



*Pulse of the Planet, Delivered Daily*

# High-Resolution Gazing Imagery Using Microsatellites

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# The Skybox Imaging Vision

Combine high-revisit imagery with large-scale analytics

Using microsatellites, Skybox delivers:

High-resolution terrestrial imagery

High-definition terrestrial video



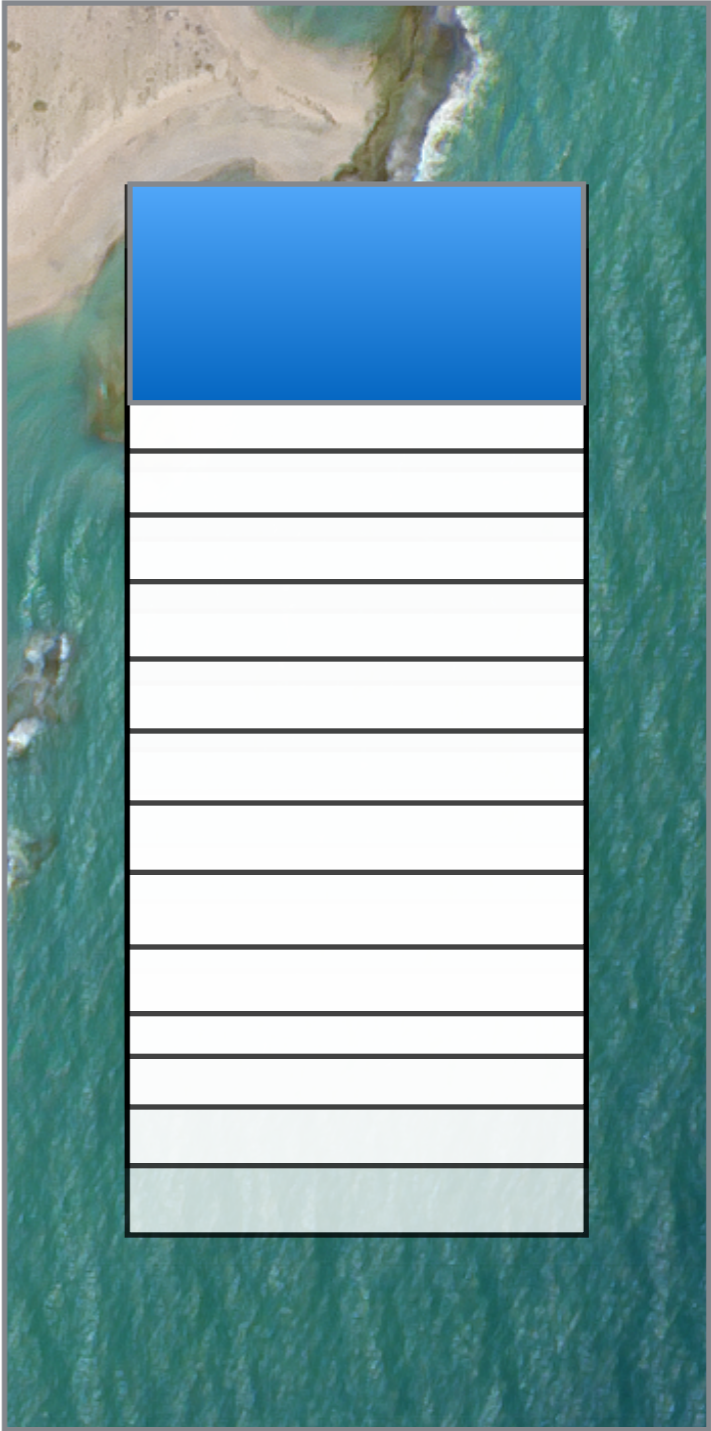


SkySat-1 Video of Loma Larga Glacier  
May 28, 2014

