



Webex Agenda, 19 June 2014



Updates information on Colorado logistics and schedule

- All **shipping documents** must be sent to Luci Crittenden at Lucille.H.Crittenden@nasa.gov **before COB on Thursday, June 24th!!!!**
- Your shipment must be listed on **Wallops Shipping Form GSFC20-4** if shipping from Wallops or on **Langley Shipping Form LF52** if shipping from Langley.
- The cargo will be **picked up at Wallops in the morning Thursday, July 10th and at Langley early afternoon on Thursday, July 10th**
- The truck is due to arrive at the RAF in Bloomfield, CO on Monday, July 14th. Exact time TBD for now. Please have someone from your team ready to help unload at the Hangar.



Shipping



Wallops shipment address

NASA Wallops Flight Facility
Attn: AIRTEC Inc. **c/o Freddie Bynum**
Bldg. N-159 Room **W165**
Wallops Island, VA 23337
Phone: 757-824-1919

Note:

If non-NASA property is being shipped please indicate on the package who property belongs to (institution/agency/company/etc.)

RAF (Broomfield) address

NCAR/RAF
c/o Randy Klotz
10802 Airport Ct.
Broomfield, CO 80021
Email: klotz@ucar.edu / cwoff@ucar.edu

Note:

Please notify Randy Klotz and Cory Wolff by email to prepare them. They will set your package aside for when you arrive.

Consolidated Shipment from Wallops and LaRC to Colorado: Please have shipping documents completed and emailed to Luci Crittenden before 24 June. Items will be picked up from both LaRC and WFF.



P-3B Upload Progress



P-3B upload remains on schedule despite some rearrangements in arrivals

DFGAS arrived today and is already on the plane

CAR (PI-Charles Gatebe) should have their new cable tomorrow and will be working over the weekend

OINeph (PI-Vanderlei Martins) will arrive tomorrow



P-3B Project Check Flight



Investigators should still plan for the Project Check Flight (PCF) to occur on 1 July (Tuesday). As in previous campaigns, we will only have one check flight if everything goes well. Investigators can also use the transit to evaluate instrument performance.

Do not expect maintenance time (other than the normal 3-hour preflight) on the day of the PCF. If you want more time with your instrument before the PCF, plan to arrive early. There should be some time on the day of the ECF (Monday, 30 June).

The PCF flight plan is to climb to 18 kft and sample until investigators are satisfied. This will be followed by a spiral descent to 1000 feet and a level leg until investigators are satisfied. The P-3B will then spiral upward to 18 kft and sample at altitude until investigators are ready to return. Let us know if you need any other maneuvers.

After the flight, we will need a sample of data (screen capture is sufficient) to demonstrate instrument readiness for the Mission Readiness Review.

DISCOVER-AQ

Today ◀ ▶ June 2014 ▼

Print Week Month Agenda ▼

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Jun 1	2	3	4	5	6	7
8	9	10	11	12	13	14
	Herndon, Gatebe, Vanderlei Upload			Wisthaler, Fried, Yang, Barrick Upload		
	Anderson (LARGE), NSERC, Cohen Upload					
15	16	17	18	19	20	21
Herndon, Gatebe, Vanderlei Upload			Weinheimer, Diskin Upload			
Wisthaler, Fried, Yang, Barrick Upload			Anderson (CAPS) Upload			
22	23	24	25	26	27	28
Herndon, Gatebe, Vanderlei Upload			P3B FIIR	P3B FRR	P3B ATP	
Weinheimer, Diskin Upload						
29	30	Jul 1	2	3	4	5
	P3B ECF	P3B PCF and pack days				



P-3B Transit Manifest

	Name	Instrument
1	Beyersdorf	LARGE
2	Corr	LARGE
3	Winstead	LARGE
4	Barrick	PDS
5	Gatebe	CAR
6	Rush	CAR
7	James	CAR
8	Weinheimer	NOxyO3
9	Mueller	PTR-MS
10	Geiger	AVOCET
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

It is still early, but Luci has a tentative manifest for the transit

The transit will NOT be a science flight, so it is not mandatory to operate instruments unless desired

TD-LIF has decided to not send anyone on the transit.

