

RICO DATA MANAGEMENT STATUS UPDATE

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UCAR/Joint Office for Science Support (JOSS)

Boulder, Colorado

RICO Planning Workshop

Boulder, CO

1 - 2 September 2004

RICO

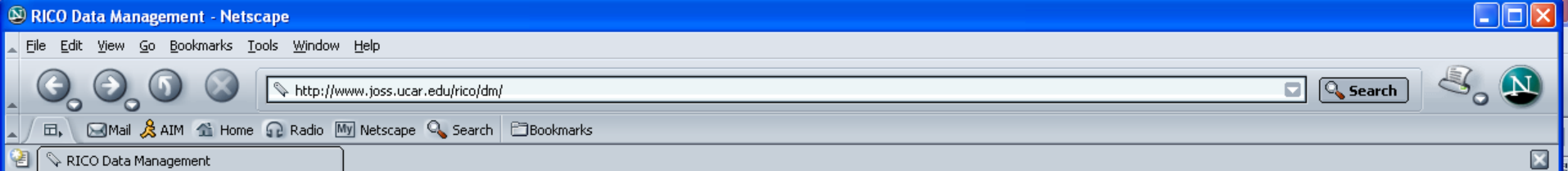
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JOSS DATA MANAGEMENT ACTIVITIES

- ◆ Determine the needs of the RICO scientific community and develop them into a comprehensive RICO Data Management Plan
- ◆ Develop and implement a real-time web-based field data catalog to provide in-field support products for operations planning, project summaries and field phase documentation, facility and product status for the PIs
- ◆ Establish a RICO Data Archive Center (RDAC) which provides data distribution/support for the PIs and the general scientific community. This includes comprehensive seamless access to all operational and research data sets through a distributed data archive





RICO

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RICO Data Management



Data Policy (DRAFT)

Data Submission

- [Dataset Documentation Guidelines](#)
- [Data Submission Instructions](#)

Distributed RICO Long-Term Data Archive

- **Data Access**
- Data Information Links
 - [WHOI Buoy Data from 51W 15N](#)
 - [NDBC Caribbean Buoy Observations](#)
 - [NOAA Marine Observations](#)
 - [US ARGO](#)
 - [NOAA Drifting Buoy Center](#)
 - [Pilot Research Moored Array in the Tropical Atlantic \(PIRATA\) Home Page](#)
 - [High Density XBT Lines](#)
 - [Satellite Data Information Links](#)

Documents

- [RICO Science Overview](#)
- [Maps of Meteorological Networks in the RICO Region](#)
- [RICO Data Questionnaire - Responses](#)

Collaborating Projects

- [VAMOS Ocean-Cloud-Atmosphere-Lany Study \(VOCALS\)](#)

Other Links

- [RICO Home Page](#)
- [Puerto Rico NWSFO](#)
- [Meteo France Antilles-Guyane](#) (best viewed in IE)
- [Antigua & Barbuda Meteorological Services](#) (best viewed in IE)
- [Explorer of the Seas](#) (University of Miami)

RICO DRAFT DATA POLICY (29 August 2004)

- All investigators participating in RICO must agree to promptly submit their data to the RICO Data Archive Center (RDAC) to facilitate intercomparison of results, quality control checks and inter-calibrations, as well as an integrated interpretation of the combined data set.
- All data shall be promptly provided to other RICO investigators upon request. A list of RICO investigators will be maintained by the RICO Project Office and will include the Principle Investigators (PIs) directly participating in the field experiment as well as collaborating scientists who have provided guidance in the planning and analysis of RICO data.
- During the initial data analysis period (one year following the end of the field phase; 25 January 2005), if data are provided to a third party (journal articles, presentations, research proposals, other investigators) the investigator who collected the data must be notified first. This initial analysis period is designed to provide an opportunity to quality control the combined data set as well as to provide the investigators ample time to publish their results.
- All data will be considered public domain not more than one year following the end of the RICO field phase. Data can be opened to the public domain earlier depending on the discretion of the data provider. There will be exceptions where extensive data processing is required.
- Any use of the data will include acknowledgment (i.e., citation). Co-authorship during the one year analysis phase will be at the discretion of the investigator(s) who collected the data.

RICO Data Questionnaire

The following Questionnaire is intended to collect information from RICO PIs regarding their individual needs for specific types of data both in the field and during post-analysis.

Please fill out the form as completely as possible. For the purposes of this questionnaire **Real Time** means that the data are needed in the RICO Operations Center. After clicking on the submit button, your response will appear above the form on this page. Please check it over for any errors or omissions and change as desired. In order for changes to be registered, you must click on the confirm button after you are satisfied with your responses.

