

## P-3 Orion 04/21/18

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

Flight Number: 2018 OIB Arctic -Science #12

Payload Configuration: 2018 OIB Arctic

Nav Data Collected: No

Total Flight Time: 8.1 hours

Submitted by: Janet Letchworth on 04/23/18

### Flight Segments:

<b>From:</b>	BGSF	<b>To:</b>	BGSF
<b>Start:</b>	04/21/18 10:34 Z	<b>Finish:</b>	04/21/18 18:42 Z
<b>Flight Time:</b>	8.1 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>	This flight covered the Geike 2 line along the east coast of Greenland		

### Flight Hour Summary:

	18P008
<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 04/21/18 Science Report

**Mission:** OIB

**Mission Summary:**

Mission: Geikie 02  
Priority: High

This mission flies the centerlines of eight Geikie Peninsula glaciers. These are Sorgenfri, Christian IV, Bartholins, and South glaciers, plus five more glaciers with unknown names. We transit to and from the Geikie area along master grid lines and ICESat-1 ground tracks. For 2015, we added a crossing of a proposed core site on the Renland ice cap, plus an improved centerline of the Vestfjord Glacier. For 2018, we replace one of the east-west crossing lines with the "111" line, to accommodate a request from MacFerrin et al.

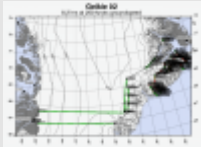
A promising forecast for Geikie 02 for several days, more so than for any other mission, favored this mission and indeed it was the most viable mission today. We launched as clouds approached Kangerlussuaq, expecting for the 111 line across the ice sheet to be mostly clouded over. Fortunately, they were higher clouds than expected that we were able to fly under for nearly the entire line, except briefly at the western end. Otherwise, skies were mostly clear across eastern Greenland during the rest of the mission in that sector, with brief periods of cloud encountered near the termini of a couple of the flatter tidewater glacier flowlines we surveyed. Numerous, varied glacier termini were crossed, innumerable polar bear tracks were observed a couple of their owners were also spotted. On the return line across the ice sheet, we encountered significant clouds and were unable to survey a significant portion of that line. All instruments performed well, with no issues reported.

Attached images:

1. Map of today's mission (John Sonntag / NASA)
2. Ogives in a small mountain glacier (background) near Kangerdlugssuaq Glacier (Joe MacGregor / NASA)
3. Mt. Gunnbjørn, the tallest mountain in Greenland, from the center flowline of Kong Christian IV Glacier (Joe MacGregor / NASA)
4. Stratified mountains of the Geikie fjords (Joe MacGregor / NASA)
4. An avalanche and an icefall across the bedrock cliff that constitutes the eastern edge of the terminus of Magga Dan Glacier (Joe MacGregor / NASA)
5. Matterhorn-shaped iceberg in Scoresby Sund (Joe MacGregor / NASA)

Images:

## Map of today's mission



[Read more](#)

## Ogives in a small mountain glacier (background) near



[Read more](#)

## Mt. Gunnbjørn, the tallest mountain in Greenland, from the center



[Read more](#)

## Stratified mountains of the Geikie fjords



[Read more](#)

## An avalanche and an icefall across the bedrock cliff that constitutes



[Read more](#)

## Matterhorn-shaped iceberg in Scoresby Sund



[Read more](#)

**Submitted by:** Joseph MacGregor on 04/24/18

Page Last Updated: April 22, 2017

Page Editor: Brad Bulger

NASA Official: Marilyn Vasques

---

**Source URL:** [https://espo.nasa.gov/hs3/flight\\_reports/P-3\\_Orion\\_04\\_21\\_18#comment-0](https://espo.nasa.gov/hs3/flight_reports/P-3_Orion_04_21_18#comment-0)