



Discussion will be devoted to current status in preparation for California and any outstanding issues to be resolved.

If you are absent, we assume that you have everything in order for your investigation. Otherwise, please contact Mary Kleb if you need help with anything.

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
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)

1. “Hold Harmless” Letters for after hours access to ARB sites:

Accepted: UCSB (Oildale), NASA-Aeronet, UMBC-Pandora (Shafter, Fresno-Garland)

Revision Required: UC-Davis (Fresno-Garland)

Need Letter: UC-Irvine (Fresno-Garland)

Next Step: Need to establish who is getting keys/codes and make sure that rules of access are clear. Mary is compiling the list of individuals for ARB.

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.

3. Porterville power and access:

Estimate for electrical work has been received and is being processed by Mary Kleb.

Landowner has granted access and will prep the site for NOAA tower.

Penn State will be located in parking lot adjacent to APCD trailer.

Kathy Lantz has asked about showing up on Saturday, 5 January. This should not be a problem, but we will notify the landowner.

4. Visalia Airport (EPA site)

Initial estimate for electrical work has been received. Need to find out if modifications need to be removed or remain after we leave. Mary and Melinda are working these details.

5. Relocation of Millersville to Huron

Rich Clark visited on November 7 and was very complimentary of City personnel.

Initial estimate for electrical work has been received, but there are several questions that need to be resolved.

Great outreach opportunity with local schools.

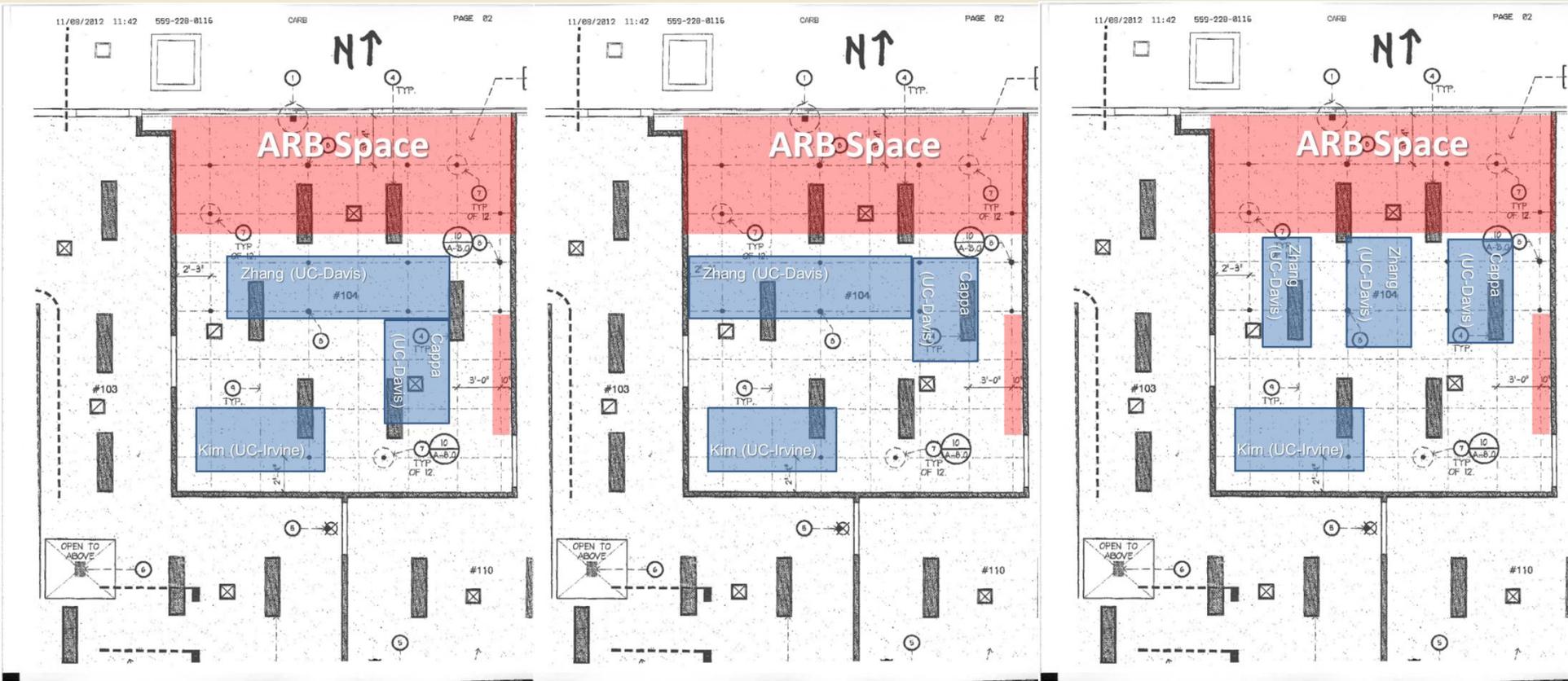
6. Pandora and Aeronet installations

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 - Still waiting for final permission.



