

## P-3 Orion 04/03/18

**Aircraft:**

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

**Flight Number:**

2018 OIB Arctic -Science #2

**Payload Configuration:**

2018 OIB Arctic

**Nav Data Collected:**

No

**Total Flight Time:**

7.9 hours

**Submitted by:**

Janet Letchworth on 04/03/18

**Flight Segments:**

<b>From:</b>	BGTL	<b>To:</b>	BGTL
<b>Start:</b>	04/03/18 10:53 Z	<b>Finish:</b>	04/03/18 18:47 Z
<b>Flight Time:</b>	7.9 hours		
<b>Log Number:</b>	<a href="#">18P008</a>	<b>PI:</b>	Nathan Kurtz
<b>Funding Source:</b>	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
<b>Purpose of Flight:</b>	Science		
<b>Comments:</b>	The flight covered the Nansen Gap line.		

**Flight Hour Summary:**

	<b>18P008</b>
<b>Flight Hours Approved in SOFRS</b>	201.2
<b>Total Used</b>	190.4
<b>Total Remaining</b>	10.8

**18P008 Flight Reports**

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
<a href="#">03/13/18</a>	2018 OIB Arctic - Airworthiness Test Flight	Other	0.8	0.8	200.4	
<a href="#">03/14/18</a>	2018 OIB Arctic -Project Test Flight - Laser	Other	2.6	3.4	197.8	
<a href="#">03/15/18</a>	2018 OIB Arctic -Project Test Flight - Radar	Other	5.7	9.1	192.1	
<a href="#">03/18/18</a>	2018 OIB Arctic -delta ATF	Other	0.8	9.9	191.3	
<a href="#">03/20/18</a>	2018 OIB Arctic -Transit to Thule	Transit	7.9	17.8	183.4	
<a href="#">03/22/18</a>	2018 OIB Arctic - Science #1	Science	7.8	25.6	175.6	
<a href="#">04/03/18</a>	2018 OIB Arctic - Science #2	Science	7.9	33.5	167.7	
<a href="#">04/04/18</a>	2018 OIB Arctic - Science #3	Science	8.1	41.6	159.6	
<a href="#">04/05/18</a>	2018 OIB Arctic - Science #4	Science	8	49.6	151.6	
<a href="#">04/06/18</a>	2018 OIB Arctic - Science #5	Science	8.8	58.4	142.8	
<a href="#">04/07/18 - 04/08/18</a>	2018 OIB Arctic - Science #6	Science	8.1	66.5	134.7	
<a href="#">04/08/18 - 04/09/18</a>	2018 OIB Arctic - Science #7	Science	8.3	74.8	126.4	

<a href="#">04/14/18 - 04/15/18</a>	2018 OIB Arctic - Science #8	Science	7.7	82.5	118.7
<a href="#">04/16/18</a>	2018 OIB Arctic - Science #9	Science	8.2	90.7	110.5
<a href="#">04/18/18</a>	2018 OIB Arctic - Science #10	Science	8	98.7	102.5
<a href="#">04/19/18</a>	2018 OIB Arctic - Science #11	Science	7.7	106.4	94.8
<a href="#">04/20/18</a>	2018 OIB Arctic -Transit to Kanger	Transit	4.2	110.6	90.6
<a href="#">04/21/18</a>	2018 OIB Arctic - Science #12	Science	8.1	118.7	82.5
<a href="#">04/22/18</a>	2018 OIB Arctic - Science #13	Science	6.5	125.2	76
<a href="#">04/23/18</a>	2018 OIB Arctic - Science #14	Science	8.2	133.4	67.8
<a href="#">04/25/18</a>	2018 OIB Arctic - Science #15	Science	7.7	141.1	60.1
<a href="#">04/26/18</a>	2018 OIB Arctic - Science #16	Science	8.8	149.9	51.3
<a href="#">04/27/18</a>	2018 OIB Arctic - Science #17	Science	8	157.9	43.3
<a href="#">04/29/18</a>	2018 OIB Arctic - Science #18	Science	8.3	166.2	35
<a href="#">04/30/18</a>	2018 OIB Arctic - Science #19	Science	9.3	175.5	25.7
<a href="#">05/01/18</a>	2018 OIB Arctic - Science #20	Science	7.4	182.9	18.3
<a href="#">05/03/18</a>	2018 OIB Arctic -Return Transit Leg #1	Transit	6.4	189.3	11.9
<a href="#">05/03/18</a>	2018 OIB Arctic -Return Transit Leg #2	Transit	0.6	189.9	11.3
<a href="#">05/03/18</a>	2018 OIB Arctic -Return Transit Leg #3	Transit	0.5	190.4	10.8

*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 - P-3 Orion 04/03/18 Science Report

#### Mission:

OIB

#### Mission Summary:

OIB completed the high priority Nansen Gap mission. This is a modified version of the Fram Gateway missions flown in the earlier years of IceBridge. It differs from them in that it transits to and from the area of the Fram Strait at high-altitude, leaving more time to sample ice farther north and east than in prior years. The mission was selected to broaden our coverage in the eastern Arctic as much as possible with the absence of Svalbard based missions this year. The mission was also slightly modified to underfly an opportunistic Sentinel-3A orbit across the Fram Strait with the satellite passing over 1 hour and 13 minutes after we had left the line. In addition to Level 1 Requirements SI1 and SI2, this mission addresses sea ice level 1 baseline requirements SI3c and by sampling sea ice north of Fram Strait.

Weather along the survey line was good through most of the flight. Heavier clouds near the beginning of the line were present which slightly delayed our descent from high altitude and some occasional light haze as present at times throughout the flight, though not enough to significantly impact data collection. ATM had a few start-up issues with about 5 minutes of data lost at the beginning of the flight, but otherwise performed well with no other

issues. DMS, snow radar, and all other instruments also collected good data throughout the line making for an overall good mission.

#### Data Volumes

ATM T6: 63 Gb  
ATM T7: 97 Gb  
CAMBOT: 37 Gb  
FLIR: 7 Gb  
KT19: 10 Mb  
DMS: 52.2 Gb

Snow radar: 693 Gb  
MCoRDS: Calibration data only  
Accumulation radar: No data (sea ice)

Data on: 1257  
Data off: 1611

#### File:

[Nansen\\_Gap.pdf](#)

#### Submitted by:

Nathan T. Kurtz on 04/03/18

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