

TITLE

CEOP_Tsukuba_MRI_20070101_20070630.stm

CONTACT

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1. 0 DATASET OVERVIEW

1.1 Introduction

Intensive meteorological observations have been conducted on the grounds of the Meteorological Research Institute, Tsukuba Japan, since November 2002 in order to provide long-term monitoring of the meteorological elements in the Tsukuba area. This is a typical suburban area, located on the Kanto plains. The observation field is covered by grass, which is cut several times a year.

1.2 Time period covered by the data

Start: 1 January 2007, 00:00

End: 30 June 2007, 23:30

1.3 Temporal characteristics of the data

All parameters are recoded every 30 minutes intervals.

1.4 Physical location of the measurement

Latitude: 36° 03' 09" N

Longitude: 140° 07' 24" E

Elevation: 25.2 m a.s.l.

1.5 Data source

Original data is provided by MRI.

1.6 WWW address references

2.0 INSTRUMENTATION DESCRIPTION

2.1 Platform

The sensors are placed on the ground.

2.2 Description of the instrumentation

| Parameter | Model | Manufacturer |
|------------------|---------|------------------|
| Soil moisture | TDR-100 | Campbell (USA) |
| Soil temperature | CHF-GP1 | Climatec (Japan) |

2.3 Instrumentation specification

| Parameter | Sensor Type | Height of sensor (m) | Accuracy | Resolution |
|------------------|---------------------------|--|----------|------------|
| Soil moisture | Time Domain Reflectometry | -0.02, -0.10 and -0.50 | +/-2.5% | 1% |
| Soil temperature | thermopile | -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.12, -0.14, -0.16, -0.18, -0.20, -0.25, -0.30, -0.35, -0.40, -0.50, -0.60, -0.70, -0.80, -0.90 and -1.00 | +/-0.5°C | 0.01°C |

3.0 DATA COLLECTION AND PROCESSING

3.1 Description of data collection

Data are downloaded from the AWS every 30 minutes, then data are sent to data server PC, where they are processed.

3.2 Description of derived parameters and processing techniques used

Soil moisture and soil temperature are the previous 30 minutes average values.

4.0 QUALITY CONTROL PROCEDURES

For all parameters, the data have been visually checked, looking for extremely low/high values and/or periods with constant values. 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

6.1.2 Quality issues

6.2 Missing data periods

7.0 REFERENCE REQUIREMENTS

Original data was collected and is provided within the framework of the CEOP Tsukuba Project, funded by grants-in-aid for scientific research by Japan Society for the Promotion of Science, CEOP Tsukuba DB, No. 198052.

8.0 REFERENCES