TITLE

CAMP_Himalayas_Syangboche_20080521_20081225.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; Ueno et al. 2008; Ueno and Aryal) 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: May 21, 2008, 22:45
End: December 25, 2008, 23:45

1.3 Temporal characteristics of the data

Recording hour is UTC.
All parameters are recoded every 30 minutes (the observations are recorded every 00 and 30 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	Manifacturer
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

There are no data in the period from January 1, 2008 at 0:00 to May 21, 22.15 and from December 26, at 0:00 to December 31, at 23:45.

The period of dataset reported in this document is full, without missing data.

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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