VORTEX-2 FIELD CATALOG AND DATA ARCHIVE

Steve Williams, Greg Stossmeister, Scot Loehrer and Linda Cully

Computing, Data, and Software Facility (CDS)

NCAR Earth Observing Laboratory

Boulder, Colorado

VORTEX-2 Planning Meeting

Boulder, CO

23-24 February 2009

NCAR

EOL DATA SERVICES

- Data Questionnaire
- Data Management Plans
- Real-time Data Ingest
- Field Operations Catalog and Mapserver
- Data Processing
- Interactive Data Archive and Distribution (EMDAC)
- Web Services and Mailing Lists
- Special Media Products and Services

EOL FIELD CATALOG TOOL

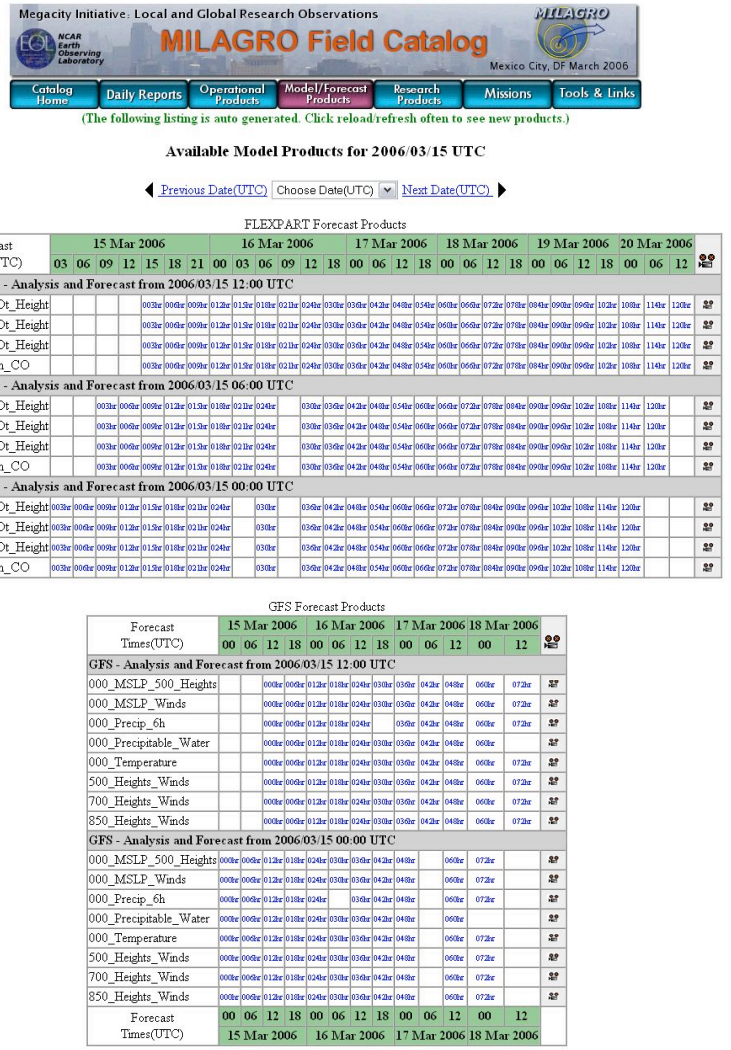
NCAR Earth Observing Laboratory

http://catalog.eol.ucar.edu/

In-field tool to ingest and display operational and preliminary research products and project documentation for making real-time decisions and evaluating project progress

Features:

- **Daily Mission Reports**
- **Operations Summary**
- **Facility Status Reports**
- **Data Analysis Products**
- **Authoring Tools**
- **Web-based access**



EOL/TPARC_2008 FIELD CATALOG - Home - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://catalog.eol.ucar.edu/tparc/

Most Visited CNN.com UCAR/NCAR E-mail and... NOAA Staff Directory AT&T: Directory: Direct... Colorado Weather

TPARC/TCS-08 Field Catalog

2008 Field Season

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links

UTC:	Tues, Feb 24, 5:13 Z	Guam:	Tues, Feb 24, 3:13 PM	Tokyo:	Tues, Feb 24, 2:13 PM
Boulder:	Mon, Feb 23, 11:13 PM	Monterey:	Mon, Feb 23, 10:13 PM	Taipei:	Tues, Feb 24, 1:13 PM
		Hawaii:	Mon, Feb 23, 7:13 PM		

Quick Links:

Facilities Status

Operations Plan of the Day

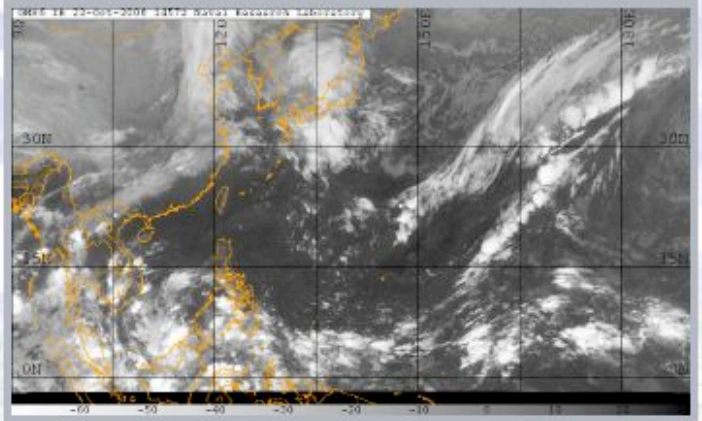
TPARC Weather Discussion

Real-Time P3 Flight Track (kml)
Real-Time C-130 Flight Track (kml)
Real-Time MTSAT Vis/IR Imagery (kml)
Real-Time Driftsonde Track (kml)
(Download kmls first then open in GoogleEarth)

NPS Weather Briefing Website

Elluminate Meetings

Northwest Pacific Latest Infrared Image



Additional Satellite Imagery:

Latest 4 hours Visible

Information Links:

JTWC Website

Honolulu Weather

Guam Weather

Okinawa Weather

Monterey Operations Center
(831) 656-3569

Guam Aircraft Coordination Center
(671) 653-0235

Comments

Done

BAMEX Field Catalog

Field Documentation

Operations Summary

Instrument / Facility Status

Forecast Briefing

Mission Summary

Scientist Summary

Date(UTC)	CSU Forecast Discussion	GBOS Mission Summary	MIPS summary	NOAA P-3 mission summary	NRL P-3 mission summary	SPC Forecast Discussion	WRF Forecast Discussion	aircraft alert	facilities status summary	learjet mission summary	ops plan of the day	science director summary	weather NOWCAST	weather summary
2003/06/30	13:00			00:47		15:28			18:09		20:07		00:42 02:05 03:15 20:45	21:06
2003/06/29	13:00			01:48	00:15		17:06		21:36	18:37	21:25	00:30 18:00	00:21 01:22 03:45 04:55 06:12 07:50 08:07 15:17 20:17 23:25	21:33
2003/06/28	13:00	18:00					17:12	21:37			20:18		21:06	21:53
2003/06/27	13:00					16:57		21:02	18:25		18:34			19:55
2003/06/26	13:00					16:13			19:18		17:54		00:33 01:05 01:54 03:15 03:24	21:06
2003/06/25	13:00	13:00		21:45	21:12	15:19	20:43		20:28	23:06	18:12	21:00	00:47 20:01 22:04	18:47
2003/06/24	13:00			02:41	02:49	15:46	22:53	18:53	19:10	02:29	21:14	00:00	00:57 02:14 03:38 04:53 06:20 07:44 21:02 21:58 23:05	22:25
2003/06/23	13:00	16:30	23:59	01:19	00:21	16:54	22:18		20:44	01:00	20:10	00:25	00:43 02:40 03:19 05:14 06:24 23:02	21:56
2003/06/22	13:00	23:00	23:59	00:45	00:15		22:19	20:25	16:20	00:55	19:48	00:30	00:45 02:05 03:48 05:12 20:54 22:58	22:06

EOL
Deployment
Development
Data Services

BAMEX Facilities Status Summary Report

Date of report(UTC): 2003/05/27 16:00
Author of report: Brigitte Baeuerle
Submitted at(UTC): 2003/05/27 16:01

OVERVIEW:

FACILITY/PROJECT STATUS

= up; = provisional; = down ; = no report

1.	**NRL P-3** (Remaining flight hrs: 130.6)	**Comment:**	APU broken
a.	**ELDORA Radar**	**Comment:**	
b.	**Radar Mosaic Display**	**Comment:**	
c.	**Navigation, State Parameters**	**Comment:**	
d.	**Data System**	**Comment:**	
e.	**Sat. Communications**	**Comment:**	WSI/Iridium interference
2.	**NOAA P-3** (Remaining flight hrs: 131.7)	**Comment:**	
a.	**Lower Fuselage Radar**	**Comment:**	
b.	**Doppler Radar**	**Comment:**	
c.	**Navigation, State Parameters**	**Comment:**	
d.	**Data System**	**Comment:**	
e.	**Sat. Communications**	**Comment:**	
3.	**WMI Learjet** (Remaining flight hrs: 88.7)	**Comment:**	
a.	**Dropsondes**	**Comment:**	
b.	**Data System**	**Comment:**	
c.	**Sat. Communications**	**Comment:**	
4.	**GBOS**	**Comment:**	
a.	**Mobile Probe**	**Comment:**	
b.	**NCAR MGLASS**	**Comment:**	
c.	**UAH MIPS**	**Comment:**	

EOL
Deployment
Development
Data Services

Mission Scientist Report, RICO, RF15 January 16th, 2005

C130Q Flight Scientist/Observer: Stevens/Ochs

Figure 1: Images showing cloud field during flight.

