	11.2	0.0	27.4
2003	5	17	17	13.4	-0.2	188.	4.7	10.6	0.0	30.1
2003	5	17	18	13.4	-0.1	188.	3.0	7.1	0.0	32.9
2003	5	17	19	13.3	-0.1	169.	1.2	4.0	0.0	34.3

2003	5	17	20	13.0	0.0	10048.	0.9	3.4	0.0	37.8
2003	5	17	21	12.4	0.2	166.	1.5	4.7	0.0	40.7
2003	5	17	22	12.0	0.2	184.	2.8	8.4	0.0	43.6
2003	5	17	23	10.6	0.3	10244.	3.0	6.5	0.0	55.5
2003	5	17	24	10.0	0.3	10269.	1.1	2.8	0.0	61.3
2003	5	18	1	9.5	0.3	166.	1.8	3.4	0.0	64.7
2003	5	18	2	9.3	0.3	147.	1.3	2.5	0.0	65.7
2003	5	18	3	8.7	0.4	179.	1.4	2.5	0.0	70.1
2003	5	18	4	8.8	0.4	167.	1.7	3.1	0.0	70.5
2003	5	18	5	8.7	0.3	168.	2.3	5.3	0.0	71.3
2003	5	18	6	9.2	0.3	10169.	1.8	3.7	0.0	66.9
2003	5	18	7	10.0	0.3	173.	1.9	3.7	0.0	62.5
2003	5	18	8	11.2	0.2	10058.	1.3	3.7	0.0	59.0
2003	5	18	9	12.5	-0.2	10085.	1.1	4.0	0.0	53.9
2003	5	18	10	12.9	0.0	10076.	1.8	7.8	0.0	50.9
2003	5	18	11	13.5	0.0	10184.	3.6	13.1	0.0	49.2
2003	5	18	12	13.5	0.1	190.	8.1	17.7	0.0	48.9
2003	5	18	13	13.4	0.0	195.	8.6	16.2	0.0	49.8
2003	5	18	14	12.8	0.1	166.	3.4	10.6	0.0	53.7
2003	5	18	15	12.7	0.2	10160.	2.0	8.4	0.0	54.7
2003	5	18	16	12.9	0.2	10153.	2.9	9.3	0.0	53.5
2003	5	18	17	12.1	0.2	13.	1.4	4.4	0.0	58.3
2003	5	18	18	11.4	0.6	356.	2.2	4.4	0.2	64.7
2003	5	18	19	11.4	0.6	160.	1.2	2.8	0.0	64.3
2003	5	18	20	11.1	0.5	10355.	1.8	3.7	0.0	67.0
2003	5	18	21	10.5	0.4	166.	1.0	2.2	0.2	70.4
2003	5	18	22	9.4	0.3	169.	1.4	2.8	0.4	80.3
2003	5	18	23	8.8	0.2	168.	1.6	3.4	0.2	86.0
2003	5	18	24	8.6	0.3	156.	1.0	2.5	0.1	87.6

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	5	19	1	8.3	0.2	10176.	1.6	3.4	0.1	89.7
2003	5	19	2	8.1	0.2	169.	1.5	2.8	0.0	89.8
2003	5	19	3	7.8	0.3	10000.	1.7	3.4	0.0	90.9
2003	5	19	4	7.7	0.2	193.	1.2	3.4	0.0	92.2
2003	5	19	5	7.6	0.2	10189.	1.3	2.8	0.0	91.5
2003	5	19	6	7.7	0.2	177.	1.6	3.4	0.0	89.6
2003	5	19	7	8.1	0.1	133.	0.9	2.8	0.0	85.6
2003	5	19	8	8.6	0.0	170.	1.4	2.5	0.0	84.7
2003	5	19	9	9.7	-0.1	161.	1.6	3.4	0.0	78.5
2003	5	19	10	10.1	-0.2	10353.	1.5	3.7	0.0	76.1
2003	5	19	11	11.0	-0.1	158.	0.9	2.8	0.0	73.1
2003	5	19	12	11.3	-0.1	12.	1.0	2.2	0.0	67.2
2003	5	19	13	12.2	-0.1	10.	1.2	2.8	0.0	64.7
2003	5	19	14	13.0	-0.1	10355.	1.6	5.0	0.0	60.3
2003	5	19	15	11.9	0.1	167.	3.3	5.6	0.2	67.5
2003	5	19	16	11.0	0.1	164.	3.0	6.5	0.0	74.2
2003	5	19	17	10.8	0.0	149.	2.9	5.9	0.1	76.3
2003	5	19	18	9.9	0.1	155.	4.5	7.8	0.6	84.6
2003	5	19	19	9.7	0.2	175.	3.6	6.8	0.5	78.8
2003	5	19	20	9.3	0.2	176.	3.0	6.5	0.3	79.2
2003	5	19	21	8.8	0.2	150.	1.6	3.7	0.0	84.1
2003	5	19	22	8.6	0.3	179.	1.0	2.8	0.0	85.0
2003	5	19	23	8.7	0.4	163.	1.7	3.7	0.0	81.2
2003	5	19	24	8.4	0.3	149.	2.2	4.0	0.0	81.6
2003	5	20	1	8.0	0.2	10142.	1.9	3.7	0.0	83.0
2003	5	20	2	7.9	0.3	152.	1.0	2.2	0.0	84.0
2003	5	20	3	7.6	0.2	171.	0.7	1.2	0.1	85.9
2003	5	20	4	7.3	0.3	155.	1.7	4.0	0.0	87.9
2003	5	20	5	7.1	0.3	168.	1.3	2.2	0.0	88.5
2003	5	20	6	7.4	0.2	161.	1.5	2.5	0.0	86.5
2003	5	20	7	8.0	0.2	162.	0.9	2.2	0.0	83.2
2003	5	20	8	8.5	0.1	31.	0.6	1.9	0.0	80.2
2003	5	20	9	9.4	-0.3	2.	1.0	2.8	0.0	75.5
2003	5	20	10	9.1	-0.7	358.	2.4	3.7	1.4	76.1
2003	5	20	11	10.3	-0.5	15.	1.3	2.5	0.0	69.5
2003	5	20	12	11.7	-0.3	23.	1.1	2.2	0.0	61.4
2003	5	20	13	12.6	-0.2	67.	0.6	1.6	0.0	58.1
2003	5	20	14	13.3	-0.5	70.	0.9	2.5	0.0	54.9
2003	5	20	15	13.7	-0.8	10242.	2.1	4.0	0.0	48.8
2003	5	20	16	12.7	-1.6	358.	3.6	5.3	0.0	54.8
2003	5	20	17	12.4	-1.5	358.	3.1	5.0	0.0	58.3

2003	5	20	18	13.4	-0.5	359.	2.7	5.6	0.0	49.8
2003	5	20	19	13.7	0.1	354.	1.9	6.5	0.0	46.4
2003	5	20	20	14.0	0.0	297.	5.4	9.6	0.0	43.1
2003	5	20	21	12.9	0.1	10209.	2.8	8.7	0.0	51.8
2003	5	20	22	11.5	0.1	176.	1.7	4.7	0.0	62.6
2003	5	20	23	10.6	0.1	166.	2.7	5.6	0.0	68.4
2003	5	20	24	10.0	0.2	166.	3.2	6.2	0.0	70.5
2003	5	21	1	10.0	0.2	170.	3.0	5.6	0.0	69.6
2003	5	21	2	10.0	0.2	178.	2.5	5.3	0.0	69.8
2003	5	21	3	10.1	0.2	161.	2.0	4.7	0.0	69.5
2003	5	21	4	9.4	0.1	150.	2.4	5.0	0.2	75.1
2003	5	21	5	9.0	0.2	178.	2.5	5.6	0.4	79.5
2003	5	21	6	8.7	0.2	10202.	1.5	3.4	0.2	81.5
2003	5	21	7	9.0	0.2	10106.	1.0	2.5	0.0	79.6
2003	5	21	8	9.5	0.1	10093.	0.9	2.5	0.0	75.8
2003	5	21	9	9.9	0.1	186.	0.9	2.5	0.0	71.4
2003	5	21	10	10.5	0.1	161.	0.7	1.9	0.0	67.1
2003	5	21	11	10.7	-0.3	18.	1.6	4.4	0.0	65.7
2003	5	21	12	10.6	-0.4	359.	2.8	5.6	0.0	64.6
2003	5	21	13	11.3	-0.3	306.	4.0	8.4	0.0	60.1
2003	5	21	14	11.9	-0.4	148.	2.3	4.7	0.0	58.5
2003	5	21	15	10.8	-0.5	7.	4.1	8.1	0.0	63.3
2003	5	21	16	11.3	-0.4	346.	4.2	9.9	0.0	58.8
2003	5	21	17	11.8	-0.4	10011.	1.9	4.7	0.0	57.5
2003	5	21	18	11.8	-0.5	149.	2.7	9.9	0.0	57.1
2003	5	21	19	9.7	-0.3	3.	6.2	9.3	0.0	73.5
2003	5	21	20	9.4	-0.2	7.	5.5	8.4	0.0	77.2
2003	5	21	21	9.0	0.1	0.	2.6	5.3	0.3	81.0
2003	5	21	22	8.8	0.2	10060.	0.9	2.2	0.0	84.0
2003	5	21	23	8.4	0.1	10216.	1.1	2.5	0.2	84.3
2003	5	21	24	8.4	0.2	10184.	1.1	2.2	0.0	84.4

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	5	22	1	8.2	0.2	10182.	1.1	1.9	0.0	82.9
2003	5	22	2	8.0	0.2	10035.	0.5	2.2	0.0	84.0
2003	5	22	3	7.8	0.2	10180.	0.7	1.2	0.0	86.5
2003	5	22	4	7.8	0.3	163.	0.8	2.2	0.0	84.0
2003	5	22	5	7.9	0.3	178.	1.4	4.4	0.0	81.1
2003	5	22	6	8.0	0.1	178.	1.3	3.1	0.0	77.6
2003	5	22	7	8.7	0.1	174.	1.3	3.4	0.0	72.7
2003	5	22	8	8.7	-0.1	34.	1.4	3.7	0.0	74.1
2003	5	22	9	8.6	-0.2	6.	1.6	3.7	0.0	78.7
2003	5	22	10	9.1	-0.8	3.	2.1	4.7	0.0	76.6
2003	5	22	11	9.0	-1.2	3.	4.4	7.8	0.0	79.3
2003	5	22	12	9.0	-0.5	4.	5.4	8.4	0.0	80.5
2003	5	22	13	9.4	-0.6	6.	3.8	5.6	0.0	78.3
2003	5	22	14	9.7	-1.1	6.	4.9	7.5	0.0	77.6
2003	5	22	15	9.9	-0.9	7.	7.0	9.3	0.0	78.4
2003	5	22	16	10.7	-0.9	2.	4.8	7.8	0.0	71.6
2003	5	22	17	11.9	-1.6	0.	2.4	4.0	0.0	64.3
2003	5	22	18	11.6	-1.2	3.	2.5	4.0	0.0	66.0
2003	5	22	19	11.4	-0.3	349.	2.7	4.0	0.0	69.2
2003	5	22	20	11.2	-0.1	10358.	1.3	3.1	0.0	70.8
2003	5	22	21	10.7	0.1	178.	1.0	2.2	0.0	72.2
2003	5	22	22	10.3	0.2	171.	1.5	3.4	0.0	73.0
2003	5	22	23	9.5	0.3	161.	1.9	3.4	0.0	76.1
2003	5	22	24	8.9	0.3	164.	2.2	3.7	0.0	73.3
2003	5	23	1	8.9	0.4	174.	1.8	3.1	0.0	68.5
2003	5	23	2	8.9	0.3	10193.	0.9	3.4	0.0	68.2
2003	5	23	3	8.5	0.2	10153.	1.4	3.1	0.0	73.3
2003	5	23	4	8.1	0.2	171.	0.9	2.2	0.0	76.1
2003	5	23	5	8.2	0.3	183.	1.2	2.8	0.1	74.3
2003	5	23	6	8.7	0.6	167.	2.0	2.8	0.3	74.8
2003	5	23	7	8.3	0.3	158.	2.1	3.7	0.1	82.8
2003	5	23	8	8.4	0.2	172.	1.6	3.4	0.1	83.5
2003	5	23	9	8.3	0.1	158.	2.0	4.4	1.2	86.0
2003	5	23	10	8.8	0.1	179.	1.5	3.1	0.2	84.4
2003	5	23	11	9.0	-0.1	10014.	1.7	5.0	0.5	84.9
2003	5	23	12	8.7	-0.2	10133.	1.1	2.8	0.9	88.1
2003	5	23	13	8.9	-0.1	143.	1.2	2.5	0.0	87.6
2003	5	23	14	9.4	-0.1	147.	1.0	2.2	0.0	86.6
2003	5	23	15	10.4	-0.4	360.	1.3	5.0	0.0	80.5

2003	5	23	16	10.2	-0.3	6.	2.4	5.6	0.0	78.7
2003	5	23	17	10.8	-0.2	10162.	0.9	2.2	0.0	76.1
2003	5	23	18	10.5	0.0	168.	1.9	4.7	0.0	77.3
2003	5	23	19	10.4	0.1	150.	2.2	4.7	0.0	81.0
2003	5	23	20	9.9	0.1	158.	1.8	3.1	0.4	85.5
2003	5	23	21	9.4	0.1	160.	1.4	2.8	0.2	88.1
2003	5	23	22	9.0	0.2	170.	1.4	2.5	0.1	88.5
2003	5	23	23	8.6	0.2	155.	1.6	2.8	0.0	88.7
2003	5	23	24	8.5	0.2	156.	1.8	3.4	0.0	88.2
2003	5	24	1	8.3	0.2	166.	1.6	3.1	0.1	88.5
2003	5	24	2	8.1	0.2	153.	2.1	3.7	0.0	88.6
2003	5	24	3	8.2	0.3	165.	1.2	2.8	0.0	86.3
2003	5	24	4	8.0	0.3	154.	1.4	2.8	0.0	86.4
2003	5	24	5	8.0	0.2	160.	0.7	2.2	0.0	86.2
2003	5	24	6	8.0	0.2	10180.	0.6	1.2	0.0	87.4
2003	5	24	7	8.5	0.1	183.	0.6	1.6	0.0	86.1
2003	5	24	8	9.3	0.0	154.	1.0	1.9	0.0	81.8
2003	5	24	9	10.3	-0.8	10014.	1.9	4.0	0.0	76.4
2003	5	24	10	10.2	-1.2	358.	2.5	4.0	0.0	75.5
2003	5	24	11	10.7	-0.9	0.	2.5	3.7	0.0	71.3
2003	5	24	12	12.6	-0.5	45.	0.9	2.8	0.0	63.4
2003	5	24	13	14.3	0.0	181.	1.0	2.2	0.0	54.8
2003	5	24	14	15.9	-0.2	193.	1.1	2.8	0.0	42.0
2003	5	24	15	15.6	-0.4	10161.	1.4	5.6	0.0	41.7
2003	5	24	16	16.0	-0.4	172.	2.3	6.2	0.0	40.5
2003	5	24	17	15.8	-0.6	145.	2.2	5.0	0.0	41.7
2003	5	24	18	15.3	-0.2	161.	2.7	5.9	0.0	42.6
2003	5	24	19	14.5	0.1	159.	2.7	5.6	0.0	46.0
2003	5	24	20	11.6	0.2	164.	3.4	7.5	0.5	67.5
2003	5	24	21	10.5	0.1	178.	2.8	5.3	0.2	76.1
2003	5	24	22	9.8	0.1	163.	2.6	5.0	0.2	80.3
2003	5	24	23	9.0	0.1	145.	1.8	4.4	0.4	87.0
2003	5	24	24	8.8	0.1	164.	2.0	3.4	0.0	88.4

				TT 2m	dT	DD	FF	Gust	nedbor	Rel-fukt
				grader	grader	dekagrad	m/s	m/s	mm	%
2003	5	25	1	8.8	0.1	177.	1.6	3.1	0.0	87.6
2003	5	25	2	8.6	0.2	160.	1.9	4.4	0.0	88.2
2003	5	25	3	8.6	0.2	155.	2.0	4.7	0.0	88.3
2003	5	25	4	8.5	0.2	156.	1.2	2.5	0.0	87.5
2003	5	25	5	8.6	0.2	10004.	0.6	2.8	0.0	88.0
2003	5	25	6	8.6	0.2	165.	1.0	1.9	0.0	88.5
2003	5	25	7	8.9	0.0	157.	1.7	3.1	0.0	87.4
2003	5	25	8	10.2	-0.1	156.	1.3	2.8	0.0	80.0
2003	5	25	9	11.9	-0.3	10184.	0.7	2.2	0.0	71.2
2003	5	25	10	12.9	-0.9	12.	1.3	2.5	0.0	64.1
2003	5	25	11	13.3	-0.3	10051.	0.7	2.5	0.0	62.4
2003	5	25	12	13.8	-0.3	10028.	0.8	1.9	0.0	59.4
2003	5	25	13	15.9	-0.2	180.	0.7	1.6	0.0	46.4
2003	5	25	14	16.6	-0.4	10233.	0.7	2.2	0.0	41.1
2003	5	25	15	16.4	-0.4	224.	0.9	2.5	0.0	40.1
2003	5	25	16	16.5	-0.3	146.	1.1	2.8	0.0	40.1
2003	5	25	17	15.8	-0.2	10127.	2.6	6.2	0.0	43.5
2003	5	25	18	15.6	-0.4	10019.	1.3	4.7	0.0	45.3
2003	5	25	19	14.2	0.0	227.	1.9	4.4	0.0	50.4
2003	5	25	20	12.0	0.1	169.	0.9	2.2	0.7	67.2
2003	5	25	21	10.3	0.1	167.	1.3	3.4	1.0	81.7
2003	5	25	22	9.5	0.1	157.	2.1	3.7	1.1	87.0
2003	5	25	23	9.2	0.1	160.	1.9	3.7	0.1	88.2
2003	5	25	24	8.9	0.1	152.	1.7	3.1	0.5	88.5
2003	5	26	1	8.6	0.1	165.	2.3	5.0	0.5	88.9
2003	5	26	2	8.4	0.1	163.	1.1	2.8	0.1	88.7
2003	5	26	3	8.6	0.2	152.	1.1	2.2	0.0	87.0
2003	5	26	4	8.3	0.2	170.	1.2	2.5	0.0	88.9
2003	5	26	5	8.5	0.3	158.	1.0	2.8	0.0	86.7
2003	5	26	6	8.5	0.2	10088.	0.6	2.2	0.0	87.0
2003	5	26	7	8.5	0.2	137.	1.3	2.8	0.0	87.0
2003	5	26	8	9.1	-0.1	10063.	1.2	3.4	0.0	86.0
2003	5	26	9	9.6	-0.3	10135.	0.8	3.1	0.0	85.4
2003	5	26	10	9.7	-0.1	20.	0.7	3.4	0.0	83.4
2003	5	26	11	9.5	-0.4	6.	1.7	3.7	0.0	84.3
2003	5	26	12	11.3	-0.1	10149.	1.9	10.3	0.0	73.7
2003	5	26	13	12.1	-0.2	166.	6.2	10.9	0.0	60.8

2003	5	26	14	13.3	-0.8	162.	5.4	9.0	0.0	56.4
2003	5	26	15	13.4	-0.8	155.	5.5	9.3	0.0	56.3
2003	5	26	16	13.4	-0.2	176.	4.7	9.6	0.0	52.9
2003	5	26	17	13.3	-0.4	165.	2.5	8.7	0.0	55.4
2003	5	26	18	13.2	-0.2	163.	3.9	7.8	0.0	52.6
2003	5	26	19	12.8	0.0	164.	5.2	9.0	0.0	52.5
2003	5	26	20	12.7	0.1	161.	4.9	9.0	0.0	50.7
2003	5	26	21	12.6	0.2	166.	4.8	7.8	0.0	50.6
2003	5	26	22	12.1	0.2	175.	4.7	8.1	0.0	54.6
2003	5	26	23	11.8	0.2	169.	4.0	8.4	0.0	58.8
2003	5	26	24	10.7	0.2	158.	4.2	8.1	0.0	67.0
2003	5	27	1	10.1	0.2	157.	4.9	8.4	0.0	71.2
2003	5	27	2	9.5	0.2	156.	5.9	9.3	0.0	77.3
2003	5	27	3	9.1	0.2	160.	6.9	9.9	0.4	80.8
2003	5	27	4	9.4	0.3	160.	7.1	10.3	0.1	79.9
2003	5	27	5	9.4	0.3	162.	6.6	9.3	0.4	81.7
2003	5	27	6	9.7	0.2	158.	6.6	10.3	0.0	80.1
2003	5	27	7	10.6	0.2	159.	7.2	11.2	0.0	74.2
2003	5	27	8	11.2	0.1	168.	7.3	11.2	0.0	68.5
2003	5	27	9	11.4	0.1	172.	8.4	12.1	0.0	67.8
2003	5	27	10	12.0	0.1	169.	7.4	12.4	0.0	65.3
2003	5	27	11	12.9	-0.1	176.	7.9	12.7	0.0	61.1
2003	5	27	12	13.4	0.0	178.	7.5	12.1	0.0	58.8
2003	5	27	13	14.1	0.0	157.	6.6	13.1	0.0	50.8
2003	5	27	14	14.0	0.0	173.	4.8	8.4	0.0	53.2
2003	5	27	15	14.8	0.0	164.	4.5	9.3	0.0	46.8
2003	5	27	16	15.3	-0.2	178.	4.9	12.1	0.0	42.8
2003	5	27	17	14.9	-0.2	153.	5.2	11.5	0.0	44.5
2003	5	27	18	14.8	-0.1	187.	3.4	7.8	0.0	44.8
2003	5	27	19	14.0	0.1	205.	2.6	5.9	0.0	44.6
2003	5	27	20	12.9	0.2	10202.	1.2	3.4	0.0	49.0
2003	5	27	21	12.1	0.3	10200.	2.4	7.5	0.0	48.9
2003	5	27	22	11.0	0.6	178.	1.5	2.8	0.0	52.8
2003	5	27	23	10.0	0.4	178.	2.1	3.7	0.0	59.5
2003	5	27	24	9.9	0.4	217.	1.3	2.8	0.0	62.7

