

First ISCCP Regional
Experiment (FIRE) Marine
Stratocumulus United
Kingdom Meteorological
Office (UKMO) C-130
Aircraft Langley DAAC
Data Set Document



## **Summary:**

The First ISCCP Regional Experiments have been designed to improve data products and cloud/radiation parameterizations used in general circulation models (GCMs). Specifically, the goals of FIRE are (1) to improve the basic understanding of the interaction of physical processes in determining life cycles of cirrus and marine stratocumulus systems and the radiative properties of these clouds during their life cycles and (2) to investigate the interrelationships between the ISCCP data, GCM parameterizations, and higher space and time resolution cloud data.

To-date, four intensive field-observation periods were planned and executed: a cirrus IFO (October 13 - November 2, 1986); a marine stratocumulus IFO off the southwestern coast of California (June 29 - July 20, 1987); a second cirrus IFO in southeastern Kansas (November 13 - December 7, 1991); and a second marine stratocumulus IFO in the eastern North Atlantic Ocean (June 1 - June 28, 1992). Each mission combined coordinated satellite, airborne, and surface observations with modeling studies to investigate the cloud properties and physical processes of the cloud systems.

This document provides information for the FIRE\_MS\_UKMO\_C130 data set.

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#### 1. Data Set Overview:

**Data Set Identification:** 

FIRE\_MS\_UKMO\_C130:

First ISCCP Regional Experiment (FIRE) Marine Stratocumulus United Kingdom Meteorological Office (UKMO) C-130 Aircraft Data (FIRE\_MS\_UKMO\_C130)



#### **Data Set Introduction:**

These data were collected by the United Kingdom Meteorological Office (UKMO) from the Meteorological Research Flight C-130 Aircraft. This data set is a 16 HZ time series data set.

### **Objective/Purpose:**

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### **Summary of Parameters:**

CO2 Temperature
Dew/Front Point Temperature
Humidity
Irradiance
Liquid Water Content
Pressure
Temperature
Wind Direction
Wind Speed

#### **Discussion:**

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### **Related Data Sets:**

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# 2. Investigator(s):

### Investigator(s) Name and Title:

..

### Title of Investigation:

First ISCCP Regional Experiment (FIRE) Marine Stratocumulus United Kingdom Meteorological Office (UKMO)

#### **Contact Information:**

M. Gill Martin Y46 Building DRA (Aerospace) Farnborough, Hampshire GU14 6TD UK

Phone: (44) 1252-395416 FAX: (44) 1252-376588

E-mail: gmmartin@email.meto.govt.uk

# 3. Theory of Measurements:

...

## 4. Equipment:

### **Sensor/Instrument Description:**

**Collection Environment:** 

...

#### Source/Platform:

6. Observations:

**Data Notes:** 

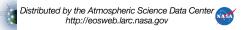
So	ource/Platform Mission Objectives:		
K	ey Variables:		
De Hu Irr Lie Pr Te W	O2 Temperature ew/Front Point Temperature umidity radiance quid Water Content ressure emperature ind Direction ind Speed		
Pr	rinciples of Operation:		
Se	ensor/Instrument Measurement Geometry:		
M	anufacturer of Sensor/Instrument:		
Se	ensor/Instrument:		
FS HC Mr PI PI PI PY RA	HILLED MIRROR SSP OT-WIRE CRW REFRACTOMETER LATINUM RESISTANCE RESSURE TRANSDUCER RT-4 YRANOMETER YRGEOMETER ADIOMETER JIND SENSOR		
С	alibration:		
Sį	pecifications:		
To	plerance:		
Fr	requency of Calibration:		
Ot	ther Calibration Information:		
5	5. Data Acquisition Methods:		

