



SHARE
SHARE
Stations at High Altitude for Research on the Environment

METEOROLOGICAL NETWORK

2011

SHARE Project

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INDEX OF CONTENTS

1. INTRODUCTION	7
1.1 Aws quality control	9
2 SITES DESCRIPTION	10
2.1 Nepal	10
2.2 Pakistan	12
2.3 Italy	13
2.4 Uganda	15
2.5 Bolivia	18
3 AWSS DATA	17
3.1 Nepal	19
AWS 1 and CEOP Pyramid	19
Technical sheet	19
Air temperature (°c)	20
Relative humidity (%)	21
Atmospheric pressure (hpa)	22
Wind direction (degree)	23
Wind speed (m/s)	24
Precipitation (mm)	25
Global solar radiation (w/m2)	26
AWS3 and CEOP Lukla	27
Technical sheet	27
Air temperature (°c)	28
Relative humidity (%)	29
Atmospheric pressure (hpa)	30
Wind direction (degree)	31
Wind speed (m/s)	32
Precipitation (mm)	33
Global solar radiation (w/m2)	34
AWS NP-Namche	35
Technical sheet	35
Air temperature (°c)	36
Relative humidity (%)	37
Atmospheric pressure (hpa)	38
Wind direction (degree)	39
Wind speed (m/s)	40
Precipitation (mm)	41
Global solar radiation (w/m2)	42
AWS2 Pheriche	43
Technical sheet	43
Air temperature (°c)	44
Relative humidity (%)	45
Atmospheric pressure (hpa)	46
Wind direction (degree)	47
Wind speed (m/s)	48
Precipitation (mm)	49
Global solar radiation (w/m2)	50

AWS Kala Patthar	51
Technical sheet	51
Air temperature (°c)	52
Relative humidity (%)	53
Atmospheric pressure (hpa)	54
Wind direction (degree)	55
Wind speed (m/s)	56
Precipitation (mm)	57
Global solar radiation (w/m2)	58
Uva radiation (w/m2)	59
AWS Changri Nup	60
Technical sheet	60
Air temperature (°c)	61
Relative humidity (%)	62
Wind direction (degree)	63
Wind speed (m/s)	64
AWS South Col	65
Technical sheet	65
Air temperature (°c)	66
Relative humidity (%)	67
Wind direction (degree)	68
Wind speed (m/s)	69
Uva radiation (w/m2)	70
3.2 Pakistan	71
AWS Askole	71
Technical sheet	71
Air temperature (°c)	72
Relative humidity (%)	73
Atmospheric pressure (hpa)	74
Wind direction (degree)	75
Wind speed (w/m2)	76
Precipitation (mm)	77
Global solar radiation (w/m2)	78
AWS Urdukas	79
Technical sheet	79
Air temperature (°c)	80
Relative humidity (%)	81
Atmospheric pressure (hpa)	82
Wind direction (degree)	83
Wind speed (m/s)	84
Precipitation (mm)	85
Global solar radiation (w/m2)	86
AWS Concordia	87
Technical sheet	87
2011 Data	87
3.3 Italy	88
AWS Bianco - Osram	88
Technical sheet	88
2011 Data	88
AWS Dosedè-Levissima	89
Technical sheet	89

Air temperature (w/m2)	90
Atmospheric pressure (w/m2)	91
Incoming solar radiation (w/m2)	92
Outgoing solar radiation (w/m2)	93
Albedo (w/m2)	94
Net solar radiation (w/m2)	95
Incoming infrared radiation (w/m2)	96
Outgoing infrared radiation (w/m2)	97
Net infrared radiation (w/m2)	98
Sky temperature (°c)	99
Surface temperature (°c)	100
AWS1 Forni	101
Technical sheet	101
Air temperature (°c)	102
Relative humidity (%)	103
Atmospheric pressure (hpa)	104
Wind direction (degree)	105
Wind speed (m/s)	106
Precipitation (mm)	107
Incoming solar radiation (w/m2)	108
Outgoing solar radiation (w/m2)	109
Albedo (w/m2)	110
Net solar radiation (w/m2)	111
Incoming infrared radiation (w/m2)	112
Outgoing infrared radiation (w/m2)	113
Net infrared radiation (w/m2)	114
Sky temperature (°c)	115
Surface temperature (°c)	116
Snow level (cm)	117
3.4 Uganda	118
AWS Rwenzori	118
Technical sheet	118
2011 Data	118
4 ATMOSPHERIC DATA	119
4.1 Nepal	119
NCO-P	119
Technical sheet	119
Ozone (ppbv)	119
BLack Carbon (ng/m3)	119
4.2 Italy	120
O. Vittori	121
Technical sheet	122
Ozone(ppbv)	123
Black carbon (ng/m3)	124
4.3 Bolivia	125
Chacalataya Observatory	125
Technical sheet	125
2011 Data	125

5. ACKNOWLEDGEMENTS	126
6. SHARE PARTNER	126
7. REFERENCES	128

1. Introduction

SHARE - Stations at High Altitude for Research on the Environment - is an integrated environmental project promoted by Ev-K2-CNR in 2005 with the support of Italian and International research institutions and in collaboration with the United Nations Environment Program (UNEP). The project is focused on mountain regions as primary indicators of climate change and it responds to the call of international and intergovernmental institutions for improving environmental research in high mountain regions. SHARE specific aim is to improve scientific knowledge on climate variability in mountain re-

gions, by ensuring the availability of long term, high quality data. Originally launched as a system of measurements in environmental and earth sciences in the Himalaya - Karakorum region, SHARE, has later expanded its network to Europe (Apennines and Alps), Africa (Rwenzori) and more recently to South America (Andes).

Now, more than fifteen stations are installed around the world, at several altitudes, from 2165 m to 8000 m a.s.l. and regularly supply data on meteorological and atmospheric conditions, the most of them are available in real time.

Installation site	Nation/Continent		Station	Characteristics	Altitude (m a.s.l.)	Latitude	Longitude
Mt. Cimone (Northern Apennines)	Italy	Europeo	"Ottavio Vittori" Research Station:	Atmospheric monitoring station	2,165	44° 11' 00" N	10° 42' 00" E
Forni glacier (Central Alps, Valtellina)	Italy	Europeo	AWS1 Forni	Automatic weather station	2,669	46° 23' 56" N	10° 35' 25.2" E
Dosdè Glacier (Central Alps, Valtellina)	Italy	Europeo	AWS Dosdè-Levissima	Automatic weather station	2,801	46° 23' 33.9" N	10° 13' 3,6" E
Campo Imperatore (Gran Sasso, Apennins)	Italy	Europeo	-	Atmospheric monitoring station	2,401	42° 26' 53" N	13° 33' 07.5" E
Gigante Glacier (Mt. Bianco, Alps)	Italy	Europeo	AWS Bianco-Osram	Automatic weather station	3,430	45° 50' 50" N	06° 55' 58" E
Pyramid Laboratory Observatory (Lobuche, humbu Valley)	Nepal	Asia	Nepal Climate Observatory-Pyramid (ABC-Pyramid)	Atmospheric monitoring station	5,079	27°56'60" N	86°49'12" E
			GPS Master	GPS station	5,050		
			AWS1; AWS CEOP	Automatic weather station	5,050	27° 57' 3.6" N	86° 48' 3.6" E
			DORIS	Orbitographic station	5,050		
Pheriche (Khumbu Valley)	Nepal	Asia	AWS2	Automatic weather station	4,258	27° 53' 43.3" N	86° 49' 7.5" E
Namche Bazaar (Sagarmatha National Park Head Quarter, Khumbu Valley)	Nepal	Asia	AWS NP	Automatic weather station	3,560	27° 48' 8.6" N	86° 42' 52.4" E

Lukla (Khumbu Valley)	Nepal	Asia	AWS3 - CEOP LUKLA	Automatic weather station	2,660	27° 41' 44" N	86° 43' 23" E
Kala Patthar (Khumbu Valley)	Nepal	Asia	AWS-KP	Automatic weather station	5,600	27° 59' 42" N	86° 49' 43" E
Changri Nup Glacier	Nepal	Asia	AWS-CNG	Automatic weather station	5,700	27° 59' 08" N	86° 45' 39" E
South Col	Nepal	Asia	AWS-CS	Automatic weather station	8,000	27° 58' N	86° 56' E
Urdukas (Baltoro glacier, Baltistan)	Pakistan	Asia	AWS PK1	Automatic weather station	3,926	35° 43' 41" N	76° 17' 10" E
Askole (Baltistan, Pakistan)	Pakistan	Asia	AWS PK2	Automatic weather station	3,015	35° 40' 56.8" N	75° 48' 58.4" E
Concordia	Pakistan	Asia	AWS CO	Automatic weather station	4,700	35°44'38.98"N	76°30'49.71"E
Mt. Rwenzori (Elena Glacier)	Uganda	Africa	AWS RW	Automatic weather station	4,750	0° 22' 34.55" N	29° 52' 43.24" E
Chacaltaya	Bolivia	South America	Chacaltaya Laboratory		5,320	16° 29' S	68° 06' W

Tab. 1 - List of SHARE stations

Data collected at high altitude in the SHARE project provide unique information to several international climate-environmental monitoring programs, as like as UNEP-ABC, WMO-GAW, NASA AERONET, ILTER, EUSAAR, and ACCENT.

The data collected by the AWS installed on glacier surface are also essential for measuring energy fluxes at the glacier-atmosphere interface and snow accumulation, for calculating the energy available for snow/ice melt, for the validation of mass balance models, meteorological models (regional/mesosca-

le) and satellite products, for constructing parameterizations for energy balance models (Senese et al., 2012; Senese et al., 2012). These data play an important role in characterizing glacier surface and sky conditions too. For example albedo and cloudiness are the most important parameters that determine the amount of solar radiation adsorbed at the surface (apart from geometric effects like shading): at the glacier surface the solar radiation mainly drives ice and snow melt.

1.1 AWS QUALITY CONTROL

In spring 2011, in the framework of the SHARE project, the calibration activities of the automatic weather stations have been strengthened thanks to the use of a mobile Quality Control automatic weather station (AWS QC).

This action, necessary to guarantee high quality measurements and check the state of the stations, was started in Nepal, where the most of AWSs are installed and then it will continue systematically in the other countries in order to calibrate all AWSs.

The AWS QC is equipped with sensors and acquisition systems with uncertainties, known and certified (see table below).

In the first experimental campaign the AWS QC was installed near the CEOP - Pyramid for two weeks and after this period the AWS QC was dismantled and its data were compared with those recorded from the CEOP- AWS Pyramid for the same period.

The data comparison has permitted to identify a few problems on the permanent station that were successively restored.

In autumn 2011, the AWS QC was installed near the permanent AWS at Kala Patthar. In this site the AWS QC worked from November 20 to December 8.

As done in the spring, also in autumn the data comparison of AWS QC and AWS KP has permitted to replace the malfunctioning sensors.



Fig. 1 - AWS QC installed near the AWS KP

Variable	Time Resolution	Manufacturer	Accuracy	Resolution	Certification
Air temperature (°C)	10 s	Vaisala HUMICAP HMO155	±0.17 °C	0.1 °C	ISO 9001:2000 ISO/IEC 17025
Relative humidity (%)	10 s	Vaisala HUMICAP HMO155	±1 %	0.1 %	ISO 9001:2000 ISO/IEC 17025
Atmospheric pressure (hPa)	10 s	Vaisala BAROCAP PTB330	0.15 hPa	0,45 hPa	ISO 9001:2000 ISO/IEC 17025
Global solar radiation (W/m ²)	0.1 s	CM6B pyranometer (Kipp & Zonen)	1 W/m ²	n.a	-
UVA radiation (W/m ²)	-	NO	-	-	-
Wind speed (m/s)	4 s	WAV151	±0.5 m/s	-	-
Wind direction (degree)	4 s	WAV151	±0.3°	5.6°	-

Tab. 2 - AWS QC structure

2. Sites description

2.1 NEPAL

The SHARE activities, in Nepal, are carried out mainly along the Khumbu Valley located in the central part of the Himalayan range and partially include the Sagarmatha National Park area. Thanks its location, this valley represents a strategic area to study climate change and its effects on mountain ecosystems, containing the southern half of Mount Everest and its summit.

The area is characterized by poor annual mean precipitation mostly concentrated during the summer monsoon season. Winter synoptic circulation is dominated by western streams (westerly) bringing events which lead to snowfalls in the western and central Himalayan Range and the Tibetan Plateau.

In summer, southern monsoon streams dominate carrying damp ocean air toward the interior of the continent. Throughout all seasons except for the monsoon, an intense southern valley breeze blows during the day, contrasted by a less intense northern mountain breeze at night.

In this region a network of nine automatic weather stations and one atmospheric laboratory has been installed since 1994 m and covers an altitudinal range from 2660 to 8000 m a.s.l. (Fig. 1). In particular, the meteorological stations that constitute the SHARE Network in Nepal are located in Lukla (2660 m a.s.l.), Namche (3570 m a.s.l.), Periche (4.260 m a.s.l.), Lobuche at Pyramid (5050 m a.s.l.), Kala Patthar (5600 m a.s.l.), Changri Nup (5700 m a.s.l.) and South Col – Mount Everest (8000 m a.s.l.).

Most of automatic weather stations take hourly measurements of seven standard meteorological parameters: temperature, relative humidity, atmospheric pressure, wind speed and direction, global solar radiation and total precipitation.

At Pyramid and Lukla, stations have been implemented by sensors for the determination of soil parameters (temperature, water content, and thermal flux) and four components of radiation.

Since February 2010 the Changri Nup station has been included in the network. This station is located on the glacier at 5700 m a.s.l. and takes every thirty minutes measurements of temperature, relative humidity, wind speed, wind direction and four components of radiation.

On May 2011, after a period of test during summer 2008, an automatic weather station has been re-installed at South Col, near summit of Mount Everest. This station was equipped with technologically-advanced sensors for measuring temperature, humidity, wind speed and direction, atmospheric pressure and solar radiation (Moore et al., 2012). Support, energy and data transmission systems are optimized for functioning in adverse weather conditions.

Since 2006, near the International Laboratory Observatory Pyramid, the Nepal Climate Observatory-Pyramid has been installed at 5079 m a.s.l. and regularly collects data on the most important atmospheric parameters. This station is installed in a key area to study the background atmospheric condition of Khumbu Valley and improve knowledge on Atmospheric Brown Cloud (ABC) phenomenon (Bonasoni et al., 2012; Bracci et al., 2012; Duchi et al., 2011; Bonasoni et al., 2010; Marinoni et al., 2010; Cristofanelli et al., 2010; Yasunari et al., 2010).

NCO-P supplies essential information to international scientific community in the study of ABC phenomenon and thanks its contribution this station represents the 34th Global Station in the framework of Global Atmospheric Watch – World Meteorological Organization (GAW-WMO).

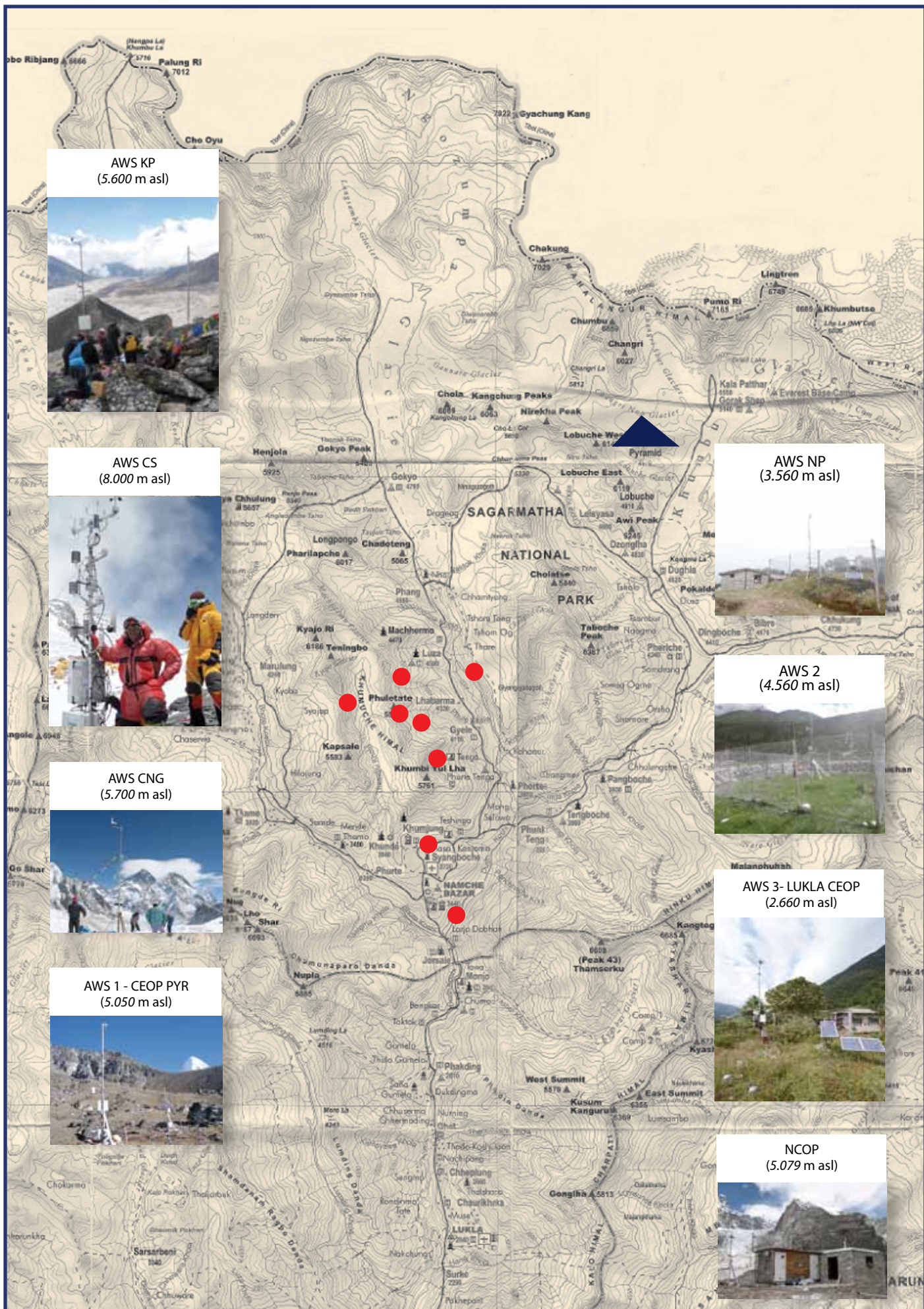


Fig. 2 Map of the stations installed in Sagarmatha National Park.

2.2 PAKISTAN

In Pakistan, the SHARE activities are focused in Central Karakorum National Park (on Baltoro Glacier).

The climate in high altitude mountains of the Northern Areas is influenced by the broad global circulation patterns associated with the position in the continental mass and the proximity to the oceans. During the winter and spring period the Karakoram area is influenced mainly by a broad scale weather system originating primarily from the Mediterranean or from the area of the Caspian Sea and from air mass convective storm in the pre-monsoon season.

In spite of climate changes, studies carried out on Baltoro Glacier show small and limited variations its extension in the last 50 years. In fact this zone is characterized by low temperatures and a climate very wet. The different activity of Baltoro Glacier in respect to most of the mountain glaciers is most likely due to the different supraglacial conditions characterizing its glacier tongue. On Baltoro Glacier the debris insulation effect allowed a larger quantity of ice in the glacier tongue to be conserved. The climate isn't influenced by monsoons and precipitations present a regular trend.

In this region tree Automatic Weather Stations are installed. Specifically, in Central Karakorum National Park, at Urdukas and Askole the stations have been working respectively since 2004 and 2005 and are supplying unique information, useful to characterize meteorological and cryospheric conditions of Baltoro Glacier (Palazzi et al., 2012; Bocchiola et al., 2012; Mihalcea et al., 2008; Smiraglia et al., 2007).

Both stations are recording standard meteorological parameters, since their installation moment, with hourly frequency. Moreover, since July 2011, Urdukas station has been implemented trough installation of sensor to record data regarding four components of radiation.

The same parameters recorded by Urdukas station are recorded also by a new station installed in 2011 at Concordia. AWS Concordia is located in one of most impressive world glacier basin: the Baltoro Concordia. The glaciers flowing from K2, Broad Peak, and Gasherbrum I and II plus many other are joining in Concordia and flowing out to the Baltoro glacier for 60 Km in total.



Fig. 3- Map of AWSs installed in Central Karakorum National Park.

2.3 ITALY

In Italy the monitoring activities are focused on Alps and Apennines Area.

On Alps three AWSs are installed on three different Italian Glaciers. The AWS1 Forni has been installed on Forni Glacier on September 26, 2005 at 2669 m a.s.l. and its location is a good compromise between the needs for minimizing local topography effects and lowering the probability of avalanches destroying the AWS. This station represents the first Italian permanent above glacial AWS that supply a big number of information about micro-meteorological conditions on surface of an Italian Alpine glacier. In particular, this station is located in the glacial ablation area and permits to measure both the winter accumulation and the thermal conditions and in-coming/out-coming energetic fluxes that rules the losses of glacial masses during the summer period (Diolaiuti et al., 2012; Diolaiuti et al., 2011; Senese et al., 2010; Senese et al., 2010)

The AWS Dosedè – Levissima is the second Italian permanent station and was installed on August 14, 2007, on Dosedè Glacier. This station located at 2850 m asl permits to collect data on above glacial ther-

mal conditions and incoming and outgoing energetic fluxes.

This automatic weather station represent the highest Lombardy permanent station on glacier and its data can be comparable to those collected by AWS Forni in order to verify the effects of climate change on glacial size and micro-meteorological parameters (Diolaiuti et al., 2011)

The AWS Monte Bianco – Osrham is the third Italian permanent automatic weather station and has been installed on December 17, 2007 on Gigante Glacier (Mt. Bianco's group), one of the most important Italian glacier group. The AWS Monte Bianco, is located about 400 m from the "Punta Helbronner" and represents the highest Italian permanent AWS on glacier. Data collected by this station permit to improve knowledge both on local micro-meteorological knowledge and to support the periglacial researches. Moreover, this station located at 3430 m asl permits to collect data on above glacial thermal conditions and incoming and outgoing energetic fluxes. Data collected by this station can be compared to the AWSs installed on Forni and Dosedè glaciers.

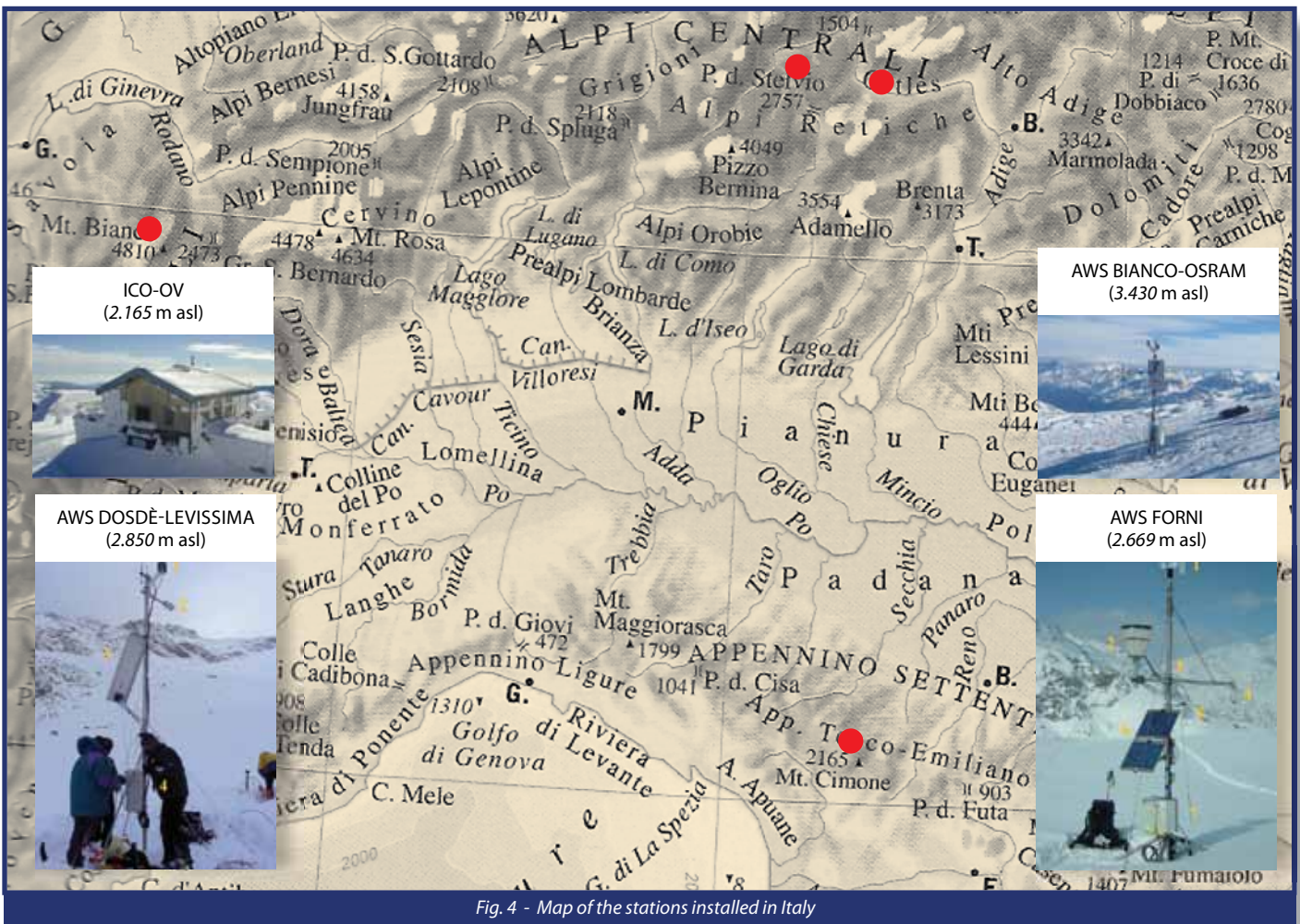


Fig. 4 - Map of the stations installed in Italy

On Apennines, at Mount Cimone is installed at Italian Climate Observatory "Ottavio Vittori" (ICO-OV). Mt. Cimone is the highest peak of the Northern Apennines on the border line of two different climatic regions: the continental Europe northwards and the Mediterranean Basin southwards.

The Italian Climate Observatory "O. Vittori" (ICO-OV), is a research infrastructure managed by the Institute of Atmospheric Sciences and Climate (ISAC) of the National Research Council (CNR). It is the only high mountain station for atmospheric research both South of the Alps and the Po basin and it represents a strategic platform to study the chemical-physical characteristics and climatology of the South Europe and North Mediterranean basin. The ICO-OV is part also of the Global Atmosphere Watch (GAW) program by the World Meteorological Organization

(WMO).

At ICO-OV, continuous monitoring of climate-altering compounds (trace gases and aerosol), solar radiation as well as meteorological parameters are carried out since 1996.

The ICO-OV activity can help to better monitor the changes of atmospheric composition, to investigate the processes influencing climate and to assess the contribution of short and long-range air mass transport to atmospheric variability. (Cristofanelli et al., 2012; Cristofanelli and Bonasoni, 2008).

ICO-OV is part of several international networks devoted to the long-term monitoring of atmospheric properties and climate change study.

Data from ICO-OV are also used to calibrate and verify data from satellites and model simulations.

2.4 UGANDA

In Africa, the SHARE monitoring activities are focused in Uganda, in particular on Rwenzori mountain area.

The Rwenzori Mountains (called also “Mountains of the Moon”), with heights of up to 5,109 m asl., are located in the central Africa, on the border between Uganda and the Democratic Republic of Congo, in the Ugandan National Park an UNESCO World Heritage Site.

In the Rwenzori Range some of the main peaks are covered with permanent snow and glacier, while the lower slopes are covered with dense forest. Besides there are several massifs such as Point Margherita, the third highest African summit after, Mt. Kilimanjaro and Mt. Kenya.

The AWS Rwenzori (RW) has been installed, in Uganda, in the western part of the Stanley Plateau, on July 18, 2006 and it is similar to the other Ev-K2-CNR

AWSs already installed in the high altitude regions of Himalaya and Karakorum. Due to the extreme environmental conditions this station worked till 2009 and in 2013 a mission for instrument replacement will be planned.

From 2006 to 2009 this station provided continuous measurements of the seven meteorological standard parameters as like as air temperature, relative humidity, wind speed and direction, atmospheric pressure, global solar radiation and total precipitation. Meteo-climatic observations in this area are very important for the study of the environmental changes that are affecting this ecosystem, helping the scientific community to improve the prediction of the evolution of this environmental phenomena and modification (Lentini et al., 2011).

The information collected by this station will contribute to better understanding the impacts of climate change on glaciers in African Region.



Fig. 5 - Map of the station installed in Rwenzori National Park

2.5 BOLIVIA

In Bolivia SHARE activities are addressed mainly on the study of atmospheric composition. In particular, from December 2011, the ozone concentration in atmosphere is measured at Chacaltaya Laboratory.

The Chacaltaya laboratory (5.230 m a.s.l.) is the highest site for astrophysical and cosmic rays research in the world. For its location, the Chacaltaya laboratory is considered the viewpoint of Cordillera Real, on the Bolivian Andes. Built on the Bolivian Andes plateau, this laboratory is surrounded by mountains

higher than 5000m a.s.l., such as Illimani (6462 m), Mururata (5775 m), Condoriri (5696 m) and the beautiful Huayna Potosi (6088 m), one of the most scenic mountains in the world.

On this mountain the homonymous glacier found place and it has now completely disappeared, as prof. Edson Ramirez, of La Paz University, announced a couple of years ago.

Therefore, studying climate evolution in this area of South America appears more important than ever.



Fig. 6 - Map of the Chacaltaya Observatory

3. AWSs data

This report achieves 2011 data of all automatic weather stations and atmospheric laboratory installed in Nepal, Pakistan and Italy in the framework of the SHARE project.

For most stations there is a documentation sheet where technical information are shown, followed by tables collecting mean daily/total data for each standard meteorological parameter. For all stations, daily precipitation corresponds to the sum of hourly rain of that day.

In the tables "not available" (n.a.) is indicated when the number of hourly data were insufficient or the measurements were not performed.

For few stations like the AWS Ruwenzori, the AWS Bianco - Osram, the AWS Concordia and the Observatory of Chacaltaya 2011 data are not available or

have not been validated yet.

Regarding Italian Alps datasets, some parameters are estimated: albedo and net solar radiation from the incoming and outgoing solar radiation, net infrared radiation from incoming and outgoing infrared radiation, sky temperature from incoming infrared radiation, and surface temperature from the outgoing infrared radiation.

For each variable there are summary tables describing mean/total daily values. Values marked with an asterisk (*) have been interpolated using data from a near AWS (i.e. AWS at Federico hut closed to AWS on Dosedè Glacier) due to periods in which malfunctioning sensors produced temporary gaps in data or non-sense values. The ten-day averages or total values are calculated when there are at least six days of daily data available.

3.1 NEPAL

AWS 1 and CEOP Pyramid

Technical sheet	
Coordinates: Latitude: 27° 57' 33" N Longitude: 86° 48' 46" E Elevation: 5.050 m a.s.l	
Installation Time: September 2000	
Data Availability: From October 1, 2000	

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
AWS1 Data Logger				2 m	LSI-Lastem Babuc ABC
Air Temperature	-30 - +70 °C	±0.1°C	60 min.	2 m	LSI-Lastem DMA570
Relative Humidity	0 - 100 %	±2.5%	60 min.	2 m	LSI-Lastem DMA570
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	180 mm/hr	0-1 mm/min: 1% 1-3 mm/min: 2% 3-5 mm/min: 4% 5-10 mm/min: 8%	60 min.	1.5 m	LSI-Lastem DQA035
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
Global Solar Radiation	0-2000	-	60 min.	2 m	Kipp & Zonen CMB6
CEOP Data Logger				2 m	LSI-Lastem E-Log
Heat Flux	<2000 Wm-2	3%	1 min	-5 cm	LSI-Lastem DPE260
Solar Radiations CNR1 sensor: (four components combined sensor+internal temperature with PT100)*	Pyranometer: 0 to 25 mV - Pyrgeometer: ±5 mV	±10% on daily totals - non linearity: < 1%	1 min	2 m	Kipp & Zonen CM3* pyranometer - Kipp & Zonen CG3 pyrgeometer
Snow level	0 to 8 m	0,1 % (FS)	1 min	2 m	Sommer USH-8
Soil Temperature	- 20 +70°C	0,15° (at 0°C)	1 min	-5 cm -20 cm	LSI- Lastem DLA400
Soil Moisture	0% from saturation point	1/10 of water amount	1 min	-5 cm	SDEC HMS 9000

AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	-8.3	-8.3	-5.6	-3.3	0.3	3.2	4.1	2.5	-1.0	-8.1	3.1
2	n.a.	-7.9	-7.7	-5.2	-2.6	0.7	3.4	3.6	2.6	-1.3	-7.6	-2.7
3	n.a.	-6.3	-7.0	-5.9	-3.4	0.6	3.2	3.5	1.9	-1.8	-7.0	1.2
4	n.a.	-5.6	-6.6	-7.5	-1.9	0.6	3.0	3.8	2.2	-1.6	-7.7	4.7
5	n.a.	-5.1	-5.3	-8.1	-1.7	1.0	2.9	3.6	2.2	-2.0	-8.2	2.7
6	n.a.	-5.4	-3.5	-8.1	-0.7	1.2	2.7	3.4	2.5	-0.8	-8.1	1.8
7	n.a.	-4.8	-3.0	-6.3	-1.0	-0.4	2.7	3.5	2.7	-1.0	-4.9	0.7
8	n.a.	-6.6	-3.3	-6.2	-3.3	-0.8	3.2	3.5	3.0	-1.9	-3.5	-0.2
9	n.a.	-10.1	-8.8	-7.0	-2.9	-0.6	2.8	2.5	2.9	-1.9	-1.1	-2.3
10	n.a.	-6.7	-8.8	-7.1	-2.1	0.6	3.4	2.1	2.4	-1.2	1.8	-6.7
Mean	n.a.	-6.7	-6.2	-6.7	-2.3	0.3	3.1	3.4	2.5	-1.5	-5.4	0.2
11	n.a.	-6.8	-9.8	-5.5	-1.8	0.4	3.8	1.5	2.3	1.5	1.4	-7.3
12	n.a.	-5.1	-10.5	-4.8	-2.2	1.4	3.7	1.3	2.0	2.4	-0.3	-6.2
13	n.a.	-3.1	-8.1	-5.6	-0.7	1.5	3.1	2.9	2.7	3.1	-4.1	-3.2
14	n.a.	-4.0	-8.1	-6.4	-0.7	1.8	3.1	2.0	2.3	2.6	-6.5	-4.3
15	-12.6	-6.2	-9.4	-5.7	0.3	2.3	3.0	2.4	2.0	1.1	-8.2	-4.6
16	-15.5	-11.0	-4.9	-3.6	0.8	3.4	2.8	3.3	1.9	-1.0	-9.4	-6.3
17	-11.5	-11.9	-4.8	-1.1	1.0	3.0	3.1	2.2	1.9	-2.8	-6.6	-3.8
18	-11.1	-8.8	-5.3	-1.9	-0.4	2.3	4.4	2.4	1.8	-3.5	-2.7	-4.0
19	-9.0	-10.5	-1.5	-3.6	-1.7	2.7	4.1	0.9	1.8	-2.5	-4.3	-3.1
20	-3.7	-10.3	-4.5	-4.1	-1.8	4.0	3.5	2.3	1.2	-2.5	-3.7	-3.5
Mean	-10.6	-7.8	-6.7	-4.2	-0.7	2.3	3.5	2.1	2.0	-0.2	-4.4	-4.6
21	-5.2	-12.5	-4.2	-3.5	-0.6	3.8	4.1	3.6	1.1	-5.8	-2.2	-2.4
22	-5.1	-10.6	-3.4	-3.8	-0.4	3.6	4.2	3.4	0.9	-7.4	-3.8	0.9
23	-4.5	-9.0	-3.6	-5.2	-0.4	5.2	3.7	2.9	1.1	-3.6	-4.4	-0.7
24	-4.3	-10.4	-5.5	-4.4	0.0	4.0	3.3	3.3	0.8	-3.0	-3.6	-4.6
25	-7.0	-12.8	-8.4	-4.4	1.6	3.5	3.8	2.7	0.4	-4.1	-1.4	-7.3
26	-10.4	-13.4	-7.6	-3.0	0.8	4.6	3.7	2.7	-0.5	-6.1	-0.9	-10.4
27	-11.0	-11.3	-7.5	-2.4	0.3	4.4	3.4	2.2	0.2	-4.6	-1.1	-10.3
28	-9.4	-9.9	-7.4	-0.8	-0.3	3.8	3.6	2.8	-0.9	-5.8	0.0	-9.9
29	-9.4		-7.5	0.7	-0.8	3.2	3.6	2.3	-1.1	-4.8	2.1	-3.3
30	-11.6		-5.9	-3.6	0.2	2.9	4.4	3.5	-0.6	-5.3	4.2	-1.7
31	-11.5		-5.1		0.7		3.9	3.1		-7.0		-2.2
Mean	-8.1	-11.2	-6.0	-3.0	0.1	3.9	3.8	3.0	0.1	-5.2	-1.1	-4.7
MEAN	-9.0	-8.4	-6.3	-4.7	-0.9	2.2	3.4	2.8	1.5	-2.4	-3.7	-3.1
MIN	-15.5	-13.4	-10.5	-8.1	-3.4	-0.8	2.7	0.9	-1.1	-7.4	-9.4	-10.4
MAX	-3.7	-3.1	-1.5	0.7	1.6	5.2	4.4	4.1	3.0	3.1	4.2	4.7

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	8.6	28.8	73.5	83.5	87.0	99.3	98.2	85.7	81.5	82.6	13.6
2	n.a.	18.6	59.6	64.2	83.9	82.0	96.9	96.6	89.7	82.7	83.0	37.7
3	n.a.	14.2	54.1	63.6	82.6	80.6	99.1	97.4	88.3	95.1	83.0	21.6
4	n.a.	19.9	42.5	58.1	60.8	78.9	98.2	96.2	85.1	77.7	85.5	6.9
5	n.a.	15.5	16.0	39.9	68.8	68.8	98.1	93.0	86.4	85.2	79.5	10.5
6	n.a.	9.7	18.1	44.8	74.4	75.7	97.3	95.1	94.8	78.4	71.3	8.1
7	n.a.	16.6	22.3	49.0	83.0	93.0	99.8	97.4	97.1	80.2	25.0	10.2
8	n.a.	27.1	24.6	60.6	85.0	83.3	95.6	94.4	93.5	87.0	30.6	14.4
9	n.a.	45.7	50.3	70.8	83.2	87.4	96.4	96.0	93.4	80.4	28.5	8.2
10	n.a.	25.2	30.2	80.4	86.5	82.8	94.0	94.7	96.0	68.8	25.9	36.5
Mean	n.a.	20.1	34.7	60.5	79.2	82.0	97.5	95.9	91.0	81.7	59.5	16.8
11	n.a.	31.6	41.6	64.9	84.7	91.2	94.9	97.8	95.5	43.7	30.4	42.9
12	n.a.	30.4	59.4	65.1	87.4	90.1	96.1	97.9	97.2	45.7	26.3	33.5
13	n.a.	27.8	43.3	70.2	82.2	92.6	99.2	93.5	95.2	48.8	49.9	22.3
14	n.a.	20.8	18.9	81.5	73.3	88.0	97.0	99.1	92.9	60.3	64.5	19.0
15	12.6	38.2	10.9	77.1	67.7	88.7	98.1	97.1	97.0	63.0	70.2	10.6
16	39.2	69.1	26.5	67.1	65.9	85.3	98.6	95.0	96.8	58.1	82.2	19.5
17	26.2	39.3	58.9	58.8	79.1	93.3	95.6	98.5	97.7	66.0	49.2	13.7
18	50.0	28.5	73.7	55.4	88.8	95.3	93.8	97.5	98.8	74.6	19.5	13.6
19	25.7	44.2	39.9	69.0	93.7	95.9	95.8	100.0	98.2	65.8	40.8	8.7
20	9.5	28.2	33.0	59.2	95.1	89.7	98.5	95.5	100.0	64.5	40.9	6.6
Mean	27.2	35.8	40.6	66.8	81.8	91.0	96.8	97.2	96.9	59.1	47.4	19.0
21	16.9	69.3	38.0	31.9	83.8	85.4	95.9	90.9	95.8	85.3	24.8	4.2
22	13.7	31.9	31.9	43.1	80.0	91.1	96.2	94.6	97.6	71.0	28.9	2.3
23	13.1	32.3	27.4	55.1	71.5	87.0	94.1	95.2	96.8	42.9	32.7	3.8
24	13.6	41.8	39.9	59.8	73.1	94.2	95.1	88.5	96.9	53.0	32.0	6.9
25	5.2	61.7	72.0	56.8	62.6	96.4	96.6	92.2	97.9	53.8	24.1	18.1
26	11.8	45.0	70.0	72.0	79.4	91.8	96.9	92.2	97.8	57.3	17.5	38.8
27	20.5	32.4	76.1	77.4	79.7	90.8	100.0	91.0	84.1	40.5	17.8	46.0
28	23.5	26.8	86.7	64.9	92.5	93.1	99.5	92.7	83.6	59.2	18.4	35.4
29	39.0		76.0	64.1	96.7	97.3	98.1	97.8	85.7	56.2	12.9	7.7
30	43.5		63.9	93.1	90.5	98.0	94.6	94.9	81.8	53.9	7.6	11.0
31	30.9		65.4		85.9		99.2	95.3		72.6		11.0
Mean	21.1	42.7	58.8	61.8	81.4	92.5	96.9	93.2	91.8	58.7	21.7	16.8
MEAN	23.2	32.2	45.2	63.0	80.8	88.5	97.0	95.4	93.2	66.2	42.9	17.5
MIN	5.2	8.6	10.9	31.9	60.8	68.8	93.8	88.5	81.8	40.5	7.6	2.3
MAX	50.0	69.3	86.7	93.1	96.7	98.0	100.0	100.0	100.0	95.1	85.5	46.0

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	548.5	550.2	549.1	n.a.	n.a.	551.7	552.5	554.3	552.7	549.6	553.4
2	n.a.	549.9	549.9	550.0	n.a.	n.a.	551.5	553.0	553.8	552.0	549.1	552.5
3	n.a.	551.8	549.8	550.7	n.a.	n.a.	552.3	553.4	553.9	552.1	549.2	549.2
4	n.a.	552.1	549.3	550.1	n.a.	n.a.	554.0	553.0	554.8	552.9	550.1	549.1
5	n.a.	550.8	549.4	550.4	n.a.	n.a.	554.7	552.6	554.6	554.6	549.5	551.1
6	n.a.	550.7	551.3	550.3	n.a.	n.a.	554.2	552.3	553.3	555.5	548.8	551.6
7	n.a.	550.0	551.4	550.5	n.a.	n.a.	553.9	552.3	552.4	555.1	550.3	552.1
8	n.a.	546.9	549.6	550.9	n.a.	n.a.	554.7	552.9	553.0	554.5	553.0	552.4
9	n.a.	545.7	549.0	552.0	n.a.	n.a.	554.1	552.9	554.4	554.6	553.8	551.1
10	n.a.	548.3	549.9	552.8	n.a.	n.a.	553.4	553.0	555.0	555.0	553.5	547.4
Mean	n.a.	549.5	550.0	550.7	n.a.	n.a.	553.5	552.8	554.0	553.9	550.7	551.0
11	n.a.	548.5	549.2	552.4	n.a.	n.a.	553.0	552.8	554.2	555.8	552.3	547.1
12	n.a.	548.5	548.2	552.1	n.a.	n.a.	552.9	552.6	554.4	555.9	550.9	548.4
13	n.a.	548.4	549.2	552.2	n.a.	n.a.	553.1	553.0	554.2	555.1	551.0	548.4
14	n.a.	548.5	549.9	550.9	n.a.	n.a.	552.8	554.4	553.7	554.2	550.7	548.6
15	545.8	548.7	551.0	550.2	n.a.	551.9	552.6	554.1	553.3	553.2	549.9	548.8
16	541.8	547.6	551.6	552.0	n.a.	551.3	552.6	553.0	553.0	553.2	548.5	548.3
17	543.0	546.1	550.4	553.7	n.a.	551.3	552.4	552.9	552.1	553.7	548.8	548.9
18	542.2	545.4	548.3	553.1	n.a.	551.5	552.1	553.2	552.4	553.5	550.3	549.6
19	541.8	547.5	548.1	551.7	n.a.	551.4	551.5	554.1	553.7	552.2	552.0	550.0
20	545.8	548.2	548.3	550.9	n.a.	552.9	551.4	555.2	554.2	552.5	553.2	549.9
Mean	543.4	547.7	549.4	551.9	n.a.	551.7	552.4	553.5	553.5	553.9	550.8	548.8
21	545.9	547.5	548.6	551.0	n.a.	553.3	551.7	555.3	553.3	551.8	553.9	550.5
22	546.8	549.1	550.8	551.1	n.a.	552.9	551.9	554.9	553.6	551.5	554.7	550.2
23	547.4	550.4	551.5	550.4	n.a.	552.8	553.0	555.0	553.5	552.8	555.2	550.2
24	547.5	549.2	550.7	551.0	n.a.	552.0	554.0	554.5	553.6	553.0	554.6	549.1
25	548.1	547.1	550.1	551.2	n.a.	552.0	555.6	554.5	553.8	552.5	553.6	549.2
26	547.7	547.0	550.6	552.6	n.a.	552.2	555.3	554.5	553.3	551.7	552.8	548.8
27	547.5	548.0	550.2	552.2	n.a.	552.1	553.9	554.4	552.8	552.2	552.6	548.8
28	547.9	549.3	549.3	551.6	n.a.	551.8	553.3	554.2	552.5	552.1	551.5	549.8
29	547.7		550.0	552.0	n.a.	552.3	553.4	554.8	552.9	552.0	551.0	551.3
30	547.8		549.6	n.a.	n.a.	552.1	552.9	555.2	553.4	550.4	552.0	552.3
31	546.9		549.1		n.a.		552.6	555.0		550.2		553.2
Mean	547.4	548.5	550.0	551.5	n.a.	552.4	553.4	554.8	553.3	551.8	553.2	550.3
MEAN	546.0	548.6	549.8	551.3	n.a.	552.1	553.1	553.7	553.6	553.2	551.5	550.0
MIN	541.8	545.4	548.1	549.1	n.a.	551.3	551.4	552.3	552.1	550.2	551.5	547.1
MAX	548.1	552.1	551.6	553.7	n.a.	553.3	555.6	555.3	555.0	555.9	555.2	553.4

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	227.8	223.1	156.7	180.0	130.8	164.1	175.0	143.2	118.7	128.0	279.2
2	n.a.	176.8	176.9	164.3	155.5	156.9	158.4	169.1	136.4	128.3	149.2	209.7
3	n.a.	164.6	202.9	174.3	131.1	167.1	165.7	187.3	151.2	162.0	131.9	132.9
4	n.a.	121.8	157.6	213.8	167.5	167.0	158.8	164.3	145.4	187.5	149.1	189.0
5	n.a.	235.8	171.4	227.2	135.0	163.5	156.5	131.0	136.5	156.3	160.9	137.5
6	n.a.	188.2	179.7	162.2	180.0	136.8	159.1	148.6	150.5	135.3	214.7	124.0
7	n.a.	117.3	192.0	144.3	165.0	163.6	168.7	154.0	159.6	153.2	274.5	89.5
8	n.a.	157.7	136.1	142.6	164.5	146.6	156.1	155.7	152.4	145.7	186.0	97.0
9	n.a.	178.8	177.0	171.0	136.5	153.0	155.9	155.0	146.0	148.6	264.0	112.6
10	n.a.	182.8	230.2	151.3	146.9	141.5	169.5	175.4	183.4	104.2	222.3	172.1
Mean	n.a.	175.2	184.7	170.8	156.2	152.7	161.3	161.5	150.5	144.0	188.1	154.4
11	n.a.	124.4	194.8	202.3	205.0	161.0	200.3	147.7	160.0	187.5	207.5	89.8
12	n.a.	222.0	167.5	190.9	144.6	164.9	169.3	195.6	169.0	183.8	215.9	120.9
13	n.a.	114.8	239.8	168.4	189.9	166.2	166.4	189.5	158.6	162.2	229.8	105.6
14	n.a.	156.8	325.0	148.1	142.9	164.1	160.1	246.7	175.4	220.9	126.6	91.8
15	157.5	164.2	339.3	163.7	191.1	186.5	156.1	184.7	164.9	205.8	117.5	105.0
16	182.2	192.3	207.3	183.5	188.8	127.9	184.3	154.4	173.5	212.8	113.9	105.3
17	206.0	158.0	213.3	151.9	160.0	153.8	180.5	216.5	178.7	146.1	197.5	83.7
18	137.7	205.4	153.1	148.5	162.9	171.6	156.1	179.8	137.6	115.8	178.9	99.2
19	122.4	111.9	178.7	179.1	165.1	166.0	165.4	172.7	167.6	137.7	192.9	117.8
20	158.9	212.5	168.5	219.5	189.8	167.2	182.4	176.2	164.0	221.0	234.5	110.7
Mean	160.8	166.2	218.7	175.6	174.0	162.9	172.1	186.4	164.9	179.4	181.5	103.0
21	128.9	175.6	167.0	126.2	156.6	167.2	169.6	156.3	145.7	200.0	243.2	57.6
22	205.6	250.9	206.6	166.0	141.0	160.9	195.7	147.9	169.9	181.2	221.1	84.3
23	110.2	232.7	154.9	169.4	145.6	159.9	151.2	136.1	148.5	175.0	207.2	130.7
24	137.0	231.0	152.8	217.4	163.4	149.1	143.8	181.1	174.5	238.5	240.4	158.4
25	96.3	188.6	182.2	186.7	204.0	165.9	158.6	188.9	172.3	220.6	267.0	157.0
26	171.6	257.7	233.0	163.9	162.2	164.5	165.5	161.1	190.4	186.7	251.6	113.3
27	141.8	213.3	228.0	162.6	163.5	165.3	182.1	182.2	138.1	217.2	250.2	113.5
28	124.5	230.8	174.4	156.8	162.0	167.6	182.8	161.2	228.6	156.3	252.7	104.2
29	121.3		252.7	165.6	177.6	167.4	176.1	168.9	105.7	156.2	277.2	85.8
30	149.0		176.1	101.6	167.8	170.7	166.1	167.0	122.5	169.3	252.0	102.3
31	232.1		159.1		173.7		166.0	172.5		157.4		96.6
Mean	147.1	222.6	189.7	161.6	165.2	163.9	168.9	165.7	159.6	187.1	246.3	109.4
MEAN	151.9	185.5	197.5	169.3	165.1	159.8	167.5	171.0	158.3	170.7	205.3	121.8
MIN	96.3	111.9	136.1	101.6	131.1	127.9	143.8	131.0	105.7	104.2	113.9	57.6
MAX	232.1	257.7	339.3	227.2	205.0	186.5	200.3	246.7	228.6	238.5	277.2	279.2

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	1.6	1.6	2.1	1.3	2.4	2.9	1.6	2.4	1.6	1.7	5.3
2	n.a.	1.9	1.3	2.2	1.2	1.8	1.5	2.0	2.1	2.3	1.8	2.0
3	n.a.	2.5	1.3	2.0	1.9	2.0	2.3	1.7	2.4	2.1	1.6	1.4
4	n.a.	1.6	1.4	2.1	1.7	2.1	1.4	1.6	2.1	2.0	1.4	1.1
5	n.a.	2.1	2.4	1.8	1.8	1.9	1.9	1.4	2.0	2.1	1.7	1.8
6	n.a.	2.1	1.7	1.7	2.3	2.7	1.6	2.0	1.9	0.9	1.6	2.3
7	n.a.	1.9	1.9	2.1	2.3	2.6	1.9	2.5	1.7	1.9	3.8	2.1
8	n.a.	3.7	2.2	2.1	3.7	2.4	2.2	2.2	1.9	2.1	2.3	1.6
9	n.a.	1.8	3.1	1.8	2.0	2.6	1.2	1.7	1.6	1.6	1.4	2.8
10	n.a.	1.4	2.0	1.6	1.6	2.8	0.9	1.7	2.0	1.6	1.2	1.5
Mean	n.a.	2.1	1.9	2.0	2.0	2.3	1.8	1.8	2.0	1.8	1.9	2.2
11	n.a.	1.8	2.1	1.7	2.0	2.6	1.6	1.5	1.8	1.4	1.7	1.1
12	n.a.	1.7	1.3	2.0	2.4	3.3	2.1	1.4	1.5	1.6	1.6	1.2
13	n.a.	1.4	1.8	1.6	2.0	2.6	1.5	2.1	1.7	1.5	1.7	1.6
14	n.a.	1.8	4.0	1.8	1.8	2.8	1.0	2.0	1.7	1.8	1.7	1.8
15	5.0	4.4	6.0	1.7	2.0	2.4	1.5	1.7	2.3	1.8	1.4	1.4
16	2.8	3.2	3.5	1.4	2.0	2.1	1.9	2.1	1.7	1.8	1.6	1.3
17	1.7	1.9	2.0	2.2	1.8	2.0	2.0	1.8	1.8	2.0	1.5	1.6
18	1.7	1.6	2.3	1.2	2.3	1.6	2.2	1.7	1.5	1.9	1.3	1.3
19	1.4	2.2	2.0	1.2	2.7	3.2	1.9	1.4	1.9	1.6	1.8	2.0
20	2.3	1.9	3.9	2.0	2.2	3.0	1.5	2.0	1.9	2.1	1.3	3.3
Mean	2.5	2.2	2.9	1.7	2.1	2.6	1.7	1.8	1.8	1.8	1.6	1.7
21	1.6	2.2	1.6	2.8	1.8	1.8	1.9	1.8	2.3	2.7	2.3	2.5
22	1.8	3.4	1.7	4.8	1.9	1.4	2.0	1.1	2.3	1.4	1.5	2.9
23	2.5	2.0	1.5	3.2	2.0	1.8	1.6	1.1	1.6	1.3	1.6	2.8
24	3.1	1.7	2.6	1.7	2.0	1.6	1.4	1.3	2.0	1.5	1.6	2.8
25	2.1	2.0	1.4	3.0	1.8	2.5	1.7	2.6	2.7	1.7	1.5	2.7
26	4.5	1.6	1.3	2.0	2.1	2.5	1.5	2.5	1.0	1.8	1.7	1.8
27	1.2	2.2	1.1	2.2	2.2	3.1	1.7	2.5	0.5	1.7	1.5	2.0
28	1.5	1.6	1.4	2.6	2.5	2.9	1.8	2.6	1.0	0.1	1.5	1.5
29	1.1		1.4	3.1	2.5	2.8	1.2	2.3	1.9	0.0	1.4	1.9
30	1.7		2.2	0.2	3.1	2.3	1.3	2.5	1.5	3.1	1.5	2.6
31	1.6		2.8		3.2		1.4	2.3		2.3		1.9
Mean	2.1	2.1	1.7	2.6	2.3	2.3	1.6	2.1	1.7	1.6	1.6	2.3
MEAN	2.2	2.1	2.2	2.0	2.1	2.4	1.7	1.9	1.8	1.7	1.7	2.0
MIN	1.1	1.4	1.1	0.2	1.2	1.4	0.9	1.1	0.5	0.0	1.2	1.1
MAX	5.0	4.4	6.0	4.8	3.7	3.3	2.9	2.6	2.7	3.1	3.8	5.3

PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	0.0	0.0	n.a	0.0	0.0	n.a	7.8	4.2	0.0	0.0	0.0
2	n.a.	0.0	0.0	0.0	n.a	0.0	1.8	4.4	0.2	0.0	n.a	n.a
3	n.a.	0.0	0.0	0.0	n.a	n.a	1.4	1.0	0.2	n.a	0.0	0.0
4	n.a.	0.0	0.0	n.a	0.0	0.0	2.8	1.2	0.8	0.0	0.0	0.0
5	n.a.	0.0	0.0	n.a	0.0	0.2	1.4	14.2	0.0	n.a	n.a	n.a
6	n.a.	0.0	0.0	0.0	0.0	0.0	7.0	7.4	3.8	n.a	0.0	0.0
7	n.a.	0.0	0.0	0.0	n.a	n.a	1.8	0.0	1.8	0.2	0.0	0.0
8	n.a.	0.0	0.0	0.0	n.a	0.0	0.4	2.8	3.8	0.0	0.0	0.0
9	n.a.	0.0	0.0	n.a	n.a	n.a	6.2	8.6	0.6	n.a	0.0	0.0
10	n.a.	0.0	0.0	n.a	n.a	0.0	2.8	17.4	0.4	0.0	0.0	0.0
Total	n.a.	0.0	0.0	0.0	0.0	0.2	25.6	64.8	15.8	0.2	0.0	0.0
11	n.a.	0.0	0.0	n.a	n.a	n.a	0.8	n.a	1.2	0.0	0.0	0.0
12	n.a.	0.0	0.0	0.0	0.0	n.a	5.6	20.0	8.6	0.0	0.0	0.0
13	n.a.	0.0	0.0	n.a	n.a	n.a	7.0	0.4	2.4	0.0	0.0	0.0
14	n.a.	0.0	0.0	0.0	n.a	0.0	4.6	n.a	4.4	0.0	0.0	0.0
15	n.a	0.0	0.0	0.0	0.0	0.0	3.6	6.2	0.4	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	3.0	2.2	1.6	1.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.2	0.0	n.a	3.2	4.0	6.0	0.0	0.0	0.0
18	0.0	0.0	0.0	n.a	n.a	n.a	0.6	3.4	3.2	n.a	0.0	0.0
19	0.0	0.0	0.0	n.a	n.a	n.a	14.6	n.a	7.4	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	n.a	n.a	4.6	2.0	3.2	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.2	0.0	3.0	46.8	37.6	37.8	0.0	0.0	0.0
21	0.0	0.0	n.a	n.a	n.a	0.4	2.0	1.2	n.a	n.a	0.0	0.0
22	0.0	0.0	0.0	n.a	n.a	n.a	1.4	7.8	n.a	n.a	0.0	0.0
23	0.0	0.0	0.0	n.a	0.0	n.a	7.4	17.6	n.a	0.0	0.0	0.0
24	0.0	0.0	0.0	n.a	n.a	n.a	9.4	1.2	6.2	0.0	0.0	0.0
25	0.0	0.0	0.0	n.a	0.0	n.a	3.0	0.2	5.4	0.0	0.0	0.0
26	0.0	0.0	n.a	n.a	0.2	n.a	8.0	0.2	n.a	0.0	0.0	0.0
27	0.0	0.0	n.a	n.a	0.0	n.a	2.4	0.6	n.a	0.0	0.0	0.0
28	0.0	0.0	n.a	n.a	n.a	n.a	3.4	0.8	n.a	0.0	0.0	0.0
29	0.0		n.a	n.a	n.a	n.a	9.0	n.a	0.0	0.0	0.0	0.0
30	0.0		0.0	n.a	n.a	n.a	8.8	1.6	0.0	0.0	0.0	0.0
31	0.0		0.0		n.a		2.8	2.4		0.0		
Total	0.0	0.0	0.0	0.0	0.2	0.4	57.6	33.6	11.6	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.2	0.2	3.6	130.0	136.0	65.2	0.2	0.0	0.0
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.2	0.2	3.0	14.6	20.0	2.7	0.2	0.0	0.0

GLOBAL SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	239.5	292.1	338.3	181.0	339.0	244.7	168.0	327.2	257.0	150.8	199.5
2	n.a.	245.8	253.2	296.7	202.9	200.8	224.5	201.8	240.3	234.8	227.3	196.8
3	n.a.	241.7	225.0	293.4	235.2	250.3	163.1	223.2	291.4	219.4	223.2	199.2
4	n.a.	239.4	104.1	143.1	292.5	305.4	145.2	165.5	307.1	210.2	142.7	195.2
5	n.a.	240.5	302.8	289.1	307.5	341.5	176.0	229.8	279.8	236.2	195.2	194.7
6	n.a.	230.3	298.0	281.5	361.3	330.1	174.3	241.3	226.6	243.5	144.5	193.7
7	n.a.	223.4	299.6	256.0	322.8	202.2	167.0	278.2	175.7	281.0	236.6	192.8
8	n.a.	245.2	251.3	225.1	320.8	252.1	319.0	301.8	251.8	256.2	234.3	194.2
9	n.a.	215.5	114.8	218.0	245.0	269.9	139.6	213.2	190.6	279.6	232.2	195.9
10	n.a.	239.5	309.0	178.0	218.5	346.5	176.1	231.6	180.1	277.4	226.0	195.4
Mean	n.a.	236.1	245.0	251.9	268.8	283.8	193.0	225.4	247.1	249.5	201.3	195.7
11	n.a.	251.8	309.3	290.6	248.9	210.5	227.0	171.3	213.0	283.7	227.8	194.0
12	n.a.	254.0	259.5	270.5	220.6	308.0	257.1	155.5	166.7	281.0	228.0	192.4
13	n.a.	249.1	208.1	198.1	319.5	237.0	128.2	282.2	245.5	275.3	220.7	191.6
14	n.a.	192.6	246.1	160.0	288.4	292.2	133.0	199.0	196.9	274.2	222.6	191.2
15	0.0	133.4	291.8	196.5	302.5	289.8	174.5	224.8	208.5	227.4	180.7	192.6
16	153.0	57.9	302.3	267.6	306.9	329.1	179.2	249.5	184.6	254.8	156.6	190.8
17	211.7	246.2	301.9	309.6	236.5	147.0	297.7	164.3	190.6	257.1	226.1	191.2
18	207.6	276.0	317.4	224.3	235.9	208.2	299.5	176.5	151.7	247.1	219.5	192.2
19	215.9	268.8	300.8	183.8	218.1	298.9	214.8	81.2	170.0	264.0	216.2	190.8
20	213.4	280.3	218.8	268.6	195.0	363.2	135.2	288.0	116.4	234.3	214.9	191.2
Mean	166.9	221.0	275.6	237.0	257.2	268.4	204.6	199.2	184.4	259.9	211.3	191.8
21	213.4	228.6	299.0	396.1	269.6	260.9	244.7	312.5	251.2	88.8	212.9	193.0
22	217.5	284.9	303.1	681.7	254.3	138.1	205.8	138.8	157.1	253.3	209.6	190.6
23	170.7	282.2	309.0	600.4	315.5	420.1	138.0	139.9	158.7	264.2	206.9	179.5
24	145.6	270.7	231.8	305.0	260.0	176.9	166.9	248.5	189.7	251.2	206.1	193.7
25	222.6	118.1	229.1	715.7	319.2	278.4	267.7	337.0	129.0	226.5	206.8	201.1
26	199.0	232.9	188.1	453.9	279.3	461.9	177.8	328.2	32.8	224.3	206.0	192.7
27	225.0	276.2	257.3	513.4	288.8	468.2	140.2	305.2	274.8	255.4	205.1	199.6
28	174.3	289.1	166.5	623.4	216.5	333.1	186.3	340.6	302.0	220.4	202.5	194.2
29	158.8		287.5	822.8	156.2	261.8	164.2	200.8	226.6	226.8	193.8	193.6
30	161.5		280.2	0.2	329.5	241.2	240.5	333.5	226.6	265.0	199.8	191.7
31	239.0		320.6		430.6		136.5	249.4		207.3		192.4
Mean	191.4	250.6	257.3	524.1	285.0	308.9	182.4	262.2	188.6	239.4	204.1	192.9
MEAN	184.1	234.1	260.6	333.4	270.3	285.4	195.0	231.6	208.8	244.4	205.8	193.5
MIN	0.0	57.9	104.1	0.2	156.2	138.1	128.2	81.2	32.8	88.8	142.7	179.5
MAX	239.0	289.1	320.6	822.8	430.6	468.2	319.0	340.6	327.2	283.7	236.6	201.1

AWS 3 and CEOP Lukla

Technical sheet	
Coordinates: Latitude: 27° 41' 48" N Longitude: 86° 43' 17" E Elevation: 2,660 m a.s.l	
Installation Time: September 2002	
Data Availability: From November 2, 2002	



Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
AWS3 Data Logger				2 m	LSI-Lastem Babuc ABC
Air Temperature	-30 - +70 °C	±0.1°C (0°C)	60 min.	2 m	LSI-Lastem DMA572
Relative Humidity	0 - 100 %	±1.5% (5 ÷ 9,5%, 23°C)	60 min.	2 m	LSI-Lastem DMA572
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	180 mm/hr	0-1 mm/min: 1% 1-3 mm/min: 2% 3-5 mm/min: 4% 5-10 mm/min: 8%	60 min.	1.5 m	LSI-Lastem DQA035
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
Global Solar Radiation	0-2000		60 min.	2 m	Kipp & Zonen CMB6
CEOP Data Logger				2 m	LSI-Lastem E-Log
Heat Flux	<2000 Wm ⁻²	3%	60 min	-5 cm	LSI-Lastem DPE260
Solar Radiations CNR1 sensor: (four components combined sensor+internal temperature with PT100)*	Pyranometer: 0 to 25 mV - Pyrgeometer: ±5 mV	±10% on daily totals - non linearity: < 1%	60 min	2 m	Kipp & Zonen CM3* pyranometer - Kipp & Zonen CG3 pyrgeometer
Soil Temperature	-20 +70°C	0,15° (at 0°C)	60 min	-5 cm -20 cm	LSI- Lastem DLA400
Soil Moisture	0% from saturation point	1/10 of water amount	60 min	-5 cm	SDEC HMS 9000

AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	3.5	4.1	n.a.	8.1	11.3	13.0	13.2	14.2	n.a.	14.2	5.4	8.3
2	3.8	4.6	n.a.	9.4	10.2	14.2	14.0	15.0	n.a.	12.9	5.7	8.6
3	3.1	7.8	n.a.	10.4	11.5	15.0	13.7	14.7	n.a.	11.0	5.9	5.7
4	3.3	9.1	n.a.	7.1	12.0	14.5	13.7	14.9	n.a.	13.0	5.8	5.0
5	4.0	7.2	n.a.	7.5	13.2	14.7	13.4	14.2	n.a.	14.1	4.6	5.3
6	4.2	6.6	11.5	7.8	13.0	14.1	13.0	14.8	n.a.	13.8	4.3	6.1
7	3.5	7.9	10.2	9.1	11.9	12.4	13.5	14.9	n.a.	13.7	7.6	7.0
8	3.9	7.7	7.7	10.5	11.5	13.5	14.6	13.7	n.a.	12.4	9.8	7.0
9	2.9	3.6	5.6	9.8	12.2	13.0	13.8	14.5	n.a.	13.2	10.4	7.0
10	2.0	6.3	7.7	7.5	11.9	13.1	13.9	13.6	n.a.	13.1	10.2	3.7
Mean	3.4	6.5	8.5	8.7	11.9	13.8	13.7	14.5	n.a.	13.1	7.0	6.4
11	2.9	5.5	8.3	10.4	12.5	13.7	15.2	14.3	n.a.	13.5	8.9	4.0
12	2.2	5.9	7.5	9.5	11.4	14.2	14.4	14.1	n.a.	13.5	5.9	4.1
13	1.7	4.9	6.4	9.0	11.8	14.6	13.7	14.5	n.a.	13.8	6.4	3.8
14	3.2	6.6	5.6	8.5	12.7	14.4	14.1	13.8	n.a.	14.0	5.9	2.1
15	3.3	7.6	8.2	9.2	14.1	15.2	14.3	13.2	n.a.	11.4	4.6	2.8
16	-0.9	2.1	10.8	10.5	15.4	16.1	14.4	14.3	15.4	12.0	3.1	2.5
17	1.9	4.3	8.4	13.1	14.4	15.5	15.8	13.4	14.5	12.4	4.5	3.4
18	n.a.	3.8	5.2	12.6	11.5	14.1	15.9	n.a.	13.5	11.3	6.0	n.a.
19	n.a.	3.6	7.1	12.0	11.2	13.7	14.8	n.a.	13.3	11.5	8.5	n.a.
20	n.a.	4.5	10.6	12.4	11.7	16.1	14.2	n.a.	14.1	11.6	8.4	n.a.
Mean	2.0	4.9	7.8	10.7	12.7	14.8	14.7	13.9	14.2	12.5	6.2	3.2
21	-1.6	2.5	9.4	11.5	13.0	17.0	15.5	n.a.	13.9	8.8	8.0	n.a.
22	0.9	5.0	10.9	11.8	14.3	16.1	14.8	n.a.	14.5	9.5	8.6	n.a.
23	-0.2	6.8	10.4	10.7	13.7	16.1	14.2	n.a.	13.9	10.1	10.2	n.a.
24	1.6	6.9	9.3	10.0	13.5	15.3	14.0	n.a.	13.7	10.3	10.0	n.a.
25	2.7	2.8	8.6	9.2	14.7	14.6	14.2	n.a.	13.3	10.2	9.0	n.a.
26	3.6	3.6	8.9	10.4	15.1	15.5	13.3	n.a.	10.2	9.4	8.4	n.a.
27	2.8	5.1	8.1	12.6	14.4	16.2	13.0	n.a.	12.2	9.3	8.1	n.a.
28	2.9	6.6	5.1	12.6	13.8	14.4	13.4	n.a.	13.5	9.4	7.4	n.a.
29	2.7	n.a.	7.1	13.1	13.7	14.0	13.6	n.a.	14.4	8.9	7.0	n.a.
30	3.0	n.a.	7.5	10.7	13.6	13.6	13.9	n.a.	14.4	8.6	6.3	n.a.
31	2.8	n.a.	8.0	n.a.	13.7	n.a.	13.8	n.a.	n.a.	6.5	n.a.	n.a.
Mean	1.9	4.9	8.5	11.3	14.0	15.3	14.0	n.a.	13.4	9.2	8.3	n.a.
MEAN	2.5	5.5	8.2	10.2	12.9	14.6	14.1	14.2	13.7	11.5	7.2	5.1
MIN	-1.6	2.1	5.1	7.1	10.2	12.4	13.0	13.2	10.2	6.5	3.1	2.1
MAX	4.2	9.1	11.5	13.1	15.4	17.0	15.9	15.0	15.4	14.2	10.4	8.6

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	91.2	69.5	n.a.	92.0	79.3	90.8	99.3	98.8	n.a.	81.5	98.8	69.8
2	67.7	74.7	n.a.	86.0	85.3	90.7	98.0	99.1	n.a.	86.9	97.8	65.6
3	68.1	31.5	n.a.	64.8	83.1	90.1	99.3	97.6	n.a.	95.0	98.2	85.7
4	74.9	29.1	n.a.	74.1	74.1	90.2	99.3	95.9	n.a.	88.8	98.6	98.8
5	69.5	53.1	n.a.	68.6	66.6	86.0	99.4	99.1	n.a.	80.3	99.8	96.1
6	61.5	64.4	36.9	67.9	75.3	89.9	99.0	97.1	n.a.	78.3	99.8	90.6
7	72.3	56.0	52.2	62.3	86.4	93.5	99.1	96.9	n.a.	80.3	87.5	84.9
8	59.1	52.3	83.1	58.6	80.6	85.0	95.4	99.3	n.a.	89.3	53.7	86.8
9	61.0	84.5	76.4	61.5	79.1	85.8	98.4	97.9	n.a.	85.5	51.5	85.7
10	63.9	76.2	44.6	83.2	85.1	89.9	98.6	94.3	n.a.	84.8	46.3	91.2
Mean	68.9	59.1	58.6	71.9	79.5	89.2	98.6	97.6	n.a.	85.1	83.2	85.5
11	69.5	82.1	42.1	71.6	81.3	88.5	94.9	98.7	n.a.	79.0	63.7	87.6
12	78.9	79.0	52.3	83.0	84.9	89.1	98.9	97.7	n.a.	77.8	95.4	76.1
13	85.9	95.5	63.2	78.2	88.6	90.9	99.4	95.4	n.a.	82.8	95.0	75.4
14	71.3	87.7	68.0	77.4	83.9	90.5	98.9	98.9	n.a.	86.5	97.1	93.3
15	67.6	73.7	43.2	78.1	84.2	87.1	98.6	97.4	n.a.	98.7	99.8	89.2
16	86.0	84.8	39.2	85.3	81.5	89.4	95.8	98.7	96.1	90.1	99.8	87.5
17	67.1	79.9	75.9	78.3	91.3	94.2	91.4	99.3	94.0	85.6	98.5	79.5
18	99.8	72.1	94.3	84.5	98.0	98.1	93.2	n.a.	96.7	83.8	87.2	n.a.
19	99.8	78.1	87.0	84.0	88.4	99.5	98.3	n.a.	99.0	86.0	68.7	n.a.
20	99.8	70.7	55.1	71.8	93.4	89.1	99.5	n.a.	98.2	83.6	58.7	n.a.
Mean	82.6	80.4	62.0	79.2	87.6	91.6	96.9	98.0	96.8	85.4	86.4	84.1
21	99.8	87.5	63.9	62.4	89.1	87.4	96.3	n.a.	96.6	85.1	76.8	n.a.
22	96.4	60.4	54.5	42.7	89.9	95.7	98.4	n.a.	93.1	73.2	59.1	n.a.
23	98.7	51.1	59.2	51.2	87.3	93.2	98.9	n.a.	96.6	72.1	46.2	n.a.
24	89.2	60.2	67.5	69.1	89.9	97.2	99.3	n.a.	96.2	81.6	43.0	n.a.
25	81.0	78.4	58.5	72.3	84.3	97.7	99.3	n.a.	96.5	86.1	62.4	n.a.
26	68.5	62.5	65.3	63.7	87.3	93.6	99.3	n.a.	99.4	81.4	77.2	n.a.
27	76.5	62.5	79.2	59.0	79.9	89.7	99.3	n.a.	95.9	79.6	86.8	n.a.
28	75.4	57.9	99.3	65.7	77.2	98.3	99.2	n.a.	90.4	83.9	86.8	n.a.
29	82.1		89.5	78.5	84.5	99.4	99.2	n.a.	88.9	84.0	89.7	n.a.
30	77.4		86.7	92.8	87.4	99.5	99.2	n.a.	84.8	85.2	91.9	n.a.
31	76.9		87.6		88.2		99.2	n.a.		95.9		n.a.
Mean	83.8	65.1	73.7	65.7	85.9	95.2	98.9	n.a.	93.8	82.6	72.0	n.a.
MEAN	78.6	68.4	66.3	72.3	84.4	92.0	98.1	97.8	94.8	84.3	80.5	84.9
MIN	59.1	29.1	36.9	42.7	66.6	85.0	91.4	94.3	84.8	72.1	43.0	65.6
MAX	99.8	95.5	99.3	92.8	98.0	99.5	99.5	99.3	99.4	98.7	99.8	98.8

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	745.2	749.1	n.a.	748.2	749.5	747.8	745.4	745.2	n.a.	749.3	750.0	751.2
2	746.4	750.2	n.a.	749.2	747.9	749.0	744.9	746.4	n.a.	748.9	749.5	750.4
3	748.5	751.4	n.a.	750.0	747.8	749.3	746.0	746.8	n.a.	749.4	749.4	748.0
4	748.5	751.1	n.a.	749.6	749.5	748.4	748.2	746.4	n.a.	750.2	750.4	747.9
5	747.8	750.0	n.a.	750.7	750.0	748.8	749.3	745.2	n.a.	752.2	750.1	749.4
6	748.7	749.4	749.6	750.4	749.9	749.6	748.9	745.1	n.a.	752.8	749.4	750.4
7	748.8	748.4	749.6	750.0	748.8	749.3	748.6	745.7	n.a.	752.4	750.3	751.1
8	748.1	746.0	747.7	750.2	747.6	748.1	749.4	746.5	n.a.	752.4	752.0	750.8
9	747.1	746.0	749.0	751.8	747.2	747.0	748.3	746.3	n.a.	752.5	752.2	749.9
10	745.4	747.5	750.5	753.2	747.6	746.2	747.3	746.5	n.a.	753.0	751.3	747.8
Mean	747.5	748.9	749.3	750.3	748.6	748.4	747.6	746.0	n.a.	751.3	750.5	749.7
11	745.9	748.2	749.7	752.0	747.9	746.5	746.6	746.5	n.a.	753.2	750.2	748.3
12	745.5	747.5	749.1	751.3	748.7	747.9	746.7	746.2	n.a.	752.7	750.4	749.5
13	745.9	747.6	749.3	751.4	749.2	748.0	746.9	746.5	n.a.	751.5	751.0	748.9
14	746.4	747.3	749.6	750.2	749.3	747.7	746.5	748.9	n.a.	750.8	751.0	749.0
15	747.8	748.4	751.0	749.3	750.8	746.9	746.4	748.5	n.a.	750.2	750.7	749.0
16	744.3	749.0	750.1	750.5	752.9	745.7	746.5	746.5	747.5	750.8	749.5	749.1
17	743.9	747.1	749.5	751.3	752.5	745.6	746.2	747.3	746.7	751.7	749.5	749.0
18	744.2	746.5	747.5	750.2	751.2	746.0	745.7	n.a.	747.4	751.8	749.9	n.a.
19	743.8	749.0	745.4	749.5	749.0	745.8	744.9	n.a.	749.3	750.1	751.4	n.a.
20	746.8	749.8	746.1	749.2	746.9	746.9	745.0	n.a.	749.8	750.6	752.7	n.a.
Mean	745.5	748.0	748.7	750.5	749.8	746.7	746.1	747.2	748.1	751.3	750.6	749.0
21	746.9	749.8	746.8	749.6	745.8	747.4	744.9	n.a.	748.9	750.8	753.6	n.a.
22	747.2	749.9	748.7	750.6	747.3	747.2	745.0	n.a.	749.2	750.9	753.2	n.a.
23	748.3	750.7	749.9	749.9	747.4	746.7	746.2	n.a.	748.7	751.4	753.6	n.a.
24	748.2	749.7	749.8	749.7	748.0	745.8	747.8	n.a.	749.0	751.9	753.5	n.a.
25	748.9	748.7	749.9	750.3	749.5	746.3	749.8	n.a.	749.6	751.7	752.1	n.a.
26	749.6	749.0	750.3	751.3	750.4	746.4	749.7	n.a.	749.3	751.4	751.1	n.a.
27	749.3	749.6	750.0	750.5	750.6	746.0	748.1	n.a.	748.9	751.4	750.6	n.a.
28	749.3	749.9	749.4	749.0	749.7	746.2	747.0	n.a.	748.8	751.8	749.0	n.a.
29	748.8		749.8	749.0	749.6	746.6	746.6	n.a.	749.3	751.6	748.5	n.a.
30	749.5		749.0	750.3	748.9	746.5	745.8	n.a.	750.0	750.1	749.7	n.a.
31	748.9		748.2		747.1		745.6	n.a.		750.3		n.a.
Mean	748.6	749.6	749.5	750.1	748.9	746.4	747.2	n.a.	749.2	751.3	751.3	n.a.
MEAN	747.2	748.8	749.1	750.3	749.0	747.2	746.9	746.5	748.8	751.3	750.9	749.4
MIN	743.8	746.0	745.4	748.2	745.8	745.6	744.9	745.1	746.7	748.9	748.5	747.8
MAX	749.6	751.4	751.0	753.2	752.9	749.6	749.8	748.9	750.0	753.2	753.6	751.2

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	168.6	140.1	n.a.	186.3	126.0	160.8	130.6	118.8	n.a.	187.3	159.1	119.9
2	120.2	107.4	n.a.	184.8	94.1	187.7	111.1	107.2	n.a.	171.2	199.8	174.2
3	126.3	95.8	n.a.	116.6	107.1	162.2	198.5	74.1	n.a.	143.5	193.4	140.3
4	99.2	89.8	n.a.	100.3	93.5	164.5	158.1	84.6	n.a.	181.1	132.8	183.6
5	90.3	121.9	n.a.	109.2	104.5	132.7	160.3	74.2	n.a.	170.2	163.2	159.3
6	93.3	105.3	98.8	96.5	130.2	139.6	146.8	98.1	n.a.	161.6	241.5	149.2
7	96.6	121.0	101.4	106.7	123.7	168.9	154.6	136.9	n.a.	166.0	173.6	150.2
8	90.2	109.6	128.5	110.2	130.1	115.2	160.4	61.2	n.a.	157.3	122.3	177.5
9	123.5	109.8	120.5	112.0	117.3	113.8	154.5	104.0	n.a.	173.5	150.8	120.0
10	100.3	123.4	85.0	141.3	178.8	128.0	150.6	76.8	n.a.	174.0	133.4	135.9
Mean	110.9	112.4	106.8	126.4	120.5	147.3	152.6	93.6	n.a.	168.6	167.0	151.0
11	131.0	130.0	93.8	133.7	143.4	146.6	147.5	118.5	n.a.	179.4	130.7	173.6
12	128.8	139.5	114.1	125.5	150.2	151.4	149.9	84.1	n.a.	177.7	193.9	116.5
13	167.4	181.1	120.0	107.5	123.5	143.6	159.6	56.8	n.a.	176.6	189.2	113.3
14	136.4	152.4	101.4	106.1	105.7	108.9	164.3	125.0	n.a.	178.8	192.8	188.7
15	106.9	120.0	125.4	112.2	137.6	151.8	152.6	66.0	n.a.	171.2	188.0	173.1
16	137.9	100.5	101.4	134.5	158.6	149.5	123.9	59.8	145.5	177.3	173.0	145.9
17	122.3	119.2	149.5	147.3	150.9	161.0	149.4	146.0	168.2	161.3	219.2	143.4
18	187.1	183.1	152.3	117.2	135.5	146.3	157.8	n.a.	135.8	155.4	169.8	n.a.
19	n.a.	109.6	109.0	166.3	116.0	125.0	141.0	n.a.	123.4	153.9	134.8	n.a.
20	n.a.	121.7	111.6	142.1	139.9	142.8	120.4	n.a.	n.a.	166.1	137.2	n.a.
Mean	139.7	135.7	117.9	129.2	136.1	142.7	146.6	93.7	143.2	169.8	172.9	150.6
21	179.0	153.7	90.8	113.9	123.0	142.2	186.9	n.a.	190.2	225.1	189.0	n.a.
22	179.9	100.2	96.9	107.7	182.0	182.3	148.3	n.a.	186.6	147.4	174.5	n.a.
23	146.8	92.6	108.3	111.5	155.6	167.5	144.1	n.a.	161.3	183.4	154.4	n.a.
24	113.0	111.4	89.7	149.6	168.5	140.1	192.3	n.a.	162.0	167.1	124.5	n.a.
25	111.8	112.6	131.5	161.5	135.3	140.4	169.3	n.a.	161.9	167.2	189.9	n.a.
26	113.7	100.5	87.6	136.0	174.4	130.4	149.9	n.a.	333.5	177.6	186.6	n.a.
27	106.5	117.0	134.9	124.2	84.7	154.9	165.4	n.a.	197.2	182.5	184.4	n.a.
28	136.3	95.9	170.8	103.7	135.7	182.5	210.6	n.a.	182.8	153.6	160.7	n.a.
29	125.0		136.0	161.7	138.8	145.8	151.8	n.a.	184.0	183.8	184.7	n.a.
30	120.6		121.8	161.3	142.3	168.3	140.4	n.a.	181.3	162.9	213.0	n.a.
31	115.0		166.6		163.6		138.1		n.a.	185.2		n.a.
Mean	131.6	110.5	121.4	133.1	145.8	155.4	163.4	n.a.	194.1	176.0	176.2	n.a.
MEAN	126.7	120.2	117.2	129.6	134.5	148.5	154.5	93.7	179.6	171.6	172.0	150.9
MIN	90.2	89.8	85.0	96.5	84.7	108.9	111.1	56.8	123.4	143.5	122.3	113.3
MAX	187.1	183.1	170.8	186.3	182.0	187.7	210.6	146.0	333.5	225.1	241.5	188.7

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	1.3	1.1	n.a.	0.9	1.3	1.1	0.9	0.9	n.a.	0.5	0.1	0.2
2	0.9	1.2	n.a.	1.0	0.9	1.0	0.6	0.9	n.a.	0.4	0.1	0.7
3	0.9	1.1	n.a.	1.3	1.0	1.0	0.6	0.8	n.a.	0.1	0.1	0.2
4	0.9	1.1	n.a.	1.0	1.3	1.1	0.7	1.0	n.a.	0.6	0.0	0.1
5	1.0	1.1	n.a.	1.3	1.3	1.1	0.8	1.1	n.a.	0.7	0.0	0.1
6	1.1	1.0	1.3	1.2	1.1	0.9	0.8	0.8	n.a.	0.6	0.0	0.2
7	1.0	1.0	1.3	1.3	1.2	0.9	0.8	0.8	n.a.	0.6	0.4	0.3
8	1.0	1.2	0.9	1.3	1.1	1.1	0.8	1.0	n.a.	0.4	0.3	0.4
9	1.0	0.9	1.1	1.3	1.1	1.0	0.7	0.9	n.a.	1.0	0.6	0.5
10	1.1	1.0	1.4	1.1	0.9	1.1	0.7	1.0	n.a.	0.7	0.7	0.2
Mean	1.0	1.1	1.2	1.2	1.1	1.0	0.7	0.9	n.a.	0.6	0.2	0.3
11	1.0	1.0	1.3	1.2	1.0	0.9	0.9	0.6	n.a.	0.7	0.5	0.5
12	0.9	1.0	1.1	1.0	0.7	1.3	0.9	0.9	n.a.	0.6	0.1	0.7
13	0.6	0.6	1.0	0.9	1.1	0.9	0.8	1.0	n.a.	0.3	0.2	0.8
14	0.9	0.8	0.9	0.9	1.1	0.9	0.7	0.9	n.a.	0.4	0.0	0.2
15	0.9	1.4	1.3	1.1	1.2	0.9	0.8	0.8	n.a.	0.1	0.0	0.3
16	0.7	1.2	1.2	1.1	1.2	1.1	0.9	1.0	0.3	0.5	0.1	0.5
17	0.9	1.2	1.0	1.1	0.9	1.0	0.9	0.8	0.3	0.6	0.1	0.7
18	0.6	1.2	0.7	1.1	0.9	0.9	1.0	n.a.	0.2	0.5	0.4	n.a.
19	n.a.	1.0	0.8	0.9	0.9	0.7	0.9	n.a.	0.2	0.5	0.4	n.a.
20	n.a.	1.2	1.7	1.2	0.9	0.8	1.4	n.a.	n.a.	0.5	0.5	n.a.
Mean	0.8	1.1	1.1	1.1	1.0	0.9	0.9	0.9	0.3	0.5	0.2	0.5
21	n.a.	0.9	1.3	1.3	1.1	1.1	1.0	n.a.	0.1	0.1	0.6	n.a.
22	0.5	1.1	1.4	1.5	1.0	0.8	1.7	n.a.	0.2	0.5	0.3	n.a.
23	0.5	1.2	1.2	1.3	1.1	1.0	1.0	n.a.	0.2	0.6	0.3	n.a.
24	0.8	1.1	1.2	1.1	0.9	0.8	0.7	n.a.	0.3	0.6	0.2	n.a.
25	1.0	0.8	1.1	1.0	1.0	1.0	0.7	n.a.	0.1	0.4	0.4	n.a.
26	1.1	1.2	1.2	1.1	1.0	1.0	0.8	n.a.	0.5	0.9	0.5	n.a.
27	0.9	1.2	1.0	1.3	1.2	0.9	0.8	n.a.	0.3	0.4	1.0	n.a.
28	1.0	1.3	0.8	1.4	0.8	1.0	0.7	n.a.	0.5	0.7	0.6	n.a.
29	0.9	n.a.	0.9	1.2	1.0	0.9	0.8	n.a.	0.7	0.2	0.7	n.a.
30	0.9	n.a.	0.9	0.9	1.0	0.9	0.8	n.a.	0.6	0.6	0.1	n.a.
31	0.9	n.a.	0.9	n.a.	1.0	n.a.	0.8	n.a.	n.a.	0.0	n.a.	n.a.
Mean	0.9	1.1	1.1	1.2	1.0	0.9	0.9	n.a.	0.4	0.5	0.5	n.a.
MEAN	0.9	1.1	1.1	1.1	1.0	1.0	0.9	0.9	0.3	0.5	0.3	0.4
MIN	0.5	0.6	0.7	0.9	0.7	0.7	0.6	0.6	0.1	0.0	0.0	0.1
MAX	1.3	1.4	1.7	1.5	1.3	1.3	1.7	1.1	0.7	1.0	1.0	0.8

PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	0.0	0.0	n.a	2.2	0.6	n.a	8.6	n.a.	n.a.	0.0	2.0	n.a.
2	0.0	0.0	n.a	0.0	14.2	0.6	22.2	n.a.	n.a.	2.8	2.4	0.0
3	0.0	0.0	n.a	0.0	1.4	0.2	34.6	n.a.	n.a.	4.0	2.0	n.a.
4	0.0	0.0	n.a	3.2	3.8	0.0	28.0	n.a.	n.a.	0.0	0.2	n.a.
5	0.0	0.0	n.a	0.4	0.0	0.0	25.6	n.a.	n.a.	0.0	2.6	0.2
6	0.0	0.0	n.a	0.6	0.6	11.8	10.0	n.a.	n.a.	0.0	6.6	0.0
7	0.0	0.0	0.0	0.0	3.2	13.4	8.2	n.a.	n.a.	0.0	0.2	0.0
8	0.0	0.0	0.0	0.0	0.2	0.8	3.2	n.a.	n.a.	0.4	0.0	0.0
9	0.0	5.6	1.4	0.0	0.0	3.6	37.6	n.a.	n.a.	0.0	0.0	0.0
10	0.0	0.2	0.0	5.0	0.4	2.0	9.4	n.a.	n.a.	0.0	0.0	n.a.
Total	0.0	5.8	1.4	11.4	24.4	32.4	187.4	n.a.	n.a	7.2	16.0	0.2
11	0.0	0.0	0.0	0.0	0.8	0.0	25.4	n.a.	n.a.	0.0	0.0	0.0
12	0.0	0.6	0.0	6.8	0.6	1.2	25.2	n.a.	n.a.	0.0	0.0	0.0
13	0.0	0.4	0.0	0.4	4.2	7.6	46.2	n.a.	n.a.	0.0	0.0	0.0
14	0.0	0.0	n.a	0.0	0.2	9.6	24.6	n.a.	n.a.	0.0	4.6	0.0
15	0.0	0.8	0.0	1.6	0.0	5.6	32.4	n.a.	n.a.	1.6	8.6	0.0
16	3.8	n.a	0.0	2.2	0.8	13.0	34.8	n.a.	n.a.	0.0	16.2	0.0
17	n.a	2.4	0.0	0.0	1.8	43.2	13.6	n.a.	10.8	0.8	0.4	n.a.
18	0.0	n.a	1.4	1.4	24.0	33.2	19.8	n.a.	5.2	0.0	0.0	n.a.
19	n.a.	0.0	0.0	2.6	3.8	15.2	18.2	n.a.	20.0	0.0	0.0	n.a.
20	n.a.	0.0	6.0	0.0	7.6	67.4	45.2	n.a.	3.6	0.0	0.0	n.a.
Total	3.8	4.2	7.4	15.0	43.8	196.0	285.4	n.a.	39.6	2.4	29.8	0.0
21	0.0	1.0	0.0	0.0	11.6	9.2	10.4	n.a.	3.0	1.8	0.0	n.a.
22	0.2	0.0	0.0	0.0	0.8	12.6	37.0	n.a.	8.2	0.0	0.0	n.a.
23	0.0	0.0	0.0	0.0	0.0	0.2	29.6	n.a.	21.2	0.0	0.0	n.a.
24	0.2	0.0	0.0	0.0	0.2	27.6	53.4	n.a.	29.4	0.0	0.0	n.a.
25	0.0	1.0	0.0	1.0	0.0	42.8	11.0	n.a.	12.6	0.0	0.0	n.a.
26	0.0	n.a	1.0	0.0	0.0	29.0	42.4	n.a.	60.4	0.0	0.4	n.a.
27	0.0	0.2	0.2	3.0	1.6	28.8	30.6	n.a.	7.8	0.0	0.0	n.a.
28	0.0	n.a	10.2	0.2	1.8	34.6	18.6	n.a.	0.0	0.0	0.4	n.a.
29	0.0		0.0	0.0	9.8	22.2	42.4	n.a.	0.0	0.0	1.0	n.a.
30	0.0		0.4	13.0	4.8	30.4	38.4	n.a.	1.4	0.0	0.2	n.a.
31	0.0		0.6		1.4	n.a	65.8		n.a	0.6		n.a.
Total	0.4	2.2	12.4	17.2	32.0	237.4	379.6	n.a.	144.0	2.4	2.0	n.a.
TOTAL	4.2	12.1	21.2	43.6	100.2	456.8	852.4	n.a.	183.6	12.0	47.8	0.2
MIN	0.0	0.0	0.0	0.0	0.0	0.0	3.2	n.a.	0.0	0.0	0.0	0.0
MAX	3.8	5.6	10.2	13.0	24.0	67.4	65.8	n.a.	60.4	4.0	16.2	0.2

GLOBAL SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	109.4	209.5	n.a.	107.2	187.1	163.3	34.3	35.1	n.a.	227.9	42.9	135.2
2	182.8	203.4	n.a.	167.1	132.4	186.2	61.3	50.8	n.a.	181.0	79.0	220.6
3	180.4	219.4	n.a.	243.9	189.7	202.8	57.8	30.2	n.a.	106.4	68.0	85.2
4	176.0	220.1	n.a.	112.3	207.7	187.8	44.9	49.9	n.a.	247.5	31.5	58.6
5	181.2	210.2	n.a.	242.7	284.3	218.9	67.3	34.0	n.a.	300.0	12.8	61.2
6	183.7	215.0	333.1	233.0	237.3	119.6	49.5	69.9	n.a.	305.4	20.1	104.3
7	165.0	216.1	269.0	209.0	178.5	99.1	64.9	58.0	n.a.	288.5	263.5	191.9
8	186.2	212.1	145.9	206.7	224.7	192.6	101.8	31.6	n.a.	188.4	258.5	181.3
9	170.8	103.0	98.1	183.5	270.2	162.8	65.6	99.3	n.a.	290.0	255.8	221.4
10	192.9	226.5	279.4	99.7	133.0	150.2	57.2	85.9	n.a.	273.3	253.2	94.8
Mean	172.8	203.5	225.1	180.5	204.5	168.3	60.5	54.5	n.a.	240.8	128.5	135.5
11	179.0	192.8	266.0	266.2	154.9	150.7	118.8	86.7	n.a.	289.9	246.4	162.5
12	150.0	199.4	236.3	180.8	106.4	186.5	50.0	64.0	n.a.	267.2	43.9	208.5
13	123.5	66.1	135.5	134.2	130.8	126.2	35.4	119.7	n.a.	217.9	75.8	218.8
14	184.4	186.3	146.2	126.5	225.0	171.8	47.2	80.1	n.a.	172.5	46.2	86.6
15	184.2	179.9	220.3	231.2	237.0	169.8	77.2	81.7	n.a.	50.3	20.2	123.8
16	67.8	12.9	279.7	238.9	278.4	246.2	74.2	49.9	209.8	206.1	18.4	147.7
17	231.6	238.1	133.4	258.0	190.0	174.7	215.2	65.5	173.4	246.2	69.9	272.2
18	n.a.	257.6	20.1	161.4	55.4	97.7	223.4	n.a.	87.1	203.8	174.5	n.a.
19	n.a.	180.8	100.3	170.8	89.8	63.5	67.1	n.a.	80.5	224.0	241.0	n.a.
20	n.a.	239.6	212.9	263.3	123.2	214.7	65.3	n.a.	98.0	207.8	238.8	n.a.
Mean	160.1	175.4	175.1	203.1	159.1	160.2	97.4	78.2	129.8	208.6	117.5	174.3
21	n.a.	143.1	270.1	198.0	240.4	276.9	159.4	n.a.	136.5	92.0	235.5	n.a.
22	100.9	261.8	275.6	301.7	229.0	150.5	74.1	n.a.	188.4	256.6	237.8	n.a.
23	44.7	242.8	241.5	218.0	216.6	164.8	35.5	n.a.	108.5	287.5	237.2	n.a.
24	180.2	236.7	146.6	133.0	187.2	76.4	57.2	n.a.	134.3	229.5	235.1	n.a.
25	207.5	73.1	178.8	144.4	186.7	96.2	72.1	n.a.	130.5	171.8	232.4	n.a.
26	207.7	187.1	201.7	189.6	179.0	148.6	51.6	n.a.	18.2	237.3	220.6	n.a.
27	192.1	242.0	141.0	218.3	225.5	219.6	23.4	n.a.	159.3	246.8	199.2	n.a.
28	169.0	278.2	43.2	270.3	140.3	81.2	42.3	n.a.	271.7	245.0	205.4	n.a.
29	169.6		138.0	259.8	179.6	70.3	27.2	n.a.	288.3	155.6	161.5	n.a.
30	161.9		162.6	118.1	188.5	58.7	41.8	n.a.	255.6	186.6	69.3	n.a.
31	146.2		118.6		211.7		45.0		n.a.	46.0		n.a.
Mean	158.0	208.1	174.3	205.1	198.6	134.3	57.2	n.a.	169.1	195.9	203.4	n.a.
MEAN	164.0	194.8	184.4	196.3	187.8	154.3	71.2	64.3	156.0	214.5	149.8	151.4
MIN	44.7	12.9	20.1	99.7	55.4	58.7	23.4	30.2	18.2	46.0	12.8	58.6
MAX	231.6	278.2	333.1	301.7	284.3	276.9	223.4	119.7	288.3	305.4	263.5	272.2

AWS NP-Namche

Technical sheet		
Coordinates: Latitude: 27° 48' 8.6" N Longitude: 86° 42' 52" E Elevation: 3,570 m a.s.l.	Installation Time: October 2001	Data Availability: From October 27, 2001

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				2 m	LSI-Lastem E-Log
Air Temperature	-30 - +70 °C	±0.1°C	60 min.	2 m	LSI-Lastem DMA570
Relative Humidity	0 - 100 %	±2.5%	60 min.	2 m	LSI-Lastem DMA570
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	180 mm/hr	0-1 mm/min: 1% 1-3 mm/min: 2% 3-5 mm/min: 4% 5-10 mm/min: 8%	60 min.	1.5 m	LSI-Lastem DQA035
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
Global Solar Radiation	0-2000		60 min.	2 m	Kipp & Zonen CMB6 pyranometer



AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-2.9	-0.3	1.7	2.6	5.3	7.8	9.9	11.3	10.8	7.7	0.7	2.3
2	-1.1	1.3	1.8	3.5	5.0	8.8	10.4	11.0	10.1	6.7	0.3	5.5
3	-0.9	2.9	1.5	4.1	5.8	9.1	10.1	11.1	9.9	6.1	0.6	0.7
4	1.8	3.8	0.5	1.4	6.7	9.3	10.2	10.8	10.5	6.7	0.7	-0.3
5	1.5	2.2	2.8	1.7	7.8	9.5	10.0	11.2	10.7	7.3	0.0	-0.3
6	0.7	4.0	4.1	2.0	7.6	9.1	9.3	11.2	9.9	7.6	-0.6	-0.3
7	0.6	3.3	4.5	2.7	6.5	7.1	9.6	10.8	9.7	7.9	1.6	-0.1
8	-0.5	1.7	3.2	4.1	5.4	7.4	10.7	10.8	10.1	6.8	4.6	1.6
9	-3.1	-1.2	-0.1	3.2	6.2	7.9	10.2	10.1	10.4	6.8	4.4	2.5
10	-3.9	0.7	0.6	2.1	6.7	8.5	10.5	10.2	10.1	6.9	4.6	-2.1
Mean	-0.8	1.8	2.1	2.7	6.3	8.5	10.1	10.9	10.2	7.1	1.7	1.0
11	-2.7	0.3	1.1	3.8	6.5	8.1	11.2	9.9	9.9	7.0	3.4	-2.6
12	-3.2	0.8	0.4	4.1	6.2	9.3	10.5	9.8	9.7	7.6	0.5	-2.9
13	-3.5	-0.3	0.4	3.4	7.4	9.3	10.4	10.4	9.6	7.9	1.0	-3.4
14	-1.6	0.4	1.7	2.7	7.5	10.2	10.4	10.1	9.6	8.0	0.6	-3.8
15	-3.1	0.8	3.1	3.5	8.8	10.1	10.5	9.7	9.9	7.3	-0.4	-3.6
16	-6.9	-2.6	5.5	5.0	9.8	10.6	10.4	10.2	9.9	6.5	-1.2	-3.8
17	-3.3	-3.0	2.2	7.4	9.0	10.8	11.1	9.4	10.1	6.1	-1.1	-2.0
18	-6.5	-3.5	0.6	7.3	7.1	9.8	11.2	9.6	9.0	6.0	-0.3	-2.5
19	-6.6	-2.9	2.9	5.5	5.9	9.8	11.2	9.1	8.9	5.6	2.4	-0.8
20	-6.2	-2.2	4.5	5.5	6.8	10.8	10.4	10.3	9.1	5.1	3.1	0.0
Mean	-4.4	-1.2	2.2	4.8	7.5	9.9	10.7	9.9	9.6	6.7	0.8	-2.5
21	-6.1	-3.6	2.7	5.2	7.9	11.5	11.6	11.5	9.0	3.3	2.4	1.4
22	-4.9	-0.2	5.5	4.5	8.5	11.1	11.0	10.4	9.5	3.1	6.2	1.4
23	-4.6	1.1	4.8	4.0	8.2	11.5	10.9	10.3	9.3	4.7	6.7	2.8
24	-4.2	0.9	3.4	3.9	7.9	11.4	10.5	10.7	9.2	4.4	5.1	1.2
25	-2.9	-3.1	2.5	3.6	9.3	10.2	11.0	10.5	8.6	4.0	4.3	0.7
26	-3.0	-3.5	2.2	4.3	10.0	10.8	10.3	10.2	6.3	2.8	3.4	-0.6
27	-2.9	-1.9	2.1	6.3	9.7	11.2	9.9	10.4	7.6	4.0	3.9	-1.8
28	-2.4	0.2	0.0	7.1	8.4	10.1	10.4	10.3	7.4	2.6	4.8	-1.8
29	-2.7		1.7	7.0	8.7	9.9	10.6	10.1	7.8	2.6	1.5	-0.8
30	-2.7		2.3	5.8	8.1	9.6	10.9	10.8	7.8	2.5	-0.1	1.2
31	-3.0		2.4		8.1		10.9	10.0		1.3		3.1
Mean	-3.6	-1.3	2.7	5.2	8.6	10.7	10.7	10.5	8.3	3.2	3.8	0.6
MEAN	-2.9	-0.1	2.3	4.2	7.5	9.7	10.5	10.4	9.3	5.6	2.1	-0.3
MIN	-6.9	-3.6	-0.1	1.4	5.0	7.1	9.3	9.1	6.3	1.3	-1.2	-3.8
MAX	1.8	4.0	5.5	7.4	10.0	11.5	11.6	11.5	10.8	8.0	6.7	5.5

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	94.5	42.3	47.7	92.0	88.7	94.3	100.0	100.0	82.0	84.4	98.4	69.3
2	51.2	39.3	74.6	86.3	91.3	93.4	100.0	99.7	94.5	90.9	98.9	37.8
3	46.1	24.7	86.2	73.0	89.7	84.2	100.0	97.5	87.0	93.0	99.0	74.7
4	38.8	23.6	88.8	81.9	79.2	84.3	99.6	97.3	84.3	92.4	100.0	95.0
5	40.4	47.2	45.8	62.2	69.2	87.0	100.0	97.3	83.5	86.2	100.0	93.0
6	37.8	35.3	38.5	61.3	77.7	89.9	99.4	92.6	96.6	81.4	97.7	95.6
7	44.3	41.0	48.5	68.4	92.5	98.4	99.9	96.9	99.7	77.0	79.5	95.2
8	39.9	48.2	58.1	71.4	90.7	91.1	97.6	96.3	94.3	89.4	39.8	73.1
9	56.2	70.5	77.8	74.2	85.2	89.2	100.0	98.7	93.0	87.3	50.6	59.2
10	49.2	59.6	45.3	90.6	88.5	88.4	99.9	89.7	96.9	85.0	45.0	87.3
Mean	49.8	43.2	61.1	76.1	85.3	90.0	99.6	96.6	91.2	86.7	80.9	78.0
11	61.8	69.3	44.5	79.6	90.4	92.0	98.9	95.7	97.7	83.3	63.8	93.6
12	73.4	71.5	62.1	81.2	90.8	85.4	99.9	91.1	92.8	82.4	95.6	86.8
13	74.6	90.7	71.5	84.3	88.7	90.8	100.0	91.6	98.5	84.9	90.5	83.7
14	58.2	85.1	64.5	89.3	89.4	89.2	100.0	97.1	97.9	n.a.	93.3	90.5
15	53.7	78.8	27.4	81.6	86.2	87.8	99.8	98.3	96.2	n.a.	100.0	84.5
16	81.0	87.2	35.1	87.2	82.4	90.3	96.5	99.4	94.3	n.a.	99.8	85.7
17	41.8	68.3	79.7	80.2	95.5	92.7	93.8	98.5	90.1	0.1	98.1	66.0
18	92.5	64.8	97.4	77.8	97.0	93.3	98.4	96.3	98.0	0.1	89.4	75.5
19	92.7	78.2	80.4	89.8	94.2	93.1	100.0	99.3	99.5	n.a.	60.6	60.9
20	93.1	66.6	54.2	81.1	96.2	94.2	100.0	91.4	99.4	n.a.	55.0	53.8
Mean	72.3	76.1	61.7	83.2	91.1	90.9	98.7	95.9	96.4	50.2	84.6	78.1
21	93.0	90.3	67.0	72.6	91.6	91.3	97.3	89.0	95.7	n.a.	71.2	36.8
22	80.7	44.7	53.2	56.6	92.8	98.4	99.9	99.7	92.0	n.a.	30.3	33.9
23	89.7	46.6	60.3	61.0	90.1	95.5	99.9	97.1	95.8	n.a.	25.1	24.7
24	82.1	51.6	74.6	76.1	94.5	98.1	100.0	93.9	91.2	n.a.	33.7	35.8
25	67.6	79.5	72.4	78.9	86.0	99.9	99.7	95.8	93.8	n.a.	48.8	38.9
26	65.6	61.2	73.9	73.7	90.3	95.4	100.0	91.5	91.6	n.a.	69.7	40.4
27	65.0	62.1	81.0	69.0	76.5	91.2	100.0	83.7	91.6	n.a.	63.7	55.2
28	63.1	51.4	99.8	71.9	82.1	98.9	100.0	88.8	92.3	n.a.	56.7	43.0
29	69.4		89.1	87.1	85.1	n.a.	100.0	92.0	94.1	n.a.	82.4	44.5
30	69.8		86.0	90.4	90.9	100.0	100.0	90.1	89.7	87.4	94.9	44.0
31	66.0		89.4		92.3		100.0	93.0		97.0		36.2
Mean	73.8	60.9	77.0	73.7	88.4	96.5	99.7	92.2	92.8	92.2	57.7	39.4
MEAN	65.6	60.0	66.9	77.7	88.2	92.3	99.4	94.8	93.5	76.6	74.4	64.3
MIN	37.8	23.6	27.4	56.6	69.2	84.2	93.8	83.7	82.0	0.1	25.1	24.7
MAX	94.5	90.7	99.8	92.0	97.0	100.0	100.0	100.0	99.7	97.0	100.0	95.6

ATMOPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	655.8	660.3	662.2	660.2	662.6	660.9	659.9	660.3	663.7	663.0	661.7	664.0
2	657.6	661.7	661.8	661.4	660.7	662.6	659.4	661.3	663.1	662.3	661.1	663.4
3	659.7	664.0	661.5	662.6	660.8	663.0	660.6	661.9	663.5	662.7	661.1	659.5
4	659.8	664.0	660.4	662.1	662.8	661.8	663.1	661.3	664.6	663.7	662.4	659.5
5	659.2	662.1	660.1	662.9	663.5	662.4	664.3	660.5	664.1	666.1	661.8	661.1
6	660.3	661.7	662.2	662.6	663.3	663.3	663.7	660.3	662.3	667.0	661.0	662.3
7	660.1	660.6	662.3	662.4	661.8	662.8	663.3	660.5	660.8	666.5	662.5	663.1
8	659.4	657.7	659.6	662.8	660.1	661.4	664.3	661.5	661.5	666.1	665.2	663.0
9	657.8	656.9	661.0	664.8	659.8	660.3	663.3	661.6	663.6	666.2	665.4	661.9
10	655.6	659.1	662.6	666.0	660.5	659.4	661.9	661.9	664.7	666.8	664.4	658.9
Mean	658.5	660.8	661.4	662.8	661.6	661.8	662.4	661.1	663.2	665.0	662.7	661.7
11	656.4	659.7	661.9	664.9	660.9	659.8	661.4	661.7	663.7	667.1	662.8	659.2
12	655.8	659.0	660.9	664.1	661.7	661.4	661.4	661.4	664.0	666.8	662.4	660.7
13	655.8	659.0	661.1	664.3	662.4	661.8	661.6	661.7	663.6	665.4	663.3	659.8
14	657.1	658.6	661.6	662.8	662.5	661.5	661.1	664.0	662.9	664.5	663.3	659.7
15	658.7	660.2	663.9	661.6	664.3	660.6	661.0	663.6	662.5	663.6	662.6	659.7
16	653.7	660.1	663.0	663.4	667.0	659.4	661.1	661.6	662.0	664.0	660.8	659.8
17	653.8	658.1	661.9	664.8	666.6	659.3	660.8	661.7	660.6	665.1	661.0	659.9
18	653.4	657.1	659.3	663.8	665.0	659.7	660.0	662.3	661.1	665.1	661.6	661.2
19	652.9	660.0	657.4	662.7	662.3	659.6	658.9	663.9	663.3	663.1	664.2	661.0
20	656.4	660.9	658.4	661.9	659.7	661.0	659.0	665.3	663.9	663.7	665.7	660.8
Mean	655.4	659.3	660.9	663.4	663.2	660.4	660.6	662.7	662.8	664.8	662.8	660.2
21	656.6	660.7	658.8	662.4	658.7	661.7	659.2	664.7	662.8	663.8	666.3	660.9
22	657.1	661.5	661.3	663.3	660.5	661.4	659.5	664.1	663.2	663.7	666.8	660.3
23	658.3	662.8	662.6	662.5	660.4	660.8	661.0	664.3	662.9	664.4	667.7	660.0
24	658.4	661.7	662.5	662.5	661.2	659.8	662.9	663.7	663.1	664.8	667.2	660.1
25	659.6	659.9	662.3	663.0	663.3	660.2	665.2	664.1	663.6	664.5	665.2	660.7
26	660.5	660.1	662.8	664.4	664.5	660.4	664.9	664.2	663.6	664.0	663.8	661.2
27	660.1	661.0	662.2	663.8	664.6	660.1	663.0	664.1	662.6	664.1	663.0	661.6
28	660.2	661.7	661.2	662.2	663.4	660.2	661.9	663.7	662.4	664.4	661.1	663.0
29	659.6		662.0	662.0	663.3	660.6	661.8	664.7	662.9	664.1	660.2	663.0
30	660.5		661.0	663.5	662.4	660.6	660.9	665.0	663.8	662.3	661.7	663.4
31	659.8		660.1		660.2		660.5	664.7		662.4		664.1
Mean	659.2	661.2	661.5	663.0	662.0	660.6	661.9	664.3	663.1	663.9	664.3	661.7
MEAN	657.7	660.4	661.3	663.1	662.3	660.9	661.6	662.8	663.0	664.6	663.2	661.2
MIN	652.9	656.9	657.4	660.2	658.7	659.9	658.9	660.3	660.6	662.3	660.2	658.9
MAX	660.5	664.0	663.9	666.0	667.0	663.3	665.2	665.3	664.7	667.1	667.7	664.1

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	138.8	182.6	186.4	138.7	147.8	144.3	133.9	141.2	154.2	136.1	141.2	160.5
2	173.5	174.9	162.5	161.3	143.1	133.7	141.2	137.6	137.9	139.0	141.6	163.2
3	170.5	193.1	136.2	165.2	135.1	138.8	135.8	123.4	181.0	123.8	140.4	158.3
4	236.6	162.3	107.7	193.3	171.6	143.7	140.0	148.2	167.0	149.7	150.8	182.5
5	172.4	189.4	123.7	169.6	180.1	161.9	121.6	165.1	167.9	153.0	148.4	136.0
6	178.4	222.7	142.9	140.4	168.2	135.5	146.5	159.2	141.4	157.6	160.9	120.3
7	132.4	117.1	151.2	175.1	151.6	139.6	129.0	150.0	140.6	147.8	172.7	170.6
8	141.3	125.3	136.3	143.7	127.5	122.5	145.5	157.6	175.5	137.6	154.0	145.1
9	178.9	164.4	151.9	164.2	168.5	161.6	131.8	138.8	173.0	160.0	139.9	150.7
10	170.4	158.5	116.7	171.9	143.7	147.3	137.1	133.1	144.1	157.7	130.4	115.8
Mean	169.3	169.0	141.6	162.3	153.7	142.9	136.2	145.4	158.3	146.2	148.0	150.3
11	164.5	141.0	170.3	159.8	147.4	123.1	135.5	164.6	139.0	166.7	146.4	133.8
12	134.0	183.9	193.8	172.2	129.8	136.1	150.2	129.5	163.3	157.7	157.8	147.1
13	100.5	147.3	145.9	173.6	169.1	143.5	136.2	154.2	152.2	116.2	161.0	128.5
14	124.1	108.1	183.2	172.4	142.8	170.7	134.8	143.3	137.0	163.6	174.6	167.5
15	97.3	132.8	228.5	171.1	162.9	156.9	134.8	140.4	152.9	177.8	157.9	170.4
16	125.5	134.5	152.7	148.3	174.7	155.3	137.4	139.7	143.2	162.4	148.3	147.7
17	167.3	134.0	142.4	160.9	149.4	146.4	163.3	148.4	149.2	152.6	135.5	150.0
18	102.2	128.9	169.2	149.9	196.0	136.9	143.1	160.2	145.6	155.7	117.6	127.5
19	173.9	164.9	142.9	152.6	136.4	152.8	144.4	140.7	141.8	176.9	170.2	139.3
20	204.3	154.7	149.4	156.2	144.5	166.5	139.7	144.6	126.1	132.6	135.2	182.2
Mean	139.4	143.0	167.8	161.7	155.3	148.8	141.9	146.6	145.0	156.2	150.5	149.4
21	190.5	149.9	107.4	174.8	159.2	151.4	152.4	174.2	169.5	213.4	188.9	160.8
22	115.8	140.3	147.7	135.1	162.5	136.8	151.0	146.0	159.3	185.9	176.0	111.3
23	105.2	169.7	178.1	170.1	171.4	166.5	128.6	152.9	146.5	165.9	154.6	94.0
24	123.9	136.1	160.9	166.0	147.9	150.9	130.4	175.9	187.6	153.4	197.0	123.8
25	105.0	176.1	146.9	165.9	152.5	128.9	152.6	132.5	143.2	155.2	178.5	137.9
26	139.3	174.6	167.5	190.3	151.6	149.9	140.9	134.5	253.6	180.8	147.3	163.2
27	181.9	137.7	134.6	162.8	163.0	144.8	134.7	160.6	175.2	153.5	175.5	151.4
28	166.6	174.4	136.3	192.7	165.9	146.4	135.7	153.1	178.5	142.0	173.1	183.2
29	182.4		176.1	180.9	144.1	134.2	136.9	127.7	149.4	165.9	153.8	164.1
30	156.3		162.4	167.1	158.2	141.8	136.8	139.0	165.9	176.6	160.8	152.8
31	166.3		154.6		165.3		149.6	174.0		146.0		103.6
Mean	148.5	157.4	152.0	170.6	158.3	145.2	140.9	151.9	172.9	167.1	170.6	140.6
MEAN	152.3	156.4	153.8	164.9	155.9	145.6	139.7	148.1	158.7	156.9	156.3	146.6
MIN	97.3	108.1	107.4	135.1	127.5	122.5	121.6	123.4	126.1	116.2	117.6	94.0
MAX	236.6	222.7	228.5	193.3	196.0	170.7	163.3	175.9	253.6	213.4	197.0	183.2

