

Webex Agenda, 15 November 2012



- 1) California Logistics and Preparations
- 2) Houston update and early preparations
- 3) Publication plans and any new analysis results team members would like to share



Ground Site Plans



Updates to this summary table since the last telecon are in red

Site Name	Spiral Y/N	Pandora Y/N	Aeronet Y/N	Blake Cans Y/N	Missed Approach?	other DISCOVER-AQ Augmentation
Fresno - Garland	Y	Y	Y	Y	Maybe	AMS/SMPS (Zhang), Drum Sampler/Nephelometer (VanCuren), Aerosol Optical Properties (Cappa), CRDS NO2 and PTR-MS (Kim), Cloudwater (Herckes)
Madera City	N	Y	Y	N	N	
Madera - Pump Yard	N	N	N	N	N	
Fresno - Skypark	N	N	N	N	N	
Clovis - N. Villa	N	N	Y	N	N	
Fresno - Drummond	N	N	Y	N	N	
Parlier	N	Y	Y	N	N	
Tranquility	Y	Y	Y	Y	N	
Huron	Y	Y	Y	Y	N	Millersville (approved after site visit)
Hanford	Y	Y	Y	Y	Y	
Corcoran	N	Y	Y	N	Y	
Visalia	N	N	N	N	N	
Visalia APT	N	Y	Y	N	Y	EPA (roadside proximity)
Porterville	Y	Y	Y	Y	Y	NATIVE/UMBC/EPA, NOAA, Drum Sampler (VanCuren)
Bakersfield – Cal.	N	N	N	N		
Shafter	N	Y	Y	N	N	
Oildale	N	N	N	N	N	P-3B overflight, Mobile lab (Leifer), Cloudwater (Herckes)
Bakersfield Airport	Y	Y	Y	Y	Maybe	EPA
Edison	N	N	N	N	N	
Arvin – Di Giorgio	N	Y	Y	N	N	P-3B overflight (still negotiating details)



Outstanding Logistics Issues



1. “Hold Harmless” Letters for after hours access to ARB sites:
Received and Forwarded: UCSB (Oildale), UC-Davis (Fresno-Garland), NASA-Aeronet, UMBC-Pandora (Shafter, Fresno-Garland)
2. Internet Access at monitoring sites:
Fresno-Garland: We will have two mobile hotspots (5 connections each).
SJV APCD sites – switches to be used to expand access (Brent is installing them with the Aeronet instruments, Pandoras to follow in December)
Other sites: Mobile hotspots will be needed for Porterville, Huron, Arvin, Visalia Airport, and Shafter (others?)
3. Porterville power and access:
Mary is working with Bob Ruffa to schedule power connections and requirements. Don't forget to include power needs for UMBC (Hoff) and UC-Davis (VanCuren)
Landowner has granted access and will prep the site for NOAA tower.
Penn State will be located in parking lot adjacent to APCD trailer.
4. Visalia Airport (EPA site)
Permission has been granted, details are now being negotiated directly between EPA and airport personnel. Mary will assist on billing for power connection. Waiting for estimate from EPA.



Outstanding Logistics Issues (cont.)



5. Relocation of Millersville to Huron

Rich Clark visited on November 7 and was very complimentary of City personnel. Mary will assist with power requirements, and open space behind city offices will serve as an excellent location. Great outreach opportunity with local schools.