# Collection Strategy



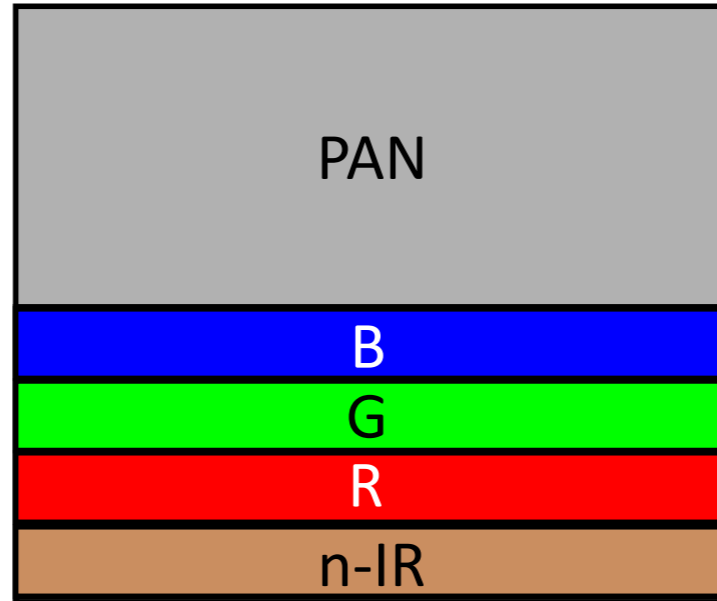
TDI (pushbroom) sensor



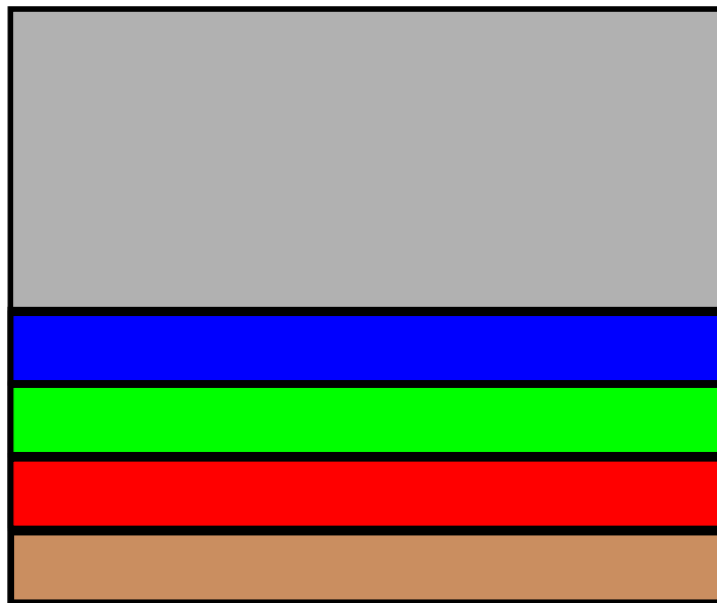
Framing sensor

# Sensor Configuration

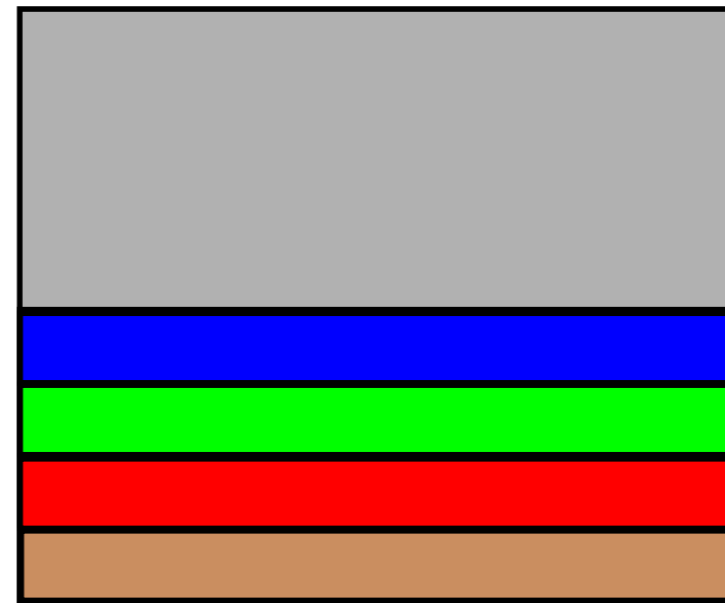
Sensor 2



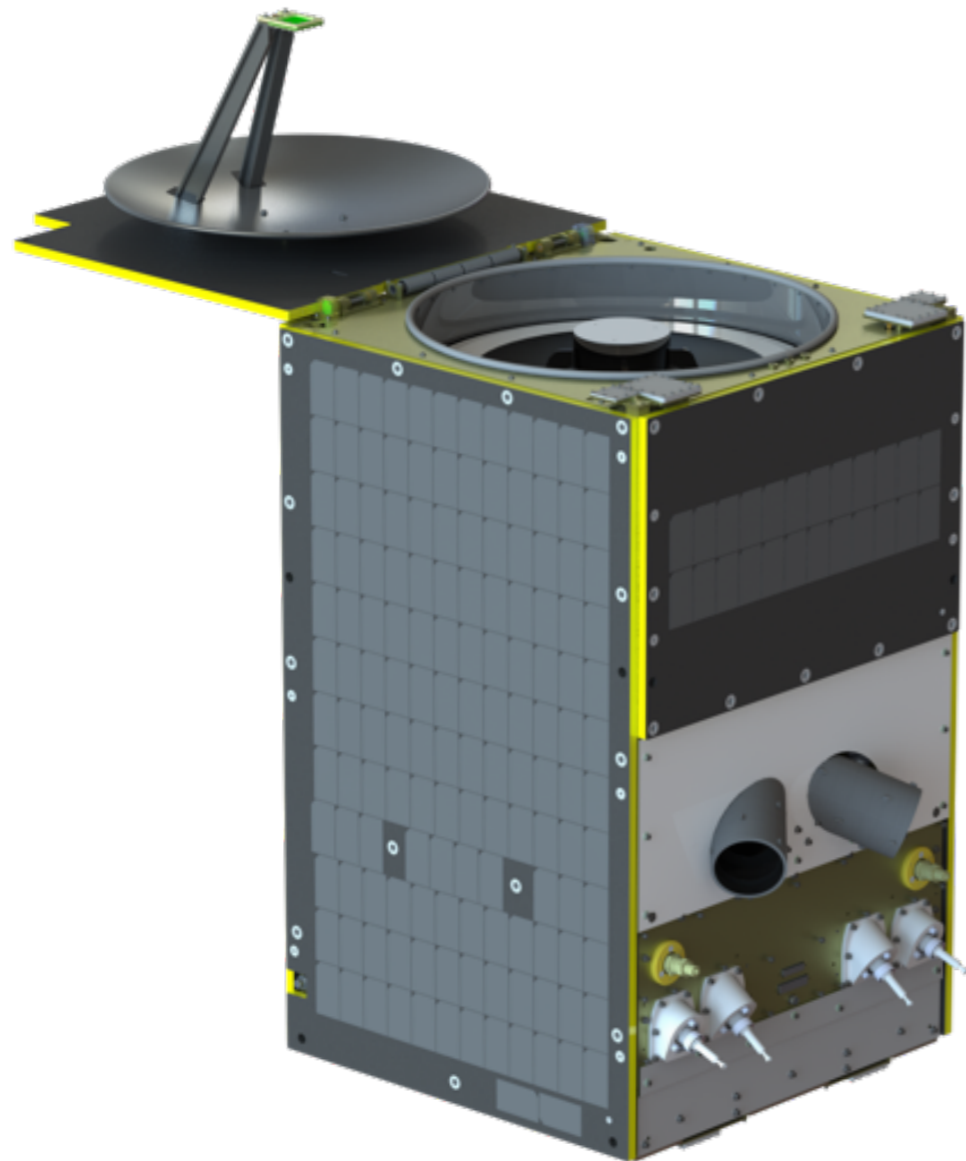
Sensor 1



Sensor 3



# SkySat-1



## Specification

## Parameter

**Design Life**

6+ years

**Dimensions (stowed)**

60 cm x 60 cm x 95 cm

**Satellite Mass**

120 kg

**LEO Orbit**

600 km sun synchronous @  
10:30AM rise time

**Launch**

November 21, 2013, Dnepr

- Calibration completed in March 2014
- Commercial operations upcoming

# Video Products

## Full Motion Video

SkySat-1 Video of Muir Glacier  
May 23, 2014

1 km

- Meter class spatial resolution
- Panchromatic (450 nm - 900 nm)
- 30 frames per second
- Up to 90 seconds in length
- Raw frames (11-bit TIF format)
- RPC file for each frame
- Satellite ephemeris data
- Sensor geometry