General cloud characteristics: The clouds sampled during the line segment of the flight were initially thought to be in the outflow of a region of more organized, deeper convection. Our targets consisted of several convective cells which grew substantially during the period of flight operations, eventually reaching depths of 15000'. Based on the radar imagery (Fig. 3), the "line" might be better interpreted as the stronger, eastern, flank of meso-cell of approximately 60 km in diameter. Later we sampled another ring, or rings of growing convection with tops nearer 6000 ft, sampling many rainshafts, and convective cells at a variety of levels, these were more apparently annular while flying. Both the deeper cells sampled early and the later cells sampled late were not unlike other forms of convection encountered during RICO. Cloud droplet concentrations during the flight were low, typically around 100 cm^{-3} or a bit less. The latter cells provided many opportunities to work rainshafts near the radar, thus providing calibration for $Z - R$ relationships during RICO.

RICO Operations Plan of the Day Form

For use by authorized users only please.

Date of report(UTC): year: 2005 month: 02 day: 05 hour: 22 min: 03

Author of report: Jim Moore **Password:**

Preserve the format of the text being entered below?: no

OPERATIONS SUMMARY:

SCIENTIFIC OBJECTIVE(S):

MISSION PLANS:

PRIMARY MISSION:

BAMEX Field Catalog

Browse by Date:

UTC CDT

May 2003						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

June 2003						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

July 2003						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Browse by Operational Products:

Satellite Products

GOES	CAPE	Latest	Start Date	End Date	Get Data
goes-12	2km_ch1_vis	Latest	Start Date	End Date	Get Data
noaa-12	01km_ch1_vis	Latest	Start Date	End Date	Get Data
noaa-14	01km_ch1_vis	Latest	Start Date	End Date	Get Data
noaa-15	01km_ch1_vis	Latest	Start Date	End Date	Get Data
noaa-16	01km_ch1_vis	Latest	Start Date	End Date	Get Data
noaa-17	01km_ch1_vis	Latest	Start Date	End Date	Get Data

Surface Products

ARM_SMOS	sfc	Latest	Start Date	End Date	Get Data
Iowa_mesonet	sfc	Latest	Start Date	End Date	Get Data

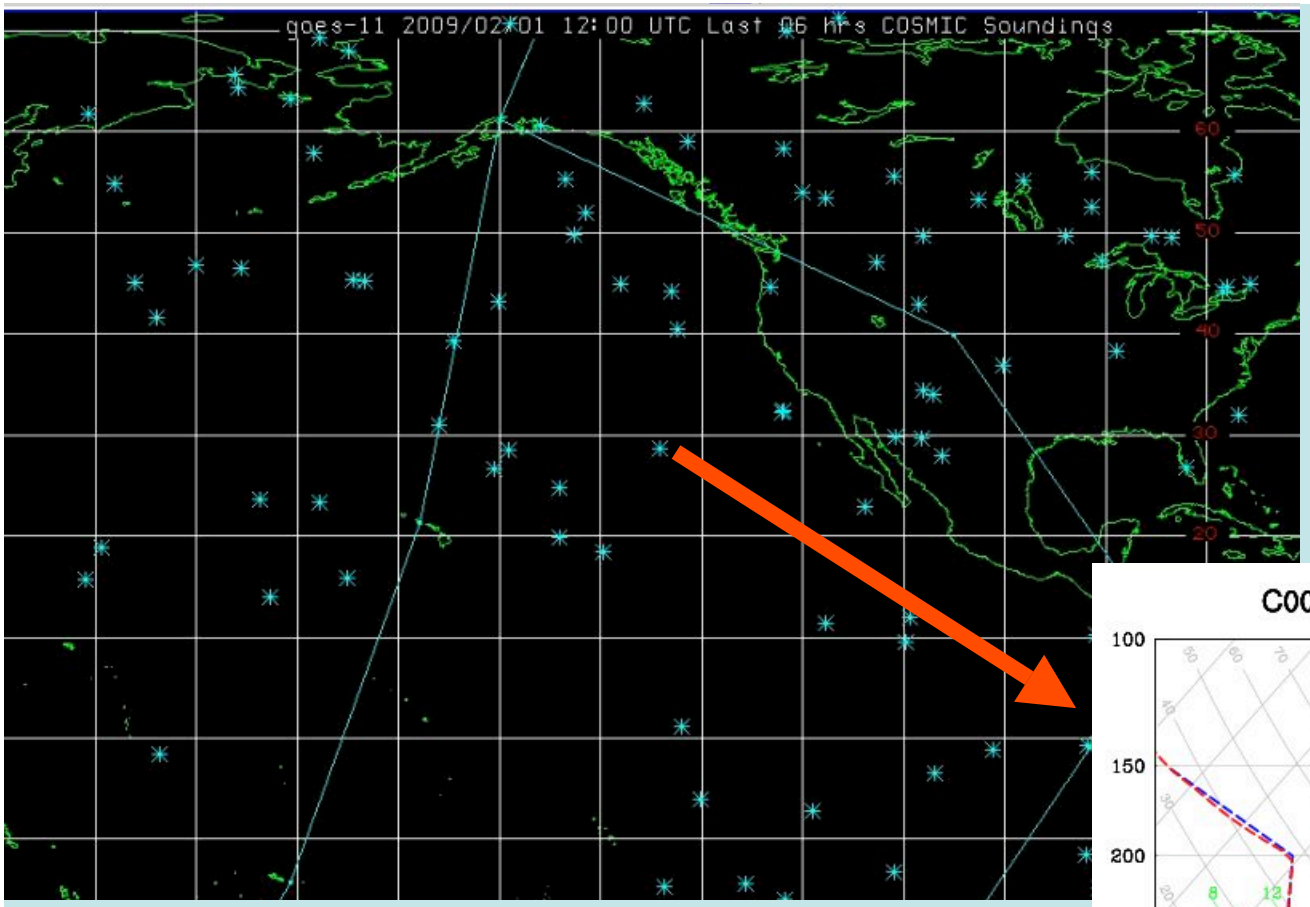
BAMEX Field Catalog

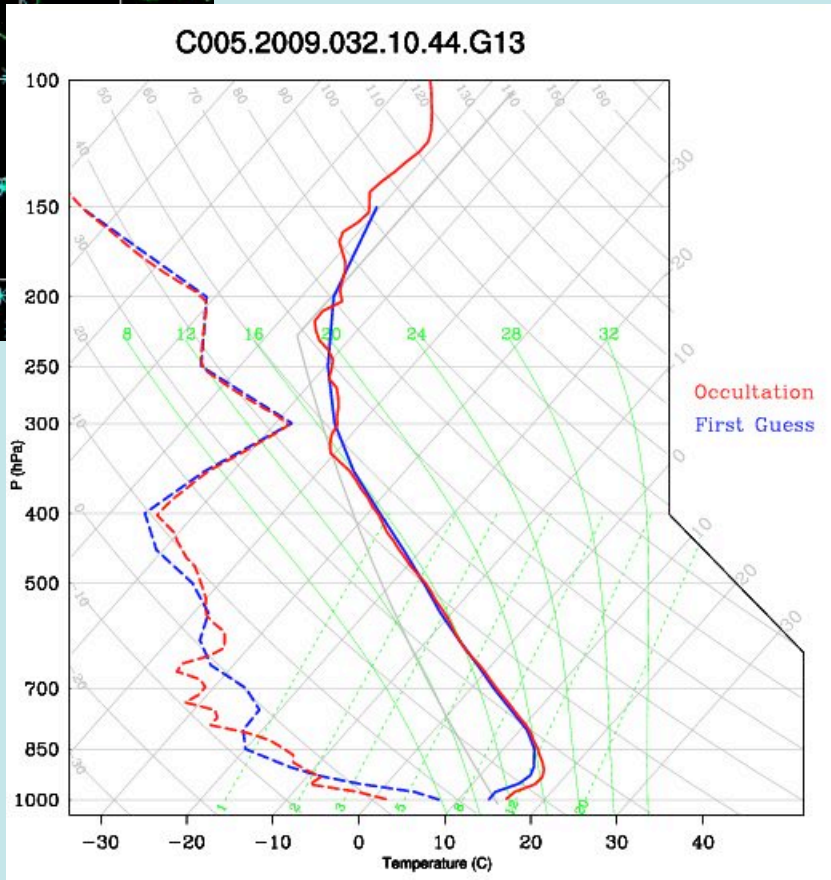
Operational Products Display

- *Satellite*
- *Surface*
- *Profilers*
- *Upper-Air Soundings*
- *Radar Products*
- *Composite Products*
- *Interactive Maps*