6. Pandora and Aeronet installations

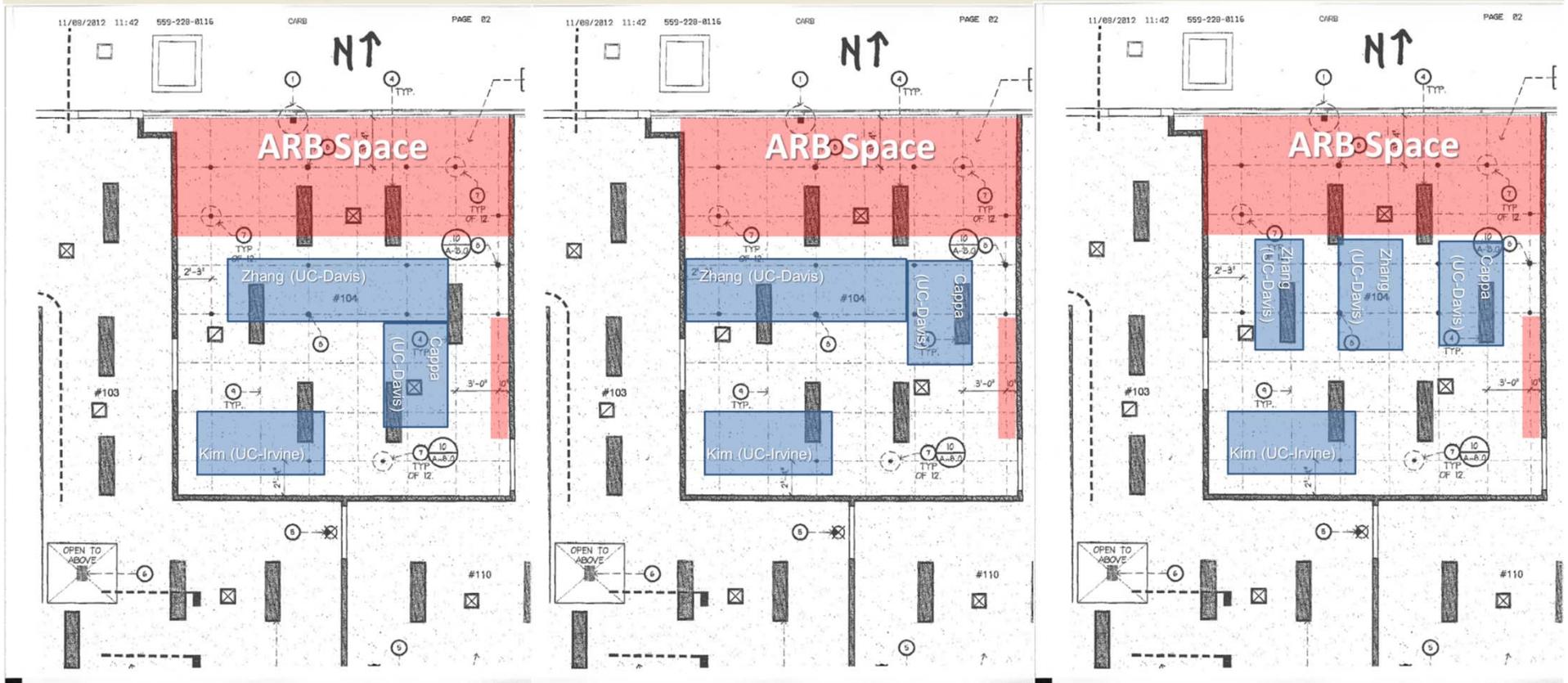
Shipping of Aeronet instruments to APCD in Fresno and installations are underway. Pandoras to follow in December. Certain emplacements will have to wait until January (e.g., Arvin, Huron, Porterville, and Visalia Airport).

7. Mobile Lab at Oildale

Permission for UCSB mobile lab and ASU cloudwater samplers has been granted.

8. Arvin-Digiorgio School

Last contact was for details on weight and duration of project. Need status update on this location, but feedback has been positive.



These are possible options for placement of racks in the lab. Roof is less urgent, but does need attention.



Fresno Garland (cont.)



Outstanding questions:

- 1) Can shipment be accepted for a cylinder of ultrapure nitrogen on behalf of Qi Zhang? If not, she will have it shipped to UC-Davis and transport it to the site herself.
- 2) Is there access to compressed air? If not, Chris Cappa will bring his own small compressor for purging his instrument.
- 3) Is it possible for the investigators to take advantage of the counter space in the kitchen area? Qi can either position the nitrogen cylinder in there or bring a small table for the lab.
- 4) When we visited, there were several large tables in the lab. Will those be removed, or do we need to worry about working around them?
- 5) We still have three investigations to add to the rooftop.
 - Jay Herman should be coming in December to position the Pandora spectrometer (exact date TBD)
 - Tony Van Curen will bring his Drum Sampler and nephelometer in January
 - Pierre Herckes will bring his cloudwater sampler, which is on a mast, in January (125 inches tall on a 40x34 inch base).



Outstanding Logistics Issues (cont.)



Badging:

- All inquiries should go through Luci Crittenden (Lucille.H.Crittenden@nasa.gov)
- If going to both Wallops and Palmdale, one badge is being obtained through Wallops that will be recognized at both centers.
- If only going to Dryden, the badge will be obtained through Dryden.
- **Caution:** If your trip to Wallops is contingent, Luci can get you independently badged with both WFF and DFRC. Please let her know if you fall into this category.
- If you will be working in the SJV, but might wish to visit us in Palmdale (or maybe fly on the plane), please submit your name for a badge.