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	2.4	1.7	2.2	2.7	2.2	2.5	1.9	1.8	2.6	2.3	2.3	1.0
2	1.6	1.4	2.3	2.7	1.8	2.6	2.1	2.0	1.9	2.6	2.3	1.3
3	1.4	1.8	2.0	2.8	2.2	2.7	2.3	2.1	2.1	2.1	2.3	1.4
4	1.0	2.1	2.1	1.1	2.6	3.1	1.9	1.7	2.4	2.5	1.7	0.9
5	1.3	1.9	2.5	2.2	2.8	2.7	2.0	1.9	2.5	2.5	2.0	1.3
6	1.3	2.0	2.3	2.4	2.9	2.6	2.0	2.4	2.6	2.4	1.0	1.5
7	1.6	2.2	2.3	2.9	2.6	2.1	1.9	2.5	1.9	2.4	2.2	1.3
8	1.7	2.3	2.9	2.7	2.8	2.5	2.2	2.4	1.9	2.4	2.0	1.3
9	1.7	2.0	1.4	2.0	2.7	2.0	1.6	1.9	1.4	2.3	1.8	1.6
10	2.0	1.6	2.0	2.1	2.3	2.7	2.0	2.1	1.5	2.2	1.8	2.0
Mean	1.6	1.9	2.2	2.4	2.5	2.6	2.0	2.1	2.1	2.4	1.9	1.4
11	1.6	2.0	2.3	2.4	2.1	2.1	2.2	2.0	1.6	2.4	1.4	2.0
12	1.6	1.8	2.3	2.5	2.2	2.2	2.3	1.3	2.4	2.2	1.0	2.1
13	2.0	1.3	2.3	1.7	2.7	2.4	2.0	1.6	2.0	2.0	1.2	1.4
14	2.3	2.6	2.6	2.0	2.9	2.1	2.0	2.0	1.8	2.1	1.2	1.1
15	1.4	2.7	3.4	2.8	2.5	2.5	2.4	2.0	2.1	1.7	1.3	1.6
16	1.6	1.3	2.6	2.7	2.6	2.4	2.5	2.7	2.2	2.2	1.8	1.8
17	2.4	1.3	2.3	2.5	2.2	2.3	2.3	1.8	2.2	2.0	2.0	1.1
18	1.1	1.7	1.1	2.1	2.1	1.8	2.2	2.1	2.0	2.0	1.7	1.2
19	0.2	1.9	2.3	1.9	1.8	1.6	2.3	1.8	2.0	2.2	1.7	1.3
20	0.2	2.1	2.5	2.7	2.4	1.6	2.9	2.0	1.8	2.3	1.9	1.3
Mean	1.4	1.9	2.4	2.3	2.4	2.1	2.3	1.9	2.0	2.1	1.5	1.5
21	0.4	2.2	2.6	2.9	2.4	1.9	2.3	2.0	1.4	0.9	1.5	1.2
22	1.1	1.9	2.4	3.0	2.6	2.2	2.3	1.7	1.6	2.2	1.1	1.3
23	2.4	2.1	2.8	2.5	2.8	1.8	2.3	1.3	1.6	1.7	1.6	1.3
24	2.8	1.5	2.0	1.7	2.0	2.0	2.2	1.9	2.1	2.0	1.7	1.5
25	2.9	1.2	2.1	2.3	2.4	2.1	2.0	2.5	1.3	2.3	1.3	1.4
26	2.1	1.8	2.3	2.0	2.2	2.4	2.3	2.7	1.2	2.2	1.4	1.8
27	1.9	2.0	2.6	2.6	2.4	2.2	2.4	2.4	1.7	1.8	1.0	2.1
28	2.0	1.8	2.1	2.6	2.2	2.8	2.7	2.1	2.2	2.2	0.9	1.9
29	2.0		2.4	2.4	2.5	2.6	2.2	2.7	2.5	2.1	1.0	1.6
30	1.7		2.4	1.9	2.7	2.3	1.8	2.5	2.6	2.0	1.1	1.1
31	2.0		2.3		2.4		2.0	2.2		1.4		1.1
Mean	1.9	1.8	2.4	2.4	2.4	2.2	2.2	2.2	1.8	1.9	1.3	1.5
MEAN	1.7	1.9	2.3	2.4	2.4	2.3	2.2	2.1	2.0	2.1	1.6	1.4
MIN	0.2	1.2	1.1	1.1	1.8	1.6	1.6	1.3	1.2	0.9	0.9	0.9
MAX	2.9	2.7	3.4	3.0	2.9	3.1	2.9	2.7	2.6	2.6	2.3	2.1

PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a	0.0	0.0	0.2	14.6	1.6	2.0	4.6	5.2	0.0	0.4	0.0
2	0.0	0.0	0.0	0.0	0.4	0.2	6.6	23.2	7.2	0.6	n.a	0.0
3	0.0	0.0	0.0	0.2	2.2	0.2	8.8	5.6	0.2	0.6	0.0	0.0
4	0.0	0.0	0.4	n.a	0.4	0.0	9.0	10.2	0.0	0.0	0.2	n.a
5	0.0	0.0	0.0	0.0	0.0	0.0	4.2	8.6	0.2	0.0	0.2	0.0
6	0.0	0.0	0.0	0.4	0.2	0.2	6.6	19.2	2.4	0.2	n.a	n.a
7	0.0	0.0	0.0	0.0	0.6	6.8	5.8	4.2	5.0	0.0	0.2	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	1.8	7.8	3.8	0.2	0.0	0.0
9	0.0	0.0	n.a	0.4	0.0	0.2	5.2	15.2	2.4	0.0	0.0	0.0
10	0.0	2.4	0.4	1.8	0.4	0.0	0.8	5.2	7.4	0.2	0.0	n.a
Total	0.0	2.4	0.8	3.0	18.8	9.2	50.8	103.8	33.8	1.8	1.0	0.0
11	0.0	0.0	0.0	0.2	0.2	0.2	5.2	4.6	0.6	0.0	0.0	0.0
12	0.0	0.0	0.0	4.4	0.0	0.8	12.2	6.8	19.6	0.4	0.0	n.a
13	0.0	0.0	0.0	0.4	0.6	2.6	23.6	10.2	3.8	0.2	0.2	n.a
14	0.0	n.a	0.0	0.0	0.0	1.2	9.2	15.6	1.8	0.0	0.0	n.a
15	0.0	0.0	0.0	0.2	0.0	1.2	7.0	5.0	1.6	0.0	0.0	0.0
16	0.0	0.0	0.0	4.6	0.0	4.8	17.6	8.4	12.0	0.2	n.a	n.a
17	0.0	n.a	0.4	0.0	4.8	18.0	1.4	4.0	7.4	0.4	0.2	0.0
18	0.0	n.a	0.2	2.6	11.0	11.8	6.2	4.6	3.2	n.a	0.0	0.2
19	n.a	0.0	0.2	3.8	3.4	7.4	9.4	9.2	2.8	0.0	0.0	0.0
20	0.0	0.0	0.0	0.2	2.4	7.6	7.2	10.4	2.4	0.6	0.0	0.0
Total	0.0	0.0	0.8	16.4	22.4	55.6	99.0	78.8	55.2	1.8	0.4	0.2
21	0.0	n.a	3.4	0.0	0.8	1.8	5.0	0.2	0.4	3.4	0.2	0.0
22	n.a	0.0	0.0	0.0	0.2	4.6	9.4	1.6	2.2	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.4	5.8	4.6	9.4	0.0	0.0	0.0
24	0.2	0.0	0.0	0.0	0.4	3.0	6.6	0.6	18.6	0.0	0.0	0.0
25	0.0	0.0	0.2	0.0	0.0	17.4	1.6	6.0	5.6	0.2	0.0	0.0
26	0.0	n.a	0.0	5.0	0.0	11.0	8.0	2.6	62.4	0.2	0.0	0.0
27	0.0	0.0	0.2	0.6	0.4	2.6	5.0	1.8	3.4	0.0	0.0	0.0
28	0.0	0.0	n.a	0.0	0.6	13.4	6.2	0.4	0.2	0.2	0.0	0.0
29	0.0		1.4	0.0	6.6	10.4	15.8	4.2	0.2	0.2	0.0	0.0
30	n.a		0.0	5.4	4.6	7.8	5.4	4.8	0.0	0.0	0.0	0.0
31	0.0		0.0		0.2		4.8	5.8		0.0		0.0
Total	0.2	0.0	5.2	11.0	13.8	72.4	73.6	32.6	102.4	4.2	0.2	0.0
TOTAL	0.2	2.4	6.8	30.4	55.0	137.2	223.4	215.2	191.4	7.8	1.6	0.2
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.2	0.0	0.0	0.0	0.0
MAX	0.2	2.4	3.4	5.4	14.6	18.0	23.6	23.2	62.4	3.4	0.4	0.2

GLOBAL SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	68.3	212.6	265.7	204.2	240.2	246.7	132.9	162.6	292.6	266.3	145.2	165.6
2	183.9	213.9	228.9	320.8	199.2	267.3	174.3	144.6	216.6	198.0	113.7	184.4
3	185.0	219.5	216.2	312.9	239.6	285.1	106.3	249.1	225.9	207.4	125.0	134.0
4	183.6	218.8	100.0	106.0	270.2	338.4	131.2	154.2	266.6	280.9	63.5	66.4
5	187.9	215.1	286.4	276.3	301.3	378.1	136.0	204.4	299.1	268.4	84.8	164.2
6	190.1	221.3	278.6	280.1	293.2	283.0	114.5	225.7	155.2	273.6	57.2	112.7
7	188.5	214.1	273.6	288.0	280.4	118.7	126.9	227.0	114.9	258.2	219.2	126.0
8	180.0	224.6	210.9	312.8	277.3	237.6	290.8	246.1	154.0	217.5	208.2	177.0
9	152.2	218.2	73.7	205.6	306.0	234.0	142.3	150.4	187.3	261.6	206.8	183.2
10	194.1	221.5	268.0	212.6	258.8	260.0	177.9	189.3	148.5	244.4	203.7	123.9
Mean	171.4	218.0	220.2	251.9	266.6	264.9	153.3	195.3	206.1	247.6	142.7	143.7
11	191.0	228.9	240.8	281.8	188.9	166.3	231.6	166.2	191.3	246.6	201.4	142.8
12	177.7	217.5	286.7	250.8	192.1	248.9	122.9	109.8	215.1	223.2	67.0	178.8
13	186.1	114.9	203.9	195.8	276.7	175.6	98.6	160.0	160.4	207.5	86.4	196.6
14	191.8	228.5	253.3	179.4	358.4	293.3	136.7	208.6	171.3	218.0	56.4	143.9
15	63.9	145.0	257.7	347.7	352.8	239.0	173.0	152.7	215.2	147.8	49.3	127.1
16	108.7	7.9	286.5	316.8	341.3	250.9	231.7	167.9	193.1	237.6	71.4	160.9
17	198.2	148.5	171.5	321.7	253.5	235.9	309.1	109.7	221.8	233.2	112.4	167.2
18	25.8	259.2	52.6	232.1	119.3	116.0	234.7	158.2	91.1	214.8	203.4	171.3
19	42.8	202.7	157.3	189.0	131.5	89.6	168.0	85.6	112.3	218.4	199.1	177.8
20	56.4	254.0	194.9	360.8	263.0	226.0	81.5	268.6	108.5	195.5	197.9	179.3
Mean	124.2	180.7	210.5	267.6	247.8	204.2	178.8	158.7	168.0	214.3	124.5	164.6
21	55.7	177.7	272.0	347.3	299.0	279.7	250.1	302.4	158.5	55.6	196.1	181.7
22	77.5	258.9	292.5	347.9	343.7	169.4	111.9	148.5	211.3	213.9	196.1	181.6
23	108.6	239.7	300.0	308.9	345.4	252.4	130.3	82.0	122.7	239.1	194.9	189.8
24	151.8	200.6	215.5	184.4	265.5	157.9	122.1	232.2	148.3	229.1	193.7	182.0
25	205.1	73.6	288.3	204.1	308.5	100.0	203.4	304.5	142.2	232.4	192.3	176.8
26	195.8	187.8	229.3	230.8	252.9	225.0	146.1	222.6	15.4	217.0	191.3	178.7
27	210.7	260.4	217.0	320.4	274.9	273.4	102.6	264.5	175.5	233.1	185.2	178.9
28	190.4	265.6	69.1	305.3	190.2	147.5	160.4	211.8	239.9	241.5	183.9	181.5
29	182.9		236.1	269.7	284.9	129.2	128.6	219.8	266.3	233.7	164.4	180.4
30	150.1		299.3	200.3	306.9	107.9	129.4	237.1	260.7	183.7	146.1	180.5
31	211.9		262.6		290.6		105.6	161.2		93.3		181.8
Mean	158.2	208.0	243.8	271.9	287.5	184.2	144.6	217.0	174.1	197.5	184.4	181.2
MEAN	151.5	201.8	225.4	263.8	267.9	217.8	158.4	191.2	182.7	219.1	150.5	163.8
MIN	25.8	7.9	52.6	106.0	119.3	89.6	81.5	82.0	15.4	55.6	49.3	66.4
MAX	211.9	265.6	300.0	360.8	358.4	378.1	309.1	304.5	299.1	280.9	219.2	196.6

AWS2 Pheriche

Technical sheet		
Coordinates: Latitude: 27° 53' 43" N Longitude: 86° 49' 7.5" E Elevation: 4,260 m a.s.l	Installation Time: October 2001	Data Availability: From October 25, 2001

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				2 m	LSI-Lastem Babuc ABC
Air Temperature	-30 - +70 °C	±0.1°C (0°C)	60 min.	2 m	LSI-Lastem DMA572
Relative Humidity	0 - 100 %	±1.5% (5÷95%, 23°C)	60 min.	2 m	LSI-Lastem DMA572
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	180 mm/hr	0-1 mm/min: 1% 1-3 mm/min: 2% 3-5 mm/min: 4% 5-10 mm/min: 8%	60 min.	1.5 m	LSI-Lastem DQA035
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
Global Solar Radiation	0-2000		60 min.	2 m	Kipp & Zonen CMB6 pyranometer



AIR TEMPERATURE (° C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-8.4	-7.6	-4.7	-1.7	n.a.	4.5	6.6	8.3	6.7	3.7	n.a.	n.a.
2	-7.5	-6.2	-4.1	-1.8	n.a.	4.6	7.3	7.5	6.3	3.3	n.a.	n.a.
3	-6.5	-3.3	-4.0	-1.1	n.a.	4.9	7.0	7.5	5.4	2.5	n.a.	n.a.
4	-3.3	-4.4	-4.1	-3.7	n.a.	5.1	6.7	7.8	6.0	2.3	n.a.	n.a.
5	-4.4	-3.7	-3.3	-4.5	n.a.	4.8	6.7	7.7	5.7	2.9	n.a.	n.a.
6	-6.2	-4.5	-2.1	-3.9	n.a.	5.4	6.5	7.2	6.7	2.2	n.a.	n.a.
7	-5.5	-3.2	-1.5	-2.4	n.a.	3.5	6.4	7.4	6.6	2.4	n.a.	n.a.
8	-8.0	-5.4	-1.3	-1.3	n.a.	3.2	7.2	7.4	6.5	2.8	n.a.	n.a.
9	-10.5	-8.2	-4.4	-2.5	n.a.	3.8	7.3	6.8	6.6	2.6	n.a.	n.a.
10	-11.4	-5.1	-6.0	-2.2	n.a.	4.9	7.6	6.1	6.7	1.7	n.a.	n.a.
Mean	-7.2	-5.2	-3.6	-2.5	n.a.	4.5	6.9	7.4	6.3	2.6	n.a.	n.a.
11	-8.0	-5.8	-5.5	-4.5	n.a.	4.6	8.2	6.2	6.7	2.1	n.a.	n.a.
12	-5.7	-4.7	-5.7	n.a.	n.a.	5.3	7.5	5.6	6.2	2.6	n.a.	n.a.
13	-4.1	-4.1	-4.8	n.a.	n.a.	5.5	7.0	7.1	6.6	3.3	n.a.	n.a.
14	-6.3	-2.5	-2.7	n.a.	n.a.	6.2	7.0	6.6	6.3	2.0	n.a.	n.a.
15	-7.2	-2.7	-2.8	n.a.	n.a.	6.8	6.9	6.7	6.2	2.9	n.a.	n.a.
16	-13.2	-7.4	0.0	n.a.	n.a.	7.1	7.1	7.1	6.4	2.2	n.a.	n.a.
17	-10.8	10.1	-2.9	n.a.	n.a.	7.6	7.3	6.0	6.3	1.0	n.a.	n.a.
18	-11.2	10.6	-3.0	n.a.	n.a.	6.5	8.1	6.4	5.3	0.7	n.a.	n.a.
19	-10.4	-8.9	-1.8	n.a.	n.a.	6.0	8.1	5.1	5.5	0.8	n.a.	n.a.
20	-6.4	-7.8	0.6	n.a.	n.a.	7.2	7.2	6.7	5.0	0.4	n.a.	n.a.
Mean	-8.3	-6.5	-2.9	-4.5	n.a.	6.3	7.4	6.4	6.1	1.8	n.a.	n.a.
21	-6.0	-8.1	-2.2	n.a.	n.a.	7.3	8.5	7.6	4.7	n.a.	n.a.	n.a.
22	-5.2	-6.8	-0.4	n.a.	n.a.	7.9	7.6	7.6	5.3	n.a.	n.a.	n.a.
23	-4.3	-6.0	-1.0	n.a.	n.a.	7.8	8.2	6.7	5.3	n.a.	n.a.	n.a.
24	-3.2	-6.4	-2.3	n.a.	n.a.	8.0	7.5	6.7	5.0	n.a.	n.a.	n.a.
25	-5.4	-8.4	-3.4	n.a.	n.a.	6.9	7.8	7.1	4.7	n.a.	n.a.	n.a.
26	-8.8	-11	-3.9	n.a.	n.a.	7.4	7.6	6.8	1.4	n.a.	n.a.	n.a.
27	-9.5	-9.1	-3.6	n.a.	n.a.	7.4	6.8	6.1	3.6	n.a.	n.a.	n.a.
28	-7.6	-7.3	-3.7	n.a.	n.a.	7.2	7.0	6.7	3.2	n.a.	n.a.	n.a.
29	-6.7		-4.0	n.a.	n.a.	6.7	7.5	6.7	4.4	n.a.	n.a.	n.a.
30	-8.6		-2.8	n.a.	3.1	6.3	7.5	7.4	3.6	n.a.	n.a.	n.a.
31	-9.6		-2.2		4.4		7.6	6.9		n.a.		
Mean	-6.9	-7.9	-2.7	n.a.	n.a.	7.3	7.5	6.9	4.1	n.a.	n.a.	n.a.
MEAN	-7.4	-6.4	-3.0	-2.7	3.8	6.0	7.3	6.9	5.5	2.2	n.a.	n.a.
MIN	-13.2	-11.0	-6.0	-4.5	3.1	3.2	6.4	5.1	1.4	0.4	n.a.	n.a.
MAX	-3.2	-2.5	0.6	-1.1	4.4	8.0	8.5	8.3	6.7	3.7	n.a.	n.a.

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	94.1	49.0	54.7	90.0	n.a.	94.8	99.9	99.9	94.8	93.4	n.a.	n.a.
2	45.5	45.6	76.5	87.7	n.a.	93.5	98.5	100.0	98.3	97.3	n.a.	n.a.
3	44.7	29.2	84.2	83.3	n.a.	90.5	100.0	98.9	96.5	99.9	n.a.	n.a.
4	28.8	38.0	80.5	84.6	n.a.	89.8	99.9	98.3	96.0	97.4	n.a.	n.a.
5	35.4	47.2	48.8	73.7	n.a.	88.0	99.9	97.7	95.0	93.0	n.a.	n.a.
6	38.9	38.5	47.7	72.1	n.a.	89.0	98.8	99.9	98.1	94.5	n.a.	n.a.
7	37.5	42.2	56.2	73.9	n.a.	99.3	100.0	99.8	99.6	94.0	n.a.	n.a.
8	50.1	56.2	65.7	81.2	n.a.	94.4	98.1	99.2	99.5	95.7	n.a.	n.a.
9	67.1	77.3	74.4	85.8	n.a.	92.7	99.0	99.7	98.2	92.6	n.a.	n.a.
10	65.2	55.0	62.8	91.2	n.a.	91.6	98.9	98.4	98.8	92.6	n.a.	n.a.
Mean	50.7	47.8	65.2	82.4	n.a.	92.4	99.3	99.2	97.5	95.0	n.a.	n.a.
11	64.1	60.2	65.7	85.7	n.a.	94.6	96.9	99.6	98.4	86.4	n.a.	n.a.
12	51.5	62.4	79.6	n.a.	n.a.	94.5	99.4	99.7	98.3	85.4	n.a.	n.a.
13	28.9	66.1	74.3	n.a.	n.a.	97.7	100.0	96.9	99.8	84.8	n.a.	n.a.
14	32.0	56.4	45.5	n.a.	n.a.	92.7	100.0	99.3	99.8	96.8	n.a.	n.a.
15	40.4	70.7	18.8	n.a.	n.a.	91.5	100.0	99.5	99.7	96.2	n.a.	n.a.
16	74.3	98.5	34.6	n.a.	n.a.	91.7	99.1	99.8	97.0	90.3	n.a.	n.a.
17	53.8	95.8	84.4	n.a.	n.a.	93.7	98.3	100.0	97.9	87.3	n.a.	n.a.
18	89.7	84.5	99.3	n.a.	n.a.	99.1	97.6	98.9	100.0	91.6	n.a.	n.a.
19	81.9	73.0	82.3	n.a.	n.a.	100.0	99.7	100.0	99.9	90.0	n.a.	n.a.
20	52.4	67.4	44.0	n.a.	n.a.	96.2	100.0	98.2	100.0	87.0	n.a.	n.a.
Mean	56.9	73.5	62.9	85.7	n.a.	95.2	99.1	99.2	99.1	89.6	n.a.	n.a.
21	51.1	87.2	71.6	n.a.	n.a.	95.3	98.1	95.2	99.8	n.a.	n.a.	n.a.
22	41.5	53.5	59.4	n.a.	n.a.	95.3	99.8	99.2	99.6	n.a.	n.a.	n.a.
23	45.8	59.7	62.2	n.a.	n.a.	96.2	98.8	100.0	99.8	n.a.	n.a.	n.a.
24	37.8	65.0	75.0	n.a.	n.a.	97.0	99.9	97.4	99.3	n.a.	n.a.	n.a.
25	32.4	85.0	83.9	n.a.	n.a.	99.9	99.7	98.5	99.2	n.a.	n.a.	n.a.
26	45.8	81.8	84.7	n.a.	n.a.	98.7	99.6	97.1	100.0	n.a.	n.a.	n.a.
27	56.1	67.3	89.0	n.a.	n.a.	97.1	100.0	96.4	97.2	n.a.	n.a.	n.a.
28	60.9	57.3	100.0	n.a.	n.a.	98.2	100.0	96.9	93.9	n.a.	n.a.	n.a.
29	64.3		95.1	n.a.	n.a.	99.8	100.0	98.1	92.8	n.a.	n.a.	n.a.
30	71.9		87.8	n.a.	n.a.	100.0	100.0	98.2	95.1	n.a.	n.a.	n.a.
31	70.5		92.2		92.6		100.0	97.9		n.a.		n.a.
Mean	52.6	69.6	81.9	n.a.	92.6	97.8	99.6	97.7	97.7	n.a.	n.a.	n.a.
MEAN	23.4	63.2	70.4	82.7	92.6	95.1	99.4	98.7	98.1	92.3	n.a.	n.a.
MIN	28.8	29.2	18.8	72.1	92.6	88.0	96.9	95.2	92.8	84.8	n.a.	n.a.
MAX	94.1	98.5	100.0	91.2	92.6	100.0	100.0	100.0	100.0	99.9	n.a.	n.a.

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	595.7	604.0	606.0	604.0	n.a.	605.1	603.0	603.1	605.5	603.8	n.a.	n.a.
2	599.2	605.4	605.5	605.3	n.a.	606.9	603.8	605.1	604.8	602.9	n.a.	n.a.
3	601.3	607.2	605.1	606.2	n.a.	607.5	604.7	606.4	605.1	602.8	n.a.	n.a.
4	602.2	606.2	604.1	605.5	n.a.	606.2	606.7	605.7	606.6	603.8	n.a.	n.a.
5	601.3	604.9	604.4	606.2	n.a.	607.1	607.9	605.7	606.0	606.1	n.a.	n.a.
6	602.3	606.1	606.4	605.9	n.a.	608.1	608.1	605.1	604.9	609.4	n.a.	n.a.
7	601.0	604.4	606.4	605.9	n.a.	606.7	606.7	605.4	603.9	608.9	n.a.	n.a.
8	600.0	600.5	604.1	606.1	n.a.	605.6	608.4	606.3	604.2	608.3	n.a.	n.a.
9	599.2	600.5	604.2	607.9	n.a.	605.0	608.1	606.2	606.0	608.3	n.a.	n.a.
10	599.3	602.6	605.8	608.9	n.a.	604.4	607.2	605.6	606.6	608.9	n.a.	n.a.
Mean	600.2	604.2	605.2	606.2	n.a.	606.3	606.5	605.5	605.4	606.3	n.a.	n.a.
11	600.9	603.0	604.8	608.5	n.a.	604.7	607.0	605.6	606.8	611.0	n.a.	n.a.
12	599.6	602.8	603.3	n.a.	n.a.	606.5	606.3	605.5	606.9	611.2	n.a.	n.a.
13	600.5	602.2	604.2	n.a.	n.a.	607.2	606.1	605.9	607.4	608.8	n.a.	n.a.
14	602.1	602.8	605.1	n.a.	n.a.	606.3	604.1	607.8	606.1	608.5	n.a.	n.a.
15	603.9	603.6	606.8	n.a.	n.a.	605.4	603.2	607.7	606.4	607.2	n.a.	n.a.
16	596.4	602.9	607.0	n.a.	n.a.	604.4	604.5	606.0	604.9	607.1	n.a.	n.a.
17	597.7	601.0	605.4	n.a.	n.a.	603.9	604.8	605.7	603.8	609.0	n.a.	n.a.
18	596.7	600.6	602.7	n.a.	n.a.	604.1	604.4	606.2	602.9	610.6	n.a.	n.a.
19	596.0	603.0	601.8	n.a.	n.a.	604.1	603.2	607.1	604.3	607.8	n.a.	n.a.
20	599.1	603.4	602.9	n.a.	n.a.	605.6	601.9	608.9	604.9	607.9	n.a.	n.a.
Mean	599.3	602.5	604.4	608.5	n.a.	605.2	604.6	606.6	605.4	608.9	n.a.	n.a.
21	600.2	603.0	602.9	n.a.	n.a.	606.3	603.1	608.3	603.9	n.a.	n.a.	n.a.
22	600.1	604.9	605.6	n.a.	n.a.	606.1	602.7	606.5	604.3	n.a.	n.a.	n.a.
23	601.3	606.1	606.6	n.a.	n.a.	605.4	604.4	606.0	604.0	n.a.	n.a.	n.a.
24	602.1	605.1	605.9	n.a.	n.a.	604.5	605.2	607.0	605.0	n.a.	n.a.	n.a.
25	602.3	602.9	605.4	n.a.	n.a.	604.4	607.4	607.7	604.5	n.a.	n.a.	n.a.
26	603.6	603.3	606.1	n.a.	n.a.	604.2	607.1	607.7	604.1	n.a.	n.a.	n.a.
27	602.7	604.2	605.7	n.a.	n.a.	604.3	605.5	606.8	603.6	n.a.	n.a.	n.a.
28	602.7	605.0	604.3	n.a.	n.a.	604.0	604.7	606.3	604.1	n.a.	n.a.	n.a.
29	601.8		605.6	n.a.	n.a.	604.5	605.0	606.6	604.0	n.a.	n.a.	n.a.
30	602.8		604.8	n.a.	604.3	603.9	604.9	607.4	604.9	n.a.	n.a.	n.a.
31	602.4		604.0		603.8		603.2	606.8		n.a.		n.a.
Mean	602.0	604.3	605.2	n.a.	604.1	604.8	604.8	607.0	604.2	n.a.	n.a.	n.a.
MEAN	600.5	603.6	604.9	606.4	604.1	605.4	605.3	606.4	605.0	607.6	n.a.	n.a.
MIN	595.7	600.5	601.8	604.0	603.8	603.9	601.9	603.1	602.9	602.8	n.a.	n.a.
MAX	603.9	607.2	607.0	608.9	604.3	608.1	608.4	608.9	607.4	611.2	n.a.	n.a.

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	260.2	239.0	234.0	181.9	n.a.	178.1	160.5	166.0	180.7	174.4	n.a.	n.a.
2	248.8	257.2	241.4	220.2	n.a.	167.0	176.7	191.4	177.3	176.5	n.a.	n.a.
3	265.2	238.1	222.1	197.5	n.a.	202.4	168.4	178.2	188.6	181.8	n.a.	n.a.
4	227.1	233.7	236.8	171.5	n.a.	199.3	183.4	191.6	192.9	217.2	n.a.	n.a.
5	216.8	195.6	242.8	193.4	n.a.	181.1	170.5	164.8	228.5	183.4	n.a.	n.a.
6	275.7	271.2	251.8	226.8	n.a.	162.4	185.8	169.4	178.5	260.5	n.a.	n.a.
7	253.0	228.5	206.1	195.8	n.a.	170.7	169.2	172.8	182.0	217.2	n.a.	n.a.
8	254.3	226.5	216.2	155.5	n.a.	175.1	171.6	161.0	195.4	174.4	n.a.	n.a.
9	254.8	263.0	195.3	188.6	n.a.	171.2	170.8	185.6	221.2	202.7	n.a.	n.a.
10	267.6	215.4	251.3	168.9	n.a.	184.3	171.7	196.3	201.3	171.3	n.a.	n.a.
Mean	252.4	236.8	229.8	190.0	n.a.	179.2	172.9	177.7	194.6	195.9	n.a.	n.a.
11	188.6	255.2	204.2	238.5	n.a.	170.1	160.7	214.3	177.0	262.2	n.a.	n.a.
12	212.5	256.8	195.7	n.a.	n.a.	169.0	176.5	211.1	194.6	268.4	n.a.	n.a.
13	230.0	209.0	232.5	n.a.	n.a.	175.5	168.8	174.8	174.6	272.3	n.a.	n.a.
14	241.8	209.4	268.8	n.a.	n.a.	168.3	167.6	179.0	174.6	229.1	n.a.	n.a.
15	145.8	151.2	302.8	n.a.	n.a.	177.0	168.5	181.2	163.9	212.9	n.a.	n.a.
16	226.0	173.8	206.5	n.a.	n.a.	215.3	174.3	189.7	188.4	180.5	n.a.	n.a.
17	242.3	238.5	213.3	n.a.	n.a.	187.1	151.5	193.0	173.2	186.7	n.a.	n.a.
18	225.1	239.7	175.9	n.a.	n.a.	181.4	181.9	188.8	219.2	207.9	n.a.	n.a.
19	210.5	199.0	201.6	n.a.	n.a.	190.0	170.9	175.1	167.7	218.3	n.a.	n.a.
20	248.2	238.1	170.4	n.a.	n.a.	204.1	168.0	175.0	193.3	206.5	n.a.	n.a.
Mean	217.1	217.1	217.2	238.5	n.a.	183.8	168.9	188.2	182.7	224.5	n.a.	n.a.
21	204.5	194.2	194.2	n.a.	n.a.	201.5	149.0	177.0	196.2	n.a.	n.a.	n.a.
22	263.7	172.8	226.1	n.a.	n.a.	194.6	174.0	166.0	171.2	n.a.	n.a.	n.a.
23	224.7	232.7	196.0	n.a.	n.a.	203.8	168.6	188.0	170.7	n.a.	n.a.	n.a.
24	126.2	248.3	195.7	n.a.	n.a.	160.0	161.3	244.8	221.0	n.a.	n.a.	n.a.
25	191.4	184.8	168.6	n.a.	n.a.	172.0	182.4	171.5	175.4	n.a.	n.a.	n.a.
26	198.0	260.0	245.0	n.a.	n.a.	182.7	182.8	179.5	263.2	n.a.	n.a.	n.a.
27	256.2	189.1	228.0	n.a.	n.a.	210.0	165.5	194.4	202.2	n.a.	n.a.	n.a.
28	183.3	224.2	172.1	n.a.	n.a.	169.5	165.5	161.3	219.3	n.a.	n.a.	n.a.
29	236.1		175.9	n.a.	n.a.	165.8	183.0	160.7	160.0	n.a.	n.a.	n.a.
30	223.6		192.1	n.a.	167.6	177.4	171.3	173.6	170.8	n.a.	n.a.	n.a.
31	244.5		190.2		164.2		179.0	161.5		n.a.		n.a.
Mean	213.8	213.3	n.a.	n.a.	165.9	183.7	171.1	179.8	195.0	n.a.	n.a.	n.a.
MEAN	227.3	223.0	214.6	194.4	165.9	182.2	171.0	181.9	190.8	210.2	n.a.	n.a.
MIN	126.2	151.2	168.6	155.5	164.2	160.0	149.0	160.7	160.0	171.3	n.a.	n.a.
MAX	275.7	271.2	302.8	238.5	167.6	215.3	185.8	244.8	263.2	272.3	n.a.	n.a.

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	1.8	3.2	2.5	3.7	n.a.	4.0	3.2	1.8	3.1	2.7	n.a.	n.a.
2	3.1	2.7	2.2	3.4	n.a.	3.1	3.0	2.0	2.7	3.3	n.a.	n.a.
3	2.1	4.1	2.2	3.5	n.a.	3.7	3.2	1.6	2.6	3.0	n.a.	n.a.
4	2.3	2.6	1.5	2.3	n.a.	3.8	2.5	1.3	3.1	2.5	n.a.	n.a.
5	2.2	2.6	2.8	2.9	n.a.	3.7	2.5	1.9	2.6	2.8	n.a.	n.a.
6	2.8	2.6	2.5	3.0	n.a.	3.8	3.2	2.5	3.1	3.1	n.a.	n.a.
7	3.3	2.4	2.9	3.9	n.a.	3.7	3.1	2.5	2.5	3.1	n.a.	n.a.
8	3.0	3.3	2.6	4.0	n.a.	4.1	3.2	2.8	3.0	2.7	n.a.	n.a.
9	2.8	2.9	2.6	3.3	n.a.	3.5	2.0	2.1	2.2	2.8	n.a.	n.a.
10	3.0	2.8	3.0	3.4	n.a.	4.0	2.2	2.2	2.4	2.8	n.a.	n.a.
Mean	2.6	2.9	2.5	3.3	n.a.	3.7	2.8	2.1	2.7	2.9	n.a.	n.a.
11	2.3	2.7	2.5	1.9	n.a.	3.6	2.4	2.2	2.3	2.8	n.a.	n.a.
12	2.1	2.4	2.8	n.a.	n.a.	3.8	3.0	1.2	2.7	2.9	n.a.	n.a.
13	2.8	2.4	3.3	n.a.	n.a.	3.9	2.2	1.9	2.3	2.6	n.a.	n.a.
14	2.5	2.9	4.7	n.a.	n.a.	3.6	1.9	1.9	2.2	2.3	n.a.	n.a.
15	2.5	3.7	9.1	n.a.	n.a.	3.7	2.6	2.2	2.5	2.7	n.a.	n.a.
16	2.6	2.1	4.5	n.a.	n.a.	3.9	2.3	2.5	2.4	2.8	n.a.	n.a.
17	3.3	1.9	3.3	n.a.	n.a.	3.7	2.8	2.3	2.9	2.8	n.a.	n.a.
18	1.7	1.7	5.3	n.a.	n.a.	3.3	2.5	2.3	2.5	3.1	n.a.	n.a.
19	2.5	2.2	3.1	n.a.	n.a.	2.8	2.7	1.7	2.6	3.0	n.a.	n.a.
20	2.3	1.9	5.1	n.a.	n.a.	2.8	2.9	2.5	2.1	3.6	n.a.	n.a.
21	2.5	2.9	3.5	n.a.	n.a.	3.0	2.6	2.4	1.8	n.a.	n.a.	n.a.
Mean	2.5	2.4	4.3	1.9	n.a.	3.5	2.5	2.1	2.4	2.9	n.a.	n.a.
22	2.9	2.4	3.6	n.a.	n.a.	3.0	2.8	1.8	1.9	n.a.	n.a.	n.a.
23	2.4	2.5	3.3	n.a.	n.a.	3.1	2.0	2.0	1.9	n.a.	n.a.	n.a.
24	2.6	2.2	3.4	n.a.	n.a.	2.4	2.4	1.9	2.0	n.a.	n.a.	n.a.
25	2.5	2.0	3.3	n.a.	n.a.	2.7	2.0	2.5	2.1	n.a.	n.a.	n.a.
26	2.6	2.6	3.5	n.a.	n.a.	3.0	2.5	3.0	1.0	n.a.	n.a.	n.a.
27	3.2	2.3	3.3	n.a.	n.a.	3.2	3.2	3.2	1.7	n.a.	n.a.	n.a.
28	2.7	2.9	3.7	n.a.	n.a.	3.9	2.9	3.0	2.4	n.a.	n.a.	n.a.
29	2.4		3.6	n.a.	n.a.	3.6	1.8	3.0	2.8	n.a.	n.a.	n.a.
30	2.5		4.0	n.a.	4.2	3.5	2.0	3.2	2.7	n.a.	n.a.	n.a.
31	3.0		3.0		3.9		1.8	2.8		n.a.		n.a.
Mean	2.7	2.4	3.5	n.a.	4.1	3.2	2.3	2.6	2.1	n.a.	n.a.	n.a.
MEAN	2.6	2.6	3.4	3.2	4.1	3.5	2.6	2.3	2.4	2.9	n.a.	n.a.
MIN	1.7	1.7	1.5	1.9	3.9	2.4	1.8	1.2	1.0	2.3	n.a.	n.a.
MAX	3.3	4.1	9.1	4.0	4.2	4.1	3.2	3.2	3.1	3.6	n.a.	n.a.

PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	0.0	0.0	0.0	n.a.	n.a.	0.2	0.8	9.8	0.2	0.2	n.a.	n.a.
3	0.0	0.0	n.a.	0.0	n.a.	0.0	1.2	0.8	1.2	1.0	n.a.	n.a.
4	0.0	0.0	0.0	n.a.	n.a.	0.0	2.0	1.2	1.4	0.4	n.a.	n.a.
5	0.0	0.0	0.2	0.0	n.a.	0.0	1.4	13.6	0.2	0.0	n.a.	n.a.
6	0.0	0.0	0.0	0.2	n.a.	0.0	2.8	10.4	1.0	0.2	n.a.	n.a.
7	0.0	0.0	0.0	0.2	n.a.	1.8	4.2	1.0	5.0	0.2	n.a.	n.a.
8	0.0	0.0	0.0	0.0	n.a.	n.a.	0.6	2.8	4.8	0.0	n.a.	n.a.
9	0.0	0.0	0.0	n.a.	n.a.	0.2	2.6	16.2	0.8	0.2	n.a.	n.a.
10	0.0	0.0	n.a.	n.a.	n.a.	0.2	0.4	11.2	0.4	0.2	n.a.	n.a.
Total	0.0	0.0	0.2	0.4	0.0	2.4	16.0	67.0	15.0	2.4	n.a.	n.a.
11	0.0	0.0	0.2	n.a.	n.a.	0.2	0.0	10.2	0.0	0.0	n.a.	n.a.
12	0.0	0.0	0.0	n.a.	n.a.	0.6	6.2	4.6	8.8	0.0	n.a.	n.a.
13	0.0	0.0	0.0	n.a.	n.a.	1.0	8.0	2.6	3.4	0.0	n.a.	n.a.
14	0.0	0.0	0.0	n.a.	n.a.	0.2	4.6	9.4	3.6	n.a.	n.a.	n.a.
15	0.0	0.0	0.0	n.a.	n.a.	0.0	1.6	4.2	0.0	0.0	n.a.	n.a.
16	0.0	0.0	0.0	n.a.	n.a.	0.0	4.6	3.4	1.0	0.0	n.a.	n.a.
17	0.0	n.a.	0.0	n.a.	n.a.	4.4	3.4	4.0	4.2	n.a.	n.a.	n.a.
18	0.0	n.a.	n.a.	n.a.	n.a.	5.4	0.4	1.4	1.6	n.a.	n.a.	n.a.
19	0.0	0.0	0.0	n.a.	n.a.	5.6	15.8	8.6	3.8	0.2	n.a.	n.a.
20	0.0	0.0	0.0	n.a.	n.a.	4.0	8.4	1.0	4.6	n.a.	n.a.	n.a.
Total	0.0	0.0	0.2	n.a.	n.a.	21.4	53.0	49.4	31.0	0.2	n.a.	n.a.
21	0.0	0.0	n.a.	n.a.	n.a.	0.2	2.6	0.2	1.6	n.a.	n.a.	n.a.
22	0.0	0.0	0.0	n.a.	n.a.	0.6	2.4	5.6	1.0	n.a.	n.a.	n.a.
23	0.0	0.0	0.0	n.a.	n.a.	2.6	2.8	6.2	7.0	n.a.	n.a.	n.a.
24	0.0	0.0	0.0	n.a.	n.a.	1.0	4.8	0.6	14.0	n.a.	n.a.	n.a.
25	0.0	0.0	0.0	n.a.	n.a.	7.4	3.4	0.6	3.4	n.a.	n.a.	n.a.
26	0.0	n.a.	n.a.	n.a.	n.a.	8.4	3.4	0.4	n.a.	n.a.	n.a.	n.a.
27	0.0	0.0	n.a.	n.a.	n.a.	2.4	2.2	0.6	3.0	n.a.	n.a.	n.a.
28	0.0	0.0	n.a.	n.a.	n.a.	0.8	2.6	0.0	0.2	n.a.	n.a.	n.a.
29	0.0		n.a.	n.a.	n.a.	3.8	7.2	5.0	0.2	n.a.	n.a.	n.a.
30	0.0		0.0	n.a.	n.a.	3.4	3.0	1.6	0.0	n.a.	n.a.	n.a.
31	0.0		n.a.		0.0		3.4	2.4		n.a.		n.a.
Total	0.0	0.0	0.0	n.a.	0.0	30.6	37.8	23.2	30.4	n.a.	n.a.	n.a.
TOTAL	0.0	0.0	0.4	0.4	0.0	54.4	106.8	139.6	76.4	2.6	n.a.	n.a.
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.
MAX	0.0	0.0	0.2	0.2	0.0	8.4	15.8	16.2	14.0	1.0	n.a.	n.a.

GLOBAL SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	13.0	246.0	306.9	357.6	n.a.	372.4	163.8	239.6	354.0	309.4	n.a.	n.a.
2	181.2	234.1	235.0	329.5	n.a.	207.8	273.8	233.1	275.8	283.8	n.a.	n.a.
3	180.7	232.4	238.8	328.1	n.a.	261.6	167.0	237.5	269.0	254.9	n.a.	n.a.
4	177.9	230.2	106.3	66.1	n.a.	316.9	142.6	204.5	327.2	206.5	n.a.	n.a.
5	182.0	230.5	275.8	340.4	n.a.	336.3	173.1	248.1	272.8	281.2	n.a.	n.a.
6	184.7	210.5	289.4	272.5	n.a.	345.0	200.8	253.6	234.4	271.1	n.a.	n.a.
7	183.4	195.8	289.9	280.7	n.a.	158.8	183.8	296.4	169.8	281.4	n.a.	n.a.
8	192.6	234.5	212.2	333.9	n.a.	270.0	312.0	293.1	256.3	242.0	n.a.	n.a.
9	191.5	222.1	87.0	238.2	n.a.	268.8	211.5	224.2	204.5	265.3	n.a.	n.a.
10	188.7	237.7	300.7	174.0	n.a.	338.8	252.9	277.6	241.2	274.9	n.a.	n.a.
Mean	167.6	227.4	234.2	272.1	n.a.	287.6	208.1	250.8	260.5	267.1	n.a.	n.a.
11	186.2	225.4	294.8	196.2	n.a.	207.4	303.3	205.2	239.1	275.0	n.a.	n.a.
12	184.6	237.3	291.1	n.a.	n.a.	306.0	225.3	125.9	237.5	255.4	n.a.	n.a.
13	184.9	200.5	230.0	n.a.	n.a.	229.6	140.0	228.0	219.6	254.8	n.a.	n.a.
14	190.3	216.4	187.1	n.a.	n.a.	348.4	168.9	217.3	212.8	243.4	n.a.	n.a.
15	48.2	172.2	258.2	n.a.	n.a.	281.7	210.4	280.8	204.7	263.9	n.a.	n.a.
16	135.5	48.6	310.3	n.a.	n.a.	326.0	271.9	261.2	272.5	251.9	n.a.	n.a.
17	193.1	240.5	264.3	n.a.	n.a.	302.5	297.8	149.8	276.6	257.0	n.a.	n.a.
18	102.2	269.6	177.6	n.a.	n.a.	185.8	284.5	218.6	127.8	257.7	n.a.	n.a.
19	158.2	244.6	226.7	n.a.	n.a.	135.1	249.2	81.8	156.2	252.0	n.a.	n.a.
20	192.6	273.0	227.1	n.a.	n.a.	197.6	124.6	343.1	108.6	347.7	n.a.	n.a.
Mean	157.6	212.8	246.7	196.2	n.a.	252.0	227.6	211.2	205.5	265.9	n.a.	n.a.
21	194.0	265.7	311.7	n.a.	n.a.	306.2	354.8	328.4	222.0	n.a.	n.a.	n.a.
22	192.0	273.5	306.7	n.a.	n.a.	257.0	170.7	227.3	193.3	n.a.	n.a.	n.a.
23	171.2	289.6	313.7	n.a.	n.a.	276.2	210.1	129.8	156.7	n.a.	n.a.	n.a.
24	177.3	271.3	212.4	n.a.	n.a.	150.1	209.3	271.2	213.4	n.a.	n.a.	n.a.
25	205.7	112.7	240.7	n.a.	n.a.	167.5	270.5	326.0	127.3	n.a.	n.a.	n.a.
26	207.6	238.1	230.0	n.a.	n.a.	249.7	270.4	300.4	24.6	n.a.	n.a.	n.a.
27	209.0	275.4	275.0	n.a.	n.a.	298.5	140.2	296.2	222.3	n.a.	n.a.	n.a.
28	206.0	258.7	127.8	n.a.	n.a.	270.2	155.2	317.2	290.0	n.a.	n.a.	n.a.
29	192.8		280.9	n.a.	n.a.	192.5	230.2	286.5	295.3	n.a.	n.a.	n.a.
30	157.2		301.0	n.a.	0.6	160.3	217.7	314.7	220.5	n.a.	n.a.	n.a.
31	219.2		308.1		299.9		155.3	237.3		n.a.		n.a.
Mean	193.8	248.1	264.4	n.a.	150.3	232.8	216.8	275.9	196.5	n.a.	n.a.	n.a.
MEAN	173.7	228.1	248.9	265.2	150.3	257.5	217.5	246.9	220.9	266.5	n.a.	n.a.
MIN	13.0	48.6	87.0	66.1	0.6	135.1	124.6	81.8	24.6	206.5	n.a.	n.a.
MAX	219.2	289.6	313.7	357.6	299.9	372.4	354.8	343.1	354.0	347.7	n.a.	n.a.