Satellite Products

Product Times(UTC)	18 Jun 2003																							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
GOES (CIMSS Derived Product Imagery; NESDIS Derived Product Imagery)																								
CAPE	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	
LI	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
PWV	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
goes-12 (NESDIS GOES Soundings)																								
2km_ch1_vis	0008 0039 0055	0109 0125 0139 0155	0209 0225 0239	0309						0955	1009 1025 1039 1055	1109 1125 1139	1209 1239 1253	1309 1325 1339 1355	1409 1425 1439	1509 1525 1539 1555	1609 1625 1639 1655	1709 1725 1739	1809 1839 1855	1909 1925 1939 1955	2009 2025 2039	2109 2125 2139 2155	2209 2225 2239 2255	2309 2325 2339
conus_4km_ch1_vis	0008 0039 0055	0109 0125 0139 0155	0209 0225 0239	0309 0325 0339 0355	0409 0425 0439 0455	0509				0909 0925 0939 0955	1009 1025 1039 1055	1109 1125 1139	1209 1239 1253	1309 1325 1339 1355	1409 1425 1439	1509 1525 1539 1555	1609 1625 1639 1655	1709 1725 1739	1809 1839 1855	1909 1925 1939 1955	2009 2025 2039	2109 2125 2139 2155	2209 2225 2239 2255	2309 2325 2339
conus_4km_ch2_near-IR	0008 0039 0055	0109 0125 0139 0155	0209 0225 0239	0309 0325 0339 0355	0409 0425 0439 0455	0509 0525 0539	0609 0625 0639 0655	0709 0725 0739 0755	0809 0825 0839	0909 0925 0939 0955	1009 1025 1039 1055	1109 1125 1139	1209 1239 1253	1309 1325 1339 1355	1409 1425 1439	1509 1525 1539 1555	1609 1625 1639 1655	1709 1725 1739	1809 1839 1855	1909 1925 1939 1955	2009 2025 2039	2109 2125 2139 2155	2209 2225 2239 2255	2309 2325 2339
conus_4km_ch3_water_vapor	0008 0039 0055	0109 0125 0139 0155	0209 0225 0239	0309 0325 0339 0355	0409 0425 0439 0455	0509 0525 0539	0609 0625 0639 0655	0709 0725 0739 0755	0809 0825 0839	0909 0925 0939 0955	1009 1025 1039 1055	1109 1125 1139	1209 1239 1253	1309 1325 1339 1355	1409 1425 1439	1509 1525 1539 1555	1609 1625 1639 1655	1709 1725 1739	1809 1839 1855	1909 1925 1939 1955	2009 2025 2039	2109 2125 2139 2155	2209 2225 2239 2255	2309 2325 2339
conus_4km_ch4_thermal-IR	0008 0039 0055	0109 0125 0139 0155	0209 0225 0239	0309 0325 0339 0355	0409 0425 0439 0455	0509 0525 0539	0609 0625 0639 0655	0709 0725 0739 0755	0809 0825 0839	0909 0925 0939 0955	1009 1025 1039 1055	1109 1125 1139	1209 1239 1253	1309 1325 1339 1355	1409 1425 1439	1509 1525 1539 1555	1609 1625 1639 1655	1709 1725 1739	1809 1839 1855	1909 1925 1939 1955	2009 2025 2039	2109 2125 2139 2155	2209 2225 2239 2255	2309 2325 2339
conus_4km_ch6_thermal-IR	0008 0039 0055	0109 0125 0139 0155	0209 0225 0239	0309 0325 0339 0355	0409 0425 0439 0455	0509 0525 0539	0609 0625 0639 0655	0709 0725 0739 0755	0809 0825 0839	0909 0925 0939 0955	1009 1025 1039 1055	1109 1125 1139	1209 1239 1253	1309 1325 1339 1355	1409 1425 1439	1509 1525 1539 1555	1609 1625 1639 1655	1709 1725 1739	1809 1839 1855	1909 1925 1939 1955	2009 2025 2039	2109 2125 2139 2155	2209 2225 2239 2255	2309 2325 2339
noaa-12																								
01km_ch1_vis											1013	1154										2132		2313
01km_ch2_near-IR											1013	1154										2132		2313
01km_ch3_near-IR											1013	1154										2132		2313
01km_ch4_thermal-IR											1013	1154										2132		2313
noaa-14																								
01km_ch1_vis												1153												2317
01km_ch2_near-IR												1153												2317
01km_ch3_near-IR												1153												2317
01km_ch4_thermal-IR												1153												2317
noaa-15																								
01km_ch1_vis	0050											1122		1300	1441								2241	
01km_ch2_near-IR	0050											1122		1300	1441								2241	





FIELD CATALOG SOUNDING INTERACTIVE MAP FEATURE

BAMEX Field Catalog

WRF Forecast Products

Forecast Times(UTC)	18 Jun 2003																								19 Jun 2003																								20 Jun 2003	
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08	09	10	11	12	15	18	21	00	
WRF_10km - Analysis and Forecast from 2003/06/18 00:00 UTC (NCAR/MMM Real-time MM5)																																																		
0-3km_shear	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
300mb	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
500mb	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
700mb	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
850mb	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
CAPE	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
CIN	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
precip	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
reflectivity	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
sfc_dew	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
sfc_temp	00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr			27hr			30hr			33hr			36hr					
WRF_10km - Analysis and Forecast from 2003/06/18 12:00 UTC (NCAR/MMM Real-time MM5)																																																		
0-3km_shear													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
300mb													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
500mb													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
700mb													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
850mb													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
CAPE													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
CIN													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
precip													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
reflectivity													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
sfc_dew													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
sfc_temp													00hr			03hr			06hr			09hr			12hr			15hr			18hr			21hr			24hr	27hr	30hr	33hr	36hr	
WRF_4km - Analysis and Forecast from 2003/06/18 00:00 UTC (NCAR/MMM Real-time MM5)																																																		
0-3km_shear	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					
300mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					
500mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					
700mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					
850mb	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					
CAPE	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					
CIN	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					
precip	00hr	01hr	02hr	03hr	04hr	05hr	06hr	07hr	08hr	09hr	10hr	11hr	12hr	13hr	14hr	15hr	16hr	17hr	18hr	19hr	20hr	21hr	22hr	23hr	24hr	25hr	26hr	27hr	28hr	29hr	30hr	31hr	32hr	33hr	34hr	35hr	36hr					

BAMEX Field Catalog

Browse by Research Products:

Aircraft Products

Aircraft	chat_log_P3	Latest	Start Date	End Date	Get Data
NOAA_P-3	Chief_Sci_Event-Radar_Log	Latest	Start Date	End Date	Get Data
NRL_P-3	ALT_ATX_DPXC	Latest	Start Date	End Date	Get Data
WMI_Lear_Jet	QC_SkewT	Latest	Start Date	End Date	Get Data

MIPS Products

MIPS	915snr	Latest	Start Date	End Date	Get Data

Surface Products

none found

Upper Air Products

mobile_GLASS1	SkewT	Latest	Start Date	End Date	Get Data
mobile_GLASS2	SkewT	Latest	Start Date	End Date	Get Data
mobile_GLASS3	SkewT	Latest	Start Date	End Date	Get Data

BAMEX Field Catalog

BAMEX Mission Table

Date	Mission	Begin (UTC)	End (UTC)	Location/Mission Map	Catalog Products	Facilities	Notes
20 May	Sounding Intercomparison	1950	2152	Carlyle Lake, IL	Operational Research Model	WMI Learjet GBOS	A comparison between MIPS, dropsondes and MGLASS in essentially clear air. Two GLASS soundings were launched. The Lear did 3 drops
22 May	Aircraft Intercomparison	2000	2200	Southern Illinois	Operational Research Model	NOAA P-3 NRL P-3 WMI Learjet	The intercomparison involved a set of pre-determined maneuvers roughly 15 min. northeast of MAA. These lasted for about 1 hour. The planes then broke formation to do testing of individual components of each aircraft. No clouds were available to test microphysical probes.
23 May	**GBOS 1** MCS	1600	2200	Enid, OK	Operational Research Model	GBOS	Forecast was for MCS to develop in western KS and move through western OK. Later observations indicated conditions were less favorable for an MCS in the region until much later that night. The mission was called off.
24-25 May	**IOP 1** Mature MCV	1300	0130	Northern Arkansas	Operational Research Model	NOAA P-3 NRL P-3 WMI Learjet GBOS	Rationale for mission plan: early t/o based on expectation that nocturnal system would form and persist into daytime, retriggering severe convection in the early afternoon. Convection did not develop on the Red River until early evening, and never organized into a well-defined MCS within the BAMEX domain. The target remained the MCV throughout the mission. The MCV grew out of nocturnal convection in Nebraska and Kansas, forming from a series of line end vortices that "pooled" into a broader MCV over northeastern Oklahoma.
28-29 May	**IOP 2** Bow Echo/MCS	1400	0130	Central Illinois	Operational Research Model	NOAA P-3 NRL P-3 WMI Learjet GBOS	There were two modes of organized convection. The first was a bow-shaped MCS forming in southern Wisconsin on the cyclonic shear side of a strong jet at 500 mb. This system moved south-southeastward and produced damaging winds near Chicago. A second system over Illinois began as a supercell storm around 1900 UTC, produced a tornado and some large hail. The system was embedded within much stronger vertical shear than the Chicago MCS. Precipitation fell on the downshear side, leading to a perception of a "leading stratiform" region. The system organized further but did not become a bow echo.
30-31 May	**IOP 3** Supercell MCS	2300	0700	Eastern Illinois/Indiana	Operational Research Model	NOAA P-3 NRL P-3 WMI Learjet GBOS	Line of supercells developed ahead of strong cold front in southern Wisconsin and moved into northern/central Illinois and Indiana in an environment of strong shear and marginal CAPE. The line never developed a trailing stratiform region, rather there was a stratiform region ahead of the line of supercells.
2-3 June	**IOP 4** MCV/MCS mini-bow	1320	0130	Northwest MO (MCV) Eastern AR and Northern MS (MCS)	Operational Research Model	WMI Learjet (MCV) NOAA P-3 (MCS) NRL P-3 (MCS) WMI Learjet (MCS) GBOS (MCS)	The first part of IOP4 focused on the dynamics of a remnant MCV over northwest MO. The second part of the IOP focused on the upscale growth process of an MCS over AR and the rapid appearance of small-scale (30 km) bowed segments within the line.
5-6 June	**IOP 5** MCV	1700	0400	Northeast TX	Operational Research Model	NOAA P-3 WMI Learjet GBOS	IOP5 was centered around an apparent remnant MCV from an overnight convective system in Texas, and the possibility of retriggering by that MCV during the afternoon and evening hours.
7-8	**GBOS 2**				Operational		MGLASS1 northeast of Seymour, TX; MIPS east of Haskell, TX; and MGLASS2 in Anson, TX. Data collection by the MIPS ended at approximately 0800 UTC. An MCS was beginning to form in the GBOS

VOCALS-REx Field Catalog

October-November 2008

Catalog Home | Daily Reports | Operational Products | Model/Forecast Products | Research Products | Missions | Tools & Links

Catalog Tools

Report Generation Forms
(password needed to submit)

