

TITLE

CAMP_Himalayas_Syangboche_20070101_20071231.stm

DATASET CONTACT

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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: January 1, 2007, 00:30
End: December 31, 2007, 23:40

1.3 Temporal characteristics of the data

Recording hour is UTC.

All parameters are recorded every 30 minutes from January 1, 2007 at 00:30 to March 25, 2007 at 4:00 (the observations are recorded every 00 and 30 minutes) and from March 25 at 04:15 to July 07, 2007 at 23:45 (the observations are recorded every 15 and 45 minutes).

All parameters are recorded every 20 minutes from July 8, 2007 at 00:20 to December 31, 2007 at 23:45 (the observations are recorded every 00, 20 and 40 minutes).

(We have modified the original time in order to obtain regular slots as request by CEOP in its data format submission instructions, where for each hour, minutes should be 00 or 05 and multiple of 5).

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://aan.suiri.tsukuba.ac.jp/aanstation/syangboche.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

Sensor at 0.5 cm is mounted in the vegetated soil, and not exactly at 0.5 cm below the surface. Vegetation changes height (1-10cm) depending on the season. Since 2007, fences around the AWS system were broken, and cattle may enter and change the condition of pasture.

6.1.2 Quality issues

None.

6.2 Missing data periods

All data are missed on March 25, 2007 from 00:00 to 04:00 and from November 03, 2007 at 05:20 to December 31, 2007 at 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

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