Outstanding Logistics Issues (cont.)



Travel:

- Questions about travel eligibility should be referred to Mary Kleb (Mary.M.Kleb@nasa.gov)
- All NASA Civil Servants will charge travel to a common WBS 153351.05.04.01.07.03
- All non-NASA travelers will be reimbursed through the SSAI contract and will make arrangements through Diane Zeimet (Diane.L.Zeimet@nasa.gov)
- Travelers are no longer required to stay at the Residence Inn. We have also learned that Palmdale does NOT recognize tax exemption. Travelers are free to stay at any hotel within per diem. If you can't find per diem rate, Residence Inn has promised to provide that to as many as needed.
- For travelers to Wallops and locations in the SJV, you are free to choose your own accommodations (within per diem). Diane Zeimet is available to assist if needed.



Outstanding Logistics Issues (cont.)



Shipping:

- Investigators are responsible for shipments between their home institution and the integration sites (Wallops and Langley).
- The project will be responsible for shipments from integration sites to the deployment site in Palmdale. Requirements need to be provided to Luci Crittenden (be specific about what is being shipped both to and from Palmdale).
- **Luci is working with Freddie Bynum to combine WFF and LaRC shipping. If no Hazmat at LaRC, it would be best to send truck from LaRC first (over Bay Bridge) and pickup rest of equipment at WFF (shipment takes 5 days)**
- **Luci will be sending out an itemized form to be completed for shipping.**
- Other shipments to Palmdale should be addressed to:

NASA Dryden Aircraft Operations Facility (DAOF)

ATTN: Your Name/Wendy/DISCOVER-AQ

2825 East Avenue P

Palmdale, CA 93550

POC: Wendy Given, 661-276-3182, 661-810-4351 (cell),

Email: Wendy.Given-1@nasa.gov

Special Instructions: call Wendy before delivery to ensure that she is present to receive the shipment



P-3B Pre-Deployment Preparation



NASA Airborne Science Program

Home > Platforms > Calendar

Displayed Aircraft:
 ▼

[Year](#) [Month](#) [Week](#) [Day](#)

[« Prev](#) [Next »](#)

January 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2 DISCOVER-AQ Upload 2013-01-02 -	3 DISCOVER-AQ Final Installation and Inspection Review	4 DISCOVER-AQ Flight Readiness Review	5
6	7 DISCOVER-AQ Approval to Proceed DISCOVER-AQ Engineering Check Flight	8 DISCOVER-AQ Project Check Flight	9 DISCOVER-AQ Mission Readiness Review	10	11 DISCOVER-AQ A/C Pack	12
13	14	15	16	17	18	19
DISCOVER-AQ California 2013-01-14 - 2013-02-15						
20	21	22	23	24	25	26
DISCOVER-AQ California 2013-01-14 - 2013-02-15						
27	28	29	30	31	1	2
DISCOVER-AQ California 2013-01-14 - 2013-02-15						

Updated since last telecon, current schedule is on the Airborne Science website
 (http://airbornescience.nasa.gov/aircraft_detailed_cal/2013-01?aircraft_id=12)



Outstanding Logistics Issues (cont.)



Consumables:

- Need to know all requirements for cryogenics or other consumables at Wallops and Palmdale (e.g., LN2 for Diskin, dry ice for Weinheimer)
- Rick Shetter will be handling LN2 and dry ice requirements (contacts for resupply are forthcoming)

Operations at Palmdale:

- Questionnaires have been distributed to PIs by Chris Miller, please respond ASAP if you have not.
- Need to establish conference phone for ops center and daily webex.
- Other items from Chris?



Daily Schedules



Daily Activities

1100 (Pacific) Daily Flight Planning Meeting – conducted via Webex to enable participation by team members and collaborators at all remote sites

1600 (Pacific) Daily Fly/No-Fly decision for subsequent day

1600 (Pacific) Daily (or after landing) – Polling of team for daily status report. Negative reports will trigger a reevaluation of the Fly/No-Fly decision.