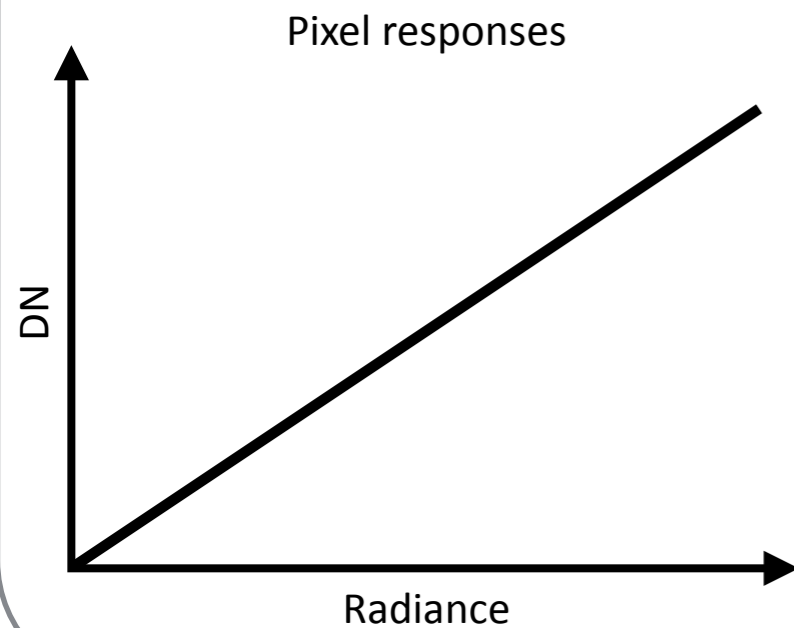
2 km

# Imaging System Calibration

## Radiometric accuracy

### Relative calibration

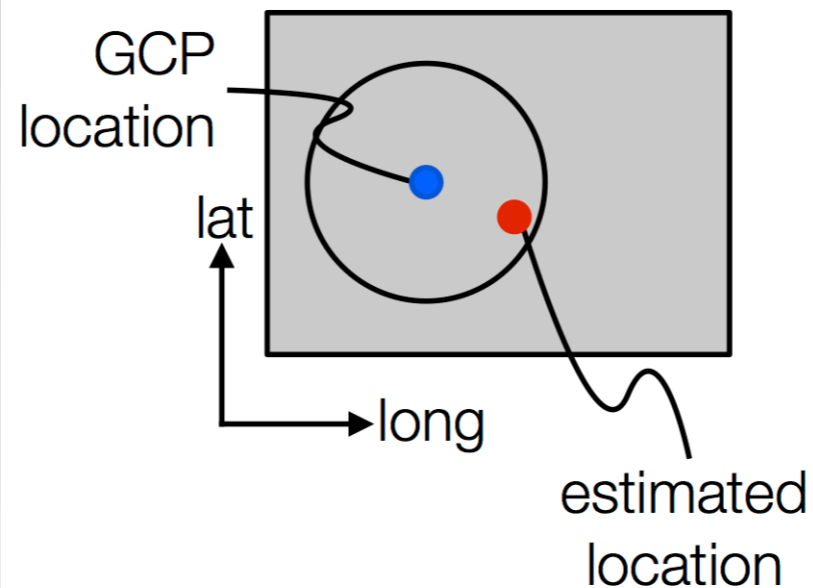
- Gain/offset correction
- Bad pixel replacement
- Flat field correction



## Geometric accuracy

**CE 90 < 100 m**

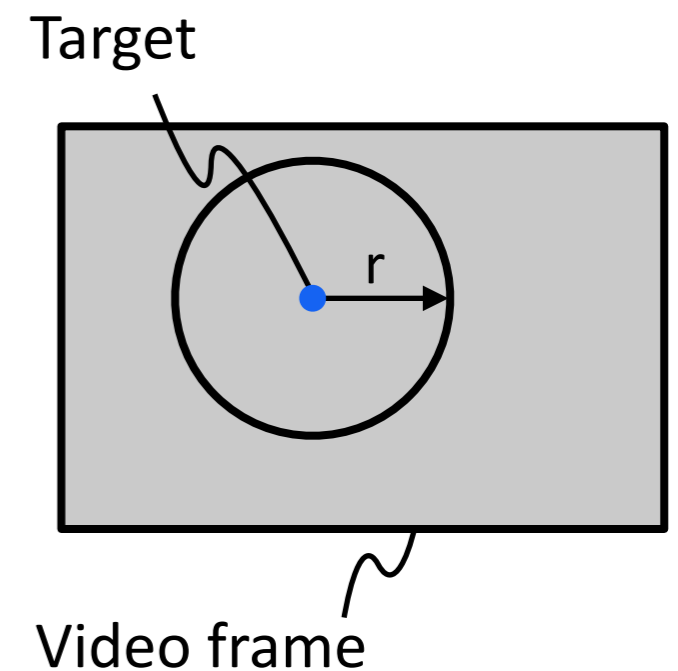
- GCP-based calibration
- Validated every month



