

# OIB - Gulfstream V - JSC 10/24/19 Science Report

**Aircraft:** [Gulfstream V - JSC \(See full schedule\)](#)

**Date:** Thursday, October 24, 2019

**Mission:** OIB

**Mission Location:** Antarctic Fall 2019: Hobart, Australia

**Mission Summary:**

Flight Report: 10/24/19

*OUTLOOK FOR TOMORROW:* Similar conditions in the area of the science mission today, give us more viable options for another land ice flight in the vicinity tomorrow.

Mission: Adelie-Clarie Gap 02  
Priority: Medium

Today was a 'First of Lasts' for Operation IceBridge as we embarked our *first* science mission of OIB's *last* campaign, this particular campaign based out of Hobart Tasmania and focusing on sea and land ice in Eastern Antarctica.

The science mission flown today was the medium priority land ice mission Adelie-Clarie Gap 02. This mission was chosen based on ideal weather conditions in the area and that it was a good first mission to get the new GV crew acclimated to flying in Antarctica.

Weather conditions were just as expected due to katabatic outflow off of the ice sheet yielding clear skies in our survey area. Clouds were present to the east and the west, and this mission was perfectly placed in this area, giving us high confidence for a successful *first* mission of our *last* campaign. Smooth conditions were present for the flight except for some light turbulence on the centerline of Dibbler Glacier.

Part of this mission is to fly the center flowline of Dibbler Glacier which is a large channel glacier that flows from the Antarctic continent out to the east side of Davis Bay. Since this glacier has a prominent ice tongue, bathymetry data collected via the gravimeter will be of importance in learning more about the stability of the glacier.

Thanks to the 'hard yakka' of the instrument teams all instruments performed well with 100% data collection. A *first* ramp pass of OIB's *last* campaign was taken shortly after takeoff at 1500 feet AGL. A 3-minute data collection of MCoRDS deconvolution over a large coastal polynya on our northbound departure from the Antarctic coast.

ICESat-2 RGT latencies (+/- indicates OIB surveyed after/before ICESat-2):  
None

Data volumes collected during today's mission, which consisted of 3.1 hours of data collection:

ATM: 51 Gb

CAMBOT: 88 Gb

FLIR: 7 Gb

Narrow Swath ATM: 79 Gb green

Narrow Swath ATM: 73 Gb IR

VNIR: 27 Gb

SWIR: 39 Gb

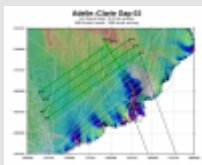
Snow Radar: 627 Gb

MCoRDS: 312 Gb

Gravity: 4.5 Gb

**Images:**

## Figure 1



[Read more](#)

## Figure 2



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## Figure 3



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## Figure 4



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## Figure 5



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Submitted by: Linette Boisvert on 11/05/19

Related Flight Report:

## Gulfstream V - JSC 10/23/19 - 10/24/19

**Flight Number:** GV-53

**Payload Configuration:** OIB

**Nav Data Collected:** No

**Total Flight Time:** 10.2 hours

**Submitted by:** Debra Willett on 10/24/19

**Flight Segments:**

<b>From:</b>	YMHB	<b>To:</b>	YMHB
<b>Start:</b>	10/23/19 22:38 Z	<b>Finish:</b>	10/24/19 08:50 Z
<b>Flight Time:</b>	10.2 hours		
<b>Log Number:</b>	<a href="#">205003</a>	<b>PI:</b>	Joseph MacGregor
<b>Funding Source:</b>	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
<b>Purpose of Flight:</b>	Science		

Miles Flown: 4400 miles

**Flight Hour Summary:**

	<b>205003</b>
<b>Flight Hours Approved in SOFRS</b>	350
<b>Total Used</b>	248.4
<b>Total Remaining</b>	101.6

**205003 Flight Reports**

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
<a href="#">10/17/19</a>	GV-48	Science	1.9	1.9	348.1	800
<a href="#">10/17/19</a>	GV-49	Science	3.2	5.1	344.9	1400
<a href="#">10/19/19</a>	GV-50	Transit	8.2	13.3	336.7	3600
<a href="#">10/21/19 - 10/22/19</a>	GV-51	Transit	5.3	18.6	331.4	2300
<a href="#">10/22/19</a>	GV-52	Transit	7	25.6	324.4	3100
<a href="#">10/23/19 - 10/24/19</a>	GV-53	Science	10.2	35.8	314.2	4400
<a href="#">10/24/19 - 10/25/19</a>	GV-54	Science	10.1	45.9	304.1	4400
<a href="#">10/26/19 - 10/27/19</a>	GV-55	Science	10.4	56.3	293.7	4500
<a href="#">10/27/19 - 10/28/19</a>	GV-56	Science	10.2	66.5	283.5	4400
<a href="#">10/28/19 - 10/29/19</a>	GV-57	Science	10.1	76.6	273.4	4400
<a href="#">10/29/19 - 10/30/19</a>	GV-58	Science	10	86.6	263.4	4400
<a href="#">10/31/19 - 11/01/19</a>	GV-59	Science	10.2	96.8	253.2	4400
<a href="#">11/02/19 - 11/03/19</a>	GV-60	Science	10.6	107.4	242.6	4600
<a href="#">11/03/19 - 11/04/19</a>	GV-61	Science	9.6	117	233	4200
<a href="#">11/04/19 - 11/05/19</a>	GV-62	Science	10.3	127.3	222.7	4500
<a href="#">11/05/19 - 11/06/19</a>	GV-63	Science	10.2	137.5	212.5	4400
<a href="#">11/07/19 - 11/08/19</a>	GV-64	Science	10	147.5	202.5	4400
<a href="#">11/08/19 - 11/09/19</a>	GV-65	Science	9.5	157	193	4100
<a href="#">11/09/19 - 11/10/19</a>	GV-66	Science	10.2	167.2	182.8	4400
<a href="#">11/13/19 - 11/14/19</a>	GV-67	Science	10.2	177.4	172.6	4400
<a href="#">11/14/19 - 11/15/19</a>	GV-68	Science	10.4	187.8	162.2	4500
<a href="#">11/16/19 - 11/17/19</a>	GV-69	Science	9.9	197.7	152.3	4300
<a href="#">11/17/19 - 11/18/19</a>	GV-70	Science	9.9	207.6	142.4	4300
<a href="#">11/18/19 - 11/19/19</a>	GV-71	Science	10.3	217.9	132.1	4500

<a href="#">11/19/19 - 11/20/19</a>	GV-72	Science	10.4	228.3	121.7	4500
<a href="#">11/20/19 - 11/21/19</a>	GV-73	Science	3.5	231.8	118.2	1500
<a href="#">11/25/19</a>	GV-74	Ferry	5.7	237.5	112.5	2500
<a href="#">11/26/19</a>	GV-75	Ferry	10.9	248.4	101.6	4700

*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

Page Editor: Brad Bulger

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