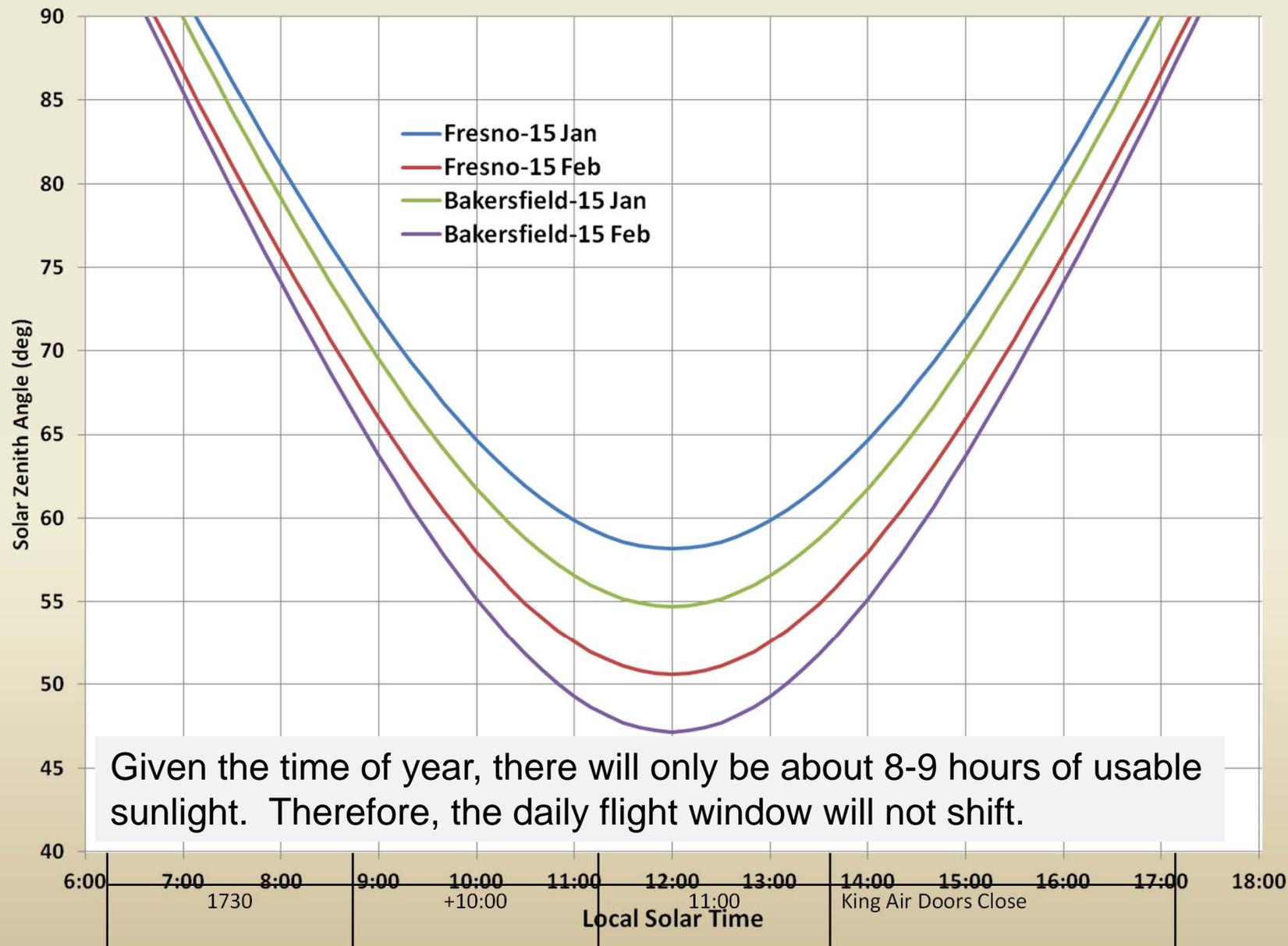
No Fly Day Schedule

Aircraft open for up to 8 hours of access (nominally 0800 – 1600 Pacific).

1600 Team meeting – conducted via Webex to enable participation by team members and collaborators at all remote sites



Daily Schedules (cont.)





Daily Schedules (cont.)



On flight days, takeoff will be 0800 for the P-3B and 0730 for the King Air. (ER-2 flights for PODEX will likely take off at 0830)

The schedules below suggest that there should be no problem conducting back-to-back flights with the same takeoff time.

