

TO: Airborne Science Program
NASA Headquarters
Mail Suite 3F71
Attn: Bruce Tagg
bruce.a.tagg@nasa.gov

FAX: (202) 358-2770
Voice: (202) 358-2890

Flight Report

Aircraft :	NASA 528 (LaRC UC-12)
Operating Site(s) From / To :	KLFI (Langley) -KLFI
Flight Date :	7/01/2011
Flight Number :	HSRL R269 A & B (DISCOVER AQ 1A &1B)
Take Off Time :	A: 1340 Z B: 1848 Z
Landing Time :	A: 1758 Z B: 2212 Z
Flight Time :	A: 4.3 hours B: 3.4 hours 7.7 hours Total
Flt Request # / PI:	11-070 LaRC
Purpose of Flight :	Data <input checked="" type="checkbox"/> Ferry <input type="checkbox"/> Functional Check <input type="checkbox"/> Other <input type="checkbox"/>
Aircraft Status:	Up <input checked="" type="checkbox"/> Down <input type="checkbox"/>
Sensor Payload :	DISCOVER-AQ (HSRL & ACAM)
Comments :	Discover AQ Research Flights (1A & 1B) with HSRL & ACAM. FL260, Weather clear, ATC coordination good, Early RTB on second flight due to P-3 RTB.

SUBMITTED BY: Michael Wusk DATE: 7/01/11

- 13:47 UTC confirmed new Canon camera system is operational. Will wait to activate it to save memory.
- 13:49 UTC Both doors are open. ACAM is on.
- 13:52 UTC Right on cue, ACAM is receiving packets.
- 14:30 UTC Canon camera is operational. I tried to adjust the focus and the pictures look decent. May need a bit more tweaking.
- 15:05 UTC System is operating great. IR 95% parallel still noisy, but air is really clear anyway.
15:34 UTC Shut off 3 cameras to pass over Aberdeen.
- 15:39 UTC 3 cameras back on.
- 16:17:56 UTC closed transmit shutter for airplane passing beneath us
- 16:18:12 UTC transmit shutter is open again
- 16:36 UTC 3 cameras off for passing over Aberdeen.
- 16:40 UTC 3 cameras back on.
- 17:10 UTC Changed Canon camera intervalometer to 12 second intervals from 9 seconds previously. With this camera's FOV, this cadence images every point about 3 times as we fly over it. That should be sufficient for our purposes and for saving memory.
- 17:15 UTC 3 cameras off for passing over Aberdeen.
- 17:22 UTC 3 cameras back on. Note that after turning Canon camera back on the shooting cadence was not responding to adjustments and was running at about 25 seconds between images.
- 17:40 UTC Starting our descent.

Flight Name: R-269b

Date: 7/1/2011

Personnel: Yasky, Wusk, Rogers

Take Off Time:

- 18:56z ACAM on at 13kft.
- 19:00z Mike Wusk got the forward camera saturation problem fixed. Data look good.
- 19:00z the canon camera is still doing 25s intervals.
- 19:19z shuttered laser due to aircraft below.
- 20:21z – got diverted a bit for traffic below us by ATC.
- 20:29z – shuttered laser for plane below for about 20 seconds.
- 20:30z cameras not saving data (APG)
- 20:37z cameras taking data again.
- 21:10z – shuttered laser briefly for plane below.
- 21:30z cameras not saving data (APG)
- 21:37z cameras saving data (APG)
- 21:45z- got the RTB call from Rich, all is good for the day. Cals.