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# Science Flight Report

## Operation IceBridge Arctic 2012



**Flight:** Falcon 05  
**Mission:** Southern Interior (land ice)

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### Flight Report Summary

<b>Aircraft</b>	<b>Falcon (HU-25) N525</b>
<b>Flight Number</b>	Falcon 05
<b>Flight Log number</b>	12F001
<b>Date</b>	Wednesday, May 2, 2012 (Z)
<b>Purpose of Flight</b>	Occupy ICESat lines south of Kangerlussuaq
<b>Take off time</b>	1147 Zulu at Kangerlussuaq
<b>Landing time</b>	1544 Zulu at Kangerlussuaq
<b>Flight Hours</b>	4 hours
<b>Aircraft Status</b>	Airworthy.
<b>Sensor Status</b>	All installed sensors operational.
<b>Significant Issues</b>	None.
<b>Accomplishments</b>	<ul style="list-style-type: none"><li>• Surveyed three ICESat lines, which will extend our knowledge of the ablation of southern Greenland in a data sparse region</li></ul>
<b>Geographic Keywords</b>	Southern Greenland
<b>Satellite Tracks</b>	none
<b>Repeat Mission</b>	repeated ICESat lines.

## Science Data Report Summary

Instrument	Data Volume			Instrument Issues
	Survey Area	Entire Flight		
LVIS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	37 GB	None
LVIS cameras	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	48 GB	None

### Mission Report (Seelye Martin, Acting Project Manager)

This is a flight south of Kanger that surveyed three ICESat tracks. The total distance flown was 2,686 km; an estimate of area covered was 3,500 square km; the ICESat tracks were #174, #55, and #62. The coverage of the ICESat lines will extend our knowledge of regional ablation in a data poor region. The distances flown along ICESat tracks (excluding turns) was  
track 174 = 414 km  
track 55 = 659 km  
track 62 = 693 km  
sub-total =1,766 km

Total distance flown was 2,686 km. The sky was cloud-free, and was described as “clear as a bell” by laser operator Shane Wake. Preliminary examination of the camera and LVIS data shows that the instruments worked well.

### Individual instrument reports from experimenters on board the aircraft:

**LVIS:** The LVIS system worked well and collected data for all of the flight.

**LVIS-cameras:** worked well.