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	5	28	1	9.4	0.4	158.	1.1	2.8	0.0	62.6
2003	5	28	2	8.2	0.5	10097.	0.7	1.9	0.0	69.2
2003	5	28	3	7.4	0.4	162.	1.6	2.8	0.0	70.9
2003	5	28	4	6.7	0.4	160.	1.8	3.7	0.0	73.9
2003	5	28	5	6.3	0.2	159.	1.6	3.4	0.0	77.0
2003	5	28	6	6.7	0.1	164.	2.1	3.7	0.0	74.9
2003	5	28	7	7.5	0.2	178.	1.2	3.4	0.0	70.9
2003	5	28	8	8.5	-0.1	10178.	1.4	5.3	0.0	66.7
2003	5	28	9	8.8	-1.5	357.	2.8	5.0	0.0	68.1
2003	5	28	10	9.6	-1.9	0.	3.0	5.9	0.0	63.7
2003	5	28	11	11.2	-1.8	3.	2.1	3.7	0.0	53.7
2003	5	28	12	11.8	-1.8	1.	2.7	5.0	0.0	52.1
2003	5	28	13	13.0	-2.0	351.	2.5	4.4	0.0	47.7
2003	5	28	14	14.4	-1.7	5.	1.7	3.4	0.0	41.3
2003	5	28	15	17.4	-0.8	10167.	1.5	4.0	0.0	40.0
2003	5	28	16	18.4	-0.7	181.	3.2	7.1	0.0	41.9
2003	5	28	17	18.0	-0.6	163.	3.8	6.8	0.0	43.8
2003	5	28	18	17.4	-0.2	171.	5.4	9.3	0.0	44.3
2003	5	28	19	16.3	-0.1	176.	4.1	8.4	0.0	48.6
2003	5	28	20	15.5	0.1	161.	3.4	5.3	0.0	52.4
2003	5	28	21	14.9	0.1	167.	3.5	5.9	0.0	56.0
2003	5	28	22	14.5	0.1	175.	4.1	7.1	0.0	58.9
2003	5	28	23	14.0	0.2	164.	5.5	8.4	0.0	63.1
2003	5	28	24	14.2	0.2	162.	2.6	6.8	0.0	61.7
2003	5	29	1	13.6	0.1	159.	4.7	8.1	0.0	63.6
2003	5	29	2	13.0	0.1	153.	5.7	9.0	0.0	67.8
2003	5	29	3	12.8	0.1	151.	6.2	10.6	0.0	70.0
2003	5	29	4	12.3	0.1	155.	7.4	11.5	0.0	72.7
2003	5	29	5	12.0	0.1	154.	7.5	11.8	0.0	73.1
2003	5	29	6	11.8	0.1	151.	6.5	11.2	0.0	73.8
2003	5	29	7	11.9	0.1	150.	7.1	11.2	0.0	73.3
2003	5	29	8	12.0	0.1	154.	7.0	11.2	0.0	73.1
2003	5	29	9	12.9	0.1	150.	7.3	11.2	0.0	68.4
2003	5	29	10	13.5	0.2	152.	6.4	10.9	0.0	65.1
2003	5	29	11	13.8	0.1	158.	6.5	11.5	0.0	62.1

2003	5	29	12	13.5	0.0	161.	8.0	14.0	0.0	63.5
2003	5	29	13	13.0	0.0	169.	7.9	13.4	0.0	66.2
2003	5	29	14	12.9	0.0	173.	7.7	13.4	0.0	67.7
2003	5	29	15	12.4	0.0	157.	6.3	11.8	0.0	71.0
2003	5	29	16	12.4	0.0	149.	7.2	12.1	0.0	70.2
2003	5	29	17	11.9	0.1	151.	5.5	9.6	0.1	75.2
2003	5	29	18	12.3	0.1	146.	6.4	10.9	0.0	72.6
2003	5	29	19	12.0	0.0	153.	6.1	10.9	0.0	74.3
2003	5	29	20	11.4	0.1	150.	6.4	9.6	0.0	78.5
2003	5	29	21	11.3	0.1	153.	6.6	9.9	0.0	78.3
2003	5	29	22	11.4	0.2	151.	7.1	10.9	0.0	76.4
2003	5	29	23	11.2	0.1	155.	5.7	10.3	0.0	77.8
2003	5	29	24	11.0	0.1	167.	2.0	5.0	0.0	78.0
2003	5	30	1	11.1	0.2	170.	1.2	4.4	0.0	77.3
2003	5	30	2	11.0	0.2	183.	1.9	5.9	0.0	78.3
2003	5	30	3	11.1	0.2	167.	3.2	8.1	0.0	78.1
2003	5	30	4	11.2	0.2	174.	1.5	4.4	0.0	77.9
2003	5	30	5	11.1	0.2	10067.	1.2	2.8	0.0	78.4
2003	5	30	6	10.9	0.1	13.	1.4	3.7	0.0	79.7
2003	5	30	7	10.5	0.0	3.	3.0	7.1	0.0	86.0
2003	5	30	8	11.2	0.0	10068.	1.3	3.7	0.0	80.7
2003	5	30	9	11.0	-0.2	10145.	2.7	5.9	0.0	81.5
2003	5	30	10	11.3	-0.3	10346.	1.6	5.0	0.0	83.5
2003	5	30	11	12.7	-0.2	165.	1.1	1.9	0.0	74.3
2003	5	30	12	13.9	-0.5	10158.	1.3	2.8	0.0	62.9
2003	5	30	13	12.3	-1.0	1.	3.8	7.1	0.0	71.9
2003	5	30	14	15.1	-0.8	10142.	2.3	7.5	0.0	55.1
2003	5	30	15	15.7	-0.4	294.	5.8	9.3	0.0	46.7
2003	5	30	16	16.0	-0.5	282.	6.1	10.3	0.0	45.4
2003	5	30	17	15.7	-0.3	293.	5.8	9.0	0.0	45.6
2003	5	30	18	15.4	-0.2	293.	4.8	10.3	0.0	47.3
2003	5	30	19	15.0	0.1	287.	6.1	9.9	0.0	48.3
2003	5	30	20	14.8	0.1	289.	6.3	9.9	0.0	47.6
2003	5	30	21	14.4	0.2	292.	4.3	9.0	0.0	48.0
2003	5	30	22	11.8	0.6	159.	2.4	4.0	0.0	60.4
2003	5	30	23	10.6	0.4	165.	2.7	5.6	0.0	65.3
2003	5	30	24	10.0	0.4	157.	2.0	4.0	0.0	66.2

				TT 2m grader	dT grader	DD dekagrad	FF m/s	Gust m/s	nedbor mm	Rel-fukt %
2003	5	31	1	9.5	0.3	160.	2.3	3.7	0.0	70.5
2003	5	31	2	9.2	0.3	169.	2.1	3.7	0.0	71.7
2003	5	31	3	8.4	0.3	161.	1.9	3.4	0.0	74.0
2003	5	31	4	7.8	0.4	144.	1.8	3.4	0.0	76.4
2003	5	31	5	7.2	0.3	161.	1.7	3.1	0.0	78.4
2003	5	31	6	6.8	0.3	156.	2.4	4.0	0.0	80.1
2003	5	31	7	7.0	0.2	157.	1.9	3.7	0.0	79.7
2003	5	31	8	9.1	0.2	154.	1.3	3.1	0.0	71.1
2003	5	31	9	10.1	-1.2	11.	1.5	2.8	0.0	64.9
2003	5	31	10	10.8	-1.6	4.	1.9	3.1	0.0	63.3
2003	5	31	11	11.3	-1.9	356.	2.5	4.0	0.0	62.3
2003	5	31	12	12.8	-1.8	349.	2.5	5.0	0.0	58.6
2003	5	31	13	13.9	-1.9	354.	2.5	4.0	0.0	50.7
2003	5	31	14	14.0	-2.0	355.	4.0	9.0	0.0	48.4
2003	5	31	15	14.6	-0.8	7.	6.9	9.3	0.0	37.9
2003	5	31	16	15.7	-1.1	3.	5.7	8.7	0.0	33.2
2003	5	31	17	17.0	-1.4	354.	4.5	6.8	0.0	30.5
2003	5	31	18	16.9	-0.9	353.	3.6	5.9	0.0	32.1
2003	5	31	19	15.5	0.2	354.	2.3	5.3	0.0	38.6
2003	5	31	20	15.4	0.3	118.	1.0	2.8	0.0	37.7
2003	5	31	21	14.4	0.5	175.	1.0	2.5	0.0	41.4
2003	5	31	22	13.1	0.6	154.	1.8	3.4	0.0	47.6
2003	5	31	23	12.0	0.5	160.	1.8	3.4	0.0	50.9
2003	5	31	24	11.1	0.4	161.	2.2	4.4	0.0	55.6

MANGLER(ANT)	0	0	0	0	0	0	0
MANGLER(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix B

Wind statistics

Stasjon : Odda met
Periode : 01.02.03 - 31.05.03

FORDELING AV VINDRETNINGER OVER DØGNET (%)

*) Vind-	Klokkeslett								Vind-
retning	01	04	07	10	13	16	19	22	rose
30	0.9	0.9	1.9	9.3	11.2	5.7	0.9	1.9	3.4
60	0.9	0.0	2.8	2.8	1.9	0.0	0.9	0.9	1.2
90	0.9	0.0	0.0	1.9	0.0	1.9	0.9	0.0	0.9
120	0.9	1.9	3.7	0.0	2.8	0.9	0.9	0.0	1.4
150	52.3	52.3	45.8	34.6	13.1	16.0	28.0	45.8	37.8
180	30.8	24.3	26.2	15.0	16.8	17.9	29.9	33.6	23.2
210	1.9	0.9	1.9	1.9	1.9	3.8	3.7	1.9	2.0
240	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.3
270	0.0	0.9	0.0	0.0	0.0	1.9	1.9	0.9	0.9
300	0.0	0.0	3.7	0.9	1.9	0.0	3.7	2.8	1.9
330	2.8	4.7	2.8	0.9	0.9	4.7	5.6	2.8	3.2
360	8.4	12.1	9.3	30.8	48.6	46.2	21.5	9.3	22.5
Stille	0.0	1.9	1.9	1.9	0.9	0.9	0.9	0.0	1.4
Ant.obs	(107)	(107)	(107)	(107)	(107)	(106)	(107)	(107)	(2567)
Midlere vind m/s	3.0	2.8	2.4	2.5	3.2	3.3	3.2	2.8	2.9

VINDSTYRKEKLASSER FORDELT PÅ VINDRETNING (%)

Klasse I: Vindstyrke 0.5 - 2.0 m/s
Klasse II: Vindstyrke 2.1 - 4.0 m/s
Klasse III: Vindstyrke 4.1 - 6.0 m/s
Klasse IV: Vindstyrke > 6.0 m/s

*) Vind-	Klasser						Midlere
retning	I	II	III	IV	Total	Nobs	vind m/s
30	2.9	0.3	0.1	0.1	3.4	(86)	1.4
60	1.1	0.1	0.0	0.0	1.2	(32)	1.3
90	0.9	0.0	0.0	0.0	0.9	(23)	0.9
120	1.1	0.1	0.1	0.1	1.4	(35)	1.6
150	20.6	10.9	3.2	3.1	37.8	(970)	2.6
180	10.2	5.0	3.3	4.8	23.2	(596)	3.5
210	1.2	0.4	0.2	0.2	2.0	(52)	2.7
240	0.2	0.1	0.0	0.0	0.3	(7)	1.7
270	0.2	0.0	0.3	0.4	0.9	(22)	5.1
300	0.2	0.4	0.8	0.6	1.9	(49)	5.2
330	0.7	0.7	1.1	0.7	3.2	(82)	4.4
360	8.4	8.8	4.0	1.4	22.5	(578)	3.0
Stille					1.4	(35)	
Total	47.6	26.8	12.9	11.3	100.0	(2567)	
Midlere vind m/s	1.3	2.8	5.0	7.7			2.9

*) Dette tallet angir sentrum av vindsektor

Stasjon : Odda met
Periode : 01.02.03 - 28.02.03

FORDELING AV VINDRETNINGER OVER DØGNET (%)

*) Vind-retning	Klokkeslett 01	04	07	10	13	16	19	22	Vind-rose
30	0.0	6.7	6.7	6.7	26.7	7.1	0.0	0.0	3.3
60	6.7	0.0	6.7	0.0	0.0	0.0	0.0	0.0	1.1
90	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.8
120	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	1.9
150	60.0	66.7	66.7	60.0	20.0	14.3	60.0	60.0	58.2
180	26.7	20.0	20.0	26.7	6.7	21.4	40.0	20.0	19.5
210	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	1.1
240	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.3
300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
330	0.0	0.0	0.0	0.0	6.7	7.1	0.0	0.0	2.5
360	6.7	6.7	0.0	6.7	20.0	28.6	0.0	13.3	10.0
Stille	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Ant.obs	(15)	(15)	(15)	(15)	(15)	(14)	(15)	(15)	(359)
Midlere vind m/s	1.9	1.6	1.7	1.8	0.9	0.9	1.9	1.7	1.6

VINDSTYRKEKLASSER FORDELT PÅ VINDRETNING (%)

Klasse I: Vindstyrke 0.5 - 2.0 m/s
Klasse II: Vindstyrke 2.1 - 4.0 m/s
Klasse III: Vindstyrke 4.1 - 6.0 m/s
Klasse IV: Vindstyrke > 6.0 m/s

*) Vind-retning	Klasser I	II	III	IV	Total	Nobs	Midlere vind m/s
30	3.3	0.0	0.0	0.0	3.3	(12)	0.8
60	1.1	0.0	0.0	0.0	1.1	(4)	0.9
90	0.8	0.0	0.0	0.0	0.8	(3)	0.6
120	1.9	0.0	0.0	0.0	1.9	(7)	1.0
150	38.7	19.5	0.0	0.0	58.2	(209)	1.8
180	16.2	3.3	0.0	0.0	19.5	(70)	1.4
210	1.1	0.0	0.0	0.0	1.1	(4)	0.7
240	0.0	0.0	0.0	0.0	0.0	(0)	0.0
270	0.3	0.0	0.0	0.0	0.3	(1)	0.7
300	0.0	0.0	0.0	0.0	0.0	(0)	0.0
330	2.5	0.0	0.0	0.0	2.5	(9)	0.9
360	8.6	1.4	0.0	0.0	10.0	(36)	1.4
Stille					1.1	(4)	
Total	74.7	24.2	0.0	0.0	100.0	(359)	
Midlere vind m/s	1.3	2.5	0.0	0.0			1.6

*) Dette tallet angir sentrum av vindsektor

Stasjon : Odda met
Periode : 01.03.03 - 31.03.03

FORDELING AV VINDRETNINGER OVER DØGNET (%)

*) Vind-retning	Klokkeslett 01	04	07	10	13	16	19	22	Vind-rose
30	3.2	0.0	3.2	3.2	9.7	6.5	3.2	3.2	3.1
60	0.0	0.0	6.5	3.2	3.2	0.0	0.0	0.0	1.2
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
120	3.2	0.0	3.2	0.0	0.0	0.0	3.2	0.0	1.3
150	51.6	32.3	41.9	61.3	12.9	16.1	29.0	48.4	36.6
180	19.4	29.0	19.4	12.9	16.1	16.1	35.5	35.5	23.7
210	6.5	0.0	3.2	0.0	0.0	0.0	0.0	3.2	1.2
240	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
300	0.0	0.0	3.2	0.0	0.0	0.0	3.2	0.0	0.9
330	0.0	3.2	3.2	3.2	0.0	6.5	3.2	3.2	2.7
360	16.1	29.0	9.7	9.7	54.8	51.6	19.4	6.5	24.9
Stille	0.0	6.5	6.5	6.5	3.2	3.2	3.2	0.0	3.5
Ant.obs	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(744)
Midlere vind m/s	3.1	3.0	2.4	2.7	3.4	3.2	2.9	2.8	2.9

VINDSTYRKEKLASSER FORDELT PÅ VINDRETNING (%)

Klasse I: Vindstyrke 0.5 - 2.0 m/s
Klasse II: Vindstyrke 2.1 - 4.0 m/s
Klasse III: Vindstyrke 4.1 - 6.0 m/s
Klasse IV: Vindstyrke > 6.0 m/s

*) Vind-retning	Klasser I	II	III	IV	Total	Nobs	Midlere vind m/s
30	2.6	0.4	0.1	0.0	3.1	(23)	1.3
60	1.1	0.0	0.0	0.1	1.2	(9)	1.7
90	0.7	0.0	0.0	0.0	0.7	(5)	0.9
120	0.7	0.1	0.3	0.3	1.3	(10)	3.0
150	20.2	8.6	3.4	4.4	36.6	(272)	2.8
180	8.9	3.2	2.8	8.7	23.7	(176)	4.3
210	0.8	0.3	0.0	0.1	1.2	(9)	2.4
240	0.0	0.0	0.0	0.0	0.0	(0)	0.0
270	0.3	0.0	0.0	0.0	0.3	(2)	1.4
300	0.4	0.3	0.3	0.0	0.9	(7)	3.3
330	0.5	1.1	1.1	0.0	2.7	(20)	3.4
360	10.5	11.0	2.7	0.7	24.9	(185)	2.5
Stille					3.5	(26)	
Total	46.5	25.0	10.6	14.4	100.0	(744)	
Midlere vind m/s	1.2	2.8	5.1	7.6			2.9

*) Dette tallet angir sentrum av vindsektor

Stasjon : Odda met
Periode : 01.04.03 - 30.04.03

FORDELING AV VINDRETNINGER OVER DØGNET (%)

*) Vind-retning	Klokkeslett 01	04	07	10	13	16	19	22	Vind-rose
30	0.0	0.0	0.0	20.0	10.0	6.7	0.0	0.0	3.6
60	0.0	0.0	0.0	3.3	0.0	0.0	3.3	0.0	0.8
90	0.0	0.0	0.0	3.3	0.0	0.0	3.3	0.0	0.8
120	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.8
150	63.3	60.0	40.0	16.7	6.7	16.7	10.0	56.7	36.0
180	23.3	16.7	36.7	6.7	10.0	0.0	26.7	16.7	15.4
210	0.0	3.3	0.0	3.3	0.0	6.7	6.7	0.0	3.1
240	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
270	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.6
300	0.0	0.0	6.7	0.0	0.0	0.0	3.3	6.7	2.5
330	6.7	6.7	3.3	0.0	0.0	6.7	13.3	3.3	6.1
360	6.7	6.7	13.3	46.7	73.3	63.3	30.0	16.7	29.7
Stille	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Ant.obs	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(720)
Midlere vind m/s	3.5	2.9	2.4	2.4	3.3	3.6	3.4	3.0	3.1

VINDSTYRKEKLASSER FORDELT PÅ VINDRETNING (%)

Klasse I: Vindstyrke 0.5 - 2.0 m/s
Klasse II: Vindstyrke 2.1 - 4.0 m/s
Klasse III: Vindstyrke 4.1 - 6.0 m/s
Klasse IV: Vindstyrke > 6.0 m/s

*) Vind-retning	Klasser I	II	III	IV	Total	Nobs	Midlere vind m/s
30	2.8	0.4	0.1	0.3	3.6	(26)	2.0
60	0.6	0.3	0.0	0.0	0.8	(6)	1.5
90	0.8	0.0	0.0	0.0	0.8	(6)	0.9
120	0.8	0.0	0.0	0.0	0.8	(6)	1.1
150	19.9	13.2	2.2	0.7	36.0	(259)	2.2
180	8.1	3.2	1.0	3.2	15.4	(111)	3.4
210	1.7	0.8	0.6	0.0	3.1	(22)	2.5
240	0.1	0.0	0.0	0.0	0.1	(1)	1.9
270	0.1	0.0	0.1	0.3	0.6	(4)	6.2
300	0.1	0.4	1.1	0.8	2.5	(18)	5.8
330	0.4	1.1	2.4	2.2	6.1	(44)	5.7
360	8.8	10.0	7.9	3.1	29.7	(214)	3.6
Stille					0.4	(3)	
Total	44.2	29.4	15.4	10.6	100.0	(720)	
Midlere vind m/s	1.4	2.8	4.9	8.5			3.1

*) Dette tallet angir sentrum av vindsektor

Stasjon : Odda met
Periode : 01.05.03 - 31.05.03

FORDELING AV VINDRETNINGER OVER DØGNET (%)

*) Vind-retning	Klokkeslett 01	04	07	10	13	16	19	22	Vind-rose
30	0.0	0.0	0.0	6.5	6.5	3.2	0.0	3.2	3.4
60	0.0	0.0	0.0	3.2	3.2	0.0	0.0	3.2	1.7
90	3.2	0.0	0.0	3.2	0.0	3.2	0.0	0.0	1.2
120	0.0	0.0	9.7	0.0	0.0	3.2	0.0	0.0	1.6
150	38.7	58.1	45.2	12.9	16.1	16.1	29.0	25.8	30.9
180	51.6	29.0	25.8	19.4	29.0	35.5	22.6	54.8	32.1
210	0.0	0.0	3.2	3.2	6.5	0.0	6.5	3.2	2.3
240	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.8
270	0.0	3.2	0.0	0.0	0.0	6.5	3.2	0.0	2.0
300	0.0	0.0	3.2	3.2	6.5	0.0	6.5	3.2	3.2
330	3.2	6.5	3.2	0.0	0.0	0.0	3.2	3.2	1.2
360	3.2	3.2	9.7	48.4	32.3	32.3	25.8	3.2	19.2
Stille	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Ant.obs	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(744)
Midlere vind m/s	2.9	3.1	2.7	2.9	4.1	4.1	4.1	3.2	3.3

VINDSTYRKEKLASSER FORDELT PÅ VINDRETNING (%)

Klasse I: Vindstyrke 0.5 - 2.0 m/s
Klasse II: Vindstyrke 2.1 - 4.0 m/s
Klasse III: Vindstyrke 4.1 - 6.0 m/s
Klasse IV: Vindstyrke > 6.0 m/s

*) Vind-retning	Klasser I	II	III	IV	Total	Nobs	Midlere vind m/s
30	3.1	0.3	0.0	0.0	3.4	(25)	1.3
60	1.6	0.1	0.0	0.0	1.7	(13)	1.1
90	1.2	0.0	0.0	0.0	1.2	(9)	1.0
120	1.5	0.1	0.0	0.0	1.6	(12)	1.1
150	12.9	7.0	5.4	5.6	30.9	(230)	3.4
180	10.6	9.3	7.7	4.6	32.1	(239)	3.6
210	1.1	0.4	0.3	0.5	2.3	(17)	3.5
240	0.5	0.3	0.0	0.0	0.8	(6)	1.7
270	0.1	0.1	0.8	0.9	2.0	(15)	5.6
300	0.1	0.5	1.3	1.2	3.2	(24)	5.3
330	0.4	0.3	0.3	0.3	1.2	(9)	3.9
360	5.8	9.0	3.4	1.1	19.2	(143)	3.0
Stille					0.3	(2)	
Total	39.0	27.4	19.1	14.2	100.0	(744)	
Midlere vind m/s	1.4	2.9	5.0	7.3			3.3

*) Dette tallet angir sentrum av vindsektor

Stasjon : Odda met
Periode : 01.02.03 - 28.02.03
Parameter: Gust
Enhet : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

		*)Døgn-			A n t a l l		
Dato	Min	middel	Maks	Nobs	99	Null	Peak
010203	0.0	0.0	0.0	0	24	0	0
020203	0.0	0.0	0.0	0	24	0	0
030203	0.0	0.0	0.0	0	24	0	0
040203	0.0	0.0	0.0	0	24	0	0
050203	0.0	0.0	0.0	0	24	0	0
060203	0.0	0.0	0.0	0	24	0	0
070203	0.0	0.0	0.0	0	24	0	0
080203	0.0	0.0	0.0	0	24	0	0
090203	0.0	0.0	0.0	0	24	0	0
100203	0.0	0.0	0.0	0	24	0	0
110203	0.0	0.0	0.0	0	24	0	0
120203	0.0	0.0	0.0	0	24	0	0
130203	0.0	0.0	0.0	0	24	0	0
140203	1.6	3.7	6.5	24	0	0	0
150203	1.9	3.7	6.5	24	0	0	0
160203	1.2	2.9	4.7	24	0	0	0
170203	1.9	2.9	4.4	24	0	0	0
180203	1.9	3.2	5.3	24	0	0	0
190203	1.6	3.2	6.2	24	0	0	0
200203	1.6	3.3	5.0	24	0	0	0
210203	1.9	3.3	5.6	24	0	0	0
220203	1.2	3.2	5.6	24	0	0	0
230203	1.2	3.1	5.3	24	0	0	0
240203	1.6	2.8	4.4	24	0	0	0
250203	1.2	2.9	5.3	24	0	0	0
260203	2.2	3.7	5.6	24	0	0	0
270203	1.6	3.9	5.6	24	0	0	0
280203	1.6	3.1	5.0	24	0	0	0