Still waiting to hear from Aerodyne, DFGAS, and DLH/DACOM

Also need to know about preflight requirements for the transit.

Please communicate your needs to Luci (Lucille.H.Crittenden@nasa.gov)



B200 HSRL2 & ACAM Integration



- ***Current plan is for the HSRL2 to start integration on the B200 beginning June 30th and continue through July 3rd if needed.***
- ***ACAM integration will start just after the HSRL2 integration (HSRL2 has to go on first due to fit). ACAM could start as early as June 30th afternoon but mostly likely on July 1st.***
- ***Check-out flights will most likely start on July 7th and will be complete before July 10th (shipping day).***

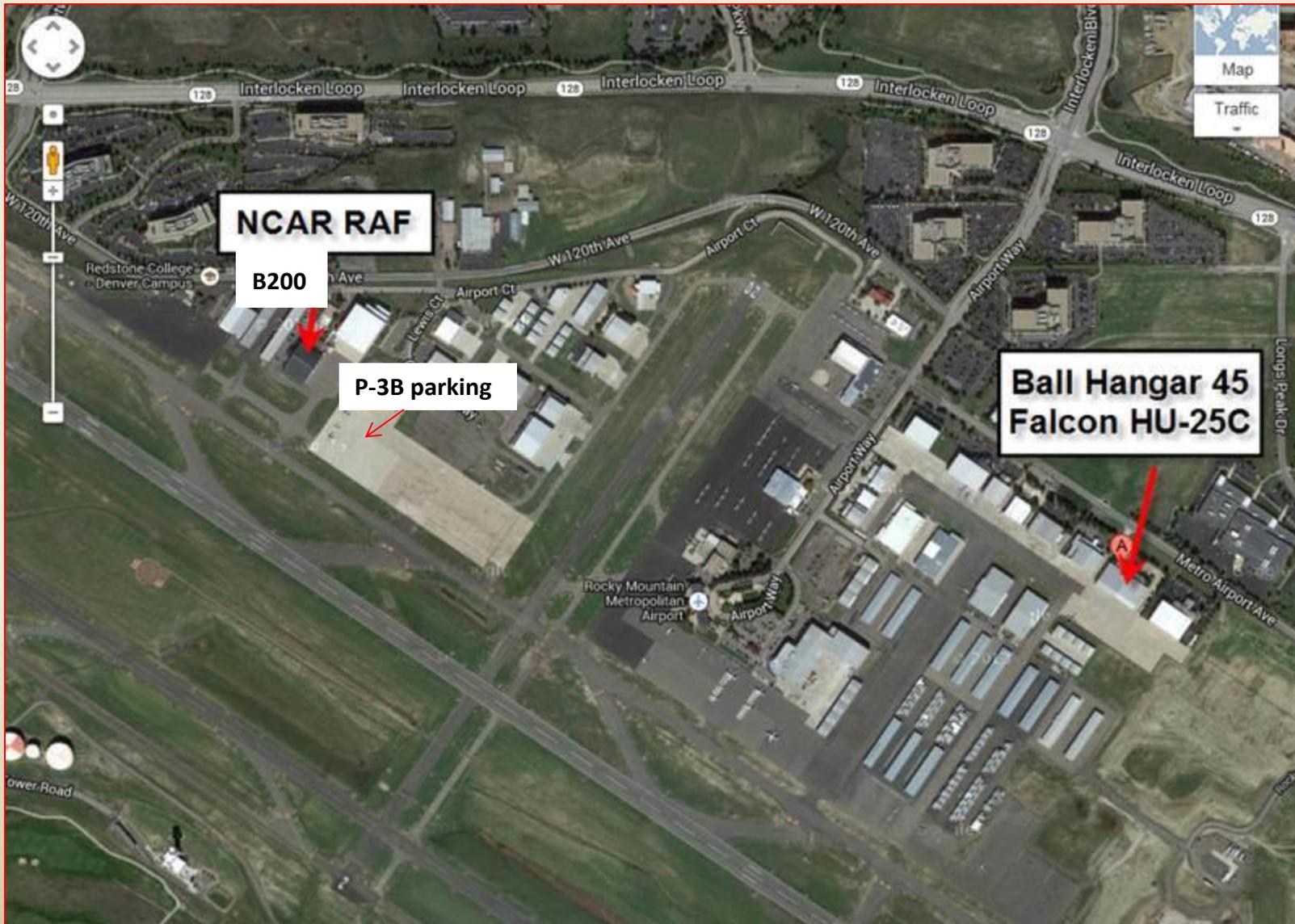


Colorado Hotel Reservations



For those of you still trying to obtain hotel reservations, the “DISCOVER-AQ Block” with below per diem rates at the Broomfield TownPlace Suites is full; however, if you call the hotel directly (1-303-466-2200) and identify yourself as “DISCOVER-AQ with a government per diem rate”, the hotel still has some rooms at the current per diem rate (\$111).

Another option is the Renaissance Hotel (1-303-464-8400) next door to the TownPlace Suites. This hotel has very nice rooms and may still have government per diem rates to offer, but they do not have cooking facilities (some rooms may have a microwave, but you will have to ask).



The forecasting dry run will be on 1 July, agenda and webcast details are forthcoming



FRAPPE Field Catalog

Front Range Air Pollution and Photochemistry Experiment

Home Reports Status Satellite Radar Surface Upper-Air Advisory Aircraft Model Missions Tools & Links Help

The FRAPPE field catalog is now operational and digesting products: <http://catalog.eol.ucar.edu/frappe>

