

TITLE

CAMP_SiberiaTaiga_LarchForest_20021001_20030331.flx

CONTACT

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DATE OF THIS DOCUMENT

27 Aug. 2004
Updated 22 Jan. 2005

1. 0 DATASET OVERVIEW

1.1 Introduction

Objectives

The goal of the GAME-Siberia project is to clarify the characteristics and processes of water accumulation and transfer and their relation with the energy cycle, in the atmosphere-land surface interface of cold environments from the seasonal to the inter-annual time scale. This study will contribute to one of the primary GAME objectives;

- To understand multi-scale interactions in the energy and hydrologic cycles in the Asian Monsoon Region

and one scientific objective;

- To assess the impact of monsoon variability on the regional hydrologic cycle.

The objectives of Taiga study subgroup include:

1. Develop seasonal and inter-annual variation of one-dimensional energy and water vapor fluxes over tundra.
2. Characterize the water balance components in these Taiga watersheds.
3. Determine the areal distribution of ground surface properties.

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 recoded every 30 minutes.

1.4 Physical location of the measurement

Latitude : 62.255 N
Longitude : 129.618 E
Elevation : 220.0m a.s.l.
Landscape : Larch Forest
Canopy height : About 18 m
Soil Characteristics: sandy soil

1.5 Data source

Original data provided by the Institute of Observational Research for Global Change (IORGC), Independent Administrative Institution Japan Agency for Marine-Earth Science and Technology (JAMSTEC) financially supported by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT).

1.6 WWW address references

Website: <http://www.hyarc.nagoya-u.ac.jp/game/siberia/p-taiga.html>

2.0 INSTRUMENTATION DESCRIPTION

2.1 Platform

The sensors are mounted on several heights.

2.2 Description of the instrumentation

Parameter	Model	Manufacturer
Soil heat flux	MF-81	EKO

2.3 Instrumentation specification

Soil Heat Flux (5cm) : Soil heat flux at the 5cm depth (W/m^2)

3.0 DATA COLLECTION AND PROCESSING

3.1 Description of data collection

Data are downloaded from the Tower twice every year, in spring and autumn. Then, data are sent to Japan, where they are processed.

3.2 Description of derived parameters and processing techniques used

3.3 Data format

These data are in the CEOP EOP-3 data format agreed to by the CEOP Scientific Steering Committee. This format is described in detail as part of the CEOP Reference Site Data Set Procedures Report which is available at the following URL:

http://www.joss.ucar.edu/ghp/ceopdm/refdata_report/ceop_flux_format.html

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 thorough 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

Soil Heat Flux (5cm):

2002/12/07 09:30 - 2002/12/08 01:00

2003/01/07 16:00 - 2003/01/08 03:30

2003/01/17 18:30 - 2003/01/20 05:30

2003/03/30 03:30 - 2003/03/31 23:30

7.0 REFERENCE REQUIREMENTS

Original data was collected and is provided within the framework of the Institute of Observational Research for Global Chang (IORGC), Independent Administrative Institution Japan Agency for Marine-Earth Science and Technology (JAMSTEC), financially supported by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT).

8.0 REFERENCES

Ohta, T., T. Hiyama, H. Tanaka, T. Kuwada, T. C. Maximov, T. Ohata and Y. Fukushima (2001) Seasonal variation in the energy and water exchanges above and below a larch forest in Eastern Siberia. *HYDROLOGICAL PROCESSES*. 15, 1459-1476.

TITLE

CAMP_SiberiaTaiga_LarchForest_20030401_20030930.flx.doc

CONTACT

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DATE OF THIS DOCUMENT

22 Jan. 2005

1. 0 DATASET OVERVIEW

1.7 Introduction

Objectives

The goal of the GAME-Siberia project is to clarify the characteristics and processes of water accumulation and transfer and their relation with the energy cycle, in the atmosphere-land surface interface of cold environments from the seasonal to the inter-annual time scale. This study will contribute to one of the primary GAME objectives;

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and one scientific objective;

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The objectives of Taiga study subgroup include:

1. Develop seasonal and inter-annual variation of one-dimensional energy and water vapor fluxes over tundra.
2. Characterize the water balance components in these Taiga watersheds.
3. Determine the areal distribution of ground surface properties.

1.8 Time period covered by the data

Start: 1 April 2003, 00:00
End: 30 September 2003, 23:30

1.9 Temporal characteristics of the data

All parameters are recorded every 30 minutes.

1.10 Physical location of the measurement

Latitude : 62.255 N
Longitude : 129.618 E
Elevation : 220.0m a.s.l.
Landscape : Larch Forest
Canopy height : About 18 m
Soil Characteristics: sandy soil

1.11 Data source

Original data provided by the Institute of Observational Research for Global Change (IORGC), Independent Administrative Institution Japan Agency for Marine-Earth Science and Technology (JAMSTEC) financially supported by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT).

1.12 WWW address references

Website: <http://www.hyarc.nagoya-u.ac.jp/game/siberia/p-taiga.html>

2.0 INSTRUMENTATION DESCRIPTION

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2.2 Description of the instrumentation

Parameter	Model	Manufacturer
Soil heat flux	MF-81	EKO

2.4 Instrumentation specification

Soil Heat Flux (5cm) : Soil heat flux at the 5cm depth (W/m²)

3.0 DATA COLLECTION AND PROCESSING

3.1 Description of data collection

Data are downloaded from the Tower twice every year, in spring and autumn. Then, data are sent to Japan, where they are processed.

