

DC-8 - AFRC 11/04/18

Aircraft:

[DC-8 - AFRC](#) ([See full schedule](#))

Flight Number:

1306

Payload Configuration:

OIB 2018 Configuration - ATM-Cambot, ATM-GPS/ATM-NAV, ATM-FLIR, ATM-T6, ATM-T7, Gravimeter, MCoRDS, UWB Snow RADAR, and piggybacks ARMAS & Tinman

Nav Data Collected:

Yes

Total Flight Time:

10.8 hours

Submitted by:

Timothy Moes on 11/04/18

Flight Segments:

From:	SAWH- Ushuaia	To:	SAWH- Ushuaia
Start:	11/04/18 13:01 Z	Finish:	11/04/18 23:47 Z
Flight Time:	10.8 hours		
Log Number:	198006	PI:	Joseph MacGregor
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	A successful science flight completing the Foundation Academy IS2 A high-priority mission. All science instruments successfully obtained data and the aircraft returned in good condition with no writeups.		

Flight Hour Summary:

	198006
Flight Hours Approved in SOFRS	345.8
Total Used	292.8
Total Remaining	53

198006 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
10/02/18	1287	Check	2.6	2.6	343.2	0
10/08/18	1289	Transit	10.1	12.7	333.1	0
10/08/18	1290	Transit	2.8	15.5	330.3	0
10/10/18 - 10/11/18	1291	Science	11.5	27	318.8	0
10/11/18 - 10/12/18	1292	Science	11.6	38.6	307.2	0
10/12/18 - 10/13/18	1293	Science	11.3	49.9	295.9	0
10/13/18 - 10/14/18	1294	Science	10.7	60.6	285.2	0
10/15/18 - 10/16/18	1295	Science	11.1	71.7	274.1	0
10/16/18 - 10/17/18	1296	Science	10.1	81.8	264	0
10/18/18 - 10/19/18	1297	Science	11.1	92.9	252.9	0
10/19/18 - 10/20/18	1298	Science	10.8	103.7	242.1	0
10/20/18 - 10/21/18	1299	Science	10.7	114.4	231.4	0
10/22/18 - 10/23/18	1300	Science	11.1	125.5	220.3	0

10/27/18 - 10/28/18	1301	Science	11.3	136.8	209	0
10/30/18 - 10/31/18	1302	Science	11.7	148.5	197.3	0
10/31/18 - 11/01/18	1303	Science	11.3	159.8	186	0
11/01/18	1304	Transit	0.6	160.4	185.4	0
11/03/18 - 11/04/18	1305	Science	11	171.4	174.4	0
11/04/18	1306	Science	10.8	182.2	163.6	0
11/05/18	1307	Science	10.4	192.6	153.2	0
11/07/18	1308	Science	10.4	203	142.8	0
11/09/18 - 11/10/18	1309	Science	11.1	214.1	131.7	0
11/10/18 - 11/11/18	1310	Science	10.6	224.7	121.1	0
11/11/18	1311	Science	10.8	235.5	110.3	0
11/12/18	1312	Science	10.7	246.2	99.6	0
11/14/18 - 11/15/18	1313	Science	11.2	257.4	88.4	0
11/15/18	1314	Science	10.3	267.7	78.1	0
11/16/18 - 11/17/18	1315	Science	10.1	277.8	68	0
11/19/18	1316	Transit	3.4	281.2	64.6	0
11/21/18	1317	Transit	11.6	292.8	53	0

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.

Related Science Report:

OIB - DC-8 - AFRC 11/04/18 Science Report

Mission:

OIB

Mission Summary:

Mission: Foundation-Academy IS-2 A
Priority: High

The forecast last night once again gave IceBridge hope of completing a baseline mission over the Amundsen Sea Embayment, but deteriorating conditions over Pine Island and Thwaites took us east to Foundation-Academy IS-2 A. The team was greeted in the upper Foundation Ice Stream by monstrous crevasses, drifting snow, fields of blue ice, and lots of little peaks perforating the surface. The conditions were absolutely perfect for IceBridge, and the variety of surface types and slopes should make for excellent validation data for ICESat-2.

Due to the long survey latency, all flights were flown directly along the ground track (not offset) at 1500?. Underlined tracks below indicate that ICESat-2 surveyed prior to IceBridge. All instruments reported excellent data quality, however, snow radar incurred minor issues on the final track where IceBridge's survey altitude drifted too close the 1800? Nyquist zone.

ICESat-2 ground track and survey latency:

0126, t = 62 days

0141, t = 63 days

0766, t = 13 days

1315, t = 49 days

Media: Romain Potoki and Florent Muller of France2 joined us again today, conducting interviews and collecting footage for a feature-length documentary.

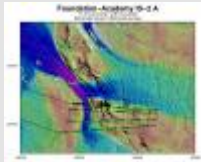
Outlook: At the risk of sounding like a broken record, the forecast remains hopeful for two of the Pine Island and Thwaites baseline missions tomorrow. We are additionally watching the Bellingshausen Sea closely as cloudy conditions have largely cleared up for the first time this campaign. A required down day will be used either tomorrow or Tuesday based on weather forecasts.

List of attached figures:

1. Map of today's science mission. (John Sonntag/NASA)
2. The ATM T6 laser maps massive crevasses over the upper Foundation Ice Stream (Matt Linkswiler/NASA)
3. Frozen lakes sit within a moraine left behind by the ice lobe in the foreground in the Pensacola Mountains (Brooke Medley/NASA)
4. Smaller ice flows coalesce as they enter the Foundation Ice Stream (Brooke Medley/NASA)
5. Ice crevasses as it is pulled off the plateau into the main trunk of the Foundation Ice Stream in the background (Brooke Medley/NASA)

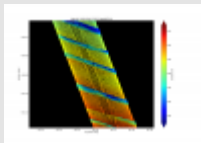
Images:

Figure 1



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Figure 2



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Figure 3



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Figure 4



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Figure 5



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Submitted by:

Brooke Medley on 11/11/18

Page Last Updated: April 22, 2017

Page Editor: Brad Bulger

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Source URL: https://espo.nasa.gov/flight_reports/DC-8_-_AFRC_11_04_18#comment-0