Please specify your contact information

Name (Required):	<input type="text"/>
Affiliation:	<input type="text"/>
Mailing Address:	<input type="text"/>
Telephone (Please include country code and area/city code):	<input type="text"/>
Fax (Please include country code and area/city code):	<input type="text"/>
E-mail (Required):	<input type="text"/>

Please specify your geostationary satellite needs below

GOES Data	Real Time Need	Archive Need
GOES Imager Data	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
GOES Sounder Data:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
GOES Derived Products	Real Time Need	Archive Need
Convective Available Potential Energy (CAPE) Product:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Lifted Index Product:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Precipitable Water Product:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Cloud Top Pressure Product:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes

RICO Data Questionnaire Satellite Response Summary (13)

GOES Data Set	Real Time Need	Archive Need	Other Information
GOES Imager	38%	77%	
GOES Sounder	08%	38%	
CAPE	08%	31%	
Lifted Index	08%	31%	
Precipitable Water	23%	54%	
Cloud Top Pressure	23%	46%	
Surface Skin Temperature	23%	46%	
Cloud Drift Winds	15%	38%	

Other GOES Sectors or Products needed: No discussion of Rapid Scan Operations in Data Management Questionnaire

POES Data Set	Real Time Need	Archive Need	
AVHRR LAC/HRPT Imager	23%	54%	
AVHRR GAC Imager	08%	23%	
TOVS/ATOVS	15%	15%	
Surface Skin Temperature	15%	46%	
Precipitable Water	15%	54%	
Cloud LWP/IWP	15%	46%	

Other POES products needed: ICE-Sat, Seawinds on Quikscat, TMI

RICO Data Questionnaire Satellite Response Summary (13)

Other POES Datasets	Real-time	Archive	Other Information
DMSP OLS Imager Data	N/A	08%	
TRMM Data	N/A	31%	
SeaWifs Imager Data	08%	46%	
MODIS Data	N/A	77%	
MISR Data	N/A	46%	

RICO Data Questionnaire Radar Response Summary (13)

Radar Data Sets	Real-time	Archive	Other Information
WSR-88D	08%	46%	Level II Data

Other Radar data/products needed: W-Band cloud radar; S-Pol

RICO Data Questionnaire Upper Air Response Summary (13)

Upper Air Data Sets	Real-time	Archive	Other Information
Mandatory/significant levels	38%	46%	
High Vertical Resolution	N/A	69%	
Interpolated (e.g. 5mb)	N/A	31%	
ACARS/WVSS	15%	31%	
GPS	08%	15%	

Other Upper Air data/products needed: 500mb charts made available and archived

RICO Data Questionnaire Surface Response Summary (13)

Surface Data Sets	Real-time	Archive	Other Information
ASOS (1 and 5-min)	N/A	38%	
ASOS (60-min)	23%	54%	
Hourly METAR Observations	08%	31%	
Synoptic Observations	23%	54%	
Buoy Observations	15%	46%	
Ship Observations	15%	46%	

Other Surface data/products needed: Surface maps made available and archived

RICO Data Questionnaire Model Response Summary (13)

Model Output	Real-time	Archive	Products Specified
NOAA/NCEP ETA	23%	38%	low level winds, vert vel

Meteorological variables on pressure levels: None specified

Model Output	Real-time	Archive	Products Specified
NOAA/NCEP GFS	15%	15%	

Meteorological variables on pressure levels: None specified

Model Output	Real-time	Archive	Products Specified
Navy NOGAPS	08%	08%	

Meteorological variables on pressure levels: None specified

Model Output	Real-time	Archive	Products Specified
ECMWF	23%	38%	

Meteorological variables on pressure levels: None specified

RICO DATA MANAGEMENT PLAN OUTLINE

1.0 Introduction/Background

- 1.1 Scientific Objectives
- 1.2 Data Management Philosophy

2.0 Data Management Policy

- 2.1 Data Protocol
- 2.2 Data Processing/Quality Control
- 2.3 Data Availability
- 2.4 Data Attribution
- 2.5 Community Access to Data

3.0 Data Management Functional Strategy/Description

- 3.1 Data Archive and Analysis Centers
- 3.2 Investigator Requirements
 - 3.2.1 Data Format Conventions
 - 3.2.2 Data Submission Requirements
- 3.3 Data Collection Schedule
 - 3.3.1 On-line Field Catalog
- 3.4 Data Processing following the Field Phase
- 3.5 Data Integration
- 3.6 Data Archival and Long-term Access

4.0 RICO Data Sets

- 4.1 Data Collection/Processing
- 4.2 Status Update Procedures
- 4.3 In-field Data Display and Analysis Requirements
- 4.4 Coordination with other Programs

APPENDICES

- A. Research Data Sets
- B. Operational Data Sets
- C. List of Acronymns

The logo for RICO, consisting of the letters 'RICO' in a bold, red, sans-serif font. The letters are slightly stylized, with the 'R' and 'O' having a more rounded appearance.

