

TITLE

CAMP_Tibet_Naqu-DSTMS_20021001_20030331.stm

CONTACT

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DATE OF THIS DOCUMENT

02 Sep. 2004 (Updated 04 Aug. 2006)

1. 0 DATASET OVERVIEW

1.1 Introduction

To clarify the energy and water cycle in the Tibetan Plateau, it is important to understand the profile of the soil temperature.

The purpose of DSTMS (Deep Soil Temperature Measurement System) observation is to monitor these values and develop the land surface process models and satellite-based soil moisture retrieval methods.

1.2 Time period covered by the data

Start: 1 October 2002, 00:00

End: 31 March 2003, 23:00

1.3 Temporal characteristics of the data

All parameters are recorded every hour.

1.4 Physical location of the measurement

Latitude : 31.37787 N
Longitude : 91.94044 E
Elevation : 4548.6 m a.s.l.

Landscape : Bare land (with the thin weed-like plant)
Canopy height : Less than 5cm.
Soil Characteristics: Sand

1.5 Data source

1.6 Website address references

<http://monsoon.t.u-tokyo.ac.jp/camp/tibets/>

2.0 INSTRUMENTATION DESCRIPTION

2.1 Platform

The sensors are mounted on several heights.

2.2 Description of the instrumentation

Parameter	Model	Manufacturer
Soil Temperature	TS-301(Pt100)	Okazaki

2.3 Instrumentation specification

Soil Temp_160cm : Soil Temperature at the 160cm depth (deg.C)
Soil Temp_200cm : Soil Temperature at the 200cm depth (deg.C)
Soil Temp_320cm : Soil Temperature at the 320cm depth (deg.C)
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Soil Temp_1000cm : Soil Temperature at the 1000cm depth (deg.C)

3.0 DATA COLLECTION AND PROCESSING

3.1 Description of data collection

Data are downloaded from the DSTMS twice a year. Then, data are sent to Tokyo, where they are processed.

3.2 Description of derived parameters and processing techniques used

Soil temperature is measured by using Trime MUX and Pt100 sensor.

4.0 QUALITY CONTROL PROCEDURES

For all parameters, the data has been visually checked, looking for extremely and unusual low/high values and/or periods with constant values through the CAMP Quality Control Web Interface.

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

None.

6.1.2 Quality issues

6.2 Missing data periods

None

7.0 REFERENCE REQUIREMENTS

Original data was collected and is provided within the framework of GAME/CAMP Tibet Scientific and Technological Research Project, funded by the Ministry of Education, Culture, Sports, Science and Technology; the Japan Science and Technology Agency; the Frontier Research System for Global Change; the Japan Aerospace Exploration Agency; the Chinese Academy of Sciences; and the Chinese Academy of Meteorological Sciences.

8.0 REFERENCES

N. Hirose, T. Koike, and H. Ishidaira, 2002: Study on Spatially Averaged Evaporation under Soil Moisture Heterogeneity Affected by Permafrost Micro-topography. JMSJ, Vol.80. pp191-203.

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T. Koike, N. Hirose, H. Ishidaira, Y. Ding, Y. Shen, S. Wang, B. Ye and M. Yang, 2001b: Hydrological Variability in the Tibetan Permafrost, Proc. of the 2nd International Workshop on TIPEX/GAME-Tibet, Kunming, China.

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CAMP_Tibet_Naqu-DSTMS_20030401_20030930.stm

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DATE OF THIS DOCUMENT

20 Apr. 2005 (**Updated 31 Aug. 2006**)

1. 0 DATASET OVERVIEW

1.7 Introduction

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The purpose of DSTMS (Deep Soil Temperature Measurement System) observation is to monitor these values and develop the land surface process models and satellite-based soil moisture retrieval methods.

1.8 Time period covered by the data

Start: 1 April 2003, 00:00

End: 30 September 2003, 23:00

1.9 Temporal characteristics of the data

All parameters are recorded every hour.

1.10 Physical location of the measurement

Latitude : 31.37787 N
Longitude : 91.94044 E
Elevation : 4548.6 m a.s.l.

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6.0 DATA REMARKS

6.1 PI's assessment of the data

6.1.1 Instruments problems

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6.1.2 Quality issues

6.2 Missing data periods

Soil_Temperature_In_1000cm	2003/9/17 4:00
Soil_Temperature_In_900cm	2003/9/17 4:00
Soil_Temperature_In_800cm	2003/9/17 4:00
Soil_Temperature_In_700cm	2003/9/17 4:00
Soil_Temperature_In_600cm	2003/9/17 4:00
Soil_Temperature_In_500cm	2003/9/17 4:00
Soil_Temperature_In_400cm	2003/9/17 4:00
Soil_Temperature_In_320cm	2003/9/17 4:00
Soil_Temperature_In_200cm	2003/9/17 4:00
Soil_Temperature_In_160cm	2003/9/17 4:00
Soil_Temperature_Out_200ocm	2003/9/17 4:00
Soil_Temperature_Out_160ocm	2003/9/17 4:00
Soil_Temperature_Out_130ocm	2003/9/17 4:00
Soil_Temperature_Out_100ocm	2003/9/17 4:00
Soil_Temperature_Out_80ocm	2003/9/17 4:00
Soil_Temperature_Out_60ocm	2003/9/17 4:00

7.0 REFERENCE REQUIREMENTS

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9.0 Missing Data Periods

None.