TCI Field Catalog Introduction

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http://catalog.eol.ucar.edu/tci (eventually, but not yet)



The NCAR/EOL Field Catalog



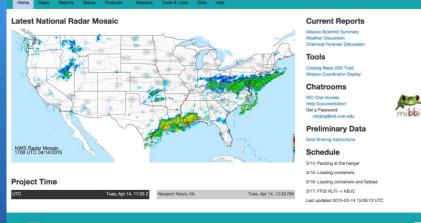
865rad

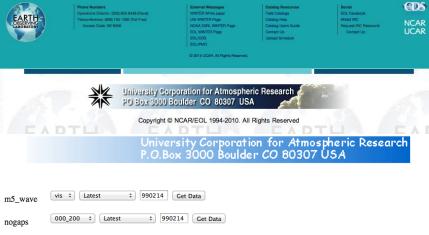
seawifs

+ Latest

WINTER Field Catalog

Wintertime Investigation of Transport, Emission, and Reactivity





\$ 990214 Get Data

The field catalog is a web-based collaborative service whose mission is to provide facilities for:

- Project Documentation
- Collect supporting prods for context
- Post mission, campaign review
- Mission Planning
- Real-time communications
- Situational Awareness
- Real-time decision-making
- In-field data sharing

80 campaigns supported in 19 years

The NCAR/EOL Field Catalog







Weather Forecast Discussion Enter new report

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You must enter a password before adding a link or image in a text box.

Password*	•••••
Author*	Lori Chappel
Date/Time*	2014-01-15 05:00 UTC (Form loaded at 2015-04-10 17:04 UTC)

Current Conditions

The editor below allows WYSIWYG and Source-HTML editing with file uploads for both inline images and links to attachments. See the Users Guide for editing help. We suggest you restrict your HTML and styling to be clean and simple. To include images, use the Image or Link button and then the Upload tab. Finally, for security and styling reasons, some advanced HTML and larger headings may be removed or modified.

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An active monsoon trough lies over the Arafura Sea with a tropical low embedded within the trough located over the Territory's Top End to the south of Darwin. Broad areas of cloud with embedded thunderstorms, showers and areas of rain can be seen about large areas of northern Australia, associated with the monsoon trough and low. Active lightning early morning in the convergent bands in the Timor Sea.



For documentation: Interactive web forms Ops Plan of the Day Weather Discussion Mission Scientist Summary IOP Proposal NASA WB57 Mission Summary Staffing Schedule

body p Clear editor

Ops Plan of the Day Weather Discussion Mission Scientist Summary IOP Proposal NASA WB57 Mission Summary Staffing Schedule

For documentation: Operations Reports Mission Scientist Report, RICO, King Air Flight January 21st, 2005 UW King Air Flight Scientist: Stevens



Figure 1: Images showing cloud field during flight.

General cloud characteristics: The cloud field was rather suppressed with patches of humulus and patches of clear, with tops rarely developing above 4000'. During the day a magnificent tail developed west of Barbuda. This tail had a tremendous radar projection, but faded by the time we worked it, only to redevelop somewhat after we left. Drop concentrations were generally light, near 50 or 75 cm⁻².

General Comments: The King Air was the only aircraft in the area as the BAE flew well to the north on this day in search of deeper clouds. The intial plan was to fly along and cross wind segments near the ship for estimating momentum fluxes by fields of shallow cumulus, following a line suggested by Peggy LeMone. Winds proved rather light, as did the shear and cloud field. Indeed echoes were so little in evidence we often turned off the radar, and did not fly legs over the top of the cloud field for which the dual Doppler was desired. Later in the flight we flew a tail pattern which sampled a dissipating tail west of Barbuda, and the period before its subsequent redevelopment.