AWS Kala Patthar

Technical sheet		
Coordinates: Latitude: 27° 59' 24" N Longitude: 86° 49' 48" E Elevation: 5,600 m a.s.l	Installation Time: May 2008	Data Availability: From May 13, 2008

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger			10 min.	2 m	LSI-Lastem E- Log
Air Temperature	-30 - +70 °C	±0.1°C (0°C)	10 min.	2 m	LSI-Lastem DMA572
Relative Humidity	0 - 100 %	±1.5% (5÷95%, 23°C)	10 min.	2 m	LSI-Lastem DMA572
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	10 min.	2 m	LSI-Lastem CX115P
Total Precipitation	Max 10 mm/min	1÷10mm/min: ±1%	10 min.	1.5 m	LSI-Lastem DQA030
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	10 min.	5 m	LSI-Lastem DNA022
Global Solar Radiation	0-2000		10 min.	2 m	Kipp & Zonen CMB6 pyranometer



AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-13.2	-11.3	-12.1	-7.4	-6.0	n.a.	n.a.	0.9	-0.5	-4.3	-10.9	-0.3
2	-11.0	-11.2	-11.4	-7.6	-6.2	-1.7	n.a.	0.8	-0.8	-4.3	-9.6	-2.8
3	-7.3	-10.0	-11.1	-9.2	-5.4	-2.4	n.a.	0.6	-1.1	-4.2	-7.9	-0.4
4	-6.9	-7.9	-11.6	-11.8	-5.1	-2.4	n.a.	0.8	-1.4	-4.5	-7.4	0.0
5	-9.5	-8.4	-10.3	-12.9	-5.5	-2.5	-0.1	0.4	-1.0	-3.9	-9.4	-1.1
6	-11.6	-9.2	-8.0	-12.6	-4.5	-2.3	-0.2	0.6	-0.4	-3.9	-9.3	-3.2
7	-12.0	-8.7	-7.1	-10.6	-4.3	-3.0	0.0	1.0	-0.3	-4.0	-10.0	-4.3
8	-14.5	-10.2	-8.3	-10.7	-6.2	-3.8	-0.1	0.3	-0.3	-4.9	-5.6	-3.6
9	-17.0	-13.2	-13.7	-11.4	-5.8	-3.6	-0.3	-0.4	-0.1	-4.8	-3.5	-6.8
10	-13.1	-9.8	-12.6	-11.4	-5.4	-2.8	-0.1	0.1	-0.5	-3.2	-0.4	-8.0
Mean	-11.6	-10.0	-10.6	-10.6	-5.4	-2.7	-0.1	0.5	-0.6	-4.2	-7.4	-3.1
11	-9.5	-10.2	-14.1	-9.7	-5.1	-2.5	0.6	-0.8	-0.8	-1.0	-1.3	-7.7
12	-6.6	-8.3	-13.1	-8.9	-5.3	-1.4	0.8	-0.9	-0.8	0.0	-3.2	-4.6
13	-9.5	-6.2	-11.9	-9.1	-3.5	-1.5	0.2	-0.4	-0.7	1.1	-5.9	-4.9
14	-12.4	-8.7	-13.2	-9.8	-3.6	-1.2	0.0	-0.3	-0.7	0.8	-8.9	-6.9
15	-16.6	-11.5	-15.0	n.a.	-3.3	-0.9	-0.1	-0.4	-0.9	-2.0	-9.7	-8.4
16	-20.2	-15.4	-9.9	n.a.	-2.4	0.2	0.0	0.3	-0.8	-3.4	-11.9	-9.3
17	-14.2	-16.4	-7.0	n.a.	-2.6	-0.1	0.4	-0.2	-0.6	-5.7	-8.7	-6.1
18	-13.0	-12.1	-6.6	n.a.	-3.2	-0.2	1.8	-0.4	-0.8	-6.9	-6.2	-6.4
19	-12.0	-14.3	-5.1	n.a.	-4.3	-0.5	1.1	-1.2	-1.0	-4.7	-6.7	-7.8
20	-7.9	-13.9	-9.4	n.a.	-4.5	0.4	0.6	-0.4	-1.3	-5.7	-5.0	-8.2
Mean	-12.2	-11.7	-10.5	-9.4	-3.8	-0.8	0.5	-0.5	-0.8	-2.8	-6.8	-7.0
21	-7.8	-15.5	-7.5	n.a.	-3.0	0.9	0.9	0.8	-1.9	-9.6	-6.0	-7.1
22	-9.2	-14.6	-7.2	n.a.	-3.1	1.0	1.5	0.0	-1.8	-10.8	-7.3	-4.7
23	-8.5	-13.4	-7.9	-10.3	-3.4	0.7	0.6	-0.5	-1.7	-7.1	-8.2	-5.1
24	-8.6	-14.9	-10.2	-9.4	-3.1	0.7	0.2	-0.5	-1.5	-6.1	-6.1	-9.4
25	-10.0	-16.8	-12.1	-9.3	-2.2	-0.1	0.5	0.4	-1.9	-7.5	-3.8	-12.5
26	n.a.	-17.0	-11.0	-8.3	n.a.	0.0	0.6	0.0	-2.9	-9.9	-3.6	-14.4
27	n.a.	-15.4	-10.9	-7.7	n.a.	0.2	0.6	-0.5	-2.8	-8.8	-5.0	-14.2
28	n.a.	-14.1	-10.8	-6.6	n.a.	0.4	0.8	0.2	-3.3	-9.1	-1.5	-11.4
29	n.a.		-10.1	-6.0	n.a.	0.6	0.8	-0.4	-3.6	-8.0	0.2	-7.0
30	n.a.		-9.9	-6.0	n.a.	0.4	0.8	0.5	-3.9	-8.8	1.8	-6.6
31	n.a.		-8.5		n.a.		1.2	0.1		-8.9		-6.6
Mean	-8.8	-15.2	-9.6	-8.0	-3.0	0.5	0.8	0.0	-2.5	-8.6	-4.0	-9.0
MEAN	-11.3	-12.1	-10.2	-9.4	-4.3	-0.9	0.5	0.0	-1.3	-5.3	-6.0	-6.4
MIN	-20.2	-17.0	-15.0	-12.9	-6.2	-3.8	-0.3	-1.2	-3.9	-10.8	-11.9	-14.4
MAX	-6.6	-6.2	-5.1	-6.0	-2.2	1.0	1.8	1.0	-0.1	1.1	1.8	0.0

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	38.8	7.1	16.9	42.6	64.8	n.a.	100.0	100.0	85.3	83.6	76.4	11.1
2	7.5	15.2	39.9	27.1	83.0	76.7	100.0	100.0	92.4	86.1	59.6	22.5
3	7.8	15.3	38.9	32.2	57.4	71.8	99.7	99.6	86.8	90.6	48.7	9.6
4	4.3	14.3	44.1	54.4	44.0	64.5	97.8	99.2	92.4	68.4	41.4	6.0
5	7.0	12.3	15.1	30.4	67.8	58.6	99.2	99.4	92.5	55.8	47.0	8.7
6	5.8	11.1	14.5	30.3	80.9	73.5	99.3	98.2	97.3	74.1	48.6	7.9
7	11.2	16.9	18.0	41.5	77.5	87.8	99.6	88.6	99.5	80.9	20.9	11.5
8	16.6	21.3	21.8	57.6	75.1	78.5	98.8	97.2	96.7	84.1	12.2	9.6
9	17.6	35.0	50.5	69.5	76.6	85.1	98.9	99.8	96.3	75.9	20.5	5.6
10	10.5	17.7	17.7	79.6	85.6	82.3	98.0	94.3	97.7	40.1	19.7	5.7
Mean	12.7	16.6	27.7	46.5	71.3	75.4	99.1	97.6	93.7	74.0	39.5	9.8
11	7.9	26.7	22.2	64.3	84.1	90.1	96.0	98.5	99.2	29.7	25.3	12.9
12	6.9	21.8	22.2	58.7	86.5	88.8	97.4	97.0	99.3	28.0	15.4	9.1
13	8.0	17.5	35.5	64.8	76.5	93.5	99.6	95.1	99.4	29.0	26.3	8.7
14	7.5	18.5	22.1	69.6	55.9	88.9	99.6	98.6	96.2	31.6	38.4	11.1
15	24.9	41.7	14.2	n.a.	62.9	91.2	99.1	99.1	98.3	43.5	47.5	6.9
16	31.6	67.7	26.2	n.a.	58.7	86.4	99.6	97.4	98.8	25.7	73.1	10.4
17	14.8	33.6	39.7	n.a.	79.1	96.9	97.7	99.7	99.2	41.9	20.3	7.9
18	29.5	14.2	41.0	n.a.	86.4	96.6	92.7	99.7	99.6	63.8	13.0	4.5
19	11.3	24.8	25.8	n.a.	90.8	97.0	99.3	99.4	99.4	41.6	31.6	8.8
20	8.4	12.3	34.7	n.a.	89.9	91.9	99.6	98.2	99.2	43.1	17.4	5.5
Mean	15.1	27.9	28.4	64.4	77.1	92.1	98.1	98.3	98.9	37.8	30.8	8.6
21	10.5	48.6	19.5	n.a.	65.4	86.7	98.5	92.4	97.5	81.4	21.1	3.2
22	12.0	20.1	17.8	n.a.	67.4	92.2	97.2	99.6	98.6	63.1	25.7	1.8
23	12.2	31.1	12.8	77.8	58.5	95.4	99.4	99.8	98.1	33.1	37.2	3.4
24	14.4	27.8	35.8	63.5	65.6	97.3	99.9	93.6	97.2	22.6	23.8	5.9
25	4.2	39.0	71.8	52.8	35.6	98.6	99.9	78.2	96.8	25.8	14.2	22.1
26	n.a.	35.6	66.8	72.7	n.a.	97.8	99.8	91.3	95.5	36.1	10.4	35.5
27	n.a.	22.7	76.3	80.6	n.a.	97.0	100.0	93.3	89.4	35.2	9.5	34.0
28	n.a.	17.6	80.9	74.6	n.a.	97.0	100.0	92.3	79.1	34.2	13.4	12.8
29	n.a.		60.2	74.7	n.a.	97.7	100.0	99.5	76.6	28.9	7.1	6.1
30	n.a.		56.2	73.5	n.a.	99.1	99.4	96.9	81.7	39.3	4.6	13.0
31	n.a.		52.9		n.a.		100.0	97.7		48.1		11.1
Mean	10.7	30.3	50.1	71.3	58.5	95.9	99.5	94.1	91.1	40.7	16.7	13.5
MEAN	13.2	24.6	35.9	58.8	71.0	88.2	98.9	96.6	94.5	50.5	29.0	10.7
MIN	4.2	7.1	12.8	27.1	35.6	58.6	92.7	78.2	76.6	22.6	4.6	1.8
MAX	38.8	67.7	80.9	80.6	90.8	99.1	100.0	100.0	99.6	90.6	76.4	35.5

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	502.9	508.0	509.9	508.7	511.6	n.a.	n.a.	513.1	514.6	512.2	508.7	513.9
2	506.2	509.6	509.3	509.7	510.2	513.8	n.a.	513.6	514.0	511.3	508.1	511.8
3	508.3	512.0	509.3	510.2	510.4	513.8	n.a.	514.0	514.2	511.5	508.2	508.6
4	509.7	512.4	508.7	509.2	512.3	512.7	n.a.	513.6	515.1	512.5	509.3	508.7
5	507.6	510.6	508.8	509.9	513.2	513.3	515.8	513.0	514.7	514.5	508.6	510.7
6	508.4	510.6	511.3	509.8	513.1	514.1	515.2	512.6	513.3	515.7	507.8	510.5
7	508.4	509.7	511.4	510.2	511.4	512.9	514.9	512.7	512.4	515.0	510.3	511.2
8	506.0	505.4	508.7	510.5	509.2	511.6	515.8	513.3	513.1	514.3	513.2	511.6
9	503.5	504.5	508.1	511.9	509.7	511.0	515.1	513.3	514.8	514.4	514.3	509.2
10	502.2	507.7	509.3	512.7	510.5	510.7	514.2	513.2	515.3	515.3	513.9	504.6
Mean	506.3	509.1	509.5	510.3	511.2	512.7	515.2	513.2	514.2	513.7	510.2	510.1
11	504.3	507.8	508.0	512.6	510.9	511.1	513.9	513.0	514.4	516.5	512.4	504.5
12	504.9	508.1	507.4	512.1	511.4	512.8	513.7	512.6	514.6	516.5	510.6	506.2
13	504.7	507.9	508.5	512.2	512.5	513.1	513.9	513.3	514.4	515.6	510.5	506.7
14	505.6	507.8	509.4	510.7	512.6	513.0	513.6	514.8	513.7	514.4	510.0	506.6
15	505.2	507.4	510.3	n.a.	514.6	512.5	513.3	514.6	513.3	513.0	509.0	506.3
16	500.4	505.9	511.6	n.a.	517.1	512.0	513.3	513.2	513.0	512.9	507.3	505.6
17	501.3	504.5	510.1	n.a.	516.6	512.2	513.0	513.0	511.9	513.4	508.2	507.1
18	500.6	504.1	507.5	n.a.	514.5	512.3	512.7	513.5	512.3	513.0	510.1	507.6
19	500.5	506.3	507.5	n.a.	511.9	512.2	512.0	514.6	513.9	511.8	511.9	507.9
20	504.9	507.1	507.1	n.a.	510.0	513.5	511.9	515.7	514.2	512.0	513.4	507.7
Mean	503.2	506.7	508.7	511.9	513.2	512.5	513.1	513.8	513.6	513.9	510.3	506.6
21	504.9	505.8	508.1	n.a.	510.1	514.2	512.2	515.9	513.2	510.9	514.4	508.6
22	505.8	508.5	510.6	n.a.	511.4	514.0	512.4	515.6	513.6	510.7	515.1	508.4
23	505.8	509.9	511.2	510.9	511.2	513.8	513.6	515.7	513.4	512.6	515.6	508.2
24	505.6	508.3	510.1	510.7	512.0	513.1	514.9	515.0	513.6	513.0	515.1	506.1
25	506.8	506.1	509.3	510.8	514.1	513.0	516.8	515.0	513.7	512.2	514.0	506.2
26	n.a.	506.6	510.3	512.3	n.a.	513.2	516.3	514.8	513.3	511.2	513.1	505.4
27	n.a.	506.7	509.9	512.3	n.a.	513.0	514.6	514.6	512.4	511.9	513.3	505.4
28	n.a.	508.7	508.5	511.4	n.a.	512.7	514.0	514.5	512.2	511.7	513.8	507.1
29	n.a.		509.6	511.9	n.a.	512.9	514.1	515.4	512.5	511.7	511.0	509.5
30	n.a.		509.1	512.8	n.a.	512.7	513.5	515.8	513.1	510.0	512.5	510.9
31	n.a.		508.6		n.a.		513.2	515.4		509.4		511.7
Mean	505.8	507.6	509.6	511.6	511.8	513.3	514.1	515.2	513.1	511.4	513.8	508.0
MEAN	505.0	507.8	509.3	511.1	512.1	512.8	514.0	514.1	513.6	512.9	511.5	508.2
MIN	500.4	504.1	507.1	508.7	509.2	510.7	511.9	512.6	511.9	509.4	507.3	504.5
MAX	509.7	512.4	511.6	512.8	517.1	514.2	516.8	515.9	515.3	516.5	515.6	513.9

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	202.2	n.a.	134.3	106.3	144.1	n.a.	81.4	122.3	130.0	131.4	191.0	220.1
2	208.9	n.a.	118.9	140.1	146.1	97.6	109.7	114.8	136.2	103.3	153.7	207.1
3	210.5	n.a.	131.2	97.3	142.5	173.0	88.7	117.1	113.8	201.7	164.8	126.5
4	203.9	n.a.	123.6	127.8	137.3	143.1	125.1	121.2	105.2	156.2	202.6	131.3
5	194.0	n.a.	118.7	122.7	127.0	174.2	111.2	166.6	144.5	237.2	181.1	196.6
6	201.4	n.a.	135.3	129.9	125.7	171.6	84.5	181.5	135.3	250.2	148.1	223.0
7	203.9	n.a.	173.9	131.2	119.1	98.0	99.6	129.5	91.8	294.3	142.0	204.3
8	190.8	n.a.	109.6	121.0	113.7	121.0	96.2	102.2	131.6	275.5	88.6	196.1
9	192.3	n.a.	106.7	140.4	141.6	128.7	152.2	105.0	113.2	218.8	174.2	212.7
10	198.3	98.9	95.5	162.2	161.4	127.2	129.2	117.0	129.9	216.0	153.2	183.2
Mean	200.6	98.9	124.8	127.9	135.9	137.2	107.8	127.7	123.2	208.5	159.9	190.1
11	181.5	130.5	96.0	130.6	125.9	129.0	108.2	125.6	122.1	137.5	183.0	181.4
12	162.7	180.6	136.9	123.7	176.0	121.5	96.2	141.4	119.4	175.8	169.2	153.1
13	150.1	134.6	152.3	131.9	130.1	106.9	132.4	107.5	110.7	156.2	166.4	159.4
14	149.2	114.9	218.4	110.3	142.8	119.5	151.1	96.7	137.3	175.3	207.3	209.2
15	157.7	101.5	196.2	n.a.	153.7	113.6	120.6	107.6	133.8	220.9	167.8	202.6
16	184.6	110.6	181.3	n.a.	160.6	142.9	108.4	113.5	93.8	215.2	176.5	180.2
17	165.5	114.0	156.3	n.a.	163.2	132.3	125.5	100.0	98.9	233.2	137.4	148.5
18	187.7	92.9	158.0	n.a.	114.6	104.0	115.5	98.9	94.2	228.8	149.7	193.8
19	156.5	117.6	138.3	n.a.	137.9	133.9	104.7	95.2	105.0	194.7	166.6	205.6
20	198.6	112.3	94.6	n.a.	116.4	108.7	112.0	65.3	100.0	222.7	171.1	214.1
Mean	169.4	121.0	152.8	124.1	142.1	121.2	117.5	105.2	111.5	196.0	169.5	184.8
21	141.1	141.5	120.5	n.a.	139.8	128.8	107.8	115.5	106.0	262.0	148.1	213.7
22	163.5	155.7	130.9	n.a.	136.8	126.3	98.1	134.2	132.7	215.8	127.9	228.1
23	153.8	122.9	94.6	213.4	146.1	160.2	110.3	159.2	144.6	192.9	170.8	222.6
24	94.5	97.9	95.1	159.4	150.0	107.6	143.7	163.7	131.4	223.3	163.8	241.1
25	94.9	109.1	136.9	143.3	135.1	120.5	106.0	118.1	145.1	228.8	130.4	229.1
26	n.a.	114.5	151.8	140.1	n.a.	116.0	135.1	109.1	162.6	226.5	169.0	194.5
27	n.a.	86.8	152.1	151.1	n.a.	118.7	128.8	100.7	183.4	171.7	101.6	200.7
28	n.a.	131.1	147.0	177.6	n.a.	122.2	112.0	121.8	149.2	150.3	159.5	205.8
29	n.a.		138.2	140.8	n.a.	112.7	181.7	91.9	172.6	183.0	210.4	181.6
30	n.a.		122.5	145.9	n.a.	103.9	151.5	103.9	152.3	207.0	286.2	229.1
31	n.a.		122.0		n.a.		114.2	96.0		132.1		222.3
Mean	129.6	119.9	128.3	159.0	141.6	121.7	126.3	119.5	148.0	199.4	166.8	215.3
MEAN	173.9	119.4	135.1	138.5	139.5	126.3	117.5	117.5	127.6	201.2	165.4	197.3
MIN	94.5	86.8	94.6	97.3	113.7	97.6	81.4	65.3	91.8	103.3	88.6	126.5
MAX	210.5	180.6	218.4	213.4	176.0	174.2	181.7	181.5	183.4	294.3	286.2	241.1

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	5.9	2.5	2.2	2.2	2.3	n.a.	4.1	1.8	1.4	1.4	2.8	1.7
2	3.3	3.1	3.5	3.2	2.9	5.0	1.9	2.3	2.2	1.9	1.3	1.2
3	3.4	3.7	4.1	5.6	1.3	2.5	2.5	2.2	2.5	1.1	1.3	1.6
4	4.6	2.3	3.4	2.6	1.5	3.9	2.2	1.5	1.8	1.3	1.6	2.1
5	7.7	4.8	5.3	3.1	2.1	3.7	2.0	1.0	1.8	1.8	2.4	3.2
6	5.0	4.3	4.3	2.6	2.5	2.7	1.8	1.2	1.7	1.7	1.7	6.4
7	4.8	3.7	2.9	3.4	3.9	3.8	2.2	0.8	2.3	2.2	2.8	4.3
8	8.3	6.3	6.1	4.3	3.6	2.5	2.6	2.7	1.7	2.2	3.0	3.6
9	7.8	2.3	4.7	2.8	2.0	2.8	1.0	2.5	2.4	1.9	1.2	5.2
10	2.1	4.8	6.1	2.9	1.5	2.5	1.2	1.3	2.1	1.4	1.2	3.1
Mean	5.3	3.8	4.3	3.3	2.4	3.3	2.2	1.7	2.0	1.7	1.9	3.2
11	2.8	2.9	7.4	1.9	3.2	2.9	2.4	1.4	2.3	1.2	1.7	1.2
12	4.8	1.8	2.4	3.2	2.0	2.4	2.2	0.7	1.4	1.2	2.6	2.2
13	7.7	3.2	2.9	2.3	2.5	3.2	1.2	3.4	2.1	1.9	2.0	1.6
14	4.4	4.1	2.2	2.1	3.6	3.5	1.4	2.8	1.7	2.9	3.9	1.7
15	5.8	6.6	3.4	n.a.	3.3	2.7	1.9	1.9	2.7	5.4	1.9	4.5
16	4.7	4.7	2.3	n.a.	2.3	1.8	2.1	2.5	3.3	3.1	2.5	3.9
17	2.3	4.3	1.6	n.a.	2.2	2.1	1.9	2.6	3.9	4.5	2.0	1.9
18	1.9	3.9	2.1	n.a.	2.9	2.5	2.1	2.8	2.3	4.1	1.6	3.9
19	2.9	3.8	4.2	n.a.	1.6	2.1	2.2	1.5	2.6	2.3	1.4	5.2
20	3.2	5.3	7.2	n.a.	2.9	2.3	1.8	2.3	3.2	3.5	1.4	5.8
Mean	4.1	4.1	3.6	2.4	2.7	2.6	1.9	2.2	2.6	3.0	2.1	3.2
21	2.9	3.1	4.6	n.a.	2.1	2.4	1.9	2.2	2.4	2.0	2.1	5.7
22	5.2	1.3	5.2	n.a.	3.7	2.6	2.2	0.8	2.3	2.3	2.8	7.3
23	9.8	2.7	4.4	1.6	2.8	1.6	1.8	1.0	2.0	2.2	4.0	5.9
24	11.7	5.2	4.0	1.7	1.7	1.9	1.9	1.2	1.8	5.1	2.2	7.3
25	8.4	4.6	2.2	2.1	1.8	1.4	2.1	2.2	0.7	6.2	1.4	5.4
26	n.a.	1.4	1.9	1.6	n.a.	1.1	1.5	2.1	0.3	3.5	1.2	3.0
27	n.a.	6.1	1.1	1.9	n.a.	2.2	1.9	2.8	0.6	2.5	1.5	4.6
28	n.a.	3.2	1.5	1.5	n.a.	2.3	2.5	2.4	1.2	2.1	1.6	2.0
29	n.a.		1.8	2.6	n.a.	3.1	1.5	2.6	1.8	3.6	1.5	3.8
30	n.a.		2.6	2.4	n.a.	2.1	1.4	3.4	1.8	1.9	1.5	3.0
31	n.a.		1.8		n.a.		2.2	2.7		2.8		4.8
Mean	7.6	3.5	2.8	1.9	2.4	2.1	1.9	2.1	1.5	3.1	2.0	4.8
MEAN	5.3	3.8	3.5	2.6	2.5	2.6	2.0	2.0	2.0	2.6	2.0	3.8
MIN	1.9	1.3	1.1	1.5	1.3	1.1	1.0	0.7	0.3	1.1	1.2	1.2
MAX	11.7	6.6	7.4	5.6	3.9	5.0	4.1	3.4	3.9	6.2	4.0	7.3

PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	0.0	0.0	0.0	0.0	n.a.	n.a.	1.4	n.a.	0.0	0.0	n.a.	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.6	3.0	n.a.	0.0	0.0	n.a.
4	0.0	0.0	0.0	0.0	0.0	0.0	1.4	n.a.	n.a.	0.0	0.0	0.0
5	n.a.	0.0	0.0	n.a.	0.0	0.0	n.a.	n.a.	n.a.	0.0	0.0	n.a.
6	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	26.8	0.0	0.0	0.0	n.a.
7	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	0.8	n.a.	0.0	n.a.	0.0
8	n.a.	0.0	0.0	0.0	0.0	0.0	n.a.	1.2	n.a.	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.	0.0	0.0	0.0
10	n.a.	0.0	0.0	n.a.	n.a.	0.0	n.a.	23.8	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	3.4	55.6	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0
12	n.a.	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.	0.0	0.0	0.0
13	n.a.	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0
14	0.0	0.0	0.0	n.a.	0.0	0.0	n.a.	n.a.	n.a.	0.0	0.0	0.0
15	n.a.	0.0	0.0	n.a.	0.0	0.0	n.a.	n.a.	n.a.	0.0	0.0	0.0
16	0.0	0.0	0.0	n.a.	0.0	n.a.	n.a.	n.a.	n.a.	0.0	n.a.	0.0
17	0.0	0.0	0.0	n.a.	0.0	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0
18	0.0	0.0	0.0	n.a.	0.0	n.a.	0.0	n.a.	n.a.	0.0	0.0	0.0
19	0.0	0.0	0.0	n.a.	n.a.	n.a.	12.0	n.a.	n.a.	0.0	0.0	n.a.
20	0.0	0.0	0.0	n.a.	0.0	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	n.a.	0.0	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0
22	n.a.	0.0	0.0	n.a.	0.0	0.0	n.a.	8.2	0.0	n.a.	0.0	0.0
23	n.a.	0.0	0.0	n.a.	0.0	11.6	5.8	n.a.	0.0	0.0	0.0	0.0
24	n.a.	0.0	0.0	n.a.	0.0	3.2	n.a.	n.a.	n.a.	0.0	0.0	0.0
25	n.a.	n.a.	0.0	n.a.	n.a.	n.a.	n.a.	1.2	n.a.	0.0	0.0	0.0
26	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.	0.0	0.0	0.0
27	n.a.	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.	0.0	n.a.	0.0
28	n.a.	0.0	n.a.	0.0	n.a.	n.a.	n.a.	0.0	0.0	0.0	n.a.	0.0
29	n.a.		n.a.	0.0	n.a.	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0
30	n.a.		0.0	0.0	n.a.	0.0	2.6	n.a.	0.0	0.0	0.0	0.0
31	n.a.		0.0		n.a.		9.0	n.a.		0.0		0.0
Total	0.0	0.0	0.0	0.0	0.0	14.8	17.4	9.4	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	14.8	32.8	65.0	0.0	0.0	0.0	0.0
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	11.6	12.0	26.8	0.0	0.0	0.0	0.0

GLOBAL SOLAR RADIATION (W/m²)

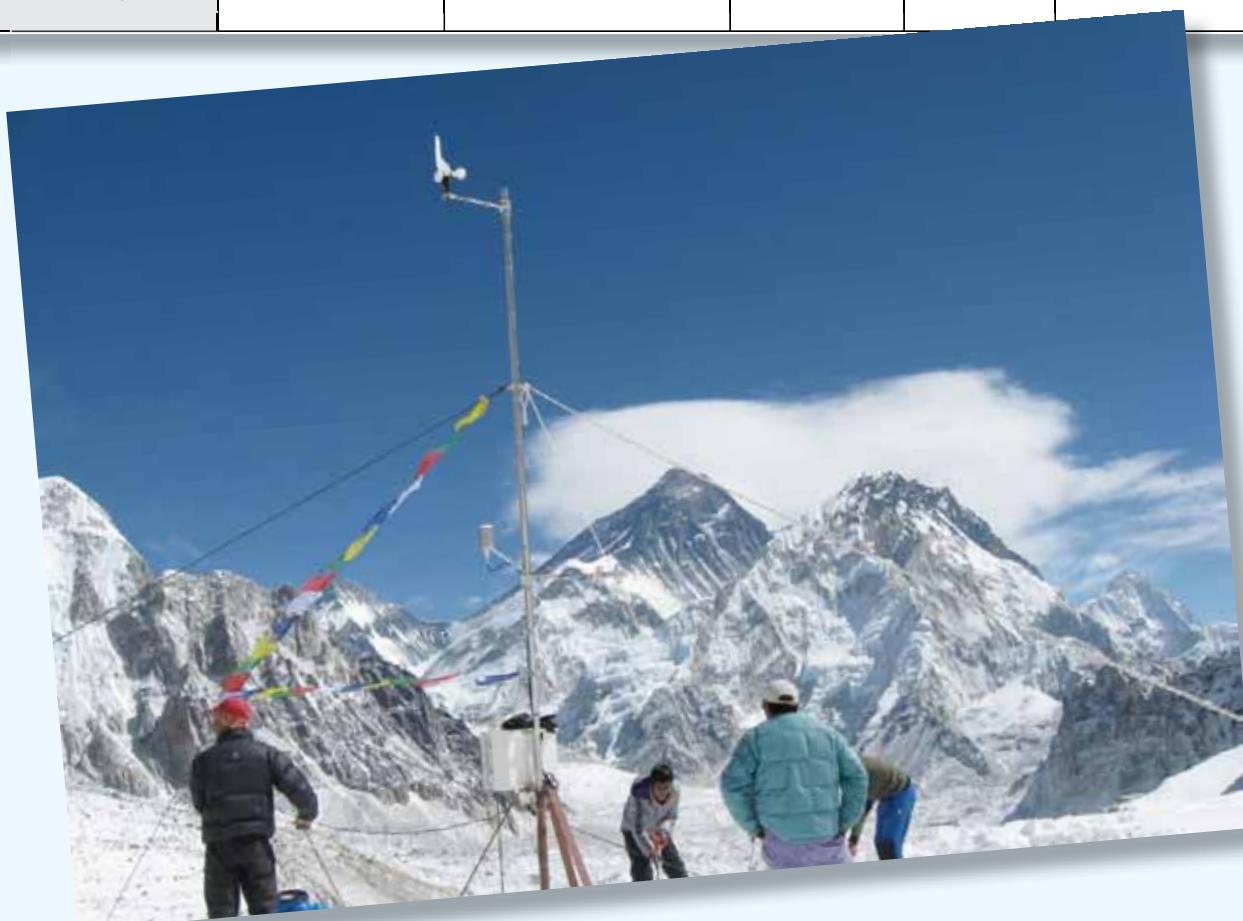
	J	F	M	A	M	J	J	A	S	O	N	D
1	220.3	245.0	292.6	352.4	266.7	n.a.	249.6	139.6	259.8	229.0	171.6	219.5
2	218.1	233.3	274.6	354.6	181.9	244.2	149.4	153.9	227.2	264.0	234.5	219.2
3	216.8	248.6	264.3	309.2	298.7	273.6	189.5	172.4	288.7	237.8	250.6	217.3
4	210.6	246.8	117.6	122.2	324.3	379.4	173.5	140.7	213.2	262.5	246.7	215.7
5	216.2	247.6	295.5	300.3	258.7	342.0	144.5	141.9	238.9	268.2	238.5	213.9
6	220.3	257.6	308.4	299.2	264.7	290.7	128.2	159.1	183.1	258.7	233.1	214.9
7	217.5	188.0	310.0	248.6	350.2	262.1	132.8	236.3	117.4	289.1	247.4	215.0
8	213.7	252.5	264.7	311.4	358.0	269.3	175.9	187.7	181.7	241.4	243.1	215.8
9	198.2	226.0	134.3	215.3	244.7	232.8	117.3	122.2	240.5	266.9	240.2	215.4
10	223.2	244.2	321.2	167.7	158.4	277.6	130.7	229.6	185.7	287.0	234.7	217.4
Mean	215.5	239.0	258.3	268.1	270.6	285.7	159.1	168.3	213.6	260.5	234.0	216.4
11	223.2	265.6	281.2	244.5	273.4	198.1	187.8	126.5	145.4	289.6	235.8	214.6
12	221.2	262.7	319.8	286.9	203.9	299.7	207.8	151.8	126.3	291.0	238.5	212.4
13	221.6	249.6	197.3	253.3	356.8	217.0	101.5	227.9	146.8	285.2	239.0	210.4
14	223.6	249.2	291.6	268.2	349.6	284.8	117.2	179.4	235.7	286.0	245.6	211.8
15	77.0	113.8	277.1	n.a.	307.1	200.1	160.9	146.9	190.8	227.0	232.9	213.9
16	151.0	64.7	309.4	n.a.	290.1	269.4	149.2	238.2	191.3	293.4	181.4	212.0
17	233.4	259.3	315.1	n.a.	249.4	151.1	206.6	134.6	206.6	263.7	219.1	210.4
18	224.6	278.9	262.5	n.a.	216.1	129.2	295.9	171.1	122.1	265.0	235.3	211.9
19	231.2	282.6	319.7	n.a.	118.6	127.7	116.1	65.4	140.0	280.6	231.0	211.8
20	229.6	285.5	194.1	n.a.	196.4	198.6	141.0	206.9	171.3	161.5	229.0	209.6
Mean	203.6	231.2	276.8	263.2	256.1	207.6	168.4	164.9	167.6	264.3	228.8	211.9
21	231.0	285.5	333.8	n.a.	246.9	334.5	169.5	287.1	206.1	86.1	226.7	213.2
22	233.7	292.8	290.0	n.a.	380.3	252.5	195.1	79.8	168.7	290.7	229.5	206.7
23	206.3	219.8	320.6	3.4	320.7	163.7	147.9	72.3	146.1	273.3	228.4	215.5
24	190.1	255.3	235.2	206.7	273.1	107.2	126.2	180.2	153.6	272.8	223.2	213.2
25	317.7	52.5	181.9	272.6	404.5	98.9	130.8	354.0	109.9	265.3	224.6	192.9
26	n.a.	0.1	215.5	205.8	n.a.	120.3	150.1	304.0	22.0	222.5	224.1	211.2
27	n.a.	298.0	161.7	196.9	n.a.	174.3	117.3	299.4	271.7	267.4	293.0	184.6
28	n.a.	289.7	125.6	243.1	n.a.	215.1	148.6	251.1	282.7	207.9	235.6	212.7
29	n.a.		270.4	258.8	n.a.	212.4	138.2	119.4	313.8	265.8	214.6	211.0
30	n.a.		274.4	249.4	n.a.	165.2	175.4	260.5	255.7	199.9	221.1	210.5
31	n.a.		326.7		n.a.		151.6	226.4		258.0		212.3
Mean	235.8	211.7	248.7	204.6	325.1	184.4	150.1	221.3	193.0	237.2	232.1	207.6
MEAN	214.8	228.4	260.9	244.1	275.7	223.8	158.9	186.0	191.4	253.5	231.6	211.8
MIN	77.0	0.1	117.6	3.4	118.6	98.9	101.5	65.4	22.0	86.1	171.6	184.6
MAX	317.7	298.0	333.8	354.6	404.5	379.4	295.9	354.0	313.8	293.4	293.0	219.5

UVA RADIATION (W/m2)

	J	F	M	A	M	J	J	A	S	O	N	D
1	8.2	9.7	12.7	15.8	13.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	7.9	9.5	12.4	15.8	13.4	10.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	7.8	9.8	12.0	14.5	15.2	14.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	7.6	9.7	6.4	7.5	15.5	17.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	7.9	9.8	13.0	14.3	12.7	16.7	2.1	n.a.	n.a.	n.a.	n.a.	n.a.
6	8.0	10.2	13.1	14.0	13.5	14.1	1.3	n.a.	n.a.	n.a.	n.a.	n.a.
7	8.0	8.2	13.1	12.0	17.3	14.2	1.0	n.a.	n.a.	n.a.	n.a.	n.a.
8	8.1	10.2	11.7	14.6	17.3	13.8	1.4	n.a.	n.a.	n.a.	n.a.	n.a.
9	7.7	9.6	7.2	11.4	12.9	13.0	0.5	n.a.	n.a.	n.a.	n.a.	n.a.
10	8.3	10.0	14.1	9.3	9.1	14.0	0.6	n.a.	n.a.	n.a.	n.a.	n.a.
Mean	8.0	9.7	11.6	12.9	14.0	14.3	1.2	n.a.	n.a.	n.a.	n.a.	n.a.
11	8.5	10.6	12.8	12.0	15.9	11.2	1.4	n.a.	n.a.	n.a.	n.a.	n.a.
12	8.4	10.5	13.9	13.9	11.2	15.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13	8.5	10.3	9.7	12.7	16.9	12.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14	8.6	10.3	13.2	16.4	16.8	14.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
15	3.9	5.7	12.6	n.a.	14.6	11.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16	6.6	4.2	13.4	n.a.	14.4	13.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
17	9.0	11.8	13.9	n.a.	12.8	8.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
18	8.9	12.0	12.1	n.a.	11.4	7.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
19	9.0	12.1	14.0	n.a.	10.6	8.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
20	8.9	12.2	9.3	n.a.	13.1	11.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mean	8.0	10.0	12.5	13.8	13.8	11.5	1.4	n.a.	n.a.	n.a.	n.a.	n.a.
21	9.0	12.3	14.4	n.a.	14.3	17.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22	9.1	12.4	12.9	n.a.	18.3	13.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23	8.4	10.3	14.1	0.3	16.1	9.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24	8.0	11.7	11.1	10.8	13.2	12.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25	12.4	4.0	9.5	14.1	22.2	44.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26	n.a.	0.1	10.1	11.0	n.a.	10.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27	n.a.	13.1	8.8	14.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28	n.a.	12.7	9.2	14.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
29	n.a.		14.1	13.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
30	n.a.		13.5	12.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
31	0.1		15.1		n.a.		n.a.					
Mean	7.8	9.6	12.1	11.3	16.8	17.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
MEAN	8.0	9.8	12.0	12.5	14.5	14.0	1.2	n.a.	n.a.	n.a.	n.a.	n.a.
MIN	0.1	0.1	6.4	0.3	9.1	7.7	0.5	n.a.	n.a.	n.a.	n.a.	n.a.
MAX	12.4	13.1	15.1	16.4	22.2	44.0	2.1	n.a.	n.a.	n.a.	n.a.	n.a.

Technical sheet		
Coordinates: Latitude: 27° 58' 54.5" N Longitude: 86° 45' 538" E Elevation: 5,700 m a.s.l	Installation Time: February 2010	Data Availability: From February 24, 2010

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger			30 min.	2 m	LSI-Lastem E-Log
Air Temperature	-30 - +70 °C	±0.1°C (0°C)	30 min.	2 m	LSI-Lastem DMA572
Relative Humidity	0 - 100 %	1.5% (5÷95%, 23°C)	30 min.	2 m	LSI-Lastem DMA572
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	30 min.	5 m	LSI-Lastem DNA022
Solar Radiations CNR1 sensor: (four components combined sensor+internal temperature with PT100)*	Pyranometer: 0 to 25 mV - Pyrgeometer: ±5 mV	±10% on daily totals - non linearity: < 1%	30 min.	2 m	Kipp & Zonen CM3* pyranometer - Kipp & Zonen CG3 pyrgeometer



AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	-50.5	-44.9	-39.1	-15.6	-9.8	-0.4	1.4	-14.7	-26.7	-32.3	n.a.
2	n.a.	-45.8	-30.1	-41.3	-11.7	-18.1	-3.8	0.6	-9.5	-23.5	-36.9	n.a.
3	n.a.	-49.5	-33.8	-31.5	-20.3	-17.4	0.0	-0.8	-9.0	-13.5	-42.8	n.a.
4	n.a.	-44.8	-25.2	-28.9	-21.8	-22.5	-0.2	-1.4	-9.1	-15.7	-43.1	n.a.
5	n.a.	-44.6	-42.2	-42.1	-15.8	-18.6	0.5	-3.0	n.a.	-25.6	-40.6	n.a.
6	n.a.	-45.6	-41.9	-39.3	-10.0	-15.2	-1.6	-4.3	n.a.	-15.6	-42.0	n.a.
7	n.a.	-39.7	-41.0	-23.8	-16.9	-9.5	0.1	-5.3	n.a.	-21.8	-43.2	n.a.
8	n.a.	-44.5	-33.6	-23.1	-24.7	-14.9	-2.1	-7.5	n.a.	-15.3	-39.9	n.a.
9	n.a.	-46.2	-20.7	-20.3	-16.3	-8.4	-1.2	-3.1	n.a.	-29.1	-38.2	n.a.
10	n.a.	-44.4	-40.4	-22.2	-5.4	-13.8	-1.9	-3.8	n.a.	-36.6	-33.1	n.a.
Mean	n.a.	-45.6	-35.4	-31.2	-15.9	-14.8	-1.1	-2.7	-10.6	-22.3	-39.2	n.a.
11	n.a.	-42.9	-45.1	-28.8	-12.0	-9.6	0.6	-1.3	-5.5	-36.5	n.a.	n.a.
12	n.a.	-41.5	-47.1	-19.2	-11.3	-8.5	-1.9	-2.7	-4.1	-34.8	n.a.	n.a.
13	n.a.	-36.1	-31.3	-19.8	-15.6	-0.7	-0.2	-5.6	-6.4	-31.1	n.a.	n.a.
14	n.a.	-34.4	-38.0	-20.4	-18.0	-4.0	-2.6	-2.0	-4.6	-31.1	n.a.	n.a.
15	n.a.	-19.3	-44.7	-25.1	-22.2	-1.9	-3.2	-4.5	-2.8	-27.4	n.a.	n.a.
16	n.a.	-15.4	-40.5	-27.8	-19.0	-3.3	-2.4	-4.6	-3.8	-38.7	n.a.	n.a.
17	n.a.	-43.5	-35.8	-28.5	-13.0	-1.5	-4.2	-1.8	-5.2	-35.9	n.a.	n.a.
18	n.a.	-48.3	-31.1	-22.2	-8.1	0.6	-7.7	-3.8	-4.6	-34.7	n.a.	n.a.
19	n.a.	-50.6	-28.8	-23.4	-6.0	n.a.	-1.0	-1.5	-2.7	-39.7	n.a.	n.a.
20	n.a.	-50.6	-25.1	-34.6	-8.2	n.a.	1.5	-3.4	-2.2	-25.4	n.a.	n.a.
Mean	n.a.	-38.3	-36.8	-25.0	-13.3	-3.6	-2.1	-3.1	-4.2	-33.5	n.a.	n.a.
21	n.a.	-32.0	-39.1	-34.0	-18.0	n.a.	-0.5	-10.5	-1.8	-9.7	n.a.	n.a.
22	n.a.	-50.6	-39.7	-31.5	-23.2	n.a.	-5.6	-1.9	-2.9	-32.8	n.a.	n.a.
23	n.a.	-38.6	-36.5	-14.8	-22.1	n.a.	1.2	-0.6	-2.7	-45.6	n.a.	n.a.
24	n.a.	-41.6	-30.1	-11.6	-13.6	n.a.	0.1	-9.7	-5.2	-43.1	n.a.	n.a.
25	n.a.	-26.6	-22.1	-27.9	-23.1	n.a.	-1.4	-17.5	-2.3	-42.1	n.a.	n.a.
26	n.a.	-36.1	-19.3	-17.8	-19.7	n.a.	0.5	-14.9	-3.2	-41.1	n.a.	n.a.
27	n.a.	-42.8	-14.9	-14.6	-24.2	n.a.	-0.5	-7.1	-24.1	-44.6	n.a.	n.a.
28	n.a.	-48.4	-10.5	-18.6	n.a.	n.a.	1.1	-10.0	-35.5	-40.4	n.a.	n.a.
29	n.a.		-29.4	-15.9	n.a.	n.a.	1.0	-1.8	-26.5	-41.9	n.a.	n.a.
30	n.a.		-32.3	-8.1	n.a.	-1.0	-1.4	-6.0	-19.3	-39.6	n.a.	n.a.
31	n.a.		-36.1		n.a.		0.8	-2.3		-37.9		n.a.
Mean	n.a.	-39.6	-28.2	-19.5	-20.6	-1.0	-0.4	-7.5	-12.4	-38.1	n.a.	n.a.
MEAN	n.a.	-41.2	-33.3	-25.2	-16.1	-9.4	-1.2	-4.5	-8.7	-31.5	-39.2	n.a.
MIN	n.a.	-50.6	-47.1	-42.1	-24.7	-22.5	-7.7	-17.5	-35.5	-45.6	-43.2	n.a.
MAX	n.a.	-15.4	-8.1	-8.1	-5.4	0.6	1.5	1.4	-1.8	-9.7	-32.3	n.a.

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	31.3	61.3	75.3	98.2	100.0	100.0	100.0	96.5	99.5	99.3	n.a.
2	n.a.	54.5	99.8	66.7	100.0	100.0	100.0	100.0	100.0	99.9	86.9	n.a.
3	n.a.	41.0	94.3	86.4	100.0	99.3	100.0	100.0	100.0	100.0	81.3	n.a.
4	n.a.	41.4	98.2	80.1	88.9	96.1	100.0	100.0	100.0	100.0	67.0	n.a.
5	n.a.	43.3	59.7	60.9	100.0	99.2	100.0	100.0	100.0	83.3	80.5	n.a.
6	n.a.	48.9	53.6	76.1	100.0	100.0	100.0	100.0	100.0	99.9	79.2	n.a.
7	n.a.	68.6	62.2	88.6	99.7	100.0	100.0	100.0	100.0	100.0	64.2	n.a.
8	n.a.	60.5	78.8	96.2	93.9	99.8	100.0	100.0	100.0	100.0	42.4	n.a.
9	n.a.	57.9	98.7	94.1	100.0	100.0	100.0	100.0	100.0	95.8	49.4	n.a.
10	n.a.	67.6	53.0	100.0	100.0	100.0	100.0	100.0	100.0	59.6	58.0	n.a.
Mean	n.a.	51.5	76.0	82.4	98.1	99.4	100.0	100.0	99.7	93.8	70.8	n.a.
11	n.a.	86.5	61.9	95.4	100.0	100.0	100.0	100.0	100.0	65.9	n.a.	n.a.
12	n.a.	70.8	59.0	99.0	100.0	100.0	100.0	100.0	100.0	68.7	n.a.	n.a.
13	n.a.	69.3	78.1	99.9	100.0	100.0	100.0	100.0	100.0	71.6	n.a.	n.a.
14	n.a.	76.8	66.9	100.0	84.5	100.0	100.0	100.0	100.0	78.3	n.a.	n.a.
15	n.a.	93.9	45.9	100.0	99.1	100.0	100.0	100.0	100.0	96.8	n.a.	n.a.
16	n.a.	100.0	69.4	97.1	96.6	100.0	100.0	100.0	100.0	64.4	n.a.	n.a.
17	n.a.	82.3	85.7	96.0	100.0	100.0	100.0	100.0	100.0	78.7	n.a.	n.a.
18	n.a.	46.0	93.6	98.8	100.0	100.0	100.0	100.0	100.0	92.4	n.a.	n.a.
19	n.a.	54.2	84.9	94.8	100.0	100.0	100.0	100.0	100.0	71.1	n.a.	n.a.
20	n.a.	34.7	91.4	79.1	100.0	100.0	100.0	100.0	100.0	71.6	n.a.	n.a.
Mean	n.a.	71.5	73.7	96.0	98.0	100.0	100.0	100.0	100.0	76.0	n.a.	n.a.
21	n.a.	92.8	59.3	78.2	100.0	100.0	100.0	100.0	100.0	99.9	n.a.	n.a.
22	n.a.	56.9	56.5	94.8	99.1	100.0	100.0	100.0	100.0	87.3	n.a.	n.a.
23	n.a.	77.5	54.4	100.0	88.6	100.0	100.0	100.0	100.0	65.8	n.a.	n.a.
24	n.a.	71.1	85.0	100.0	100.0	100.0	100.0	100.0	100.0	52.5	n.a.	n.a.
25	n.a.	90.6	99.0	100.0	87.1	100.0	100.0	98.5	100.0	68.5	n.a.	n.a.
26	n.a.	71.4	99.7	100.0	99.1	100.0	100.0	100.0	100.0	76.0	n.a.	n.a.
27	n.a.	69.9	100.0	100.0	98.8	100.0	100.0	100.0	100.0	77.8	n.a.	n.a.
28	n.a.	52.6	100.0	100.0	n.a.	100.0	100.0	100.0	100.0	68.8	n.a.	n.a.
29	n.a.		98.1	100.0	n.a.	100.0	100.0	100.0	100.0	70.6	n.a.	n.a.
30	n.a.		90.2	100.0	n.a.	100.0	100.0	100.0	100.0	72.6	n.a.	n.a.
31	n.a.		83.7		n.a.		100.0	100.0		72.9		n.a.
Mean	n.a.	72.9	84.2	97.3	96.1	100.0	100.0	99.9	100.0	73.9	n.a.	n.a.
MEAN	n.a.	64.7	78.1	91.9	97.5	99.8	100.0	100.0	99.9	81.0	70.8	n.a.
MIN	n.a.	31.3	45.9	60.9	84.5	96.1	100.0	98.5	96.5	52.5	42.4	n.a.
MAX	n.a.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	n.a.

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	159.0	162.1	151.2	102.8	130.8	91.6	149.6	150.3	304.3	271.5	n.a.
2	n.a.	172.9	164.5	168.2	70.4	78.4	106.1	206.6	163.1	244.3	269.7	n.a.
3	n.a.	200.2	68.3	64.0	163.3	144.4	245.2	192.4	185.1	218.7	240.9	n.a.
4	n.a.	201.7	83.1	88.2	116.9	74.0	181.2	217.5	104.9	276.6	254.1	n.a.
5	n.a.	156.9	115.0	127.8	100.2	103.8	137.9	234.1	159.0	179.0	210.4	n.a.
6	n.a.	160.6	116.2	97.9	132.5	117.3	158.2	228.5	249.8	259.0	195.5	n.a.
7	n.a.	134.5	117.7	64.1	148.6	93.1	193.8	110.5	307.6	222.9	153.9	n.a.
8	n.a.	119.6	140.7	129.2	184.4	110.8	108.7	107.4	209.1	244.7	201.5	n.a.
9	n.a.	216.8	84.2	106.0	136.6	122.0	209.7	287.5	215.2	236.4	305.2	n.a.
10	n.a.	147.7	97.6	139.4	126.9	113.1	61.8	255.0	236.3	266.6	243.6	n.a.
Mean	n.a.	167.0	114.9	113.6	128.3	108.8	149.4	198.9	198.0	245.3	234.6	n.a.
11	n.a.	128.1	65.2	142.8	135.6	79.1	111.5	219.8	161.0	295.9	n.a.	n.a.
12	n.a.	191.9	134.1	101.6	94.7	72.7	163.6	263.8	263.3	313.6	n.a.	n.a.
13	n.a.	147.7	176.7	114.3	130.8	169.5	187.2	223.7	194.2	321.8	n.a.	n.a.
14	n.a.	116.5	130.7	117.3	98.1	99.6	199.3	152.6	270.9	238.9	n.a.	n.a.
15	n.a.	85.2	141.5	162.2	123.3	47.0	204.1	240.0	177.0	146.2	n.a.	n.a.
16	n.a.	208.1	170.3	171.7	126.2	168.2	195.9	243.0	133.7	231.1	n.a.	n.a.
17	n.a.	176.3	159.1	154.5	112.7	192.3	169.5	234.1	206.4	211.6	n.a.	n.a.
18	n.a.	76.3	111.4	123.3	99.0	176.6	99.6	214.4	210.2	216.3	n.a.	n.a.
19	n.a.	83.6	104.1	65.0	143.0	169.7	192.2	272.5	226.9	250.3	n.a.	n.a.
20	n.a.	103.7	73.5	41.2	92.4	130.4	220.3	271.7	249.9	129.3	n.a.	n.a.
Mean	n.a.	131.7	126.7	119.4	115.6	130.5	174.3	233.6	209.4	235.5	n.a.	n.a.
21	n.a.	93.7	92.7	72.9	101.8	143.9	218.6	168.3	247.3	213.3	n.a.	n.a.
22	n.a.	183.8	103.0	140.8	100.2	164.8	158.9	231.6	220.1	267.2	n.a.	n.a.
23	n.a.	82.9	104.9	207.1	87.6	164.1	176.1	271.5	205.7	291.5	n.a.	n.a.
24	n.a.	70.9	136.1	216.3	150.9	172.8	264.1	201.6	201.3	236.5	n.a.	n.a.
25	n.a.	72.6	165.1	148.4	128.7	258.6	201.7	117.6	214.5	185.0	n.a.	n.a.
26	n.a.	130.3	202.0	101.2	94.9	224.9	128.8	129.8	267.5	202.3	n.a.	n.a.
27	n.a.	83.9	149.4	176.2	179.5	236.4	92.0	65.7	280.7	280.3	n.a.	n.a.
28	n.a.	151.3	220.1	114.4	n.a.	181.1	187.7	137.3	302.4	291.3	n.a.	n.a.
29	n.a.		95.0	136.2	n.a.	183.3	181.1	227.4	268.4	208.5	n.a.	n.a.
30	n.a.		149.2	145.6	n.a.	189.4	127.5	229.7	282.2	258.2	n.a.	n.a.
31	n.a.		126.4		n.a.		198.8	322.4		243.1		n.a.
Mean	n.a.	108.7	140.4	145.9	120.5	191.9	175.9	191.2	249.0	243.4	n.a.	n.a.
MEAN	n.a.	137.7	127.7	126.3	121.6	143.7	166.9	207.3	218.8	241.4	234.6	n.a.
MIN	n.a.	70.9	65.2	41.2	70.4	47.0	61.8	65.7	104.9	129.3	153.9	n.a.
MAX	n.a.	216.8	220.1	216.3	184.4	258.6	264.1	322.4	307.6	321.8	305.2	n.a.

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	2.3	1.9	1.5	0.9	1.4	0.7	0.4	0.7	0.4	0.7	n.a.
2	n.a.	2.0	1.9	2.2	1.1	1.4	0.5	0.4	0.5	0.5	0.9	n.a.
3	n.a.	4.2	1.6	2.4	1.8	1.5	0.3	0.4	0.8	0.3	0.8	n.a.
4	n.a.	1.5	2.6	2.0	2.3	1.5	0.9	0.3	0.7	0.6	0.9	n.a.
5	n.a.	2.6	3.8	1.2	0.9	1.4	0.5	0.2	0.7	2.0	1.5	n.a.
6	n.a.	2.5	2.7	1.4	1.1	1.5	0.4	0.3	0.3	0.5	1.3	n.a.
7	n.a.	3.1	1.9	1.7	1.5	1.7	0.4	0.6	0.1	0.5	3.0	n.a.
8	n.a.	4.3	4.6	1.4	1.7	1.4	0.4	0.5	0.3	0.9	2.7	n.a.
9	n.a.	1.3	2.6	1.3	1.3	1.3	0.3	0.1	0.4	0.7	1.3	n.a.
10	n.a.	2.6	2.6	1.3	0.5	1.9	0.5	0.1	0.5	1.0	2.1	n.a.
Mean	n.a.	2.6	2.6	1.6	1.3	1.5	0.5	0.3	0.5	0.7	1.5	n.a.
11	n.a.	2.0	3.1	0.9	1.0	1.1	0.5	0.2	0.5	1.1	n.a.	n.a.
12	n.a.	2.0	1.6	1.1	1.6	1.1	0.5	0.2	0.3	0.8	n.a.	n.a.
13	n.a.	3.2	1.8	0.7	1.2	0.6	0.3	0.6	0.3	0.8	n.a.	n.a.
14	n.a.	3.9	4.3	1.1	1.4	0.6	0.2	0.5	0.3	1.4	n.a.	n.a.
15	n.a.	4.4	5.7	1.8	1.3	0.7	0.4	0.3	0.5	1.8	n.a.	n.a.
16	n.a.	0.8	2.5	1.1	0.8	0.9	0.7	0.2	0.5	1.1	n.a.	n.a.
17	n.a.	1.5	1.5	1.4	1.3	0.3	0.4	0.2	0.5	1.5	n.a.	n.a.
18	n.a.	2.7	2.6	1.8	1.6	0.9	0.7	0.3	0.3	1.0	n.a.	n.a.
19	n.a.	2.0	3.7	2.1	0.8	1.2	0.3	0.1	0.6	0.9	n.a.	n.a.
20	n.a.	2.5	4.1	2.7	1.1	1.3	0.3	0.3	0.8	1.4	n.a.	n.a.
Mean	n.a.	2.5	3.1	1.5	1.2	0.9	0.4	0.3	0.5	1.2	n.a.	n.a.
21	n.a.	1.7	2.8	3.1	1.3	0.8	0.4	0.5	0.8	1.3	n.a.	n.a.
22	n.a.	1.3	3.4	2.2	1.6	0.5	0.6	0.3	0.8	1.2	n.a.	n.a.
23	n.a.	1.5	3.5	0.3	1.5	0.3	0.6	0.1	0.5	0.9	n.a.	n.a.
24	n.a.	2.4	1.6	0.4	1.4	0.4	0.1	0.4	0.5	1.1	n.a.	n.a.
25	n.a.	1.9	0.9	1.7	1.4	0.2	0.4	2.7	0.6	1.8	n.a.	n.a.
26	n.a.	1.3	0.8	0.9	1.0	0.1	0.4	1.7	0.3	1.4	n.a.	n.a.
27	n.a.	2.5	0.5	0.9	1.3	0.3	0.7	0.9	0.3	1.2	n.a.	n.a.
28	n.a.	1.6	0.5	1.2	n.a.	0.4	0.6	0.5	0.4	1.2	n.a.	n.a.
29	n.a.		1.1	0.8	n.a.	0.7	0.5	0.2	0.5	1.3	n.a.	n.a.
30	n.a.		1.4	0.6	n.a.	0.7	0.6	0.3	0.5	1.0	n.a.	n.a.
31	n.a.		1.3		n.a.		0.2	0.1		1.4		n.a.
Mean	n.a.	1.8	1.6	1.2	1.4	0.4	0.5	0.7	0.5	1.3	n.a.	n.a.
MEAN	n.a.	2.3	2.4	1.4	1.3	0.9	0.5	0.4	0.5	1.1	1.5	n.a.
MIN	n.a.	0.8	0.5	0.3	0.5	0.1	0.1	0.1	0.1	0.3	0.7	n.a.
MAX	n.a.	4.4	5.7	3.1	2.3	1.9	0.9	2.7	0.8	2.0	3.0	n.a.

AWS South Col

Technical sheet		
Coordinates: Latitude: 27° 58' N Longitude: 86° 56' E Elevation: 8,000 m a.s.l	Installation Time: May 2011	Data Availability: From June to September 2011

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger			10 min.	2 m	LSI-Lastem E- Log
Air Temperature	-30 - +70 °C	±0.1°C (0°C)	10 min.	2 m	LSI-Lastem DMA572
Relative Humidity	0 - 100 %	1.5% (5÷95%, 23°C)	10 min.	2 m	LSI-Lastem DMA572
Atmospheric Pressure	50 to 1100 hPa	±0.30 hPa (+20°C)	10 min		Vaisala PTB330
Wind Speed and Direction			10 min.	5 m	Vaisala WA15D7B
Global Solar Radiation	0-2000		10 min.	2 m	Kipp&Zonen CM6B pyranometer
UVA Radiation	0 to 70 W/m2	±12% VL/reading ± 1W/m2	10 min		LSI-Lastem DPA 007



AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1						-18.0	-10.8	-9.8	-15.6			
2						-17.1	-10.9	-10.5	-16.0			
3						-17.3	-11.8	-11.5	-16.7			
4						-18.5	-12.1	-11.8	-16.3			
5						-18.7	-11.5	-11.0	-16.0			
6						-16.2	-11.5	-10.4	-15.5			
7						-17.1	-11.6	-11.6	-15.2			
8						-17.7	-12.8	-12.9	-15.0			
9						-17.1	-12.0	-12.9	-15.6			
10						-16.7	-12.4	-11.1	-14.7			
Mean						-17.4	-11.7	-11.4	-15.7			
11						-16.0	-11.5	-11.2	-14.7			
12						-14.9	-11.5	-13.0	-15.1			
13						-13.9	-11.5	-13.2	-16.8			
14						-13.5	-11.2	-12.5	-16.0			
15						-13.4	-11.1	-12.2	-15.1			
16						-13.3	-10.3	-12.1	-14.5			
17						-12.2	-12.0	-11.5	-15.2			
18						-12.1	-11.4	-12.1	n.a.			
19						-12.0	-10.5	-11.9	n.a.			
20						-12.6	-10.7	-14.0	n.a.			
Mean						-13.4	-11.2	-12.4	-15.3			
21						-12.0	-10.9	-13.6	n.a.			
22						-11.9	-10.9	-12.4	n.a.			
23						-11.5	-11.0	-11.9	n.a.			
24						-11.5	-11.0	-13.6	n.a.			
25						-11.0	-12.4	-18.0	n.a.			
26						-11.2	-11.6	-17.7	n.a.			
27						-12.1	-10.5	-17.0	n.a.			
28						-11.7	-8.6	-15.1	n.a.			
29						-12.1	-9.7	-13.4	n.a.			
30						-11.8	-11.0	-14.2	n.a.			
31							-10.3	-14.4				
Mean						-11.7	-10.7	-14.7	n.a.			
MEAN						-14.2	-11.2	-12.9	-15.5			
MIN						-18.7	-12.8	-18.0	-16.8			
MAX						-11.0	-8.6	-9.8	-14.5			

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1						67.4	86.5	82.3	68.1			
2						61.6	80.9	87.8	71.1			
3						52.3	85.4	81.6	73.7			
4						30.5	84.9	86.7	67.7			
5						21.2	83.7	88.1	58.7			
6						34.3	78.7	87.8	71.5			
7						48.3	77.8	87.2	81.2			
8						28.4	38.0	84.5	70.9			
9						45.2	54.3	81.6	83.2			
10						39.6	61.1	85.0	77.4			
Mean						42.9	73.1	85.3	72.4			
11						60.6	59.9	84.2	80.0			
12						37.7	74.2	78.1	82.3			
13						59.7	86.1	68.9	78.6			
14						44.4	85.5	80.3	74.0			
15						53.5	83.4	72.1	56.5			
16						67.4	77.5	66.2	73.9			
17						83.1	74.0	83.0	76.7			
18						86.3	63.8	82.3	n.a.			
19						79.1	86.3	86.0	n.a.			
20						75.8	88.1	49.4	n.a.			
Mean						64.8	77.9	75.1	74.6			
21						55.6	86.5	42.4	n.a.			
22						72.7	70.8	82.2	n.a.			
23						84.2	87.6	88.1	n.a.			
24						84.7	88.9	85.5	n.a.			
25						88.3	84.6	67.3	n.a.			
26						88.3	81.4	76.0	n.a.			
27						75.2	86.3	61.7	n.a.			
28						79.5	85.4	66.0	n.a.			
29						77.3	79.5	73.2	n.a.			
30						83.5	81.2	59.7	n.a.			
31							85.5	65.8				
Mean						78.9	83.4	69.8	n.a.			
MEAN						62.2	78.3	76.5	73.3			
MIN						21.2	38.0	42.4	56.5			
MAX						88.3	88.9	88.1	83.2			

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1						247.7	237.7	246.6	n.a.			
2						250.7	231.4	239.2	69.5			
3						251.2	97.0	231.9	59.3			
4						254.7	67.1	230.8	139.5			
5						245.2	141.0	118.1	108.3			
6						245.2	109.1	67.5	160.9			
7						256.2	196.9	108.8	n.a.			
8						253.3	209.1	135.7	75.7			
9						257.3	171.7	168.8	73.9			
10						245.4	215.7	247.7	162.3			
Mean						250.7	167.7	179.5	106.2			
11						249.0	147.6	243.2	216.6			
12						245.6	190.9	158.0	202.1			
13						251.5	221.1	87.4	134.2			
14						236.4	226.0	237.6	190.5			
15						260.4	212.8	222.2	210.5			
16						211.6	247.7	110.0	198.1			
17						252.3	211.7	172.1	153.4			
18						141.4	176.0	130.5	n.a.			
19						134.7	148.3	136.2	n.a.			
20						267.4	256.8	77.3	n.a.			
Mean						225.0	203.9	157.5	186.5			
21						232.6	64.7	78.8	n.a.			
22						205.4	64.6	65.2	n.a.			
23						189.3	174.3	72.5	n.a.			
24						189.7	62.6	93.9	n.a.			
25						203.5	111.4	49.1	n.a.			
26						131.5	130.8	50.8	n.a.			
27						163.2	245.1	60.4	n.a.			
28						201.9	231.1	60.7	n.a.			
29						253.1	205.3	81.1	n.a.			
30						256.0	177.6	74.1	n.a.			
31							170.1	64.0				
Mean						202.6	148.9	68.2	n.a.			
MEAN						226.1	172.7	132.9	143.7			
MIN						131.5	62.6	49.1	59.3			
MAX						267.4	256.8	247.7	216.6			

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1						7.9	0.1	1.7	n.a.			
2						11.3	2.1	1.7	8.0			
3						14.2	2.1	3.1	10.6			
4						23.0	4.4	2.1	2.0			
5						11.7	1.7	2.7	2.5			
6						9.4	2.2	3.8	2.3			
7						16.6	2.3	4.0	n.a.			
8						13.9	2.1	2.1	4.9			
9						16.9	1.7	1.9	3.2			
10						15.1	2.3	1.8	1.8			
Mean						14.0	2.1	2.5	4.4			
11						13.1	1.7	1.9	2.1			
12						7.0	2.1	2.7	3.1			
13						4.2	2.5	3.4	2.0			
14						2.8	3.5	3.0	1.3			
15						6.2	2.9	1.7	3.3			
16						2.5	3.0	3.1	2.7			
17						2.1	2.4	1.4	0.7			
18						4.1	1.8	1.8	n.a.			
19						6.1	3.3	2.8	n.a.			
20						7.3	2.4	4.5	n.a.			
Mean						5.5	2.6	2.6	2.2			
21						2.6	2.6	3.4	n.a.			
22						2.3	4.7	5.5	n.a.			
23						1.8	1.7	4.7	n.a.			
24						2.7	4.8	6.7	n.a.			
25						2.4	3.1	12.5	n.a.			
26						3.4	2.0	15.4	n.a.			
27						3.3	3.4	12.7	n.a.			
28						2.2	1.3	8.6	n.a.			
29						3.9	1.9	5.3	n.a.			
30						4.9	3.4	7.5	n.a.			
31							2.2	9.2				
Mean						3.0	2.8	8.3	n.a.			
MEAN						7.5	2.5	4.6	3.4			
MIN						1.8	0.1	1.4	0.7			
MAX						23.0	4.8	15.4	10.6			

UVA RADIATION (W/m²)

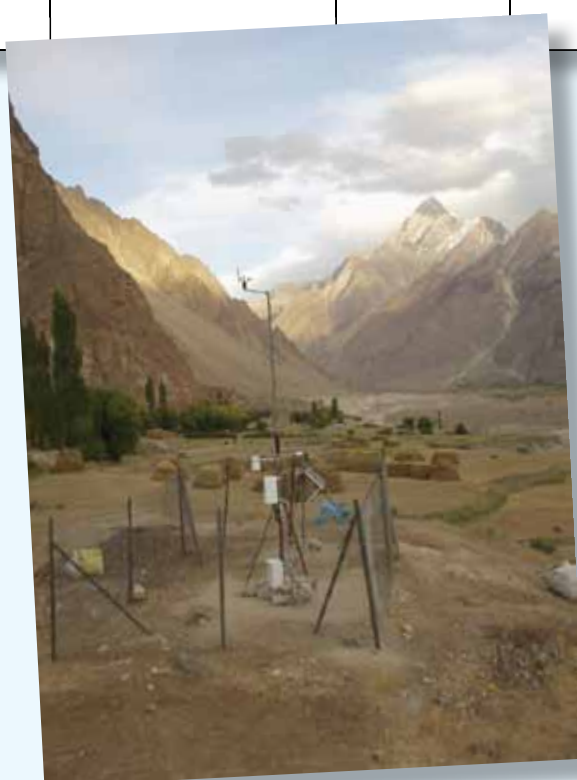
	J	F	M	A	M	J	J	A	S	O	N	D
1						20.2	16.1	19.4	n.a.			
2						13.2	20.4	17.0	n.a.			
3						15.5	15.1	19.8	n.a.			
4						16.7	19.6	16.0	n.a.			
5						19.7	17.2	14.6	n.a.			
6						19.6	18.1	15.8	n.a.			
7						18.1	16.5	15.2	n.a.			
8						15.8	20.3	18.0	n.a.			
9						16.6	18.5	16.8	n.a.			
10						16.8	20.1	19.1	n.a.			
Mean						17.2	18.2	17.2	n.a.			
11						11.5	17.8	15.7	n.a.			
12						19.0	19.7	14.4	n.a.			
13						14.6	17.7	18.2	n.a.			
14						19.7	14.7	17.8	n.a.			
15						18.6	18.4	17.5	n.a.			
16						17.6	20.6	16.4	n.a.			
17						15.1	19.3	12.6	n.a.			
18						13.9	19.1	13.9	n.a.			
19						14.6	15.4	12.5	n.a.			
20						19.0	12.5	18.4	n.a.			
Mean						16.4	17.5	15.7	n.a.			
21						19.5	18.3	17.4	n.a.			
22						19.3	15.2	13.2	n.a.			
23						16.2	13.9	13.6	n.a.			
24						13.6	13.9	15.6	n.a.			
25						14.1	15.4	18.3	n.a.			
26						19.6	16.8	20.4	n.a.			
27						20.0	18.1	28.0	n.a.			
28						18.0	20.2	29.8	n.a.			
29						20.1	16.7	25.9	n.a.			
30						17.9	17.6	32.0	n.a.			
31						n.a.	16.9	30.6				
Mean						17.8	16.6	22.3	n.a.			
MEAN						17.7	17.4	18.5	n.a.			
MIN						11.5	12.5	12.5	n.a.			
MAX						20.2	20.6	32.0	n.a.			