If you have products to submit please get in touch with Scot Loehrer (loehrer@ucar.edu).

DISCOVER-AQ will not maintain a report server for the Colorado deployment. The Field Catalog will be used to consolidate all project information.

Our flight tracker will still be available, but tracking flights and chat will be also be available through the catalog.

Current Reports

Chief Scientist Summary
Weather Discussion

Tools

Catalog Maps (GIS Tool)

Chatrooms

Help Documentation
Password:
catalog@eol.ucar.edu

Name	Spiral	Over-flight	Pandora	Aeronet	EPA NO2	Missed Approach	Lidars	Balloons	Comment
BAO Tower	X		2	X			NOAA-TOPAZ and HRDL, UW-HSRL, H2O DIAL		CSU, 3 mobile hookups, small sensors on tower
Chatfield Park	X		1	X	X				
Denver-LaCasa Ncore	X		1	X	X				
Fort Collins-West	X		1	X	X	500 feet	GSFC TOLNET-O3 MPL		
NREL-Golden	X		2	X	X		MPL, LaRC TOLNet-O3, and Leosphere	Tethersonde	Millersville also brings sodar, flux tower, nephelometer; Pandoras by EPA here, EPA ceilometer, UMBC trailer, NOAA profiler
Platteville	X		1	X	X		MPL	Ozonesondes	NATIVE; NOAA radiation; 3 mobile hookups; Pandora by NATIVE here; extra trailer for PTR-MS
Aurora East/DU-ARTI				X					Nothing extra planned for this site
Boulder		X	1	X					Pandora already at this location
CAMP		X							
I-25 Denver			1		X				near-road NO2 monitor
Niwot Ridge			1	X					
Rocky Flats - N		X	1	X	?				
Squaw Mtn			1	X					
Table Mountain		X	1	X					possible ozone monitor
Welch		X		X					
Weld Co. Tower		X	1	X	?				remote sensors on county building
Greeley-Weld Co. Airport						X			Missed approach along BL run
Parkland Airport						500 feet			Missed approach with BAO spiral

Early installation planned for Aeronet (April) and Pandora (June). Groups are working directly with Gordon Pierce at CDPHE.