Overview of Flight Pattern: The momentum patterns were to consist of stacks of four to five legs, ong and across the shear. We attempted to coordinate these with the ships heading, and after some tial adjustment settled on a direction. The patterns generally included two levels in the subcloud ver, one or more in the subcloud layer, and one above the cloud. The latter were cut short for lack of hoes. The cloud legs were not flow straight and level, but rather adjusted slightly, trying to maintain average heading that followed the subcloud legs, to increase the time in cloud for cloud statistics. The tail pattern consisted of: (1) two subcloud legs starting well north and ending well south of Barbuda, and flown approximately 10km downwind of Barbuda, upwind of the region of significant tail development; (2) along tail cloud and subcloud legs for measuring clouds and precipitation; (3) a repeat of one of the subcloud legs.

Flight Notes:



CONTRAST Field Catalog

CONvective TRansport of Active Species in the Tropics

Home Maps Reports Status Products Missions Tools & Links Data Access Help

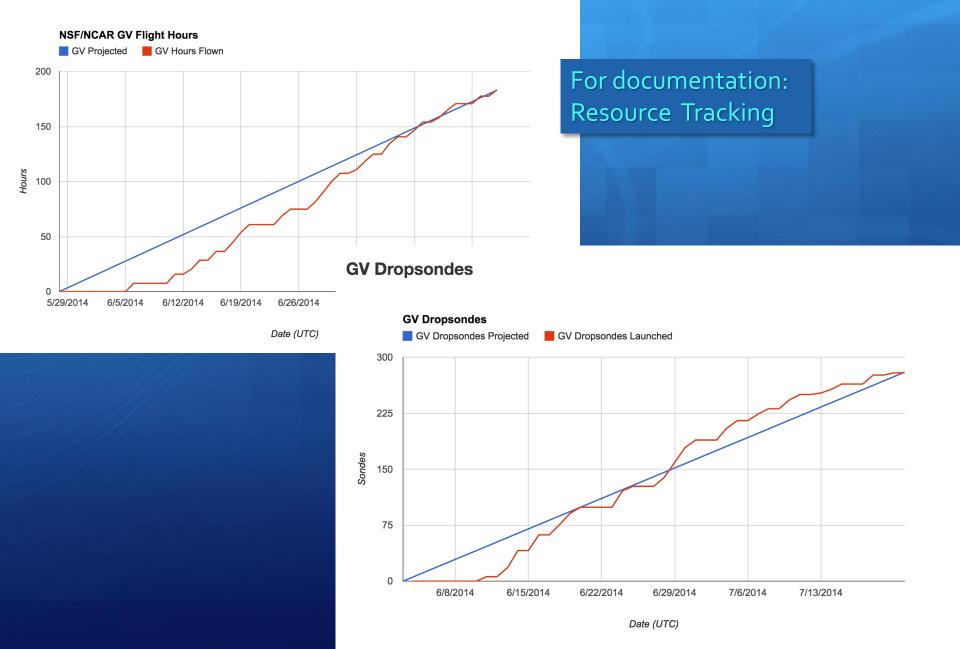
Status reports summary 2013-2014-01-2014-01-2014-01-2014-01-2014-01-2014-01-2014-01-2014-02-2014-02-2014-02-2014- 2014- 2014-2014-02-Instrumen Instrumen 12-17 11 14 17 19 22 25 29 01 05 08 02-14 02-17 02-21 25 Aircraft and state parameters Aircraft, NSF/N Aircraft, NSE/NCAR GV HIAPER **GV HIAPER** Overal up (up 🤅 up 🤅 up up 🛙 up (up up 🕄 up up up up up up Overall ADS - Airborne Data ADS - Airborne dow up up up 🛙 up (up 🤅 up up up up up up up up System Data System Digital cameras Digital cameras up up 🐔 up up up up up up up (up up up up up Mission Coordinator Mission up up up (up up 🕄 up (up 🤅 up up 🤅 up up up up up System Coordinator System Radome gust probe up up up up up (up up Radome gust probe up up up up up up Chemistry ovisior AMAX-DOAS up up 🕄 up up down 🙃 up (up up AMAX-DOAS down up up 6 AWAS - Advanced Whole AWAS - Advanced ovisiona rovisional provision up 6 0 6 Whole Air Sampler Air Sample ovisior rovisiona Bromine dowr up Bromine 0 0 CO2/CH4 - Picarro CO2/CH4 - Picarro Instrument for Instrument for Airborne provisiona ovisiona provisiona Airborne down 🚯 down 🚳 down 🕄 up up ur up up up up up Measurement of CO2 and 6 6 6 Measurement of CH4 CO2 and CH4 COMR AL rovision COMR_AL - Aerolaser up down up down up 🛙 up up up up up up up up 0 erolase Fast O3 up up Fast O3 dowr up ovisiona visiona ovisiona Formaldehyde dow down 🖉 up up up up up down 🚳 up up up up Formaldehyde 0 0 0 GT-CIMS - Georgia GT-CIMS - Georgia Tech Fech Chemical Chemical Ionization Mass up up up up up down 🙃 up up up up up up Ionization Mass Spectrometer Spectrometer NO-NO2/NO-NOv - 2 NO-NO2/NO-NOv 2-channel channel up uD chemilumine chemilumin instrument instrument TOGA - Trace TOGA - Trace Organic up up up 🖲 up up up up up up Organic Gas up up up up up Gas Analyzer Analyzer Dew point and humidity orovisional orovisional provisional provisional provisiona rovisiona ovisiona provisiona DP - Dewnointers DP - Dewnointers dowr up up (up un up up 0 0 0 0 0 0 0 0 PLWC - King LW PLWC - King LW probe up probe RICE - icing rate RICE - icing rate indicator up UD up ndicator VCSEL - Vertical VCSEL - Vertical-Cavity up up 🚳 up 🤅 up up 🛙 up up Cavity Surfaceup up up up up up up Surface-Emitting Laser Emitting Laser