- Upload documents and images
(password needed to submit)

Project Information

- Arica LAN information
- Group Photo
- VOCALS educational short talks (page 3)
- VOCALS All-Hands Science Meeting

Contact Information

- Arica Operations Center Staff
- VOCALS (Arica) Participants Listing
- VOCALS-Field (Arica) Mail List

Catalog Information

- Catalog User Guide

Chat Information

- X-Chat instant access
- Chat Room Guidelines
- Chat Client Configuration Instructions
- Primer-*Everything you need to know about CHAT*

Additional Data Sources

- VOCALS Data Archive Master List
- FLEXPART Interactive Model from NOAA ESRL
- Oregon State VOCALS Satellite Products
- PMEL website for Ron Brown Underway data
- VOCALS-Rex Peru Website with Jose Olaya information
- MODIS subset for VOCALS
- HRDL Lidar Data from VOCALS
- DoE-G1 Data
- Unisys Weather
- Ron Brown Data Perusal (NCSU)

Geospatial data

Download (*Save As...*) KML first then open in e.g. GoogleEarth

- Real-Time VOCALS kml
- Ops center kml- use this from the VOCALS operations center network
- GOES-10 georeferences:
  1km images (ch1_vis, ch2_irs, ch3_water_vapor, ch4_2_diff, ch4_thermal-IR):
  Northern: -9.245, Southern: -30.791,
  Western: -101.187, Eastern: -68.777
  4km image (ch1_vis_big)
  Northern: -14.036, Southern: -26.631,
  Western: -85.577, Eastern: -67.586
- R/V Ron Brown kml for last 12 hours

T-REX Field Catalog Statistics

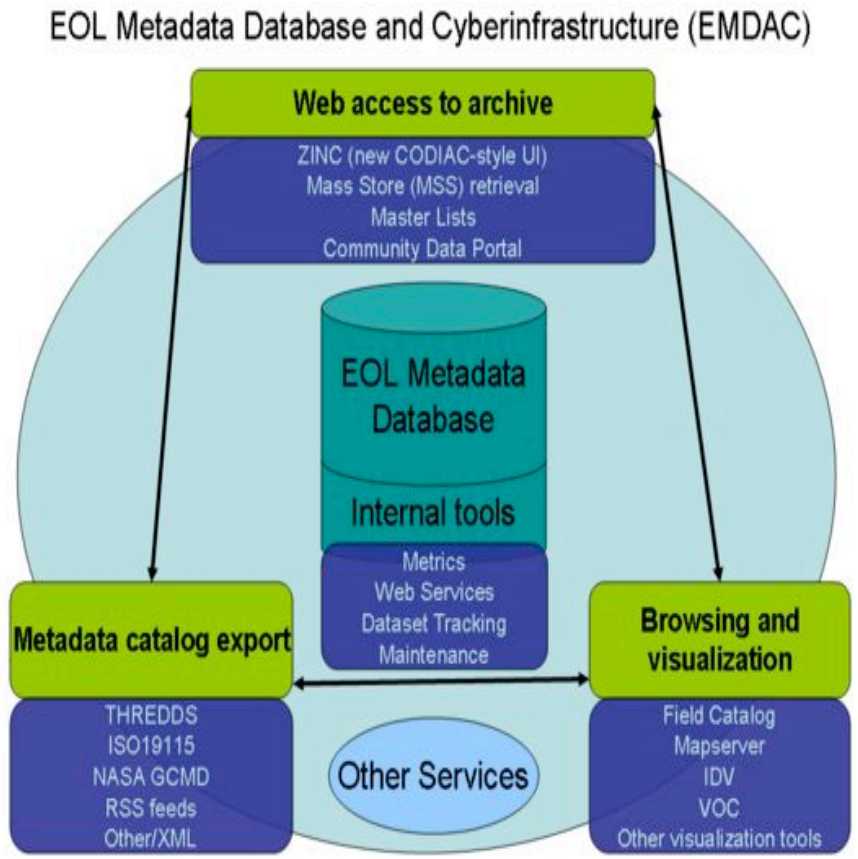
http://catalog.eol.ucar.edu/trex/

- **Reports/Summaries (Status, Mission, and Operations)**
  340 documents and 1555 image files (0.26 GB)
- **Research Platform Products (Aircraft, Surface, Lidar, Upper Air)**
  124,150 image files (8.01 GB)
- **Operational Products (Satellite, Surface, Radar, Upper Air)**
  85,357 image files (7.81 GB)
- **Model Output Imagery (Analysis and Forecast Fields)**
  143,252 image files (10.22 GB)

- **TOTALS: 354,654 Files (26.30 GB)**

NCAR Earth Observing Laboratory

EOL DATA MANAGEMENT



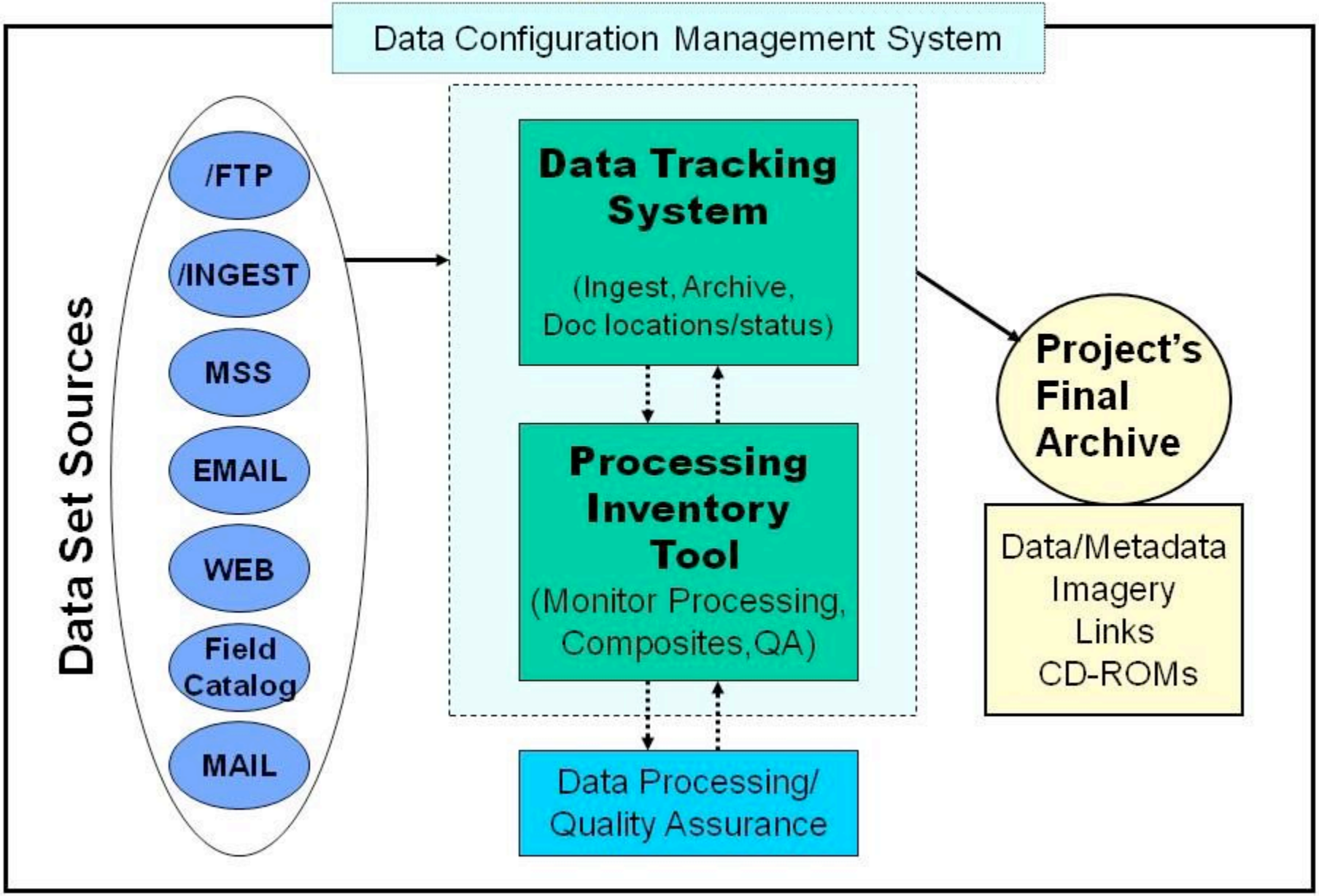
EOL Data System (EMDAC)

Primary means for all project scientists and researchers to browse and retrieve data from any EOL-supported projects

Features:

- **Long-term field project data archival and distribution**
- **Interactive data browsing, subsetting, and format translation**
- **Web-based access**
- **Value-added datasets**
- **Data documentation**

Data Flow – Ingest to Final Archive



“Composite” Data Sets at NCAR/EOL

A composite dataset is a collection (over some time period and region) of similar data (e.g. surface meteorological) from a variety of sources, put into a common format, and passed through a uniform quality control.

