

P-3 Orion 03/22/13 - 03/23/13

Aircraft:

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

Flight Number:

2013 Operation IceBridge Arctic #1474

Payload Configuration:

2013 Operation IceBridge Arctic

Nav Data Collected:

No

Total Flight Time:

8.2 hours

Submitted by:

Kelly Griffin on 03/22/13

Flight Segments:

From:	PAFA	To:	PAFA
Start:	03/22/13 16:00 Z	Finish:	03/23/13 00:14 Z
Flight Time:	8.2 hours		
Log Number:	13P001	PI:	Michael Studinger
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	2013 Operation IceBridge Arctic: Fairbanks science flight. Aircraft performance nominal, 5.5 hours of successful data collection.		

Flight Hour Summary:

	13P001
Flight Hours Approved in SOFRS	255
Total Used	211.6
Total Remaining	43.4

13P001 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
03/14/13	2013 Operation IceBridge Arctic #1447	Check	0.8	0.8	254.2	
03/14/13	2013 Operation IceBridge Arctic #1449	Check	2.1	2.9	252.1	
03/15/13	2013 Operation IceBridge Arctic #1448	Check	4	6.9	248.1	
03/18/13	2013 Operation IceBridge Arctic #1450	Transit	7.9	14.8	240.2	
03/20/13	2013 Operation IceBridge Arctic #1468	Science	6.3	21.1	233.9	
03/21/13	2013 Operation IceBridge Arctic #1456	Transit	8.5	29.6	225.4	
03/22/13 - 03/23/13	2013 Operation IceBridge Arctic #1474	Science	8.2	37.8	217.2	
03/23/13	2013 Operation IceBridge Arctic #1470	Science	7.8	45.6	209.4	

03/24/13 - 03/25/13	2013 Operation IceBridge Arctic #1469	Science	8.4	54	201
03/26/13	2013 Operation IceBridge Arctic #1475	Transit	8.6	62.6	192.4
03/27/13	2013 Operation IceBridge Arctic #1476	Science	7.9	70.5	184.5
03/28/13	2013 Operation IceBridge Arctic #1477	Science	3.3	73.8	181.2
04/02/13	2013 Operation IceBridge Arctic #1486	Transit	6.4	80.2	174.8
04/04/13	2013 Operation IceBridge Arctic #1484	Science	8.1	88.3	166.7
04/05/13	2013 Operation IceBridge Arctic #1489	Science	7.8	96.1	158.9
04/06/13	2013 Operation IceBridge Arctic #1487	Science	8	104.1	150.9
04/08/13	2013 Operation IceBridge Arctic #1491	Science	7.5	111.6	143.4
04/09/13	2013 Operation IceBridge Arctic #1493	Science	6.4	118	137
04/10/13	2013 Operation IceBridge Arctic #1493	Science	6.6	124.6	130.4
04/11/13	2013 Operation IceBridge Arctic #1495	Science	7.4	132	123
04/12/13	2013 Operation IceBridge Arctic #1496	Science	6.2	138.2	116.8
04/15/13	2013 Operation IceBridge Arctic #1502	Science	7.9	146.1	108.9
04/18/13	2013 Operation IceBridge Arctic #1504	Transit	5.2	151.3	103.7
04/19/13	2013 Operation IceBridge Arctic #1505	Science	7.4	158.7	96.3
04/20/13	2013 Operation IceBridge Arctic #1508	Science	6.8	165.5	89.5
04/22/13	2013 Operation IceBridge Arctic #1512	Science	7.8	173.3	81.7
04/23/13	2013 Operation IceBridge Arctic #1513	Science	7.7	181	74
04/24/13	2013 Operation IceBridge Arctic #1514	Science	8	189	66
04/25/13	2013 Operation IceBridge Arctic #1515	Science	7.5	196.5	58.5

04/26/13	2013 Operation IceBridge Arctic #1516	Science	7.1	203.6	51.4
05/02/13	2013 Operation IceBridge Arctic	Transit	7.5	211.1	43.9
05/02/13	2013 Operation IceBridge Arctic	Transit	0.5	211.6	43.4

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 03/22/13 - 03/23/13 Science Report

Mission:

OIB

Mission Summary:

F03 Sea Ice - Beaufort-Chukchi Diamond

Accomplishments

- Low-altitude survey (1,500 ft AGL) over the Beaufort and Chukchi Seas.
- ATM, snow and Ku-band radars, and DMS were operated on the survey lines.
- Satellite Tracks: none
- Repeat Mission: yes, 2012

Science Data Report Summary

Instrument	Operated	Data Volume	Instrument Issues/Comments
ATM	yes	49 GB	None.
DMS	yes	121 GB	None.
Snow Radar	yes	274 GB	None.
Ku-band Radar	yes	274 GB	None
Accumulation Radar	yes	138 GB	None.
MCoRDS	no	N/A	MCoRDS was not operated due to sea ice mission
KT-19	yes	9 MB	None.

Mission Report (Michael Studinger, Mission Scientist)

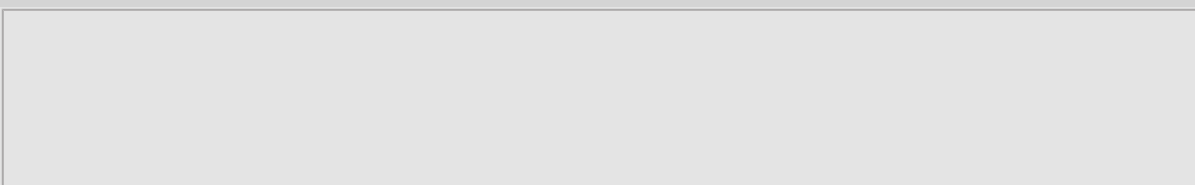
This is a repeat of a mission first flown in 2012. It is designed to sample sea ice in the western Arctic Basin along north-south gradients in the Chukchi and Beaufort Seas. In addition to Level-1 Requirements SI1 and SI2, it addresses sea ice level projected requirement SIP2d by extending sea ice baseline observations to the southern Chukchi Sea north of the Bering Strait.

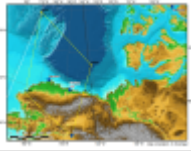
The weather over the Chukchi and Beaufort Seas turned out to be better than what we had expected from satellite imagery. ATM lost only 10% of data due to scattered clouds along the survey line. Given the large size of the survey area this is a remarkably low rate of data loss due to weather conditions.

We collected 5.5 hours of science data.

Images:

Today's P-3 trajectory over the Beaufort and Chukchi Seas





[Read more](#)

Infrared satellite image 3 hours before takeoff



[Read more](#)

Submitted by:

Michael Studinger on 03/22/13

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Page Editor: Katja Drdla

NASA Official: Marilyn Vasques

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