Delayed takeoffs should not result in longer days since extending the flight would only push us into darkness.

Local Time	Time from Takeoff	Cumulative Time	Event
P-3B			
0500	-3:00	0:00	P-3B Doors Open
0730	-0:30	2:30	P-3B Doors Close
0800	0:00	3:00	P-3B Takeoff
1600	+8:00	11:00	P-3B Landing
1700	+9:00	12:00	P-3B Doors Close
King Air			
0630	-1:00	0:00	King Air Doors Open
0715	-0:15	0:45	King Air Doors Close
0730	0:00	1:00	King Air Takeoff (Sortie 1)
1130	+4:00	5:00	King Air landing (Sortie 1)



B200 Integration and Deployment



Discover - AQ California 2013

B200

ID	Task Name	Duration	Start	Finish	2013			
					1st Quarter			
					Dec	Jan	Feb	Mar
1	Option 1	55 d	12/10/12	2/22/13				
2	Discover - AQ California	55 d	12/10/12	2/22/13				
3	Installation / Integration	5 d	12/10/12	12/14/12				
4	Check-Out Flights	6 d	1/2/13	1/9/13				
5	Pack-Out	2 d	1/10/13	1/11/13				
6	Depart LaRC	0 d	1/14/13	1/14/13				
7	Discover - AQ Ca. Mission	30 d	1/14/13	2/22/13				
8								
9	Option 2	38 d	1/2/13	2/22/13				
10	Discover - AQ California	38 d	1/2/13	2/22/13				
11	Installation / Integration	3 d	1/2/13	1/4/13				
12	Check-Out Flights	3 d	1/7/13	1/9/13				
13	Pack-Out	2 d	1/10/13	1/11/13				
14	Depart LaRC	0 d	1/13/13	1/13/13				
15	Discover - AQ Ca. Mission	30 d	1/14/13	2/22/13				

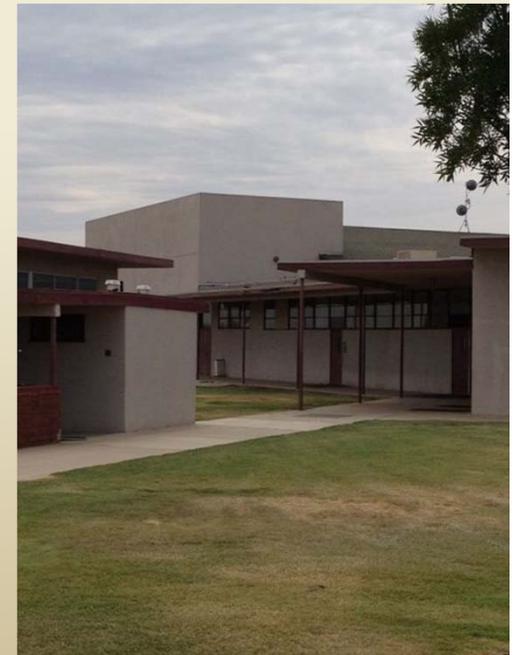


California EPO Opportunities



GLOBE (Global Learning and Observation to Benefit the Environment) Train the Trainer Planning in Progress-This event will teach and train a small group of GLOBE partners from CA about DISCOVER-AQ and how to make atmospheric measurements using GLOBE protocols. The GLOBE partners will then be able to go back to CA and train teachers how to make those same measurements in their classrooms concurrent with the DISCOVER-AQ campaign in January. The train-the-trainer session is underway today and tomorrow.

Visits to CA Schools during the Campaign-In addition, we're also planning site visits to 8 schools in CA that are directly in the flight path. Anyone interested in helping with those site visits to the schools to share about DISCOVER-AQ would be greatly appreciated!



Still looking for volunteers to help with outreach!