For documentation: Instrument Status

NASA WB57 HDSS SATCOM FSSP Camera HIRAD **NOAA G-IV** NASA Global Hawk SFMR Cloud Physics NOAA P-3

Tail Doppler AVAPS

DEEPWAVE Resource Usage NSF/NCAR GV

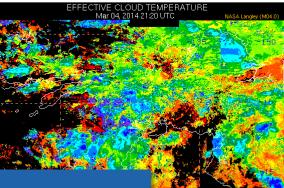




HAIC-HIWC Field Catalog High Altitude Ice Crystals - High Ice Water Content Project



Latest Cloud Temperature



For documentation/communications: Operations Schedule

01 EFFECTIVE CLOUD TEMPERATURE MAR 04, 2014 21:20Z NAS

JTC	Tues, Mar 4, 22:18 Z	Boulder
Darwin	Wed. Mar 5, 7:48 AM	Melbourne

Tues, Mar 4,

22:18 Z	Boulder	Tues, Mar 4, 3:18 PM
:48 AM	Melbourne	Wed, Mar 5, 9:18 AM
:18 PM	Tokyo	Wed, Mar 5, 7:18 AM

Current Reports

Operations Plan of the Day Weather Discussion

Tools

Catalog Maps (GIS Tool)

Announcements/Schedule

Communications Coordinator: Tom Ratvasky Phone: 0469 329 163

Updated at 01:30 UTC 02-Mar-2014

Announcement:

- No flights 02-March or 04-March the fuel control valve is expected to be in Darwin on Monday. However, a PC board for the fuel control is also required. This board has been ordered, but the delivery date is unknown at the moment. Current best guess is the test flight on 05-March.
- The forecast for the top end has dry air persisting through Wednesday. A tropical cyclone is anticipated to develop in the Coral Sea and move west toward Cairns. Planning is being initiated to deploy the Falcon 20 towards the east coast later this week after functional flight checks are completed.
- Decision on extension will be made on 05-March after gathering terms and conditions of extending lease at Pearl hangar and understanding the status of the aircraft

Plan for 02-Mar-2014

· no more meetings - enjoy the good weather!

Plan for 03-Mar-2014

- 09:00 Wx brief
- 09:30 FOG meeting
- 14:00 McBride presentation, "Australian Monsoon and the MJO (Madden-Julian Oscillation)", NTRO 2nd Floor conference room

Plan for 04-Mar-2014

- 09:00 Wx brief
- 09:30 FOG meeting
- · Replace fuel valve after receipt

Times posted are local Darwin time, unless otherwise noted.



