

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

Aircraft:

[Gulfstream V - JSC](#) ([See full schedule](#))

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:

From:	YMHB	To:	YMHB
Start:	10/23/19 22:38 Z	Finish:	10/24/19 08:50 Z
Flight Time:	10.2 hours		
Log Number:	205003	PI:	Joseph MacGregor
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Miles Flown:	4400 miles		

Flight Hour Summary:

	205003
Flight Hours Approved in SOFRS	350
Total Used	248.4
Total Remaining	101.6

205003 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
10/17/19	GV-48	Science	1.9	1.9	348.1	800
10/17/19	GV-49	Science	3.2	5.1	344.9	1400
10/19/19	GV-50	Transit	8.2	13.3	336.7	3600
10/21/19 - 10/22/19	GV-51	Transit	5.3	18.6	331.4	2300
10/22/19	GV-52	Transit	7	25.6	324.4	3100
10/23/19 - 10/24/19	GV-53	Science	10.2	35.8	314.2	4400
10/24/19 - 10/25/19	GV-54	Science	10.1	45.9	304.1	4400
10/26/19 - 10/27/19	GV-55	Science	10.4	56.3	293.7	4500
10/27/19 - 10/28/19	GV-56	Science	10.2	66.5	283.5	4400
10/28/19 - 10/29/19	GV-57	Science	10.1	76.6	273.4	4400
10/29/19 - 10/30/19	GV-58	Science	10	86.6	263.4	4400
10/31/19 - 11/01/19	GV-59	Science	10.2	96.8	253.2	4400
11/02/19 - 11/03/19	GV-60	Science	10.6	107.4	242.6	4600
11/03/19 - 11/04/19	GV-61	Science	9.6	117	233	4200

11/04/19 - 11/05/19	GV-62	Science	10.3	127.3	222.7	4500
11/05/19 - 11/06/19	GV-63	Science	10.2	137.5	212.5	4400
11/07/19 - 11/08/19	GV-64	Science	10	147.5	202.5	4400
11/08/19 - 11/09/19	GV-65	Science	9.5	157	193	4100
11/09/19 - 11/10/19	GV-66	Science	10.2	167.2	182.8	4400
11/13/19 - 11/14/19	GV-67	Science	10.2	177.4	172.6	4400
11/14/19 - 11/15/19	GV-68	Science	10.4	187.8	162.2	4500
11/16/19 - 11/17/19	GV-69	Science	9.9	197.7	152.3	4300
11/17/19 - 11/18/19	GV-70	Science	9.9	207.6	142.4	4300
11/18/19 - 11/19/19	GV-71	Science	10.3	217.9	132.1	4500
11/19/19 - 11/20/19	GV-72	Science	10.4	228.3	121.7	4500
11/20/19 - 11/21/19	GV-73	Science	3.5	231.8	118.2	1500
11/25/19	GV-74	Ferry	5.7	237.5	112.5	2500
11/26/19	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.

Related Science Report:

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

Mission:

OIB

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 Dibble 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.

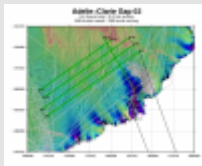
ICESat-2 RGT latencies (+/- indicates OIB surveyed after/before ICESat-2):
None

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



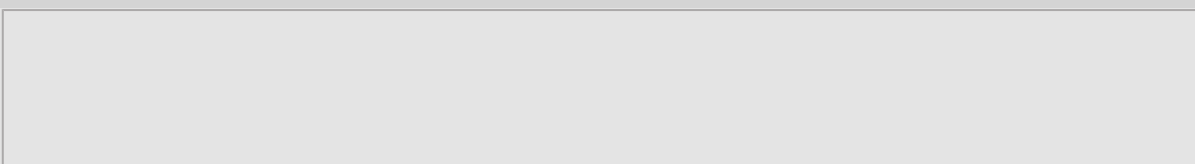
[Read more](#)

Figure 3



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Figure 4





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Figure 5



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Submitted by:
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