Publications and Meetings



Deadline Extended: 31 December, 2012

Special issue of the Journal of Atmospheric Chemistry

Process Impacting NEar-Surface Atmospheric Pollutants (PINESAP), DISCOVER-AQ

Recent and Upcoming opportunities:

- **Fall AGU, 3-7 December, San Francisco (25 abstracts across 10 sessions)**
- AMS, 6-10 January, Austin, TX



PODEX Collaborative Flights



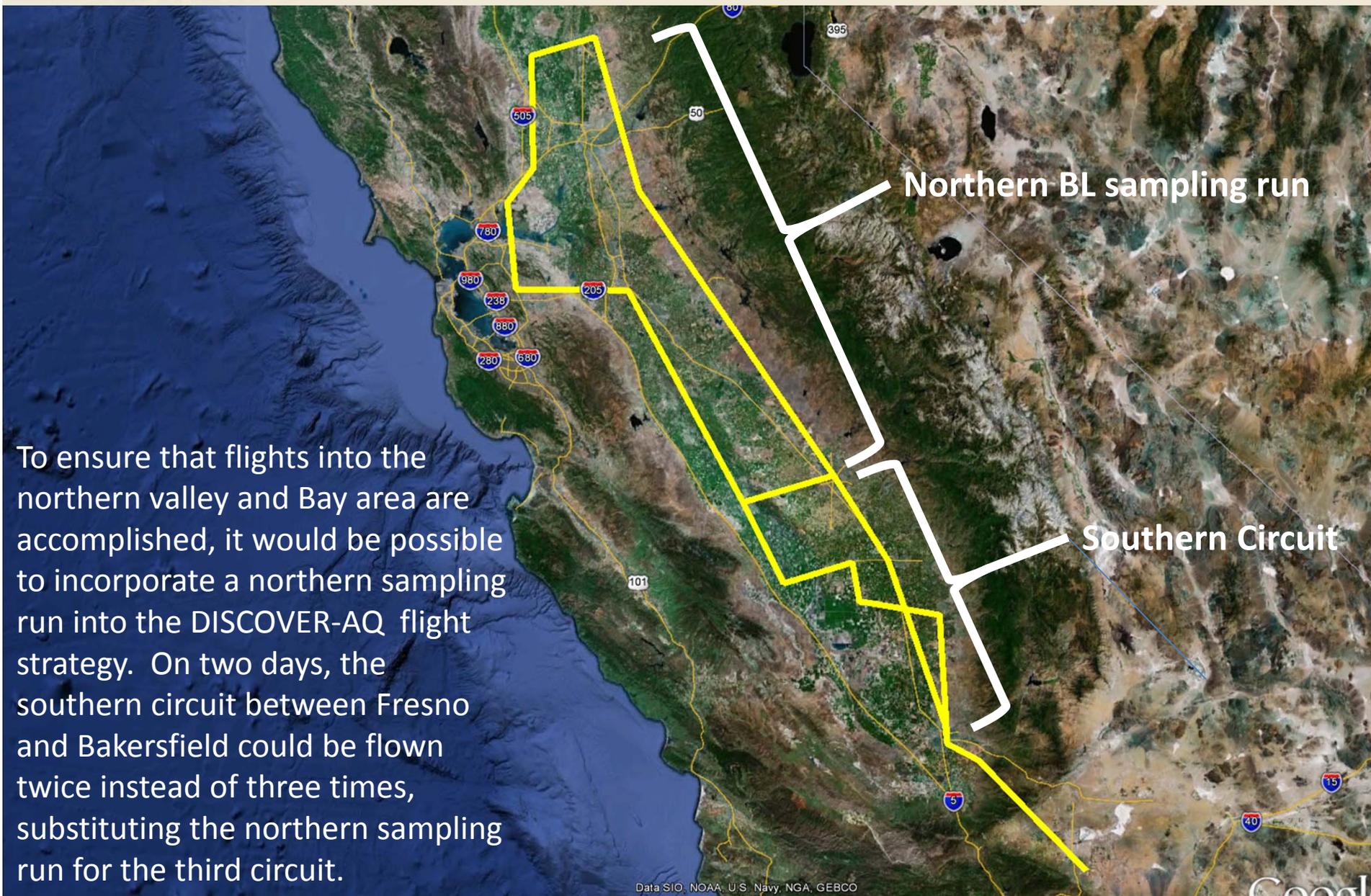
***PODEX = Polarimeter Definition Experiment
(preparation study in support of ACE)***

***ER-2 Flights in coordination with DISCOVER-AQ to take advantage of
HSRL lidar and in situ aerosol measurements***

***Up to 3 additional flights in support of PODEX. These flights are
lower priority and will not be allowed to interfere with the 10 core
flights over the southern SJV. These flights will take the aircraft into
other areas and conditions (e.g., marine stratus)***