Paris

Partner Webpages HAIC Home Page Catalog Resources Field Catalogs EOL Pages HAIC-HIWC Data





FRAPPE Field Catalog

Front Range Air Pollution and Photochemistry Experiment

0	Satellite					
Satellite	Radar Surface					
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	Advisory	U U	Shoose Product Group	\$		
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	4km Channel 4 (Thermal IR)	UTC 2014/08/25 20:08	2014/08/25	Loop Last 6 Images	Loop Last 12 Images	13 Loop Last 24 Images
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		UTC				

GOES-E SST NEXRAD **NWS Soundin METARs** HRRR **Advisories** Analyses

> Supporting Products: Example - Satellite



OWLeS Field Catalog Ontario Winter Lake-effect Systems

	Home	Reports	Status Ops	Products Model F	Products Research	Products Missions Tool	s & Links Data Access He	lp
	IOP	Start Date/Time	End Date/Time	Event	Catalog Products	Flight Track Plot	Summaries	Notes
Mission Summa	o1	2013-12-07 16:00	2013-12-07 23:00	LLAP band	Ops: Satellite Ops: Radar Ops: Surface Ops: Upper-Air Research: Radar Research: Surface Research: Upper- Air	UWKA Flight Track Plot	Summary Reports	A band-like structure, exhibiting small cellular features, formed early in the day near Oswego and persisted through the afternoon and early evening. The band was oriented approximately 280-290 degrees to the shoreline. Surface assets and soundings targeted this band. More substantial snow occurred with an E-W oriented band near Pulaksi, NY. The WY King Air flew parallel to the long axis of the lake. Upwind soundings were obtained in Ontario, Canada.
Table	ĺ.				Ops: Satellite			Weak mesoscale band oriented E-W off Lake Erie. Two surprising observations were that the Erie band
	02a	2013-12-10 16:39	2013-12-10 20:18	Downwind band	Ops: Radar Ops: Surface Ops: Upper-Air Research: Radar Research: Surface Research: Upper- Air	UWKA Flight Track Plot	King Air Mission Summary Report Millersville Tethersonde Summary Report	extending east completely across the OWLeS operations area throughout the day (it died at sunset as expected from climatology) and that the cloud tops south of the band were just as high and turreted as those in the band. Indeed, the high reflectivity band seemed to follow a sharp change in depth of the moist convection rather than being assoicated with an isolated band of deeper convection.
	02b	2013-12-10 23:00	2013-12-12 02:00	LLAP band	Ops: Satellite Ops: Radar Ops: Surface Ops: Upper-Air Research: Radar Research: Surface Research: Upper- Air	UWKA Flight Track Plot	Summary Reports	An intense LLAP band was sampled on the east shores of Lake Ontario by ground assets. OWLeS operated through the night with all ground facilities commencing operations at 1800 EST and ending operations at 1900 EST on 11 December.
	03	2013-12-12 21:00	2013-12-13 07:00	LLAP band	Ops: Satellite Ops: Radar Ops: Surface Ops: Upper-Air Research: Radar Research: Surface Research: Upper-	UWKA Flight Track Plot	Summary Reports	An intense LLAP band was sampled on the east shores of Lake Ontario by ground assets. OWLeS operated through the night with all ground facilities commencing operations at 1600 EST and ending operations at 0200 EST on 13 December, although some teams continued data collection until 0900 EST.
For Post Mission/Post								
Campaign Revie	0 4	2013-12-15 20:40	2013-12-16 07:00	LLAP band	Ops: Satellite Ops: Radar Ops: Surface Ops: Upper-Air Research: Radar Research: Surface Research: Upper- Air	UWKA Flight Track Plot	Summary Reports	of Lake Ontario. The expectation from model guidance was that it would make landfall between Fairhaven and Oswego but instead the band moved Northward. In summary, this is a good case study for LLAP and orographic interests, but the coordination between aircraft and DOW measurements was rather poor, MIPS was nor under the band, and we did not have an east shore radiosonde north of the band.



