

OIB - P-3 Orion 11/16/17 Science Report

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

Date: Thursday, November 16, 2017

Mission: OIB

Mission Location: Antarctica

Mission Summary:

OIB successfully flew the high priority Venable 01 A mission. This is a new flight, primarily designed to map the bathymetry beneath the Venable Ice Shelf. This and the Venable 01B flight are companion flights. Each flight by itself establishes a grid spaced at 20 km, and together they establish a 20 km grid.

The weather call this morning was somewhat difficult as imagery from early in the morning showed low clouds in the area. All forecast models showed clear skies during the mission time, and the GEOS-5 model showed the cloudy skies from the imagery time would begin to clear near our launch time. We delayed take-off for one hour to see if we could get more imagery to support this hypothesis and give the low clouds time to clear. Indeed this worked well and the mission was flown under very good weather conditions. All instruments performed well on the flight.

Data volumes

ATM: T6: 25 Gb T7: 32 Gb

FLIR: 3.0 Gb

Cambot: 8 Gb

KT19: 12 Mb

DMS: 12.1 Gb

MCoRDS: 241 Gb

Gravity/Magnetometer: 3 Gb

Accumulation radar: 277 Gb

Snow/Ku radar: 280 Gb

data on: 1739

data off: 1859

Submitted by: Nathan T. Kurtz on 11/16/17

File:

 [VenableAmap.pdf](#)

Related Flight Report:

P-3 Orion 11/16/17

Flight Number: OIB-Ushuaia Science Flight #7

Payload Configuration: OIB - Ushuaia 2018

Nav Data Collected: No

Total Flight Time: 9.1 hours

Submitted by: Kelly Griffin on 11/17/17

Flight Segments:

From:	SAWH	To:	SAWH
Start:	11/16/17 13:47 Z	Finish:	11/16/17 22:50 Z
Flight Time:	9.1 hours		
Log Number:	18P006	PI:	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	OIB successfully flew the high priority Venable 01 A mission. This is a new flight, primarily designed to map the bathymetry beneath the Venable Ice Shelf. This and the Venable 01B flight are companion flights. Each flight by itself establishes a grid spaced at 20 km, and together they establish a 20 km grid.		

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 Editor: Brad Bulger

NASA Official: Bruce A. Tagg

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