3.1 PAKISTAN

AWS Askole

Technical sheet		
Coordinates: Latitude: 35° 40' 50" N Longitude: 75° 48' 55" E Elevation: 3.000 m a.s.l	Installation Time: October 2005	Data Availability: From October 9, 2005

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				2 m	LSI-Lastem Babuc ABC
Air Temperature	-30 - +70 °C	±0.1°C (0°C)	60 min.	2 m	LSI-Lastem DMA572
Relative Humidity	0 - 100 %	1,5% (5÷95%, 23°C)	60 min.	2 m	LSI-Lastem DMA572
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	180 mm/hr	0-1 mm/min: 1% 1-3 mm/min: 2% 3-5 mm/min: 4% 5-10 mm/min: 8%	60 min.	1.5 m	LSI-Lastem DQA035
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
Global Solar Radiation	0-2000		60 min.	2 m	Kipp & Zonen CMB6 pyranometer



AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-6.5	-6.1	-3.6	2.7	11.1	9.7	15.8	16.6	13.6	11.8	3.3	n.a.
2	-7.1	-4.0	-2.9	2.2	13.7	7.9	11.7	18.5	13.6	11.8	2.6	n.a.
3	-6.7	-2.4	-2.3	2.3	14.4	10.2	12.4	20.5	14.9	12.1	1.9	n.a.
4	-5.1	-0.4	-3.0	0.0	14.5	13.6	13.6	21.1	13.9	12.8	2.8	n.a.
5	-5.5	0.8	-2.5	-0.3	14.1	14.0	17.7	22.1	14.8	9.8	2.2	n.a.
6	-4.5	-2.0	-1.6	1.0	11.0	11.7	18.3	22.7	17.2	8.9	1.2	n.a.
7	-4.0	-2.0	-1.0	3.0	10.6	14.6	19.2	17.0	18.2	6.3	1.0	n.a.
8	-4.0	-5.6	-0.7	3.1	12.2	16.7	13.1	18.0	18.3	5.7	1.4	n.a.
9	-5.1	-7.2	-1.3	4.0	12.5	16.3	10.8	19.5	18.6	6.7	0.9	n.a.
10	-7.4	-6.3	-1.7	4.6	12.4	17.4	11.4	19.4	15.5	6.7	3.6	n.a.
Mean	-5.6	-3.5	-2.1	2.3	12.7	13.2	14.4	19.5	15.9	9.3	2.1	n.a.
11	-6.9	-5.5	-1.9	5.2	11.2	17.9	14.4	16.3	13.7	9.1	2.8	n.a.
12	-6.3	-4.5	-1.2	4.3	9.7	16.6	17.8	11.7	16.1	10.4	1.8	n.a.
13	-4.4	-2.9	0.1	6.5	10.5	13.6	19.9	13.3	17.3	10.9	1.5	n.a.
14	-4.5	-2.0	1.7	7.4	13.0	15.5	20.5	13.4	14.2	10.1	1.8	n.a.
15	-5.7	-4.4	3.1	8.1	15.3	17.2	15.5	13.8	10.7	8.5	1.6	n.a.
16	-7.9	-6.8	4.7	7.6	17.2	18.5	12.1	13.2	9.3	7.5	1.1	n.a.
17	-8.5	-5.7	2.0	4.9	17.0	17.4	15.6	14.3	10.8	7.2	0.6	n.a.
18	-8.5	-7.3	3.9	5.3	16.8	15.8	18.5	14.1	11.0	5.0	2.0	n.a.
19	-9.5	-5.9	0.1	5.1	14.7	16.1	17.0	16.2	10.3	5.1	2.0	n.a.
20	-9.3	-4.0	-0.8	4.4	10.1	16.6	17.5	16.6	10.7	4.8	3.9	n.a.
Mean	-7.2	-4.9	1.2	5.9	13.6	16.5	16.9	14.3	12.4	7.9	1.9	n.a.
21	-7.9	-5.6	-1.6	7.1	5.5	18.2	18.8	18.4	10.8	4.9	2.0	n.a.
22	-7.4	-4.8	0.2	10.2	8.9	19.2	19.1	19.6	11.1	5.4	1.7	n.a.
23	-7.3	-4.5	2.8	11.3	12.1	18.2	20.3	20.4	10.8	4.5	2.4	n.a.
24	-7.0	-3.5	3.5	11.6	14.2	20.2	20.2	20.7	10.6	4.4	2.3	n.a.
25	-8.1	-3.9	4.0	12.5	13.9	20.9	20.5	19.4	11.8	3.2	4.4	n.a.
26	-7.9	-4.2	4.3	13.1	11.3	21.9	19.6	17.9	9.1	4.0	3.5	n.a.
27	-7.9	-4.9	5.7	13.4	11.1	18.2	16.9	16.0	10.4	4.5	3.5	n.a.
28	-7.8	-5.7	2.4	13.6	14.0	16.1	15.3	14.2	11.6	5.7	n.a.	n.a.
29	-6.3		3.9	13.1	14.4	16.8	14.1	16.3	12.0	6.6	n.a.	n.a.
30	-4.8		3.5	9.5	14.6	14.5	14.6	15.8	12.9	6.0	n.a.	n.a.
31	-6.0		3.7		15.2		15.7	16.9		4.9		n.a.
Mean	-7.1	-4.6	2.9	11.5	12.3	18.4	17.7	17.8	11.1	4.9	2.8	n.a.
MEAN	-6.6	-4.3	0.8	6.6	12.8	16.1	16.4	17.2	13.1	7.3	2.2	n.a.
MIN	-9.5	-7.3	-3.6	-0.3	5.5	7.9	10.8	11.7	9.1	3.2	0.6	n.a.
MAX	-4.0	0.8	5.7	13.6	17.2	21.9	20.5	22.7	18.6	12.8	4.4	n.a.

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	52.8	47.8	76.0	46.2	41.4	53.2	42.8	41.0	62.8	42.1	71.1	n.a.
2	39.8	45.5	71.7	51.8	22.4	67.3	59.9	25.7	64.4	25.7	71.5	n.a.
3	39.9	79.7	76.1	44.5	18.7	52.2	56.2	15.6	54.8	22.3	78.0	n.a.
4	48.1	81.7	81.3	55.7	20.5	30.5	59.2	16.8	61.5	24.1	67.6	n.a.
5	41.7	51.0	54.3	57.1	25.9	32.1	40.5	18.1	60.2	40.6	50.8	n.a.
6	39.1	83.9	50.8	27.0	45.8	55.2	28.4	19.7	38.8	57.1	31.0	n.a.
7	74.1	83.3	55.8	24.7	43.0	33.2	27.7	56.0	30.0	76.0	24.9	n.a.
8	72.6	52.9	59.1	22.0	30.1	23.6	75.6	55.4	31.4	74.8	52.3	n.a.
9	54.5	61.8	35.6	29.7	31.5	24.0	74.1	36.3	42.1	51.9	91.1	n.a.
10	30.7	58.3	32.3	59.5	38.8	24.1	62.4	34.2	55.1	58.5	82.9	n.a.
Mean	49.3	64.6	59.3	41.8	31.8	39.5	52.7	31.9	50.1	47.3	62.1	n.a.
11	70.3	68.9	35.6	65.6	36.8	24.2	56.5	54.9	54.3	36.5	79.2	n.a.
12	78.0	91.0	37.9	69.9	52.0	36.8	33.6	77.0	39.6	30.1	47.6	n.a.
13	61.5	86.6	40.3	39.1	46.5	53.3	22.1	66.0	31.8	26.0	41.4	n.a.
14	61.7	88.3	41.0	27.6	24.5	31.3	23.9	60.6	59.1	26.4	44.8	n.a.
15	80.2	65.8	39.3	25.1	19.6	27.4	52.6	59.8	88.4	30.7	59.8	n.a.
16	48.0	44.1	48.3	36.4	17.9	24.1	74.4	57.0	93.6	29.4	54.1	n.a.
17	68.5	56.1	77.3	80.7	20.3	27.4	53.1	49.0	58.2	30.5	42.3	n.a.
18	73.9	44.6	67.4	73.2	24.7	34.1	35.9	50.9	56.7	45.9	55.6	n.a.
19	38.6	72.4	90.9	51.4	37.5	30.0	45.8	46.1	69.8	42.2	62.2	n.a.
20	50.2	66.3	71.7	63.7	62.9	27.9	38.5	42.9	57.8	56.0	51.3	n.a.
Mean	63.1	68.4	55.0	53.3	34.3	31.7	43.6	56.4	60.9	35.4	53.8	n.a.
21	79.3	45.6	44.3	39.0	83.8	23.9	32.5	33.3	41.4	60.5	36.3	n.a.
22	61.0	63.6	43.7	20.3	62.3	22.4	36.6	26.9	42.8	53.6	32.3	n.a.
23	43.4	85.0	46.3	17.5	40.0	32.8	35.0	23.6	43.2	74.7	35.1	n.a.
24	44.5	76.7	38.6	20.7	35.2	31.2	35.2	22.7	44.1	45.4	37.4	n.a.
25	36.8	65.1	35.3	22.5	40.3	21.7	35.3	34.3	33.7	30.4	25.3	n.a.
26	30.6	56.9	36.7	22.2	58.4	23.7	36.3	45.7	50.5	31.2	24.4	n.a.
27	29.1	44.7	38.6	22.4	70.3	45.0	53.3	55.8	34.8	27.8	17.4	n.a.
28	48.7	67.0	82.5	20.8	40.5	52.4	59.3	63.1	27.1	26.4	n.a.	n.a.
29	83.5		61.8	31.9	32.3	45.3	68.9	47.9	25.7	38.5	n.a.	n.a.
30	81.1		48.1	58.6	37.6	45.2	59.5	42.9	25.4	47.1	n.a.	n.a.
31	56.8		40.3		28.0		45.4	40.9		59.8		n.a.
Mean	54.1	63.1	46.9	27.6	48.1	34.4	45.2	39.7	36.9	45.0	29.7	n.a.
MEAN	55.5	65.5	53.5	40.9	38.4	35.2	47.1	42.6	49.3	42.7	50.7	n.a.
MIN	29.1	44.1	32.3	17.5	17.9	21.7	22.1	15.6	25.4	22.3	17.4	n.a.
MAX	83.5	91.0	90.9	80.7	83.8	67.3	75.6	77.0	93.6	76.0	91.1	n.a.

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	705.6	713.3	702.9	704.9	709.3	701.8	700.8	703.6	706.9	708.0	707.5	n.a.
2	708.7	714.2	702.2	704.7	707.6	705.4	702.9	704.0	706.6	708.6	706.5	n.a.
3	709.8	709.3	700.5	704.0	708.4	708.8	704.0	705.0	706.4	709.3	707.2	n.a.
4	705.4	705.1	698.8	702.9	707.4	707.8	706.6	703.3	708.0	707.5	706.9	n.a.
5	704.7	701.6	703.6	705.4	706.5	707.2	707.5	701.6	707.8	709.8	709.4	n.a.
6	706.9	698.8	708.8	707.3	705.3	709.0	706.5	700.6	705.3	711.6	711.5	n.a.
7	704.3	693.6	707.9	708.5	705.3	706.9	704.1	703.7	703.6	710.4	714.0	n.a.
8	700.9	703.1	706.6	710.5	704.6	705.7	706.7	704.0	702.9	711.1	712.0	n.a.
9	703.9	703.6	706.8	710.0	705.0	703.2	706.3	703.2	704.0	711.7	710.3	n.a.
10	707.9	707.5	710.5	709.8	706.3	702.0	705.8	702.2	707.3	713.7	710.4	n.a.
Mean	705.8	705.0	704.9	706.8	706.6	705.8	705.1	703.1	705.9	710.2	709.6	n.a.
11	704.7	709.4	710.7	708.0	706.5	701.8	705.5	703.4	707.1	714.3	709.5	n.a.
12	703.3	706.1	711.1	707.9	706.9	703.4	704.7	703.6	707.0	712.9	709.5	n.a.
13	702.1	697.9	713.5	709.8	708.3	705.9	704.6	703.7	706.3	708.9	709.7	n.a.
14	699.0	697.4	715.3	709.2	709.5	705.3	701.5	707.3	705.5	706.5	709.7	n.a.
15	696.9	701.1	716.3	707.7	711.6	704.0	701.3	705.5	704.1	708.2	708.0	n.a.
16	703.8	702.0	711.0	708.2	713.1	701.8	703.4	703.7	703.2	708.3	708.3	n.a.
17	701.4	703.6	705.9	706.1	711.6	700.0	702.8	704.0	705.5	709.1	710.3	n.a.
18	701.0	704.9	702.8	705.1	708.6	701.5	702.1	705.2	704.5	711.2	710.7	n.a.
19	706.3	703.3	697.0	705.5	706.5	701.4	701.6	706.0	706.3	709.2	709.9	n.a.
20	707.9	703.5	700.3	706.3	706.2	702.9	700.2	708.1	708.2	707.0	713.4	n.a.
Mean	702.6	702.9	708.4	707.4	708.9	702.8	702.8	705.1	705.8	709.6	709.9	n.a.
21	705.7	711.0	707.8	707.9	705.1	704.7	700.7	708.5	707.5	708.5	716.7	n.a.
22	705.8	709.0	708.5	709.8	705.5	703.4	701.2	707.6	707.9	708.5	715.9	n.a.
23	707.3	704.2	710.0	711.2	707.8	702.7	701.8	706.4	707.7	706.8	713.7	n.a.
24	706.6	701.0	710.6	711.2	707.9	703.4	703.4	704.8	707.7	709.3	711.7	n.a.
25	706.8	698.6	711.2	711.2	708.2	701.6	705.5	706.1	707.4	709.7	710.5	n.a.
26	709.2	697.8	710.7	711.1	708.4	700.0	706.1	707.0	708.7	711.9	707.8	n.a.
27	711.9	704.3	709.6	709.9	707.4	701.5	705.2	705.7	708.0	711.5	706.8	n.a.
28	709.5	706.8	705.5	707.3	707.5	700.9	705.0	705.8	707.7	710.2	n.a.	n.a.
29	706.4		704.8	706.7	707.3	700.4	705.1	706.5	707.2	708.3	n.a.	n.a.
30	705.3		705.6	708.8	706.4	700.8	704.9	707.9	707.6	706.9	n.a.	n.a.
31	710.4		705.8		703.1		703.7	706.6		707.2		n.a.
Mean	707.7	704.1	708.2	709.5	706.8	701.9	703.9	706.6	707.7	709.0	711.9	n.a.
MEAN	705.5	704.0	707.2	707.9	707.4	703.5	703.9	705.0	706.5	709.6	710.3	n.a.
MIN	696.9	693.6	697.0	702.9	703.1	700.0	700.2	700.6	702.9	706.5	706.5	n.a.
MAX	711.9	714.2	716.3	711.2	713.1	709.0	707.5	708.5	708.7	714.3	716.7	n.a.

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	132.2	107.2	302.2	215.7	203.2	142.6	172.2	126.3	179.8	183.8	196.2	n.a.
2	126.0	146.2	287.5	250.6	163.4	157.4	154.6	112.8	186.5	94.6	283.9	n.a.
3	158.1	289.5	304.2	254.3	116.6	172.6	117.9	115.5	148.9	101.0	265.7	n.a.
4	171.5	302.8	296.0	246.7	149.3	136.5	177.5	87.9	109.4	119.2	221.0	n.a.
5	174.2	232.6	290.2	232.6	177.0	135.8	143.8	91.9	92.9	184.0	192.2	n.a.
6	188.5	292.9	290.9	176.4	268.3	137.0	125.1	93.2	108.6	223.1	105.9	n.a.
7	306.0	303.4	302.0	180.9	252.1	119.1	170.1	212.1	123.9	205.7	133.5	n.a.
8	292.6	234.2	247.2	156.0	176.5	143.1	290.4	160.9	135.2	257.1	198.7	n.a.
9	207.5	244.7	150.3	179.1	183.2	121.5	130.5	169.1	193.0	166.5	301.2	n.a.
10	128.9	204.8	156.8	276.9	274.7	116.4	134.8	136.0	114.1	168.9	260.6	n.a.
Mean	188.6	235.8	262.7	216.9	196.4	138.2	161.7	130.6	139.2	170.4	215.9	n.a.
11	185.1	179.2	164.7	238.2	153.8	148.5	152.4	134.5	114.4	134.3	177.5	n.a.
12	245.7	207.2	162.6	231.6	240.2	280.8	107.0	157.0	109.3	114.2	106.0	n.a.
13	299.1	307.7	157.4	172.8	174.5	185.2	108.6	186.1	125.4	192.3	114.0	n.a.
14	253.6	302.0	174.0	147.5	146.2	119.8	118.5	149.2	133.0	170.3	144.3	n.a.
15	299.4	210.5	168.2	160.9	127.9	133.0	164.1	123.0	176.7	127.1	284.9	n.a.
16	146.3	173.8	188.5	186.4	118.8	154.9	131.1	140.6	285.7	117.5	224.9	n.a.
17	224.1	171.2	243.7	258.0	152.7	115.3	126.8	117.1	185.5	108.1	110.5	n.a.
18	174.7	153.7	207.5	248.6	123.6	139.7	153.2	129.0	141.0	104.7	193.7	n.a.
19	118.8	200.6	214.4	185.6	144.6	125.5	181.9	140.9	262.5	171.9	218.3	n.a.
20	170.6	292.7	188.5	174.6	230.5	112.1	116.9	124.2	226.3	200.9	187.4	n.a.
Mean	211.7	219.9	187.0	200.4	161.3	151.5	136.1	140.2	176.0	144.1	176.2	n.a.
21	207.4	160.0	127.6	152.9	166.4	152.8	100.1	107.8	151.7	298.6	107.3	n.a.
22	171.8	202.9	174.5	173.7	142.7	143.1	122.0	94.3	147.2	168.8	108.5	n.a.
23	170.0	221.2	149.4	143.1	89.9	138.7	137.6	98.2	146.5	285.5	115.6	n.a.
24	162.5	297.6	128.3	158.2	151.0	114.0	135.4	120.7	109.3	220.5	180.2	n.a.
25	123.0	285.1	151.5	140.9	129.5	95.9	130.9	134.7	141.0	154.6	275.5	n.a.
26	140.0	296.1	162.4	157.8	174.0	169.9	115.3	116.8	122.1	120.4	282.0	n.a.
27	133.9	266.0	150.0	145.8	206.7	179.2	166.8	102.8	103.3	124.5	311.5	n.a.
28	160.7	250.8	269.1	166.3	148.4	121.0	190.1	195.4	107.0	190.5	n.a.	n.a.
29	160.4		226.5	279.9	148.2	126.9	158.7	164.9	141.5	264.1	n.a.	n.a.
30	181.2		239.3	231.2	221.4	131.6	132.8	152.3	167.8	243.6	n.a.	n.a.
31	144.8		186.2		129.2		155.5	144.8		208.4		n.a.
Mean	159.6	247.5	178.6	175.0	155.2	137.3	140.5	130.2	133.7	207.2	197.2	n.a.
MEAN	185.8	233.5	208.4	197.4	170.5	142.3	145.9	133.5	149.7	175.0	196.3	n.a.
MIN	118.8	107.2	127.6	140.9	89.9	95.9	100.1	87.9	92.9	94.6	105.9	n.a.
MAX	306.0	307.7	304.2	279.9	274.7	280.8	290.4	212.1	285.7	298.6	311.5	n.a.

WIND SPEED (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	1.4	1.2	3.5	1.6	2.0	2.2	1.6	1.9	0.8	2.7	1.8	n.a.
2	1.3	1.4	2.6	2.2	2.0	2.1	1.4	2.1	0.9	1.6	2.4	n.a.
3	1.6	1.6	3.7	2.6	1.8	1.9	2.0	2.1	1.4	1.5	1.8	n.a.
4	2.2	4.0	3.1	1.9	1.9	1.6	1.8	1.6	1.4	1.7	2.2	n.a.
5	1.7	2.9	3.2	2.2	2.3	2.1	1.3	1.3	1.5	1.4	1.6	n.a.
6	1.6	4.3	2.8	2.1	3.0	2.1	1.7	1.3	1.5	2.0	1.6	n.a.
7	2.8	2.1	3.2	2.0	2.3	1.7	2.0	1.8	1.8	1.5	1.5	n.a.
8	2.2	1.7	1.9	2.0	1.4	1.9	2.1	1.4	1.7	2.8	1.4	n.a.
9	1.4	2.1	1.4	2.4	2.2	1.5	1.0	1.6	1.2	2.1	2.4	n.a.
10	1.3	2.1	2.1	2.9	2.7	1.4	1.6	1.5	1.4	1.4	1.9	n.a.
Mean	1.8	2.3	2.8	2.2	2.2	1.9	1.7	1.7	1.4	1.9	1.9	n.a.
11	1.8	1.6	2.3	1.9	2.1	1.6	1.9	2.0	1.6	1.6	1.6	n.a.
12	2.5	0.5	2.1	2.1	2.5	2.6	1.4	1.1	1.6	1.4	1.8	n.a.
13	2.1	7.1	2.2	2.0	1.6	2.3	1.7	2.1	1.6	1.9	1.2	n.a.
14	2.4	2.2	2.3	1.8	1.8	1.5	1.4	1.3	1.6	1.7	1.3	n.a.
15	2.2	2.0	2.3	2.1	1.8	1.5	2.4	1.1	1.6	1.6	2.2	n.a.
16	1.5	1.6	2.4	2.2	2.0	1.7	1.0	1.1	1.6	1.6	1.4	n.a.
17	1.2	1.7	1.1	2.1	2.0	1.8	1.3	1.3	1.8	1.5	1.3	n.a.
18	1.6	1.8	2.0	1.4	1.7	2.1	1.9	1.8	1.9	1.5	1.6	n.a.
19	1.4	2.4	2.2	1.4	2.0	1.5	1.6	1.3	1.8	1.7	1.9	n.a.
20	1.6	4.0	1.1	1.8	1.3	1.3	1.0	1.1	1.7	2.3	1.6	n.a.
Mean	1.8	2.5	2.0	1.9	1.9	1.8	1.6	1.4	1.7	1.7	1.6	n.a.
21	1.4	1.9	1.7	1.2	1.2	1.7	1.1	1.1	1.8	3.1	1.5	n.a.
22	1.8	1.4	2.5	1.9	1.6	1.9	1.3	1.4	1.4	1.9	1.5	n.a.
23	2.0	2.0	1.4	1.7	1.2	1.9	1.7	1.5	1.6	2.3	1.2	n.a.
24	2.0	3.2	2.0	1.7	1.3	1.9	1.5	1.5	1.4	1.8	1.8	n.a.
25	1.3	2.1	2.1	2.0	1.8	2.0	1.5	2.2	1.8	1.5	2.9	n.a.
26	1.5	2.7	2.2	2.0	2.0	1.9	1.8	1.7	2.1	1.6	2.7	n.a.
27	1.4	2.3	1.8	2.1	2.3	2.5	1.5	1.0	1.4	1.5	4.1	n.a.
28	1.3	2.3	2.6	1.9	1.6	1.9	1.6	1.7	1.6	1.5	n.a.	n.a.
29	0.8		1.7	3.8	1.7	1.6	1.6	2.2	1.5	2.5	n.a.	n.a.
30	1.4		1.8	2.2	2.1	1.7	1.6	1.7	1.6	2.4	n.a.	n.a.
31	1.0		1.4		2.4		1.8	2.4		2.2		n.a.
Mean	1.4	2.2	1.9	2.1	1.7	1.9	1.5	1.7	1.6	2.0	2.2	n.a.
MEAN	1.7	2.4	2.2	2.0	1.9	1.8	1.6	1.6	1.6	1.9	1.9	n.a.
MIN	0.8	0.5	1.1	1.2	1.2	1.3	1.0	1.0	0.8	1.4	1.2	n.a.
MAX	2.8	7.1	3.7	3.8	3.0	2.6	2.4	2.4	2.1	3.1	4.1	n.a.

PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	0.0	0.0	n.a	0.0	0.2	9.2	0.2	n.a	1.0	0.0	0.2	n.a.
2	n.a	0.0	n.a	0.0	0.0	0.4	1.6	0.0	0.2	0.0	0.0	n.a.
3	0.0	n.a	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.4	n.a.
4	0.0	0.0	n.a	0.0	0.0	0.0	1.6	0.0	3.0	0.0	0.0	n.a.
5	0.0	0.2	n.a	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	n.a.
6	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	n.a.
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	4.2	0.0	n.a.
8	0.0	n.a	0.0	0.0	0.0	0.0	0.8	0.2	0.0	0.6	0.0	n.a.
9	0.0	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	1.0	2.0	n.a.
10	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.4	0.2	0.4	n.a.
Total	0.0	0.2	0.0	0.0	0.2	12.8	9.8	2.0	7.0	9.0	3.0	n.a.
11	n.a	0.0	0.0	3.2	0.0	0.0	3.0	4.6	0.0	0.0	3.6	n.a.
12	0.0	n.a	0.0	3.8	0.6	0.2	0.0	6.6	0.0	0.0	0.0	n.a.
13	0.0	n.a	0.0	0.0	0.2	1.4	0.0	3.6	0.0	0.0	0.0	n.a.
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	n.a.
15	0.0	0.2	0.0	0.0	0.0	0.0	3.0	0.8	9.2	0.0	0.0	n.a.
16	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	12.0	0.0	0.0	n.a.
17	0.0	0.0	2.4	7.2	0.0	0.0	5.0	0.0	0.0	0.0	0.0	n.a.
18	n.a	0.0	0.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.
19	n.a	n.a	n.a	0.0	4.0	0.0	0.0	0.0	1.2	0.0	0.0	n.a.
20	0.0	0.0	n.a	0.2	1.0	0.0	0.0	0.0	0.2	0.0	0.0	n.a.
Total	0.0	0.2	3.0	16.2	5.8	1.6	12.0	15.6	27.0	0.0	3.6	n.a.
21	0.0	0.0	0.0	0.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.
22	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	n.a.
23	0.0	n.a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	n.a.
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.
26	0.0	n.a	0.0	0.0	4.8	0.0	0.0	0.2	0.0	0.0	0.0	n.a.
27	0.0	0.0	0.0	0.0	0.2	0.4	4.6	0.6	0.0	0.0	n.a	n.a.
28	0.0	0.0	2.2	0.0	0.0	1.2	2.8	0.0	0.0	0.0	n.a	n.a.
29	n.a		0.8	0.0	0.0	0.0	2.4	0.0	0.0	0.0	n.a	n.a.
30	n.a		0.0	3.2	0.0	0.0	0.6	0.0	0.0	0.0	n.a	n.a.
31	0.0		0.0		0.0		0.0	0.0		0.2		n.a.
Total	0.0	0.0	3.0	3.2	24.2	1.6	10.4	0.8	0.0	1.4	0.0	n.a.
TOTAL	0.0	0.4	6.0	19.4	30.2	16.0	32.2	18.4	34.0	10.4	6.6	n.a.
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.
MAX	0.0	0.2	2.4	7.2	19.0	9.2	5.2	6.6	12.0	4.2	3.6	n.a.

GLOBAL SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	129.5	174.1	137.6	151.5	371.5	130.5	296.8	279.8	88.5	228.8	82.6	n.a.
2	143.7	160.3	93.8	161.7	368.2	277.7	129.5	362.6	78.1	278.1	52.3	n.a.
3	157.8	57.6	120.2	230.2	370.3	315.7	208.6	368.0	158.8	273.9	45.6	n.a.
4	112.6	67.9	96.7	131.3	333.2	380.6	241.3	358.8	204.4	268.3	107.0	n.a.
5	145.2	87.8	147.6	208.5	315.3	294.0	316.4	354.4	213.5	101.2	144.7	n.a.
6	89.9	43.3	163.0	292.4	168.7	324.0	381.3	301.4	331.5	156.2	197.2	n.a.
7	50.9	12.7	107.5	348.8	267.4	334.8	325.0	112.6	316.8	94.2	167.3	n.a.
8	52.7	192.4	256.2	349.0	336.1	390.8	91.6	371.3	209.2	163.9	50.2	n.a.
9	174.1	99.4	289.7	260.0	276.6	322.1	122.9	316.3	188.0	166.5	45.6	n.a.
10	153.3	216.5	294.7	164.3	306.5	379.2	176.0	315.2	180.0	209.1	91.1	n.a.
Mean	121.0	111.2	170.7	229.8	311.4	314.9	228.9	314.0	196.9	194.0	98.4	n.a.
11	70.7	136.7	291.2	172.0	198.2	335.3	334.9	252.2	162.0	251.7	156.2	n.a.
12	139.7	25.5	288.2	235.4	241.4	262.8	373.0	121.5	321.8	251.6	190.0	n.a.
13	89.2	22.3	275.5	359.6	337.0	255.2	377.0	218.8	271.2	250.6	123.5	n.a.
14	51.6	22.0	295.2	355.6	385.9	369.1	349.7	195.7	169.8	163.2	116.9	n.a.
15	62.6	142.1	274.8	319.3	385.0	391.2	153.6	181.9	116.1	238.9	70.0	n.a.
16	165.2	175.9	208.3	178.5	380.5	351.0	98.6	128.9	64.0	169.8	110.9	n.a.
17	47.7	204.3	33.1	128.8	376.5	247.5	354.9	282.8	255.6	177.3	152.1	n.a.
18	126.6	185.1	174.8	194.6	320.5	260.1	315.5	176.8	157.1	122.2	119.4	n.a.
19	173.2	87.2	66.5	205.5	260.1	285.0	193.7	224.8	144.8	151.5	58.8	n.a.
20	81.8	114.5	109.6	170.0	211.0	305.5	234.5	181.5	210.6	124.3	150.9	n.a.
Mean	100.8	111.6	201.7	231.9	309.6	306.3	278.5	196.5	187.3	190.1	124.9	n.a.
21	92.0	220.8	324.4	350.5	89.8	387.8	237.7	341.8	231.0	146.7	161.0	n.a.
22	134.1	94.7	316.6	362.5	320.8	361.1	250.3	340.8	236.6	131.7	166.0	n.a.
23	176.8	88.3	300.4	369.0	370.6	210.7	345.2	341.3	227.0	76.0	112.8	n.a.
24	180.5	123.4	308.8	367.1	311.5	375.4	230.3	337.3	212.6	158.2	96.1	n.a.
25	119.2	104.5	317.8	364.5	273.0	380.1	268.4	231.2	224.5	212.9	143.2	n.a.
26	182.6	99.5	267.7	365.9	169.4	323.2	242.9	234.5	133.8	216.6	138.2	n.a.
27	185.4	155.9	300.2	362.4	236.3	235.1	300.5	195.9	280.8	215.5	133.2	n.a.
28	71.5	109.4	78.9	348.3	345.7	258.6	199.2	143.8	278.4	168.8	n.a.	n.a.
29	48.5	n.a.	254.4	269.7	306.3	288.0	190.5	296.5	271.8	122.9	n.a.	n.a.
30	40.8	n.a.	222.2	233.0	296.4	184.8	219.0	169.7	273.0	103.4	n.a.	n.a.
31	78.5	n.a.	203.2	n.a.	348.1	n.a.	238.1	206.9	n.a.	154.3	n.a.	n.a.
Mean	119.1	124.6	263.1	339.3	278.9	300.5	247.5	258.2	237.0	155.2	135.8	n.a.
MEAN	113.8	115.1	213.5	267.0	299.3	307.2	251.5	256.3	207.0	179.0	117.9	n.a.
MIN	40.8	12.7	33.1	128.8	89.8	130.5	91.6	112.6	64.0	76.0	45.6	n.a.
MAX	185.4	220.8	324.4	369.0	385.9	391.2	381.3	371.3	331.5	278.1	197.2	n.a.

AWS Urdukas

Technical sheet		
Coordinates: Latitude: 35° 43' 41" N Longitude: 76° 17' 10" E Elevation: 3.926 m a.s.l	Installation Time: June 2004	Data Availability: From June 17, 2004

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
AWS Data Logger				2 m	LSI-Lastem Babuc ABC
Air Temperature	-30 - +70 °C	±0.001°C	60 min.	2 m	LSI-Lastem DMA570
Relative Humidity	0 - 100 %	±1%	60 min.	2 m	LSI-Lastem DMA570
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	180 mm/hr	0-1 mm/min: 1% 1-3 mm/min: 2% 3-5 mm/min: 4% 5-10 mm/min: 8%	60 min.	1.5 m	LSI-Lastem DQA035
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
CNR1 Data Logger					LSI-Lastem E-Log
Solar Radiations CNR1 sensor: (four components combined sensor+internal temperature with PT100)*	Pyranometer: 0 to 25 mV - Pyrgeometer: ±5 mV	±10% on daily totals - non linearity: < 1%	60 min.	2 m	Kipp & Zonen CM3* pyranometer - Kipp & Zonen CG3 pyrgeometer
Snow level	0 to 8 m	0,1 % (FS)	60 min.	2 m	Sommer USH-8



AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-15.4	-13.7	-9.8	-6.0	3.1	1.6	7.3	8.1	7.5	2.9	-4.4	-5.9
2	-15.4	-11.4	-9.6	-6.1	4.6	0.2	4.9	11.2	6.6	4.0	-4.4	n.a.
3	-14.7	-8.3	-8.4	-6.1	4.9	2.1	4.8	12.5	8.2	4.1	-5.2	n.a.
4	-11.1	-6.0	-9.0	-8.2	5.7	4.8	5.1	13.2	7.1	5.0	-5.0	n.a.
5	-11.7	-7.1	-9.9	-8.3	5.4	5.2	7.8	14.6	7.8	2.6	-6.9	n.a.
6	-11.6	-7.4	-9.4	-8.1	2.4	3.9	10.7	15.5	10.5	0.7	-8.2	n.a.
7	-11.5	-7.3	-8.1	-6.7	2.2	7.5	11.7	9.9	11.0	-0.6	-7.7	n.a.
8	-12.3	-11.2	-8.4	-6.0	3.2	8.2	6.3	10.4	10.7	-1.1	-5.7	n.a.
9	-14.8	-13.3	-9.6	-4.1	4.2	8.9	3.6	11.4	10.1	-1.3	-3.8	n.a.
10	-17.5	-11.8	-9.4	-1.9	3.8	9.9	4.5	12.6	7.9	-0.1	-2.4	n.a.
Mean	-13.6	-9.8	-9.2	-6.2	4.0	5.2	6.7	11.9	8.7	1.6	-5.4	-5.9
11	-14.6	-11.4	-9.0	-2.3	2.9	9.6	6.6	8.7	6.3	1.7	-5.1	n.a.
12	-12.9	-9.4	-8.6	-3.9	1.4	7.0	11.0	5.3	8.8	2.7	-7.9	n.a.
13	-12.1	-6.7	-6.9	-3.4	1.1	4.9	11.9	7.4	10.0	3.8	-7.1	n.a.
14	-11.4	-8.0	-5.0	-1.9	3.9	7.8	12.6	5.3	7.1	2.3	-7.4	n.a.
15	-13.1	-11.4	-3.6	-0.8	6.6	9.2	9.0	5.5	4.1	-0.5	-7.1	n.a.
16	-16.4	-13.4	-1.5	-0.6	8.2	10.8	4.8	4.8	2.4	-1.6	-8.2	n.a.
17	-15.7	-12.9	-3.5	-1.3	8.3	9.9	7.6	7.3	3.6	-1.6	-8.9	n.a.
18	-16.8	-14.9	-3.8	-2.9	8.6	7.8	10.4	5.7	3.6	-3.4	-6.5	n.a.
19	-19.1	-12.2	-6.3	-4.0	5.4	7.9	8.8	7.1	2.8	-3.5	-5.0	n.a.
20	-17.0	-10.9	-9.5	-3.6	1.8	9.6	9.9	9.3	2.8	-3.2	-5.5	n.a.
Mean	-14.9	-11.1	-5.8	-2.5	4.8	8.5	9.3	6.6	5.2	-0.3	-6.9	n.a.
21	-15.1	-12.8	-10.4	-1.2	-0.7	9.8	n.a.	11.4	2.5	-3.4	-7.0	n.a.
22	-15.6	-11.5	-8.6	1.1	1.1	10.9	n.a.	12.5	2.9	-2.3	-6.7	n.a.
23	-15.8	-10.4	-5.3	2.1	4.0	10.8	n.a.	13.3	2.7	-3.0	-5.4	n.a.
24	-15.1	-10.9	-5.7	3.1	5.8	11.1	n.a.	13.6	2.7	-4.5	-3.4	n.a.
25	-16.7	-11.5	-4.9	3.9	6.1	13.6	n.a.	11.5	3.6	-5.4	-2.8	n.a.
26	-17.7	-12.2	-4.1	4.1	4.2	13.9	n.a.	10.1	0.4	-4.8	-2.9	n.a.
27	-17.0	-13.0	-4.0	4.0	4.2	9.8	n.a.	9.4	2.0	-4.0	-2.6	n.a.
28	-15.1	-12.5	-3.4	4.4	6.3	8.4	9.8	7.1	3.9	-3.2	-4.7	n.a.
29	-12.9		-3.7	3.4	5.9	9.0	6.6	9.3	4.0	-1.8	-8.0	n.a.
30	-12.0		-4.7	1.6	5.4	7.4	6.6	9.6	4.2	-2.8	-7.0	n.a.
31	-13.6		-6.1		6.2		7.7	11.1		-3.0		n.a.
Mean	-15.1	-11.9	-5.5	2.7	4.4	10.5	7.7	10.8	2.9	-3.5	-5.1	n.a.
MEAN	-14.6	-10.8	-6.8	-2.0	4.4	8.1	7.9	9.8	5.6	-0.8	-5.8	-5.9
MIN	-19.1	-14.9	-10.4	-8.3	-0.7	0.2	3.6	4.8	0.4	-5.4	-8.9	-5.9
MAX	-11.1	-6.0	-1.5	4.4	8.6	13.9	12.6	15.5	11.0	5.0	-2.4	-5.9

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	52.0	59.1	62.6	56.0	59.0	73.7	65.2	62.8	74.9	55.5	70.4	37.7
2	47.3	52.7	72.2	64.9	34.9	79.3	75.3	31.7	85.3	30.8	69.5	n.a.
3	45.3	83.9	58.5	53.7	31.1	62.2	85.0	19.9	73.2	29.9	79.0	n.a.
4	43.5	75.4	61.8	60.6	32.8	45.1	79.2	23.3	79.7	31.6	74.1	n.a.
5	34.4	53.6	42.5	61.0	38.8	46.7	59.0	24.4	74.9	49.2	69.4	n.a.
6	50.6	70.4	52.6	48.9	69.1	70.8	39.0	25.5	50.1	78.3	55.6	n.a.
7	81.2	71.0	59.2	43.9	64.9	39.3	40.2	63.6	40.7	84.5	39.8	n.a.
8	79.5	40.2	61.3	40.8	50.0	30.0	88.8	63.8	44.8	81.4	60.8	n.a.
9	69.3	68.9	40.2	45.4	44.5	31.0	97.8	50.1	61.3	66.0	91.6	n.a.
10	54.7	47.3	36.5	68.2	60.5	32.7	84.4	42.3	76.2	63.8	69.7	n.a.
Mean	55.8	62.3	54.7	54.3	48.6	51.1	71.4	40.7	66.1	57.1	68.0	37.7
11	75.0	75.0	41.3	74.4	56.0	36.2	74.2	68.7	79.5	45.1	89.6	n.a.
12	63.6	85.7	49.4	82.6	69.2	58.3	39.3	94.7	52.9	35.2	59.4	n.a.
13	54.6	69.6	47.5	53.0	72.6	74.3	35.9	75.1	43.3	29.3	54.2	n.a.
14	55.7	74.5	41.3	46.2	33.5	45.9	38.4	81.6	73.9	29.7	61.8	n.a.
15	85.1	63.4	41.7	41.9	29.3	40.6	65.0	81.3	93.3	46.0	72.3	n.a.
16	66.2	56.6	50.4	54.9	29.2	35.2	96.0	79.4	95.9	47.7	65.1	n.a.
17	71.8	68.9	76.0	88.3	33.3	41.1	69.5	63.1	67.5	47.2	55.5	n.a.
18	78.8	59.6	74.4	84.7	35.9	48.7	52.5	81.4	73.8	70.6	62.1	n.a.
19	63.6	71.1	91.3	70.8	58.0	44.5	65.3	70.9	82.5	61.4	65.7	n.a.
20	62.9	55.2	86.7	70.2	85.3	35.7	58.4	60.9	68.8	70.6	63.9	n.a.
Mean	67.7	68.0	60.0	66.7	50.2	46.1	59.5	75.7	73.1	48.3	65.0	n.a.
21	74.4	50.1	65.6	42.0	96.7	34.2	n.a.	47.5	58.7	78.0	48.8	n.a.
22	51.2	70.7	59.5	28.9	76.3	31.3	n.a.	38.1	57.2	67.5	41.0	n.a.
23	45.4	84.2	50.2	26.0	52.7	43.1	n.a.	31.6	62.7	82.9	39.3	n.a.
24	48.9	73.5	50.1	32.0	45.6	51.1	n.a.	30.7	59.8	55.8	31.8	n.a.
25	45.7	57.4	49.4	37.5	50.1	28.2	n.a.	50.5	46.9	45.5	26.5	n.a.
26	48.7	50.7	48.6	38.7	70.5	33.6	n.a.	65.8	82.6	51.8	24.4	n.a.
27	45.1	42.1	51.7	37.8	79.7	64.6	n.a.	67.1	53.6	40.1	17.8	n.a.
28	58.3	66.8	72.6	34.9	56.9	73.5	62.2	82.5	36.3	42.1	22.9	n.a.
29	77.8		66.6	51.2	46.6	66.0	85.0	64.3	37.8	53.3	32.3	n.a.
30	77.5		56.5	75.0	52.8	65.4	76.8	52.9	36.6	65.7	33.3	n.a.
31	72.0		52.8		41.0		64.6	49.4		63.6		n.a.
Mean	58.6	61.9	56.7	40.4	60.8	49.1	72.2	52.8	53.2	58.8	31.8	n.a.
MEAN	60.6	64.2	57.1	53.8	53.4	48.7	66.5	56.3	64.2	54.8	54.9	37.7
MIN	34.4	40.2	36.5	26.0	29.2	28.2	35.9	19.9	36.3	29.3	17.8	37.7
MAX	85.1	85.7	91.3	88.3	96.7	79.3	97.8	94.7	95.9	84.5	91.6	37.7

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	615.1	621.9	613.2	616.7	623.6	616.9	620.1	626.3	628.5	625.5	626.4	632.0
2	617.8	623.5	613.3	616.2	625.4	619.6	619.8	627.2	628.1	626.8	625.1	n.a.
3	619.0	619.7	611.5	615.4	629.0	623.0	622.1	628.6	628.2	627.3	625.8	n.a.
4	615.6	616.5	609.4	613.8	628.0	623.2	624.7	627.3	629.6	625.6	625.4	n.a.
5	614.8	612.8	613.6	615.9	626.8	623.0	626.6	625.9	629.7	626.3	627.4	n.a.
6	617.0	610.1	618.8	618.1	625.2	623.9	626.5	625.2	628.0	627.1	627.7	n.a.
7	614.7	605.2	618.6	619.8	625.0	623.1	624.5	626.5	626.0	625.0	629.2	n.a.
8	611.5	613.1	617.6	621.7	624.4	622.6	624.4	626.8	624.6	626.2	629.8	n.a.
9	613.6	613.0	617.7	621.6	623.5	620.4	623.0	626.5	626.8	626.9	627.9	n.a.
10	616.7	616.8	620.9	621.8	623.8	619.7	624.7	625.7	628.9	629.0	628.8	n.a.
Mean	615.6	615.3	615.5	618.1	625.5	621.5	623.6	626.6	627.8	626.6	627.4	632.0
11	614.0	618.8	621.0	620.3	622.2	619.6	625.3	625.9	628.8	630.7	627.8	n.a.
12	613.2	616.5	621.5	620.0	621.1	620.3	625.6	625.0	629.1	629.8	627.4	n.a.
13	612.5	609.7	624.0	622.2	622.5	622.1	625.6	625.1	628.4	626.8	628.0	n.a.
14	610.2	609.0	626.2	622.1	624.5	621.9	623.2	628.8	626.8	624.8	627.8	n.a.
15	607.2	611.8	627.6	621.0	627.2	621.4	622.1	627.3	621.8	624.2	626.1	n.a.
16	612.8	612.0	623.6	621.5	629.0	619.8	622.0	625.6	619.2	624.4	626.4	n.a.
17	610.9	613.4	618.7	619.1	627.5	618.3	623.2	625.9	622.5	625.0	628.0	n.a.
18	610.2	614.3	615.4	618.2	624.9	618.9	623.0	627.2	621.6	626.1	628.6	n.a.
19	614.6	613.3	609.2	618.3	622.5	619.0	622.9	628.5	623.0	624.7	628.0	n.a.
20	616.1	613.4	611.7	618.9	620.8	620.5	622.3	630.5	625.0	622.3	631.6	n.a.
Mean	612.2	613.2	619.9	620.2	624.2	620.2	623.5	627.0	624.6	625.9	628.0	n.a.
21	614.6	620.0	618.4	621.1	618.8	622.5	n.a.	631.2	624.6	624.4	634.4	n.a.
22	615.0	618.7	619.4	623.9	619.7	621.8	n.a.	630.5	625.5	625.4	633.6	n.a.
23	616.2	614.7	621.7	625.5	622.7	620.9	n.a.	629.9	624.8	624.1	631.8	n.a.
24	615.8	611.5	622.4	625.4	623.5	622.0	n.a.	628.4	625.2	625.1	629.9	n.a.
25	615.7	609.4	623.0	625.6	623.7	621.0	n.a.	629.2	625.4	625.1	629.0	n.a.
26	617.5	607.9	622.7	625.7	623.4	619.4	n.a.	629.5	624.1	627.5	626.4	n.a.
27	620.0	613.3	622.2	624.8	622.3	619.9	n.a.	626.2	625.1	627.5	625.0	n.a.
28	618.2	616.1	618.2	622.4	623.1	618.7	626.6	626.2	625.7	627.0	624.4	n.a.
29	615.8		617.4	621.5	623.2	619.1	626.9	628.3	625.2	627.6	627.4	n.a.
30	615.1		617.2	622.6	622.3	619.1	627.0	629.8	625.8	626.2	632.4	n.a.
31	619.4		617.8		619.8		626.2	628.8		626.3		n.a.
Mean	616.7	614.0	620.0	623.9	622.0	620.4	626.7	628.9	625.1	626.0	629.4	n.a.
MEAN	614.9	614.2	618.5	620.7	623.9	620.7	624.1	627.5	625.9	626.2	628.3	632.0
MIN	607.2	605.2	609.2	613.8	618.8	616.9	619.8	625.0	619.2	622.3	624.4	632.0
MAX	620.0	623.5	627.6	625.7	629.0	623.9	627.0	631.2	629.7	630.7	634.4	632.0

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	151.0	189.4	232.2	160.8	163.1	172.7	158.2	n.a.	n.a.	n.a.	n.a.	n.a.
2	148.9	189.2	162.3	151.9	130.7	148.2	161.3	n.a.	n.a.	n.a.	n.a.	n.a.
3	167.2	195.5	267.9	198.8	98.2	187.5	162.3	n.a.	n.a.	n.a.	n.a.	n.a.
4	221.2	184.0	249.7	206.1	131.9	135.8	125.2	n.a.	n.a.	n.a.	n.a.	n.a.
5	183.0	249.8	205.6	258.0	150.0	123.6	145.2	n.a.	n.a.	n.a.	n.a.	n.a.
6	135.5	253.5	134.6	151.3	251.6	227.8	102.6	n.a.	n.a.	n.a.	n.a.	n.a.
7	207.1	258.9	128.7	158.7	265.9	157.8	148.8	n.a.	n.a.	n.a.	n.a.	n.a.
8	223.0	187.8	179.6	122.8	204.9	99.6	158.0	n.a.	n.a.	n.a.	n.a.	n.a.
9	143.0	213.5	110.9	169.9	146.2	162.0	174.9	n.a.	n.a.	n.a.	n.a.	n.a.
10	114.6	172.0	146.1	182.5	223.0	155.1	200.5	n.a.	n.a.	n.a.	n.a.	n.a.
Mean	169.5	209.4	181.8	176.1	176.6	157.0	153.7	n.a.	n.a.	n.a.	n.a.	n.a.
11	213.8	227.4	175.2	164.5	140.7	126.8	192.6	n.a.	n.a.	n.a.	n.a.	n.a.
12	182.5	206.5	157.8	210.8	156.0	102.4	116.2	n.a.	n.a.	n.a.	n.a.	n.a.
13	146.4	271.8	137.8	107.8	236.0	132.1	104.3	n.a.	n.a.	n.a.	n.a.	n.a.
14	166.8	247.3	180.8	134.1	115.8	179.8	137.5	n.a.	n.a.	n.a.	n.a.	n.a.
15	236.8	195.9	179.5	145.6	87.5	111.2	162.2	n.a.	n.a.	n.a.	n.a.	n.a.
16	184.7	161.3	220.8	167.7	89.7	129.9	177.2	n.a.	n.a.	n.a.	n.a.	n.a.
17	223.0	176.9	158.1	181.3	156.3	183.5	148.6	n.a.	n.a.	n.a.	n.a.	n.a.
18	179.4	145.0	254.6	162.2	182.2	188.4	170.3	n.a.	n.a.	n.a.	n.a.	n.a.
19	119.6	188.7	233.8	146.9	174.9	136.9	171.3	n.a.	n.a.	n.a.	n.a.	n.a.
20	177.5	225.6	258.4	158.0	204.5	162.0	178.3	n.a.	n.a.	n.a.	n.a.	n.a.
Mean	183.1	204.6	195.7	157.9	154.4	145.3	155.9	n.a.	n.a.	n.a.	n.a.	n.a.
21	205.7	166.1	187.2	104.3	233.1	98.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22	129.8	227.7	165.0	160.5	265.7	100.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23	138.2	202.6	156.8	127.0	186.9	167.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24	164.1	244.3	157.7	133.6	160.0	106.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25	129.0	191.1	153.7	131.3	163.0	88.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26	115.8	242.1	155.7	127.5	182.0	127.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27	127.7	243.8	120.6	112.2	182.0	164.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28	196.5	164.7	203.0	125.1	144.8	157.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
29	207.2		203.4	122.6	130.3	188.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
30	226.7		184.8	201.1	170.2	136.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
31	n.a.		118.9		116.2		n.a.		n.a.	n.a.		n.a.
Mean	164.1	210.3	164.3	134.5	175.8	133.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
MEAN	172.2	207.9	180.0	156.2	169.1	145.3	154.8	n.a.	n.a.	n.a.	n.a.	n.a.
MIN	114.6	145.0	110.9	104.3	87.5	88.2	102.6	n.a.	n.a.	n.a.	n.a.	n.a.
MAX	236.8	271.8	267.9	258.0	266.9	227.8	200.5	n.a.	n.a.	n.a.	n.a.	n.a.