For Real-time Communications: •••• AT&T 3G **IRC** Chat

Colloquies owles
GregStoss-mobile: !replay 1440 minutes
GregStoss-mobile: Test
KAK-CSWR: actually, no. but so is life.
Redfield_Utah_sonde: Karen- a second tab should have popped up on the top of the chat window
Oswego_sonde: Cap at 514 hPa!
You joined the room.

4:13 PM

0

Field Catalog	
Catalog Reports Operational Model/Forecast Research Missions Tools & Links Data Acce Home Products Products Products	ss Help ?
#GV (28) #TORERO (22) * groundbot	
Happy chatting.	
09.07 -	Chatting
09:07 +++ gstoss-Boulder set to mode +iwsz	JimBresch-mroc
charge and volkamer CP hi observed only 5 of 20 downward pointing minutes - clouds - bi 300m avt 10.5/m no resid serveds, no bi	schanot_GV
09:13 clouds 15 min of clouds from 4-11km	Idlers
09:18 «volkamer_CR»: Ireplay 10	annav
09:18 <groundbot>: incorrect usage, ask for help using 'groundbot: help replay'</groundbot>	ATMOS-Speciab Becky Bidr
09:18 <volkamer_cr>: Ireplay10</volkamer_cr>	Bill adsGV
09:21 <schanot_gv>: interesting. Wind speed increase and shifting to the North</schanot_gv>	bruce-gv
09:33 <jimbresch-mroc>: schanot_GV, at least the forecast was right about the winds Presumably the airmass chemical comopositions</jimbresch-mroc>	bruning_CR
should be different (northerlies 'cleaner' than easterlies).	campos_cr
0936 <schanot_gv>: JimBresch-mroc, nothing obvious in CO so far</schanot_gv>	DaveR-RAF
09:37 <schanot_gv>: wind shift occurred pretty much at the equator</schanot_gv>	dd_montzka-bldr ffl-Bldr
0939 cyclkamer_CR>: schanot_GV: we climbed out of the terrestrial plume with our ascend to FL400	groundbot
09:39 <volkamer_cr>: There was a drop in CO of about 40ppb control of about 40ppb control</volkamer_cr>	gstoss-Boulder
09/36 <schanot gv="">; roger</schanot>	Hills_G-V
0948 <schand_gv>: light chop</schand_gv>	hsrl
and schand_Gv> light chop	hsrl_
09:50 of there is developing convection.	Jose_OpsCenter JScannell-FL
09:54 <schanot_gv>: JimBresch-mroc, roger. all still looks like small low stuff in target area. Three MBL legs all below cloud base</schanot_gv>	SamHall Denver
09:55 <jimbresch-mroc>: OK, the area north and east of the ship is mostly clear.</jimbresch-mroc>	TomBaltzer-RAF
09:56 <schanot_gv>: roger, any ship reports on the sfc winds? SERVING</schanot_gv>	volkamer_CR
09:57 <jimbresch-mroc>: The Ka'l is reporting 150 @ 7 kts</jimbresch-mroc>	_
09:58 <schanot_gv>: roger</schanot_gv>	
10:00 <jimbresch-mroc>: A pleasant 82 F with SST of 81 F.</jimbresch-mroc>	
10:08 10:08 show more about it such as altitude, depth - on satellite it looks like a liquid cloud.	
10:09 <schanot_gv>: started descent to FL280 as part of Module 1</schanot_gv>	
10:09 <schanot_gv>: will be descending thru some straus</schanot_gv>	
10:10 «schanot_GV»: stratus	
10:11 <jimbresch-mroc>: A jump in CO with the wind shift in the descent</jimbresch-mroc>	
10:11 <schanot_gv>: tops of stratus 2.0 km</schanot_gv>	
10:11 <schanot_gv>: right here</schanot_gv>	
10:12 <schanot_gv>: you're right we may be past it prior to the next descent below 280</schanot_gv>	
10:12 < JimBresch-mroc>: Actually, the current stratus is a different type of cloud than the one I was talking about.	
10:13 <jimbresch-mrocx: around="" gray="" latest="" light="" mc="" right="" shows="" stratus="" td="" the="" vis="" wp4.<=""><td></td></jimbresch-mrocx:>	
10:13 <schanot_gv>: good call on wind shift. CO in a cal at start of descent. not real data yet 10:14 <schanot_gv>: my bad, wasn't watching for that. I will cancel all CO cals during the MBL legs</schanot_gv></schanot_gv>	
IN THE SCHARDLEVER MY DAU. WASH'T WATCHING FOR THAT. I WILL CARCELAR OUT CAIS OUTING THE MIDL LEGS	