Midlere minimum måneden : 1.6 m/s
Middelverdi for måneden : 3.3 m/s
Stand.avvik for måneden : 1.1 m/s
Midlere maksimum måneden: 5.4 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.02.03 - 28.02.03
Parameter: Gust
Enhet : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Antall Nobs	99	Null	Peak
01	3.8	1.2	6.5	15	13	0	0
02	3.7	1.2	5.6	15	13	0	0
03	3.6	0.9	5.3	15	13	0	0
04	3.1	0.9	5.0	15	13	0	0
05	3.2	0.7	4.4	15	13	0	0
06	3.6	0.6	4.7	15	13	0	0
07	3.7	1.1	5.3	15	13	0	0
08	3.3	1.2	5.6	15	13	0	0
09	3.4	1.3	5.3	15	13	0	0
10	3.6	1.3	6.2	15	13	0	0
11	3.1	1.0	5.6	15	13	0	0
12	2.7	0.9	4.4	15	13	0	0
13	2.6	0.8	4.7	15	13	0	0
14	2.9	1.3	6.5	15	13	0	0
15	2.7	1.2	6.2	15	13	0	0
16	2.3	0.6	3.4	15	13	0	0
17	2.5	0.8	4.0	15	13	0	0
18	2.8	0.8	4.4	15	13	0	0
19	3.5	1.0	5.3	15	13	0	0
20	4.0	0.9	5.0	15	13	0	0
21	3.8	1.1	6.2	15	13	0	0
22	3.5	1.0	5.6	15	13	0	0
23	3.5	0.9	5.0	15	13	0	0
24	3.6	0.9	5.0	15	13	0	0

Stasjon : Odda met
Periode : 01.02.03 - 28.02.03
Parameter: Gust
Enhet : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H		Antall obs. L-H	<H	Prosent forekomst L-H	<H	>L
0.0 -	0.4	0	0	0.00	0.00	
0.4 -	1.0	0	0	0.00	0.00	100.00
1.0 -	2.0	47	47	13.06	13.06	100.00
2.0 -	3.0	106	153	29.44	42.50	86.94
3.0 -	4.0	137	290	38.06	80.56	57.50
4.0 -	5.0	51	341	14.17	94.72	19.44
5.0 -	6.0	14	355	3.89	98.61	5.28
6.0 -	7.0	5	360	1.39	100.00	1.39
OVER	7.	0	360	0.00	100.00	0.00

Stasjon : Odda met
Periode : 01.03.03 - 31.03.03
Parameter: Gust
Enhet : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

Dato	Min	*)Døgn- middel	Maks	Nobs	Antall 99	Antall Null	Antall Peak
010303	2.2	4.7	12.7	24	0	0	0
020303	2.2	4.0	7.8	24	0	0	0
030303	1.6	2.8	5.3	24	0	0	0
040303	1.9	6.7	10.9	24	0	0	0
050303	0.0	5.2	14.9	24	0	1	1
060303	0.0	2.1	8.7	24	0	11	11
070303	4.0	10.3	16.5	24	0	0	0
080303	2.2	5.1	10.9	24	0	0	0
090303	3.4	9.5	16.5	24	0	0	0
100303	9.9	13.3	16.8	24	0	0	0
110303	2.2	7.6	13.1	24	0	0	0
120303	1.9	8.0	11.2	24	0	0	0
130303	1.6	3.3	6.2	24	0	0	0
140303	1.6	3.3	6.5	24	0	0	0
150303	1.6	2.8	6.2	24	0	0	0
160303	0.9	4.3	9.9	24	0	0	0
170303	1.6	3.6	7.5	24	0	0	0
180303	1.2	3.1	5.6	24	0	0	0
190303	1.9	4.6	11.8	24	0	0	0
200303	1.9	3.8	6.2	24	0	0	0
210303	1.6	7.8	13.1	24	0	0	0
220303	2.5	10.2	14.6	24	0	0	0
230303	1.9	4.9	9.3	24	0	0	0
240303	1.6	3.4	7.1	24	0	0	0
250303	2.2	3.2	4.7	24	0	0	0
260303	1.2	4.9	10.3	24	0	0	0
270303	1.9	5.5	9.9	24	0	0	0
280303	1.2	2.7	4.7	24	0	0	0
290303	3.1	10.5	17.4	24	0	0	0
300303	2.5	10.5	19.0	24	0	0	0
310303	2.2	6.0	16.2	24	0	0	0

Midlere minimum måneden : 2.1 m/s
Middelverdi for måneden : 5.7 m/s
Stand.avvik for måneden : 3.9 m/s
Midlere maksimum måneden: 10.7 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.03.03 - 31.03.03
Parameter: Gust
Enhet : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Nobs	Antall 99	Antall Null	Antall Peak
01	5.9	4.6	17.4	31	0	0	0
02	5.1	4.1	14.3	31	0	1	1
03	5.5	4.1	16.8	31	0	1	1
04	5.8	4.2	16.5	31	0	1	1
05	5.6	4.0	14.6	31	0	1	1
06	5.5	4.0	16.5	31	0	1	1
07	5.0	4.1	17.1	31	0	1	1
08	4.8	4.3	19.0	31	0	2	2
09	5.3	4.5	17.4	31	0	1	1
10	5.3	4.0	14.6	31	0	1	1
11	5.3	3.8	12.7	31	0	1	1
12	6.3	4.3	17.7	31	0	1	1
13	6.5	3.9	15.2	31	0	0	0
14	6.5	4.0	14.6	31	0	0	0
15	6.6	3.8	14.9	31	0	0	0
16	6.2	3.3	14.6	31	0	0	0
17	6.2	3.5	14.0	31	0	0	0
18	5.8	3.3	13.7	31	0	0	0
19	5.9	3.5	13.1	31	0	0	0
20	5.9	3.8	16.5	31	0	0	0
21	5.4	3.5	15.9	31	0	0	0
22	5.3	3.7	15.2	31	0	0	0
23	5.6	4.0	16.5	31	0	0	0
24	6.4	4.5	17.4	31	0	0	0

Stasjon : Odda met
Periode : 01.03.03 - 31.03.03
Parameter: Gust
Enhet : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H	Antall obs. L-H	Antall obs. <H	Prosent forekomst L-H	Prosent forekomst <H	Prosent forekomst >L
0.0 - 0.4	13	13	1.75	1.75	
0.4 - 1.0	1	14	0.13	1.88	98.25
1.0 - 2.0	73	87	9.81	11.69	98.12
2.0 - 3.0	121	208	16.26	27.96	88.31
3.0 - 4.0	156	364	20.97	48.92	72.04
4.0 - 5.0	78	442	10.48	59.41	51.08
5.0 - 6.0	40	482	5.38	64.78	40.59
6.0 - 7.0	38	520	5.11	69.89	35.22
7.0 - 10.0	97	617	13.04	82.93	30.11
OVER 10.	127	744	17.07	100.00	0.00

Stasjon : Odda met
Periode : 01.04.03 - 30.04.03
Parameter: Gust
Enhet : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

Dato	Min	*)Døgn- middel	Maks	Nobs	Antall 99	Antall Null	Antall Peak
010403	3.7	9.9	15.2	24	0	0	0
020403	2.5	8.4	17.4	24	0	0	0
030403	4.7	8.7	14.3	24	0	0	0
040403	3.7	14.9	22.4	24	0	0	0
050403	3.7	12.7	22.7	24	0	0	0
060403	2.8	4.9	7.5	24	0	0	0
070403	1.9	4.2	6.5	24	0	0	0
080403	2.2	4.2	7.5	24	0	0	0
090403	2.5	9.4	19.9	24	0	0	0
100403	3.4	9.0	13.4	24	0	0	0
110403	2.5	8.9	15.5	24	0	0	0
120403	1.6	5.4	9.6	24	0	0	0
130403	1.9	5.4	8.4	24	0	0	0
140403	2.2	4.2	8.4	24	0	0	0
150403	2.2	3.6	5.3	24	0	0	0
160403	1.2	3.2	6.2	24	0	0	0
170403	2.2	4.1	6.5	24	0	0	0
180403	1.2	3.5	5.3	24	0	0	0
190403	2.2	5.0	11.8	24	0	0	0
200403	2.8	5.1	12.4	24	0	0	0
210403	1.9	3.6	6.2	24	0	0	0
220403	1.9	3.6	5.6	24	0	0	0
230403	2.2	4.0	6.2	24	0	0	0
240403	1.6	4.5	9.6	24	0	0	0
250403	0.9	4.3	8.7	24	0	0	0
260403	1.9	3.3	7.5	24	0	0	0
270403	1.6	5.1	12.1	24	0	0	0
280403	2.2	5.4	9.0	24	0	0	0
290403	1.6	4.8	13.4	24	0	0	0
300403	1.9	10.7	18.6	24	0	0	0

Midlere minimum måneden : 2.3 m/s
Middelverdi for måneden : 6.1 m/s
Stand.avvik for måneden : 4.2 m/s
Midlere maksimum måneden: 11.1 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.04.03 - 30.04.03
Parameter: Gust
Enhet   : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Nobs	Antall 99	Antall Null	Antall Peak
01	6.6	4.6	19.3	30	0	0	0
02	6.5	4.7	17.7	30	0	0	0
03	6.3	4.8	18.6	30	0	0	0
04	5.8	4.4	17.1	30	0	0	0
05	5.8	4.2	16.2	30	0	0	0
06	5.2	4.5	22.4	30	0	0	0
07	5.3	4.4	20.5	30	0	0	0
08	4.9	4.7	22.7	30	0	0	0
09	4.9	3.9	17.1	30	0	0	0
10	5.4	4.0	16.8	30	0	0	0
11	6.2	4.1	16.8	30	0	0	0
12	6.0	3.5	16.2	30	0	0	0
13	6.2	3.5	15.9	30	0	0	0
14	7.0	3.7	19.3	30	0	0	0
15	7.2	3.5	19.0	30	0	0	0
16	6.9	4.0	20.2	30	0	0	0
17	6.9	3.7	19.3	30	0	0	0
18	6.8	4.4	21.1	30	0	0	0
19	6.5	4.8	19.9	30	0	0	0
20	6.1	4.1	19.6	30	0	0	0
21	6.0	4.1	20.2	30	0	0	0
22	6.2	4.6	22.4	30	0	0	0
23	6.3	4.0	20.2	30	0	0	0
24	6.1	4.2	18.6	30	0	0	0

Stasjon : Odda met
Periode : 01.04.03 - 30.04.03
Parameter: Gust
Enhet   : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H	Antall obs. L-H	Antall obs. <H	Prosent forekomst L-H	Prosent forekomst <H	Prosent forekomst >L
0.0 - 0.4	0	0	0.00	0.00	
0.4 - 1.0	1	1	0.14	0.14	100.00
1.0 - 2.0	30	31	4.17	4.31	99.86
2.0 - 3.0	96	127	13.33	17.64	95.69
3.0 - 4.0	185	312	25.69	43.33	82.36
4.0 - 5.0	100	412	13.89	57.22	56.67
5.0 - 6.0	59	471	8.19	65.42	42.78
6.0 - 7.0	39	510	5.42	70.83	34.58
7.0 - 10.0	105	615	14.58	85.42	29.17
OVER 10.	105	720	14.58	100.00	0.00

Stasjon : Odda met
Periode : 01.05.03 - 31.05.03
Parameter: Gust
Enhet : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

Dato	Min	*)Døgn- middel	Maks	Nobs	Antall 99	Antall Null	Antall Peak
010503	1.2	7.0	15.9	24	0	0	0
020503	2.8	8.6	16.2	24	0	0	0
030503	1.2	8.2	17.4	24	0	0	0
040503	1.9	4.8	10.6	24	0	0	0
050503	1.6	6.6	12.1	24	0	0	0
060503	3.7	10.0	14.3	24	0	0	0
070503	4.7	10.1	13.7	24	0	0	0
080503	3.1	9.6	25.5	24	0	0	0
090503	4.4	11.5	19.6	24	0	0	0
100503	4.7	9.5	15.5	24	0	0	0
110503	2.2	7.3	12.4	24	0	0	0
120503	2.2	5.4	10.9	24	0	0	0
130503	4.4	6.6	10.9	24	0	0	0
140503	1.6	6.1	11.2	24	0	0	0
150503	1.6	5.8	11.5	24	0	0	0
160503	2.2	3.6	5.0	24	0	0	0
170503	2.5	5.8	11.2	24	0	0	0
180503	2.2	5.9	17.7	24	0	0	0
190503	2.2	4.1	7.8	24	0	0	0
200503	1.2	4.0	9.6	24	0	0	0
210503	1.9	5.2	9.9	24	0	0	0
220503	1.2	4.4	9.3	24	0	0	0
230503	2.2	3.4	5.6	24	0	0	0
240503	1.2	3.9	7.5	24	0	0	0
250503	1.6	3.1	6.2	24	0	0	0
260503	2.2	6.2	10.9	24	0	0	0
270503	2.8	9.1	13.1	24	0	0	0
280503	1.9	5.1	9.3	24	0	0	0
290503	5.0	10.8	14.0	24	0	0	0
300503	1.9	6.3	10.3	24	0	0	0
310503	2.5	4.5	9.3	24	0	0	0

Midlere minimum måneden : 2.5 m/s
Middelverdi for måneden : 6.5 m/s
Stand.avvik for måneden : 3.8 m/s
Midlere maksimum måneden: 12.1 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.05.03 - 31.05.03
Parameter: Gust
Enhet   : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Nobs	Antall 99	Antall Null	Antall Peak
01	5.5	3.6	18.6	31	0	0	0
02	5.7	4.0	19.6	31	0	0	0
03	6.0	4.3	19.3	31	0	0	0
04	5.7	3.8	16.5	31	0	0	0
05	5.6	4.0	17.4	31	0	0	0
06	5.0	3.2	13.1	31	0	0	0
07	5.5	3.8	14.6	31	0	0	0
08	6.0	4.3	17.4	31	0	0	0
09	5.5	3.5	15.2	31	0	0	0
10	5.6	3.4	15.2	31	0	0	0
11	6.7	4.1	15.5	31	0	0	0
12	7.7	4.6	17.7	31	0	0	0
13	7.6	4.6	16.2	31	0	0	0
14	7.9	4.0	14.9	31	0	0	0
15	8.1	3.0	13.7	31	0	0	0
16	7.9	3.1	12.1	31	0	0	0
17	7.6	3.4	14.6	31	0	0	0
18	8.1	3.2	14.9	31	0	0	0
19	7.9	3.3	15.9	31	0	0	0
20	6.7	3.5	14.9	31	0	0	0
21	6.0	3.3	15.5	31	0	0	0
22	6.3	3.7	15.9	31	0	0	0
23	6.2	3.9	20.2	31	0	0	0
24	5.7	4.3	25.5	31	0	0	0

Stasjon : Odda met
Periode : 01.05.03 - 31.05.03
Parameter: Gust
Enhet   : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H	Antall obs. L-H	Antall obs. <H	Prosent forekomst L-H	Prosent forekomst <H	Prosent forekomst >L
0.0 - 0.4	0	0	0.00	0.00	
0.4 - 1.0	0	0	0.00	0.00	100.00
1.0 - 2.0	27	27	3.63	3.63	100.00
2.0 - 3.0	106	133	14.25	17.88	96.37
3.0 - 4.0	146	279	19.62	37.50	82.12
4.0 - 5.0	74	353	9.95	47.45	62.50
5.0 - 6.0	52	405	6.99	54.44	52.55
6.0 - 7.0	46	451	6.18	60.62	45.56
7.0 - 10.0	155	606	20.83	81.45	39.38
OVER 10.	138	744	18.55	100.00	0.00

Stasjon : Odda met
Periode : 01.02.03 - 28.02.03
Parameter: Vindstyrke
Enhet : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

		*)Døgn-			A n t a l l		
Dato	Min	middel	Maks	Nobs	99	Null	Peak
010203	0.0	0.0	0.0	0	24	0	0
020203	0.0	0.0	0.0	0	24	0	0
030203	0.0	0.0	0.0	0	24	0	0
040203	0.0	0.0	0.0	0	24	0	0
050203	0.0	0.0	0.0	0	24	0	0
060203	0.0	0.0	0.0	0	24	0	0
070203	0.0	0.0	0.0	0	24	0	0
080203	0.0	0.0	0.0	0	24	0	0
090203	0.0	0.0	0.0	0	24	0	0
100203	0.0	0.0	0.0	0	24	0	0
110203	0.0	0.0	0.0	0	24	0	0
120203	0.0	0.0	0.0	0	24	0	0
130203	0.0	0.0	0.0	0	24	0	0
140203	0.6	1.9	3.4	24	0	0	0
150203	0.6	1.8	3.9	24	0	0	0
160203	0.5	1.4	2.5	24	0	0	0
170203	0.7	1.5	2.7	24	0	0	0
180203	0.7	1.4	2.4	24	0	0	0
190203	0.5	1.4	3.4	24	0	0	0
200203	0.5	1.5	2.5	24	0	0	0
210203	0.5	1.5	2.7	24	0	0	0
220203	0.4	1.7	3.3	24	0	0	0
230203	0.4	1.4	2.8	24	0	0	0
240203	0.6	1.3	2.2	24	0	0	0
250203	0.4	1.3	2.8	24	0	0	0
260203	0.7	1.7	3.2	24	0	0	0
270203	0.8	2.1	3.1	24	0	0	0
280203	0.6	1.6	3.3	24	0	0	0

Midlere minimum måneden : 0.6 m/s
Middelverdi for måneden : 1.6 m/s
Stand.avvik for måneden : 0.7 m/s
Midlere maksimum måneden: 2.9 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.02.03 - 28.02.03
Parameter: Vindstyrke
Enhet : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Antall Nobs	Antall 99	Antall Null	Antall Peak
01	1.9	0.8	3.9	15	13	0	0
02	1.8	0.7	3.2	15	13	0	0
03	1.8	0.6	2.7	15	13	0	0
04	1.6	0.6	3.1	15	13	0	0
05	1.6	0.5	2.8	15	13	0	0
06	1.8	0.5	2.9	15	13	0	0
07	1.7	0.7	2.9	15	13	0	0
08	1.6	0.7	2.9	15	13	0	0
09	1.8	0.9	3.3	15	13	0	0
10	1.8	0.9	3.8	15	13	0	0
11	1.5	0.5	2.4	15	13	0	0
12	1.1	0.5	1.9	15	13	0	0
13	0.9	0.3	1.6	15	13	0	0
14	1.3	0.8	3.4	15	13	0	0
15	1.1	0.5	2.2	15	13	0	0
16	0.9	0.3	1.7	15	13	0	0
17	1.1	0.4	1.8	15	13	0	0
18	1.5	0.4	2.2	15	13	0	0
19	1.9	0.5	2.5	15	13	0	0
20	2.1	0.6	3.2	15	13	0	0
21	2.0	0.7	3.4	15	13	0	0
22	1.7	0.6	2.8	15	13	0	0
23	1.8	0.8	3.3	15	13	0	0
24	1.7	0.6	2.6	15	13	0	0

Stasjon : Odda met
Periode : 01.02.03 - 28.02.03
Parameter: Vindstyrke
Enhet : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H	Antall obs. L-H	Antall obs. <H	Prosent forekomst L-H	Prosent forekomst <H	Prosent forekomst >L
0.0 - 0.4	4	4	1.11	1.11	
0.4 - 1.0	95	99	26.39	27.50	98.89
1.0 - 2.0	174	273	48.33	75.83	72.50
2.0 - 3.0	76	349	21.11	96.94	24.17
3.0 - 4.0	11	360	3.06	100.00	3.06
OVER 4.	0	360	0.00	100.00	0.00

Stasjon : Odda met
Periode : 01.03.03 - 31.03.03
Parameter: Vindstyrke
Enhet : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

Dato	Min	*)Døgn-middel	Maks	Nobs	Antall 99	Antall Null	Antall Peak
010303	0.6	2.0	5.3	24	0	0	0
020303	0.9	2.1	3.1	24	0	0	0
030303	0.5	1.4	3.5	24	0	0	0
040303	0.7	3.9	7.7	24	0	0	0
050303	0.0	2.0	8.0	24	0	2	2
060303	0.0	0.9	4.6	24	0	11	11
070303	1.6	5.7	9.7	24	0	0	0
080303	1.2	2.3	5.7	24	0	0	0
090303	1.0	5.3	10.7	24	0	0	0
100303	5.6	7.7	10.6	24	0	0	0
110303	0.6	4.4	8.6	24	0	0	0
120303	0.9	4.4	6.3	24	0	0	0
130303	0.6	1.6	3.0	24	0	0	0
140303	0.3	1.4	3.0	24	0	0	0
150303	0.3	1.2	3.7	24	0	0	0
160303	0.4	1.8	4.4	24	0	0	0
170303	0.5	1.6	2.9	24	0	0	0
180303	0.6	1.4	3.0	24	0	0	0
190303	0.8	2.7	7.7	24	0	0	0
200303	0.7	1.8	3.1	24	0	0	0
210303	0.4	4.4	7.9	24	0	0	0
220303	1.0	6.0	9.5	24	0	0	0
230303	0.7	2.1	5.1	24	0	0	0
240303	0.6	1.6	2.8	24	0	0	0
250303	0.7	1.5	2.7	24	0	0	0
260303	0.3	2.2	6.7	24	0	0	0
270303	0.9	2.8	5.8	24	0	0	0
280303	0.4	1.2	2.8	24	0	0	0
290303	1.1	5.6	9.0	24	0	0	0
300303	1.0	4.3	10.4	24	0	0	0
310303	1.0	3.3	9.5	24	0	0	0

Midlere minimum måneden : 0.8 m/s
Middelverdi for måneden : 2.9 m/s
Stand.avvik for måneden : 2.4 m/s
Midlere maksimum måneden: 6.0 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.03.03 - 31.03.03
Parameter: Vindstyrke
Enhet : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Nobs	Antall 99	Antall Null	Antall Peak
01	3.1	2.9	10.6	31	0	0	0
02	2.7	2.6	9.3	31	0	1	1
03	2.6	2.5	9.8	31	0	1	1
04	3.0	2.7	9.7	31	0	1	1
05	2.9	2.4	8.6	31	0	1	1
06	2.7	2.1	7.6	31	0	1	1
07	2.4	2.3	8.4	31	0	1	1
08	2.4	2.2	7.8	31	0	2	2
09	2.5	2.3	8.1	31	0	2	2
10	2.7	2.4	9.1	31	0	1	1
11	2.7	2.4	8.5	31	0	1	1
12	3.2	2.4	9.3	31	0	1	1
13	3.4	2.5	9.0	31	0	0	0
14	3.6	2.6	9.0	31	0	0	0
15	3.5	2.5	8.3	31	0	0	0
16	3.2	2.3	9.5	31	0	0	0
17	2.9	1.9	7.4	31	0	0	0
18	2.9	2.0	8.0	31	0	0	0
19	2.9	1.9	7.7	31	0	0	0
20	3.0	2.2	9.1	31	0	0	0
21	2.8	2.3	10.7	31	0	0	0
22	2.8	2.4	9.8	31	0	0	0
23	2.9	2.3	9.7	31	0	0	0
24	3.4	2.8	10.5	31	0	0	0