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

Aeronet already in place, and Pandora coming in early December. Need to also consider placement of cloudwater sampler when Pandora is installed.

Outstanding questions:

- 1) Can shipment be accepted for a cylinder of ultrapure nitrogen on behalf of Qi Zhang? (Yes)
- 2) Is there access to compressed air? (No)
- 3) Is it possible for the investigators to take advantage of the counter space in the kitchen area? (Yes)
- 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? (They will be moved if necessary)
- 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.
- **Some new badge requests have come in since the last telecon. Luci will continue to process new requests, but recognize that later requests may not be ready by the start of the campaign. This should not be a problem for visitors.**



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 has distributed the necessary forms for shipping. Questions?**
- 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

NASA Airborne Science Program

Home > Platforms > Calendar

Displayed Aircraft: P-3 Orion

Year Month Week Day 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 DISCOVER-AQ Approval to Proceed DISCOVER-AQ Engineering Check Flight	7 DISCOVER-AQ Project Check Flight	8	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						

Can investigators show up as early as 2 January and expect access to the plane?

We still need to move the shipment day to 10 January to ensure that equipment arrives on 15 January. (King Air shipment will also be one day earlier, 9 January)

P-3B Annual Maintenance will overlap with integration.

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

Operations at Palmdale:

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

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 was completed and another presentation at AGU will occur next week.

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!





PODEX Collaborative Flights



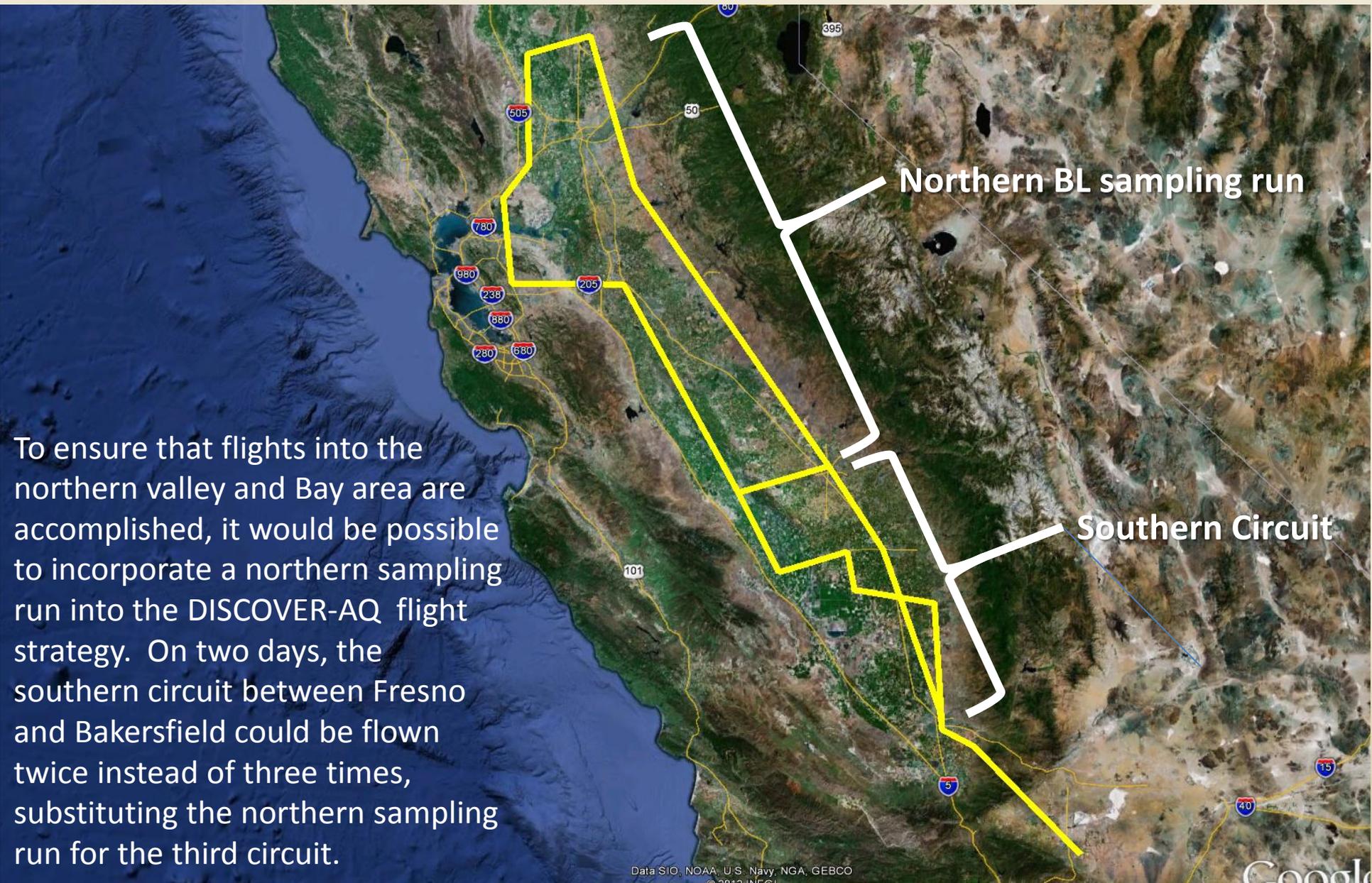
***PODEX = Polarimeter Definition Experiment
(preparation study in support of ACE)***