DISCOVER-AQ

Deriving Information on Surface Conditions from Column and Vertically Resolved Observations Relevant to Air Quality

Colorado 2014 | Texas 2013 | California 2013 | Baltimore-Washington, D.C. 2011

- ➔ Data Archive: DISCOVER-AQ
- ➔ Data Archive: FRAPPE (NCAR C130) 
- ➔ P3-B Interactive Flight Tracks & Time / Profile Data Plotter
- ➔ P3-B Profile Summaries - Percentiles Plots
- ➔ P3-B Merged Data: Extract / Download one or more variables
- ➔ P3-B Aircraft Forward / Nadir Videos 
- ➔ Submitted and Planned Publications **UPDATED!**

FRAPPÉ

July-August 2014 

- ➔ FRAPPE: Related Links
- ➔ DISCOVER-AQ: Data Related Links
- ➔ View Reports: Outlook / Flight / Status / QuickLook
- ➔ Flight Profile Summary 
- ➔ Flight / Profile Times: P3-B / B200
- ➔ Satellite Overpass Tracks
- ➔ Data Access & Other Data Sources
- ➔ ICARTT Data Format Document
- ➔ Data Management Plan
- ➔ Related Links & News

Recent Activities

- DISCOVER-AQ Science Team Meeting, 24-28 February 2014
H.J.E. Reid Conference Center, NASA LaRC (Login required)
- DISCOVER-AQ Team Meetings / Presentations / Telecons **UPDATED!**



The overarching objective of the DISCOVER-AQ Investigation is to improve the interpretation of satellite observations to diagnose near-surface conditions relating to air quality. To diagnose air quality conditions from space, reliable satellite information on aerosols and ozone precursors is needed for specific, highly correlated times and locations to be used in air quality models and compared to surface- and aircraft-based measurements. DISCOVER-AQ will provide an integrated dataset of airborne and surface observations relevant to the diagnosis of surface air quality conditions from space. >> more

Tools

- Data Scanning/Submittal 
Help FScan
- Register PI dataIDs 
- ➔ Overview (Crawford)
- ➔ DISCOVER-AQ Science 

This is required in order to upload data to the archive.

You can go directly to:
<https://www-air.larc.nasa.gov/cgi-bin/regid>

Or access through the link under “Tools” on the data archive site

Normal UserID/Password applies.

Questions should be addressed to Gao Chen and Ali Aknan.

dataIDs Registration for ICARTT Format Files

A dataID is the first part of an [ICARTT \[type\] data filename \(see the Data Format Document for details\)](#). Each dataID (per platform) must be unique.

DISCOVERAQ / FRAPPE Colorado 2014

IMPORTANT (PLEASE READ)

This registration is **ONLY** valid for the Platforms listed in the "Platform Box". Do **NOT** register if your platform is not listed. **YOUR "PLATFORM DATA MANAGER" IS RESPONSIBLE FOR YOUR DATA ARCHIVING NEEDS.**

The archive directory will be created from LastName.FirstName. Please enter PI name correctly. Also, if you have registered dataIDs before, they **WILL BE OVERWRITTEN** with the new registration. So, make sure you (re)enter ALL dataIDs. Each dataID represents a separate group of files in the PI data directory.

PI Last Name* : PI First Name* : Platform* :

P3B	(NASA Aircraft)
B200	(NASA Aircraft)
C130	(NCAR Aircraft)
MERGE	
MODEL	
ANALYSIS	

Press Ctrl+Click to select multiple items

dataID(s)* :

*Prepend dataIDs with "discoveraq-" OR "frappe-" separates dataIDs with semicolons

Link to PI webpage, instrument, or experiment description document:
 Optional: to display on LaRC Archive webpage

Text describing PI instrument or experiment (e.g., NASA LaRC DIAL - Troposphere O3, Aerosols, and Clouds Profiles):
 Optional: to display on LaRC Archive webpage

*Required (spaces will be removed)

Current Registered dataIDs on the Server for DISCOVERAQ / FRAPPE Colorado 2014

PI Name: Last.First	LocationID	Registered dataIDs
BARRICK.JOHN (PI Link)	P3B	discoveraq-pds
YANG.MELISSA (PI Link)	P3B	discoveraq-co2
ANDERSON.BRUCE (PI Link)	P3B	DISCOVERAQ-LARGE-APS;DISCOVERAQ-LARGE-CAS;DISCOVERAQ-LARGE-CIP;DISCOVERAQ-LARGE-CNC;DISCOVERAQ-LARGE-LAS;DISCOVERAQ-LARGE-OPTICAL;DISCOVERAQ-LARGE-SMPS;DISCOVERAQ-LARGE-SP2;DISCOVERAQ-LARGE-

For those new to the process, a link to the Data Format document is provided.