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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

Soil Heat Flux (5cm):

2003/07/23 16:00 - 2003/09/17 04:30

2003/09/30 15:30 - 2003/09/30 23:30

7.0 REFERENCE REQUIREMENTS

Original data was collected and is provided within the framework of the Institute of Observational Research for Global Change (IORGC), Independent Administrative Institution Japan Agency for Marine-Earth Science and Technology (JAMSTEC), financially supported by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT).

8.0 REFERENCES

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TITLE

CAMP_SiberiaTaiga_LarchForest_20031001_20040331.flx

CONTACT

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DATE OF THIS DOCUMENT

16 May 2006

1. 0 DATASET OVERVIEW

1.13 Introduction

Objectives

The goal of the GAME-Siberia project is to clarify the characteristics and processes of water accumulation and transfer and their relation with the energy cycle, in the atmosphere-land surface interface of cold environments from the seasonal to the inter-annual time scale. This study will contribute to one of the primary GAME objectives;

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2. Characterize the water balance components in these Taiga watersheds.
3. Determine the areal distribution of ground surface properties.

1.14 Time period covered by the data

Start: 1 October 2003, 00:00

End: 31 March 2004, 23:00

1.15 Temporal characteristics of the data

All parameters are recorded every 30 minutes.

1.16 Physical location of the measurement

Latitude : 62.255 N

Longitude : 129.618 E

Elevation : 220.0m a.s.l.

Landscape : Larch Forest

Canopy height : About 18 m

Soil Characteristics: sandy soil

1.17 Data source

Original data provided by the Institute of Observational Research for Global Change (IORGC), Independent Administrative Institution Japan Agency for Marine-Earth Science and Technology (JAMSTEC) financially supported by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT).

1.18 WWW address references

Website: <http://www.hyarc.nagoya-u.ac.jp/game/siberia/p-taiga.html>

2.0 INSTRUMENTATION DESCRIPTION

2.1 Platform

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2.2 Description of the instrumentation

Parameter	Model	Manufacturer
Soil heat flux	MF-81	EKO

2.5 Instrumentation specification

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3.0 DATA COLLECTION AND PROCESSING

3.1 Description of data collection

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4.0 QUALITY CONTROL PROCEDURES

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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

The missing data period are listed in chapter 9.0.

7.0 REFERENCE REQUIREMENTS

Original data was collected and is provided within the framework of the Institute of Observational Research for Global Chang (IORGC), Independent Administrative Institution Japan Agency for Marine-Earth Science and Technology (JAMSTEC), financially supported by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT).

8.0 REFERENCES

Ohta, T., T. Hiyama, H. Tanaka, T. Kuwada, T. C. Maximov, T. Ohata and Y. Fukushima (2001) Seasonal variation in the energy and water exchanges above and below a larch forest in Eastern Siberia. HYDROLOGICAL PROCESSES. 15, 1459-1476.

9.0 Missing Data Periods

File Name : CAMP_SiberiaTundra_Tiksi_20031001_20040331.flx

Data Period : 2003/10/01 00:00 - 2004/03/31 23:00

Sensible Heat Flux (-0.08m)
2003/10/01 00:00 - 2004/03/31 23:00 (ALL)

Sensible Heat Flux (-0.05m)
2003/10/01 00:00 - 2004/03/31 23:00 (ALL)

Latent Heat Flux (-0.08m)
2003/10/01 00:00 - 2004/03/31 23:00 (ALL)

Latent Heat Flux (-0.05m)
2003/10/01 00:00 - 2004/03/31 23:00 (ALL)

CO2 Flux (-0.08m)
2003/10/01 00:00 - 2004/03/31 23:00 (ALL)

CO2 Flux (-0.05m)
2003/10/01 00:00 - 2004/03/31 23:00 (ALL)

Soil Heat Flux (-0.08m)
2003/10/01 00:00
2004/03/31 16:00 - 2004/03/31 23:00 (8)

Soil Heat Flux (-0.05m)
2003/10/01 00:00
2004/03/31 16:00 - 2004/03/31 23:00 (8)

TITLE

CAMP_SiberiaTaiga_LarchForest_20040401_20041217.flx

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DATE OF THIS DOCUMENT

18 July 2006

1. 0 DATASET OVERVIEW

1.19 Introduction

Objectives

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3. Determine the areal distribution of ground surface properties.

1.20 Time period covered by the data

Start: 1 April 2004, 00:00

End: 17 December 2004, 23:00

1.21 Temporal characteristics of the data

All parameters are recorded every 30 minutes.

1.22 Physical location of the measurement

Latitude : 62.255 N
Longitude : 129.618 E
Elevation : 220.0m a.s.l.
Landscape : Larch Forest
Canopy height : About 18 m
Soil Characteristics: sandy soil

1.23 Data source

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2.2 Description of the instrumentation

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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

The missing data period are listed in chapter 9.0.

7.0 REFERENCE REQUIREMENTS

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9.0 Missing Data Periods

File Name : CAMP_SiberiaTaiga_LarchForest_20040401_20041217.flx
Data Period : 2004/04/01 00:00 - 2004/12/17 23:30

Soil Heat Flux (-0.05m)

2004/05/28 07:00 - 2004/05/29 08:00 (51)
2004/06/16 08:30 - 2004/06/18 04:30 (89)
2004/08/07 01:00 - 2004/08/10 06:00 (155)
2004/08/20 22:00 - 2004/08/21 05:00 (15)
2004/09/11 15:00 - 2004/09/17 04:30 (268)
2004/12/17 02:00
2004/12/17 03:30
2004/12/17 20:30 - 2004/12/17 23:30 (7)