Stasjon : Odda met
Periode : 01.03.03 - 31.03.03
Parameter: Vindstyrke
Enhet : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H	Antall obs. L-H	Antall obs. <H	Prosent forekomst L-H	Prosent forekomst <H	Prosent forekomst >L
0.0 - 0.4	26	26	3.49	3.49	
0.4 - 1.0	131	157	17.61	21.10	96.51
1.0 - 2.0	215	372	28.90	50.00	78.90
2.0 - 3.0	137	509	18.41	68.41	50.00
3.0 - 4.0	49	558	6.59	75.00	31.59
4.0 - 5.0	36	594	4.84	79.84	25.00
5.0 - 6.0	43	637	5.78	85.62	20.16
6.0 - 7.0	42	679	5.65	91.26	14.38
7.0 - 10.0	61	740	8.20	99.46	8.74
OVER 10.	4	744	0.54	100.00	0.00

Stasjon : Odda met
Periode : 01.04.03 - 30.04.03
Parameter: Vindstyrke
Enhet   : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

		*)Døgn-			A n t a l l		
Dato	Min	middel	Maks	Nobs	99	Null	Peak
010403	1.0	5.1	10.0	24	0	0	0
020403	0.8	4.1	9.6	24	0	0	0
030403	2.0	4.4	8.4	24	0	0	0
040403	1.4	7.7	12.6	24	0	0	0
050403	1.8	6.5	11.7	24	0	0	0
060403	1.2	2.7	5.3	24	0	0	0
070403	1.0	2.6	4.9	24	0	0	0
080403	1.0	2.2	5.4	24	0	0	0
090403	0.9	3.9	9.9	24	0	0	0
100403	1.3	4.0	7.4	24	0	0	0
110403	0.7	3.6	6.1	24	0	0	0
120403	0.8	2.9	6.2	24	0	0	0
130403	1.0	3.1	6.3	24	0	0	0
140403	0.6	2.1	4.0	24	0	0	0
150403	1.1	1.9	2.8	24	0	0	0
160403	0.5	1.7	4.1	24	0	0	0
170403	0.9	2.1	3.6	24	0	0	0
180403	0.4	1.6	2.9	24	0	0	0
190403	0.8	2.4	5.6	24	0	0	0
200403	0.9	2.2	4.6	24	0	0	0
210403	0.7	1.6	3.0	24	0	0	0
220403	0.5	1.8	3.0	24	0	0	0
230403	0.7	2.0	2.9	24	0	0	0
240403	0.4	2.4	6.5	24	0	0	0
250403	0.3	2.2	5.3	24	0	0	0
260403	0.7	1.4	2.5	24	0	0	0
270403	0.5	3.0	8.8	24	0	0	0
280403	0.7	3.1	6.2	24	0	0	0
290403	0.6	2.1	7.1	24	0	0	0
300403	1.1	6.4	10.9	24	0	0	0

Midlere minimum måneden :   0.9 m/s
Middelverdi for måneden :   3.1 m/s
Stand.avvik for måneden :   2.3 m/s
Midlere maksimum måneden: 6.3 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.04.03 - 30.04.03
Parameter: Vindstyrke
Enhet : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Nobs	Antall 99	Antall Null	Antall Peak
01	3.5	2.6	10.0	30	0	0	0
02	3.3	2.6	10.9	30	0	0	0
03	3.1	2.6	10.7	30	0	0	0
04	2.9	2.6	9.7	30	0	0	0
05	2.7	2.2	10.3	30	0	0	0
06	2.5	2.1	10.2	30	0	0	0
07	2.4	2.4	10.4	30	0	0	0
08	2.3	2.6	11.7	30	0	0	0
09	2.5	2.4	9.9	30	0	0	0
10	2.4	2.2	9.2	30	0	0	0
11	3.1	2.4	9.9	30	0	0	0
12	3.2	1.8	8.1	30	0	0	0
13	3.3	1.8	7.5	30	0	0	0
14	3.9	2.1	10.0	30	0	0	0
15	4.0	2.3	11.8	30	0	0	0
16	3.6	2.4	11.7	30	0	0	0
17	3.6	2.3	11.2	30	0	0	0
18	3.5	2.6	12.6	30	0	0	0
19	3.4	2.7	11.6	30	0	0	0
20	3.2	2.6	12.2	30	0	0	0
21	2.8	2.1	11.3	30	0	0	0
22	3.0	2.3	11.9	30	0	0	0
23	3.0	1.8	8.2	30	0	0	0
24	3.1	2.0	8.4	30	0	0	0

Stasjon : Odda met
Periode : 01.04.03 - 30.04.03
Parameter: Vindstyrke
Enhet : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H	Antall obs. L-H	Antall obs. <H	Prosent forekomst L-H	Prosent forekomst <H	Prosent forekomst >L
0.0 - 0.4	3	3	0.42	0.42	
0.4 - 1.0	78	81	10.83	11.25	99.58
1.0 - 2.0	240	321	33.33	44.58	88.75
2.0 - 3.0	144	465	20.00	64.58	55.42
3.0 - 4.0	68	533	9.44	74.03	35.42
4.0 - 5.0	69	602	9.58	83.61	25.97
5.0 - 6.0	42	644	5.83	89.44	16.39
6.0 - 7.0	22	666	3.06	92.50	10.56
7.0 - 10.0	39	705	5.42	97.92	7.50
OVER 10.	15	720	2.08	100.00	0.00

Stasjon : Odda met
Periode : 01.05.03 - 31.05.03
Parameter: Vindstyrke
Enhet : m/s

DØGNLIGE MINIMUM, MIDDEL- OG MAKSIMUMVERDIER

		*)Døgn-			A n t a l l		
Dato	Min	middel	Maks	Nobs	99	Null	Peak
010503	0.5	3.3	7.6	24	0	0	0
020503	1.0	4.4	9.0	24	0	0	0
030503	0.4	3.6	7.2	24	0	0	0
040503	0.5	2.2	5.2	24	0	0	0
050503	0.5	3.0	6.7	24	0	0	0
060503	1.5	5.3	8.3	24	0	0	0
070503	2.3	5.2	8.1	24	0	0	0
080503	1.0	5.0	10.2	24	0	0	0
090503	1.7	5.9	10.6	24	0	0	0
100503	2.2	5.0	8.6	24	0	0	0
110503	0.8	3.9	7.3	24	0	0	0
120503	1.0	2.6	5.7	24	0	0	0
130503	1.4	3.3	6.1	24	0	0	0
140503	0.4	3.2	6.9	24	0	0	0
150503	0.6	3.4	6.9	24	0	0	0
160503	0.8	2.1	3.2	24	0	0	0
170503	0.9	2.8	6.3	24	0	0	0
180503	1.0	2.4	8.6	24	0	0	0
190503	0.9	1.9	4.5	24	0	0	0
200503	0.6	1.9	5.4	24	0	0	0
210503	0.7	2.4	6.2	24	0	0	0
220503	0.5	2.4	7.0	24	0	0	0
230503	0.9	1.5	2.4	24	0	0	0
240503	0.6	1.8	3.4	24	0	0	0
250503	0.6	1.3	2.6	24	0	0	0
260503	0.6	3.0	6.2	24	0	0	0
270503	1.2	5.2	8.4	24	0	0	0
280503	0.7	2.6	5.5	24	0	0	0
290503	2.0	6.5	8.0	24	0	0	0
300503	1.1	3.1	6.3	24	0	0	0
310503	1.0	2.5	6.9	24	0	0	0

Midlere minimum måneden : 1.0 m/s
Middelverdi for måneden : 3.3 m/s
Stand.avvik for måneden : 2.2 m/s
Midlere maksimum måneden: 6.6 m/s

*) Døgnet er midlet fra kl 01 - 24

Stasjon : Odda met
Periode : 01.05.03 - 31.05.03
Parameter: Vindstyrke
Enhet : m/s

MIDLERE DØGNFORDELING

Time	Middel	Stand. avvik	Maks.	Nobs	Antall 99	Antall Null	Antall Peak
01	2.9	2.0	10.2	31	0	0	0
02	2.9	2.2	10.6	31	0	0	0
03	3.2	2.4	10.6	31	0	0	0
04	3.1	2.4	9.0	31	0	0	0
05	2.8	2.3	9.1	31	0	0	0
06	2.5	1.7	6.6	31	0	0	0
07	2.7	2.1	7.5	31	0	0	0
08	2.7	2.2	7.3	31	0	0	0
09	2.7	2.2	8.4	31	0	0	0
10	2.9	2.1	7.8	31	0	0	0
11	3.3	2.3	8.6	31	0	0	0
12	3.9	2.4	8.1	31	0	0	0
13	4.1	2.6	8.6	31	0	0	0
14	4.0	2.4	8.3	31	0	0	0
15	4.1	2.0	7.6	31	0	0	0
16	4.1	1.8	7.5	31	0	0	0
17	3.8	1.9	7.4	31	0	0	0
18	4.1	1.9	8.4	31	0	0	0
19	4.1	2.0	9.3	31	0	0	0
20	3.6	2.2	9.1	31	0	0	0
21	2.9	1.9	8.5	31	0	0	0
22	3.2	2.2	10.2	31	0	0	0
23	3.2	2.1	10.2	31	0	0	0
24	2.7	1.7	9.4	31	0	0	0

Stasjon : Odda met
Periode : 01.05.03 - 31.05.03
Parameter: Vindstyrke
Enhet : m/s

FREKVENSFORDELING I INTERVALLER

Intervall L - H	Antall obs. L-H	Antall obs. <H	Prosent forekomst L-H	Prosent forekomst <H	Prosent forekomst >L
0.0 - 0.4	2	2	0.27	0.27	
0.4 - 1.0	74	76	9.95	10.22	99.73
1.0 - 2.0	216	292	29.03	39.25	89.78
2.0 - 3.0	132	424	17.74	56.99	60.75
3.0 - 4.0	72	496	9.68	66.67	43.01
4.0 - 5.0	81	577	10.89	77.55	33.33
5.0 - 6.0	61	638	8.20	85.75	22.45
6.0 - 7.0	52	690	6.99	92.74	14.25
7.0 - 10.0	49	739	6.59	99.33	7.26
OVER 10.	5	744	0.67	100.00	0.00

Appendix C

Stability

Stasjon : Odda met
Parameter: Temperatur differanse (DT)
Enhet : Grader C
Periode : 01.02.03 - 31.05.03

STABILITETSKLASSER (%) FORDELT OVER DØGNET

Klasse I: Ustabil DT < -0.6 Grader C
Klasse II: Nøytral -0.6 < DT < 0.2 Grader C
Klasse III: Lett stabil 0.2 < DT < 0.5 Grader C
Klasse IV: Stabil 0.5 < DT Grader C

	Klasser			
Time	I	II	III	IV
01	0.0	24.3	68.2	7.5
02	0.0	24.3	67.3	8.4
03	0.0	21.5	66.4	12.1
04	0.0	23.4	61.7	15.0
05	0.0	24.3	63.6	12.1
06	0.0	25.2	63.6	11.2
07	0.0	41.1	50.5	8.4
08	0.9	47.7	45.8	5.6
09	5.6	63.6	28.0	2.8
10	12.1	72.9	13.1	1.9
11	22.4	68.2	8.4	0.9
12	35.5	61.7	2.8	0.0
13	38.3	57.9	2.8	0.9
14	35.5	61.7	1.9	0.9
15	29.9	62.6	6.5	0.9
16	25.2	58.9	15.0	0.9
17	16.8	65.4	15.0	2.8
18	2.8	71.0	21.5	4.7
19	0.0	52.3	40.2	7.5
20	0.0	41.1	48.6	10.3
21	0.0	36.4	50.5	13.1
22	0.0	28.0	62.6	9.3
23	0.0	24.3	63.6	12.1
24	0.0	25.2	67.3	7.5
Total	9.4	45.1	38.9	6.5

Antall obs : 2568
Manglende obs: 312

Kummulerte stabilitetsklasser (%) fordelt over døgnet

Time	IV	III	II	I
01	7.5	75.7	100.0	100.0
02	8.4	75.7	100.0	100.0
03	12.1	78.5	100.0	100.0
04	15.0	76.6	100.0	100.0
05	12.1	75.7	100.0	100.0
06	11.2	74.8	100.0	100.0
07	8.4	58.9	100.0	100.0
08	5.6	51.4	99.1	100.0
09	2.8	30.8	94.4	100.0
10	1.9	15.0	87.9	100.0
11	0.9	9.3	77.6	100.0
12	0.0	2.8	64.5	100.0
13	0.9	3.7	61.7	100.0
14	0.9	2.8	64.5	100.0
15	0.9	7.5	70.1	100.0
16	0.9	15.9	74.8	100.0
17	2.8	17.8	83.2	100.0
18	4.7	26.2	97.2	100.0
19	7.5	47.7	100.0	100.0
20	10.3	58.9	100.0	100.0
21	13.1	63.6	100.0	100.0
22	9.3	72.0	100.0	100.0
23	12.1	75.7	100.0	100.0
24	7.5	74.8	100.0	100.0

Stasjon : Odda met
Parameter: Temperatur differanse (DT)
Enhet : Grader C
Periode : 01.02.03 - 28.02.03

STABILITETSKLASSER (%) FORDELT OVER DØGNET

Klasse I: Ustabil DT < -0.6 Grader C
Klasse II: Nøytral -0.6 < DT < 0.2 Grader C
Klasse III: Lett stabil 0.2 < DT < 0.5 Grader C
Klasse IV: Stabil 0.5 < DT Grader C

	Klasser			
Time	I	II	III	IV
01	0.0	20.0	60.0	20.0
02	0.0	20.0	53.3	26.7
03	0.0	20.0	46.7	33.3
04	0.0	20.0	53.3	26.7
05	0.0	26.7	53.3	20.0
06	0.0	13.3	60.0	26.7
07	0.0	20.0	66.7	13.3
08	0.0	26.7	60.0	13.3
09	0.0	20.0	60.0	20.0
10	0.0	46.7	40.0	13.3
11	0.0	73.3	26.7	0.0
12	26.7	73.3	0.0	0.0
13	33.3	66.7	0.0	0.0
14	6.7	93.3	0.0	0.0
15	0.0	73.3	26.7	0.0
16	0.0	26.7	66.7	6.7
17	0.0	26.7	53.3	20.0
18	0.0	6.7	66.7	26.7
19	0.0	6.7	46.7	46.7
20	0.0	6.7	60.0	33.3
21	0.0	6.7	60.0	33.3
22	0.0	20.0	53.3	26.7
23	0.0	13.3	46.7	40.0
24	0.0	20.0	53.3	26.7
Total	2.8	31.1	46.4	19.7

Antall obs : 360
Manglende obs: 312

Kummulerte stabilitetsklasser (%) fordelt over døgnet

Time	IV	III	II	I
01	20.0	80.0	100.0	100.0
02	26.7	80.0	100.0	100.0
03	33.3	80.0	100.0	100.0
04	26.7	80.0	100.0	100.0
05	20.0	73.3	100.0	100.0
06	26.7	86.7	100.0	100.0
07	13.3	80.0	100.0	100.0
08	13.3	73.3	100.0	100.0
09	20.0	80.0	100.0	100.0
10	13.3	53.3	100.0	100.0
11	0.0	26.7	100.0	100.0
12	0.0	0.0	73.3	100.0
13	0.0	0.0	66.7	100.0
14	0.0	0.0	93.3	100.0
15	0.0	26.7	100.0	100.0
16	6.7	73.3	100.0	100.0
17	20.0	73.3	100.0	100.0
18	26.7	93.3	100.0	100.0
19	46.7	93.3	100.0	100.0
20	33.3	93.3	100.0	100.0
21	33.3	93.3	100.0	100.0
22	26.7	80.0	100.0	100.0
23	40.0	86.7	100.0	100.0
24	26.7	80.0	100.0	100.0

Stasjon : Odda met
Parameter: Temperatur differanse (DT)
Enhet : Grader C
Periode : 01.03.03 - 31.03.03

STABILITETSKLASSER (%) FORDELT OVER DØGNET

Klasse I: Ustabil DT < -0.6 Grader C
Klasse II: Nøytral -0.6 < DT < 0.2 Grader C
Klasse III: Lett stabil 0.2 < DT < 0.5 Grader C
Klasse IV: Stabil 0.5 < DT Grader C

	Klasser			
Time	I	II	III	IV
01	0.0	25.8	71.0	3.2
02	0.0	25.8	74.2	0.0
03	0.0	25.8	71.0	3.2
04	0.0	32.3	51.6	16.1
05	0.0	29.0	61.3	9.7
06	0.0	25.8	67.7	6.5
07	0.0	32.3	58.1	9.7
08	0.0	38.7	54.8	6.5
09	0.0	51.6	48.4	0.0
10	0.0	80.6	19.4	0.0
11	9.7	80.6	6.5	3.2
12	25.8	67.7	6.5	0.0
13	29.0	61.3	9.7	0.0
14	19.4	74.2	6.5	0.0
15	9.7	83.9	6.5	0.0
16	6.5	83.9	9.7	0.0
17	0.0	87.1	12.9	0.0
18	0.0	71.0	29.0	0.0
19	0.0	41.9	58.1	0.0
20	0.0	32.3	61.3	6.5
21	0.0	32.3	51.6	16.1
22	0.0	25.8	71.0	3.2
23	0.0	29.0	58.1	12.9
24	0.0	32.3	61.3	6.5
Total	4.2	48.8	42.7	4.3

Antall obs : 744
Manglende obs: 0

Kummulerte stabilitetsklasser (%) fordelt over døgnet

Time	IV	III	II	I
01	3.2	74.2	100.0	100.0
02	0.0	74.2	100.0	100.0
03	3.2	74.2	100.0	100.0
04	16.1	67.7	100.0	100.0
05	9.7	71.0	100.0	100.0
06	6.5	74.2	100.0	100.0
07	9.7	67.7	100.0	100.0
08	6.5	61.3	100.0	100.0
09	0.0	48.4	100.0	100.0
10	0.0	19.4	100.0	100.0
11	3.2	9.7	90.3	100.0
12	0.0	6.5	74.2	100.0
13	0.0	9.7	71.0	100.0
14	0.0	6.5	80.6	100.0
15	0.0	6.5	90.3	100.0
16	0.0	9.7	93.5	100.0
17	0.0	12.9	100.0	100.0
18	0.0	29.0	100.0	100.0
19	0.0	58.1	100.0	100.0
20	6.5	67.7	100.0	100.0
21	16.1	67.7	100.0	100.0
22	3.2	74.2	100.0	100.0
23	12.9	71.0	100.0	100.0
24	6.5	67.7	100.0	100.0

Stasjon : Odda met
Parameter: Temperatur differanse (DT)
Enhet : Grader C
Periode : 01.04.03 - 30.04.03

STABILITETSKLASSER (%) FORDELT OVER DØGNET

Klasse I:	Ustabil		DT < -0.6	Grader C
Klasse II:	Nøytral	-0.6 <	DT < 0.2	Grader C
Klasse III:	Lett stabil	0.2 <	DT < 0.5	Grader C
Klasse IV:	Stabil	0.5 <	DT	Grader C

	Klasser			
Time	I	II	III	IV
01	0.0	16.7	73.3	10.0
02	0.0	13.3	76.7	10.0
03	0.0	16.7	63.3	20.0
04	0.0	16.7	63.3	20.0
05	0.0	23.3	56.7	20.0
06	0.0	13.3	73.3	13.3
07	0.0	26.7	63.3	10.0
08	0.0	36.7	56.7	6.7
09	3.3	83.3	13.3	0.0
10	10.0	90.0	0.0	0.0
11	40.0	56.7	3.3	0.0
12	66.7	30.0	3.3	0.0
13	66.7	33.3	0.0	0.0
14	66.7	33.3	0.0	0.0
15	63.3	36.7	0.0	0.0
16	56.7	43.3	0.0	0.0
17	36.7	63.3	0.0	0.0
18	0.0	100.0	0.0	0.0
19	0.0	60.0	40.0	0.0
20	0.0	36.7	53.3	10.0
21	0.0	26.7	63.3	10.0
22	0.0	23.3	73.3	3.3
23	0.0	23.3	73.3	3.3
24	0.0	20.0	76.7	3.3
Total	17.1	38.5	38.6	5.8

Antall obs : 720
Manglende obs: 0

Kummulerte stabilitetsklasser (%) fordelt over døgnet

Time	IV	III	II	I
01	10.0	83.3	100.0	100.0
02	10.0	86.7	100.0	100.0
03	20.0	83.3	100.0	100.0
04	20.0	83.3	100.0	100.0
05	20.0	76.7	100.0	100.0
06	13.3	86.7	100.0	100.0
07	10.0	73.3	100.0	100.0
08	6.7	63.3	100.0	100.0
09	0.0	13.3	96.7	100.0
10	0.0	0.0	90.0	100.0
11	0.0	3.3	60.0	100.0
12	0.0	3.3	33.3	100.0
13	0.0	0.0	33.3	100.0
14	0.0	0.0	33.3	100.0
15	0.0	0.0	36.7	100.0
16	0.0	0.0	43.3	100.0
17	0.0	0.0	63.3	100.0
18	0.0	0.0	100.0	100.0
19	0.0	40.0	100.0	100.0
20	10.0	63.3	100.0	100.0
21	10.0	73.3	100.0	100.0
22	3.3	76.7	100.0	100.0
23	3.3	76.7	100.0	100.0
24	3.3	80.0	100.0	100.0

Stasjon : Odda met
Parameter: Temperatur differanse (DT)
Enhet : Grader C
Periode : 01.05.03 - 31.05.03