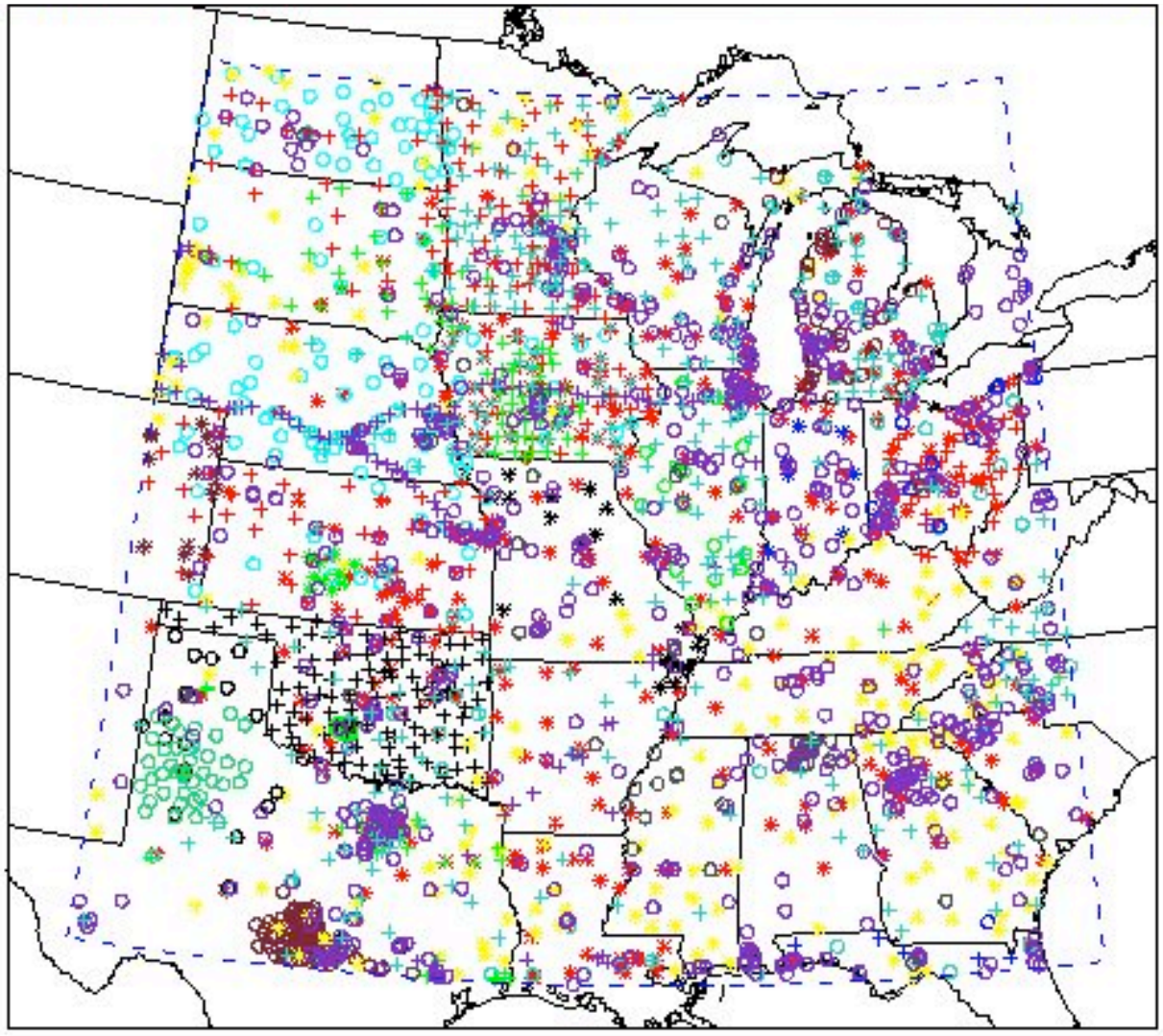
Why does NCAR/EOL develop composites?

- **Provides data in a uniform format with QC.**
- **Allows determination of network/site problems.**
- **Useful for model applications.**
- **Prevents duplication of effort.**

EOL
Deployment
Development
Data Services

Hourly Surface Meteorological Data Composite (2991 stations)

1-min sites (* 385)
AWOS (+ 335)
RAWS (* 220)
MesoWest (+ 94)
HPCN (o 138)
RWIS (+ 279)
GPSMET (o 153)
CO CoAgMet (* 17)
FL FAWN (+ 5)
IA IEM (+ 88)
IL ICN (o 19)
IN PAAWS (* 7)
KS GWMD5 (* 10)
MI MAWN (o 33)
MO CAWS (* 21)
OH OARDC (o 11)
OK ARS Micro (o 42)
OK Mesonet (+ 119)
TX LCRA (o 102)
TX TNRCC (+ 47)
West TX Meso (o 39)
Texas ET (o 23)
15 Other Networks (o 804)

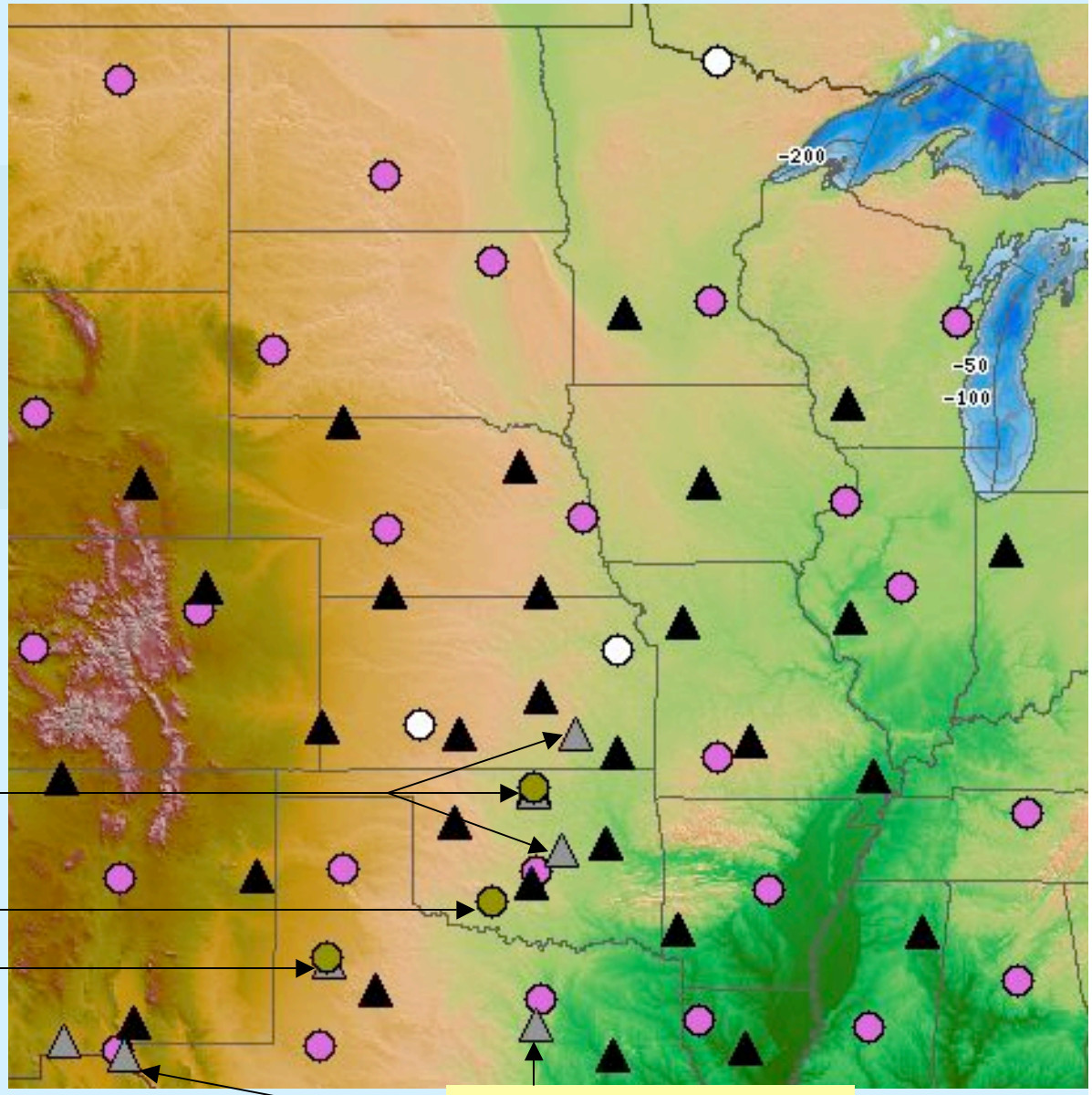


Radiosonde/Profiler Sites

- Other Radiosonde Sites
- Other Profiler Sites
- NOAA Profiler Network Sites
- NWS MicroART Radiosonde Sites
- NWS RRS Radiosonde Sites

RRS Sippican MarkIIA GPS sondes
1-sec vertical resolution
TOP changeover in early Apr

MicroART VIZ B2 sonde with
Radiotheodolite winds
6-sec vertical resolution
DDC only by field phase



ARM (915MHz)

