

OIB - P-3 Orion 11/24/17 Science Report

Aircraft: [P-3 Orion - WFF \(See full schedule\)](#)

Date: Friday, November 24, 2017

Mission: OIB

Mission Location: Ushuaia, Argentina

Mission Summary:

Mission: Ferrigno-Alison 01 (priority: baseline)

This flight is designed to collect dh/dt measurements on established OIB flight lines along the Eights Coast near the Ferrigno and Alison ice streams.

The Bellingshausen sector has experienced very poor weather during most of our campaign, but our weather models showed the clouds there clearing somewhat today. This morning's satellite imagery showed the sea ice mission lines in the Bellingshausen were still mostly covered in thin and relatively low clouds. They also showed the entire coastal area between Alexander and Thurston Islands covered in a mid-level stratus deck, with the altitude of the clouds discernible by their relatively cold temperature in infrared satellite imagery. We could not see through this stratus to assess the near-surface conditions. However, all three weather models we consulted this morning (GFS, ECMWF and WRF) showed the presence of moderately strong katabatic surface winds along this coast. Katabatics can be depended upon to clear a coastal area because they had to blow a lengthy distance downhill in order to reach the coast, and thus are relatively warm and dry. By the time we reached the survey area, the surface was indeed very clear, and the mid-level stratus had departed from about 2/3 of the area. This gave us perfect conditions, and we achieved successful data collection across 100% of the science lines.

Science instruments performed well, with the exception of the snow radar. The incoherent noise issue that cropped up late during the previous flight corrupted the data from that instrument throughout today's survey. The CReSIS team believes that a component failure or loose connection is at fault and are currently working to isolate the problem.

Data volumes

ATM T6: 39 Gb

ATM T7: 49 Gb

FLIR: 5.0 Gb

Cambot: 12 Gb

KT19: 12 Mb

DMS: 18 Gb

MCoRDS: 368 Gb

Gravity/Magnetometer: 3 Gb

Accumulation radar: 403 Gb

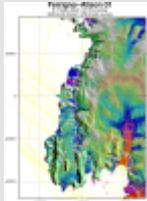
Snow/Ku radar: 158 Gb

data on: 1723

data off: 1926

Images:

Map of Ferrigno-Alison 01



[Read more](#)

Iceberg



[Read more](#)

Wirth Peninsula



[Read more](#)

Jones Mountains



[Read more](#)

Submitted by: John Sonntag on 11/24/17

Related Flight Report:

P-3 Orion 11/24/17

Flight Number: OIB-Ushuaia Science Flight #10

Payload Configuration: OIB - Ushuaia 2018

Nav Data Collected: No

Total Flight Time: 9.6 hours

Submitted by: Kelly Griffin on 11/24/17

Flight Segments:

From:	SAWH	To:	SAWH
Start:	11/24/17 13:28 Z	Finish:	11/24/17 23:05 Z
Flight Time:	9.6 hours		
Log Number:	18P006	PI:	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		

Flight Hour Summary:

	18P006
Flight Hours Approved in SOFRS	151
Total Used	156
Total Remaining	-5

18P006 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
10/17/17	OIB - Airworthiness Test Flight	Check	1.1	1.1	149.9	

10/18/17	OIB - Project Test Flight	Check	3.5	4.6	146.4
10/19/17	OIB PTF - Radar	Check	4.5	9.1	141.9
10/23/17	OIB - Transit leg #1	Transit	7.1	16.2	134.8
10/24/17	OIB - Transit leg #2	Transit	6.5	22.7	128.3
10/25/17	OIB - Transit leg #3	Transit	7	29.7	121.3
10/29/17 - 10/30/17	OIB-Ushuaia Science Flight #1	Science	9.7	39.4	111.6
10/31/17	OIB-Ushuaia Science Flight #2	Science	8.9	48.3	102.7
11/03/17	OIB-Ushuaia Science Flight #3	Science	9	57.3	93.7
11/04/17	OIB-Ushuaia Science Flight #4	Science	9.3	66.6	84.4
11/12/17	OIB-Ushuaia Science Flight #5	Science	9.5	76.1	74.9
11/14/17	OIB-Ushuaia Science Flight #6	Science	9.8	85.9	65.1
11/16/17	OIB-Ushuaia Science Flight #7	Science	9.1	95	56
11/21/17	OIB-Ushuaia Science Flight #8	Science	9.4	104.4	46.6
11/22/17 - 11/23/17	OIB-Ushuaia Science Flight #9	Science	9.9	114.3	36.7
11/24/17	OIB-Ushuaia Science Flight #10	Science	9.6	123.9	27.1
11/25/17 - 11/26/17	OIB-Ushuaia Science Flight #11	Science	9.5	133.4	17.6
11/27/17	OIB-Ushuaia SAWH-SCDA Transit Flight	Transit	7	140.4	10.6
11/28/17	OIB-Ushuaia SCDA-MROC Transit Flight	Transit	7	147.4	3.6
11/29/17	OIB-Ushuaia MROC-KNGU Transit Flight	Transit	6.3	153.7	-2.7
11/29/17	OIB-Ushuaia KNGU-KWAL Transit Flight	Transit	0.8	154.5	-3.5
12/04/17	OIB-Post Mission Calibration Flight	Science	1.5	156	-5

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

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