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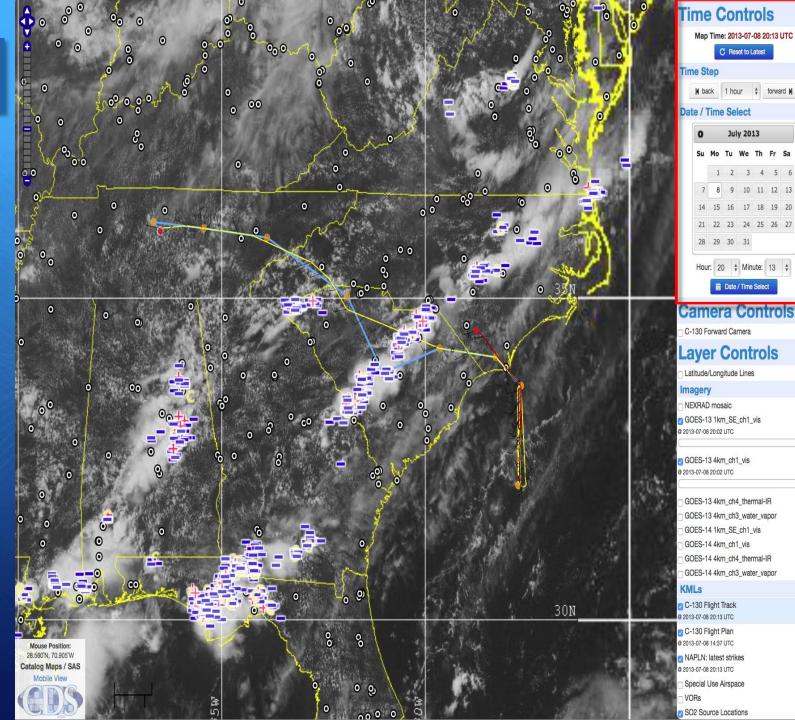
Catalog Maps Tool:

Situational Awareness

Mission Planning

Flight Tracking

Mission Review



MTS Collaboration:

• The NASA MTS will be supporting SHOUT, while we will be supporting TCI. Our two groups have discussed this and agreed to work together to share products between the tools.

1. We'll each need to set up processes to make files available to the other.

 In some cases it may be more expedient for providers to send each of us a copy of a product (minimizes latency)

3. We'll start by sharing our expected product lists

Next Steps – Expected products list:

• With input from project participants, develop a prioritized list of operational and model products needed in the field.

1. What is needed for real-time decision making/situational awareness?

2. What are the important products/data that need to be captured to document the conditions in which you sampled?

<u>Next Steps – research products/preliminary data:</u>

 Develop a list of research products that are expected to be uploaded from the field.

1. What products/preliminary datasets can you send to the catalog?

2. What are the formats of these data?

 Do you have any special requirements for real-time data support during the campaign?

<u>Next Steps – Field Catalog support:</u>

• The Field Catalog will be on-line by mid-July to give you time to become familiar with it at the beginning of the campaign.

• EOL will do a tutorial on how to use the Field Catalog before the campaign starts via a web conference. Probably in early July.

• Greg Stossmeister is planning to be on-site (Wallops Island) for the first two weeks of the intensive part of the campaign. for more information, contact: Greg Stossmeister E-mail: gstoss@ucar.edu



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