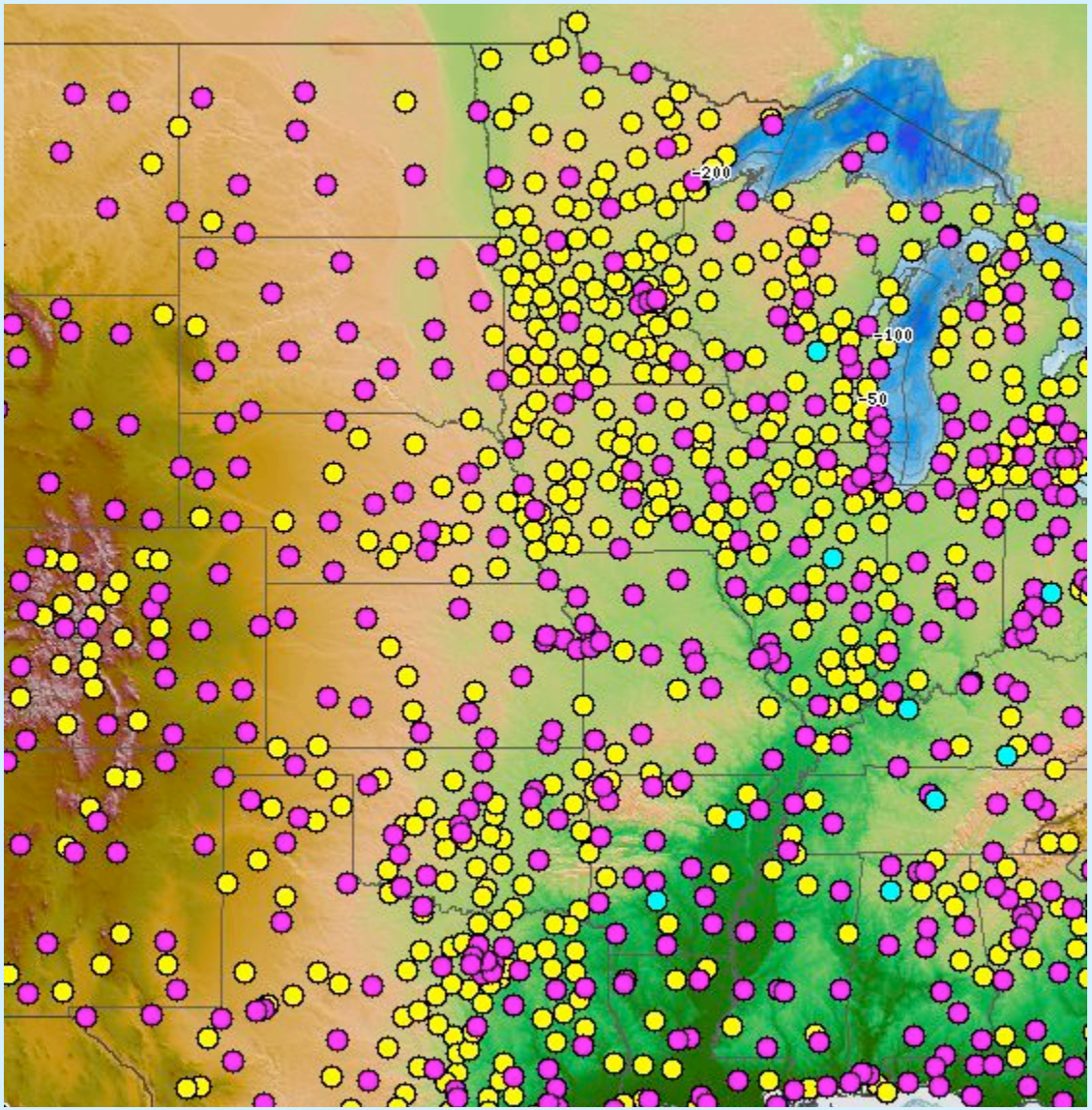
Fort Sill

West TX Mesonet
(915 MHz)

TNRCC (915MHz)

ASOS/AWOS Networks

AWSS
ASOS
AWOS



MADIS Networks

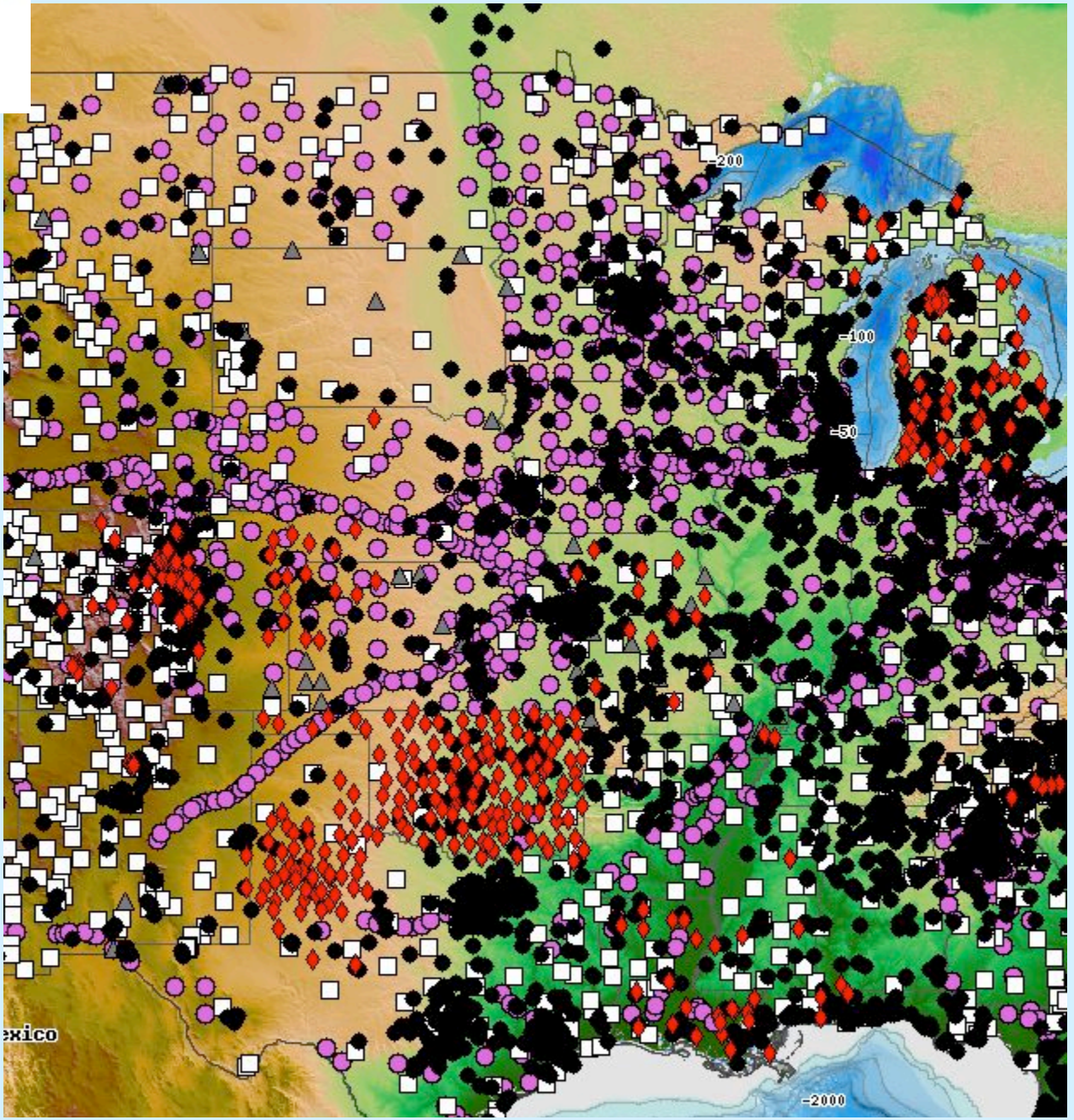
- MADIS - Various Mesonets
- MADIS - Personal Weather Station Networks
- MADIS - Non-Federal AWOS Network
- MADIS - RAWS Network
- MADIS - DOT Networks

Air Force Academy
CAIC
GLDNWS
IEM
LAIS (5 min)
LANL
MAWN
MOComAgNet
MQT-Meso
OKMeso (15 min)
UDFCD
West TX Mesonet

APRSWXNET
AnythingWX.com
WXforyou.com

CODOT
CO E470
IADOT
INDOT
KSDOT
KYDOT
MNDOT
NDDOT
NEDOR
WIDOT
WYDOT
UPR

GLOBE
GPSMET
HADS
SCAN
CRN
Non-Fed AWOS
RAWS



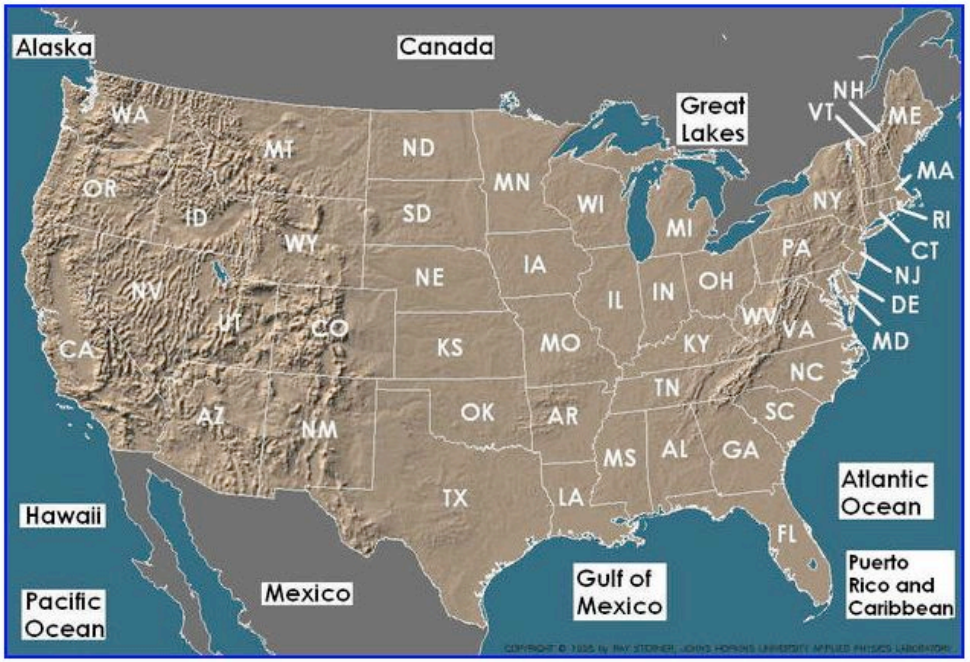
Some Networks not in MADIS that may be of interest

High Plains Climate Network
State Air Quality Networks
South Dakota DOT RWIS
Water Management District Networks (KS/CO)
Additional ALERT networks (e.g. Overland Park, KS)
ARS Micronet (SW OK)
OKC Micronet
Texas ET Networks
COAgMet
IA AgClimate Network

Hydrometeorological Networks in the United States

If you have updates or know of other networks please pass them along to loehrer at ucar dot edu