STABILITETSKLASSER (%) FORDELT OVER DØGNET

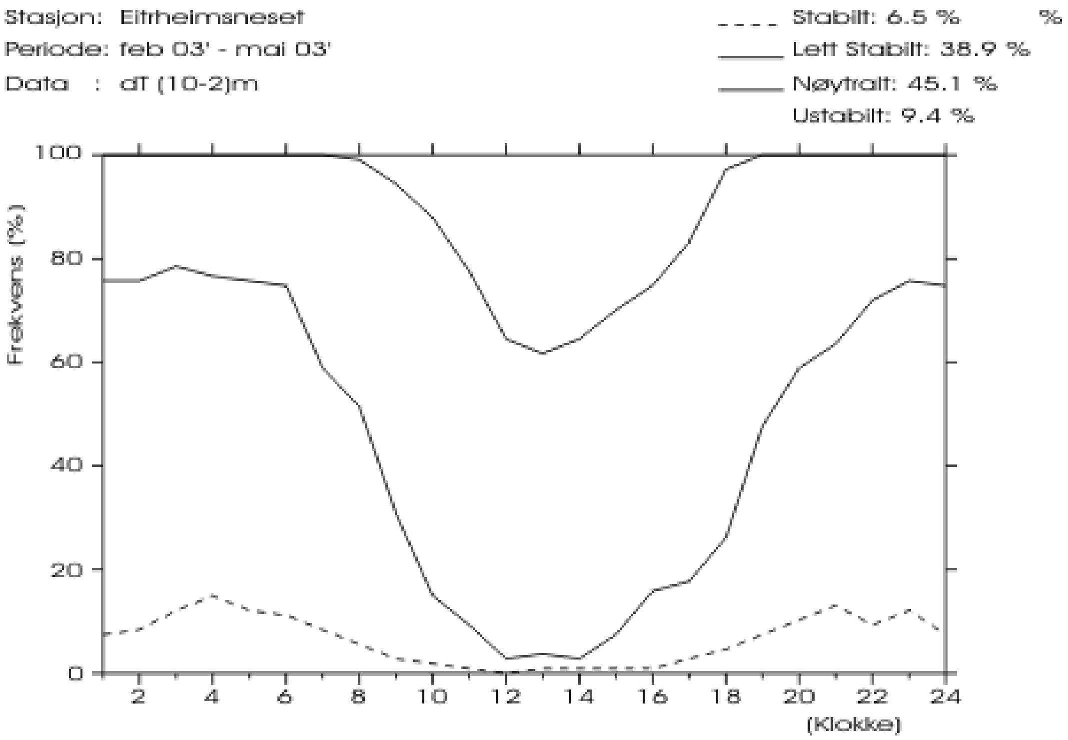
Klasse I: Ustabil DT < -0.6 Grader C
Klasse II: Nøytral -0.6 < DT < 0.2 Grader C
Klasse III: Lett stabil 0.2 < DT < 0.5 Grader C
Klasse IV: Stabil 0.5 < DT Grader C

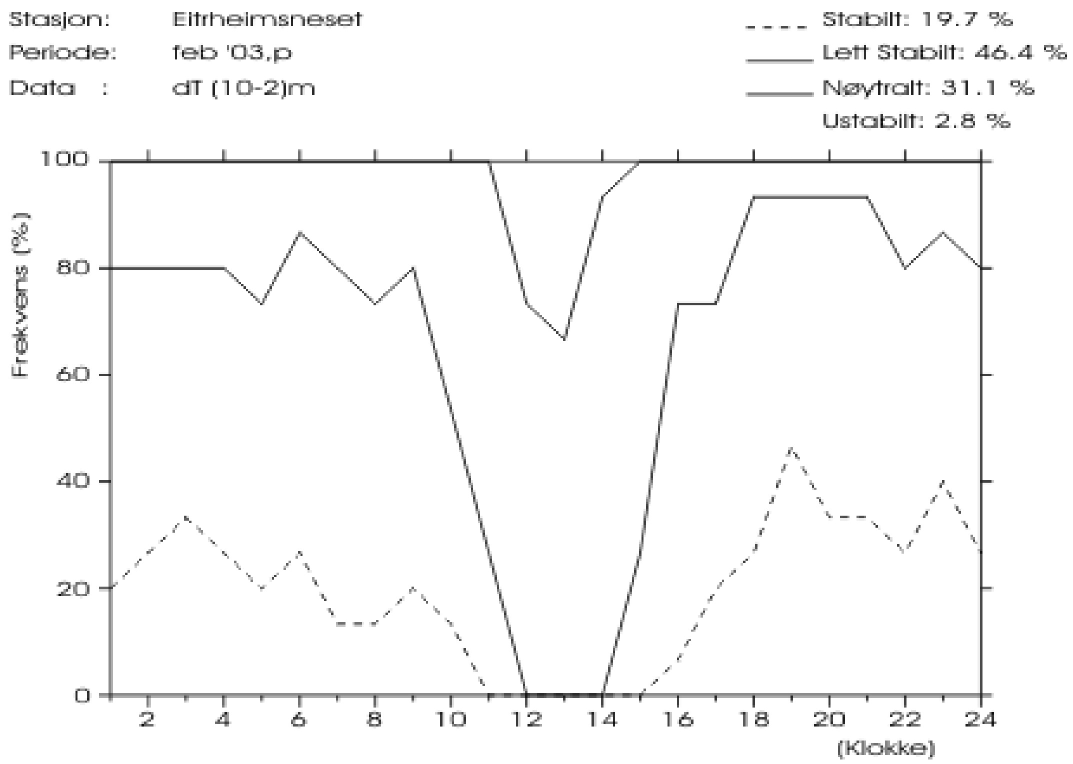
	Klasser			
Time	I	II	III	IV
01	0.0	32.3	64.5	3.2
02	0.0	35.5	58.1	6.5
03	0.0	22.6	74.2	3.2
04	0.0	22.6	74.2	3.2
05	0.0	19.4	77.4	3.2
06	0.0	41.9	51.6	6.5
07	0.0	74.2	22.6	3.2
08	3.2	77.4	19.4	0.0
09	16.1	77.4	6.5	0.0
10	32.3	61.3	6.5	0.0
11	29.0	64.5	6.5	0.0
12	19.4	80.6	0.0	0.0
13	22.6	74.2	0.0	3.2
14	35.5	61.3	0.0	3.2
15	32.3	61.3	3.2	3.2
16	25.8	64.5	9.7	0.0
17	22.6	64.5	12.9	0.0
18	9.7	74.2	12.9	3.2
19	0.0	77.4	19.4	3.2
20	0.0	71.0	25.8	3.2
21	0.0	64.5	32.3	3.2
22	0.0	38.7	48.4	12.9
23	0.0	25.8	67.7	6.5
24	0.0	25.8	71.0	3.2
Total	10.3	54.7	31.9	3.1

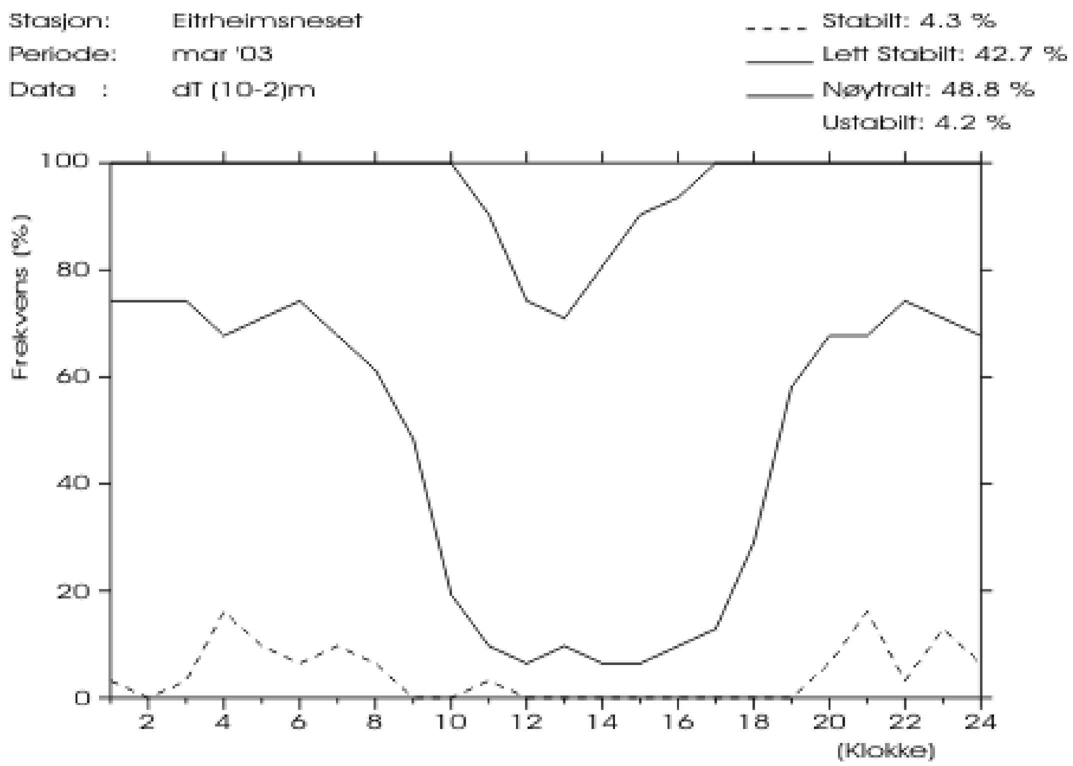
Antall obs : 744
Manglende obs: 0

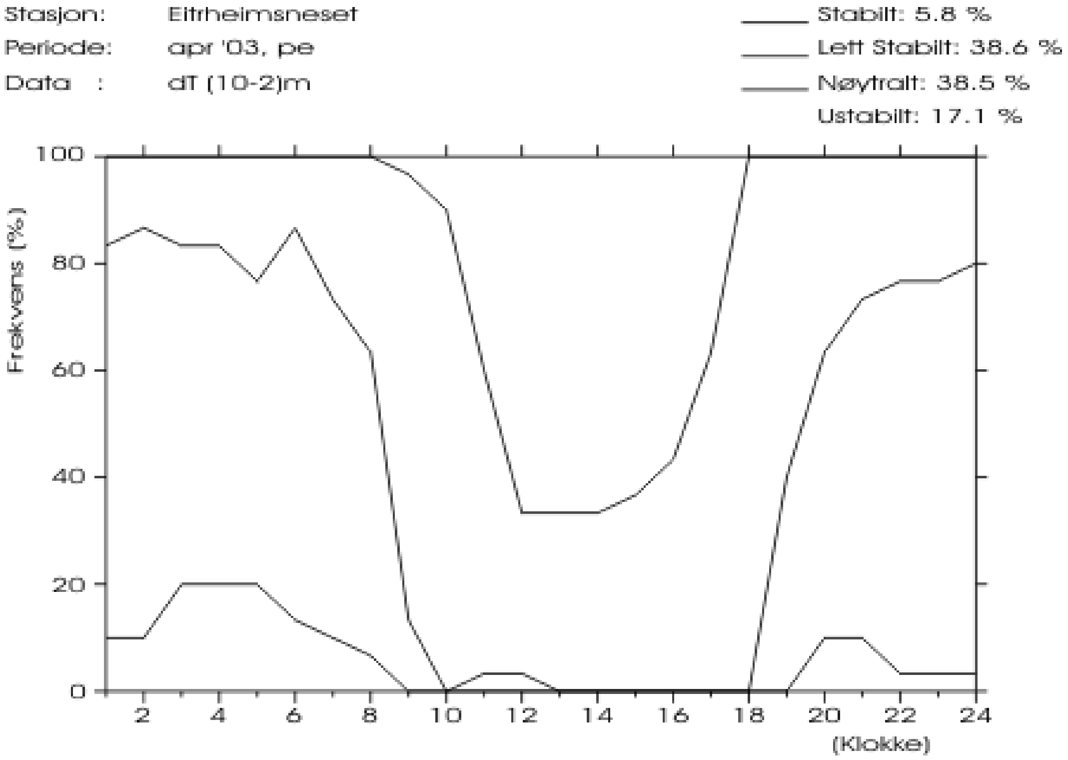
Kummulerte stabilitetsklasser (%) fordelt over døgnet

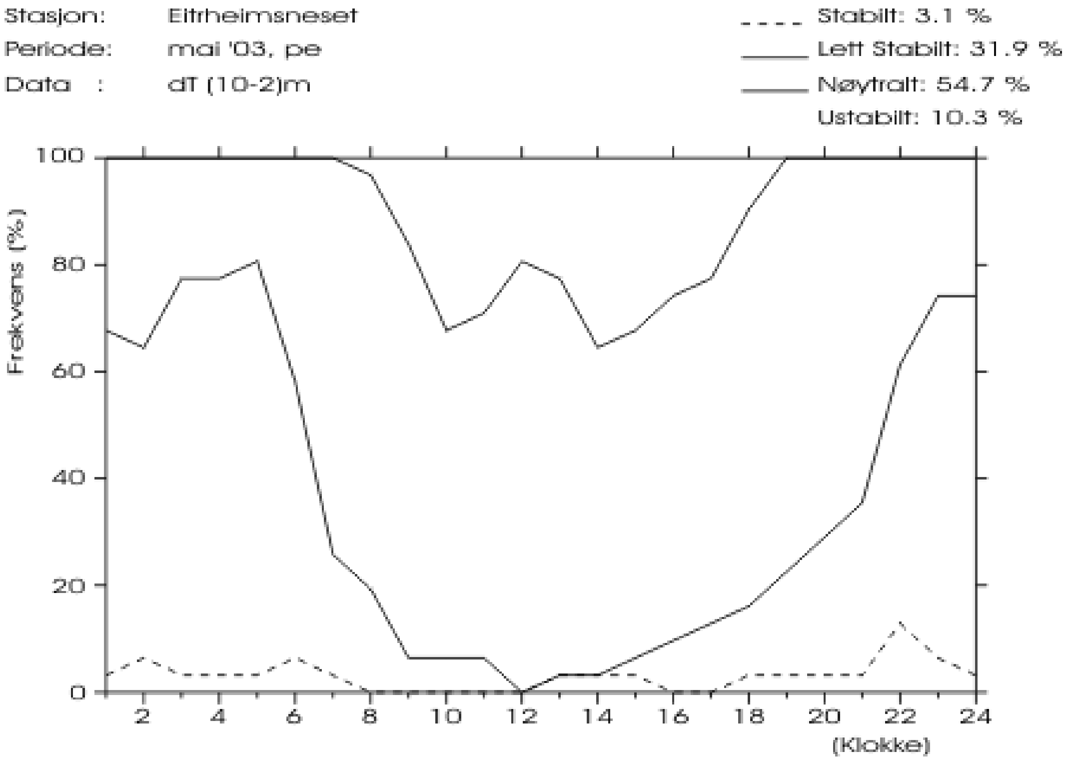
Time	IV	III	II	I
01	3.2	67.7	100.0	100.0
02	6.5	64.5	100.0	100.0
03	3.2	77.4	100.0	100.0
04	3.2	77.4	100.0	100.0
05	3.2	80.6	100.0	100.0
06	6.5	58.1	100.0	100.0
07	3.2	25.8	100.0	100.0
08	0.0	19.4	96.8	100.0
09	0.0	6.5	83.9	100.0
10	0.0	6.5	67.7	100.0
11	0.0	6.5	71.0	100.0
12	0.0	0.0	80.6	100.0
13	3.2	3.2	77.4	100.0
14	3.2	3.2	64.5	100.0
15	3.2	6.5	67.7	100.0
16	0.0	9.7	74.2	100.0
17	0.0	12.9	77.4	100.0
18	3.2	16.1	90.3	100.0
19	3.2	22.6	100.0	100.0
20	3.2	29.0	100.0	100.0
21	3.2	35.5	100.0	100.0
22	12.9	61.3	100.0	100.0
23	6.5	74.2	100.0	100.0
24	3.2	74.2	100.0	100.0




Stasjon: Eitrheimsneset
Periode: feb '03,p
Data : dT (10-2)m
Stabilt: 19.7 %
Lett Stabilt: 46.4 %
Nøytralt: 31.1 %
Ustabilt: 2.8 %
Frekvens (%)
0
20
40
60
80
100
2
4
6
8
10
12
14
16
18
20
22
24
(Klokke)


Stasjon: Eitrheimsneset
Periode: mar '03
Data : dT (10-2)m
Stabilt: 4.3 %
Lett Stabilt: 42.7 %
Nøytralt: 48.8 %
Ustabilt: 4.2 %
Frekvens (%)
0
20
40
60
80
100
2
4
6
8
10
12
14
16
18
20
22
24
(Klokke)


Stasjon: Eitrheimsneset
Periode: apr '03, pe
Data : dT (10-2)m
Stabilt: 5.8 %
Lett Stabilt: 38.6 %
Nøytralt: 38.5 %
Ustabilt: 17.1 %
Frekvens (%)
(Klokke)


Stasjon: Eitrheimsneset
Periode: mai '03, pe
Data : dT (10-2)m
Stabilt: 3.1 %
Lett Stabilt: 31.9 %
Nøytralt: 54.7 %
Ustabilt: 10.3 %
Frekvens (%)
(Klokke)

Appendix D

Wind and stability

Delta T : Odda met
Vind : Odda met
Periode : 01.02.03 - 31.05.03
Enhet : Prosent

FREKVENSFORDELING SOM FUNKSJON AV VINDRETNING, VINDSTYRKE OG STABILITET

Klasse I: Ustabil DT < -0.6 Grader C
Klasse II: Nøytral -0.6 < DT < 0.2 Grader C
Klasse III: Lett stabil 0.2 < DT < 0.5 Grader C
Klasse IV: Stabil 0.5 < DT Grader C

Vindstille: U mindre eller lik 0.4 m/s

Vind-	0.0- 2.0 m/s				2.0- 4.0 m/s				4.0- 6.0 m/s				over 6.0 m/s				
retning	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	Rose
30	0.2	2.2	0.5	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	3.4
60	0.0	0.6	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
90	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
120	0.1	0.6	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	1.4
150	0.2	7.2	11.1	2.2	0.2	3.1	6.4	1.3	0.2	2.1	0.9	0.0	0.1	2.0	1.1	0.0	38.1
180	0.0	3.8	5.2	1.2	0.2	2.2	1.9	0.7	0.2	1.6	1.5	0.1	0.0	2.6	2.2	0.0	23.4
210	0.0	0.6	0.5	0.1	0.0	0.3	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	2.0
240	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
270	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.9
300	0.0	0.0	0.1	0.1	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.6	0.0	0.0	1.9
330	0.0	0.2	0.4	0.1	0.1	0.1	0.5	0.0	0.1	0.6	0.4	0.0	0.0	0.4	0.3	0.0	3.2
360	1.8	3.8	2.5	0.4	3.9	3.8	1.1	0.1	1.6	2.0	0.4	0.0	0.3	0.8	0.2	0.0	22.7
Stille	0.0	0.4	0.2	0.0													0.6
Total	2.4	20.3	21.5	4.4	4.6	10.1	10.2	2.1	2.0	7.5	3.4	0.1	0.4	6.9	4.0	0.0	100.0

	0.0- 2.0 m/s	2.0- 4.0 m/s	4.0- 6.0 m/s	over 6.0 m/s
Forekomst	48.6 %	27.1 %	13.0 %	11.3 %
Vindstyrke	1.3 m/s	2.8 m/s	5.0 m/s	7.7 m/s

Fordeling på stabilitetsklasser

	Klasse I	Klasse II	Klasse III	Klasse IV	
Forekomst	9.5 %	44.8 %	39.2 %	6.6 %	100.0 %

Antall obs. : 2547
Manglende obs.: 333

Appendix E

Data for temperature and relative humidity

Stasjon : Odda met
Periode : 01.02.03 - 31.05.03
Parameter: TEMPERATUR
Enhet : GRADER C

MIDDEL-, MAKSIMUM- OG MINIMUMVERDIER

Måned	Nobs	Tmidl	Maks T	Maks Dag	Maks Kl	Min T	Min Dag	Min Kl	Midlere Tmaks	Midlere Tmin
Feb 2003	15	0.1	5.9	20	15	-5.4	17	09	2.4	-1.8
Mar 2003	31	3.8	8.9	*15	15	-2.4	* 1	04	6.5	1.5
Apr 2003	30	7.5	18.3	23	16	-1.3	6	07	11.0	4.3
Mai 2003	31	9.2	18.4	28	16	1.3	13	22	12.3	6.4

FOREKOMST INNEN GITTE GRENSER

Måned	T <-15.0 Døgn	T <-15.0 Timer	T <-10.0 Døgn	T <-10.0 Timer	T < -5.0 Døgn	T < -5.0 Timer	T < 0.0 Døgn	T < 0.0 Timer	T < 5.0 Døgn	T < 5.0 Timer	T < 10.0 Døgn	T < 10.0 Timer
Feb 2003	0	0	0	0	1	5	12	158	15	353	15	360
Mar 2003	0	0	0	0	0	0	8	47	30	510	31	744
Apr 2003	0	0	0	0	0	0	2	10	14	196	30	565
Mai 2003	0	0	0	0	0	0	0	0	8	59	30	491

Stasjon : Odda met
Periode : 01.02.03 - 31.05.03
Parameter: TEMPERATUR
Enhet : GRADER C

MIDLERE MÅNEDSVIS DØGNFORDELING

Måned: Feb 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	-0.3	-0.7	-1.1	-1.1	1.7	1.8	1.0	0.1	
Stand.avvik	2.1	2.1	2.1	2.3	2.1	2.1	2.1	1.9	
Nobs	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(360)

Måned: Mar 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	3.4	2.7	2.5	3.0	4.7	5.3	4.9	4.1	
Stand.avvik	2.1	2.3	2.7	2.2	1.6	1.5	1.3	1.6	
Nobs	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(744)

Måned: Apr 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	6.2	5.3	4.8	7.1	9.1	10.5	9.7	7.6	
Stand.avvik	2.6	2.5	2.6	2.9	3.4	4.2	3.7	2.9	
Nobs	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(720)

Måned: Mai 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	8.0	7.2	7.6	9.0	10.5	11.4	10.8	9.1	
Stand.avvik	2.3	2.1	2.2	2.2	2.7	3.2	3.0	2.7	
Nobs	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(744)

Stasjon : Odda met
Periode : 01.02.03 - 31.05.03
Parameter: REL.FUKT.
Enhet : PROSENT

MIDDEL-, MAKSIMUM- OG MINIMUMVERDIER

			Maks			Min			Midlere	
Måned	Nobs	RHmidl	RH	Dag	Kl	RH	Dag	Kl	RHmaks	RHmin
Feb 2003	15	63.22	94.60	25	10	37.70	28	14	73.26	52.11
Mar 2003	31	69.43	95.60 *	6	09	30.80	1	17	81.89	54.56
Apr 2003	30	52.68	93.10	2	05	20.70	10	17	67.67	37.38
Mai 2003	31	66.54	93.90	5	14	26.10	17	15	83.16	48.07

FOREKOMST INNEN GITTE GRENSER

	RH >95.00		RH >90.00		RH >85.00		RH >80.00		RH >75.00		RH >70.00	
Måned	Døgn	Timer	Døgn	Timer	Døgn	Timer	Døgn	Timer	Døgn	Timer	Døgn	Timer
Feb 2003	0	0	2	19	2	31	3	42	5	53	6	76
Mar 2003	1	10	7	50	13	86	19	154	24	257	29	383
Apr 2003	0	0	5	15	6	31	7	54	9	95	11	126
Mai 2003	0	0	4	16	16	94	22	161	27	246	29	329

Stasjon : Odda met
Periode : 01.02.03 - 31.05.03
Parameter: REL.FUKT.
Enhet : PROSENT

MIDLERE MÅNEDSVIS DØGNFORDELING

Måned: Feb 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	66.25	66.14	67.41	66.14	55.51	59.21	62.64	63.65	
Stand.avvik	11.54	10.70	9.76	12.29	11.69	11.44	13.49	11.76	
Nobs	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(360)

Måned: Mar 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	71.27	75.21	74.61	71.27	63.93	63.72	66.81	69.65	
Stand.avvik	11.46	9.82	10.39	10.54	14.23	15.81	12.58	10.88	
Nobs	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(744)

Måned: Apr 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	56.13	60.19	62.87	53.95	46.29	43.04	46.10	52.81	
Stand.avvik	12.20	12.75	13.82	16.21	16.32	16.55	16.94	16.06	
Nobs	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(720)

Måned: Mai 2003 — Klokkeslett

	01	04	07	10	13	16	19	22	
Middelverdi	72.04	75.08	73.36	67.96	60.69	56.00	59.71	67.39	
Stand.avvik	11.24	10.66	12.98	13.05	15.17	15.03	14.73	14.54	
Nobs	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(744)

