

OIB - Other: NOAA P-3 05/18/16 Science Report

Aircraft: Other: NOAA P-3 - 16M030

Date: Wednesday, May 18, 2016

Mission: OIB

Mission Location: Kangerlussuaq, Greenland

Mission Summary:

Mission: IceSat-2 Central (priority: baseline)

This mission was designed to overfly planned IceSat-2 ground tracks over a wide range of ice regimes near Kangerlussuaq. We center some of the flightlines on each of three beam pairs (left, nadir and right) in turn, sampling three of each beam pair during this mission. The east-west crossing lines are designed to capture as many ascending/descending crossovers as possible. We modified and augmented the mission in 2016 to overfly five GreenTrACS core sites.

The weather across west-central Greenland began to destabilize last night as a cold front began its approach from the Davis Strait. However the worst of the cloudiness was centered to the northeast of Disko Bay, with only a broken and quite low stratus deck obscuring portions of the area between Kangerlussuaq and the Jakobshavn basin. We believed that daytime heating was likely to raise and dissipate these clouds as today wore on, so we selected this mission as the best option of our remaining baseline-priority flights for today. The weather improved as we had hoped it would and we lost no part of the flight lines to clouds. We do however expect conditions to continue to deteriorate tomorrow as the cold front nears, and this may make our last science flight of this campaign tomorrow a challenging one.

All instruments performed normally today, and neither ATM nor DMS experienced unusual fouling of their respective windows from hydraulic fluid.

Overall, we estimate successful data collection across 100% of the flight.

We conducted a ramp pass over Kangerlussuaq at 3000' AGL.

Data volumes:

ATM: 32 Gb

FLIR: 3.8 Gb

DMS: 96 Gb

Ku-Band Radar: 150 Gb

MCoRDS: 1.8 Tb

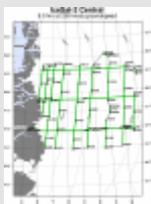
Snow Radar: 150 Gb

BESST: xx Gb

total data collection time: 7.1 hrs

Images:

Map of IceSat-2 Central



[Read more](#)

NOAA-43 on takeoff



[Read more](#)

Drainage channels and lakes



[Read more](#)

Miss Piggy mascot



[Read more](#)

Submitted by: John Sonntag on 05/18/16

Related Flight Report:

Other: NOAA P-3 05/18/16

Flight Number: Land Ice IceSat-2 Central

Payload Configuration: OIB Spring 2016

Nav Data Collected: No

Total Flight Time: 7.7 hours

Submitted by: John Woods on 05/18/16

Flight Segments:

From:	BGSF	To:	BGSF
Start:	05/18/16 10:42 Z	Finish:	05/18/16 18:22 Z
Flight Time:	7.7 hours		
Log Number:	16M030	PI:	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		

Flight Hour Summary:

	16M030
Flight Hours Approved in SOFRS	200
Total Used	148.7
Total Remaining	51.3

16M030 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
03/22/16	ICF1	Check	2	2	198	
03/23/16	ICF2	Check	3.4	5.4	194.6	
04/12/16	ICF3	Check	1.3	6.7	193.3	
04/15/16	Repo 1	Ferry	0.5	7.2	192.8	
04/16/16	Repo 2	Ferry	2.9	10.1	189.9	
04/18/16	Repo 3	Ferry	7.1	17.2	182.8	
04/19/16	Sea Ice Eureka	Science	7.3	24.5	175.5	
04/20/16	Sea Ice Laxon Line	Science	8.7	33.2	166.8	

04/21/16 - 04/22/16	Sea Ice SIZRS Zigzag	Science	8.3	41.5	158.5
04/30/16	Sea Ice South Basin Transect	Science	8.8	50.3	149.7
05/03/16	Sea Ice North Pole Transect	Science	7.6	57.9	142.1
05/04/16	Sea Ice South Canada Basin	Science	7.9	65.8	134.2
05/09/16	Land Ice Zachariae-79N	Science	7.6	73.4	126.6
05/10/16	Land Ice Northwest Coastal A	Science	6	79.4	120.6
05/11/16	Land Ice Umanaq B	Science	7.1	86.5	113.5
05/12/16	Land Ice Southeast Coastal	Science	7.3	93.8	106.2
05/13/16	Land Ice Helheim-Kangerdlugssuaq	Science	7.8	101.6	98.4
05/14/16	Land Ice SW Coastal A	Science	7.8	109.4	90.6
05/16/16	Land Ice Thomas-Jakobshavn 01	Science	7.9	117.3	82.7
05/17/16	Land Ice Helheim-Kangerdlugssuaq Gap B	Science	8.1	125.4	74.6
05/18/16	Land Ice IceSat-2 Central	Science	7.7	133.1	66.9
05/19/16	Land Ice East Glaciers 01	Science	7.1	140.2	59.8
05/21/16	Ferry BGSF_KMCF	Ferry	8.5	148.7	51.3

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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NASA Official: Bruce A. Tagg

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