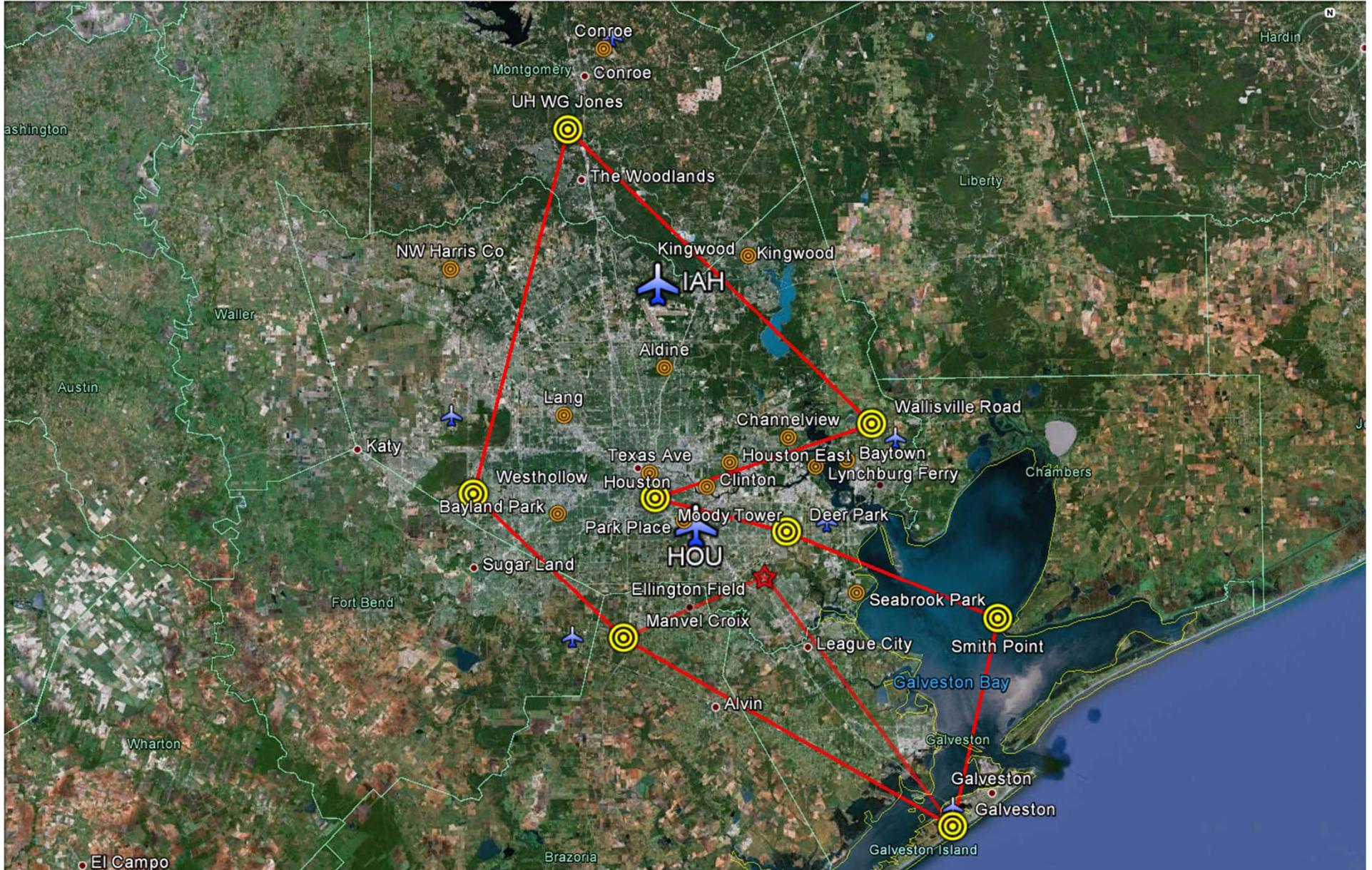
ER-2 and PODEX team will be co-located with us in Palmdale

Primary liaison: Rich Ferrare





Feedback on Houston flight plan





Houston Site Survey



Luci is still working to get the appropriate contact for Ellington Field

Dates for the site survey need to be determined (early March?)

Overlap with SEAC4RS is now a certainty. Investigators are encouraged to let us know how this could impact DISCOVER-AQ.

For instance...

Are we getting your old or new instrument? (I prefer old)

Do you need a second inlet? (Armin, I already know about you)

Where will your spares be located? (I prefer Houston)

Enough said...