***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



To ensure that flights into the northern valley and Bay area are accomplished, it would be possible to incorporate a northern sampling run into the DISCOVER-AQ flight strategy. On two days, the southern circuit between Fresno and Bakersfield could be flown twice instead of three times, substituting the northern sampling run for the third circuit.



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

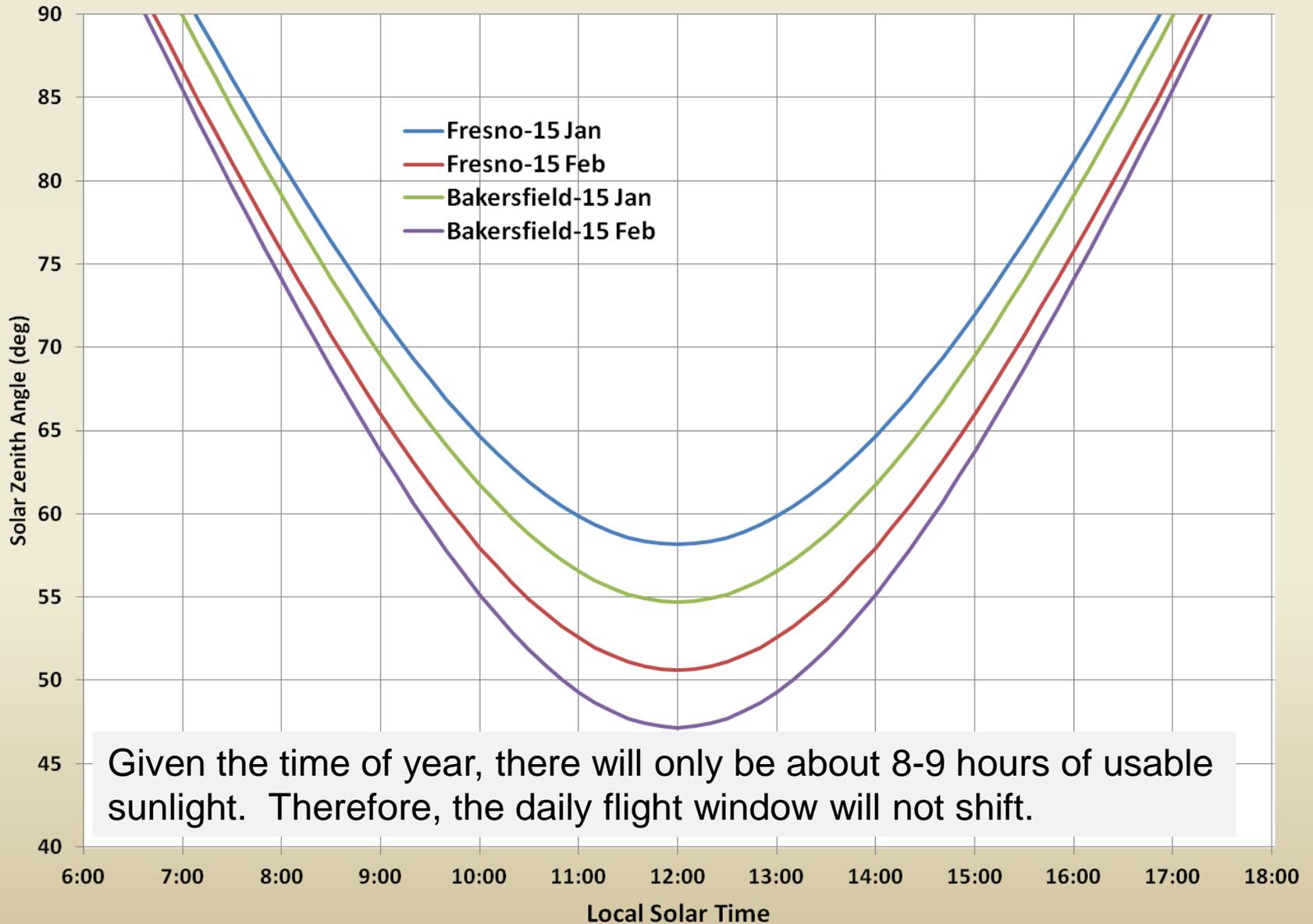
1600 (Pacific) Daily Fly/No-Fly decision for subsequent day

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



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)
1230	+5:00	6:00	King Air Takeoff (Sortie 2)
1630	+9:00	10:00	King Air Landing (Sortie 2)
1730	+10:00	11:00	King Air Doors Close