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RICO DATASET METADATA

TITLE: This should match the data set name AUTHOR(S):

Name(s) of PI and all co-PIs

Complete mailing address, telephone/facsimile Nos.,

E-mail address of PIs, and WWW address (if applicable)

Similar contact information for data questions (if different than above)

1.0 DATA SET OVERVIEW:

Introduction or abstract

Time period covered by the data

Physical location (including lat/lon/elev) of the measurement or platform

Data source if applicable (e.g. for operational data include agency)

Any World Wide Web address references (i.e. additional documentation such as Project WWW site)

2.0 INSTRUMENT DESCRIPTION:

Brief text (i.e. 1-2 paragraphs) describing the instrument with references

Figures (or links), if applicable

Table of specifications (i.e. accuracy, precision, frequency, resolution, etc.)

3.0 DATA COLLECTION AND PROCESSING:

Description of data collection

Description of derived parameters and processing techniques used

Description of quality control procedures

Data intercomparisons, if applicable

4.0 DATA FORMAT:

Data file structure and file naming conventions (e.g. column delimited ASCII, NetCDF, GIF, JPEG, etc.)

Data format and layout (i.e. description of header/data records, sample records)

List of parameters with units, sampling intervals, frequency, range

Data version number and date

Description of flags, codes used in the data, and definitions (i.e. good, questionable, missing, estimated, etc.)

5.0 DATA REMARKS:

PI's assessment of the data (i.e. disclaimers, instrument problems, quality issues, etc.)

Missing data periods

Software compatibility (i.e. list of existing software to view/manipulate the data)

6.0 REFERENCES:

List of documents cited in this data set description



IHOP_2002 DATA SETS



DATA CATEGORIES

- [Aircraft Data](#)
- [GPS Data](#)
- [Land Data](#)
- [Lidar Data](#)
- [Mesonet Data](#)
- [Model Output](#)
- [Photography](#)
- [Profiler/SODAR Data](#)
- [Radar Data](#)
- [Radiation Data](#)
- [Satellite Data](#)
- [Soundings Data](#)

[Back to JOSS IHOP Data Management](#)

Email comments & questions to the webmaster@ucar.edu

Data Set Name (Responsible group/PIs shown in parentheses)	Date Posted	Documentation
Aircraft		
Aircraft DC-8 Meteorology Navigation and State Parameter Data [NASA]	2003-03-17	
Aircraft DC-8 Photography Cloud Video (forward/nadir) [NASA]	2003-03-17	
Aircraft Falcon Navigation and State Parameter Data [DLR]	2003-06-12	
Aircraft Falcon Navigation Parameter Imagery [JOSS]	2002-11-08	
Aircraft Falcon Temp/Humidity Parameter Imagery [JOSS]	2002-11-08	
Aircraft Falcon Wind Parameter Imagery [JOSS]	2002-11-08	
Aircraft KingAir Navigation and State Parameter Imagery [JOSS]	2002-11-21	
Aircraft KingAir Navigation, State, and Microphysics Data [UWY]	2002-08-13	
Aircraft KingAir Photography Cloud Video (forward/nadir) [UWY]	2003-03-17	
Aircraft P-3 Navigation and State Parameter Data (1-sec rate) [NCAR/RAF]	2002-08-15	
Aircraft P-3 Navigation and State Parameter Imagery [JOSS]	2002-11-21	
Aircraft Proteus Navigation and State Parameter Data [Howell]		
GPS		
GPS Homestead Scanning Raman Lidar Imagery [NASA]	2002-08-13	
GPS Integrated Precipitable Water (30-min) Data [CNRS/UNAVCO/FSL]	2003-03-23	
GPS Integrated Precipitable Water (30-min) Data [CNRS]	2003-05-23	
GPS Integrated Precipitable Water (30-min) Data [NOAA/FSL]	2002-12-09	

 **BAMEX Field Catalog** 
Catalog Home Reports Operational Products Model/Forecast Products Research Products Missions Tools & Links



