

OIB - HU-25C Guardian #524 09/02/16 Science Report

Aircraft: [HU-25A Guardian - LaRC #524](#) (See full schedule)

Date: Friday, September 2, 2016

Mission: OIB

Mission Location: Kangerlussuaq, Greenland

Mission Summary:

Mission: Falcon Southeast Coastal A (priority: high)

This mission is one of two (along with Southeast Coastal B) which are designed primarily to re-fly the "Southeast Coastal" mission from Spring 2016. These two flights work together in an interlaced (working upward from the coast) manner. This particular flight concentrates on the first and third lowermost of the coast-parallel lines. It transits to the east coast along a line from a different mission also flown in Spring 2016, in order to expand post-melt coverage farther south.

Central Greenland cleared some during the course of this morning as weather models indicated it would, but it did not clear enough to permit us to fly a mission there. However southeastern Greenland remained clear so we selected this flight. We encountered some stratus and altostratus clouds on both of the east-west grid lines connecting Kangerlussuaq with the east coast, but for the most part these clouds were quite thin and ATM was able to range through them. The lines on the east coast were completely clear, except for the northernmost 50 km of the inboard line which had a few thin clouds below us. Overall we estimate successful data collection along at least 95% of the flight.

All instruments performed well.

We conducted a ramp pass over Kangerlussuaq at 18,000' prior to landing.

Data volumes:

CAMBOT: 11 Gb images

Narrow Swath ATM: 23 Gb

FLIR: 8.5 Gb

total data collection time: 3.3 hrs

Images:

Map of Southeast Coastal A



[Read more](#)

Ikertivaq Glacier



[Read more](#)

Storebjorn Glacier



[Read more](#)

Submitted by: John Sonntag on 09/04/16

Related Flight Report:

HU-25A Guardian #524 09/02/16

Flight Number: OIB 2016 on HU-25 #22

Payload Configuration: ATM

Nav Data Collected: No

Total Flight Time: 3.8 hours

Submitted by: Richard Yasky on 09/04/16

Flight Segments:

From:	BGSF	To:	BGSF
Start:	09/02/16 15:02 Z	Finish:	09/02/16 18:51 Z
Flight Time:	3.8 hours		
Log Number:	16F003	PI:	Nathan Kurtz
Funding Source:	Thomas Wagner - NASA - SMD - ESD Cryospheric Science		
Purpose of Flight:	Science		
Comments:	Science Flight over Southeast Coastal A route where mostly clear skies prevailed except on the final west to east transect where a descent to FL220 was required to stay below an increasing broken to overcast layer at 240. Attempted a ramp pass at FL180 over scattered to broken skies but later determined that a cloud impacted the data collection over the ramp. Six good flights completed out of sixteen projected to date with next flights scheduled for 9/3.		

Flight Hour Summary:

	16F003
Flight Hours Approved in SOFRS	121.25
Total Used	126.9
Total Remaining	-5.65

16F003 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
06/29/16	OIB 2016 on HU25A ICF	Science	2	2	119.25	
07/11/16	OIB 2016 on HU25A #1	Ferry	2.6	4.6	116.65	
07/11/16	OIB 2016 on HU25A #2	Ferry	2.5	7.1	114.15	
07/11/16 - 07/12/16	OIB 2016 on HU25A #3	Ferry	2.2	9.3	111.95	
07/12/16 - 07/13/16	OIB 2016 on HU25A #4	Ferry	2.6	11.9	109.35	
07/13/16	OIB 2016 on HU25A #5	Science	3.4	15.3	105.95	
07/14/16	OIB 2016 on HU25A #6	Science	3.5	18.8	102.45	
07/15/16	OIB 2016 on HU25A #7	Science	3.7	22.5	98.75	

07/19/16 - 07/20/16	OIB 2016 on HU25A #8	Science	3.6	26.1	95.15
07/20/16	OIB 2016 on HU25A #9	Science	3.4	29.5	91.75
07/21/16	OIB 2016 on HU25A #10	Science	3.6	33.1	88.15
07/22/16	OIB 2016 on HU25A #11	Ferry	3.9	37	84.25
07/22/16	OIB 2016 on HU25A #12	Ferry	3.2	40.2	81.05
07/22/16	OIB 2016 on HU25A #13	Ferry	2.1	42.3	78.95
08/23/16	OIB 2016 on HU-25 #14	Science	2.3	44.6	76.65
08/25/16	OIB 2016 on HU-25 #15	Ferry	3.2	47.8	73.45
08/25/16	OIB 2016 on HU-25 #16	Ferry	2.2	50	71.25
08/27/16	OIB 2016 on HU-25 #17	Science	3.7	53.7	67.55
08/29/16	OIB 2016 on HU-25 #18	Science	3.8	57.5	63.75
08/29/16	OIB 2016 on HU-25 #19	Science	3.5	61	60.25
09/01/16	OIB 2016 on HU-25 #20	Science	3.4	64.4	56.85
09/02/16	OIB 2016 on HU-25 #21	Science	3.8	68.2	53.05
09/02/16	OIB 2016 on HU-25 #22	Science	3.8	72	49.25
09/05/16	OIB 2016 on HU-25 #23	Science	0.6	72.6	48.65
09/06/16	OIB 2016 on HU-25 #24	Science	3.5	76.1	45.15
09/09/16	OIB 2016 on HU-25 #25	Science	3.5	79.6	41.65
09/09/16	OIB 2016 on HU-25 #26	Science	3.5	83.1	38.15
09/10/16	OIB 2016 on HU-25 #27	Science	3	86.1	35.15
09/11/16	OIB 2016 on HU-25 #28	Science	3.9	90	31.25
09/11/16	OIB 2016 on HU-25 #29	Science	3.7	93.7	27.55
09/12/16	OIB 2016 on HU-25 #30	Science	3.3	97	24.25
09/12/16	OIB 2016 on HU-25 #31	Science	2.7	99.7	21.55
09/13/16	OIB 2016 on HU-25 #32	Science	4	103.7	17.55
09/13/16	OIB 2016 on HU-25 #33	Science	2.9	106.6	14.65
09/15/16	OIB 2016 on HU-25 #34	Science	3.7	110.3	10.95
09/16/16	OIB 2016 on HU-25 #35	Ferry	2.4	112.7	8.55

09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	114.4	6.85
09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	116.1	5.15
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.8	118.9	2.35
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.9	121.8	-0.55
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.5	124.3	-3.05
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.6	126.9	-5.65

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

Page Last Updated: April 22, 2017

Page Editor: Brad Bulger

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Source URL: https://airbornescience.nasa.gov/science_reports/OIB_-_HU-25C_Guardian_524_09_02_16_Science_Report_0#comment-0