

TITLE

CAMP_Himalayas_Syangboche_20031001_20040331.stm

DATASET CONTACT

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DATE OF THIS DOCUMENT

9 June 2005

1. 0 DATASET OVERVIEW

1.1 Introduction

Intensive meteorological observations in the Khumbu Valley, Nepal Himalayas, have been conducted since the middle 90's (Ueno et al., 1996; Bertolani et al., 2000; Ueno et al., 2001; Bollasina et al., 2002; Ueno and Pokhrel, 2002) in order to provide long-term monitoring of the monsoon at high altitude. This area, being located on the windward side of the Range with respect to the Indian monsoon, is well exposed to the summer winds. The studies conducted have demonstrated that the region is a significant point of observation both of local climate and large-scale circulation. The Syangboche AWS was established on October 21, 1994, at Syangboche village, Solu-Khumbu district, at an altitude of 3833 m a.s.l., with the cooperation between His Majesty's Government, Department of Hydrology and Meteorology (Nepal) and the Glaciological Expedition in Nepal Project (Japan), and has been kept as one of the GAME/AAN project AWS network. The AWS provides data for basin scale scientific process studies of meteorology, hydrology, glaciology and engineering disaster prevention, and also contributes to monitor 10 years scale climate change as representative station at mid-latitude alpine region.

1.2 Time period covered by the data

Start: 1 October 2003, 00:00
End: 31 March 2004, 23:40

1.3 Temporal characteristics of the data

All parameters are recoded every 20 minutes.

1.4 Physical location of the measurement

Latitude: 27° 48' 36" N
Longitude: 86° 43' 12" E
Elevation: 3833 m a.s.l.

1.5 Data source

Original data provided by the GAME/AAN Committee.

1.6 WWW address references

<http://www.suiri.tsukuba.ac.jp/Project/aan/aan.html>

2.0 INSTRUMENTATION DESCRIPTION

2.1 Platform

Aanderaa AWS. The 15 cm sensor is not mounted, and the 0.5 cm sensor is fixed with iron pin.

2.2 Description of the instrumentation

Parameter	Model	Manufacturer
Soil Temperature	30022A	Aandera (Norway)

2.3 Instrumentation specification

Parameter	Sensor Type	Depth of sensor (cm)	Accuracy	Resolution
Soil Temperature	Platinum resistor	-0.5; -15.0	0.1°C	0.1°C

3.0 DATA COLLECTION AND PROCESSING

3.1 Description of data collection

Original N-value data are saved in the Data Storage Unit (DSU). DSU is collected from the AWS twice every year, in spring and autumn.

3.2 Description of derived parameters and processing techniques used

The N-value is converted to a meteorological value by using experimental coefficients defined for each sensor. Soil temperature data are instantaneous values.

4.0 QUALITY CONTROL PROCEDURES

The quality control flags follow the CEOP data flag definition document.

5.0 GAP FILLING PROCEDURES

No gap filling procedure was applied.

6.0 DATA REMARKS

6.1 PI's assessment of the data

6.1.1 Instruments problems

Soil temperature at 0.05 m needs to be calibrated, because it shows flat period with negative values (flag B).

6.1.2 Quality issues

None.

6.2 Missing data periods

All data are missing from 4:20 to 7:00 during 3 March 2004, at 4:00 during 4 March 2004, from 6:40 to 7:20 during 5 March 2004.

7.0 REFERENCE REQUIREMENTS

The data was collected under the GEWEX/GAME project funded by Ministry of Education, Science, Sports and Culture and Asian Pacific Network, and special research foundation of the University of Shiga prefecture.

8.0 REFERENCES

Ueno K., and A. P. Pokhrel, 2002: Intra-seasonal air temperature variation in the Nepal Himalayas, *Mausam*, **53**, 281-288.

Bollasina, M., L. Bertolani, and G. Tartari, 2002: Meteorological observations in the Khumbu Valley, Nepal Himalayas, 1994-1999, *Bull. Glac. Res.*, **19**, 1-11.

Ueno K., R. B. Kayastha, M. R. Chitrakar, O. R. Bajracharya, A. P. Pokhrel, H. Fujinami, T. Kadota, H. Iida, D. P. Manandhar, M. Hattori, T. Yasunari, and M. Nakawo, 2001: Meteorological observations during 1994-2000 at the Automatic Weather Station (GEN-AWS) in Khumbu region, Nepal Himalayas, *Bull. Glac. Res.*, **18**, 23-30.

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Ueno K., H. Iida, H. Yabuki, K. Seko, A. Sakai, G. S. Lhakupa, R. B. Kayastha, A. P. Pokhrel, M. L. Shrestha, T. Yasunari, and M. Nakawo, 1996: Establishment of the GEN

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DATE OF THIS DOCUMENT

25 October 2005

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1.7 Introduction

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1.8 Time period covered by the data

Start: 1 April 2004, 00:00
End: 31 December 2004, 23:40

1.9 Temporal characteristics of the data

All parameters are recoded every 20 minutes.

1.10 Physical location of the measurement

Latitude: 27° 48' 36" N
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1.11 Data source

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4.0 QUALITY CONTROL PROCEDURES

The quality control flags follow the CEOP data flag definition document.

5.0 GAP FILLING PROCEDURES

No gap filling procedure was applied.

6.0 DATA REMARKS

6.1 PI's assessment of the data

6.1.1 Instruments problems

Soil temperature at 0.05 m needs to be calibrated (flag B).

6.1.2 Quality issues

None.

6.2 Missing data periods

All data are missing: 13 August 2004 at 5:00, from 13 August 2004 at 16:00 to 23:40.

7.0 REFERENCE REQUIREMENTS

The data was collected under the GEWEX/GAME project funded by Ministry of Education, Science, Sports and Culture and Asian Pacific Network, and special research foundation of the University of Shiga prefecture.

8.0 REFERENCES

Ueno K., and A. P. Pokhrel, 2002: Intra-seasonal air temperature variation in the Nepal Himalayas, *Mausam*, **53**, 281-288.

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