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	0.7	0.4	2.5	1.0	1.0	2.3	1.7	n.a.	n.a.	n.a.	n.a.	n.a.
2	0.4	0.6	1.5	1.5	1.8	1.5	2.2	n.a.	n.a.	n.a.	n.a.	n.a.
3	0.4	0.8	3.6	2.4	1.5	1.4	1.3	n.a.	n.a.	n.a.	n.a.	n.a.
4	1.4	1.4	5.0	3.7	1.6	2.6	2.1	n.a.	n.a.	n.a.	n.a.	n.a.
5	0.9	3.5	4.3	3.0	2.3	2.5	1.2	n.a.	n.a.	n.a.	n.a.	n.a.
6	1.0	3.2	1.4	1.8	2.7	2.4	1.4	n.a.	n.a.	n.a.	n.a.	n.a.
7	0.7	4.8	2.1	1.1	2.2	3.3	1.5	n.a.	n.a.	n.a.	n.a.	n.a.
8	1.6	1.3	0.9	1.0	1.6	3.4	1.0	n.a.	n.a.	n.a.	n.a.	n.a.
9	0.5	0.9	2.0	1.3	2.1	3.4	1.6	n.a.	n.a.	n.a.	n.a.	n.a.
10	0.5	0.8	0.8	1.1	2.2	3.3	1.5	n.a.	n.a.	n.a.	n.a.	n.a.
Mean	0.8	1.8	2.4	1.8	1.9	2.6	1.6	n.a.	n.a.	n.a.	n.a.	n.a.
11	0.5	0.7	1.1	2.9	1.9	1.7	1.0	n.a.	n.a.	n.a.	n.a.	n.a.
12	0.5	0.5	1.0	2.3	2.6	1.9	2.9	n.a.	n.a.	n.a.	n.a.	n.a.
13	0.8	3.7	1.2	1.2	3.6	2.5	2.3	n.a.	n.a.	n.a.	n.a.	n.a.
14	0.9	2.5	0.9	1.0	2.8	1.8	1.4	n.a.	n.a.	n.a.	n.a.	n.a.
15	2.8	1.1	1.1	1.1	2.1	1.2	2.4	n.a.	n.a.	n.a.	n.a.	n.a.
16	0.6	0.4	0.9	1.8	3.1	2.0	1.2	n.a.	n.a.	n.a.	n.a.	n.a.
17	0.7	0.5	1.6	2.1	2.0	2.4	2.0	n.a.	n.a.	n.a.	n.a.	n.a.
18	0.4	0.6	3.0	1.3	2.3	3.6	1.7	n.a.	n.a.	n.a.	n.a.	n.a.
19	0.4	0.5	2.8	0.9	2.8	1.5	1.7	n.a.	n.a.	n.a.	n.a.	n.a.
20	0.4	2.6	4.1	1.2	3.1	3.2	1.6	n.a.	n.a.	n.a.	n.a.	n.a.
Mean	0.8	1.3	1.8	1.6	2.6	2.2	1.8	n.a.	n.a.	n.a.	n.a.	n.a.
21	0.5	0.7	0.8	2.9	2.4	2.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22	0.4	0.7	0.9	2.0	3.7	2.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23	0.4	1.4	0.7	1.8	2.4	1.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24	0.4	2.4	0.8	1.4	1.9	2.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25	0.4	2.0	1.1	0.8	2.3	4.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26	0.5	4.9	1.0	1.1	1.8	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27	0.6	3.2	1.6	1.1	2.3	2.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28	0.5	0.8	0.8	1.5	2.1	2.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
29	0.4		1.6	1.2	2.4	1.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
30	0.7		1.3	2.8	3.3	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
31	n.a.		2.1		3.4		n.a.		n.a.	n.a.		n.a.
Mean	0.5	2.0	1.2	1.7	2.5	2.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
MEAN	0.7	1.7	1.8	1.7	2.4	2.4	1.7	n.a.	n.a.	n.a.	n.a.	n.a.
MIN	0.4	0.4	0.7	0.8	1.0	1.2	1.0	n.a.	n.a.	n.a.	n.a.	n.a.
MAX	2.8	4.9	5.0	3.7	3.7	4.0	2.9	n.a.	n.a.	n.a.	n.a.	n.a.


PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	0.0	0.0	0.0	0.0	0.2	0.8	0.0	0.4	1.4	0.0	n.a	n.a.
2	0.0	0.0	n.a	n.a	0.0	n.a	8.4	0.0	0.6	0.0	0.0	n.a.
3	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.2	0.0	n.a	n.a.
4	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	4.2	0.0	n.a	n.a.
5	n.a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	n.a	n.a.
6	0.0	0.0	0.0	n.a	0.0	2.6	0.0	0.0	0.0	0.0	0.0	n.a.
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	n.a	0.0	n.a.
8	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.4	0.0	n.a	0.0	n.a.
9	n.a	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0	n.a	n.a.
10	0.0	n.a	0.0	n.a	0.0	0.0	0.2	0.0	2.8	0.0	n.a	n.a.
Total	0.0	0.0	0.0	0.0	0.2	3.4	26.6	4.6	11.6	0.0	0.0	n.a.
11	0.0	n.a	0.0	n.a	0.8	0.0	0.8	6.0	4.0	0.0	n.a	n.a.
12	0.0	n.a	0.0	n.a	0.0	1.0	0.0	11.4	0.0	0.0	0.0	n.a.
13	0.0	0.0	0.0	0.0	n.a	2.0	0.0	3.6	0.0	0.0	0.0	n.a.
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	12.0	0.0	0.0	n.a.
15	0.0	n.a	0.0	0.0	0.0	0.0	5.0	4.4	13.0	0.0	0.0	n.a.
16	n.a	0.0	0.0	0.0	0.0	0.0	8.6	2.0	17.4	0.0	0.0	n.a.
17	0.0	0.0	0.0	n.a	0.0	0.0	0.4	0.0	1.8	0.0	0.0	n.a.
18	0.0	0.0	n.a	n.a	0.0	0.0	0.0	3.6	1.0	0.0	0.0	n.a.
19	n.a	n.a	n.a	n.a	1.0	0.0	0.8	1.0	0.8	n.a	0.0	n.a.
20	0.0	n.a	0.0	0.0	n.a	0.0	n.a	0.0	1.2	0.0	0.0	n.a.
Total	0.0	0.0	0.0	0.0	1.8	3.0	15.6	32.6	51.2	0.0	0.0	n.a.
21	0.0	0.0	n.a	0.0	n.a	0.0	n.a	0.0	0.0	n.a	0.0	n.a.
22	0.0	0.0	n.a	0.0	n.a	0.0	n.a	0.0	0.0	0.0	0.0	n.a.
23	0.0	n.a	0.0	0.0	0.0	0.2	n.a	0.0	0.0	n.a	0.0	n.a.
24	0.0	n.a	0.0	0.0	0.0	2.2	n.a	0.0	0.0	0.0	0.0	n.a.
25	n.a	0.0	0.0	0.0	0.0	0.0	n.a	8.4	0.0	0.0	0.0	n.a.
26	0.0	0.0	0.0	0.0	3.2	0.0	n.a	0.0	n.a	0.0	0.0	n.a.
27	0.0	0.0	0.0	0.0	0.6	3.0	n.a	0.2	0.0	0.0	0.0	n.a.
28	0.0	0.0	n.a	0.0	0.0	2.2	n.a	5.4	0.0	0.0	0.0	n.a.
29	n.a		n.a	0.0	0.0	0.2	3.2	0.0	0.0	0.0	0.0	n.a.
30	0.0		0.0	0.0	0.0	4.4	2.0	0.0	0.0	0.0	0.0	n.a.
31	0.0		0.0		0.0		0.0	0.0		0.0		n.a.
Total	0.0	0.0	0.0	0.0	3.8	12.2	5.2	14.0	0.0	0.0	0.0	n.a.
TOTAL	0.0	0.0	0.0	0.0	5.8	18.6	47.4	51.2	62.8	0.0	0.0	n.a.
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.
MAX	0.0	0.0	0.0	0.0	3.2	4.4	8.6	11.4	17.4	0.0	0.0	n.a.

GLOBAL SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	24.9	44.2	132.3	158.1	340.3	120.8	285.6	234.9	137.3	186.5	73.5	87.2
2	35.1	56.8	80.4	167.9	361.3	251.6	197.5	381.0	75.0	262.7	75.8	n.a.
3	45.3	28.8	123.5	216.4	393.6	352.8	208.8	387.1	151.0	257.9	48.3	n.a.
4	80.8	33.1	101.4	152.6	323.4	387.5	226.1	380.3	206.4	252.0	82.8	n.a.
5	63.7	102.2	120.6	212.6	305.5	295.6	339.5	364.8	167.7	113.8	85.6	n.a.
6	58.7	68.5	123.0	297.2	153.9	333.0	402.2	334.5	327.5	115.8	134.3	n.a.
7	46.8	44.0	88.6	350.2	262.5	400.2	346.0	128.0	318.0	87.6	120.6	n.a.
8	62.8	124.9	168.8	344.8	373.7	415.8	109.6	322.3	232.5	147.2	56.8	n.a.
9	66.2	71.7	236.7	272.7	311.7	398.1	80.8	281.9	182.0	151.6	44.5	n.a.
10	54.1	143.6	270.2	214.4	332.9	418.7	167.7	299.0	170.3	193.6	99.2	n.a.
Mean	53.8	71.8	144.6	238.7	315.9	337.4	236.4	311.4	196.8	176.9	82.1	87.2
11	53.7	114.8	271.4	163.2	234.0	353.8	222.4	250.8	123.1	216.9	106.2	n.a.
12	54.8	51.3	270.1	176.1	189.8	212.4	402.8	141.5	304.6	214.5	124.5	n.a.
13	78.5	57.0	271.3	367.1	289.0	209.0	403.9	218.6	292.4	205.9	98.2	n.a.
14	64.2	71.4	279.0	368.9	408.2	387.3	340.8	136.0	155.8	97.2	93.4	n.a.
15	39.5	166.9	268.9	352.7	404.0	421.2	170.6	146.6	97.7	146.2	74.1	n.a.
16	76.5	124.4	176.1	246.2	404.0	381.7	103.7	177.5	47.0	108.3	98.9	n.a.
17	55.6	125.2	46.5	70.3	394.1	322.8	275.1	312.1	254.0	128.8	76.0	n.a.
18	48.7	133.3	172.2	136.6	372.2	304.1	290.5	161.1	175.7	84.5	95.5	n.a.
19	47.9	79.0	54.0	156.1	253.8	336.1	186.9	159.7	107.1	104.0	61.9	n.a.
20	58.0	115.4	169.3	208.0	250.3	366.0	335.9	227.5	212.8	94.6	85.2	n.a.
Mean	57.7	103.9	197.9	224.5	319.9	329.4	273.3	193.1	177.0	140.1	91.4	n.a.
21	38.8	156.2	297.8	353.9	109.1	417.3	n.a.	355.1	188.3	95.3	78.0	n.a.
22	40.5	87.7	305.2	375.6	367.4	399.3	n.a.	354.3	179.7	108.0	75.8	n.a.
23	49.5	90.9	284.2	383.7	400.5	270.2	n.a.	356.6	205.2	51.9	86.1	n.a.
24	57.8	102.7	294.5	383.2	303.6	386.6	n.a.	348.0	202.7	111.7	84.9	n.a.
25	89.7	104.8	312.5	381.6	298.4	413.2	n.a.	252.2	221.8	161.4	86.8	n.a.
26	88.4	74.2	272.0	381.2	173.5	380.1	n.a.	206.4	112.3	156.1	98.3	n.a.
27	106.0	189.2	295.3	383.7	232.9	241.0	n.a.	198.2	269.6	153.5	69.8	n.a.
28	86.0	94.1	103.4	373.2	340.0	227.8	239.4	106.7	267.4	96.3	74.5	n.a.
29	68.3		194.0	243.3	333.2	309.2	164.4	214.9	269.6	102.2	57.9	n.a.
30	35.6		202.0	204.7	332.3	222.7	170.1	214.8	246.6	96.5	55.8	n.a.
31	43.0		202.7		332.2		177.8	224.2		118.1		n.a.
Mean	64.0	112.5	251.2	346.4	293.0	326.7	187.9	257.4	216.3	113.7	76.8	n.a.
MEAN	58.7	94.9	199.6	269.9	309.1	331.2	243.7	254.1	196.7	142.6	83.4	87.2
MIN	24.9	28.8	46.5	70.3	109.1	120.8	80.8	106.7	47.0	51.9	44.5	87.2
MAX	106.0	189.2	312.5	383.7	408.2	421.2	403.9	387.1	327.5	262.7	134.3	87.2

AWS Concordia

Technical sheet	
Coordinates: Latitude: 35° 44' 38.98" N Longitude: 76° 30' 49.71" E Elevation: 4.700 m a.s.l.	
Installation Time: July 2011	
Data Availability: From January 2012	


Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				2 m	LSI-Lastem E-Log
Air Temperature	-30 - +70 °C	±0.001°C	60 min.	2 m	LSI-Lastem DMA570
Relative Humidity	0 - 100 %	±1%	60 min.	2 m	LSI-Lastem DMA570
Atmospheric Pressure	500 - 800 hPa (1 hPa=1 mBar)	1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	180 mm/hr	0-1 mm/min: 1% 1-3 mm/min: 2% 3-5 mm/min: 4% 5-10 mm/min: 8%	60 min.	1.5 m	LSI-Lastem DQA035
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
Data Logger					LSI-Lastem E-Log
Solar Radiations CNR1 sensor: (four components combined sensor+internal temperature with PT100)*	Pyranometer: 0 to 25 mV - Pyrgeometer: ±5 mV	±10% on daily totals - non linearity: < 1%	60 min.	2 m	Kipp & Zonen CM3* pyranometer - Kipp & Zonen CG3 pyrgeometer
Snow level	0 to 8 m	0,1 % (FS)	60 min.		Sommer USH-8

2011 Data

The 2011 Concordia data are not available.

3.3 ITALY

AWS Bianco - Osram

Technical sheet	
<p>Coordinates: Latitude: 45° 50' 50" N Longitude: 06° 55' 58" E Elevation: 3.430 m a.s.l</p> <p>Installation Time: December 2007</p> <p>Data Availability: From December 17, 2007</p>	

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				1.5 m	LSI-Lastem E -Log (5)
Air Temperature	-30 - +70 °C	±0.001°C	60 min.	3 m	LSI-Lastem DMA572 (1)
Relative Humidity	0 - 100 %	±1%	60 min.	3 m	LSI-Lastem DMA572 (1)
Air Pressure	400 - 800 hPa or mBar	±10hPa	60 min.	1.5 m (inside the logger box)	LSI-Lastem DQA223 (5)
Solar Radiations	0.3 - 3 μm	±5% of the value	60 min.	3.5 m	Kipp and Zonen CNR-1 (4)
Infrared Radiation	5 - 50 μm	±5% of the value	60 min.	3.5 m	Kipp and Zonen CNR-1 (4)
Snow level	0 to 100 m	±2 cm	60 min.	3.5 m	LSI-Lastem (2)

2011 Data

The 2011 data are not available due to the extreme environmental conditions in which this station has been installed. Acceptable meteorological data are available for the period 2007-2010.

AWS Dosdè-Levissima

Technical sheet		
Coordinates: Latitude: 46° 23' 33.944" N Longitude: 10° 13' 3.359" E Elevation: 2.850 m a.s.l	Installation Time: August 2007	Data Availability: From August 20, 2007

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				1.5 m	LSI-Lastem E-Log (4)
Air Temperature	-30 - +70 °C	±0.001°C	60 min.	3 m	LSI-Lastem DMA572 (2)
Air Pressure	400 - 800 hPa or mBar	±10hPa	60 min.	1.5 m (inside the logger box)	LSI-Lastem DQA240#S (4)
Solar Radiations	0.3 - 3 µm	±5% of the value	60 min.	3.5 m	Kipp and Zonen CNR-1 (2)
Infrared Radiation	5 - 50 µm	±5% of the value	60 min.	3.5 m	Kipp and Zonen CNR-1 (2)



AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-9.8	-11.4	-11.3	-1.7	-2.4	1.7	0.2	4.6	4.7	6.0	0.6	-4.1
2	-13.9	-11.3	-13.9	-1.6	-2.5	3.2	-0.7	6.0	6.4	6.3	-0.8	-4.3
3	-18.1	-8.4	-10.8	-0.2	-2.9	3.7	2.2	6.9	7.6	5.9	-2.3	-4.6
4	-14.0	-8.8	-10.2	-2.6	-5.3*	3.1	4.8	5.8	5.8	5.2	-1.0	-4.4
5	-13.7	-5.4	-11.2	-5.4	-3.5*	1.7	5.0	5.6	3.4	4.7	-0.2	-8.0
6	-7.9	-5.2	-9.5	0.5	-2.3*	0.0	5.4	5.3	3.5	3.3	0.3	-12.0
7	-4.0	-3.4	-11.8	2.5	-1.0*	1.1	5.1	5.4	6.4	-5.9	-2.4	-8.8
8	-5.0	-6.0	-10.0	0.5	-0.5*	1.3	4.6	4.2	5.3	-8.5	-2.8	-8.3
9	-5.9	-6.1	-10.2	0.9	1.4	0.8	6.4	-0.4	6.1	-8.8	-3.9	-7.3
10	-6.0	-6.9	-8.7	-1.0	2.3	1.0	6.2	1.2	6.7	0.6	-2.7	-6.0
Mean	-9.8	-7.3	-10.8	-0.8	-1.7	1.8	3.9	4.5	5.6	0.9	-1.5	-6.8
11	-8.2	-6.0	-7.7	-1.0	2.6	1.0	6.8	5.1	6.4	2.8	-5.4	-7.7
12	-9.0	-8.1*	-6.6	-3.5	1.6	1.5	7.8	6.0	4.2	4.3	-3.0	-8.3
13	-2.9	-9.5*	-7.2	-12.0	2.0	1.7	6.8	5.6	6.5	-1.2	-1.1	-7.7
14	-4.1	-11.2	-6.0	-8.5	1.3	2.6	5.1	6.4	5.7	-2.4	-0.8	-5.7
15	-6.5	-9.7	-4.6	-10.1	-6.1	3.3	4.6	4.8	5.6	-0.4	-1.7	-9.7
16	-3.0	-8.5	-3.7	-6.4	-5.7	3.9	3.5	5.9	5.4	0.8	-4.0	-8.9
17	-4.1	-9.6	-4.5	-5.7	-0.4	3.8	3.4	7.0	4.6	0.9	-4.2	-15.5
18	-8.8	-10.8	-7.5	-4.0	0.4	2.4	1.6	7.8	0.3	-0.7	-4.4	-17.6
19	-12.5	-13.3	-7.8	-3.9	1.5	0.2	0.7	8.3	-6.4	-3.2	-4.1	-19.1
20	-19.9	-9.0	-14.3	-3.2	1.7	3.0	-0.8	8.9	-0.5	-9.7	-4.0	-14.7
Mean	-6.6	-9.6	-6.2	-6.1	-0.3	2.3	4.5	6.3	3.6	0.1	-3.2	-11.1
21	-21.4	-12.7	-12.6	-1.4	0.9	5.6	1.3	10.1	4.2	-8.2	-4.3	-13.2
22	-19.5	-15.3	-9.2	-1.6	2.4	5.2	2.3	11.3	4.8	-5.1	-4.9	-8.1
23	-16.6*	-19.8*	-5.9	-2.7	3.7	3.4	1.2	9.9	3.1	-7.2	-5.5	-4.2
24	-10.5*	-14.8*	-5.1	-1.2	4.6	2.2	-2.7	9.4	2.9	-7.9	-5.4	-9.5
25	-10.5*	-9.7	-6.4	-1.1	3.8	1.4	-1.1	8.6	2.8	-2.3	-3.1	-12.6
26	-10.5*	-11.1	-6.0	-2.8	3.8	7.0	0.5	7.7	3.6	-2.4	-3.9	-4.9
27	-10.4*	-10.5	-6.7	-4.5	-0.4	8.8	1.8	2.3	4.0	-0.5	0.1	-2.5
28	-10.4*	-11.1	-4.8	-3.6	-1.5	9.1	1.7	4.3	3.2	1.6	-1.1	-3.2
29	-10.5*		-8.6	-3.5	2.6	7.5	2.9	5.7	4.1	2.0	-2.1	-10.2
30	-10.5*		-7.8	-3.7	4.5	4.1	2.9	3.8	4.6	0.7	-2.7	-13.8
31	-10.5*		-4.3		2.3		3.3	4.5		-0.1		-8.7
Mean	-13.1	-13.1	-7.3	-2.6	2.4	5.4	1.1	7.3	3.7	-2.9	-3.3	-8.2
MEAN	-10.3	-9.8	-8.2	-3.1	0.3	3.2	3.0	6.1	4.2	-0.9	-2.7	-8.8
MIN	-21.4	-19.8	-14.3	-12.0	-6.1	0.0	-2.7	-0.4	-6.4	-9.7	-5.5	-19.1
MAX	-2.9	-3.4	-3.7	2.5	4.6	9.1	7.8	11.3	7.6	6.3	0.6	-2.5

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	724.8	727.0	726.6	735.4	720.4	731.0	731.0	731.6	733.2	741.3	731.7	733.7
2	720.5	729.0	724.4	733.8	721.5	736.1	727.5	735.1	734.5	740.3	730.3	728.9
3	720.9	731.3	726.1	730.4	720.4	736.8	728.1	736.1	735.2	739.5	727.7	725.8
4	719.7	734.2	730.2	729.5	722.6	733.6	731.1	734.3	733.1	739.0	726.3	723.2
5	719.5	737.1	726.2	733.7	n.a.	729.7	731.0	734.1	732.6	737.9	726.5	717.7
6	722.4	738.2	726.1	739.0	n.a.	726.0	731.3	731.2	736.8	733.4	727.2	720.0
7	727.6	736.8	729.7	739.4	n.a.	724.8	731.8	728.8	733.5	723.2	728.4	721.6
8	727.9	731.5	731.7	734.5	n.a.	723.8	732.4	728.2	731.8	723.7	731.0	728.7
9	727.3	730.6	728.3	733.6	736.8	726.7	736.1	732.0	733.4	727.0	732.9	728.1
10	725.6	730.6	728.3	732.8	738.4	728.7	736.2	734.9	735.6	733.4	731.4	725.8
Mean	723.6	732.6	727.8	734.2	726.7	729.7	731.6	732.6	734.0	733.9	729.3	725.4
11	721.6	728.1	728.3	733.2	736.7	729.3	735.4	735.3	735.2	736.7	731.8	726.3
12	726.2	725.8	725.8	728.6	733.0	731.4	735.8	732.3	734.3	734.6	737.8	722.7
13	729.0	720.1	721.8	724.2	733.2	731.5	731.3	731.1	735.1	733.9	739.4	724.3
14	731.0	718.9	726.2	721.8	730.0	733.4	730.3	731.9	734.3	734.3	735.1	723.0
15	732.2	714.8	726.9	722.5	726.4	735.3	732.0	732.5	735.2	735.7	730.1	721.3
16	737.9	710.8	719.4	726.1	731.3	734.3	731.3	735.8	735.7	735.9	729.8	711.7
17	735.4	711.9	716.3	729.2	733.5	732.3	726.0	736.5	733.4	734.4	732.2	709.5
18	732.1	717.9	725.4	730.1	733.0	727.4	723.3	737.5	724.4	732.2	732.4	716.4
19	726.6	720.7	728.0	728.5	733.2	727.8	722.9	738.8	723.0	728.6	731.5	719.3
20	721.3	718.7	730.1	730.0	734.1	732.6	723.1	740.8	732.3	727.7	731.3	718.2
Mean	730.2	718.8	724.2	727.1	732.3	731.4	729.8	734.6	732.3	734.0	733.3	719.4
21	721.5	717.3	732.1	730.3	735.0	736.5	725.0	741.2	735.2	730.0	729.7	721.9
22	720.9	715.4	737.2	727.5	734.9	736.4	725.9	740.4	734.4	729.6	729.0	727.6
23	721.0	719.3	740.1	727.5	738.0	733.4	724.8	738.9	733.4	727.5	732.1	732.0
24	n.a.	n.a.	739.9	729.0	738.2	733.2	723.6	737.7	733.4	725.1	737.0	727.2
25	n.a.	727.0	732.6	728.8	737.9	737.0	724.8	736.4	736.0	723.9	736.9	734.3
26	n.a.	724.7	726.2	726.2	734.9	739.8	727.8	733.8	739.1	726.7	737.2	740.5
27	n.a.	719.4	724.4	724.9	728.3	739.4	731.8	729.8	741.5	730.4	736.8	741.2
28	n.a.	722.4	722.9	723.7	727.8	736.5	731.7	733.8	741.5	735.5	734.9	736.8
29	n.a.		725.7	721.7	732.9	734.1	731.7	732.1	741.2	736.8	733.6	727.8
30	n.a.		727.2	720.3	734.6	732.2	730.7	730.7	741.3	734.8	734.9	719.9
31	n.a.		731.5		731.1		729.8	731.7		732.9		723.4
Mean	n.a.	720.8	730.8	726.0	734.2	735.9	727.8	735.5	737.7	730.0	734.2	730.9
MEAN	725.8	724.4	727.9	729.2	731.8	732.4	729.5	734.4	734.6	732.4	732.2	725.1
MIN	719.5	710.8	716.3	720.3	720.4	723.8	722.9	728.2	723.0	723.2	726.3	709.5
MAX	737.9	738.2	740.1	739.4	738.4	739.8	736.2	741.2	741.5	741.3	739.4	741.2

INCOMING SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	99.8*	146.6*	171.2	230.0	107.4	259.7	165.5	64.1	112.4	56.0	23.2
2	70.4*	100.4*	163.3*	167.0	137.9	159.4	275.1	208.3	135.8	110.6	49.9	27.1
3	71.0*	70.4*	113.0*	171.7	145.2	140.3	307.2	103.4	127.4	109.0	41.1	41.9
4	58.5*	99.3*	161.1*	106.1	280.2*	120.2	280.1	195.0	9.6	108.0	26.9	32.3
5	70.1*	100.0*	154.3*	196.5	283.2*	83.5	259.6	101.9	80.3	104.3	24.2	47.3
6	44.6*	111.5*	170.1*	177.6	272.3*	102.3	224.5	128.2	112.3	51.4	44.7	39.9
7	45.1*	107.5*	168.6*	166.1	266.9*	115.0	77.8	25.8	154.4	72.7	51.7	39.2
8	47.5*	108.7*	106.7	159.7	252.7*	147.5	72.0	113.5	93.9	92.6	50.7	14.1
9	47.3*	108.0*	107.4	173.1	136.5	119.5	163.4	164.5	156.8	115.5	46.8	28.6
10	45.6*	111.3*	119.2	178.2	255.5	137.6	100.5	245.0	89.0	61.7	51.8	22.9
Mean	55.6	101.7	141.0	166.7	240.2	123.3	202.0	145.1	102.4	93.8	44.4	31.7
11	49.5*	79.9*	112.2	179.8	219.2	147.4	193.6	242.7	116.7	92.6	44.5	14.6
12	74.7*	112.2*	120.2	138.2	136.8	198.4	128.1	150.9	78.3	86.3	43.3	26.1
13	51.0*	80.9*	79.8	192.0	193.4	131.2	34.2	164.9	137.6	73.9	39.8	29.1
14	71.6*	116.7*	122.4	174.2	169.1	186.2	52.4	113.1	88.8	85.8	38.9	27.6
15	77.3*	80.3*	76.2	136.1	141.1	224.2	147.0	98.1	70.4	83.1	38.0	41.0
16	72.0*	95.6*	73.4	199.5	181.7	98.5	109.4	193.8	74.7	78.2	36.0	30.1
17	72.8*	101.1*	128.3*	199.0	196.6	64.0	16.1	180.7	57.2	76.6	32.8	44.4
18	81.7*	135.8*	109.1	203.4	170.6	22.9	74.6	166.6	9.1	75.3	33.4	37.8
19	57.4*	149.3*	114.1	123.6	234.8	316.7	76.9	156.7	143.7	30.7	37.9	25.8
20	72.1*	110.2*	137.7	160.5	212.9	218.1	157.7	134.4	145.7	97.9	47.1	46.6
Mean	67.6	105.8	104.0	171.7	182.6	154.4	92.5	163.1	86.3	75.8	38.3	30.7
21	74.7*	122.7*	139.2	188.5	161.8	280.2	168.2	192.9	143.9	82.4	28.3	44.0
22	81.5*	118.1*	137.9	196.8	207.0	95.9	201.8	205.3	144.5	73.6	27.6	37.7
23	75.3*	149.2*	140.3	131.4	219.9	72.9	167.9	171.5	66.0	68.1	27.8	13.5
24	55.1*	143.2*	151.3	161.1	287.9	227.4	124.6	174.2	87.6	40.0	26.5	37.7
25	72.5*	103.6*	156.8	145.1	249.8	185.1	107.8	194.2	86.6	31.2	25.6	13.4
26	81.8*	152.6*	155.7	171.7	118.6	316.0	142.1	66.8	104.6	63.2	33.9	23.6
27	90.1*	109.1*	109.0	153.7	77.1	319.8	142.8	38.4	83.2	79.4	22.1	13.2
28	86.9*	129.9*	159.8	131.4	311.0	264.9	85.1	193.9	70.1	64.9	28.3	14.2
29	76.2*		126.6	159.4	290.8	267.2	143.5	190.5	120.3	60.5	39.3	30.7
30	94.8*		170.5	169.5	209.9	248.1	145.7	114.6	88.0	57.8	25.8	34.2
31	97.7*		164.8		143.2		205.2	85.0		55.4		51.0
Mean	78.9	128.6	144.7	160.9	213.4	227.8	142.9	154.2	99.5	62.1	28.5	26.2
MEAN	68.9	110.0	132.1	166.1	210.8	170.6	149.8	151.0	98.0	77.3	37.4	30.7
MIN	44.6	70.4	73.4	106.1	77.1	22.9	16.1	25.8	9.1	30.7	22.1	13.2
MAX	97.7	152.6	170.5	203.4	311.0	319.8	307.2	245.0	156.8	115.5	56.0	51.0

OUTGOING SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	80.0*	114.9*	155.3	185.5	68.6	140.9	40.6	19.1	87.8	52.5	19.1
2	52.7*	80.6*	132.5*	150.9	108.1	93.9	145.1	51.9	44.5	86.6	46.4	21.4
3	53.7*	56.8*	79.5*	151.5	114.3	81.0	157.9	23.5	38.6	85.1	33.0	34.7
4	45.7*	79.5*	133.9*	86.0	n.a.	72.6	136.7	53.9	2.3	84.4	23.6	27.0
5	53.1*	81.8*	124.0*	182.5	n.a.	50.4	128.3	24.7	21.3	81.4	20.3	39.6
6	35.3*	91.6*	139.3*	156.2	n.a.	79.1	110.6	28.1	40.2	38.3	35.5	32.9
7	35.0*	89.2*	141.5*	150.4	n.a.	87.2	43.2	4.9	53.7	71.2	49.3	32.8
8	n.a.	90.4*	64.3	136.3	n.a.	97.5	40.0	23.3	28.2	83.7	45.0	12.3
9	28.2*	89.7*	64.2	144.6	103.7	84.9	87.4	43.8	49.1	109.2	39.1	24.3
10	n.a.	94.3*	72.8	144.4	171.9	95.5	53.6	92.7	27.0	47.2	47.9	19.4
Mean	43.4	83.4	106.7	145.8	n.a.	81.1	104.4	38.7	32.4	77.5	39.3	26.3
11	n.a.	67.7*	66.7	141.9	142.1	103.9	100.9	67.8	31.8	76.6	43.3	13.0
12	n.a.	94.8*	79.6	105.9	88.3	132.5	64.6	40.0	24.1	72.2	41.7	22.2
13	38.9*	66.2*	70.1	181.0	123.0	81.0	17.1	42.4	44.2	55.0	38.5	24.5
14	56.6*	99.1*	93.3	147.8	125.3	110.3	24.6	27.5	26.1	70.4	36.5	23.5
15	62.1*	60.9*	66.0	118.6	130.3	128.6	62.5	23.4	20.9	68.9	34.1	33.8
16	58.0*	n.a.	66.8	181.9	161.4	58.3	43.5	50.0	22.0	65.5	31.5	25.2
17	58.4*	n.a.	74.9	174.5	141.7	38.8	6.2	43.2	15.4	64.4	30.2	36.7
18	65.3*	n.a.	87.3	172.4	119.2	15.2	25.1	34.5	7.2	63.4	30.8	31.0
19	45.7*	133.5*	91.3	97.4	163.2	189.2	32.0	30.2	129.3	24.3	33.3	21.6
20	60.1*	81.8*	110.2	123.3	148.3	120.1	114.1	26.6	136.3	88.2	40.0	39.0
Mean	55.0	87.0	77.3	146.8	132.7	95.3	41.8	39.9	35.7	62.3	35.6	25.7
21	61.6*	93.7*	111.3	146.8	102.3	148.6	103.5	40.7	121.8	77.8	26.0	36.2
22	65.7*	89.9*	108.1	146.3	124.2	52.7	98.9	42.3	118.7	69.9	25.6	32.1
23	62.8*	118.9*	120.2	94.0	133.7	43.2	61.6	34.4	52.4	63.9	25.6	12.2
24	45.5*	115.8*	143.1	113.5	179.5	132.8	87.6	33.6	67.7	34.7	24.5	31.2
25	56.6*	78.7*	142.2	114.1	153.7	101.9	62.1	37.5	65.7	27.3	23.4	11.9
26	63.5*	125.2*	142.0	129.7	70.6	171.5	77.1	11.3	81.8	54.6	28.8	20.3
27	71.0*	68.2*	93.2	114.9	57.2	169.8	48.4	14.3	64.6	73.7	20.7	11.8
28	68.8*	100.9*	145.8	104.4	256.8	139.6	24.8	70.5	52.6	61.3	24.4	12.8
29	58.4*		116.4	136.9	215.7	136.8	45.8	60.0	93.8	57.4	30.8	25.7
30	74.7*		160.7	141.9	139.3	143.9	42.7	35.1	68.3	55.7	21.0	29.1
31	77.8*		151.6		91.8		53.6	26.5		53.8		43.1
Mean	62.9	98.9	128.3	124.3	143.3	124.1	65.2	38.0	78.7	57.6	25.1	22.3
MEAN	56.0	89.2	106.7	138.2	136.6	101.0	72.3	38.0	52.3	66.3	33.4	25.8
MIN	28.2	56.8	64.2	86.0	57.2	15.2	6.2	4.9	2.3	24.3	20.3	11.8
MAX	77.8	133.5	160.7	182.5	256.8	189.2	157.9	92.7	136.3	109.2	52.5	43.1

ALBEDO

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	0.8*	0.8*	0.9	0.8	0.6	0.5	0.2	0.3	0.8	0.9	0.8
2	0.7*	0.8*	0.8*	0.9	0.8	0.6	0.5	0.2	0.3	0.8	0.9	0.8
3	0.8*	0.8*	0.7*	0.9	0.8	0.6	0.5	0.2	0.3	0.8	0.8	0.8
4	0.8*	0.8*	0.8*	0.8	n.a.	0.6	0.5	0.3	0.2	0.8	0.9	0.8
5	0.8*	0.8*	0.8*	0.9	n.a.	0.6	0.5	0.2	0.3	0.8	0.8	0.8
6	0.8*	0.8*	0.8*	0.9	n.a.	0.8	0.5	0.2	0.4	0.7	0.8	0.8
7	0.8*	0.8*	0.8*	0.9	n.a.	0.8	0.6	0.2	0.3	1.0	1.0	0.8
8	n.a.	0.8*	0.6	0.9	n.a.	0.7	0.6	0.2	0.3	0.9	0.9	0.9
9	0.6*	0.8*	0.6	0.8	0.8	0.7	0.5	0.3	0.3	0.9	0.8	0.9
10	n.a.	0.8*	0.6	0.8	0.7	0.7	0.5	0.4	0.3	0.8	0.9	0.8
Mean	0.7	0.8	0.7	0.9	n.a.	0.7	0.5	0.2	0.3	0.8	0.9	0.8
11	n.a.	0.8*	0.6	0.8	0.6	0.7	0.5	0.3	0.3	0.8	1.0	0.9
12	n.a.	0.8*	0.7	0.8	0.6	0.7	0.5	0.3	0.3	0.8	1.0	0.9
13	0.8*	0.8*	0.9	0.9	0.6	0.6	0.5	0.3	0.3	0.7	1.0	0.8
14	0.8*	0.8*	0.8	0.8	0.7	0.6	0.5	0.2	0.3	0.8	0.9	0.9
15	0.8*	0.8*	0.9	0.9	0.9	0.6	0.4	0.2	0.3	0.8	0.9	0.8
16	0.8*	n.a.	0.9	0.9	0.9	0.6	0.4	0.3	0.3	0.8	0.9	0.8
17	0.8*	n.a.	0.8*	0.9	0.7	0.6	0.4	0.2	0.3	0.8	0.9	0.8
18	0.8*	n.a.	0.8	0.8	0.7	0.7	0.3	0.2	0.8	0.8	0.9	0.8
19	0.8*	0.9*	0.8	0.8	0.7	0.6	0.4	0.2	0.9	0.8	0.9	0.8
20	0.8*	0.7*	0.8	0.8	0.7	0.6	0.7	0.2	0.9	0.9	0.9	0.8
Mean	0.8	0.8	0.8	0.8	0.7	0.6	0.4	0.2	0.4	0.8	0.9	0.8
21	0.8*	0.8*	0.8	0.8	0.6	0.5	0.6	0.2	0.8	0.9	0.9	0.8
22	0.8*	0.8*	0.8	0.7	0.6	0.5	0.5	0.2	0.8	0.9	0.9	0.9
23	0.8*	0.8*	0.9	0.7	0.6	0.6	0.4	0.2	0.8	0.9	0.9	0.9
24	0.8*	0.8*	0.9	0.7	0.6	0.6	0.7	0.2	0.8	0.9	0.9	0.8
25	0.8*	0.8*	0.9	0.8	0.6	0.6	0.6	0.2	0.8	0.9	0.9	0.9
26	0.8*	0.8*	0.9	0.8	0.6	0.5	0.5	0.2	0.8	0.9	0.9	0.9
27	0.8*	0.6*	0.9	0.7	0.7	0.5	0.3	0.4	0.8	0.9	0.9	0.9
28	0.8*	0.8*	0.9	0.8	0.8	0.5	0.3	0.4	0.7	0.9	0.9	0.9
29	0.8*		0.9	0.9	0.7	0.5	0.3	0.3	0.8	0.9	0.8	0.8
30	0.8*		0.9	0.8	0.7	0.6	0.3	0.3	0.8	1.0	0.8	0.9
31	0.8*		0.9		0.6		0.3	0.3		1.0		0.8
Mean	0.8	0.8	0.9	0.8	0.7	0.5	0.5	0.3	0.8	0.9	0.9	0.9
MEAN	0.8	0.8	0.8	0.8	0.7	0.6	0.5	0.2	0.5	0.9	0.9	0.8
MIN	0.6	0.6	0.6	0.7	0.6	0.5	0.3	0.2	0.2	0.7	0.8	0.8
MAX	0.8	0.9	0.9	0.9	0.9	0.8	0.7	0.4	0.9	1.0	1.0	0.9

NET SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	19.7*	31.7*	15.8	44.6	38.8	118.8	124.8	45.1	24.6	3.5	4.1
2	17.7*	19.9*	30.7*	16.2	29.8	65.5	129.9	156.5	91.3	24.0	3.4	5.7
3	17.2*	13.6*	33.5*	20.2	30.9	59.3	149.3	80.0	88.8	23.9	8.1	7.2
4	12.7*	19.8*	27.2*	20.1	n.a.	47.5	143.4	141.1	7.3	23.6	3.3	5.2
5	17.0*	18.2*	30.4*	14.0	n.a.	33.0	131.3	77.2	58.9	22.9	3.9	7.8
6	9.3*	19.8*	30.8*	21.3	n.a.	23.2	114.0	100.1	72.1	13.1	9.2	7.1
7	10.1*	18.3*	27.1*	15.8	n.a.	27.8	34.6	20.9	100.7	1.6	2.4	6.3
8	n.a.	18.3*	42.4	23.4	n.a.	50.0	32.0	90.3	65.7	8.9	5.7	1.8
9	19.1*	18.3*	43.2	28.6	32.8	34.6	75.9	120.7	107.6	6.3	7.7	4.3
10	n.a.	17.0*	46.4	33.8	83.7	42.1	46.9	152.3	62.1	14.5	3.9	3.5
Mean	14.7	18.3	34.3	20.9	n.a.	42.2	97.6	106.4	70.0	16.3	5.1	5.3
11	n.a.	12.2*	45.5	37.9	77.0	43.5	92.7	174.9	85.0	16.0	1.2	1.6
12	n.a.	17.5*	40.6	32.3	48.5	65.9	63.5	110.8	54.2	14.1	1.6	3.8
13	12.1*	14.7*	9.7	11.0	70.4	50.3	17.2	122.4	93.4	18.9	1.3	4.6
14	15.0*	17.5*	29.1	26.4	43.8	75.9	27.9	85.6	62.7	15.4	2.4	4.1
15	15.2*	19.4*	10.2	17.4	10.8	95.6	84.5	74.7	49.5	14.2	4.0	7.2
16	14.0*	n.a.	6.6	17.6	20.3	40.2	65.9	143.7	52.7	12.7	4.5	4.8
17	14.4*	n.a.	53.5*	24.5	55.0	25.2	9.9	137.5	41.8	12.2	2.6	7.6
18	16.4*	n.a.	21.8	31.0	51.4	7.7	49.5	132.1	1.8	12.0	2.6	6.8
19	11.7*	15.9*	22.8	26.2	71.6	127.5	44.9	126.5	14.4	6.5	4.5	4.2
20	12.0*	28.4*	27.5	37.2	64.6	98.1	43.5	107.8	9.4	9.7	7.1	7.6
Mean	14.1	16.2	26.7	24.9	49.9	59.1	50.7	123.2	50.6	13.5	2.7	5.0
21	13.1*	29.0*	27.8	41.7	59.5	131.6	64.7	152.2	22.1	4.6	2.3	7.8
22	15.8*	28.3*	29.8	50.6	82.9	43.2	102.8	163.0	25.9	3.7	2.1	5.6
23	12.5*	30.3*	20.1	37.4	86.2	29.7	106.3	137.1	13.5	4.2	2.3	1.3
24	9.6*	27.4*	8.2	47.5	108.4	94.6	37.0	140.6	19.8	5.3	2.0	6.5
25	15.9*	24.9*	14.7	31.0	96.1	83.3	45.7	156.7	20.9	3.8	2.3	1.6
26	18.4*	27.5*	13.7	42.0	48.0	144.4	65.0	55.5	22.8	8.6	5.1	3.4
27	19.1*	40.8*	15.8	38.9	19.9	150.0	94.4	24.1	18.6	5.7	1.4	1.4
28	18.2*	29.0*	14.0	27.0	54.2	125.3	60.3	123.3	17.5	3.6	3.9	1.5
29	17.8*		10.2	22.4	75.2	130.4	97.7	130.5	26.5	3.1	8.5	5.0
30	20.1*		9.8	27.6	70.6	104.2	103.0	79.4	19.6	2.1	4.8	5.1
31	19.9*		13.2		51.4		151.6	58.5		1.5		7.9
Mean	16.0	29.6	16.4	36.6	70.1	103.7	77.7	116.2	20.7	4.5	3.5	3.9
MEAN	15.2	21.8	25.4	27.9	57.2	69.6	77.6	112.9	45.7	11.0	3.9	4.9
MIN	9.3	12.2	6.6	11.0	10.8	7.7	9.9	20.9	1.8	1.5	1.2	1.3
MAX	20.1	40.8	53.5	50.6	108.4	150.0	151.6	174.9	107.6	24.6	9.2	7.9

INCOMING INFRARED RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	252.7	253.5	282.8	246.8	258.6	318.6	266.8	319.2	305.3	268.5	244.9	223.8
2	241.6	252.2	276.0	239.0	274.9	315.0	248.5	287.1	300.8	270.7	256.7	277.0
3	221.3	260.3	277.0	242.1	271.2	320.1	260.2	315.8	307.4	260.0	305.2	293.0
4	221.5	247.7	282.8	270.7	196.9	330.2	289.6	309.4	349.6	249.3	317.9	258.0
5	184.5	215.2	278.3	242.1	n.a.	324.6	293.8	327.0	337.5	253.9	321.5	244.7
6	259.4	210.4	277.2	274.3	n.a.	305.4	294.4	332.2	276.7	275.4	313.8	219.0
7	304.1	206.9	237.5	260.2	n.a.	298.0	336.4	348.1	295.5	292.1	312.8	275.6
8	293.8	202.2	186.0	252.2	n.a.	326.7	340.6	319.6	317.4	272.5	307.3	223.6
9	290.3	211.6	193.7	242.1	258.3	326.1	331.3	268.4	292.8	241.4	235.7	220.0
10	295.5	200.9	216.2	235.9	259.3	324.8	317.9	261.2	285.7	307.4	220.5	230.4
Mean	256.5	226.1	250.8	250.5	253.2	318.9	298.0	308.8	306.9	269.1	283.6	246.5
11	293.7	237.4	210.7	236.0	273.3	323.2	296.3	271.9	299.5	258.9	215.0	229.3
12	288.9	213.7	238.1	281.1	318.1	313.5	315.1	294.4	294.6	257.8	208.1	278.9
13	292.9	232.6	288.6	221.1	287.6	323.3	345.1	290.9	270.7	264.1	210.6	220.9
14	290.2	242.1	287.2	254.4	318.0	316.9	342.1	300.5	279.3	217.8	212.0	284.3
15	279.3	266.9	295.9	233.3	298.1	293.4	321.2	336.6	275.5	223.9	217.4	234.4
16	278.4	286.2	304.1	233.1	285.2	328.9	300.6	286.8	273.2	233.8	217.7	273.4
17	275.8	285.7	312.8	218.2	291.3	335.9	335.4	291.8	305.3	237.9	213.6	224.6
18	269.4	282.1	300.3	226.6	299.1	333.6	322.2	310.4	324.4	229.1	201.0	189.1
19	267.6	275.3	290.6	244.5	269.3	255.4	312.9	308.6	298.8	298.8	218.2	184.3
20	251.4	278.0	198.6	238.4	258.6	296.2	309.4	309.9	268.5	246.2	227.2	230.2
Mean	281.8	258.0	280.9	238.7	293.3	313.8	321.2	299.1	291.3	246.9	212.6	235.5
21	240.2	283.7	189.0	232.4	283.7	291.5	293.7	296.3	253.3	187.2	227.8	250.0
22	238.4	276.1	210.1	252.7	294.4	320.9	295.8	297.9	261.8	198.1	221.4	282.2
23	240.6	263.1	221.3	281.5	283.3	328.0	321.6	301.0	260.2	211.4	217.5	234.5
24	n.a.	n.a.	220.3	268.4	269.2	294.5	298.9	301.4	256.4	275.6	211.2	222.8
25	n.a.	288.2	219.5	282.3	280.5	297.3	302.4	304.9	269.9	312.6	218.3	201.1
26	n.a.	269.7	233.6	244.2	325.9	299.7	308.3	347.0	260.5	313.4	226.3	237.2
27	n.a.	278.0	261.0	253.1	317.6	283.5	314.4	313.7	265.7	251.9	233.1	230.2
28	n.a.	282.6	279.8	288.4	265.6	303.3	322.7	253.8	263.0	249.3	236.5	224.8
29	n.a.		215.3	295.7	257.8	304.1	319.2	269.0	262.0	254.3	247.0	227.2
30	n.a.		216.1	288.4	284.1	300.7	296.6	289.4	263.3	246.5	238.2	244.6
31	250.8		248.7		304.9		294.1	281.8		238.8		271.2
Mean	239.7	277.4	226.6	268.7	286.2	302.4	307.4	297.4	261.6	250.0	227.7	235.5
MEAN	263.4	251.9	250.0	252.7	280.9	311.1	308.0	301.5	285.8	254.8	241.8	240.0
MIN	184.5	200.9	186.0	218.2	196.9	255.4	248.5	253.8	253.3	187.2	201.0	184.3
MAX	304.1	288.2	312.8	295.7	325.9	335.9	345.1	348.1	349.6	313.4	321.5	293.0

OUTGOING INFRARED RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	268.0	266.4	295.2	313.3	315.8	338.7	332.5	345.4	343.2	341.3	311.8	290.8
2	259.1	265.3	289.4	307.8	317.1	343.0	329.8	347.6	347.4	344.6	313.7	311.6
3	238.9	272.7	289.6	313.3	313.7	343.0	334.8	349.0	350.0	338.8	324.8	312.3
4	256.1	283.3	295.1	314.0	267.7	341.9	345.2	348.1	348.0	330.4	331.7	300.4
5	255.0	288.5	291.5	300.6	n.a.	338.7	347.2	346.2	343.3	332.2	335.0	291.6
6	290.6	283.9	290.2	324.3	n.a.	332.6	346.2	347.2	340.8	332.3	334.9	269.9
7	310.1	283.9	279.0	326.7	n.a.	330.2	345.1	346.4	346.5	308.6	324.4	295.0
8	310.0	276.8	268.5	325.0	n.a.	340.1	344.6	343.8	345.2	298.2	322.4	283.8
9	306.9	279.3	270.6	320.0	333.3	338.8	349.7	333.2	347.6	287.5	294.5	277.4
10	306.4	273.2	281.3	315.3	332.2	339.2	346.9	336.0	346.7	333.4	291.6	284.9
Mean	280.1	277.3	285.0	316.0	313.3	338.6	342.2	344.3	345.9	324.7	318.5	291.8
11	305.2	289.4	280.3	314.4	335.9	339.5	349.3	342.6	346.9	330.6	286.1	286.0
12	302.1	279.4	293.6	316.4	338.5	341.0	350.6	347.0	341.8	336.2	286.8	298.5
13	303.3	272.5	303.7	279.8	338.4	339.8	347.9	345.9	345.8	321.3	293.8	276.1
14	303.5	277.7	303.1	290.9	338.8	342.6	345.0	347.0	344.6	300.4	295.3	306.5
15	294.8	288.7	313.5	282.7	310.0	341.4	345.5	345.4	343.4	305.4	295.5	281.6
16	292.2	297.3	317.7	296.2	310.7	342.6	340.4	346.9	341.8	312.3	289.5	294.7
17	290.0	296.8	322.6	296.4	331.6	342.0	343.3	349.2	342.8	315.0	288.3	265.2
18	284.1	294.3	311.9	304.7	335.1	339.3	338.5	353.0	334.1	308.8	278.3	242.6
19	281.9	289.0	308.4	306.3	335.2	335.0	337.0	351.8	308.7	318.7	289.0	238.1
20	267.2	289.8	281.9	308.9	332.9	339.7	332.0	352.0	321.5	285.9	293.2	261.5
Mean	295.2	287.2	306.1	298.6	330.5	340.4	344.2	347.6	338.9	316.5	289.2	276.6
21	255.6	295.2	272.0	314.6	333.5	346.9	337.9	353.8	328.7	266.1	291.3	275.5
22	252.9	289.6	283.7	316.7	340.3	344.4	340.6	357.4	332.0	279.5	291.4	300.2
23	254.4	279.2	295.4	320.9	343.5	341.2	340.2	355.2	327.4	279.2	289.6	293.8
24	n.a.	n.a.	297.0	322.8	344.1	341.2	326.1	354.1	329.2	297.4	286.1	278.9
25	n.a.	298.5	293.1	322.2	342.1	333.5	330.7	353.2	332.1	325.4	289.5	262.3
26	n.a.	283.6	296.2	313.9	342.6	349.8	332.8	350.9	334.7	321.5	288.4	290.1
27	n.a.	290.0	298.4	310.9	332.2	350.1	340.3	338.5	336.7	299.3	302.6	295.6
28	n.a.	294.5	309.9	316.8	329.8	354.7	339.7	337.7	334.2	311.9	303.4	290.6
29	n.a.		284.1	315.5	333.7	351.8	343.3	344.9	336.1	321.9	300.7	277.6
30	n.a.		289.7	314.6	341.7	343.9	341.2	341.1	337.7	316.8	299.4	272.4
31	263.9		305.3		338.7		342.3	342.4		308.5		295.3
Mean	254.3	290.1	292.0	316.9	338.4	345.8	337.3	348.7	332.9	301.9	294.3	283.7
MEAN	281.3	284.4	293.9	310.9	330.0	341.6	340.9	346.9	338.6	313.2	300.8	283.9
MIN	238.9	265.3	268.5	279.8	267.7	330.2	326.1	333.2	308.7	266.1	278.3	238.1
MAX	310.1	298.5	322.6	326.7	344.1	354.7	350.6	357.4	350.0	344.6	335.0	312.3

NET INFRARED RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-15.3	-12.9	-12.3	-66.5	-57.2	-20.2	-65.7	-26.2	-37.9	-72.8	-66.9	-67.0
2	-17.4	-13.1	-13.4	-68.8	-42.2	-28.0	-81.3	-60.5	-46.6	-73.9	-57.0	-34.6
3	-17.6	-12.4	-12.6	-71.2	-42.4	-22.8	-74.6	-33.1	-42.6	-78.8	-19.6	-19.3
4	-34.6	-35.6	-12.3	-43.3	-70.8	-11.7	-55.6	-38.6	1.6	-81.1	-13.9	-42.4
5	-70.4	-73.4	-13.2	-58.5	n.a.	-14.1	-53.4	-19.1	-5.8	-78.3	-13.5	-46.9
6	-31.3	-73.5	-13.0	-50.0	n.a.	-27.2	-51.7	-15.0	-64.2	-56.9	-21.1	-50.9
7	-6.0	-77.0	-41.5	-66.5	n.a.	-32.2	-8.7	1.7	-51.0	-16.5	-11.6	-19.4
8	-16.2	-74.6	-82.5	-72.8	n.a.	-13.5	-4.0	-24.2	-27.8	-25.7	-15.1	-60.2
9	-16.6	-67.7	-76.9	-77.9	-74.9	-12.7	-18.4	-64.8	-54.8	-46.1	-58.8	-57.4
10	-10.8	-72.3	-65.1	-79.3	-72.9	-14.4	-29.0	-74.8	-61.0	-25.9	-71.1	-54.5
Mean	-23.6	-51.2	-34.3	-65.5	-60.1	-19.7	-44.2	-35.5	-39.0	-55.6	-34.9	-45.2
11	-11.5	-51.9	-69.6	-78.4	-62.6	-16.3	-53.0	-70.7	-47.5	-71.7	-71.0	-56.6
12	-13.2	-65.7	-55.5	-35.3	-20.4	-27.4	-35.4	-52.5	-47.2	-78.4	-78.7	-19.7
13	-10.4	-39.9	-15.1	-58.6	-50.8	-16.5	-2.8	-55.1	-75.0	-57.2	-83.3	-55.2
14	-13.3	-35.6	-15.9	-36.5	-20.7	-25.8	-2.9	-46.5	-65.3	-82.6	-83.2	-22.2
15	-15.5	-21.8	-17.7	-49.4	-11.9	-48.0	-24.3	-8.7	-67.9	-81.5	-78.1	-47.2
16	-13.8	-11.1	-13.6	-63.1	-25.5	-13.8	-39.8	-60.0	-68.7	-78.4	-71.8	-21.3
17	-14.2	-11.2	-9.9	-78.2	-40.3	-6.1	-7.9	-57.4	-37.4	-77.1	-74.7	-40.7
18	-14.7	-12.2	-11.6	-78.1	-36.0	-5.8	-16.3	-42.6	-9.7	-79.7	-77.3	-53.5
19	-14.3	-13.8	-17.8	-61.8	-65.9	-79.6	-24.1	-43.3	-9.9	-19.9	-70.7	-53.8
20	-15.9	-11.9	-83.3	-70.4	-74.3	-43.5	-22.6	-42.1	-53.0	-39.7	-66.0	-31.2
Mean	-13.4	-29.2	-25.2	-59.9	-37.1	-26.6	-23.0	-48.5	-47.6	-69.6	-76.5	-41.1
21	-15.4	-11.5	-83.0	-82.2	-49.9	-55.4	-44.2	-57.5	-75.4	-78.9	-63.6	-25.5
22	-14.5	-13.4	-73.7	-64.0	-45.8	-23.5	-44.8	-59.6	-70.3	-81.4	-70.0	-18.0
23	-13.8	-16.1	-74.1	-39.4	-60.2	-13.1	-18.6	-54.2	-67.1	-67.8	-72.1	-59.3
24	n.a.	n.a.	-76.7	-54.4	-74.9	-46.7	-27.2	-52.7	-72.8	-21.8	-74.9	-56.1
25	n.a.	-10.3	-73.6	-39.9	-61.6	-36.2	-28.4	-48.4	-62.2	-12.8	-71.2	-61.2
26	n.a.	-13.9	-62.6	-69.7	-16.7	-50.2	-24.6	-3.9	-74.2	-8.0	-62.1	-52.9
27	n.a.	-12.0	-37.4	-57.8	-14.6	-66.6	-25.8	-24.8	-71.0	-47.4	-69.5	-65.4
28	n.a.	-11.9	-30.1	-28.4	-64.3	-51.4	-17.0	-83.9	-71.2	-62.6	-66.9	-65.8
29	n.a.		-68.8	-19.7	-75.9	-47.7	-24.1	-75.9	-74.1	-67.6	-53.8	-50.4
30	n.a.		-73.7	-26.1	-57.6	-43.2	-44.6	-51.7	-74.5	-70.3	-61.3	-27.8
31	-13.1		-56.5		-33.8		-48.2	-60.5		-69.6		-24.1
Mean	-14.6	-12.7	-65.4	-48.2	-52.1	-43.4	-29.9	-51.3	-71.3	-51.9	-66.5	-48.2
MEAN	-17.9	-32.5	-44.0	-58.2	-49.0	-30.4	-32.9	-45.4	-52.8	-58.4	-59.0	-43.9
MIN	-70.4	-77.0	-83.3	-82.2	-75.9	-79.6	-81.3	-83.9	-75.4	-82.6	-83.3	-67.0
MAX	-6.0	-10.3	-9.9	-19.7	-11.9	-5.8	-2.8	1.7	1.6	-8.0	-11.6	-18.0