Appendix F

Measurements of particulate matters

	Kindergarten	Harbour	School	Festiviteten
13-feb	43,1	45,6	44,6	18,2
14-feb	90,8	48,5	42,2	31,2
15-feb	51,6	35,6	35,7	30,6
16-feb	98,7	45,9	31,8	24,9
17-feb	141,4	89,5	74,7	45,8
18-feb	128,7	99,2	85,8	51,5
19-feb	121,9	141,7	81,6	43,3
20-feb	96,6	85,4	74,1	41,6
21-feb	89,7	79,9	76,4	38,6
22-feb	41,7	34,2	29,1	28,1
23-feb	55,8	50,1	35,3	15,6
24-feb	52,1	51,2	42,7	40,1
25-feb	23,9	26,8	24,4	15,6
26-feb	27,5	20,3	17,0	66,7
27-feb	54,8	36,6	28,2	24,7
28-feb	75,3	53,6	46,2	39,1
# values >50	**12**	**8**	**5**	**2**
Mean	**74,6**	**59,0**	**48,1**	**34,7**
Max	**141,4**	**141,7**	**85,8**	**66,7**
Min	**23,9**	**20,3**	**17,0**	**15,6**

	1-mar	25,7	27,2	23,6	22,6
	2-mar	33,0	29,3	22,8	17,5
	3-mar	47,5	40,3	42,0	23,0
	4-mar	29,1	23,9	25,3	40,8
	5-mar	8,4	10,5	10,5	9,9
	6-mar	12,5	9,1	10,7	13,4
	7-mar	9,4	11,0	9,1	15,5
	8-mar	6,5	6,2	7,5	12,4
	9-mar	2,7	4,8	4,1	10,1
	10-mar	4,9	6,3	7,6	26,6
	11-mar	7,5	8,5	7,1	6,7
	12-mar	16,6	10,4	13,3	9,9
	13-mar	67,0	35,6	28,6	27,6
	14-mar	62,3	56,3	44,3	39,9
	15-mar	27,1	28,7	33,6	25,3
	16-mar	26,3	25,6	23,9	24,3
	17-mar	57,2	31,6	26,1	37,6
	18-mar	103,2	39,4	30,5	48,5
	19-mar	75,6	30,0	32,3	25,8
	20-mar	109,7	34,3	37,7	25,6
	21-mar	35,1	30,2	30,6	86,0
	22-mar	27,2	27,1	28,3	56,6
	23-mar	47,7	44,7	47,9	45,2
	24-mar	57,4	40,9	41,0	34,5
	25-mar	71,1	55,9	65,4	46,7
	26-mar	73,3	68,4	72,5	84,3
	27-mar	34,5	33,0	34,9	27,5
	28-mar	72,0	42,9	56,3	33,5
	29-mar	11,0	13,1	10,6	25,5
	30-mar	9,3	7,8	7,2	15,3
	31-mar	26,3	16,5	21,3	39,7
# values >50		**10**	**3**	**3**	**3**
Mean		**38,6**	**27,4**	**27,6**	**30,9**
Max		**109,7**	**68,4**	**72,5**	**86,0**
Min		**2,7**	**4,8**	**4,1**	**6,7**

1-apr	6,6	5,7		13,6	22,0
2-apr	9,2	10,4		14,1	7,9
3-apr	19,0	11,3		13,6	31,3
4-apr	13,2	15,7		14	22,1
5-apr	8,7	9,7		13,5	11,3
6-apr	19,0	15,5		14,1	14,7
7-apr	33,2	22,7		13,5	21,4
8-apr	50,1	29,3		14,1	37,4
9-apr	0,7	16,2		13,5	16,2
10-apr	22,8	15,7		14,1	21,3
11-apr	12,4	14,1		13,6	18,1
12-apr	9,6	8,0		14,1	29,1
13-apr	13,5	18,1		13,5	24,6
14-apr	19,2	24,7		14,2	31,5
15-apr	23,5	28,2		13,5	32,2
16-apr	23,9	27,8		14,2	44,0
17-apr	18,8	21,6		13,7	38,4
18-apr	22,6	26,1		14,1	37,8
19-apr	21,6	20,2		13,6	38,0
20-apr	23,7	18,7		14,2	28,1
21-apr	30,4	32,4		13,7	47,0
22-apr	41,1	31,9		14,2	46,3
23-apr	33,7	33,1		13,7	52,2
24-apr	28,6	31,1		14,3	49,6
25-apr	29,9	25,8		13,7	54,1
26-apr	12,9	14,3		14,3	16,7
27-apr	8,4	11,0		13,7	14,5
28-apr	21,6	13,5		14,3	14,9
29-apr	6,0	5,7		13,6	33,0
30-apr	7,4	9,2		14,2	32,0
# values >50		**1**	**0**	**0**	**2**
Mean		**19,7**	**18,9**	**13,9**	**29,6**
Max		**50,1**	**33,1**	**14,3**	**54,1**
Min		**0,7**	**5,7**	**13,5**	**7,9**

	1-mai	7,8	9,7	10,5	22,1
	2-mai	10,2	8,9	10,7	9,4
	3-mai	3,9	3,6	4,5	10,4
	4-mai	7,1	11,5	10,5	17,9
	5-mai	12,8	12,8	13,3	36,7
	6-mai	5	4,2	5,7	30,8
	7-mai	11,2	8,1	6,4	31,9
	8-mai	4,9	6,6	5,6	23,1
	9-mai	8,9	10,2	8,6	29,2
	10-mai	5,6	6,7	6,3	18,5
	11-mai	6,5	7,4	9,0	18,9
	12-mai	8,6	10,2	10,7	23,0
	13-mai	6,7	6,9	9,8	7,6
# values >50		**0**	**0**	**0**	**0**
Mean		**7,6**	**8,2**	**8,6**	**21,5**
Max		**12,8**	**12,8**	**13,3**	**36,7**
Min		**3,9**	**3,6**	**4,5**	**7,6**

Total

# values >50	**23**	**11**	**8**	**7**
Mean	**34,2**	**27,4**	**23,9**	**29,8**
Max	**141,4**	**141,7**	**85,8**	**86,0**
Min	**0,7**	**3,6**	**4,1**	**6,7**

Appendix G

Metallic analysis from precipitation collectors – Monthly mean

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Målerapport nr. U-676-03

Oppdragsgiver:	NILU v/Ivar Haugsbakk Her
Prosjekt nr.:	O-103004
Prøvetaking:	
Sted:	Barnehagen, Barneskolen (Odda sentrum) Båthavn, *Demning (Tokheim)*, *Eiterheimsnes* (på *Onz*), *Festiviteten* (Tyssedal), Grande og Kvinherad
Ansvar:	NILU
Kommentar:	Prøver for perioden 13.02.2003-15.05.2003.
Prøveinformasjon:	
Prøvetype:	Tungmetaller i nedbør/ støvfallsamler
Prøven mottatt:	
Kommentar:	Prøve merket Festiviteten 12.03-16.04.03, ble sendt inn uten kork, forkastet.
Analyser:	
Utført av	Norsk institutt for luftforskning Postboks 100 N-2007 KJELLER
Målemetode:	Analysene er utført ved NILUs avdeling for Uorganisk analyse med teknikken ICPMS i henhold til metoden: NILU-U-22: Forskrift for behandling av nedbørsprøver for analyse av hovedkomponenter og tungmetaller.
Måleusikkerhet:	Måleusikkerheten for ICPMS varierer noe fra element til element. Generelt ligger måleusikkerheten innenfor ±10% ved 10 ng/ml (ppb). Måleusikkerheten omfatter bare det som kan tilskrives prøvebehandling og kjemiske analyser på laboratoriet. Ved vurdering av total usikkerhet må det tas hensyn til bidraget fra prøvetaking samt prøvens representativitet. I de tilfellene der NILU ikke har hatt ansvar for prøvetakingen, kan vi ikke tallfeste dette bidraget til usikkerheten.

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Kontaktperson: Marit Vadset

Godkjenning: Kjeller, 27. mai 2003

Marit Vadset

Marit Vadset
Ingeniør, Kjemisk analyse

Vedlegg: Analyseresultater for prøver: 1 side
Målerapporten og vedleggene omfatter totalt 3 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Analyseresultatene for ICPMS følger som et eget vedlegg med overskrift "NILU ICPMS RAPPORT". Oppdragsgivers prøveidentifikasjon er angitt i målerapporten for hver enkelt prøve.

Analyseresultatene i rapportvedlegget er gitt med varierende antall gjeldende siffer. Siden det vanligvis er vanskelig å spesifisere total måleusikkerhet bedre enn 10%, anbefales det å ikke benytte mer enn 3 gjeldende siffer ved vurdering eller i presentasjon av resultatene.

Et minus "-" foran måleresultatet, betyr at det er mindre enn deteksjonsgrensen for analysemetoden. Er måleresultatet oppgitt som f.eks. "-0.01", betyr det at deteksjonsgrensen for metoden er 0.01.

Norsk institutt for luftforskning
Avdeling for kjemisk analyse

Rapport for informasjon om
stasjoner og prøvetakingsbetingelser

Rapportdato:03/05/28
Rapportside: 1

Pros.nr	Stasjon	Prøvetype	Pr.tak	Fradato	Tildato	Fra kl	Til kl	Posisj.	Kval	Mp	Mrk	m3	ml	mm
O-10300	BARNEHAG	NB-NILUTM		03/02/13	03/03/12	7	7			4			2925.0	93.15
O-10300	BARNEHAG	NB-NILUTM		03/03/12	03/04/16	7	7			4			1336.0	42.55
O-10300	BARNEHAG	NB-NILUTM		03/04/16	03/05/14	7	7			4			2924.0	93.12
O-10300	BARNEHAG	NB-NILUTM		03/05/01	03/06/01	7	7			4				
O-10300	BARNESKO	NB-NILUTM		03/02/13	03/03/12	7	7			4			2176.0	69.30
O-10300	BARNESKO	NB-NILUTM		03/03/12	03/04/16	7	7			4			1476.0	47.01
O-10300	BARNESKO	NB-NILUTM		03/04/16	03/05/14	7	7			4			2927.0	93.22
O-10300	BARNESKO	NB-NILUTM		03/05/01	03/06/01	7	7			4				
O-10300	BÅTHAVN	NB-NILUTM		03/02/13	03/03/12	7	7			4			2480.0	78.98
O-10300	BÅTHAVN	NB-NILUTM		03/03/12	03/04/16	7	7			4			1626.0	51.78
O-10300	BÅTHAVN	NB-NILUTM		03/04/16	03/05/14	7	7			4			2929.0	93.28
O-10300	BÅTHAVN	NB-NILUTM		03/05/01	03/06/01	7	7			4				
O-10300	DEMNING	NB-NILUTM		03/02/13	03/03/12	7	7			4			2913.0	92.77
O-10300	DEMNING	NB-NILUTM		03/03/12	03/04/16	7	7			4			650.0	20.70
O-10300	DEMNING	NB-NILUTM		03/04/16	03/05/14	7	7			4			2906.0	92.55
O-10300	DEMNING	NB-NILUTM		03/05/01	03/06/01	7	7			4				
O-10300	EITERHNE	NB-NILUTM		03/02/13	03/03/12	7	7			4			2040.0	64.97
O-10300	EITERHNE	NB-NILUTM		03/03/12	03/04/16	7	7			4			2017.0	64.24
O-10300	EITERHNE	NB-NILUTM		03/04/16	03/05/14	7	7			4			2893.0	92.13
O-10300	EITERHNE	NB-NILUTM		03/05/01	03/06/01	7	7			4				
O-10300	FESTIVI	NB-NILUTM		03/02/13	03/03/12	7	7			4			1877.0	59.78
O-10300	FESTIVI	NB-NILUTM		03/03/12	03/04/16	7	7			4				
O-10300	FESTIVI	NB-NILUTM		03/04/16	03/05/14	7	7			4			2926.0	93.18
O-10300	FESTIVI	NB-NILUTM		03/05/01	03/06/01	7	7			4				
O-10300	GRANDE	NB-NILUTM		03/02/13	03/03/12	7	7			4			1765.0	56.21
O-10300	GRANDE	NB-NILUTM		03/03/12	03/04/16	7	7			4			1379.0	43.92
O-10300	GRANDE	NB-NILUTM		03/04/16	03/05/14	7	7			4			2932.0	93.38
O-10300	GRANDE	NB-NILUTM		03/05/01	03/06/01	7	7			4				
O-10300	KVINHERA	NB-NILUTM		03/02/13	03/03/12	7	7			4			2137.0	68.06
O-10300	KVINHERA	NB-NILUTM		03/03/12	03/04/16	7	7			4			2053.0	65.38
O-10300	KVINHERA	NB-NILUTM		03/04/16	03/05/14	7	7			4			2929.0	93.28
O-10300	KVINHERA	NB-NILUTM		03/05/01	03/06/01	7	7			4				

orsk Institutt for Luftforskning
vdeling for Uorganisk Analyse
007 KJELLER

N I L U   I C P M S   R A P P O R T

Dato: 03/06/10
Side: 1

røveidentifikasjon	Pos	Prøve dato	Nilu id	Prøvetyp	Fort. faktor	Enhet	Pb	Cd	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	As
rnehag		03/02/13 03/03/12	0-103004	rb-nilutm	1.	ng/ml	15.190	1.879		-0.6	30.1	195.8		-0.60	3.74	482.4	0.77
rnehag		03/03/12 03/04/16	0-103004	rb-nilutm	1.	ng/ml	37.690	5.751		1.4	56.7	555.8		8.03	14.25	881.4	1.94
rnehag		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	13.460	2.109		-0.6	18.1	190.5		-0.60	7.64	260.7	0.65
rnesko		03/02/13 03/03/12	0-103004	rb-nilutm	1.	ng/ml	8.430	0.646		1.1	17.9	725.8		2.30	2.93	178.9	0.62
rnesko		03/03/12 03/04/16	0-103004	rb-nilutm	1.	ng/ml	23.850	3.045		1.7	40.8	1352.0		3.06	7.24	447.7	1.37
rnesko		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	13.290	0.758		-0.6	13.7	455.1		0.67	3.48	156.1	0.44
ithavn		03/02/13 03/03/12	0-103004	rb-nilutm	1.	ng/ml	16.960	1.523		0.9	33.3	788.6		0.99	3.66	377.3	0.85
ithavn		03/03/12 03/04/16	0-103004	rb-nilutm	1.	ng/ml	26.900	5.336		1.0	49.2	773.7		1.53	7.30	569.8	1.40
åthavn		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	20.030	2.029		-0.6	22.3	306.8		-0.60	5.83	320.2	0.93
mning		03/02/12 03/03/12	0-103004	rb-nilutm	1.	ng/ml	3.705	0.409		-0.6	8.6	72.2		-0.60	1.21	116.7	-0.30
mning		03/03/12 03/04/16	0-103004	rb-nilutm	1.	ng/ml	9.604	2.858		-0.6	17.5	111.3		-0.60	3.74	247.9	0.58
mning		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	5.418	0.716		-0.6	6.5	135.4		-0.60	2.08	81.7	-0.30
iterhne		03/02/13 03/03/12	0-103004	rb-nilutm	1.	ng/ml	44.370	3.444		0.6	51.3	278.8		0.68	6.88	918.3	1.70
iterhne		03/03/12 03/04/16	0-103004	rb-nilutm	1.	ng/ml	80.510	8.736		1.4	123.0	461.0		2.22	18.26	1683.0	2.59
itherhne		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	51.670	5.268		1.0	112.6	311.0		0.94	13.53	1146.0	1.72
estivi		03/02/13 03/03/12	0-103004	rb-nilutm	1.	ng/ml	12.060	0.445		1.9	30.5	3972.0		4.21	2.38	261.4	-0.30
estivi		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	9.117	0.596		0.9	19.9	1983.0		1.84	6.86	143.2	-0.30
rande		03/02/13 03/03/12	0-103004	rb-nilutm	1.	ng/ml	5.276	0.268		0.8	11.1	1225.0		0.95	1.29	112.3	-0.30
rande		03/03/12 03/04/16	0-103004	rb-nilutm	1.	ng/ml	4.830	0.314		0.6	11.4	1162.0		1.17	1.22	120.8	-0.30
rande		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	3.623	0.303		-0.6	8.8	583.0		-0.60	1.43	67.3	-0.30
vinhera		03/02/13 03/03/12	0-103004	rb-nilutm	1.	ng/ml	0.691	0.050		-0.6	1.9	49.0		0.79	0.56	6.2	-0.30
vinhera		03/03/12 03/04/16	0-103004	rb-nilutm	1.	ng/ml	0.840	0.061		-0.6	3.4	81.6		-0.60	0.59	3.9	-0.30
vinhera		03/04/16 03/05/14	0-103004	rb-nilutm	1.	ng/ml	0.559	0.047		-0.6	1.7	84.1		-0.60	0.54	2.1	-0.30

Norsk Institutt for Luftforskning
Avdeling for Uorganisk Analyse
2007 KJELLER

NILU ICPMS RAPPORT

Dato: 03/06/10
Side: 1

Prøve Id.	Prøve dato	Nilu id.	ENHET	Volum	Dil_fkt	Ga	Ti	Se	Hg	P	Cl	Te
Barnehag	03/02/13	d1905da[0-103004	ng/ml	1.	1.		7.6					
Barnchag	03/03/12	d1905da[0-103004	ng/ml	1.	1.		22.9					
Barnehag	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		5.9					
Barnesko	03/02/13	d1905da[0-103004	ng/ml	1.	1.		28.1					
Barnesko	03/03/12	d1905da[0-103004	ng/ml	1.	1.		57.5					
Barnesko	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		16.5					
Båthavn	03/02/13	d1905da[0-103004	ng/ml	1.	1.		45.5					
Båthavn	03/03/12	d1905da[0-103004	ng/ml	1.	1.		45.7					
Båthavn	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		12.8					
Demning	03/02/12	d1905da[0-103004	ng/ml	1.	1.		2.5					
Demning	03/03/12	d1905da[0-103004	ng/ml	1.	1.		3.9					
Demning	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		2.9					
Eiterhne	03/02/13	d1905da[0-103004	ng/ml	1.	1.		10.3					
Eiterhne	03/03/12	d1905da[0-103004	ng/ml	1.	1.		18.0					
Eitherhn	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		11.0					
Festivi	03/02/13	d1905da[0-103004	ng/ml	1.	1.		174.9					
Festivi	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		41.5					
Grande	03/02/13	d0606da[0-103004	ng/ml	1.	1.		53.0					
Grande	03/03/12	d1905da[0-103004	ng/ml	1.	1.		44.4					
Grande	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		9.6					
Kvinhera	03/02/13	d1905da[0-103004	ng/ml	1.	1.		3.0					
Kvinhera	03/03/12	d1905da[0-103004	ng/ml	1.	1.		5.3					
Kvinhera	03/04/16	e3005ea[0-103004	ng/ml	1.	1.		2.6					

Appendix H

Metallic analysis from measurements of particulate matters.
Daily mean

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Målerapport nr. U-681-03

Oppdragsgiver: NILU
v/Ivar Haugsbakk

Prosjekt nr.: O-103004

Prøvetaking:
Sted: Barnehage, Båthavn og Festiviteten
Ansvar: NILU
Kommentar: Prøver for perioden 14.02.2003-26.03.2003.

Prøveinformasjon:
Prøvetype: Tungmetaller i svevestøv
Prøven mottatt:
Kommentar:

Analyser:
Utført av: Norsk institutt for luftforskning
Postboks 100
N-2007 KJELLER

Målemetode: Analysene er utført ved NILUs avdeling for Uorganisk analyse med teknikken ICPMS i henhold til metoden:

NILU-U-22: Forskrift for behandling av nedbørsprøver for analyse av hovedkomponenter og tungmetaller.

Måleusikkerhet: Måleusikkerheten for ICPMS varierer noe fra element til element. Generelt ligger måleusikkerheten innenfor ±10% ved 10 ng/ml (ppb). Måleusikkerheten omfatter bare det som kan tilskrives prøvebehandling og kjemiske analyser på laboratoriet. Ved vurdering av total usikkerhet må det tas hensyn til bidraget fra prøvetaking samt prøvens representativitet. I de tilfellene der NILU ikke har hatt ansvar for prøvetakingen, kan vi ikke tallfeste dette bidraget til usikkerheten.

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Kontaktperson: Marit Vadset

Godkjenning: Kjeller, 10. juni 2003

Marit Vadset

Marit Vadset
Ingeniør, Kjemisk analyse

Vedlegg: Analyseresultater for prøver: 4 sider
Målerapporten og vedleggene omfatter totalt 6 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Analyseresultatene for ICPMS følger som et eget vedlegg med overskrift "NILU ICPMS RAPPORT". Oppdragsgivers prøveidentifikasjon er angitt i målerapporten for hver enkelt prøve.

Analyseresultatene i rapportvedlegget er gitt med varierende antall gjeldende siffer. Siden det vanligvis er vanskelig å spesifisere total måleusikkerhet bedre enn 10%, anbefales det å ikke benytte mer enn 3 gjeldende siffer ved vurdering eller i presentasjon av resultatene.

Et minus "-" foran måleresultatet, betyr at det er mindre enn deteksjonsgrensen for analysemetoden. Er måleresultatet oppgitt som f.eks. "-0.01", betyr det at deteksjonsgrensen for metoden er 0.01.