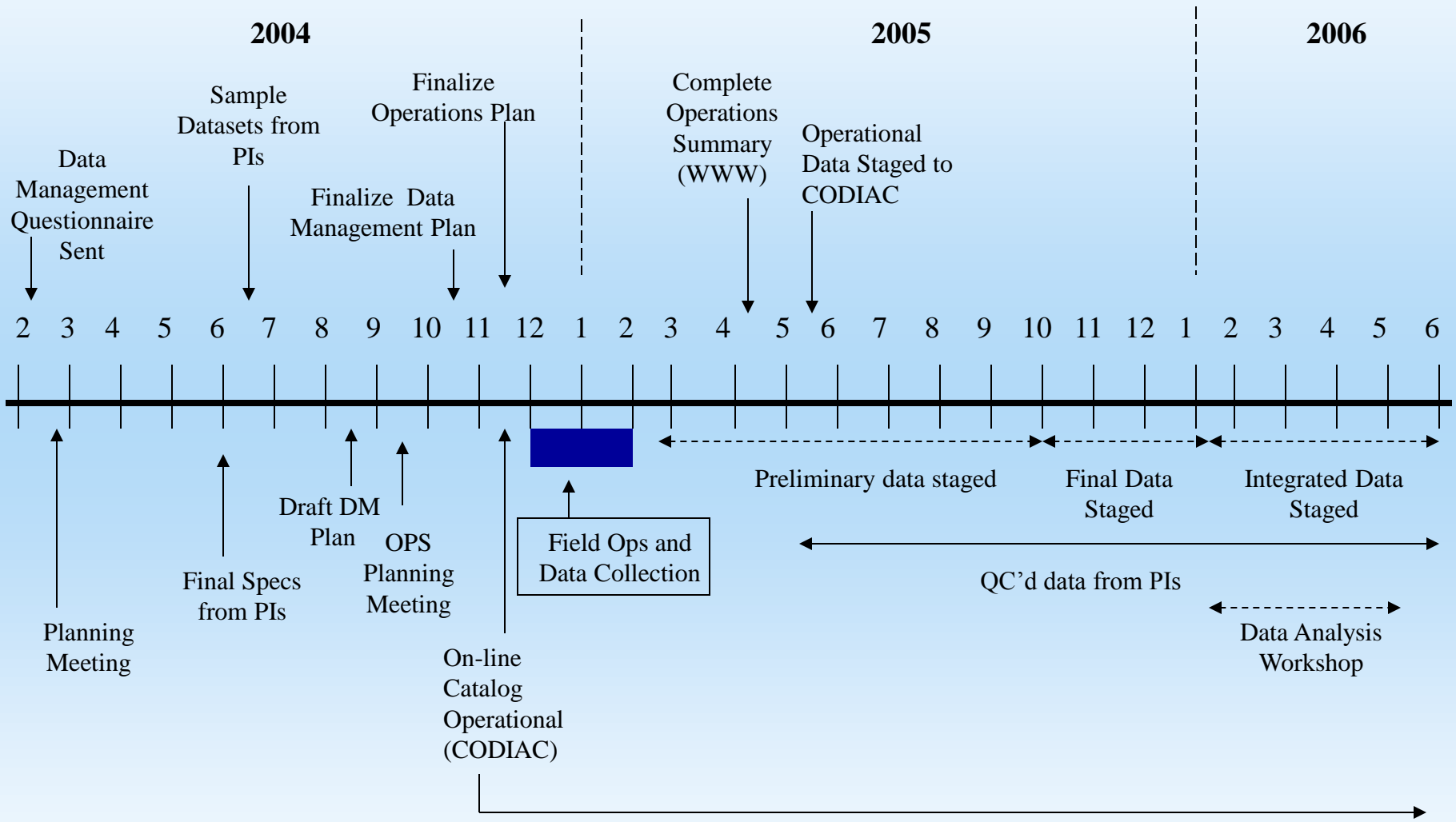
Project Location: MidAmerica Airport, Illinois
Project Dates: 20 May to 6 July 2003

This catalog is in POST FIELD SEASON MODE



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RICO Data Management Timeline



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RICO DATA MANAGEMENT SCHEDULE

- Finalize Questionnaire results and Data Policy (September 2004)
- Prepare draft Data Management Plan (early October 2004)
- Establish real-time data links and begin Field Catalog customization (October 2004)
- Establish Data archive (begin October 2004)
- Finalize Data Management Plan (November 2004)
- Field Catalog Operational (late November 2004)