SKY TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-14.8	-14.6	-7.4	-16.4	-13.6	0.6	-11.5	0.7	-2.5	-10.9	-16.8	-22.5
2	-17.7	-14.9	-9.0	-18.4	-9.7	-0.2	-16.0	-6.5	-3.4	-10.3	-14.1	-9.0
3	-23.2	-12.9	-8.8	-17.6	-10.6	0.9	-13.0	-0.2	-2.0	-13.0	-2.3	-5.1
4	-23.4	-16.2	-7.4	-10.6	-30.4	3.1	-6.1	-1.5	7.1	-15.7	0.5	-13.6
5	-34.3	-25.0	-8.5	-17.7	n.a.	1.9	-5.0	2.2	4.6	-14.5	1.3	-17.6
6	-13.6	-26.4	-8.7	-9.5	n.a.	-2.5	-5.0	3.4	-9.0	-9.5	-0.4	-24.2
7	-2.5	-27.4	-19.7	-12.9	n.a.	-4.4	4.3	6.8	-4.6	-5.4	-0.6	-9.2
8	-4.9	-28.8	-33.9	-14.9	n.a.	2.4	5.2	0.7	0.3	-9.9	-1.9	-22.9
9	-5.7	-26.0	-31.5	-17.6	-13.4	2.2	3.3	-11.1	-5.2	-18.2	-19.3	-23.7
10	-4.5	-29.2	-24.7	-19.2	-13.2	1.9	0.3	-12.8	-6.9	-1.9	-23.4	-20.7
Mean	-14.5	-22.1	-16.0	-15.5	-15.1	0.6	-4.3	-1.8	-2.2	-10.9	-7.7	-16.9
11	-4.9	-19.0	-26.3	-19.3	-9.8	1.6	-4.4	-10.1	-4.0	-13.3	-25.0	-21.2
12	-6.0	-25.4	-19.0	-8.0	0.5	-0.5	-0.4	-4.8	-4.8	-13.5	-27.0	-8.5
13	-5.1	-20.1	-6.1	-23.6	-6.7	1.6	6.1	-5.7	-10.3	-12.2	-26.3	-23.7
14	-5.7	-17.6	-6.4	-14.5	0.5	0.2	5.5	-3.6	-8.3	-24.2	-25.9	-7.2
15	-8.2	-11.4	-4.4	-20.5	-3.9	-5.2	1.1	4.4	-9.2	-22.5	-24.3	-19.8
16	-8.4	-6.6	-2.5	-20.2	-6.9	2.7	-3.8	-6.6	-9.8	-19.7	-24.2	-9.7
17	-9.0	-6.7	-0.6	-24.2	-5.6	4.3	4.1	-5.4	-2.5	-18.7	-25.4	-22.7
18	-10.6	-7.6	-3.4	-21.8	-3.8	3.8	1.4	-1.3	1.9	-21.1	-29.2	-33.2
19	-11.0	-9.2	-5.6	-17.1	-11.0	-14.3	-0.7	-1.7	-3.7	-3.9	-24.1	-34.7
20	-15.1	-8.6	-30.0	-18.7	-13.4	-4.5	-1.4	-1.4	-11.1	-17.1	-21.7	-21.4
Mean	-7.7	-13.7	-8.3	-18.8	-5.2	-0.6	1.0	-3.9	-5.6	-16.6	-25.7	-20.1
21	-18.0	-7.2	-32.9	-20.2	-7.5	-5.6	-5.1	-4.4	-14.6	-33.5	-21.5	-15.5
22	-18.5	-9.0	-26.5	-15.2	-4.9	0.9	-4.7	-4.0	-12.5	-30.0	-23.2	-7.6
23	-17.9	-12.2	-23.2	-8.0	-7.4	2.6	1.3	-3.3	-13.0	-26.5	-24.3	-19.8
24	n.a.	n.a.	-23.5	-11.2	-10.7	-5.0	-3.8	-3.3	-13.9	-9.3	-26.1	-23.1
25	n.a.	-6.1	-23.7	-7.7	-8.0	-4.6	-3.0	-2.5	-10.6	-0.7	-24.1	-29.6
26	n.a.	-10.5	-20.0	-17.2	2.1	-3.7	-1.7	6.5	-12.9	-0.5	-21.8	-19.1
27	n.a.	-8.5	-13.3	-15.1	0.4	-7.3	-0.4	-0.9	-11.6	-15.2	-19.9	-20.7
28	n.a.	-7.5	-8.2	-6.3	-11.7	-2.8	1.5	-14.6	-12.2	-15.7	-19.0	-22.2
29	n.a.		-25.1	-4.6	-13.6	-2.8	0.7	-10.8	-12.5	-14.4	-16.3	-22.2
30	n.a.		-24.8	-6.2	-7.3	-3.6	-4.4	-6.1	-12.1	-16.4	-18.6	-17.0
31	-15.3		-16.1		-2.6		-5.2	-7.7		-18.4		-10.4
Mean	-18.2	-8.7	-22.1	-11.2	-6.9	-3.2	-2.0	-4.3	-12.6	-16.2	-21.5	-19.7
MEAN	-12.4	-15.4	-16.2	-15.1	-8.2	-1.2	-2.0	-3.4	-7.0	-14.7	-18.2	-18.6
MIN	-34.3	-29.2	-33.9	-24.2	-30.4	-14.3	-16.0	-14.6	-14.6	-33.5	-29.2	-34.7
MAX	-2.5	-6.1	-0.6	-4.6	2.1	4.3	6.1	6.8	7.1	-0.5	1.3	-5.1

SURFACE TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	-10.9	-11.4	-4.5	-1.9	-2.4	0.0	-0.2	0.0	0.0	0.0	-1.6	-5.6
2	-13.2	-11.6	-5.9	-3.2	-1.6	0.0	-0.5	0.0	0.0	0.0	-1.2	-1.1
3	-18.4	-9.9	-5.8	-2.2	-2.0	0.0	-0.6	0.0	0.0	0.0	0.0	-1.0
4	-13.9	-7.3	-4.6	-1.5	-11.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4
5	-14.2	-6.1	-5.4	-3.6	n.a.	0.0	0.0	0.0	0.0	0.0	0.0	-5.5
6	-5.6	-7.2	-5.7	-0.2	n.a.	-0.2	0.0	0.0	0.0	0.0	0.0	-10.5
7	-1.2	-7.2	-8.3	-0.3	n.a.	-0.7	0.0	0.0	0.0	-2.6	0.0	-4.6
8	-1.2	-8.8	-10.9	0.0	n.a.	0.0	0.0	0.0	0.0	-3.9	-0.1	-7.2
9	-1.9	-8.2	-10.4	-0.7	0.0	0.0	0.0	0.0	0.0	-6.3	-4.7	-8.7
10	-2.0	-9.7	-7.8	-1.5	-0.4	0.0	0.0	0.0	0.0	-0.1	-5.4	-6.9
Mean	-8.3	-8.7	-6.9	-1.5	-2.9	-0.1	-0.1	0.0	0.0	-1.3	-1.3	-5.4
11	-2.3	-6.0	-8.0	-2.2	-0.1	0.0	0.0	0.0	0.0	0.0	-6.7	-6.7
12	-3.0	-8.2	-4.9	-1.4	0.0	0.0	0.0	0.0	0.0	0.0	-6.5	-3.8
13	-2.7	-9.8	-2.6	-8.2	-0.1	0.0	0.0	0.0	0.0	-0.8	-4.9	-9.1
14	-2.7	-8.6	-2.9	-5.9	0.0	0.0	0.0	0.0	0.0	-3.8	-4.5	-2.0
15	-4.6	-6.1	-0.8	-7.7	-1.6	0.0	0.0	0.0	0.0	-2.9	-4.5	-7.7
16	-5.2	-4.1	0.0	-5.1	-1.4	0.0	0.0	0.0	0.0	-1.5	-5.8	-4.7
17	-5.7	-4.2	-0.2	-5.5	-0.3	0.0	0.0	0.0	0.0	-1.2	-6.1	-11.7
18	-7.1	-4.7	-1.3	-3.9	-0.1	0.0	0.0	0.0	0.0	-2.2	-8.5	-17.5
19	-7.6	-6.0	-1.9	-3.1	-0.3	-0.1	0.0	0.0	-1.5	-0.6	-6.0	-18.6
20	-11.1	-5.8	-7.7	-2.8	-0.3	-0.1	0.0	0.0	-0.7	-6.9	-5.1	-12.7
Mean	-4.5	-6.4	-2.5	-4.8	-0.4	0.0	0.0	0.0	-0.2	-1.4	-5.9	-9.1
21	-14.0	-4.5	-10.1	-1.7	0.0	0.0	0.0	0.0	-0.1	-11.5	-5.4	-9.2
22	-14.7	-5.8	-7.4	-2.0	0.0	0.0	0.0	0.0	0.0	-8.2	-5.4	-3.4
23	-14.3	-8.3	-5.0	-1.0	0.0	0.0	0.0	0.0	-0.2	-8.3	-5.8	-4.9
24	n.a.	n.a.	-5.0	-1.2	0.0	0.0	-0.1	0.0	-0.2	-4.1	-6.6	-8.3
25	n.a.	-3.8	-5.8	-0.5	0.0	-0.3	-0.1	0.0	0.0	0.0	-5.8	-12.4
26	n.a.	-7.2	-5.1	-1.6	0.0	0.0	-0.2	0.0	0.0	-0.9	-6.1	-5.7
27	n.a.	-5.7	-4.0	-2.3	-0.1	0.0	0.0	0.0	0.0	-3.9	-2.9	-4.4
28	n.a.	-4.7	-2.1	-1.1	-0.6	0.0	0.0	0.0	0.0	-1.6	-2.8	-5.6
29	n.a.		-7.2	-1.5	-1.0	0.0	0.0	0.0	0.0	0.0	-3.4	-8.7
30	n.a.		-6.6	-1.5	0.0	0.0	0.0	0.0	0.0	-0.6	-3.6	-9.9
31	-12.0		-3.6		0.0		0.0	0.0		-2.2		-4.6
Mean	-14.4	-5.7	-5.8	-1.4	-0.2	0.0	0.0	0.0	-0.1	-3.9	-4.8	-7.3
MEAN	-7.9	-7.1	-5.2	-2.5	-0.9	0.0	-0.1	0.0	-0.1	-2.4	-4.0	-7.3
MIN	-18.4	-11.6	-10.9	-8.2	-11.0	-0.7	-0.6	0.0	-1.5	-11.5	-8.5	-18.6
MAX	-1.2	-3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0

AWS1 Forni

Technical sheet

Coordinates:

Latitude: 46° 23' 56.0" N

Longitude: 10° 35' 25.2" E

Elevation: 2.669 m a.s.l

Installation Time:

September 2005

Data Availability:

From September 26, 2005



Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				1.5 m	LSI-Lastem Babuc ABC (7)
Air Temperature	-30 - +70 °C	±0.001°C	30 min.	2.6 m	LSI-Lastem DMA570 (5)
Relative Humidity	0 - 100 %	±1%	30 min	2.6 m	LSI-Lastem DMA570 (5)
Air Pressure	400 - 800 hPa or mBar	±10hPa	60 min.	1.5 m (inside the logger box)	LSI-Lastem DQA223 (7)
Solar Radiations	0.3 - 3 µm	±5% of the value	30 min.	3.17 m	Kipp and Zonen CNR-1 (3)
Infrared Radiation	5 - 50 µm	±5% of the value	30 min.	3.17 m	Kipp and Zonen CNR-1 (3)
Snow level	0 - 1000 cm	±2 cm	60 min.	3.17 m	Sonic Ranger Campbell SR50 (4)
Liquid precipitation	0 - 1000 mm	±1mm	30 min.	1.5 m	LSI-Lastem DQA035 (2)
Wind Speed	0 - 50 m s-1	±1%	60 min.	5 m	LSI-Lastem DNA022 (1)
Wind Direction	0° - 360°	±1°	60 min.	5 m	LSI-Lastem DNA022 (1)

AIR TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	-6.1	-0.4	-0.2	3.4	2.0	5.7	5.6	6.6	0.5	-3.5
2	n.a.	n.a.	-8.3	0.9	-0.2	5.0	0.8	7.6	7.3	7.0	-0.3	-3.4
3	n.a.	n.a.	-8.8	1.7	-0.7	4.7	3.8	8.0	8.7	6.4	-0.5	-3.1
4	n.a.	n.a.	-6.1	-0.8	-3.3	4.8	6.2	7.3	7.5	6.0	0.9	-3.2
5	n.a.	n.a.	-5.7	-2.3	-2.1	4.0	6.4	6.6	4.7	5.6	2.0	-6.8
6	n.a.	n.a.	-5.8	2.5	0.8	2.0	7.1	6.9	4.9	4.6	1.1	-11.1
7	n.a.	n.a.	-9.2	4.5	2.6	2.8	6.5	6.7	7.9	-4.0	-1.0	-8.2
8	n.a.	n.a.	-6.9	3.2	4.6	3.1	7.3	5.9	6.1	-6.9	-1.0	-7.6
9	n.a.	n.a.	-7.8	3.7	2.8	2.5	8.4	1.7	6.8	-6.9	-3.3	-7.0
10	n.a.	n.a.	-6.1	1.2	3.7	2.6	8.1	3.0	7.8	2.3	-1.5	-4.6
Mean	n.a.	n.a.	-7.1	1.4	0.8	3.5	5.7	5.9	6.7	2.1	-0.3	-5.9
11	n.a.	n.a.	-4.7	1.0	4.2	2.1	8.4	5.4	7.8	4.0	-5.1	-7.2
12	n.a.	n.a.	-5.5	-1.6	3.1	3.4	9.1	n.a.	5.9	4.7	-1.9	-6.9
13	n.a.	n.a.	-5.0	-9.4	3.7	3.2	8.5	n.a.	7.2	0.5	-0.6	-6.4
14	n.a.	-9.9	-3.4	-7.2	2.8	4.4	7.1	n.a.	6.6	-1.3	0.0	-4.4
15	n.a.	-7.6	-2.9	-6.6	-4.0	5.0	6.0	n.a.	6.9	0.5	-0.2	-8.2
16	n.a.	-6.6	-2.1	-4.8	-2.6	5.2	4.6	n.a.	6.9	1.6	-3.7	-8.0
17	n.a.	-7.5	-3.0	-3.8	0.9	5.2	5.4	n.a.	5.9	1.8	-3.6	-13.8
18	n.a.	-9.2	-4.7	-1.7	2.6	4.5	4.0	n.a.	1.6	0.5	-3.9	-15.9
19	n.a.	-10.6	-5.2	-0.2	2.7	1.2	3.3	n.a.	-3.9	-2.1	-2.8	-18.5
20	n.a.	-7.3	-9.4	-0.3	2.8	3.9	0.7	n.a.	0.7	-7.6	-3.2	-13.7
Mean	n.a.	-8.6	-4.1	-3.8	1.5	3.8	6.3	n.a.	5.0	1.2	-2.4	-9.9
21	n.a.	-9.9	-7.4	-0.1	3.2	7.4	2.9	n.a.	4.9	-9.0	-3.7	-11.5
22	n.a.	-11.9	-4.4	-0.5	4.1	7.1	3.9	n.a.	5.3	-4.3	-3.7	-6.1
23	n.a.	-15.7	-0.9	-0.1	5.4	4.7	2.3	n.a.	4.1	-7.0	-3.9	-2.8
24	n.a.	-10.6	-2.0	1.0	5.9	4.0	-0.1	n.a.	4.0	-7.0	-3.3	-8.2
25	n.a.	-7.0	-2.7	1.9	5.9	3.4	1.0	n.a.	4.1	-0.1	-2.5	-11.2
26	n.a.	-8.0	-3.4	-0.8	5.0	8.8	2.6	n.a.	5.2	-1.1	-3.3	-3.0
27	n.a.	-7.6	-4.3	-1.9	1.4	10.1	3.4	n.a.	5.5	-0.7	0.3	-0.5
28	n.a.	-7.9	-2.4	-1.8	0.9	10.7	3.4	5.4	5.1	2.9	-1.1	-2.6
29	n.a.		-6.0	-1.4	3.8	8.2	4.4	7.0	5.7	2.9	-1.6	-9.2
30	n.a.		-4.7	-1.8	6.2	6.0	4.7	5.1	6.1	1.7	-2.1	-12.6
31	n.a.		-1.4		4.2		4.7	6.0		0.3		-8.0
Mean	n.a.	-9.8	-3.8	-0.5	4.2	7.0	2.8	n.a.	5.0	-2.2	-2.5	-6.8
MEAN	n.a.	-9.2	-5.0	-0.9	2.3	4.8	4.7	5.9	5.4	0.1	-1.8	-7.7
MIN	n.a.	-15.7	-9.4	-9.4	-4.0	1.2	-0.1	1.7	-3.9	-9.0	-5.1	-18.5
MAX	n.a.	-6.6	4.5	-0.9	6.2	10.7	9.1	8.0	8.7	7.0	2.0	-0.5

RELATIVE HUMIDITY (%)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	49.5	65.1	74.0	90.8	70.4	86.7	86.8	60.3	54.1	52.9
2	n.a.	n.a.	55.2	53.7	88.8	81.5	59.5	82.6	80.1	66.0	72.5	85.5
3	n.a.	n.a.	83.3	55.9	80.2	90.2	64.6	80.2	78.1	56.5	89.9	94.9
4	n.a.	n.a.	55.1	76.9	49.7	90.8	75.0	78.4	91.8	43.0	96.7	85.0
5	n.a.	n.a.	39.3	60.2	45.1	88.3	71.1	86.8	96.3	53.6	90.7	83.2
6	n.a.	n.a.	36.6	67.9	63.2	92.0	72.4	89.0	83.6	68.1	94.9	75.1
7	n.a.	n.a.	35.0	60.9	55.4	83.7	92.1	99.3	55.1	89.3	90.7	94.4
8	n.a.	n.a.	27.6	64.2	60.7	95.1	83.1	88.2	80.7	89.8	93.6	72.7
9	n.a.	n.a.	42.8	46.2	65.0	95.8	73.4	77.6	78.6	73.5	59.1	70.1
10	n.a.	n.a.	63.9	56.7	68.2	98.1	78.7	69.9	78.9	82.9	39.7	70.5
Mean	n.a.	n.a.	48.8	60.8	65.0	90.6	74.0	83.9	81.0	68.3	78.2	78.4
11	n.a.	n.a.	47.8	55.0	64.2	97.7	71.5	57.8	67.3	61.3	60.2	78.1
12	n.a.	n.a.	61.0	75.4	92.2	90.8	75.4	n.a.	84.4	57.8	39.2	92.6
13	n.a.	n.a.	85.4	64.0	78.2	95.8	85.0	n.a.	71.4	74.4	29.2	49.7
14	n.a.	86.7	85.0	58.5	90.2	86.2	84.3	n.a.	79.8	50.9	27.5	91.4
15	n.a.	88.0	84.5	66.6	88.1	84.6	87.2	n.a.	78.4	38.9	37.6	81.4
16	n.a.	82.2	87.7	72.9	73.6	94.4	88.2	n.a.	68.5	42.8	48.5	94.5
17	n.a.	87.6	93.1	71.1	80.1	97.2	96.0	n.a.	83.1	50.7	48.6	77.9
18	n.a.	77.7	80.4	65.8	86.1	96.8	86.7	n.a.	98.3	50.0	32.8	65.6
19	n.a.	58.1	83.7	68.2	72.0	73.9	81.6	n.a.	98.8	95.4	54.9	67.1
20	n.a.	77.2	46.8	68.8	76.2	78.4	94.4	n.a.	78.0	92.5	54.2	70.6
Mean	n.a.	80.1	78.7	66.4	80.5	90.8	84.0	n.a.	81.1	58.0	42.0	77.6
21	n.a.	87.3	39.2	66.2	83.7	76.4	81.9	n.a.	45.0	44.9	63.3	81.1
22	n.a.	77.3	53.6	67.7	82.3	87.8	79.2	n.a.	47.8	37.6	67.4	89.6
23	n.a.	43.3	49.8	77.7	75.1	96.2	96.5	n.a.	69.1	55.5	60.9	60.0
24	n.a.	70.4	46.7	80.8	69.1	82.0	86.8	n.a.	71.5	85.7	43.0	65.0
25	n.a.	70.8	54.2	75.3	75.3	78.2	79.4	n.a.	76.7	95.3	38.3	59.1
26	n.a.	44.7	67.6	73.8	93.6	68.6	84.3	n.a.	65.8	94.9	50.9	71.5
27	n.a.	85.6	84.6	81.3	96.1	49.5	94.6	n.a.	67.3	34.0	42.9	53.4
28	n.a.	77.5	78.6	85.8	77.0	61.6	94.9	48.3	70.5	51.8	59.2	56.6
29	n.a.		62.3	90.6	58.2	68.6	89.4	57.7	58.1	67.3	58.5	76.0
30	n.a.		67.1	78.5	73.5	79.1	83.4	83.6	58.7	64.7	55.9	83.4
31	n.a.		68.2		86.0		82.9	84.3		55.6		91.9
Mean	n.a.	69.6	60.3	77.8	78.4	74.8	87.1	n.a.	63.1	63.2	54.0	69.6
MEAN	n.a.	74.3	61.8	68.4	74.9	85.0	82.1	78.0	75.0	64.0	58.5	75.5
MIN	n.a.	43.3	27.6	46.2	45.1	49.5	59.5	48.3	45.0	34.0	27.5	49.7
MAX	n.a.	88.0	93.1	90.6	96.1	98.1	96.5	99.3	98.8	95.4	96.7	94.9

ATMOSPHERIC PRESSURE (hPa)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	736.2	744.1	729.0	739.8	740.2	740.6	742.3	750.5	741.2	743.4
2	n.a.	n.a.	734.0	742.5	730.4	744.6	736.7	744.1	743.6	749.4	739.9	739.0
3	n.a.	n.a.	735.8	739.0	729.1	745.5	737.1	745.4	744.3	748.6	737.5	735.4
4	n.a.	n.a.	739.6	738.1	733.9	742.2	740.2	743.2	742.3	748.0	736.1	732.7
5	n.a.	n.a.	735.5	742.1	739.9	738.5	740.1	743.1	741.4	746.9	736.3	727.3
6	n.a.	n.a.	735.4	747.4	743.4	734.9	740.3	740.4	745.8	742.6	736.7	729.7
7	n.a.	n.a.	739.3	747.7	743.6	733.7	740.9	737.9	742.5	732.7	737.8	730.9
8	n.a.	n.a.	741.4	743.0	742.3	732.4	741.4	737.1	740.8	733.3	740.6	738.0
9	n.a.	n.a.	737.8	742.0	744.4	735.2	745.3	741.2	742.4	736.3	742.4	737.9
10	n.a.	n.a.	737.6	741.5	747.0	737.3	745.3	744.2	744.7	742.2	740.7	735.2
Mean	n.a.	n.a.	737.3	742.7	738.3	738.4	740.8	741.7	743.0	743.1	738.9	735.0
11	n.a.	n.a.	737.3	742.1	745.4	737.8	744.3	745.1	744.4	745.8	741.5	736.1
12	n.a.	n.a.	735.1	737.7	741.8	739.9	744.8	n.a.	743.2	743.8	747.0	732.4
13	n.a.	n.a.	731.4	733.8	741.8	740.1	740.8	n.a.	744.3	743.0	748.8	734.0
14	n.a.	728.7	735.2	731.3	739.0	741.7	739.4	n.a.	743.4	743.7	744.4	732.2
15	n.a.	724.6	735.9	731.8	735.6	743.9	741.1	n.a.	744.1	745.0	739.3	730.9
16	n.a.	720.4	728.6	735.0	740.3	743.0	740.6	n.a.	744.7	745.2	739.3	721.0
17	n.a.	721.3	724.9	738.1	742.4	741.1	735.6	n.a.	742.7	743.7	741.7	719.3
18	n.a.	727.4	733.8	739.2	741.7	736.1	732.5	n.a.	734.0	741.5	742.0	726.2
19	n.a.	730.5	736.7	737.5	742.0	736.5	732.3	n.a.	731.9	738.4	741.1	729.1
20	n.a.	728.4	739.0	739.1	743.0	741.2	732.0	n.a.	741.4	737.1	740.9	727.6
Mean	n.a.	725.5	733.2	736.3	741.1	740.0	739.0	n.a.	741.4	743.3	742.8	729.0
21	n.a.	726.7	741.3	739.4	743.8	744.8	734.2	n.a.	744.3	739.7	739.3	731.3
22	n.a.	724.7	746.3	736.6	743.5	745.0	735.2	n.a.	743.6	738.9	738.6	736.8
23	n.a.	730.4	749.0	736.5	746.4	742.2	734.1	n.a.	742.5	737.2	741.6	740.7
24	n.a.	735.3	749.0	737.7	746.6	741.7	732.5	n.a.	742.6	734.9	746.4	736.6
25	n.a.	736.5	741.7	737.4	746.4	745.6	733.9	n.a.	745.1	733.5	746.3	744.1
26	n.a.	734.3	735.1	735.1	743.7	748.0	737.0	n.a.	748.2	736.1	746.6	749.6
27	n.a.	728.8	733.5	733.8	737.4	747.9	741.0	n.a.	750.6	740.0	746.2	750.3
28	n.a.	731.8	731.7	732.8	736.3	745.2	740.7	743.0	750.6	744.8	744.5	745.9
29	n.a.		734.7	730.5	741.4	743.1	740.8	741.3	750.3	746.1	743.2	737.4
30	n.a.		736.4	729.3	743.0	740.9	739.7	739.8	750.3	744.1	744.4	729.6
31	n.a.		740.5		739.9		739.1	740.7		742.4		732.8
Mean	n.a.	731.1	739.9	734.9	742.8	744.4	736.9	n.a.	746.8	739.5	743.7	740.2
MEAN	n.a.	728.7	737.1	738.1	740.8	741.0	738.7	741.8	743.7	741.8	741.7	734.6
MIN	n.a.	720.4	724.9	729.3	729.0	732.4	732.0	737.1	731.9	732.7	736.1	719.3
MAX	n.a.	736.5	749.0	747.7	747.0	748.0	745.3	745.4	750.6	750.5	748.8	750.3

WIND DIRECTION (degree)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	90.1	125.0	160.9	126.8	207.1	109.5	120.1	112.9	107.0	112.5
2	n.a.	n.a.	131.8	110.0	196.8	104.8	238.4	127.1	104.3	109.2	118.0	220.3
3	n.a.	n.a.	111.4	112.0	210.9	124.0	182.0	139.5	106.5	112.6	241.1	277.2
4	n.a.	n.a.	86.3	202.5	159.3	120.4	114.5	127.1	126.5	116.4	181.4	147.6
5	n.a.	n.a.	79.4	230.6	126.2	144.2	125.9	125.4	125.6	121.8	82.1	226.0
6	n.a.	n.a.	119.5	162.6	131.9	145.8	104.2	175.2	136.2	144.0	127.1	173.1
7	n.a.	n.a.	121.2	163.4	125.8	126.9	141.5	244.6	169.5	234.1	119.7	285.5
8	n.a.	n.a.	121.9	158.8	175.8	157.5	250.0	266.5	212.8	257.8	174.7	199.3
9	n.a.	n.a.	120.7	215.7	127.4	157.2	121.5	198.5	144.0	223.8	98.3	100.3
10	n.a.	n.a.	107.4	155.1	168.7	170.0	124.3	183.2	110.2	229.9	99.0	105.6
Mean	n.a.	n.a.	109.0	163.6	158.4	137.7	160.9	169.7	135.6	166.2	134.8	184.7
11	n.a.	n.a.	106.9	142.8	130.7	160.0	117.8	106.6	118.9	138.1	104.3	109.4
12	n.a.	n.a.	145.7	203.3	177.5	158.8	112.2	n.a.	132.1	222.9	105.8	181.6
13	n.a.	n.a.	114.6	248.2	129.6	175.2	159.3	n.a.	112.4	179.5	98.6	126.7
14	n.a.	110.8	160.3	150.1	181.7	154.3	121.2	n.a.	110.1	129.1	94.7	255.5
15	n.a.	173.7	124.0	159.5	283.3	116.8	145.4	n.a.	126.9	115.8	91.4	243.8
16	n.a.	114.0	93.7	128.1	252.0	147.1	159.6	n.a.	113.7	112.9	110.6	267.3
17	n.a.	152.3	239.8	132.4	163.0	184.4	168.8	n.a.	133.2	110.5	106.8	255.0
18	n.a.	103.6	265.7	130.4	143.0	265.3	187.5	n.a.	176.8	115.7	103.9	100.2
19	n.a.	118.5	180.4	125.2	125.9	240.3	112.4	n.a.	262.0	244.5	101.1	115.8
20	n.a.	150.9	121.3	122.3	118.0	206.2	245.0	n.a.	178.2	178.1	110.3	163.6
Mean	n.a.	128.8	159.0	157.8	176.3	178.0	142.7	n.a.	142.9	152.1	101.9	183.9
21	n.a.	203.0	101.9	116.1	126.7	132.9	158.2	n.a.	104.5	108.8	107.5	161.9
22	n.a.	184.0	116.5	158.3	126.8	206.3	167.2	n.a.	113.1	117.0	110.5	248.9
23	n.a.	218.4	97.5	153.3	134.4	173.2	154.7	n.a.	111.5	114.5	108.3	144.5
24	n.a.	204.7	107.5	140.8	128.8	195.8	244.2	n.a.	116.3	134.3	109.7	202.9
25	n.a.	240.6	105.3	148.9	119.6	224.0	165.8	n.a.	116.0	113.3	112.0	135.0
26	n.a.	125.6	172.7	137.4	124.5	186.9	185.6	n.a.	90.0	143.7	117.0	146.3
27	n.a.	149.6	189.0	169.3	198.9	104.4	157.7	n.a.	105.8	106.6	103.7	100.2
28	n.a.	102.9	159.4	163.5	202.3	145.5	129.0	122.7	111.2	108.1	105.9	103.4
29	n.a.		113.0	199.3	125.0	108.5	166.0	121.8	100.2	108.4	105.7	168.8
30	n.a.		104.3	145.4	118.0	167.8	179.4	131.6	114.7	109.8	114.4	220.4
31	n.a.		144.3		139.6		119.8	145.4		111.8		222.5
Mean	n.a.	178.6	126.7	153.2	140.5	164.5	170.8	n.a.	108.3	116.4	109.5	163.2
MEAN	n.a.	156.8	130.7	157.0	155.9	161.0	160.2	155.0	130.1	144.7	115.7	178.1
MIN	n.a.	102.9	79.4	110.0	118.0	104.4	104.2	106.6	90.0	106.6	82.1	100.2
MAX	n.a.	240.6	265.7	248.2	283.3	265.3	250.0	266.5	262.0	257.8	241.1	285.5

WIND SPEED (m/s)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	8.7	4.9	4.3	5.4	6.8	4.1	3.2	7.1	6.1	4.9
2	n.a.	n.a.	8.5	5.5	3.5	5.3	6.8	4.4	4.8	6.7	5.3	6.3
3	n.a.	n.a.	5.4	4.7	4.6	4.4	4.6	5.4	6.1	6.5	6.7	9.1
4	n.a.	n.a.	7.8	3.8	6.0	4.1	5.4	4.7	5.1	6.7	5.3	2.6
5	n.a.	n.a.	7.5	3.7	4.2	5.2	4.9	4.8	3.5	6.1	9.8	7.8
6	n.a.	n.a.	5.6	4.0	3.6	4.7	5.4	5.8	3.3	6.4	7.1	3.9
7	n.a.	n.a.	3.8	6.0	4.7	5.2	4.5	7.0	5.4	0.9	3.5	9.8
8	n.a.	n.a.	3.3	5.4	6.1	2.0	8.6	9.2	6.2	0.1	4.7	9.5
9	n.a.	n.a.	5.1	6.3	4.0	1.6	4.7	4.6	6.3	0.8	4.4	3.3
10	n.a.	n.a.	3.8	4.4	4.7	1.9	5.1	3.2	5.4	7.1	6.1	3.9
Mean	n.a.	n.a.	5.9	4.9	4.6	4.0	5.7	5.3	4.9	4.8	5.9	6.1
11	n.a.	n.a.	5.5	4.3	5.0	1.7	6.1	3.8	4.9	3.5	5.3	4.8
12	n.a.	n.a.	3.3	7.0	3.2	2.7	5.9	n.a.	5.1	7.2	4.3	3.1
13	n.a.	n.a.	11.7	9.2	3.4	2.7	8.1	n.a.	6.9	5.4	2.2	3.3
14	n.a.	6.0	3.4	3.6	2.5	3.5	6.1	n.a.	5.7	5.0	6.0	11.4
15	n.a.	2.9	6.4	4.0	4.1	3.8	4.0	n.a.	5.3	4.8	7.4	5.9
16	n.a.	9.0	10.6	4.1	7.9	3.8	4.1	n.a.	6.8	6.7	5.8	10.6
17	n.a.	2.6	0.1	4.9	2.2	4.4	5.2	n.a.	4.9	7.3	5.3	11.8
18	n.a.	5.5	3.8	3.9	1.2	10.1	5.0	n.a.	3.7	6.6	6.2	2.6
19	n.a.	5.4	2.5	3.4	4.4	6.2	6.9	n.a.	4.3	6.9	6.3	6.0
20	n.a.	1.9	6.3	4.4	4.2	4.4	4.6	n.a.	5.7	3.9	5.6	2.8
Mean	n.a.	5.2	5.3	4.9	3.8	4.3	5.7	n.a.	5.3	5.9	5.4	6.6
21	n.a.	2.1	5.7	4.2	4.4	4.0	3.4	n.a.	4.4	4.4	6.3	2.8
22	n.a.	3.3	4.9	5.3	3.1	6.5	4.1	n.a.	6.6	5.0	5.7	6.9
23	n.a.	7.5	6.0	2.4	4.9	4.1	2.6	n.a.	6.7	7.8	6.1	5.8
24	n.a.	5.4	5.5	4.1	5.6	4.6	4.9	n.a.	6.4	6.0	6.0	8.8
25	n.a.	8.9	4.9	3.4	4.8	8.5	2.9	n.a.	5.4	6.8	6.0	4.5
26	n.a.	5.2	4.4	4.3	3.4	5.6	2.9	n.a.	5.5	2.6	4.7	3.9
27	n.a.	1.2	3.5	3.1	3.0	6.7	2.1	n.a.	6.6	3.9	5.2	3.4
28	n.a.	7.1	1.9	5.0	2.0	5.6	1.9	4.9	5.9	4.4	6.1	4.4
29	n.a.		6.1	1.8	5.0	7.0	2.8	5.4	6.3	5.0	5.6	4.6
30	n.a.		6.1	4.6	4.8	3.7	4.2	4.7	5.7	6.0	5.7	6.5
31	n.a.		3.1		3.6		3.8	3.8		6.7		4.8
Mean	n.a.	5.1	4.9	3.8	4.1	5.6	3.2	n.a.	6.0	5.2	5.8	5.2
MEAN	n.a.	4.9	5.3	4.5	4.1	4.6	4.8	5.1	5.4	5.3	5.7	5.8
MIN	n.a.	1.2	0.1	1.8	1.2	1.6	1.9	3.2	3.2	0.1	2.2	2.6
MAX	n.a.	9.0	11.7	9.2	7.9	10.1	8.6	9.2	6.9	7.8	9.8	11.8

PRECIPITATION (mm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	0.4	0.2	0.0	9.4	0.0	2.0	3.4	0.0	0.0	0.0
2	n.a.	n.a.	0.0	0.0	0.2	5.8	0.0	0.0	0.0	0.0	0.0	0.0
3	n.a.	n.a.	0.0	0.0	0.4	6.6	0.0	10.8	6.0	0.0	0.0	0.0
4	n.a.	n.a.	0.2	2.0	0.0	13.8	16.8	0.0	32.8	0.0	12.8	0.0
5	n.a.	n.a.	0.0	1.0	0.0	9.0	0.2	8.2	24.0	0.0	14.2	0.0
6	n.a.	n.a.	0.0	0.0	0.0	12.8	0.4	7.8	0.8	3.6	13.4	0.0
7	n.a.	n.a.	0.0	0.0	0.0	12.2	20.6	16.8	0.0	5.2	0.4	0.0
8	n.a.	n.a.	0.0	0.0	0.0	5.8	0.6	5.4	1.0	0.0	0.0	0.0
9	n.a.	n.a.	0.0	0.0	0.0	11.2	0.0	0.2	0.0	0.0	0.2	0.0
10	n.a.	n.a.	0.0	0.0	0.0	5.0	1.8	0.0	0.0	0.0	0.0	0.0
Total	n.a.	n.a.	0.6	3.2	0.6	91.6	40.4	51.2	68.0	8.8	41.0	0.0
11	n.a.	n.a.	0.0	0.0	0.0	12.2	1.8	0.0	0.0	0.0	0.0	0.0
12	n.a.	n.a.	0.0	0.0	3.2	4.6	0.6	n.a.	10.8	0.0	0.8	0.0
13	n.a.	n.a.	0.0	0.0	0.2	4.6	34.4	n.a.	0.0	0.0	0.0	1.4
14	n.a.	0.0	0.4	0.0	11.8	1.0	3.6	n.a.	0.0	0.0	0.0	0.0
15	n.a.	0.0	0.2	0.0	0.4	0.0	3.2	n.a.	0.0	0.0	0.0	0.0
16	n.a.	0.0	1.6	0.0	3.4	3.4	4.8	n.a.	0.0	0.0	0.0	0.0
17	n.a.	2.2	4.6	0.0	0.4	12.0	18.2	n.a.	16.4	0.0	0.0	0.0
18	n.a.	0.0	0.0	0.0	3.8	34.8	11.8	n.a.	55.8	0.0	0.0	0.0
19	n.a.	0.0	0.0	0.0	0.0	0.0	7.8	n.a.	0.2	0.0	0.0	0.0
20	n.a.	1.4	0.6	0.0	0.8	0.0	12.8	n.a.	9.0	2.6	0.0	0.0
Total	n.a.	2.2	6.8	0.0	23.2	72.6	86.2	n.a.	83.2	0.0	0.8	1.4
21	n.a.	2.0	1.6	0.0	11.6	2.2	4.2	n.a.	0.4	0.0	0.0	0.0
22	n.a.	0.8	0.2	0.0	4.2	7.8	5.2	n.a.	0.0	0.2	0.0	0.4
23	n.a.	0.0	0.0	0.0	0.0	23.2	12.0	n.a.	0.0	0.0	0.0	0.2
24	n.a.	0.0	0.0	0.2	0.0	0.0	2.6	n.a.	0.0	0.0	0.0	0.0
25	n.a.	0.2	0.0	0.4	0.0	0.2	0.0	n.a.	0.0	2.6	0.0	0.0
26	n.a.	0.0	0.0	0.0	1.0	0.4	0.0	n.a.	0.0	7.4	0.0	0.2
27	n.a.	4.0	0.0	1.8	41.0	0.0	9.0	n.a.	0.0	0.6	0.0	0.2
28	n.a.	0.0	1.2	0.6	8.8	0.0	7.4	0.0	0.0	0.0	0.0	0.0
29	n.a.		0.4	3.4	0.0	15.4	0.4	0.0	0.0	0.0	0.0	0.0
30	n.a.		0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
31	n.a.		0.0		3.4		10.4	0.0		0.0		0.0
Total	n.a.	7.0	3.4	6.6	66.6	49.2	41.2	n.a.	0.4	10.8	0.0	1.0
TOTAL	n.a.	10.6	11.4	9.8	94.6	213.4	191.0	51.2	160.6	22.2	41.8	2.4
MIN	n.a.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	n.a.	4.0	4.6	3.4	41.0	34.8	34.4	16.8	55.8	7.4	14.2	1.4

INCOMING SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	162.6	261.6	310.1	102.5	385.2	170.9	74.2	192.1	106.0	54.3
2	n.a.	n.a.	159.7	272.6	143.8	200.7	374.5	298.1	165.0	184.2	74.7	30.7
3	n.a.	n.a.	88.4	267.0	188.3	106.7	324.3	154.6	198.6	187.1	60.5	36.6
4	n.a.	n.a.	167.0	124.3	360.2	228.6	252.2	296.2	30.3	187.3	36.6	54.0
5	n.a.	n.a.	180.5	294.2	364.5	154.3	295.1	123.9	85.9	183.8	34.1	42.9
6	n.a.	n.a.	187.2	284.9	341.9	165.4	265.1	176.9	247.4	166.2	46.0	48.5
7	n.a.	n.a.	191.4	275.8	346.4	144.0	112.5	24.5	211.5	138.8	60.4	35.7
8	n.a.	n.a.	193.7	246.9	352.1	162.3	97.7	99.2	88.4	101.6	54.5	40.4
9	n.a.	n.a.	197.3	271.5	364.6	205.3	278.9	259.7	236.2	214.6	91.1	34.9
10	n.a.	n.a.	177.1	280.8	322.0	171.3	195.8	308.2	221.4	60.9	99.3	40.2
Mean	n.a.	n.a.	170.5	258.0	309.4	164.1	258.1	191.2	155.9	161.7	66.3	41.8
11	n.a.	n.a.	196.0	276.7	251.9	177.8	344.0	288.9	204.1	159.2	91.0	38.2
12	n.a.	n.a.	142.4	144.0	153.4	249.5	285.4	n.a.	195.9	150.4	91.1	27.2
13	n.a.	n.a.	99.9	295.9	347.4	151.7	46.0	n.a.	236.3	138.1	88.3	48.4
14	n.a.	122.3	171.2	236.1	258.1	315.2	135.4	n.a.	143.6	162.1	86.2	29.8
15	n.a.	78.1	111.2	300.1	236.7	200.3	191.4	n.a.	214.5	153.3	83.8	43.7
16	n.a.	83.8	90.9	297.1	282.2	119.7	112.4	n.a.	203.1	141.4	81.0	31.2
17	n.a.	93.9	127.0	324.8	213.9	104.6	41.6	n.a.	122.3	149.2	79.5	52.2
18	n.a.	111.2	228.2	298.1	211.9	27.8	153.7	n.a.	17.8	148.5	79.1	52.0
19	n.a.	137.9	140.0	281.7	288.4	408.8	188.2	n.a.	150.9	37.1	71.4	37.6
20	n.a.	105.7	249.0	322.3	264.7	260.9	194.4	n.a.	238.5	127.5	71.2	51.2
Mean	n.a.	104.5	145.2	272.7	249.3	195.0	166.5	n.a.	165.4	137.7	83.5	40.0
21	n.a.	99.1	244.5	322.9	193.3	380.7	213.7	n.a.	227.6	147.0	69.9	46.0
22	n.a.	128.2	226.6	282.4	276.9	116.0	250.8	n.a.	208.6	142.1	67.7	42.7
23	n.a.	153.2	227.8	142.8	340.0	70.0	171.9	n.a.	210.1	139.3	66.2	36.9
24	n.a.	99.1	248.8	219.8	281.1	281.7	159.6	n.a.	171.4	130.1	66.4	40.7
25	n.a.	141.2	249.3	296.0	283.7	187.4	150.5	n.a.	136.5	45.8	64.8	35.2
26	n.a.	157.8	216.3	262.5	153.4	351.3	205.8	n.a.	146.5	81.9	64.3	47.2
27	n.a.	116.5	147.0	212.4	109.0	387.7	163.0	n.a.	155.1	134.1	60.4	34.1
28	n.a.	91.4	203.3	213.3	390.7	367.2	152.4	273.8	175.5	117.3	56.8	35.5
29	n.a.		269.4	195.3	376.1	306.2	174.1	270.3	172.4	116.8	47.8	29.6
30	n.a.		268.7	221.5	311.9	287.1	200.1	165.7	178.6	115.8	54.5	38.9
31	n.a.		242.8		205.5		192.7	186.3		110.2		39.1
Mean	n.a.	123.3	230.2	236.9	271.6	273.5	184.2	n.a.	178.2	117.0	61.9	38.7
MEAN	n.a.	114.6	187.3	257.5	275.0	213.1	203.5	206.5	168.9	137.5	70.1	40.5
MIN	n.a.	78.1	88.4	124.3	109.0	27.8	41.6	24.5	17.8	37.1	34.1	27.2
MAX	n.a.	157.8	269.4	324.8	390.7	408.8	385.2	308.2	247.4	214.6	106.0	54.3

OUTGOING SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	130.7	183.5	201.1	68.6	93.4	37.3	18.7	71.1	78.4	42.3
2	n.a.	n.a.	119.1	181.6	112.3	124.6	106.1	56.9	41.3	59.9	61.2	26.9
3	n.a.	n.a.	81.1	176.7	155.5	71.9	82.3	29.5	44.4	56.3	53.1	32.4
4	n.a.	n.a.	135.8	106.6	229.4	138.0	57.0	56.0	5.3	55.8	33.0	48.1
5	n.a.	n.a.	138.8	214.6	219.8	97.6	59.7	23.1	19.2	53.2	28.4	38.6
6	n.a.	n.a.	141.1	194.8	197.0	118.4	49.5	34.4	60.7	44.6	39.4	43.3
7	n.a.	n.a.	141.6	175.3	199.5	108.4	18.1	3.6	55.5	124.9	54.3	32.9
8	n.a.	n.a.	141.1	166.9	206.5	105.5	14.4	19.6	20.3	91.5	49.7	36.4
9	n.a.	n.a.	145.1	175.8	208.2	127.3	50.8	71.1	51.4	147.5	71.9	32.9
10	n.a.	n.a.	132.5	177.8	185.7	106.9	35.5	107.4	49.2	52.9	76.8	37.2
Mean	n.a.	n.a.	130.7	175.4	191.5	106.7	56.7	43.9	36.6	75.8	54.6	37.1
11	n.a.	n.a.	144.8	175.1	151.2	106.4	62.3	98.7	45.2	111.1	68.4	34.4
12	n.a.	n.a.	117.7	105.4	105.1	138.6	49.0	n.a.	44.4	101.3	66.3	24.7
13	n.a.	n.a.	87.9	211.1	196.6	82.9	7.0	n.a.	49.4	94.8	64.2	43.4
14	n.a.	90.2	140.8	180.6	160.6	137.4	30.0	n.a.	31.3	102.2	62.9	27.3
15	n.a.	67.9	96.6	208.7	200.7	77.5	44.5	n.a.	45.2	94.8	60.8	38.4
16	n.a.	76.0	85.4	197.5	235.2	42.8	27.5	n.a.	44.5	93.3	58.9	28.7
17	n.a.	84.0	121.2	214.2	161.3	32.3	8.4	n.a.	25.9	90.5	58.0	47.6
18	n.a.	92.1	178.0	185.5	164.7	5.7	39.5	n.a.	15.6	87.8	58.1	46.3
19	n.a.	107.9	124.4	182.9	174.0	115.5	52.7	n.a.	135.8	29.1	55.1	37.2
20	n.a.	94.8	177.2	198.1	164.4	84.5	165.0	n.a.	177.4	117.7	56.3	45.5
Mean	n.a.	86.3	121.9	184.5	172.2	82.1	35.7	n.a.	48.6	89.4	61.4	36.4
21	n.a.	98.3	175.0	198.2	123.3	97.0	153.1	n.a.	160.2	110.8	51.1	42.7
22	n.a.	112.4	169.4	175.5	164.9	26.0	140.2	n.a.	152.9	105.0	50.4	40.6
23	n.a.	120.3	163.9	104.8	191.4	12.6	67.3	n.a.	147.2	102.3	49.5	33.2
24	n.a.	84.7	173.4	146.5	152.4	73.2	124.0	n.a.	122.1	94.9	48.3	36.6
25	n.a.	127.4	172.5	187.0	166.7	52.3	83.0	n.a.	106.9	41.7	47.6	33.9
26	n.a.	120.9	155.8	167.3	98.2	69.7	79.1	n.a.	107.7	71.7	49.8	41.7
27	n.a.	105.3	122.1	159.2	87.6	76.2	48.9	n.a.	99.0	100.8	45.4	32.0
28	n.a.	85.1	158.5	162.1	279.2	64.7	39.6	77.2	101.3	88.6	45.2	32.7
29	n.a.		190.9	164.9	240.1	55.7	45.3	71.7	90.6	85.6	40.9	28.2
30	n.a.		188.1	183.6	198.1	53.8	47.6	48.4	81.6	83.0	42.2	35.9
31	n.a.		170.6		128.4		42.7	52.6		81.2		36.1
Mean	n.a.	106.8	167.0	164.9	170.2	58.1	82.8	n.a.	117.0	88.4	47.0	35.7
MEAN	n.a.	97.8	142.6	175.4	176.1	82.4	62.0	52.5	71.7	85.4	54.2	36.7
MIN	n.a.	67.9	81.1	104.8	87.6	5.7	7.0	3.6	5.3	29.1	28.4	24.7
MAX	n.a.	127.4	190.9	214.6	279.2	138.6	165.0	107.4	177.4	147.5	78.4	48.1

ALBEDO

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	0.8	0.7	0.6	0.7	0.2	0.2	0.3	0.4	0.7	0.8
2	n.a.	n.a.	0.7	0.7	0.8	0.6	0.3	0.2	0.3	0.3	0.8	0.9
3	n.a.	n.a.	0.9	0.7	0.8	0.7	0.3	0.2	0.2	0.3	0.9	0.9
4	n.a.	n.a.	0.8	0.9	0.6	0.6	0.2	0.2	0.2	0.3	0.9	0.9
5	n.a.	n.a.	0.8	0.7	0.6	0.6	0.2	0.2	0.2	0.3	0.8	0.9
6	n.a.	n.a.	0.8	0.7	0.6	0.7	0.2	0.2	0.2	0.3	0.9	0.9
7	n.a.	n.a.	0.7	0.6	0.6	0.8	0.2	0.1	0.3	0.9	0.9	0.9
8	n.a.	n.a.	0.7	0.7	0.6	0.6	0.1	0.2	0.2	0.9	0.9	0.9
9	n.a.	n.a.	0.7	0.6	0.6	0.6	0.2	0.3	0.2	0.7	0.8	0.9
10	n.a.	n.a.	0.7	0.6	0.6	0.6	0.2	0.3	0.2	0.9	0.8	0.9
Mean	n.a.	n.a.	0.8	0.7	0.6	0.7	0.2	0.2	0.2	0.5	0.8	0.9
11	n.a.	n.a.	0.7	0.6	0.6	0.6	0.2	0.3	0.2	0.7	0.8	0.9
12	n.a.	n.a.	0.8	0.7	0.7	0.6	0.2	n.a.	0.2	0.7	0.7	0.9
13	n.a.	n.a.	0.9	0.7	0.6	0.5	0.2	n.a.	0.2	0.7	0.7	0.9
14	n.a.	0.7	0.8	0.8	0.6	0.4	0.2	n.a.	0.2	0.6	0.7	0.9
15	n.a.	0.9	0.9	0.7	0.8	0.4	0.2	n.a.	0.2	0.6	0.7	0.9
16	n.a.	0.9	0.9	0.7	0.8	0.4	0.2	n.a.	0.2	0.7	0.7	0.9
17	n.a.	0.9	1.0	0.7	0.8	0.3	0.2	n.a.	0.2	0.6	0.7	0.9
18	n.a.	0.8	0.8	0.6	0.8	0.2	0.3	n.a.	0.9	0.6	0.7	0.9
19	n.a.	0.8	0.9	0.6	0.6	0.3	0.3	n.a.	0.9	0.8	0.8	1.0
20	n.a.	0.9	0.7	0.6	0.6	0.3	0.8	n.a.	0.7	0.9	0.8	0.9
Mean	n.a.	0.8	0.9	0.7	0.7	0.4	0.2	n.a.	0.4	0.7	0.7	0.9
21	n.a.	1.0	0.7	0.6	0.6	0.3	0.7	n.a.	0.7	0.8	0.7	0.9
22	n.a.	0.9	0.7	0.6	0.6	0.2	0.6	n.a.	0.7	0.7	0.7	1.0
23	n.a.	0.8	0.7	0.7	0.6	0.2	0.4	n.a.	0.7	0.7	0.7	0.9
24	n.a.	0.9	0.7	0.7	0.5	0.3	0.8	n.a.	0.7	0.7	0.7	0.9
25	n.a.	0.9	0.7	0.6	0.6	0.3	0.6	n.a.	0.8	0.9	0.7	1.0
26	n.a.	0.8	0.7	0.6	0.6	0.2	0.4	n.a.	0.7	0.9	0.8	0.9
27	n.a.	0.9	0.8	0.7	0.8	0.2	0.3	n.a.	0.6	0.8	0.8	0.9
28	n.a.	0.9	0.8	0.8	0.7	0.2	0.3	0.3	0.6	0.8	0.8	0.9
29	n.a.		0.7	0.8	0.6	0.2	0.3	0.3	0.5	0.7	0.9	1.0
30	n.a.		0.7	0.8	0.6	0.2	0.2	0.3	0.5	0.7	0.8	0.9
31	n.a.		0.7		0.6		0.2	0.3		0.7		0.9
Mean	n.a.	0.9	0.7	0.7	0.6	0.2	0.4	n.a.	0.7	0.8	0.8	0.9
MEAN	n.a.	0.9	0.8	0.7	0.7	0.4	0.3	0.2	0.4	0.7	0.8	0.9
MIN	n.a.	0.7	0.7	0.6	0.5	0.2	0.1	0.1	0.2	0.3	0.7	0.8
MAX	n.a.	1.0	1.0	0.9	0.8	0.8	0.8	0.3	0.9	0.9	0.9	1.0

NET SOLAR RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	31.9	78.1	109.0	33.8	291.9	133.6	55.6	121.0	27.5	12.0
2	n.a.	n.a.	40.6	91.0	31.4	76.0	268.4	241.2	123.7	124.3	13.5	3.8
3	n.a.	n.a.	7.3	90.3	32.8	34.8	241.9	125.2	154.2	130.9	7.4	4.2
4	n.a.	n.a.	31.3	17.7	130.8	90.5	195.3	240.2	25.0	131.5	3.6	5.9
5	n.a.	n.a.	41.7	79.6	144.6	56.7	235.4	100.8	66.7	130.6	5.7	4.3
6	n.a.	n.a.	46.1	90.1	144.8	47.0	215.6	142.5	186.6	121.6	6.7	5.2
7	n.a.	n.a.	49.9	100.5	146.9	35.6	94.4	20.9	156.0	13.9	6.1	2.8
8	n.a.	n.a.	52.6	80.0	145.6	56.8	83.3	79.6	68.1	10.2	4.8	4.0
9	n.a.	n.a.	52.2	95.6	156.4	78.0	228.1	188.6	184.8	67.1	19.2	1.9
10	n.a.	n.a.	44.6	103.0	136.3	64.4	160.3	200.8	172.2	8.0	22.5	3.0
Mean	n.a.	n.a.	39.8	82.6	117.9	57.4	201.5	147.3	119.3	85.9	11.7	4.7
11	n.a.	n.a.	51.2	101.6	100.7	71.4	281.8	190.2	158.9	48.1	22.7	3.8
12	n.a.	n.a.	24.7	38.6	48.3	111.0	236.4	n.a.	151.6	49.1	24.7	2.5
13	n.a.	n.a.	12.0	84.8	150.8	68.8	38.9	n.a.	186.9	43.2	24.1	5.1
14	n.a.	32.1	30.5	55.4	97.5	177.8	105.4	n.a.	112.3	59.9	23.3	2.4
15	n.a.	10.2	14.7	91.5	36.1	122.7	146.9	n.a.	169.3	58.5	23.0	5.3
16	n.a.	7.8	5.5	99.6	47.0	76.9	84.9	n.a.	158.5	48.0	22.1	2.5
17	n.a.	9.9	5.9	110.5	52.6	72.3	33.1	n.a.	96.3	58.7	21.4	4.6
18	n.a.	19.1	50.2	112.7	47.3	22.1	114.2	n.a.	2.2	60.8	21.0	5.7
19	n.a.	30.0	15.6	98.8	114.4	293.3	135.4	n.a.	15.1	7.9	16.3	0.4
20	n.a.	10.9	71.8	124.2	100.3	176.3	29.4	n.a.	61.0	9.7	14.9	5.7
Mean	n.a.	18.2	23.3	88.2	77.2	112.9	130.8	n.a.	116.8	48.3	22.1	3.6
21	n.a.	0.8	69.5	124.8	70.0	283.7	60.6	n.a.	67.4	36.2	18.8	3.4
22	n.a.	15.8	57.2	106.9	112.0	90.0	110.5	n.a.	55.7	37.1	17.3	2.1
23	n.a.	33.0	63.8	38.0	148.6	57.3	104.5	n.a.	62.9	37.1	16.7	3.7
24	n.a.	14.4	75.4	73.4	128.7	208.5	35.7	n.a.	49.3	35.1	18.1	4.0
25	n.a.	13.8	76.8	109.0	117.0	135.1	67.5	n.a.	29.6	4.1	17.2	1.4
26	n.a.	36.9	60.5	95.2	55.1	281.6	126.7	n.a.	38.8	10.3	14.5	5.5
27	n.a.	11.1	24.9	53.2	21.4	311.6	114.1	n.a.	56.1	33.2	15.0	2.1
28	n.a.	6.3	44.9	51.2	111.5	302.5	112.9	196.6	74.2	28.7	11.6	2.7
29	n.a.		78.5	30.4	136.0	250.5	128.8	198.7	81.7	31.2	7.0	1.4
30	n.a.		80.6	37.8	113.8	233.4	152.5	117.4	97.0	32.8	12.3	3.0
31	n.a.		72.2		77.1		150.0	133.7		29.0		3.0
Mean	n.a.	16.5	63.2	72.0	101.4	215.4	101.4	n.a.	61.3	28.6	14.8	2.9
MEAN	n.a.	16.8	44.7	82.1	98.9	130.7	141.5	154.0	97.3	52.2	16.0	3.8
MIN	n.a.	0.8	5.5	17.7	21.4	22.1	29.4	20.9	2.2	4.1	3.6	0.4
MAX	n.a.	36.9	80.6	124.8	156.4	311.6	291.9	241.2	186.9	131.5	27.5	12.0