## Targeting accuracy

**250 m radius coverage**

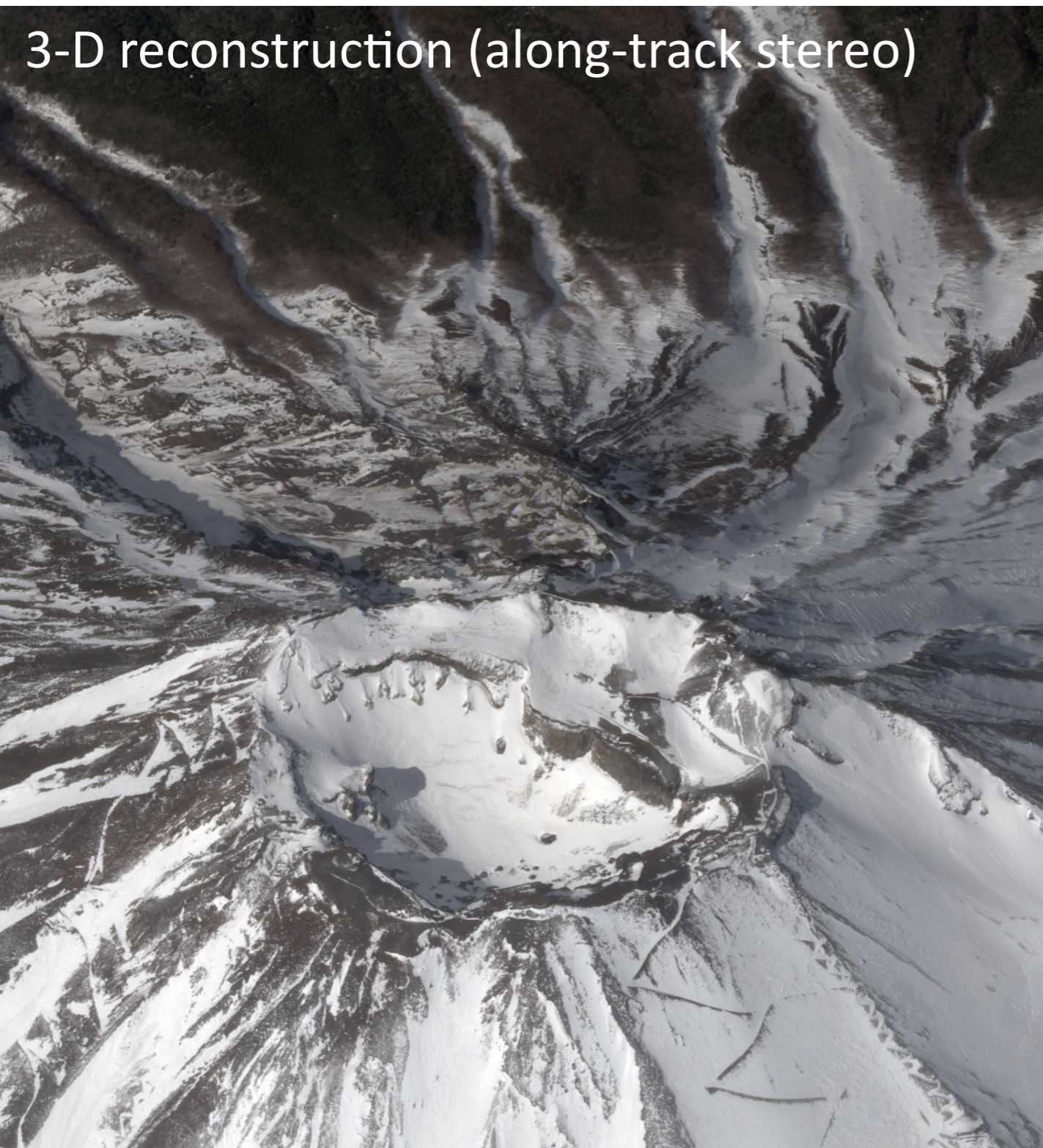
- Checked before delivery