Distributed by the Atmospheric Science Data Center http://eosweb.larc.nasa.gov

Field Notes:							
7. Data Description:							
Spatial Characteristics:							
Spatial Coverage:							
Data Set Name	Min Lat	Max Lat	Min Lon	Max Lon			
Data Set Name	Willi Lat	- Wax Lat	MIII LOII	- Max Lon			
FIRE_MS_UKM O_C130	29.00	35.00	-126.00	-116.00			
0	Mana						
Spatial Coverage Map:							
Spatial Resolutio	on:						
<b></b>							
Projection:							
Grid Description:							
<b></b>							
Temporal Characteristics:							
Temporal Covera	ige:						
Data Set Name	Begin Da	ite	End Date				
FIRE_MS_UKMO	_C130 07-07-198	87	07-18-1987				
Temporal Coverage Map:							
Temporal Resolu	ition:						
Data Characteristics:							
Parameter/Variable:							
Variable Description/Definition:							

...

Unit of Measurement:



Data Source:
Data Range:
Sample Data Record:
8. Data Organization:
Data Granularity:
A general description of data granularity as it applies to the IMS appears in the <u>EOSDIS Glossary</u> .
Data Format:
The data are in native binary format.
9. Data Manipulations:
Formulae:
Derivation Techniques and Algorithms:
Data Processing Sequence:
Processing Steps:
Processing Changes:
Calculations:
Special Corrections/Adjustments:
Calculated Variables:
Graphs and Plots:
Images are not available for this data set.
10. Errors:
Sources of Error:
Quality Assessment:
Data Validation by Source:

...

Confidence Level/Accuracy Judgement:
···
Measurement Error for Parameters:
<b></b>
Additional Quality Assessments:
Data Verification by Data Center:
<b></b>
11. Notes:
Limitations of the Data:
<b></b>
Known Problems with the Data:
<b></b>
Usage Guidance:
<b></b>
Any Other Relevant Information about the Study:
<b></b>
12. Application of the Data Set:
<b></b>
13. Future Modifications and Plans:
There are no plans to modify these data sets.
14. Software:
Software Description:
Sample read software is available for this data set.
Software Access:
The software can be obtained through the Langley DAAC. Please refer to the contact information below. The software can also be obtained

at the same time the user is ordering this data set.

## 15. Data Access:

## **Contact Information:**

Langley DAAC User and Data Services Office NASA Langley Research Center Mail Stop 157D Hampton, Virginia 23681-2199 USA

Telephone: (757) 864-8656 FAX: (757) 864-8807

E-mail: <a href="mailto:support-asdc@earthdata.nasa.gov">support-asdc@earthdata.nasa.gov</a>

#### **Data Center Identification:**

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E-mail: support-asdc@earthdata.nasa.gov

## **Procedures for Obtaining Data:**

The Langley DAAC Information Management System (IMS) is an on-line system that features a graphical user interface (GUI) that allows to query the Langley DAAC dataset holdings, to view pre-generated browse products, and to order specific data products. Users may also request data by letter, telephone, electronic mail (INTERNET), or personal visit.

The Langley DAAC User and Data Services (UDS) staff provides technical and operational support for users ordering data. The Langley DAAC Handbook is available in a postscript file through the IMS for users who want detailed information about the Langley DAAC holdings. Users may also obtain a copy by contacting:

Langley DAAC User and Data Services Office NASA Langley Research Center Mail Stop 157D Hampton, Virginia 23681-2199 USA

Telephone: (757) 864-8656 FAX: (757) 864-8807

E-mail: support-asdc@earthdata.nasa.gov

URL: http://eosweb.larc.nasa.gov

#### **Data Center Status/Plans:**

The Langley DAAC will continue to archive this data. There are no plans to reprocess.

### 16. Output Products and Availability:

There are no output products available at this time.

#### 17. References:

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## 18. Glossary of Terms:

**EOSDIS Glossary**.

# 19. List of Acronyms:

NASA - National Aeronautics Space Administration URL - Uniform Resource Locator

**EOSDIS Acronyms**.

### 20. Document Information:

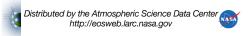
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**Document ID:** 

Citation:



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### **Document Curator:**

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