New DataIDs will be needed for those working at ground sites since filenames are site specific.

Others can check the current registered IDs to make sure that they still apply.



Coordination of Soundings



The Millersville group is coordinating all of the groups providing radiosonde/ozone soundings and issuing frequencies between 401 – 406 MHz to ensure no overlap.

The following groups have been contacted. If we have missed anyone, please let us know.

- 1) NATIVE/Platteville, Ozonesondes (Anne Thompson)
- 2) GSFC Lidar site near Fort Collins, Ozonesondes (Tom McGee)
- 3) Tethersonde with FRAPPE (Brian Johnson/Russ Schnell)
- 4) Tethersonde and rawinsonde at NREL, Golden (Rich Clark)



Tour of Ball Aerospace



Bill Good has graciously offered to arrange a tour of their facility in Boulder.

Depending on the schedule, the tour may include JWST aft optics bench, JPSS, the large membrane optics program called MOIRE, and Ball's Environmental testing facility.

Since we have an unpredictable schedule, this would be tentatively set for a no fly day during the week of 28 July. We would like a rough headcount and there is a requirement for information on Foreign Nationals to obtain clearance for the tour.

If you are interested, please contact Bill (wgood@ball.com), and include whether you are a US citizen or foreign national. For specific questions, you can call Bill at 303-939-5308.



New Outreach Opportunity



Rachelle Duvall is organizing an exhibit at the Denver Museum of Nature and Science on Sunday, July 20 from 9am to 5pm. They are having a free day (free admission to the public) where they anticipate anywhere from 8,000-12,000 people. She is organizing some tables with hands-on outreach activities and will be distributing information (e.g., the info cards) on FRAPPE and DISCOVER-AQ as well as the info on the open house.

Folks interested in volunteering should contact her at Duvall.Rachelle@epa.gov (Note: We cannot promise that this will not happen on a flight day)

Also let her know if you have any other handouts or ideas to contribute.

Rachelle has also secured space at the museum for us to place an interactive kiosk for the duration of the campaign. Current thoughts are to provide access to DISCOVER-AQ and FRAPPE videos, AirNOW forecasts, the flight tracker, the Know Your Earth Quiz, and other material.

If you have any suggestions, please pass them along to Amber Richards at Amber.L.Richards@nasa.gov



Collaboration Opportunity on Livestock Emissions



Jay Ham (CSU) is available to collaborate with those having specific interest in livestock emissions.

Projects include: CAFO (east of Greeley near Wiggins, CO) where he has a long open path measurement of ammonia with a long record. He often operates a Picarro NH₃ monitor at this site as well (and has a second lab instrument which could possibly be coordinated with one of the mobile labs during part of the study).

He has a second CAFO that he also works regularly with and also 2 different dairies (north of Ft. Collins, near Wellington, CO).

Jay has also volunteered to coordinate possible access to these sites for operators with mobile labs who wish to characterize methane, ammonia, etc. emissions from CAFOs and dairies. This is not a guarantee that the operators will wish to cooperate, but Jay thinks it seems likely that they will.

Jay also has offered to provide local livestock emission factors for ammonia that are typical to the area during the study. These are largely unpublished, though they represent something more specific to Colorado than the national factors used for example in CMU model.

Interested parties should notify Daniel Bon at CDPHE (daniel.bon@state.co.us)



Future Telecons



26 June

2 July – this is the Wednesday after the Project Check Flight

TBD for subsequent dates