Målerapport nr. U-681-03 Side 2 av 2

Norsk Institutt for Luftforskning
Avdeling for Uorganisk Analyse
2007 KJELLER

NILU ICPMS RAPPORT

Dato: 03/08/08
Side: 1

Prøveidentifikasjon	Prøve dato	Nilu id.	Prøve-type	Filt del	Luft vol	Uv.vol	ENHET	Pb	Cd	Cu	Zn	Cr	Ni	Co	Fe	Mn	V	As
Barnehag	03/02/14 03/02/15	0-10300	fp-t		14.4	10.	ng/m3	37.75	4.300	28.40	775.71	26.66	12.53		4652.2	89.77		3.852
Barnehag	03/02/19 03/02/20	0-10300	fp-t		14.5	10.	ng/m3	64.98	5.750	27.12	964.16	20.05	8.99		4345.6	82.60		3.904
Barnehag	03/02/26 03/02/27	0-10300	fp-t		14.5	10.	ng/m3	19.03	2.667	10.42	405.33	7.14	4.81		684.9	15.72		3.170
Barnehag	03/03/05 03/03/06	0-10300	fp-t		14.7	10.	ng/m3	7.05	0.436	5.37	54.96	6.36	1.12		178.8	3.58		1.505
Barnehag	03/03/12 03/03/13	0-10300	fp-t		14.5	10.	ng/m3	7.28	0.742	7.50	109.95	-1.65	0.84		578.2	10.97		0.572
Barnehag	03/03/19 03/03/20	0-10300	fp-t		14.5	10.	ng/m3	47.58	58.395	37.54	536.50	9.39	6.15		3454.6	75.57		3.669
Barnehag	03/03/26 03/03/27	0-10300	fp-t		14.7	10.	ng/m3	27.66	4.942	11.12	258.39	6.15	3.58		1448.4	38.56		2.113
Barnehag	03/04/02 03/04/03	0-10300	fp-t		14.9	10.	ng/m3	2.87	0.301	2.73	21.70	-1.61	0.56		128.1	2.79		0.237
Barnehag	03/04/08 03/04/09	0-10300	fp-t		14.7	10.	ng/m3	43.29	10.655	20.01	536.34	4.66	3.99		1981.0	42.08		2.509
Barnehag	03/04/16 03/04/17	0-10300	fp-t		27.9	10.	ng/m3	16.13	5.356	15.68	339.90	3.58	3.14		951.3	24.12		2.487
Barnehag	03/04/23 03/04/24	0-10300	fp-t		28.	10.	ng/m3	36.32	7.605	16.04	395.37	4.68	8.26		1307.9	31.89		1.986
Barnehag	03/04/30 03/05/01	0-10300	fp-t		27.3	10.	ng/m3	6.07	3.276	31.23	89.46	-0.88	1.61		105.2	3.17		1.389
Barnehag	03/05/07 03/05/08	0-10300	fp-t		27.9	10.	ng/m3	17.71	14.395	155.89	265.96	1.51	2.77		307.5	9.23		4.581
Barnehag	03/05/13 03/05/14	0-10300	fp-t		27.3	10.	ng/m3	0.80	0.124	1.84	19.69	-0.88	0.61		34.4	1.17		0.121
Barnesko	03/02/14 03/02/15	0-10300	fp-t		13.5	10.	ng/m3	4.58	0.365	3.44	153.80	-1.77	0.69		210.1	3.61		0.499
Barnesko	03/02/19 03/02/20	0-10300	fp-t		13.9	10.	ng/m3	20.09	1.822	10.67	308.08	13.69	5.52		2721.0	45.24		2.163
Barnesko	03/02/26 03/02/27	0-10300	fp-t		13.5	10.	ng/m3	6.49	0.686	3.99	104.91	5.92	1.01		305.7	5.90		0.942
Barnesko	03/03/02 03/03/03	0-10300	fp-t		13.5	10.	ng/m3	2.29	0.283	1.08	29.17	-1.77	-0.62		170.4	3.57		0.162
Barnesko	03/03/05 03/03/06	0-10300	fp-t		14.	10.	ng/m3	4.00	0.406	1.42	67.75	4.62	-0.60		-11.5	1.34		0.781
Barnesko	03/03/12 03/03/13	0-10300	fp-t		13.8	10.	ng/m3	3.83	0.471	2.30	85.09	-1.73	0.62		417.4	7.62		0.426
Barnesko	03/03/19 03/03/20	0-10300	fp-t		14.1	10.	ng/m3	10.27	3.892	4.51	266.47	4.48	1.50		964.6	19.07		0.862
Barnesko	03/03/26 03/03/27	0-10300	fp-t		13.4	10.	ng/m3	27.26	2.358	11.02	289.20	4.20	3.58		1109.1	30.75		1.665
Barnesko	03/04/09 03/04/10	0-10300	fp-t		13.5	10.	ng/m3	10.02	1.008	3.00	148.91	-1.77	0.62		528.0	10.58		0.478
Barnesko	03/04/16 03/04/17	0-10300	fp-t		14.2	10.	ng/m3	7.37	0.527	3.20	154.95	-1.68	-0.59		529.8	11.77		1.103
Barnesko	03/04/23 03/04/24	0-10300	fp-t		13.7	10.	ng/m3	16.18	0.987	7.10	265.35	1.84	2.03		1215.4	23.39		1.277
Barnesko	03/04/30 03/05/01	0-10300	fp-t		14.2	10.	ng/m3	0.54	0.066	-0.87	4.92	-1.68	-0.59		55.3	1.25		0.182
Barnesko	03/05/07 03/05/08	0-10300	fp-t		13.8	10.	ng/m3	0.23	0.043	-0.89	3.71	2.41	1.03		58.1	2.34		0.208
Barnesko	03/05/13 03/05/14	0-10300	fp-t		13.8	10.	ng/m3	7.00	0.636	6.02	190.96	15.58	4.66		2011.7	34.41		1.676
Båthavn	03/02/14 03/02/15	0-10300	fp-t		13.4	10.	ng/m3	13.87	1.383	7.90	207.18	6.19	3.75		1292.6	26.34		3.515
Båthavn	03/02/19 03/02/20	0-10300	fp-t		13.3	10.	ng/m3	44.74	14.311	18.47	618.07	15.76	5.50		2922.7	62.18		3.084
Båthavn	03/02/26 03/02/27	0-10300	fp-t		13.3	10.	ng/m3	14.74	3.161	7.26	359.87	24.03	1.21		489.4	14.41		2.198
Båthavn	03/03/05 03/03/06	0-10300	fp-t		13.3	10.	ng/m3	4.97	0.546	2.40	71.65	7.51	0.69		122.9	2.94		0.881
Båthavn	03/03/12 03/03/13	0-10300	fp-t		13.6	10.	ng/m3	4.12	0.577	5.10	73.99	-1.76	-0.61		389.3	7.28		0.360
Båthavn	03/03/19 03/03/20	0-10300	fp-t		13.3	10.	ng/m3	21.02	14.326	8.02	353.48	1.99	1.38		806.9	23.72		1.081
Båthavn	03/03/27 03/03/28	0-10300	fp-t		13.5	10.	ng/m3	19.73	2.895	7.22	228.69	3.35	2.82		786.8	27.39		1.703
Båthavn	03/04/02 03/04/03	0-10300	fp-t		13.4	10.	ng/m3	5.24	0.552	1.97	37.77	-1.79	-0.62		183.8	4.99		0.144
Båthavn	03/04/09 03/04/10	0-10300	fp-t		13.5	10.	ng/m3	20.41	3.005	6.43	265.80	1.99	1.64		481.7	13.21		0.759
Båthavn	03/04/16 03/04/17	0-10300	fp-t		13.6	10.	ng/m3	13.91	1.269	11.08	261.49	-1.76	1.45		509.1	16.10		1.451
Båthavn	03/04/23 03/04/24	0-10300	fp-t		13.4	10.	ng/m3	30.66	4.118	16.46	450.69	2.16	2.15		997.9	22.74		1.428
Båthavn	03/04/30 03/05/01	0-10300	fp-t		13.1	10.	ng/m3	1.12	0.110	2.27	15.89	-1.83	-0.64		86.9	2.23		0.285
Båthavn	03/05/07 03/05/08	0-10300	fp-t		13.2	10.	ng/m3	0.88	0.422	3.31	9.36	-1.81	8.04		47.6	2.13		-0.057
Båthavn	03/05/13 03/05/14	0-10300	fp-t		13.1	10.	ng/m3	9.56	1.018	8.96	106.51	-1.83	2.11		-12.3	1.41		0.481
Festivi	03/02/14 03/02/15	0-10300	fp-t		13.6	10.	ng/m3	10.29	0.480	4.47	265.46	15.30	4.12		1970.7	30.67		1.772
Festivi	03/02/19 03/02/20	0-10300	fp-t		13.7	10.	ng/m3	26.40	1.429	6.50	577.54	20.00	3.82		3530.8	47.03		1.566
Festivi	03/02/26 03/02/27	0-10300	fp-t		13.7	10.	ng/m3	56.26	2.153	6.07	1320.46	15.46	7.82		4544.6	56.80		3.072
Festivi	03/03/05 03/03/06	0-10300	fp-t		13.6	10.	ng/m3	4.38	0.351	0.92	75.90	7.81	-0.61		414.3	8.76		0.420
Festivi	03/03/12 03/03/13	0-10300	fp-t		13.9	10.	ng/m3	3.67	0.151	2.36	219.44	-1.72	0.65		629.0	9.05		0.160
Festivi	03/03/19 03/03/20	0-10300	fp-t		13.7	10.	ng/m3	10.28	1.434	2.47	298.78	4.94	1.78		1788.4	25.11		0.574
Festivi	03/03/26 03/03/27	0-10300	fp-t		13.7	10.	ng/m3	11.28	1.000	3.13	174.11	12.49	3.18		2892.8	37.06		0.798

Norsk Institutt for Luftforskning
Avdeling for Uorganisk Analyse
2007 KJELLER

NILU ICPMS RAPPORT

Dato: 03/08/08
Side: 2

Prøveidentifikasjon	Prøve dato	Nilu id.	Prøve-type	Filt del	Luft vol	Uv.vol	ENHET	Pb	Cd	Cu	Zn	Cr	Ni	Co	Fe	Mn	V	As
Festivi	03/04/02 03/04/03	0-10300	fp-t		13.6	10.	ng/m3	0.85	0.062	-0.90	39.91	-1.76	-0.61		265.3	5.35		0.099
Festivi	03/04/09 03/04/10	0-10300	fp-t		13.6	10.	ng/m3	4.74	0.391	1.24	86.12	-1.76	0.62		722.5	14.18		0.215
Festivi	03/04/16 03/04/17	0-10300	fp-t		13.9	10.	ng/m3	19.91	0.833	5.16	427.93	2.16	3.46		2256.9	39.73		0.616
Festivi	03/04/23 03/04/24	0-10300	fp-t		13.9	10.	ng/m3	23.83	0.513	5.91	462.47	10.03	5.50		2247.6	36.40		0.914
Festivi	03/04/30 03/05/01	0-10300	fp-t		13.8	10.	ng/m3	14.91	0.303	3.11	557.05	6.79	1.90		3126.2	44.91		0.359
Festivi	03/05/07 03/05/08	0-10300	fp-t		13.8	10.	ng/m3	9.87	0.597	4.85	250.24	6.91	2.48		2243.6	32.16		0.106
Festivi	03/05/13 03/05/14	0-10300	fp-t		13.7	10.	ng/m3	1.60	0.069	-0.90	323.89	-1.75	-0.61		148.1	2.21		0.122

Norsk Institutt for Luftforskning
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N I L U I C P M S R A P P O R T

Dato: 03/08/08
Side: 1

Prøveidentifikasjon	Prøve dato	Nilu id.	Prøve-type	Filt del	Luft vol	Uv.vol	ENHET	Ca	Al	Be	Sr	Sn	Sb	Ba	Tl	Mg	Th	Ti
amehag	03/02/14	0-10300	fp-t	1.	14.4	10.	ng/m3											488.2
amehag	03/02/19	0-10300	fp-t	1.	14.5	10.	ng/m3											462.4
amehag	03/02/26	0-10300	fp-t	1.	14.5	10.	ng/m3											88.3
amehag	03/03/05	0-10300	fp-t	1.	14.7	10.	ng/m3											24.8
amehag	03/03/12	0-10300	fp-t	1.	14.5	10.	ng/m3											58.6
amehag	03/03/19	0-10300	fp-t	1.	14.5	10.	ng/m3											180.5
amehag	03/03/26	0-10300	fp-t	1.	14.7	10.	ng/m3											93.8
amehag	03/04/02	0-10300	fp-t	1.	14.9	10.	ng/m3											20.3
amehag	03/04/08	0-10300	fp-t	1.	14.7	10.	ng/m3											215.8
amehag	03/04/16	0-10300	fp-t	1.	27.9	10.	ng/m3											180.7
amehag	03/04/23	0-10300	fp-t	1.	28.	10.	ng/m3											188.9
amehag	03/04/30	0-10300	fp-t	1.	27.3	10.	ng/m3											7.4
amehag	03/05/07	0-10300	fp-t	1.	27.9	10.	ng/m3											22.8
amehag	03/05/13	0-10300	fp-t	1.	27.3	10.	ng/m3											10.0
amesko	03/02/14	0-10300	fp-t	1.	13.5	10.	ng/m3											41.5
amesko	03/02/19	0-10300	fp-t	1.	13.9	10.	ng/m3											253.5
amesko	03/02/26	0-10300	fp-t	1.	13.5	10.	ng/m3											50.4
amesko	03/03/02	0-10300	fp-t	1.	13.5	10.	ng/m3											19.8
amesko	03/03/05	0-10300	fp-t	1.	14.	10.	ng/m3											21.4
amesko	03/03/12	0-10300	fp-t	1.	13.8	10.	ng/m3											57.1
amesko	03/03/19	0-10300	fp-t	1.	14.1	10.	ng/m3											123.0
amesko	03/03/26	0-10300	fp-t	1.	13.4	10.	ng/m3											92.7
Bamesko	03/04/09	0-10300	fp-t	1.	13.5	10.	ng/m3											51.3
Bamesko	03/04/16	0-10300	fp-t	1.	14.2	10.	ng/m3											105.4
Bamesko	03/04/23	0-10300	fp-t	1.	13.7	10.	ng/m3											233.0
Bamesko	03/04/30	0-10300	fp-t	1.	14.2	10.	ng/m3											-3.1
Bamesko	03/05/07	0-10300	fp-t	1.	13.8	10.	ng/m3											7.4
Bamesko	03/05/13	0-10300	fp-t	1.	13.8	10.	ng/m3											288.9
Båthavn	03/02/14	0-10300	fp-t	1.	13.4	10.	ng/m3											239.3
Båthavn	03/02/19	0-10300	fp-t	1.	13.3	10.	ng/m3											373.9
Båthavn	03/02/26	0-10300	fp-t	1.	13.3	10.	ng/m3											61.5
Båthavn	03/03/05	0-10300	fp-t	1.	13.3	10.	ng/m3											29.1
Båthavn	03/03/12	0-10300	fp-t	1.	13.6	10.	ng/m3											44.2
Båthavn	03/03/19	0-10300	fp-t	1.	13.3	10.	ng/m3											71.1
Båthavn	03/03/27	0-10300	fp-t	1.	13.5	10.	ng/m3											81.7
Båthavn	03/04/02	0-10300	fp-t	1.	13.4	10.	ng/m3											28.1
Båthavn	03/04/09	0-10300	fp-t	1.	13.5	10.	ng/m3											65.2
Båthavn	03/04/16	0-10300	fp-t	1.	13.6	10.	ng/m3											77.4
Båthavn	03/04/23	0-10300	fp-t	1.	13.4	10.	ng/m3											199.6
Båthavn	03/04/30	0-10300	fp-t	1.	13.1	10.	ng/m3											8.7
Båthavn	03/05/07	0-10300	fp-t	1.	13.2	10.	ng/m3											4.5
Båthavn	03/05/13	0-10300	fp-t	1.	13.1	10.	ng/m3											24.9
Festivi	03/02/14	0-10300	fp-t	1.	13.6	10.	ng/m3											1092.3
Festivi	03/02/19	0-10300	fp-t	1.	13.7	10.	ng/m3											2224.5
Festivi	03/02/26	0-10300	fp-t	1.	13.7	10.	ng/m3											2288.0
Festivi	03/03/05	0-10300	fp-t	1.	13.6	10.	ng/m3											661.5
Festivi	03/03/12	0-10300	fp-t	1.	13.9	10.	ng/m3											324.4
Festivi	03/03/19	0-10300	fp-t	1.	13.7	10.	ng/m3											593.6
Festivi	03/03/26	0-10300	fp-t	1.	13.7	10.	ng/m3											1152.2

Norsk Institutt for Luftforskning
Avdeling for Uorganisk Analyse
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NILU ICPMS RAPPORT

Dato: 03/08/08
Side: 2

Prøveidentifikasjon	Prøve dato	Nilu id.	Prøve-type	Filt del	Luft vol	Uv.vol	ENHET	Ca	Al	Be	Sr	Sn	Sb	Ba	Tl	Mg	Th	Ti
Festivi	03/04/02	0-10300	fp-t	1.	13.6	10.	ng/m3											301.5
Festivi	03/04/09	0-10300	fp-t	1.	13.6	10.	ng/m3											381.3
Festivi	03/04/16	0-10300	fp-t	1.	13.9	10.	ng/m3											383.2
Festivi	03/04/23	0-10300	fp-t	1.	13.9	10.	ng/m3											1385.3
Festivi	03/04/30	0-10300	fp-t	1.	13.8	10.	ng/m3											970.7
Festivi	03/05/07	0-10300	fp-t	1.	13.8	10.	ng/m3											390.6
Festivi	03/05/13	0-10300	fp-t	1.	13.7	10.	ng/m3											96.9

Appendix I

Analysis of mercury from measurements of particulate matters and precipitation. Daily and monthly mean

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Målerapport nr. U-699-03

Oppdragsgiver: NILU v/Ivar Haugsbakk

Prosjekt nr.: O-103004 **Jobbnr.:**
Innkjøpsordre:

Prøvetaking:

Sted:	Barnehagen, Barneskolen (Odda sentrum), Båthavn, Eiterheimsnes (på Onz.) og Festiviteten (Tyssedal).
Ansvar:	NILU
Kommentar:	Prøvetakingen har pågått i perioden 14.02.-14.05 2003

Prøveinformasjon:

Prøvetype:	Filter og nedbør
Prøvene mottatt:	
Antall prøver:	56 filtre og 4 nedbør
Kommentar:	NILU har ingen spesielle kommentarer til prøvens tilstand ved mottak

Analyser:

Utført av
Norsk institutt for luftforskning
Postboks 100
N-2007 KJELLER

Målemetode

NILU-U-62: Forskrift for bestemmelse av Hg i prøver av fast materiale ved kalddampgenerering/atomfluorescens-spektrofotometri

Måleusikkerhet:

Måleusikkerheten i Hg-analysen ligger .innenfor ±20% ved det målte nivå. Måleusikkerheten omfatter bare det som kan tilskrives prøvebehandling og kjemiske analyser på laboratoriet. Ved vurdering av total usikkerhet må det tas hensyn til bidraget fra prøvetaking samt prøvens representativitet. I de tilfellene der NILU ikke har hatt ansvar for prøvetakingen, kan vi ikke tallfeste dette

Norsk institutt for luftforskning
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bidraget til usikkerheten. For faste prøver beregnes måleresultatet i rapporten på basis av vekt. I slike tilfeller vil deteksjonsgrensen som rapporteres kunne variere fra prøve til prøve dersom vekten varierer.

Kommentar:

Kontaktperson: Hilde Th. Uggerud

Godkjenning: Kjeller, 1. juli 2003

Hilde Th. Uggerud
Forsker, Kjemisk analyse

Vedlegg: Analyseresultater: 2 sider
Målerapporten og vedleggene omfatter totalt 4 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Analyseresultatene for ICPMS følger som et eget vedlegg med overskrift "NILU ICPMS RAPPORT".

Oppdragsgivers prøveidentifikasjon er angitt i målerapporten for hver enkelt prøve. Analyseresultatene i rapportvedlegget er gitt med varierende antall gjeldende siffer. Siden det vanligvis er vanskelig å spesifisere total måleusikkerhet bedre enn 10%, anbefales det å ikke benytte mer enn 3 gjeldende siffer ved vurdering eller i presentasjon av resultatene.

Et minus "-" foran måleresultatet, betyr at det er mindre enn deteksjonsgrensen for analysemetoden. Er måleresultatet oppgitt som f.eks. "-0.01", betyr det at deteksjonsgrensen for metoden er 0.01.

Målerapport nr. U-699-03 Side 2 av 2

Prosjektnr:	O-103004			
Stasjonsnavn	**Fradato**	**Tildato**	**Kons. Hg**	**Enhet**
Filter				
Barnehagen	14.02.03	15.02.03	2.748	ng/m3
Barnehagen	19.02.03	20.02.03	2.034	ng/m3
Barnehagen	26.02.03	27.02.03	0.495	ng/m3
Barnehagen	05.03.03	06.03.03	0.131	ng/m3
Barnehagen	12.03.03	13.03.03	0.446	ng/m3
Barnehagen	19.03.03	20.03.03	2.213	ng/m3
Barnehagen	26.03.03	27.03.03	0.586	ng/m3
Barnehagen	02.04.03	03.04.03	0.240	ng/m3
Barnehagen	08.04.03	09.04.03	1.321	ng/m3
Barnehagen	16.04.03	17.04.03	0.386	ng/m3
Barnehagen	23.04.03	24.04.03	0.591	ng/m3
Barnehagen	30.04.03	01.05.03	0.760	ng/m3
Barnehagen	07.05.03	08.05.03	0.283	ng/m3
Barnehagen	13.05.03	14.05.03	0.127	ng/m3
Barneskolen	14.02.03	15.02.03	0.085	ng/m3
Barneskolen	19.02.03	20.02.03	6.471	ng/m3
Barneskolen	26.02.03	27.02.03	0.823	ng/m3
Barneskolen	05.03.03	06.03.03	0.070	ng/m3
Barneskolen	12.03.03	13.03.03	0.516	ng/m3
Barneskolen	19.03.03	20.03.03	0.764	ng/m3
Barneskolen	26.03.03	27.03.03	0.928	ng/m3
Barneskolen	09.04.03	10.04.03	0.585	ng/m3
Barneskolen	16.04.03	17.04.03	0.490	ng/m3
Barneskolen	23.04.03	24.04.03	0.617	ng/m3
Barneskolen	30.04.03	01.05.03	0.151	ng/m3
Barneskolen	07.05.03	08.05.03	0.059	ng/m3
Barneskolen	13.05.03	14.05.03	0.468	ng/m3
Båthavn	14.02.03	15.02.03	2.405	ng/m3
Båthavn	19.02.03	20.02.03	1.544	ng/m3
Båthavn	26.02.03	27.02.03	1.976	ng/m3
Båthavn	05.03.03	06.03.03	0.217	ng/m3
Båthavn	12.03.03	13.03.03	1.342	ng/m3
Båthavn	19.03.03	20.03.03	2.411	ng/m3
Båthavn	26.03.03	27.03.03	0.823	ng/m3
Båthavn	02.04.03	03.04.03	0.562	ng/m3
Båthavn	09.04.03	10.04.03	2.996	ng/m3
Båthavn	16.03.03	17.03.03	0.957	ng/m3
Båthavn	23.04.03	24.03.03	2.431	ng/m3
Båthavn	30.04.03	01.05.03	0.111	ng/m3
Båthavn	07.05.03	08.05.03	0.095	ng/m3
Båthavn	13.05.03	14.05.03	0.167	ng/m3

Prosjektnr:	O-103004			
Stasjonsnavn	**Fradato**	**Tildato**	**Kons. Hg**	**Enhet**
Filter				
Festiviteten	14.02.03	15.02.03	0.456	ng/m3
Festiviteten	19.02.03	20.02.03	1.421	ng/m3
Festiviteten	26.02.03	27.02.03	1.701	ng/m3
Festiviteten	05.03.03	06.03.03	0.071	ng/m3
Festiviteten	12.03.03	13.03.03	0.094	ng/m3
Festiviteten	19.03.03	20.03.03	0.580	ng/m3
Festiviteten	26.03.03	27.03.03	1.090	ng/m3
Festiviteten	02.04.03	03.04.03	0.001	ng/m3
Festiviteten	09.04.03	10.04.03	0.404	ng/m3
Festiviteten	16.04.03	17.04.03	0.421	ng/m3
Festiviteten	23.04.03	24.04.03	0.496	ng/m3
Festiviteten	30.04.03	01.05.03	0.120	ng/m3
Festiviteten	07.05.03	08.05.03	0.171	ng/m3
Festiviteten	13.05.03	14.05.03	-0.006	ng/m3
Nedbør				
Eiterheimsnes	17.03.03	16.04.03	278.80	ng / liter
Eiterheimsnes	16.04.03	14.05.03	630.36	ng / liter
Båthavn	17.03.03	16.04.03	405.48	ng / liter
Båthavn	16.04.03	14.05.03	529.60	ng / liter