Click on state of interest

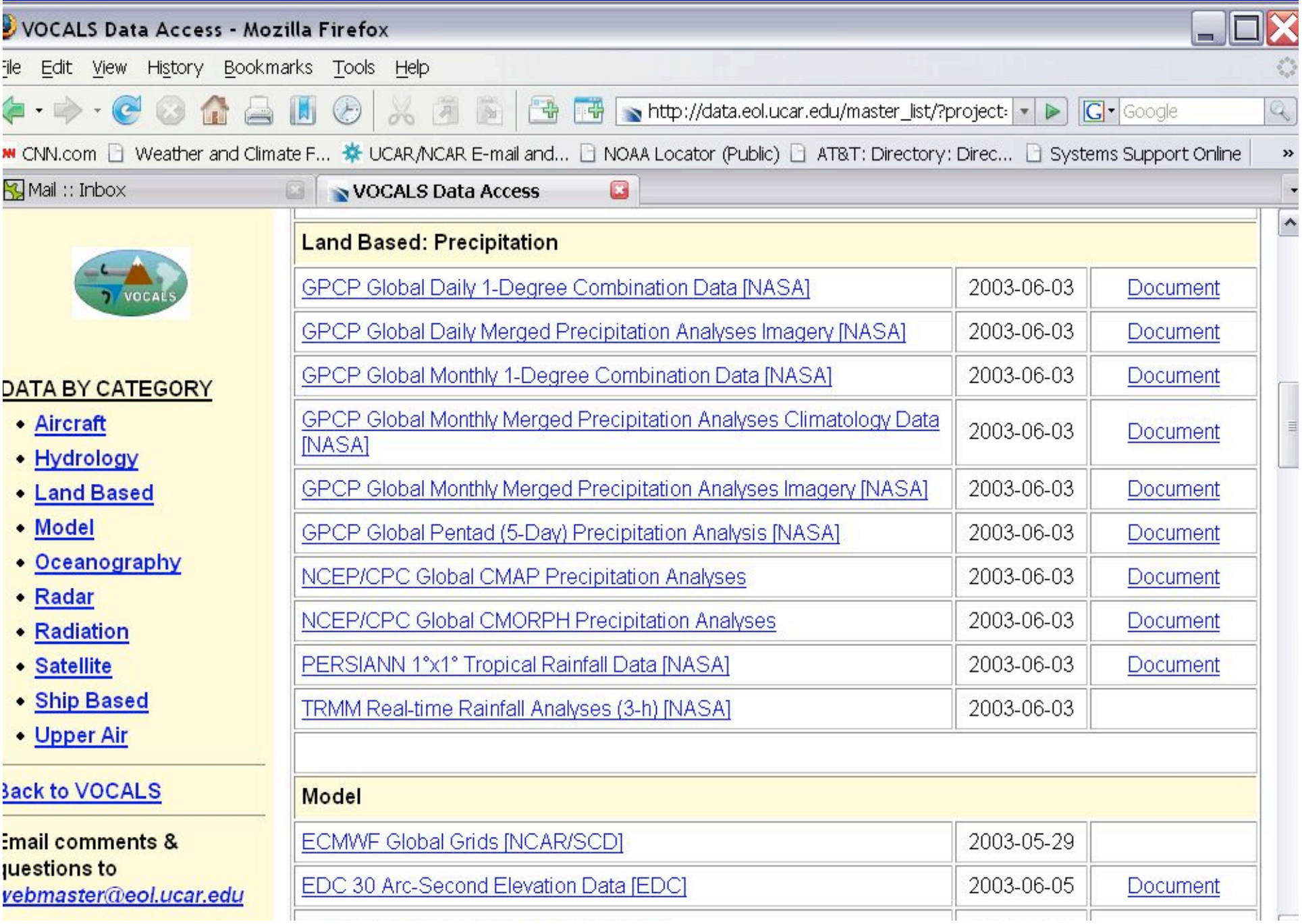


Back to GAPP Data Management Home Page.

Back to SGP/SMEX Data Management Home Page.

http://www.eol.ucar.edu/projects/hydrometnet/

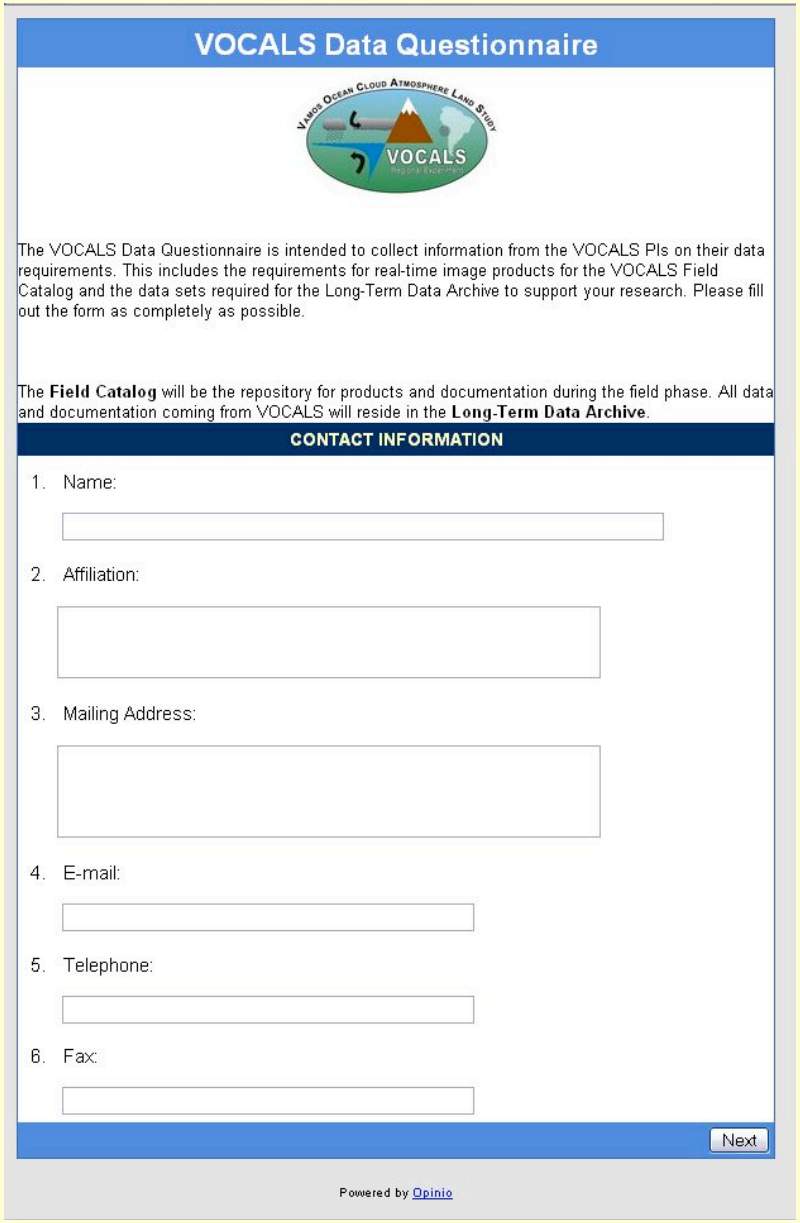
PROJECT MASTER LISTS



ISSUES FOR DISCUSSION

- Need “buy-in” from all participants (e.g. adhere to data policy, populate field catalog, provide data/metadata to archive….)
- Agree on Radar data formats
- Identify Integrated Products
- Need for other Data Services (e.g. Mailing Lists, Web pages…..)
- Other items or needs?

http://survey.ucar.edu/opinio/s?s=3634



INFORMATION COLLECTED ON:

- Imagery and products needed for the field catalog (real-time ingest)
- Supporting Datasets needed for research
- PI Data to be submitted to the field catalog/archive
- Product transfer to aircraft
- Special products/reports/datasets needed

DATA CATEGORIES

Aircraft	Upper Air
Satellite	Oceanographic
Land-based	Model Output
Radar/Lidar	Other

IHOP_2002 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 IHOP_2002 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
- 4.5 Advanced Water Vapor Sensor Intercomparison Data Set

APPENDICES
- A. Research Data Sets
- B. Operational Data Sets
- C. List of Acronyms (LOA)

T-REX Map Server

http://mapserver.eol.ucar.edu/trex/

Background Layers – DEM, orthophoto quads (aerial photo), USGS topo quads, roads, hydrography, federal lands, cities.

Points – All T-REX instruments are included using the lat/lon information provided in the documentation files.

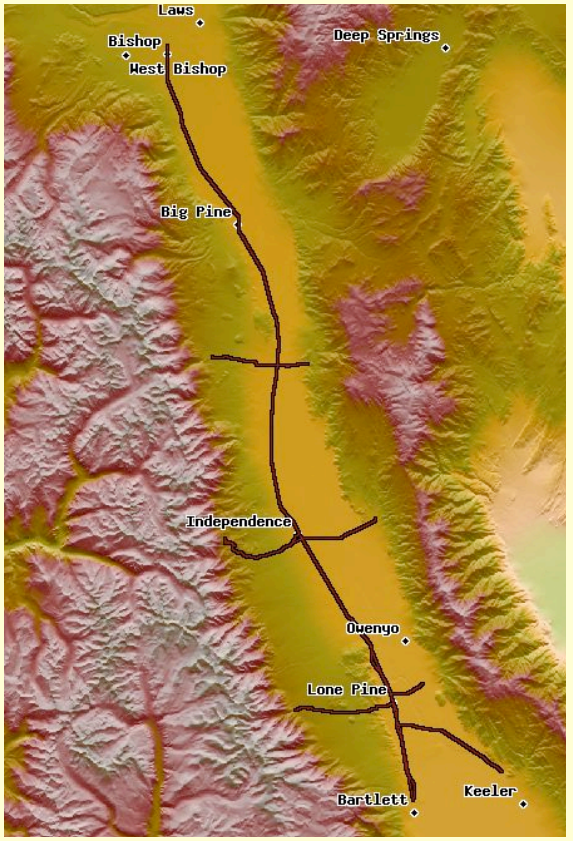
Dropsondes – All T-REX dropsonde final reported locations are included.