INCOMING INFRARED RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	207.8	252.3	255.8	331.6	257.1	314.4	306.7	258.1	233.8	216.1
2	n.a.	n.a.	207.7	230.5	285.9	325.4	241.8	287.3	297.9	261.4	245.8	271.3
3	n.a.	n.a.	280.3	232.6	277.7	331.6	264.1	311.8	302.8	250.2	288.8	300.6
4	n.a.	n.a.	208.7	286.4	204.1	332.9	291.9	313.1	350.7	239.5	324.8	263.9
5	n.a.	n.a.	191.0	256.9	200.9	313.2	294.0	330.1	341.6	244.8	326.5	243.7
6	n.a.	n.a.	188.1	273.2	231.0	306.6	292.1	332.7	274.8	259.0	326.0	219.0
7	n.a.	n.a.	165.6	254.9	232.5	299.0	340.6	353.4	293.8	310.3	314.9	285.8
8	n.a.	n.a.	176.0	247.7	251.8	328.1	342.1	329.1	323.8	298.1	311.4	213.5
9	n.a.	n.a.	182.1	238.2	240.3	332.6	292.9	261.9	280.7	283.8	233.5	215.2
10	n.a.	n.a.	216.8	232.7	267.6	334.2	306.6	254.1	273.3	314.8	214.1	228.6
Mean	n.a.	n.a.	202.4	250.5	244.7	323.5	292.3	308.8	304.6	272.0	282.0	245.8
11	n.a.	n.a.	203.2	228.9	270.3	329.2	288.3	258.1	279.2	252.9	206.1	212.6
12	n.a.	n.a.	228.8	279.0	327.6	323.2	305.1	n.a.	288.3	249.0	198.1	280.4
13	n.a.	n.a.	290.7	215.4	289.7	329.3	346.0	n.a.	265.8	246.7	197.9	243.8
14	n.a.	240.8	286.7	245.4	328.2	318.2	320.4	n.a.	275.2	211.6	201.6	289.7
15	n.a.	271.4	279.7	224.5	302.8	298.2	321.5	n.a.	268.9	212.7	209.3	249.0
16	n.a.	287.7	309.9	219.1	272.2	330.9	300.7	n.a.	265.4	224.6	207.8	280.3
17	n.a.	292.9	318.3	215.3	283.8	338.2	337.7	n.a.	302.5	227.5	204.8	218.4
18	n.a.	231.1	259.8	223.2	314.6	340.6	321.4	n.a.	330.8	219.2	190.7	187.2
19	n.a.	187.8	295.4	231.3	248.7	256.2	291.9	n.a.	303.0	300.6	210.9	157.4
20	n.a.	287.4	197.2	224.3	275.0	301.1	318.2	n.a.	253.0	288.5	215.7	241.0
Mean	n.a.	252.0	274.7	231.4	293.1	318.2	314.8	n.a.	286.6	238.3	203.0	235.4
21	n.a.	285.8	181.3	220.3	296.5	298.6	285.1	n.a.	241.4	180.1	216.8	274.6
22	n.a.	247.4	205.8	236.0	305.2	324.4	293.6	n.a.	254.8	186.9	213.0	286.7
23	n.a.	152.2	216.7	286.7	280.5	327.2	322.6	n.a.	247.8	197.5	209.4	215.3
24	n.a.	225.2	210.0	279.2	270.1	288.7	310.7	n.a.	250.3	258.5	202.2	225.8
25	n.a.	257.2	211.5	270.5	292.6	299.7	288.8	n.a.	259.2	323.1	209.2	186.4
26	n.a.	202.2	247.5	254.8	328.8	304.4	295.5	n.a.	254.2	288.6	220.5	241.4
27	n.a.	295.4	269.8	292.5	327.6	275.5	323.2	n.a.	256.5	217.6	221.8	223.1
28	n.a.	281.6	290.7	285.9	257.3	287.9	324.5	244.9	254.1	241.6	229.2	215.2
29	n.a.		199.9	322.0	247.0	295.8	309.7	262.9	255.8	245.9	235.5	231.9
30	n.a.		208.4	274.7	283.1	310.1	305.4	284.5	252.3	236.7	229.2	252.1
31	n.a.		253.1		309.3		301.1	289.7		228.3		283.5
Mean	n.a.	243.4	224.2	272.2	288.9	301.2	305.9	n.a.	252.6	237.6	218.7	235.3
MEAN	n.a.	249.7	231.9	251.1	276.1	313.8	304.3	295.2	280.2	250.3	235.0	240.4
MIN	n.a.	152.2	165.6	215.3	200.9	256.2	241.8	244.9	214.4	180.1	190.7	157.4
MAX	n.a.	295.4	318.3	322.0	328.8	340.6	346.0	353.4	350.7	323.1	326.5	300.6

OUTGOING INFRARED RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	272.9	300.3	310.7	328.8	322.8	330.2	329.9	326.2	293.8	278.5
2	n.a.	n.a.	270.2	301.4	316.2	329.8	318.5	331.4	331.4	328.5	298.1	298.1
3	n.a.	n.a.	279.5	304.8	313.3	329.4	322.8	332.4	332.8	326.2	313.4	307.4
4	n.a.	n.a.	270.9	304.2	292.3	329.8	329.6	331.2	333.5	322.5	324.7	294.6
5	n.a.	n.a.	264.0	297.7	294.9	328.2	330.4	331.6	330.4	323.5	328.5	280.6
6	n.a.	n.a.	260.5	317.9	307.5	325.7	330.4	331.8	328.9	324.5	327.4	256.7
7	n.a.	n.a.	244.0	319.7	311.7	321.9	332.1	335.9	330.1	305.3	316.3	288.2
8	n.a.	n.a.	250.6	318.5	320.9	329.0	331.9	331.0	330.7	291.1	315.5	268.2
9	n.a.	n.a.	256.2	314.3	316.4	328.7	331.8	323.4	330.3	280.4	273.7	262.5
10	n.a.	n.a.	274.1	310.5	324.0	328.7	332.2	323.7	331.4	323.1	278.7	275.4
Mean	n.a.	n.a.	264.3	308.9	310.8	328.0	328.3	330.3	330.9	315.1	307.0	281.0
11	n.a.	n.a.	273.8	307.6	322.4	328.4	331.8	324.7	330.2	314.5	268.4	265.8
12	n.a.	n.a.	276.8	309.7	327.7	329.4	333.1	n.a.	330.0	317.3	270.4	284.6
13	n.a.	n.a.	297.9	279.7	324.3	328.8	335.5	n.a.	329.6	309.7	268.6	263.7
14	n.a.	274.8	300.4	286.8	328.4	329.6	331.9	n.a.	330.3	292.6	277.0	299.9
15	n.a.	284.4	302.7	288.2	306.0	328.0	330.6	n.a.	330.2	294.6	283.8	277.0
16	n.a.	291.3	311.4	292.7	306.9	330.1	328.0	n.a.	329.5	302.4	273.0	288.0
17	n.a.	284.0	308.3	295.5	314.7	331.5	331.1	n.a.	330.4	305.7	271.0	255.5
18	n.a.	268.9	296.9	299.7	324.3	331.0	329.0	n.a.	326.4	301.4	265.9	235.0
19	n.a.	250.3	292.2	305.4	317.2	322.2	327.3	n.a.	305.2	312.9	279.3	220.1
20	n.a.	285.2	256.6	304.8	319.9	326.1	325.6	n.a.	309.4	280.3	279.4	252.4
Mean	n.a.	275.6	295.6	296.2	319.1	328.8	330.9	n.a.	326.9	305.7	273.0	265.5
21	n.a.	275.3	259.7	304.6	325.1	331.2	319.6	n.a.	309.9	247.3	280.5	263.2
22	n.a.	262.5	276.3	304.6	327.3	332.1	325.0	n.a.	317.9	264.0	280.0	292.7
23	n.a.	231.4	290.5	313.9	327.3	331.2	328.2	n.a.	318.2	268.2	277.0	275.8
24	n.a.	264.9	285.1	318.8	327.7	327.8	321.4	n.a.	319.2	289.1	274.6	266.9
25	n.a.	283.0	285.7	318.8	327.9	324.6	319.3	n.a.	322.3	322.9	275.7	245.2
26	n.a.	261.9	292.8	309.7	329.8	332.6	325.2	n.a.	320.0	306.3	279.0	284.7
27	n.a.	286.5	295.3	307.5	325.2	332.0	329.3	n.a.	323.3	278.1	286.8	280.7
28	n.a.	285.1	304.0	313.4	315.2	334.1	328.7	323.0	323.8	300.0	290.9	274.9
29	n.a.		274.5	314.6	316.3	332.1	329.0	328.1	323.6	305.6	290.6	264.3
30	n.a.		283.5	307.9	326.4	330.1	328.9	328.5	324.4	300.8	287.4	264.2
31	n.a.		300.8		327.7		328.1	330.2		292.3		284.7
Mean	n.a.	268.8	284.7	311.4	324.8	330.8	325.5	n.a.	320.3	288.2	282.2	271.2
MEAN	n.a.	272.6	280.9	305.8	318.6	329.1	328.0	329.1	325.4	301.8	287.6	272.6
MIN	n.a.	231.4	244.0	279.7	292.3	321.9	318.5	323.0	305.2	247.3	265.9	220.1
MAX	n.a.	291.3	311.4	319.7	329.8	334.1	335.5	335.9	333.5	328.5	328.5	307.4

NET INFRARED RADIATION (W/m²)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	-65.1	-47.9	-54.9	2.8	-65.7	-15.8	-23.2	-68.1	-59.9	-62.4
2	n.a.	n.a.	-62.5	-70.8	-30.3	-4.4	-76.6	-44.1	-33.5	-67.1	-52.3	-26.8
3	n.a.	n.a.	0.8	-72.2	-35.7	2.1	-58.7	-20.7	-30.0	-76.0	-24.6	-6.9
4	n.a.	n.a.	-62.2	-17.7	-88.2	3.1	-37.7	-18.1	17.2	-83.0	0.1	-30.6
5	n.a.	n.a.	-73.0	-40.7	-94.1	-14.9	-36.4	-1.5	11.3	-78.7	-2.0	-36.9
6	n.a.	n.a.	-72.4	-44.7	-76.6	-19.1	-38.3	0.9	-54.1	-65.5	-1.4	-37.7
7	n.a.	n.a.	-78.4	-64.9	-79.2	-22.9	8.4	17.5	-36.2	4.9	-1.4	-2.4
8	n.a.	n.a.	-74.6	-70.7	-69.2	-0.9	10.1	-1.9	-6.8	6.9	-4.1	-54.7
9	n.a.	n.a.	-74.2	-76.1	-76.1	3.9	-38.9	-61.5	-49.6	3.4	-40.3	-47.3
10	n.a.	n.a.	-57.3	-77.9	-56.4	5.4	-25.7	-69.6	-58.0	-8.3	-64.6	-46.8
Mean	n.a.	n.a.	-61.9	-58.4	-66.0	-4.5	-35.9	-21.5	-26.3	-43.2	-25.1	-35.3
11	n.a.	n.a.	-70.6	-78.7	-52.1	0.8	-43.6	-66.6	-51.0	-61.5	-62.3	-53.2
12	n.a.	n.a.	-48.0	-30.7	-0.1	-6.2	-28.1	n.a.	-41.7	-68.4	-72.3	-4.2
13	n.a.	n.a.	-7.2	-64.2	-34.5	0.5	10.5	n.a.	-63.8	-63.0	-70.7	-19.9
14	n.a.	-34.1	-13.6	-41.4	-0.2	-11.5	-11.6	n.a.	-55.1	-81.0	-75.4	-10.2
15	n.a.	-13.0	-23.0	-63.8	-3.2	-29.9	-9.1	n.a.	-61.2	-81.8	-74.5	-28.0
16	n.a.	-3.6	-1.5	-73.6	-34.7	0.8	-27.3	n.a.	-64.2	-77.8	-65.2	-7.8
17	n.a.	8.9	9.9	-80.2	-30.9	6.8	6.6	n.a.	-27.8	-78.2	-66.2	-37.1
18	n.a.	-37.8	-37.1	-76.5	-9.7	9.6	-7.6	n.a.	4.4	-82.2	-75.2	-47.8
19	n.a.	-62.5	3.2	-74.1	-68.6	-66.0	-35.4	n.a.	-2.2	-12.3	-68.3	-62.6
20	n.a.	2.2	-59.4	-80.6	-44.9	-25.0	-7.4	n.a.	-56.4	8.2	-63.7	-11.4
Mean	n.a.	-23.7	-20.9	-64.8	-26.0	-10.6	-16.2	n.a.	-40.3	-67.4	-70.0	-30.1
21	n.a.	10.5	-78.4	-84.3	-28.6	-32.6	-34.5	n.a.	-68.5	-67.2	-63.7	11.4
22	n.a.	-15.2	-70.4	-68.6	-22.1	-7.7	-31.5	n.a.	-63.1	-77.0	-66.9	-6.0
23	n.a.	-79.1	-73.7	-27.2	-46.9	-4.0	-5.5	n.a.	-70.4	-70.8	-67.7	-60.4
24	n.a.	-39.7	-75.1	-39.7	-57.6	-39.2	-10.7	n.a.	-68.9	-30.6	-72.4	-41.1
25	n.a.	-25.8	-74.1	-48.3	-35.3	-24.9	-30.5	n.a.	-63.1	0.2	-66.4	-58.8
26	n.a.	-59.7	-45.2	-54.9	-1.0	-28.2	-29.8	n.a.	-65.8	-17.7	-58.5	-43.3
27	n.a.	8.8	-25.5	-15.0	2.4	-56.6	-6.1	n.a.	-66.8	-60.5	-65.0	-57.6
28	n.a.	-3.5	-13.3	-27.5	-57.9	-46.2	-4.2	-78.1	-69.7	-58.4	-61.7	-59.7
29	n.a.		-74.6	7.4	-69.2	-36.3	-19.3	-65.2	-67.8	-59.7	-55.1	-32.3
30	n.a.		-75.1	-33.3	-43.3	-20.0	-23.5	-43.9	-72.0	-64.1	-58.1	-12.1
31	n.a.		-47.7		-18.4		-27.1	-40.5		-64.0		-1.2
Mean	n.a.	-25.5	-60.6	-39.1	-35.9	-29.6	-19.6	n.a.	-67.6	-50.6	-63.6	-36.0
MEAN	n.a.	-22.9	-49.0	-54.6	-42.5	-15.3	-23.7	-33.9	-45.3	-51.6	-52.7	-32.1
MIN	n.a.	-79.1	-78.4	-84.3	-94.1	-66.0	-76.6	-78.1	-72.0	-83.0	-75.4	-62.6
MAX	n.a.	10.5	9.9	7.4	2.4	9.6	10.5	17.5	17.2	8.2	0.1	11.4

SKY TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	-27.4	-15.3	-14.5	3.4	-13.9	-0.4	-2.3	-13.4	-19.8	-24.7
2	n.a.	n.a.	-28.0	-20.7	-7.1	2.1	-17.9	-6.6	-4.1	-12.6	-16.8	-10.6
3	n.a.	n.a.	-8.0	-20.2	-9.3	3.3	-12.3	-1.1	-3.1	-15.5	-6.2	-3.3
4	n.a.	n.a.	-27.1	-6.9	-28.5	3.6	-5.7	-0.7	7.3	-18.2	1.9	-12.2
5	n.a.	n.a.	-32.3	-14.1	-29.4	-0.8	-5.1	2.8	5.4	-16.8	2.3	-18.4
6	n.a.	n.a.	-33.2	-9.9	-20.7	-2.3	-5.6	3.4	-9.6	-13.5	2.2	-24.2
7	n.a.	n.a.	-40.8	-14.2	-20.3	-4.3	5.2	7.8	-5.1	-1.2	-0.2	-6.7
8	n.a.	n.a.	-37.2	-16.1	-15.1	2.6	5.5	2.6	1.7	-3.9	-0.9	-25.9
9	n.a.	n.a.	-35.2	-18.7	-18.2	3.6	-5.2	-12.7	-8.0	-7.3	-20.3	-25.1
10	n.a.	n.a.	-24.6	-20.1	-11.4	3.9	-2.2	-14.5	-9.7	-0.3	-25.3	-21.3
Mean	n.a.	n.a.	-29.4	-15.6	-17.4	1.5	-5.7	-1.9	-2.7	-10.3	-8.3	-17.2
11	n.a.	n.a.	-28.5	-21.2	-10.7	2.9	-6.3	-13.5	-8.5	-14.8	-27.7	-25.8
12	n.a.	n.a.	-21.6	-8.5	2.4	1.5	-2.6	n.a.	-6.3	-15.7	-30.1	-8.3
13	n.a.	n.a.	-5.6	-25.4	-6.2	2.9	6.3	n.a.	-11.6	-16.6	-30.1	-17.3
14	n.a.	-18.3	-6.6	-16.9	2.6	0.5	0.7	n.a.	-9.3	-26.0	-29.0	-5.9
15	n.a.	-10.6	-8.3	-22.7	-2.9	-4.3	1.2	n.a.	-10.7	-25.7	-26.7	-15.9
16	n.a.	-6.3	-1.3	-24.0	-10.0	3.2	-3.9	n.a.	-11.7	-22.3	-27.1	-8.2
17	n.a.	-5.1	0.5	-25.2	-7.7	4.7	4.6	n.a.	-3.2	-21.5	-28.0	-24.7
18	n.a.	-21.0	-13.4	-22.8	-0.5	5.2	1.2	n.a.	3.2	-23.8	-32.3	-33.9
19	n.a.	-33.5	-4.6	-20.6	-16.0	-14.2	-5.7	n.a.	-2.9	-3.6	-26.2	-43.7
20	n.a.	-6.6	-31.3	-22.5	-9.8	-3.5	0.5	n.a.	-14.9	-6.3	-24.9	-19.1
Mean	n.a.	-15.8	-9.9	-20.8	-5.5	0.3	-0.5	n.a.	-6.8	-18.9	-28.6	-20.4
21	n.a.	-6.8	-35.4	-23.6	-4.5	-4.1	-7.4	n.a.	-17.7	-35.8	-24.5	-9.4
22	n.a.	-16.7	-27.8	-19.4	-2.6	1.6	-5.4	n.a.	-14.3	-33.5	-25.6	-6.8
23	n.a.	-45.6	-24.5	-7.1	-8.2	2.3	1.4	n.a.	-16.1	-30.5	-26.6	-25.0
24	n.a.	-23.2	-26.5	-8.7	-10.6	-6.3	-1.1	n.a.	-15.5	-14.0	-28.8	-22.5
25	n.a.	-14.3	-26.0	-10.6	-5.4	-4.3	-6.5	n.a.	-13.2	1.6	-26.7	-33.8
26	n.a.	-29.6	-16.8	-14.9	2.7	-2.7	-4.8	n.a.	-14.5	-6.6	-23.5	-18.2
27	n.a.	-4.6	-11.1	-5.3	2.5	-9.2	1.5	n.a.	-13.9	-24.4	-23.1	-22.7
28	n.a.	-7.7	-5.7	-7.1	-13.8	-6.3	1.8	-16.9	-14.5	-17.7	-21.0	-24.9
29	n.a.		-29.7	1.3	-16.4	-4.7	-1.5	-12.3	-14.2	-16.5	-19.4	-21.2
30	n.a.		-27.0	-9.6	-7.7	-1.5	-2.5	-7.4	-14.9	-19.0	-21.1	-15.2
31	n.a.		-15.2		-1.9		-3.7	-5.9		-21.2		-7.8
Mean	n.a.	-18.6	-23.1	-10.5	-6.4	-3.5	-2.4	n.a.	-14.9	-19.7	-24.0	-20.0
MEAN	n.a.	-16.7	-21.3	-15.7	-9.6	-0.7	-2.9	-5.0	-8.4	-16.0	-20.2	-18.8
MIN	n.a.	-45.6	-40.8	-25.4	-29.4	-14.2	-17.9	-16.9	-17.7	-35.8	-32.3	-43.7
MAX	n.a.	-4.6	0.5	1.3	2.7	5.2	6.3	7.8	7.3	1.6	2.3	-3.3

SURFACE TEMPERATURE (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	-9.8	-4.1	-2.8	0.0	-0.1	0.0	0.0	0.0	-5.0	-8.4
2	n.a.	n.a.	-10.4	-3.9	-1.2	0.0	-0.6	0.0	0.0	0.0	-4.0	-3.9
3	n.a.	n.a.	-8.2	-3.3	-1.6	0.0	-0.6	0.0	0.0	0.0	-0.9	-1.8
4	n.a.	n.a.	-10.3	-3.4	-5.9	0.0	0.0	0.0	0.0	0.0	-0.1	-4.7
5	n.a.	n.a.	-12.0	-4.2	-5.5	0.0	0.0	0.0	0.0	0.0	0.0	-8.2
6	n.a.	n.a.	-12.9	-1.1	-3.0	-0.2	0.0	0.0	0.0	0.0	0.0	-13.8
7	n.a.	n.a.	-17.2	-0.9	-2.3	-0.8	0.0	0.0	0.0	-2.9	-0.4	-6.2
8	n.a.	n.a.	-15.6	-0.6	-0.6	0.0	0.0	0.0	0.0	-5.5	-0.4	-10.9
9	n.a.	n.a.	-14.1	-1.6	-1.5	0.0	0.0	0.0	0.0	-8.0	-9.6	-12.3
10	n.a.	n.a.	-9.6	-2.5	-0.4	0.0	0.0	0.0	0.0	-0.5	-8.4	-9.2
Mean	n.a.	n.a.	-12.0	-2.5	-2.5	-0.1	-0.1	0.0	0.0	-1.7	-2.9	-7.9
11	n.a.	n.a.	-9.7	-2.8	-0.5	0.0	0.0	0.0	0.0	-1.2	-10.9	-11.5
12	n.a.	n.a.	-9.0	-2.3	0.0	0.0	0.0	n.a.	0.0	-0.7	-10.4	-7.1
13	n.a.	n.a.	-3.9	-8.2	-0.4	0.0	0.0	n.a.	0.0	-2.1	-10.9	-12.2
14	n.a.	-9.3	-3.7	-6.8	0.0	0.0	0.0	n.a.	0.0	-5.5	-8.8	-3.5
15	n.a.	-7.1	-3.1	-6.5	-2.3	0.0	0.0	n.a.	0.0	-5.3	-7.2	-8.8
16	n.a.	-5.4	-0.9	-5.5	-2.4	0.0	0.0	n.a.	0.0	-3.3	-9.8	-6.2
17	n.a.	-7.2	-1.6	-5.0	-1.8	0.0	0.0	n.a.	0.0	-2.7	-10.3	-14.1
18	n.a.	-10.8	-4.2	-4.3	-0.1	0.0	0.0	n.a.	-0.1	-3.4	-11.5	-19.5
19	n.a.	-15.5	-5.4	-3.2	-1.2	-0.2	0.0	n.a.	-2.3	-1.2	-8.3	-23.6
20	n.a.	-7.0	-13.9	-3.3	-1.0	-0.3	0.0	n.a.	-2.3	-8.2	-8.2	-15.1
Mean	n.a.	-9.2	-4.6	-5.0	-1.0	0.0	0.0	n.a.	-0.3	-2.8	-9.8	-11.8
21	n.a.	-9.2	-13.2	-3.3	-0.1	0.0	-1.3	n.a.	-2.3	-16.3	-8.0	-12.2
22	n.a.	-12.4	-9.1	-3.2	0.0	0.0	-0.4	n.a.	-0.9	-12.1	-8.1	-5.1
23	n.a.	-20.5	-6.0	-1.8	0.0	0.0	0.0	n.a.	-0.9	-11.0	-8.8	-9.1
24	n.a.	-11.9	-7.2	-1.0	0.0	0.0	-0.1	n.a.	-0.9	-6.0	-9.4	-11.3
25	n.a.	-7.4	-7.2	-0.8	0.0	-0.3	-0.9	n.a.	-0.2	-0.2	-9.1	-16.7
26	n.a.	-12.6	-5.7	-2.2	0.0	0.0	-0.2	n.a.	-0.8	-2.6	-8.3	-7.1
27	n.a.	-6.5	-4.7	-2.6	-0.3	0.0	0.0	n.a.	-0.3	-8.6	-6.5	-7.9
28	n.a.	-6.9	-3.1	-1.1	-1.4	0.0	0.0	-0.3	-0.1	-3.9	-5.5	-9.3
29	n.a.		-9.5	-0.8	-1.8	0.0	0.0	0.0	-0.3	-2.7	-5.6	-12.0
30	n.a.		-7.5	-2.2	-0.1	0.0	0.0	0.0	-0.1	-3.7	-6.4	-11.9
31	n.a.		-4.2		0.0		0.0	0.0		-5.3		-7.1
Mean	n.a.	-10.9	-7.3	-1.9	-0.4	0.0	-0.3	n.a.	-0.7	-6.7	-7.6	-10.3
MEAN	n.a.	-10.0	-8.2	-3.1	-1.2	-0.1	-0.1	0.0	-0.4	-4.0	-6.7	-10.0
MIN	n.a.	-20.5	-17.2	-8.2	-5.9	-0.8	-1.3	-0.3	-2.3	-16.3	-11.5	-23.6
MAX	n.a.	-5.4	-0.9	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.8

SNOW LEVEL (cm)

	J	F	M	A	M	J	J	A	S	O	N	D
1	n.a.	n.a.	204.9	214.9	176.9	97.6	0.0	0.0	0.0	0.5	38.3	47.3
2	n.a.	n.a.	199.4	213.4	174.5	94.1	0.0	0.0	0.0	0.0	37.9	46.4
3	n.a.	n.a.	203.5	211.2	174.2	89.9	0.0	0.0	0.0	0.0	36.3	47.0
4	n.a.	n.a.	209.8	211.1	173.0	84.4	0.0	0.0	0.0	0.0	36.0	48.8
5	n.a.	n.a.	206.9	212.4	171.9	79.0	0.0	0.0	0.0	0.0	36.6	48.6
6	n.a.	n.a.	203.8	209.2	170.2	75.0	0.0	0.0	0.0	0.0	40.0	47.0
7	n.a.	n.a.	201.6	204.4	167.5	73.2	0.0	0.0	0.0	5.3	48.4	47.0
8	n.a.	n.a.	201.2	200.7	163.8	70.3	0.0	0.0	0.0	5.5	54.8	47.8
9	n.a.	n.a.	200.3	198.6	158.9	66.7	0.0	0.0	0.0	10.3	54.0	48.8
10	n.a.	n.a.	200.2	195.8	155.2	62.6	0.0	0.0	0.0	11.8	52.5	48.8
Mean	n.a.	n.a.	203.2	207.2	168.6	79.3	0.0	0.0	0.0	3.3	43.5	47.7
11	n.a.	n.a.	199.9	194.1	151.0	57.6	0.0	0.0	0.0	14.4	50.1	47.5
12	n.a.	n.a.	199.0	192.6	147.4	53.8	0.0	n.a.	0.0	17.1	50.0	48.0
13	n.a.	n.a.	194.2	190.2	142.9	49.5	0.0	n.a.	0.0	16.6	50.0	63.9
14	n.a.	180.3	192.2	189.8	139.0	44.5	0.0	n.a.	0.0	16.9	50.0	67.3
15	n.a.	182.8	191.9	189.3	146.2	41.1	0.0	n.a.	0.0	17.5	49.8	73.2
16	n.a.	190.6	201.7	189.3	141.4	37.6	0.0	n.a.	0.0	17.5	48.2	72.4
17	n.a.	193.3	228.5	189.7	139.8	33.0	0.0	n.a.	0.0	17.5	48.4	70.5
18	n.a.	193.4	238.8	190.0	139.2	27.8	0.0	n.a.	6.9	17.5	48.5	70.0
19	n.a.	191.7	234.6	189.6	137.1	27.0	0.0	n.a.	31.0	17.1	48.5	68.7
20	n.a.	192.1	235.0	188.1	133.5	26.3	6.1	n.a.	22.3	31.3	48.5	69.2
Mean	n.a.	188.7	209.0	190.5	142.7	41.3	0.0	n.a.	4.2	16.9	49.3	64.6
21	n.a.	202.0	231.5	186.7	132.0	22.3	6.3	n.a.	17.7	37.0	48.5	70.5
22	n.a.	200.6	228.0	185.3	129.7	0.0	3.4	n.a.	15.0	36.2	48.3	76.1
23	n.a.	198.1	225.9	184.1	126.2	0.0	0.0	n.a.	12.7	32.2	47.8	81.8
24	n.a.	194.4	223.7	181.9	121.0	0.0	1.8	n.a.	9.6	29.1	48.5	79.6
25	n.a.	198.7	221.4	179.4	115.8	0.0	4.2	n.a.	7.0	31.3	48.8	74.8
26	n.a.	191.9	220.4	178.2	109.3	0.0	0.0	n.a.	5.5	43.4	48.8	78.8
27	n.a.	195.1	219.0	177.8	109.1	0.0	0.0	n.a.	5.2	43.0	49.3	79.8
28	n.a.	203.2	219.0	176.3	117.1	0.0	0.0	0.0	3.6	42.3	49.5	78.8
29	n.a.		218.7	178.1	111.8	0.0	0.0	0.0	1.6	40.4	49.0	77.3
30	n.a.		217.4	178.8	107.8	0.0	0.0	0.0	1.5	39.0	48.2	79.9
31	n.a.		216.5		100.8		0.0	0.0		38.3		83.1
Mean	n.a.	198.0	222.5	180.6	118.0	2.2	1.6	n.a.	7.9	37.4	48.7	77.7
MEAN	n.a.	193.9	212.6	192.7	141.4	40.4	0.7	0.0	4.7	20.3	47.1	64.1
MIN	n.a.	180.3	191.9	176.3	100.8	0.0	0.0	0.0	0.0	0.0	36.0	46.4
MAX	n.a.	203.2	238.8	214.9	176.9	97.6	6.3	0.0	31.0	43.4	54.8	83.1

3.3 UGANDA

AWS Rwenzori

Technical sheet

Coordinates:

Latitude: 0° 22' 34.55" N
 Longitude: 29° 52' 43.24" E
 Elevation: 4.750 m a.s.l

Installation Time:

July 2006

Data Availability:

From July 2006 to June 2009



Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Data Logger				2 m	LSI-Lastem BABUC
Air Temperature	-30 - +70 °C	±0.1°C (0°C)	60 min.	2 m	LSI-Lastem DMA572
Relative Humidity	0 - 100 %	1,5% (5÷95%, 23°C)	60 min.	2 m	LSI-Lastem DMA572
Atmospheric Pressure	800 - 1100 hPa (1 hPa=1 mBar)	±1hPa	60 min.	2 m	LSI-Lastem CX115P
Total Precipitation	Max 10 mm/min	1÷10mm/min: ±1%	60 min.	1.5 m	LSI-Lastem DQA030
Wind Speed and Direction	For speed: 0-60 m/s For direction: 0 ÷ 360	For speed: 0,1 m/s+1%VL For direction: 1% FS (Full scale)	60 min.	5 m	LSI-Lastem DNA022
Global Solar Radiation	<2000 W/m2		60 min.	2 m	Kipp & Zonen CM3 pyranometer and CG3 pyrgeometer

2011 Data

The 2011 data are not available. Due to the extreme environmental conditions in which this station has been installed, acceptable meteorological data are available for the period 2006-2009. The replacement of this station is foreseen for next year.

4. Atmospheric Data

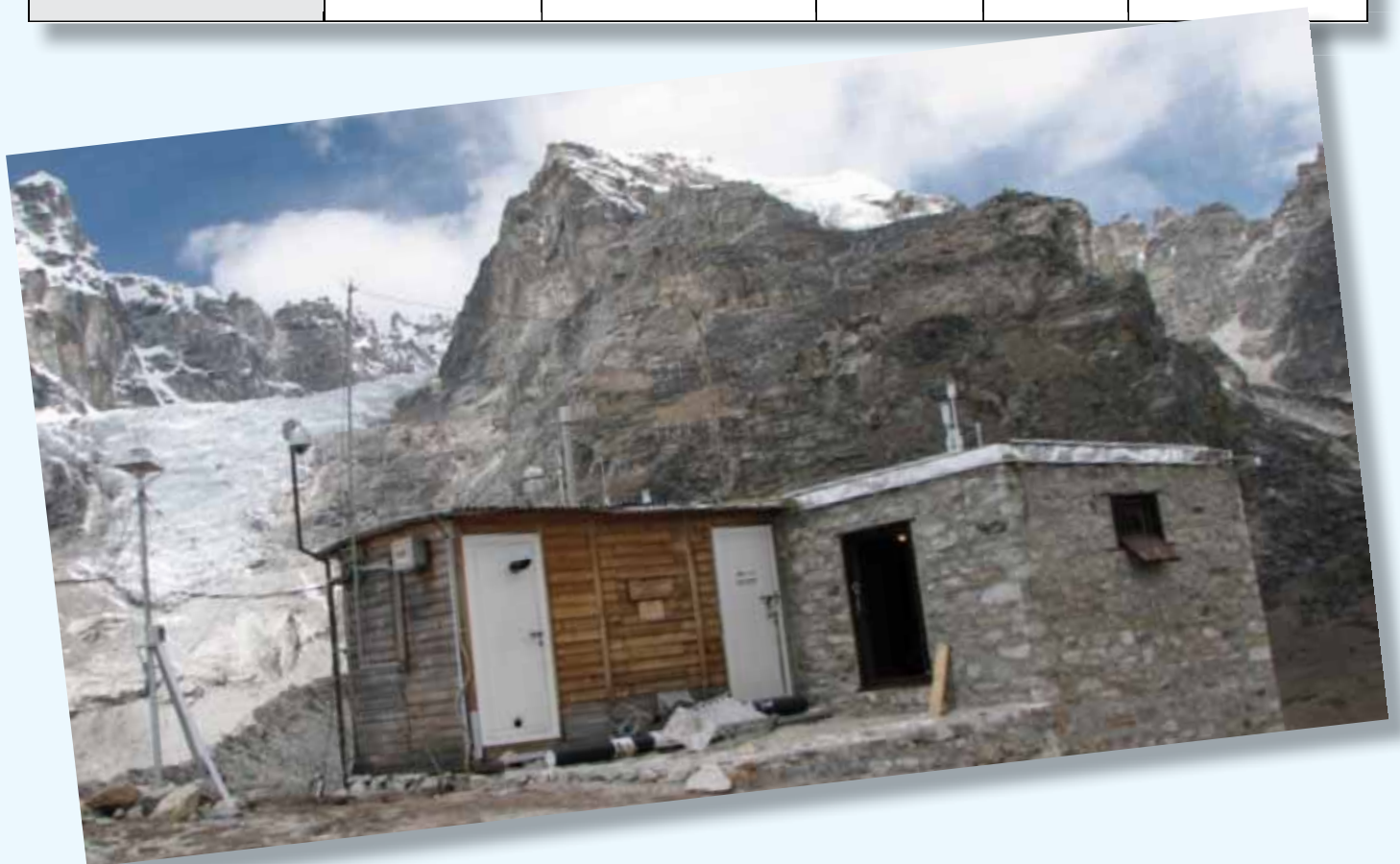
The following pages show the values of the concentrations of surface ozone and black carbon, two of the most important short-lived climate pollutants measured at the GAW-WMO Global Stations of Mount Cimone (Italia Climate Observatory - Vittori) and NCO-P (Nepal Climate Observatory - Pyramid)

4.1 NEPAL

NCO-P

Technical sheet		
Coordinates: Latitude: 27° 57' N Longitude: 86° 48' E Elevation: 5.079 m a.s.l	Installation Time: February 2006	Data Availability: From March 1, 2006

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Black carbon	Minimum detection limit (30-min): 11 ng m-3	Better than 2%	1 min.	3 m	Thermo Scientific MAAP 5012
Ozone	0 - 200 ppm	± 2 ppb in the range 0-100 ppb	1 min.	3 m	Thermo Scientific Tei49C



OZONE (ppbv)

	J	F	M	A	M	J	J	A	S	O	N	D
1	57.2	50.4	50.0	59.3	57.4	55.4	36.6	28.7	48.6	45.6	37.5	46.5
2	56.1	49.0	48.7	69.1	63.5	53.8	38.5	32.3	43.2	43.6	38.3	41.3
3	47.1	52.4	53.8	66.1	59.2	55.7	36.3	34.6	43.2	39.4	39.4	39.7
4	41.6	50.8	53.7	64.4	64.3	58.7	37.3	34.9	44.3	49.2	41.6	43.4
5	44.8	50.8	53.6	65.5	66.6	69.7	32.7	35.4	44.9	45.6	44.8	47.1
6	43.0	46.3	53.3	61.8	65.0	68.2	26.3	35.4	37.9	45.5	42.0	47.9
7	43.1	47.4	56.3	59.7	68.0	69.9	23.8	31.6	33.2	44.4	50.7	45.4
8	44.1	54.0	57.8	62.2	69.2	66.0	25.3	33.3	33.8	48.0	47.4	44.1
9	46.4	51.6	58.0	63.7	64.5	64.1	29.8	27.0	34.5	49.7	50.7	52.5
10	50.2	48.9	58.2	57.6	66.6	64.6	30.6	25.5	26.9	48.3	44.6	46.7
Mean	47.4	50.2	54.3	62.9	64.4	62.6	31.7	31.9	39.1	45.9	43.7	45.5
11	51.6	47.2	58.8	57.4	66.9	64.0	35.1	24.9	26.9	53.8	43.9	46.6
12	54.2	49.5	60.2	61.0	69.6	55.5	41.0	24.3	26.1	53.8	45.6	42.3
13	50.5	48.3	55.5	69.5	57.4	51.0	37.8	26.2	27.2	51.5	39.9	43.6
14	47.3	50.3	50.3	n.a.	54.3	55.6	36.3	28.3	34.8	42.6	42.2	44.4
15	47.3	55.0	53.9	n.a.	55.2	48.6	35.5	26.0	33.2	41.8	44.0	38.6
16	51.9	58.9	51.1	n.a.	56.4	43.0	36.1	24.1	32.9	46.1	n.a.	39.3
17	59.0	57.7	52.2	59.9	58.0	35.9	30.8	26.7	26.9	46.6	n.a.	37.7
18	50.1	55.6	56.0	59.3	60.8	36.7	n.a.	26.4	n.a.	46.9	n.a.	39.7
19	50.6	48.1	54.1	57.8	61.2	38.7	35.4	29.2	31.9	47.3	n.a.	40.4
20	51.1	50.7	59.6	65.7	52.8	42.5	30.2	27.6	33.9	52.5	n.a.	41.4
Mean	51.4	52.1	55.2	61.5	59.3	47.2	35.4	26.4	30.4	48.3	43.1	41.4
21	49.8	52.2	53.8	n.a.	58.0	40.6	23.8	26.8	31.2	53.7	n.a.	44.9
22	49.1	51.2	59.2	n.a.	55.1	36.0	22.1	29.2	30.7	54.0	41.4	48.6
23	49.9	47.0	61.1	n.a.	57.9	35.8	30.0	38.7	29.6	54.4	41.7	46.1
24	51.7	44.7	62.7	n.a.	66.9	32.4	27.9	49.8	32.9	40.3	44.9	44.4
25	49.4	48.2	62.9	69.3	63.6	36.3	25.5	50.0	36.1	45.4	49.0	47.4
26	49.8	54.8	62.3	61.2	50.2	32.5	25.1	48.1	43.4	49.5	49.3	n.a.
27	47.2	46.8	65.3	61.3	55.8	32.1	28.0	51.9	n.a.	50.3	48.9	41.2
28	47.5	51.5	65.3	n.a.	56.2	31.4	29.9	44.2	43.3	42.3	42.4	43.7
29	47.9		63.6	n.a.	57.2	33.2	28.3	42.0	43.4	39.8	48.6	49.3
30	47.7		55.4	51.9	52.4	34.7	25.6	37.8	42.6	37.9	50.7	43.8
31	54.5		65.3		57.1		27.8	39.7		35.2		42.8
Mean	49.5	49.6	61.5	60.9	57.3	34.5	26.7	41.7	37.0	45.7	46.3	45.2
MEAN	49.4	50.7	57.2	62.1	60.2	48.1	31.0	33.6	35.6	46.6	44.6	44.0
MIN	41.6	44.7	48.7	51.9	50.2	31.4	22.1	24.1	26.1	35.2	37.5	37.7
MAX	59.0	58.9	65.3	69.5	69.6	69.9	41.0	51.9	48.6	54.4	50.7	52.5

BLACK CARBON (ng/m³)

	J	F	M	A	M	J	J	A	S	O	N	D
1	183.9	29.7	139.5	219.4	66.8	60.9	5.6	4.9	58.8	100.0	183.0	146.8
2	51.4	181.9	348.1	396.1	101.7	94.8	8.8	5.0	67.9	54.0	180.6	124.0
3	50.5	133.6	261.7	408.0	115.3	191.2	5.2	16.2	48.9	37.5	306.8	84.1
4	17.1	159.0	97.2	300.9	120.4	275.8	7.0	6.5	56.2	96.6	580.5	78.4
5	21.3	171.8	50.8	174.7	109.7	313.5	9.9	2.3	60.4	134.5	431.9	41.4
6	33.2	139.1	76.3	226.1	125.3	414.7	4.0	3.7	32.9	154.8	175.6	94.2
7	50.8	151.3	136.1	538.9	115.7	174.4	3.7	5.7	8.0	123.2	281.6	75.3
8	62.4	235.8	282.2	769.6	87.2	130.8	14.2	6.7	5.3	105.8	84.1	73.8
9	101.6	336.7	109.1	861.3	109.1	163.3	11.2	3.5	7.0	145.4	51.5	71.4
10	150.4	149.3	63.8	505.3	77.5	131.2	10.4	2.8	8.9	146.4	34.2	211.9
Mean	72.3	168.8	156.5	440.0	102.9	195.1	8.0	5.7	35.4	109.8	231.0	100.1
11	129.0	251.4	207.3	433.3	182.5	93.6	17.5	3.0	7.3	79.5	46.0	211.2
12	98.5	273.8	330.5	383.4	279.3	68.7	9.2	3.3	8.7	110.7	103.2	153.9
13	47.8	342.8	250.7	102.7	308.6	51.9	9.2	7.2	8.7	112.0	304.0	153.0
14	32.7	175.3	61.1	189.5	229.2	81.4	5.9	3.2	9.5	153.5	371.5	127.9
15	28.4	229.1	301.9	160.4	286.7	55.5	5.9	3.9	9.6	154.1	293.0	68.7
16	142.7	242.7	390.8	197.7	342.2	29.3	9.3	4.4	13.7	242.5	208.1	117.0
17	103.0	90.9	899.3	346.8	405.0	3.3	19.0	2.9	4.7	307.0	153.9	63.5
18	200.2	62.5	530.8	168.8	220.3	2.5	20.7	6.3	4.2	395.0	69.7	104.7
19	208.0	134.2	395.7	197.0	23.4	2.4	4.4	8.9	3.7	318.2	118.2	46.0
20	133.3	52.9	153.3	144.3	18.1	7.7	2.8	7.1	8.4	253.2	104.1	43.7
Mean	112.4	185.6	352.1	232.4	229.5	39.6	10.4	5.0	7.9	212.6	177.2	109.0
21	129.5	272.3	251.5	353.0	70.8	24.9	7.4	19.8	11.8	100.3	86.6	25.4
22	100.6	93.1	240.8	714.5	117.5	30.3	3.2	-24.3	11.9	94.8	66.9	41.2
23	107.6	62.8	390.2	957.4	164.7	10.0	5.8	3.3	8.2	83.4	77.4	30.9
24	148.6	159.6	548.3	416.8	108.5	14.1	7.6	11.4	6.0	94.8	69.5	82.0
25	32.1	203.8	873.6	285.0	115.6	5.2	7.2	18.1	9.4	149.5	62.8	40.8
26	89.8	125.3	616.1	233.5	234.0	7.3	4.8	21.8	7.1	199.3	49.7	97.7
27	185.0	89.4	779.6	109.1	182.2	6.1	10.7	26.2	8.2	144.0	47.2	112.2
28	138.2	87.9	312.0	141.7	41.8	2.7	7.0	31.3	15.7	187.2	50.5	64.3
29	240.5		173.4	199.6	50.5	2.8	4.1	32.2	33.3	222.5	45.2	35.2
30	171.5		194.6	104.5	14.8	3.7	4.8	53.0	44.9	255.5	107.8	80.9
31	145.8		208.6		78.5		4.8	14.8		276.5		20.7
Mean	135.4	136.8	417.2	351.5	107.2	10.7	6.1	18.9	15.7	164.3	66.4	57.4
MEAN	107.6	165.6	312.1	341.3	145.3	81.8	8.1	10.2	19.6	162.3	158.2	87.8
MIN	17.1	29.7	50.8	102.7	14.8	2.4	2.8	-24.3	3.7	37.5	34.2	20.7
MAX	240.5	342.8	899.3	957.4	405.0	414.7	20.7	53.0	67.9	395.0	580.5	211.9

4.1 ITALY

O. Vittori

Technical sheet

Coordinates: Latitude: 44° 12' N Longitude: 10° 42' E Elevation: 2.165 m a.s.l.	Installation Time: January 1996	Data Availability: From January 1, 1996
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Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Black carbon	Minimum detection limit (30-min): 13 ng m-3	Better than 2%	1 min.	8 m	Thermo Scientific MAAP 5012
Ozone	0 - 200 ppm	± 2 ppb in the range 0-100 ppb	1 min.	7 m	Dasibi 1108



OZONE (ppbv)

	J	F	M	A	M	J	J	A	S	O	N	D
1	45.0	46.9	43.8	63.0	59.9	60.6	63.8	65.8	57.1	52.8	52.8	45.4
2	42.9	47.0	46.9	65.7	63.2	65.0	60.3	64.3	55.2	49.7	47.5	43.2
3	36.1	45.0	47.5	56.6	62.6	63.3	64.7	67.3	55.9	58.9	46.5	42.1
4	41.9	46.7	51.7	51.7	64.7	62.3	61.4	66.7	51.3	61.5	45.8	39.8
5	38.3	46.4	55.6	56.7	62.7	60.3	63.7	68.9	51.4	70.4	45.3	39.5
6	36.6	46.6	58.9	56.0	67.7	58.1	66.6	56.9	53.5	62.7	51.5	42.1
7	36.9	46.2	51.2	51.1	73.4	50.2	71.8	56.6	54.3	46.3	51.4	45.4
8	37.3	46.4	n.a.	56.8	74.6	59.9	65.4	48.2	51.7	39.9	47.0	44.2
9	41.0	48.7	n.a.	56.9	60.7	59.0	63.6	51.6	61.1	42.7	49.6	46.6
10	36.0	48.4	n.a.	56.9	65.1	54.8	56.5	52.5	55.5	44.5	50.3	45.7
Mean	39.2	46.8	50.8	57.1	65.5	59.4	63.8	59.9	54.7	52.9	48.8	43.4
11	36.5	49.1	59.3	61.5	68.2	53.3	58.2	62.8	59.0	41.8	49.6	46.1
12	39.6	44.9	57.4	63.1	73.4	55.5	60.3	64.0	55.9	45.5	50.7	43.5
13	37.7	46.9	51.0	56.3	75.6	52.7	55.8	65.4	67.7	52.2	51.1	43.2
14	34.8	47.4	48.9	61.1	65.8	57.6	57.8	61.8	59.1	39.4	54.1	41.3
15	41.3	47.9	51.5	55.9	57.0	54.4	61.1	60.6	56.6	43.3	55.8	42.3
16	47.6	41.4	52.6	55.4	54.1	51.7	61.3	60.4	54.4	51.7	52.0	39.8
17	44.4	40.4	52.8	57.8	54.1	56.6	58.2	63.0	56.4	52.4	n.a.	41.7
18	41.7	47.2	52.0	61.0	54.7	56.3	50.4	65.7	52.4	54.1	49.9	38.9
19	40.2	47.3	56.1	64.6	62.6	55.4	51.7	61.7	46.3	52.6	51.1	37.7
20	31.3	49.5	47.7	69.6	66.4	57.6	48.8	66.7	48.0	45.6	50.9	41.5
Mean	39.5	46.2	52.9	60.6	63.2	55.1	56.4	63.2	55.6	47.9	51.7	41.6
21	32.3	44.5	49.8	72.7	75.3	49.1	47.4	73.4	56.3	42.1	50.5	42.0
22	34.8	43.5	53.0	73.7	67.1	49.2	49.1	67.9	64.6	48.8	49.4	41.8
23	41.0	39.3	57.4	63.0	74.9	42.3	52.2	70.0	62.1	54.5	48.7	39.0
24	43.0	44.6	60.0	52.9	70.4	58.8	51.7	69.4	61.6	51.9	46.7	37.6
25	42.0	45.9	63.0	57.6	67.9	55.9	49.6	67.4	65.3	43.6	49.6	38.1
26	42.2	45.8	58.8	61.4	71.2	51.8	58.6	67.8	65.8	49.8	50.7	42.8
27	39.4	45.6	56.1	56.3	66.5	55.2	54.6	55.5	66.3	54.2	51.5	45.4
28	34.9	38.6	49.4	56.4	60.1	63.6	62.8	60.9	69.0	54.2	51.1	46.7
29	42.1		56.7	60.0	62.0	74.9	64.8	65.4	68.7	51.6	50.1	45.1
30	38.4		60.0	58.2	65.7	67.3	62.8	70.3	54.2	50.7	49.3	40.6
31	43.7		62.8		71.4		62.5	66.0		49.8		42.0
Mean	39.4	43.5	57.0	61.2	68.4	56.8	56.0	66.7	63.4	50.1	49.8	41.9
MEAN	39.4	45.6	54.0	59.7	65.8	57.1	58.6	63.4	57.9	50.3	50.0	42.3
MIN	31.3	38.6	43.8	51.1	54.1	42.3	47.4	48.2	46.3	39.4	45.3	37.6
MAX	47.6	49.5	63.0	73.7	75.6	74.9	71.8	73.4	69.0	70.4	55.8	46.7

BLACK CARBON (ng/m³)

	J	F	M	A	M	J	J	A	S	O	N	D
1	9.5	26.9	78.2	207.5	113.6	77.1	233.1	209.3	139.2	127.0	-8.7	147.1
2	70.4	29.5	46.4	328.7	120.9	134.5	188.6	270.1	243.8	157.0	124.6	64.8
3	133.6	56.1	86.1	177.7	179.6	125.7	177.1	117.4	535.6	148.6	212.3	61.7
4	92.2	19.9	29.2	268.0	154.8	142.4	169.6	329.5	194.5	262.0	89.4	21.6
5	91.5	16.6	46.0	100.2	212.2	109.1	106.6	360.1	40.5	461.9	74.3	38.1
6	11.8	14.0	61.9	88.2	310.5	103.9	215.8	201.1	120.2	282.0	58.8	85.4
7	37.0	12.9	134.2	125.2	286.3	47.7	266.6	197.2	114.9	126.0	28.1	41.8
8	122.6	19.1	77.0	161.4	265.8	22.2	192.8	86.1	58.0	52.0	82.9	37.9
9	120.4	21.7	92.8	134.1	113.3	60.5	283.6	144.2	235.1	92.3	89.4	44.1
10	179.2	55.6	139.1	167.8	189.5	116.5	168.5	130.8	129.9	53.0	56.5	24.5
Mean	86.8	27.2	79.1	175.9	194.7	94.0	200.2	204.6	181.2	176.2	80.8	56.7
11	25.8	38.1	140.6	226.2	161.1	145.4	175.5	238.4	120.8	80.0	127.6	73.6
12	47.3	22.5	95.0	248.0	215.5	128.3	314.5	226.4	142.7	42.8	162.2	42.3
13	15.3	39.1	27.0	59.7	359.3	147.3	244.0	310.2	263.6	327.4	33.1	26.7
14	16.6	88.8	17.6	83.5	133.9	194.8	137.3	263.8	179.5	178.4	8.2	19.1
15	34.3	51.1	110.2	32.7	32.3	127.4	89.5	267.1	137.0	87.4	-19.6	61.0
16	18.5	8.2	14.2	190.6	49.8	125.5	148.4	209.1	109.3	38.5	-15.0	29.7
17	19.0	13.1	9.2	257.4	128.8	173.2	155.1	238.9	94.2	70.9	10.0	31.8
18	25.1	61.6	53.0	311.4	161.5	158.3	38.0	267.3	85.4	214.8	43.9	59.7
19	109.4	79.7	129.0	356.6	177.1	87.1	48.6	197.0	48.4	126.4	12.9	112.0
20	105.4	48.0	78.5	438.5	249.5	140.8	47.1	258.9	60.3	112.6	193.2	74.5
Mean	41.7	45.0	67.4	220.5	166.9	142.8	139.8	247.7	124.1	127.9	55.7	53.0
21	77.4	77.0	138.5	408.6	332.1	124.0	75.3	343.1	159.6	56.7	122.7	33.3
22	135.6	146.1	127.2	462.5	183.9	139.0	75.8	241.4	348.6	87.6	78.6	49.9
23	95.1	347.5	99.1	190.6	256.7	94.3	112.7	295.1	351.8	97.1	55.0	54.1
24	40.8	126.0	185.9	115.9	201.4	265.3	72.1	257.4	332.9	129.7	47.0	62.5
25	95.1	175.9	178.7	186.7	172.1	179.7	57.9	299.8	431.9	40.7	15.7	71.7
26	48.9	214.3	133.4	209.9	237.3	155.6	121.2	365.9	393.9	38.2	35.6	21.0
27	86.9	168.9	83.7	195.1	150.7	206.5	77.6	162.4	314.5	77.9	20.5	13.2
28	108.0	80.5	39.0	195.8	53.3	301.1	169.5	168.6	364.9	73.4	25.3	12.4
29	36.5	n.a.	104.5	233.6	116.4	540.5	213.7	205.9	301.7	48.3	15.5	61.9
30	48.2	n.a.	211.5	125.4	160.1	238.8	156.2	271.7	151.1	43.5	72.4	173.0
31	32.1	n.a.	170.2	n.a.	251.4	n.a.	174.3	182.1	n.a.	18.9	n.a.	51.0
Mean	73.1	167.0	133.8	232.4	192.3	224.5	118.8	253.9	315.1	64.7	48.8	54.9
MEAN	67.4	73.5	94.7	209.6	184.9	153.8	151.8	236.0	206.0	121.1	61.7	54.9
MIN	9.5	8.2	9.2	32.7	32.3	22.2	38.0	86.1	40.5	18.9	-19.6	12.4
MAX	179.2	347.5	211.5	462.5	359.3	540.5	314.5	365.9	535.6	461.9	212.3	173.0

4.1 BOLIVIA

Chacaltaya Observatory

Technical sheet		
Coordinates: Latitude: 16° 12' N Longitude: 68° 06' W Elevation: 5.320 m a.s.l	Installation Time: November 2011	Data Availability: From December 11, 2011

Variable	Range	Accuracy	Recording rate	Height on Pole	Manufacturer
Ozone	0 - 200 ppm	± 2 ppb in the range 0-100 ppb	1 min.	8 m	Thermo Scientific Tei49i

2011 Data

The ozone data collected at the Chacaltaya Observatory have not been validated yet.



5. Acknowledgements

This study is promoted by Ev-K2-CNR and funded by the Italian Ministry of Education, University and Research (MIUR) through the Italian National research Council (CNR) and by the Lombardy region through the Lombardy Foundation for the Environment (FLA). For the meteorological activities carried out in Nepal, the Ev-K2-CNR committee thanks the Nepal Academy of Science and Technology (NAST), the Department of Hydrology and Meteorology (Government of Nepal) and the Sagarmatha Pollution Control Committee.

This study is carried out also with the support of the Pakistan Meteorological Department, Ministry of Defence, Government of the Islamic Republic of Pakistan, in Pakistan and with the support of the Department of Meteorology of the Ministry of Water and Environment (DoM), in Uganda.

The Ev-K2-CNR Committee thanks the Universidad Mayor de San Andres for activities carried out in Bolivia. Installation of Italian Alpine AWSs was made possible also thanks to some public and private corporations (San Pellegrino-Levissima, Cariplo Foundation, Osram Spa, AEM Spa, Arpa Lombardia, Lsi-LASTEM) and volunteers activity (members of Italian Alpine Club, National Corp of Alpine and Speleological Rescue and Italian Alpine Club - station of Valfurva, students of University and Politecnico of Milan).

The data analysis was performed in the framework of the COFIN PRIN Project 2008.

The authors wish to thank the Stelvio National Park, the Commune of Valfurva, the Valfurva section of the Italian Alpine Club (CAI), the ARPA Lombardia and the ARPA Valle d'Aosta for their kind help and support. Moreover the authors wish also to thank Eraldo Meraldi, Paolo Turcotti, Roberto Chillemi and Adriano Greco for their fundamental technical assistance on the field.

The Italian Alps are property of University of Milan which signed an apposite agreement with Ev-K2-CNR Committee for a joint management of these stations in the framework of the SHARE project.

6. SHARE Partner



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World Meteorological Organization (WMO)



United Nations Environment Programme (UNEP)



Universidad Mayor de San Andres acting on behalf of the Instituto de Investigaciones Físicas de La Paz

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