

OIB - P-3 Orion 11/12/17 Science Report

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

Date: Sunday, November 12, 2017

Mission: OIB

Mission Location: Antarctica

Mission Summary:

This is a new flight, designed to improve the density of airborne gravity measurements over the Larsen C ice shelf. Most of the lines are designed along IceSat-2 ground tracks. We also directly overfly the Bawden Ice Rise.

The flight went very well with no weather impacts or major instrument issues. Noise was present in one channel of the MCORDS and Accumulation radar systems which will be investigated. Some window fogging was also present during a small portion of the flight for DMS.

Data volumes

ATM: T6: 82 Gb T7: 101 Gb

FLIR: 9.0 Gb

Cambot: 24 Gb

KT19: 12 Mb

DMS: 41.2 Gb

MCoRDS: 770.0 Gb

Gravity/Magnetometer: 3 Gb

Accumulation radar: 834 Gb

Snow/Ku radar: 940 Gb

data on: 1523

data off: 1843

Submitted by: Nathan T. Kurtz on 11/12/17

File:

 [Larsen_C_gravity_map.pdf](#)

Related Flight Report:

P-3 Orion 11/12/17

Flight Number: OIB-Ushuaia Science Flight #5

Payload Configuration: OIB - Ushuaia 2018

Nav Data Collected: No

Total Flight Time: 9.5 hours

Submitted by: Janet Letchworth on 11/12/17

Flight Segments:

From:	SAWH	To:	SAWH
Start:	11/12/17 12:50 Z	Finish:	11/12/17 22:20 Z
Flight Time:	9.5 hours		
Log Number:	18P006	PI:	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	Larsen C High Priority Flight Line		

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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