Appendix J

Statistics from activities that can change the air quality in Odda

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	mengde
Lossing/lasting av bulk materiale						
Lossing klinker	Diff kai	Fe, Hg, Cd	13.02.2003	3 t	ONZ	1 620 000
Lossing konsentrat	Diff kai	Fe, Hg, Cd	13.02.2003	6,5 t	ONZ	1 742 640
Lasting av jern (på bil)			13.02.2003	0,5 t	TTI	
Start av anlegg						
Avvik i drift						
Stans av anlegg						
Stans av produksjon ovnshus			13.02.2003	12,66 t	TTI	
Andre hendelser						

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	mengde	
Lossing/lasting av bulk materiale							
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	17.2.2003	9 t	ONZ	2 126 000 kg	22,5 h
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	17.2.2003	7 t	ONZ	2 917 000	
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	18.2.2003	6 t	ONZ	forts	
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	18.2.2003	15 t	ONZ	6 105 400	
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	19.2.2003	10,5 t	ONZ	forts	
lasting anhydritt	diff kai	Al, F	19.2.2003	15,5t	ONZ	??????	
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	19.2.2003	16 t	ONZ	5 444 600	
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	20.2.2003	6 t	ONZ	forts	
Lasting av jern (på bil)			14.02.2003	0,5 t	TTI		
Lossing av kullbåt			14.02.2003	10 t	TTI		
Lossing av kullbåt			15.02.2003	10 t	TTI		
Lasting av jern (på bil)			17.02.2003	1,5 t	TTI		
Lasting av jern (på bil)			18.02.2003	1,0 t	TTI		
Lasting av jern (på bil)			19.02.2003	1,0 t	TTI		
Lasting av jern (på bil)			20.02.2003	0,5 t	TTI		
Start av anlegg							
Avvik i drift							
Mye støving lasting anhydritt	diff kai	Ca	19.2.2003		ONZ		
Stans av anlegg							
Stans av produksjon ovnshus			14.02.2003	1,12 t	TTI		
Stans av produksjon forreduksjon			14.02.2003	0,53 t	TTI		
Stans av produksjon ovnshus			15.02.2003	0,60 t	TTI		
Stans av produksjon ovnshus			16.02.2003	0,89 t	TTI		
Stans av produksjon forreduksjon			17.02.2003	0,78 t	TTI		
Stans av produksjon ovnshus			17.02.2003	0,82 t	TTI		
Stans av produksjon forreduksjon			18.02.2003	0,93 t	TTI		
Stans av produksjon ovnshus			18.02.2003	0,72 t	TTI		
Stans av produksjon ovnshus			19.02.2003	0,34 t	TTI		
Stans av produksjon ovnshus			20.02.2003	1,58 t	TTI		
Andre hendelser							

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift
Lossing/lasting av bulk materiale					
Lossing av ilmenitt			21.02.2003	12 t	
Lasting av jern (på bil)			21.02.2003	0,5.t	TTI
Lossing av ilmenitt			22.02.2003	24 t	TTI
Lossing av ilmenitt			23.02.2003	24 t	TTI
Lossing av ilmenitt			24.02.2003	24 t	TTI
Lasting av jern (på bil)			24.02.2003	1 t	TTI
Lasting av slagg			25.02.2003	8 t	TTI
Lasting av jern (på bil)			26.02.2003	0,5 t	TTI
Lasting av slagg			26.02.2003	20,5 t	TTI
Lasting av slagg			27.02.2003	8 t	TTI
Lasting av jern (på bil)			27.02.2003	1,5 t	TTI
Lossing av ilmenitt			27.02.2003	9,5 t	TTI
Start av anlegg					
Start røsteanlegg2	direktepipe	Hg, Pb	27.02.2003		ONZ
Avvik i drift					
Kalsinelekkasje redler 8	kalsine			01.03.2003	ONZ
Åpning av nødskorstein	Støv		23.01.2003	0,48 t	TTI
Stans av anlegg					
Stans av produksjon ovnshus			21.02.2003	1,26 t	TTI
Stans av produksjon ovnshus			22.02.2003	0,28 t	TTI
Stans av produksjon forreduksjon			22.02.2003	2,11 t	TTI
Stans av produksjon ovnshus			23.03.2003	0,69 t	TTI
Stans av produksjon ovnshus			24.03.2003	0,27 t	TTI
Stans av produksjon ovnshus			25.02.2003	0,67 t	TTI
Stans av produksjon ovnshus			26.02.2003	0,58 t	TTI
Stans av produksjon ovnshus			27.02.2003	2,85 t	TTI
Stans av røsteanlegg2	direktepipe	Hg, PB	26.02.2003	4	ONZ
Stans av røsteanlegg2	direktepipe	Hg, PB	27.02.2003	2	ONZ
Andre hendelser					

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift
Lossing/lasting av bulk materiale					
Lasting av jern (på bil)			28.02.2003	1 t	TTI
Lossing av ilmenitt			28.02.2003	10 t	TTI
Lossing av kull			28.02.2003	11 t	TTI
Lossing av ilmenitt			01.03.2003	9 t	TTI
Lossing av ilmenitt			02.03.2003	9 t	TTI
Lasting av jern (på bil)			03.03.2003	1 t	TTI
Lasting av jern (på bil)			04.03.2003	1,5 t	TTI
Lasting av jern			04.03.2003	8 t	TTI
Lasting av slagg			04.03.2003	6 t	TTI
Lasting av jern (på bil)			05.03.2003	1 t	TTI
Lasting av jern			05.03.2003	13 t	TTI
Lasting av jern (på bil)			06.03.2003	2 t	TTI
Lasting av jern			06.03.2003	14 t	TTI
Start av anlegg					
Avvik i drift					
Stans av anlegg					
Stans av produksjon ovnshus			28.02.2003	0,25 t	TTI
Stans av produksjon ovnshus			01.03.2003	0,5 t	TTI
Stans av produksjon ovnshus			02.03.2003	0,48 t	TTI
Stans av produksjon ovnshus			03.03.2003	0,55 t	TTI
Stans av produksjon ovnshus			04.03.2003	0,42 t	TTI
Stans av produksjon ovnshus			05.03.2003	0,29 t	TTI
Stans av produksjon ovnshus			06.03.2003	2,29 t	TTI
Stans av produksjon forreduksjon			06.03.2003	0,57 t	TTI
Andre hendelser					

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	
Lossing/lasting av bulk materiale						
lossing flusspat	diff kai	Al, F	12.03.2003	2 h	ONZ	?????
lossing flusspat	diff kai	Al, F	13.03.2003	18 t	ONZ	
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	14.03.2003	6	ONZ	2 706 300
lossing konsentrat	diff kai	Fe, Hg, Cd, Zn	15.03.2003	8	ONZ	
Lossing/lasting						
Lasting av jern (på bil)			07.03.2003	0,5 t	TTI	
Lossing av kull			08.03.2003	10 t	TTI	
Lasting av jern (på bil)			10.03.2003	0,5 t	TTI	
Lasting av jern (på bil)			11.03.2003	1 t	TTI	
Lossing av ilmenitt			11.03.2003	20 t	TTI	
Lasting av slagg			11.03.2003	11 t	TTI	
Lasting av jern (på bil)			13.03.2003	0,5 t	TTI	
Start av anlegg						
Avvik i drift						
Stans av anlegg						
Stans av produksjon ovnshus			07.03.2003	0,32 t	TTI	
Stans av produksjon forreduksjon			07.03.2003	0,87 t	TTI	
Stans av produksjon forreduksjon			08.03.2003	0,68 t	TTI	
Stans av produksjon ovnshus			08.03.2003	0,44 t	TTI	
Stans av produksjon ovnshus			09.03.2003	0,33 t	TTI	
Stans av produksjon ovnshus			10.03.2003	0,890 t	TTI	
Stans av produksjon ovnshus			11.03.2003	0,27 t	TTI	
Stans av produksjon ovnshus			12.03.2003	0,71 t	TTI	
Stans av produksjon ovnshus			13.03.2003	0,5 t	TTI	
Andre hendelser						

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	
Lossing/lasting av bulk materiale						
lossing klinker	diff kai		17.03.2003	9 t	ONZ	2 005 000 kg
lossing konsentrat	diff kai		18.03.2003	14 t	ONZ	4 925 500
lossing konsentrat	diff kai		19.03.2003	5 t	ONZ	forts
Lasting av jern (på bil)			14.03.2003	0,5 t	TTI	
Lasting av jern (på bil)			17.03.2003	1 t	TTI	
Lasting av jern			17.03.2003	23 t	TTI	
Lasting av jern (på bil)			19.03.2003	1,5 t	TTI	
Lasting av jern (på bil)			20.03.2003	0,5 t	TTI	
Start av anlegg						
Avvik i drift						
Stans av anlegg						
Stans av produksjon ovnshus			14.03.2003	0,59 t	TTI	
Stans av produksjon ovnshus			15.03.2003	0,70 t	TTI	
Stans av produksjon ovnshus			16.03.2003	0,81 t	TTI	
Stans av produksjon ovnshus			17.03.2003	0,32 t	TTI	
Stans av produksjon ovnshus			18.03.2003	0,61 t	TTI	
Stans av produksjon ovnshus			19.03.2003	0,59 t	TTI	
Stans av produksjon ovnshus			20.03.2003	2,03 t	TTI	
Andre hendelser						

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift
Lossing/lasting av bulk materiale					
Lossing klinker	diff kai		24.03.2003	5,5 t	ONZ
lossing konsentrat	diff kai		24.03.2003	11,5	ONZ
lossing konsentrat	diff kai		25.03.2003	2	ONZ
Lasting av jern (på bil)			21.03.2003	1 t	TTI
Lasting av slagg			21.03.2003	12 t	TTI
Lasting av jernbåt			23.03.2003	10 t	TTI
Lasting av jern (på bil)			24.03.2003	0,5 t	TTI
Lasting av jern (på bil)			25.03.2003	1 t	TTI
Lasting av jern (på bil)			26.03.2003	1 t	TTI
Lasting av jernbåt			26.03.2003	19 t	TTI
Lasting av jern (på bil)			27.03.2003	1 t	TTI
Start av anlegg					
Start røsteanlegg2	Direktepipe	Hg, Pb	29.03.2003		ONZ
Avvik i drift					
Stans av anlegg					
Stans av produksjon ovnshus			21.03.2003	0,64 t	TTI
Stans av produksjon ovnshus			22.03.2003	0,36 t	TTI
Stans av produksjon ovnshus			23.03.2003	0,99 t	TTI
Stans av produksjon ovnshus			24.03.2003	0,45 t	TTI
Stans av produksjon ovnshus			25.03.2003	2,10 t	TTI
Stans av produksjon ovnshus			26.03.2003	1,38 t	TTI
Stans av produksjon ovnshus			27.03.2003	2,81 t	TTI
Stans av produksjon forreduksjon			27.03.2003	0,47 t	TTI
Stans røsteanlegg2	direktepipe	Pb, Hg	26.03.2003	1,5	ONZ
Stans røsteanlegg2	direktepipe	Pb, Hg	27.03.2003	24	ONZ
Stans røsteanlegg2	direktepipe	Pb, Hg	28.03.2003	24	ONZ
Stans røsteanlegg2	direktepipe	Pb, Hg	29.03.2003	1	ONZ
Andre hendelser					
Gravearbeid ved NILU's prøveutstyr			25.03.2003		TTI
Gravearbeid ved NILU's prøveutstyr			26.03.2003		TTI
Gravearbeid ved NILU's prøveutstyr			27.03.2003		TTI

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift
Lossing/lasting av bulk materiale					
Lossing konsentrat	diff kai		31.03.2003	15 t	ONZ
Lossing hydrat	diff kai		03.042003	10 t	ONZ
Lossing hydrat	diff kai		04.04.2003	7 t	ONZ
Lossing av ilmenitt			30.03.2003	19,5 t	
Lossing av kull			30.03.2003	11,5 t	TTI
Lasting av jern (på bil)			31.03.2003	0,5 t	TTI
Lasting av jern (på bil)			02.04.2003	0,5 t	TTI
Lasting av jern (på bil)			03.04.2003	0,5 t	TTI
Lasting av jern (på bil)			04.04.2003	0,5 t	TTI
Start av anlegg					
Avvik i drift					
Støving frfa silo over ice pumpe					
Capåpning			31.03.2003	0,53 t	TTI
Capåpning			01.04.2003	2,53 t	TTI
Stans av anlegg					
Stans av produksjon ovnshus			28.03.2003	2,45 t	TTI
Stans av produksjon ovnshus			29.03.2003	0,92 t	TTI
Stans av produksjon forreduksjon			29.03.2003	0,58 t	TTI
Stans av produksjon ovnshus			30.03.2003	0,73 t	TTI
Stans av produksjon forreduksjon			31.03.2003	3,68 t	TTI
Stans av produksjon ovnshus			31.03.2003	0,40 t	TTI
Stans av produksjon forreduksjon			01.04.2003	18,5 t	TTI
Stans av produksjon ovnshus			01.04.2003	0,93 t	TTI
Stans av produksjon forreduksjon			02.04.2003	1,33 t	TTI
Stans av produksjon ovnshus			02.04.2003	9,75 t	TTI
Stans av produksjon ovnshus			03.04.2003	0,75 t	TTI
Stans av røsteanlegg 2	direktepipe	Pb, Hg	01.04.2003	1,5t	ONZ
Andre hendelser					
Gravearbeid ved NILU's prøveutstyr			31.03.2003		TTI
Gravearbeid ved NILU's prøveutstyr			01.04.2003		TTI

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	
Lossing/lasting av bulk materiale						
Lossing konsentrat	diff kai		07.04.2003	11,5 t	ONZ	3 630 200
Lossing konsentrat	diff kai		08.04.2003	7 t	ONZ	forts
Lossing klinker	diff kai		08.04.2003	6 t	ONZ	1 495 500
Lossing konsentrat	diff kai		09.04.2003	15 t	ONZ	5 464 200
Lossing konsentrat	diff kai		10.04.2003	13 t	ONZ	forts
Lasting av jern (på bil)			04.04.2003	0,5 t	TTI	
Lasting av slagg			04.04.2003	6 t	TTI	
Lasting av jern (på bil)			07.04.2003	0,5 t	TTI	
Lasting av jern (på bil)			09.04.2003	1 t	TTI	
Lasting av jern (på bil)			10.04.2003	2,5 t	TTI	
Lasting av jernbåt			10.04.2003	25 t	TTI	
Start av anlegg						
Avvik i drift						
Stans av anlegg						
Stans av produksjon ovnshus			04.04.2003	0,56 t	TTI	
Stans av produksjon ovnshus			05.04.2003	0,38 t	TTI	
Stans av produksjon ovnshus			06.04.2003	0,60 t	TTI	
Stans av produksjon ovnshus			07.04.2003	0,73 t	TTI	
Stans av produksjon ovnshus			08.04.2003	0,40 t	TTI	
Stans av produksjon ovnshus			09.04.2003	0,37 t	TTI	
Stans av produksjon ovnshus			10.04.2003	2,07 t	TTI	
Andre hendelser						

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	
Lossing/lasting av bulk materiale						
Lossing konsentrat	diff kai		14.04.2003	14 t	ONZ	3 981 800
Lossing klinker	diff kai		22.04.2003	7 t	ONZ	1 605 000
Lossing konsentrat	diff kai		22.04.2003	10 t	ONZ	2 986 000
Lossing konsentrat	diff kai		23.04.2003	3,5 t	ONZ	forts
lasting av anhydritt 15.04????						
Lasting av jern (på bil)			11.04.2003	0,5 t	TTI	
Lossing av ilmenitt			12.04.2003	13,5 t	TTI	
Lasting av slagg			13.04.2003	17,5 t	TTI	
Lossing av kull			13.04.2003	10,5 t	TTI	
Lasting av jernbåt			14.04.2003	5,5 t	TTI	
Lossing av ilmenitt			15.04.2003	24 t	TTI	
Lossing av ilmenitt			16.04.2003	9 t	TTI	
Start av anlegg						
Avvik i drift						
Mye støvin lasting anhydritt	anhydritt	Ca	15.04.2003		ONZ	
Stans av anlegg						
Stans av produksjon ovnshus			11.04.2003	0,60 t	TTI	
Stans av produksjon ovnshus			12.04.2003	0,38 t	TTI	
Stans av produksjon forreduksjon			12.04.2003	0,27 t	TTI	
Stans av produksjon ovnshus			13.04.2003	0,59 t	TTI	
Stans av produksjon ovnshus			14.04.2003	0,47 t	TTI	
Stans av produksjon forreduksjon			14.04.2003	0,18 t	TTI	
Stans av produksjon ovnshus			15.04.2003	1,94 t	TTI	
Stans av produksjon ovnshus			16.04.2003	0,86 t	TTI	
Stans av produksjon forreduksjon			16.04.2003	0,77 t	TTI	
Stans av produksjon ovnshus			17.04.2003	0,63 t	TTI	
Andre hendelser						

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	
Lossing/lasting av bulk materiale						
Lossing konsentrat	diff kai		23.04.2003	10 t	ONZ	4 293 000
Lossing konsentrat	diff kai		24.04.2003	14 t	ONZ	forts
Lasting av jern (på bil)			22.04.2003	0,5 t	TTI	
Lasting av jernbåt			22.04.2003	10,5 t	TTI	
Lossing av kull			22.04.2003	10,5 t	TTI	
Lasting av jern (på bil)			23.04.2003	0,5 t	TTI	
Lossing av ilmenitt			23.04.2003	14,5 t	TTI	
Lasting av jernbåt			24.04.2003	21 t	TTI	
Lasting av jern (på bil)			24.04.2003	1 t	TTI	
Start av anlegg						
Avvik i drift						
Stans av anlegg						
Stans av produksjon ovnshus			18.04.2003	0,67 t	TTI	
Stans av produksjon ovnshus			19.04.2003	0,52 t	TTI	
Stans av produksjon ovnshus			20.04.2003	0,62 t	TTI	
Stans av produksjon ovnshus			21.04.2003	0,32 t	TTI	
Stans av produksjon forreduksjon			21.04.2003	2,95 t	TTI	
Stans av produksjon ovnshus			22.04.2003	0,71 t	TTI	
Stans av produksjon ovnshus			23.04.2003	1,04 t	TTI	
Stans av produksjon ovnshus			24.04.2003	3,91 t	TTI	
Stans av røsteanlegg2	direktepipe	Hg, Pb	21.04.2003	4 t	ONZ	
Andre hendelser						

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift	
Lossing/lasting av bulk materiale						
Lossing flusspat	diff kai	Al F	29.04.2003	6 t	ONZ	4 147 400
Lossing flusspat	diff kai	Al F	30.04.2003	8 t	ONZ	forts
Lossing konsentrat	diff kai		30.04.2003	6 t	ONZ	5 392 773
Lossing konsentrat	diff kai		02.05.2003	12 t	ONZ	forts
Start av anlegg						
Avvik i drift						
Stans av anlegg						
Stans røsteanlegg1	direktepipe	Hg, Pb	28.04.2003	0,5	ONZ	
Stans røsteanlegg2	direktepipe	Hg, Pb	28.04.2003	0,5	ONZ	
Andre hendelser						

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift
Lossing/lasting av bulk materiale					
Lasting av slagg			02.05.2003	18 t	TTI
Lasting av jern (på bil)			05.05.2003	1 t	TTI
Lasting av jern (på bil)			06.05.2003	1 t	TTI
Start av anlegg					
Avvik i drift					
Stans av anlegg					
Stans av produksjon ovnshus			02.05.2003	0,84 t	TTI
Stans av produksjon ovnshus			03.05.2003	0,90 t	TTI
Stans av produksjon ovnshus			04.05.2003	0,58 t	TTI
Stans av produksjon ovnshus			05.05.2003	0,94 t	TTI
Stans av produksjon ovnshus			06.05.2003	0,93 t	TTI
Stans av produksjon ovnshus			07.05.2003	0,76 t	TTI
Stans av produksjon ovnshus			08.05.2003	2,51 t	TTI
Stans av produksjon forreduksjon			08.05.2003	0,28 t	TTI
Stans røsteanlegg1	direktepipe	Hg, Pb	09.05.2003	2 t	ONZ
Annet					
Transport kobbersement	diff	Cu,	07.05.2003		ONZ
Transport kobbersement	diff	Cu,	08.05.2003		ONZ

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Logg av aktiviteter som kan endre luftkvalitet i Odda

Aktivitet	Type utslipp	ID elementer	Dato	Tidsperiode	Bedrift
Lossing/lasting av bulk materiale					
Lasting av slagg			09.05.2003	20 t	TTI
Lossing av ilmenitt			09.05.2003	14 t	TTI
Lossing av kull			11.05.2003	12 t	TTI
Lasting av jern (bil)			12.05.2003	2 t	TTI
Lasting av jern (bil)			14.05.2003	0,5 t	TTI
Lossing av kull			14.05.2003	11,5 t	TTI
Lasting av jernbåt			14.05.2003	10 t	TTI
Lasting av jern (bil)			15.05.2003	1 t	TTI
Start av anlegg					
Avvik i drift					
Capåpning (under stansen)			13.05.2003	15 t	TTI
Capåpning (under stansen)			14.05.2003	14,5 t	TTI
Stans av anlegg					
Stans av produksjon ovnshus			09.05.2003	0,44 t	TTI
Stans av produksjon ovnshus			10.05.2003	0,43 t	TTI
Stans av produksjon ovnshus			11.05.2003	0,39 t	TTI
Stans av produksjon ovnshus			12.05.2003	0,63 t	TTI
Stans av produksjon forreduksjon			13.05.2003	19,5 t	TTI
Stans av produksjon ovnshus			13.05.2003	1,08 t	TTI
Stans av produksjon forreduksjon			14.05.2003	23,5 t	TTI
Stans av produksjon ovnshus			14.05.2003	13,86 t	TTI
Stans av produksjon ovnshus			15.05.2003	4,39 t	TTI
Andre hendelser					

Innrapportering av logg hver fredag i måleperioden, 13. februar til 13. Mars, til prosjektansvarlig, Tove M. Bjerknes

Norwegian Institute for Air Research (NILU)

P.O. Box 100, N-2027 Kjeller

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AUTHOR(S) Ivar Haugsbakk		CLASSIFICATION * A CONTRACT REF. Helga Gustavson	
REPORT PREPARED FOR Tinfos Titan & Iron, 5770 TYSSEDAL			
KEYWORDS Meteorology	Particulate matter	Air quality	

ABSTRACT
NILU has carried out measurements regarding meteorology and air quality around the industrial facilities of Outokumpu Norzink AS and Tinfos Titan & Iron KS innermost Sørfjorden. The results from the monitoring programme conclude in blaming the industrial activities for contribution to particulate matter and metallic emission to its surroundings.

TITLE (Norwegian)

Måling av meteorologi og luftkvalitet omkring Outokumpu Norzink AS og Tinfos Titan & Iron KS i Odda. Februar – mai 2003.

ABSTRACT (in Norwegian)
NILU har foretatt målinger av meteorologi og luftkvalitet omkring industribedriftene Outokumpu Norzink AS og Tinfos Titan & Iron KS innerst i Sørfjorden. Målingene viser at utslippene fra industrien har resultert i forhøyede nivåer av støv og metaller i lufta i området i forhold til bakgrunnsnivået.

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