

TITLE

CEOP_Tsukuba_MRI_20080701_20081231.stm

CONTACT

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1. 0 DATASET OVERVIEW

1.1 Introduction

Intensive meteorological observations in the yard of Meteorological Research Institute, Tsukuba Japan, have been conducted since November of 2002 in order to provide long-term monitoring of the soil moisture at Tsukuba area. This area, being located on the Kanto plains is typical suburbs area. The surface of observation filed is covered by grass. Grass is cut several times per year.

1.2 Time period covered by the data

Start: 1 July 2008, 00:00
End: 31 December 2008, 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 30minutes. 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 has 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...

8.0 REFERENCES