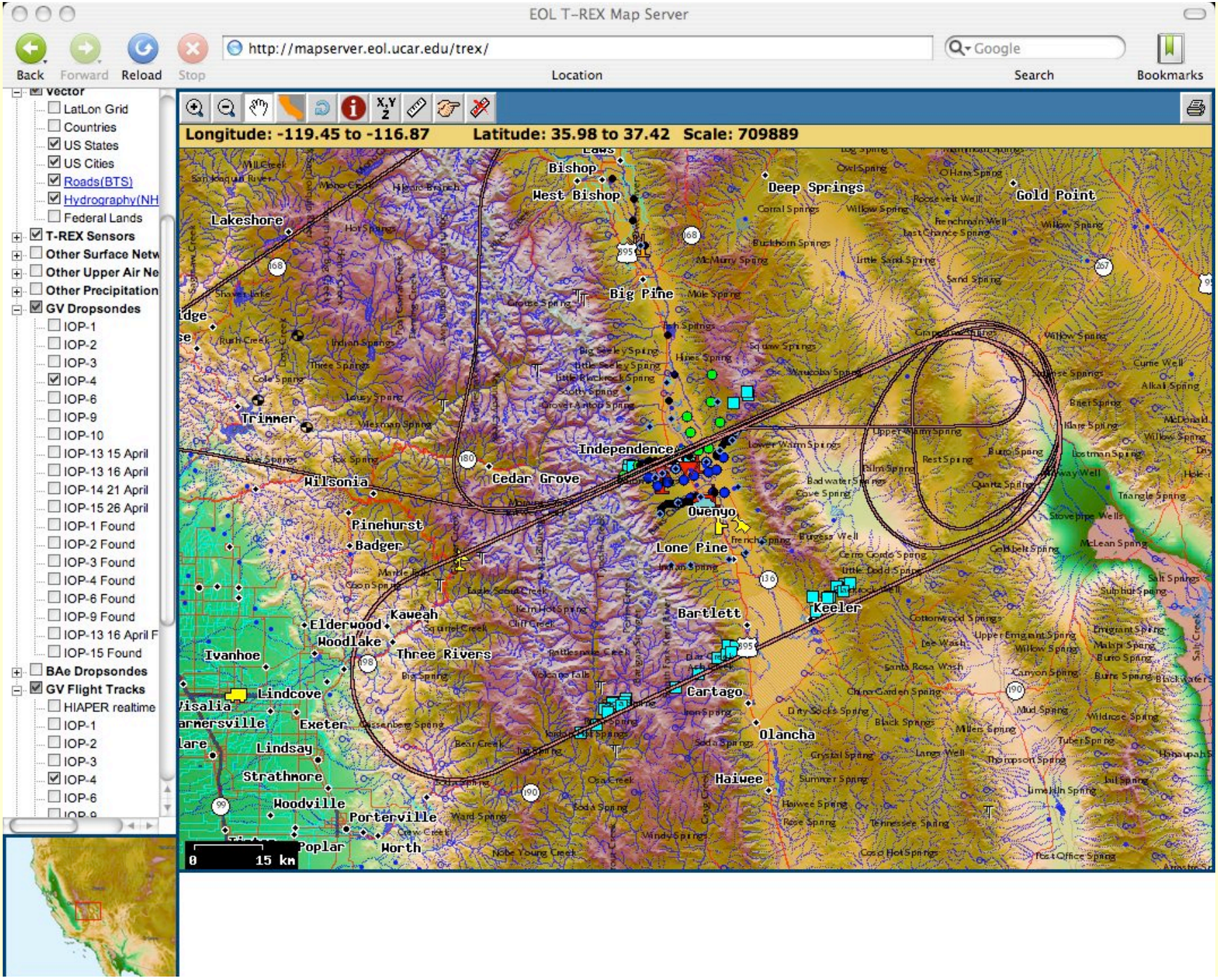
Tracks – All aircraft flights and WOW excursions.

IOP/EOP Maps – Can generate maps specific to a particular IOP or EOP with the locations of all mobile platforms, aircraft/vehicle tracks, and dropsonde locations specific to that IOP or EOP.

Surface Meteorological Composites – Can generate maps of locations that were included within a particular composite data set including the operational data sources.

Station Information – Can click on a station to get additional information (station name, lat, lon, elev, etc).




EOL T-REX Map Server
http://mapserver.eol.ucar.edu/trex/
Back
Forward
Reload
Stop
Location
Search
Bookmarks
Vector
LatLon Grid
Countries
US States
US Cities
Roads(BTS)
Hydrography(NH
Federal Lands
T-REX Sensors
Other Surface Netw
Other Upper Air Ne
Other Precipitation
GV Dropsondes
IOP-1
IOP-2
IOP-3
IOP-4
IOP-6
IOP-9
IOP-10
IOP-13 15 April
IOP-13 16 April
IOP-14 21 April
IOP-15 26 April
IOP-1 Found
IOP-2 Found
IOP-3 Found
IOP-4 Found
IOP-6 Found
IOP-9 Found
IOP-13 16 April F
IOP-15 Found
BAe Dropsondes
GV Flight Tracks
HIAPER realtime
IOP-1
IOP-2
IOP-3
IOP-4
IOP-6
Longitude: -119.45 to -116.87
Latitude: 35.98 to 37.42
Scale: 709889
Bishop
West Bishop
Deep Springs
Gold Point
Lakeshore
Big Pine
Trimmer
Independence
Cedar Grove
Wilsonia
Pinehurst
Badger
Owenyo
Lone Pine
Keeler
Bartlett
Kaweah
Elderwood
Woodlake
Three Rivers
Ivanhoe
Lindcove
Exeter
Lindsay
Strathmore
Woodville
Porterville
Poplar
Worth
Cartago
Olancha
Haiwee
0
15 km

PROJECT WEB PAGES

Project Description

Cumulus Photogrammetric, In-Situ and Doppler Observations (CuPIDO) is an observational program designed to examine the onset and development of orographic thunderstorms associated with the North American Monsoon. The CuPIDO field program used digital visible spectrum cameras, surface mesonet stations, high temporal resolution soundings and aircraft data.

Data Access

Master List of All CuPIDO Data Sets
CuPIDO Field Catalog
Data Policy
Dataset Documentation Guidelines
Data Submission Instructions

Publications

Publications

Documents

Project Summary (PDF)
Non-Technical Summary (PDF)
Scientific Overview Document
ISFF Site Survey (PDF)
ISFF Site Survey (slideshow)

Meetings

CuPIDO Preparation Meeting (12 April 2006)
CuPIDO Planning Workshop (11 April 2005)

People

CuPIDO Participants

CuPIDO Research Web Pages

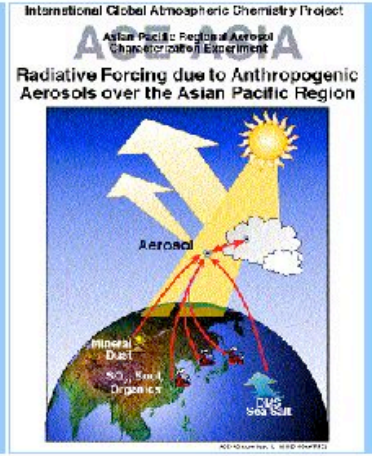
Arizona State (Joe Zehnder)
Wyoming (Bart Geerts)
NCAR/EOL ISFF
Wyoming King Air

CuPIDO Media and Animations

KSAZ-TV Monsoon Story (21 July 2006; 100Mb Quicktime)
26 July 2005 Thunderstorm (340Mb Quicktime)
26 July 2005 Microburst (350Mb Quicktime)
10 July 2004 (60Mb Quicktime)
13 July 2004 (33Mb Quicktime)
14 July 2004 (23Mb Quicktime)
16 July 2004 (27Mb Quicktime)

PROJECT AND WORKING GROUP MAILING LISTS

ACE-Asia Mailing Lists at UCAR/JOSS



Welcome!

Below is a listing of all the ACE-Asia mailing lists at UCAR/JOSS. Click on a list name to get more information about the list, view its archives (must be list member) or to subscribe, unsubscribe, and change the preferences on your subscription (requires password). (Send questions or comments to mailman-owner@joss.ucar.edu.)

List	Description
aa-adnet	ADNet (LIDAR)
aa-airmass-info	Results of the Working Group on Air Mass Characterization
aa-airmass-working	Internal discussions of Working Group on Air Mass Characterization
aa-c130-inlet	C-130 and Inlet/Plumbing Discussion
aa-casestudies	Case Studies: Possibly the Perfect Dust Storm?
aa-chemistry-carb	Carbonaceaous Aerosols
aa-chemistry-inorganic	Inorganic Aerosols, Impactors and Intercomparison
aa-chemistry-mineral	Mineral Aerosol and Trace Metals
aa-collaboration	Future Collaboration among the Asian Participants
aa-dust-comp	Dust Composition and Radiative Effects
aa-hygro-growth	Hygroscopic Growth
aa-kosan-all	Kosan and Surface Sites
aa-kosan-pi	Kosan - PI List
aa-kosan-size	Kosan Size Distribution
aa-model	Modeling Working Group
aa-model-reg	Regional Model Comparisons

RICO DATA POLICY SUMMARY

- **All investigators must agree to promptly submit their data to the RICO archive**
- **All data shall be provided to other RICO Investigators upon request**
- **During the initial 1-year data analysis period, data may be provided to a third party only with the permission of the investigator(s) who collected the data**
- **All data will be considered public domain not more than 1-year following the end of the RICO field phase**
- **Any use of the data will, at a minimum, include acknowledgment. Co-authorship TBD with the investigator(s) who collected the data**

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