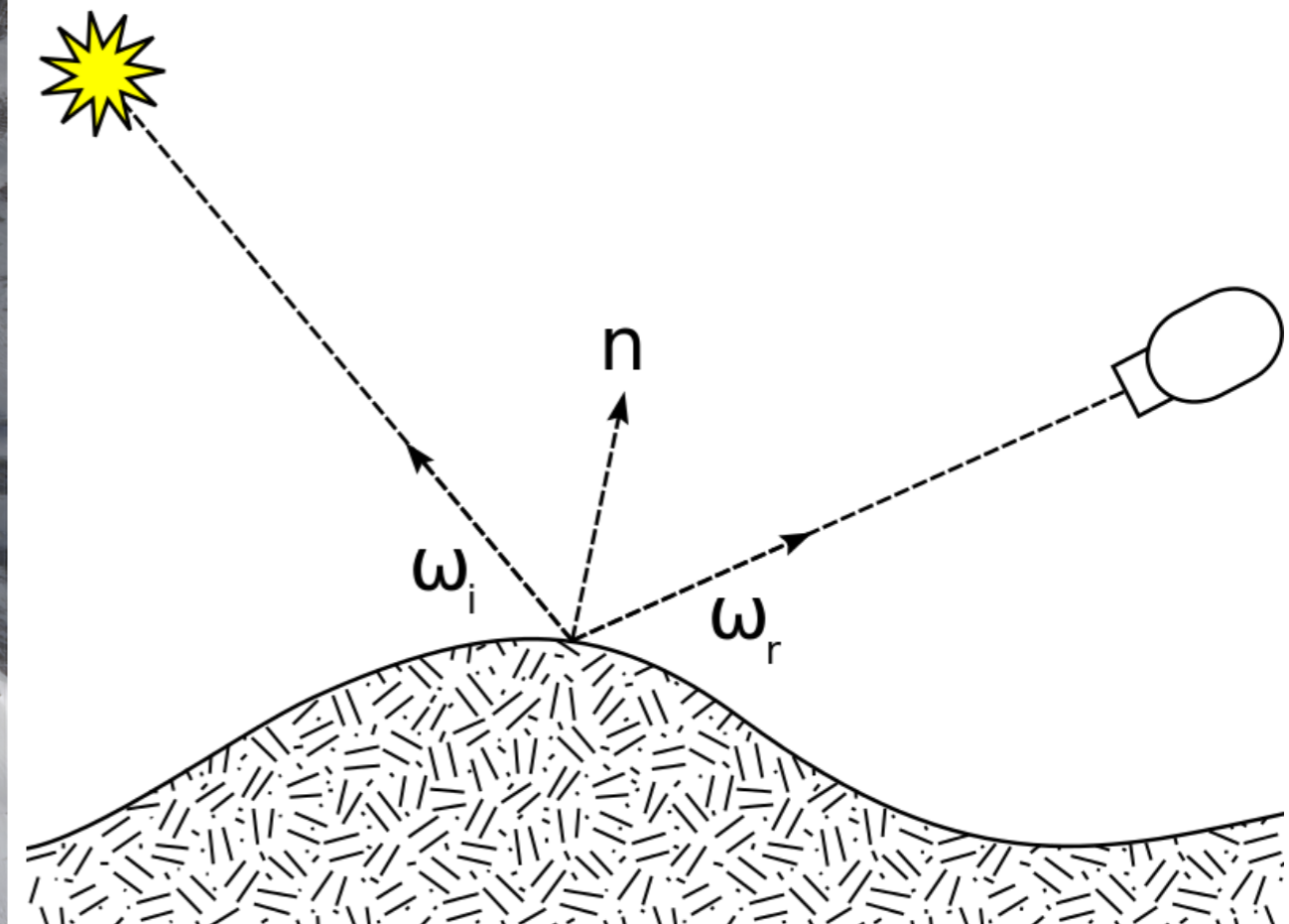
# Video Applications Today

Starting to work with partners to define the applications of today

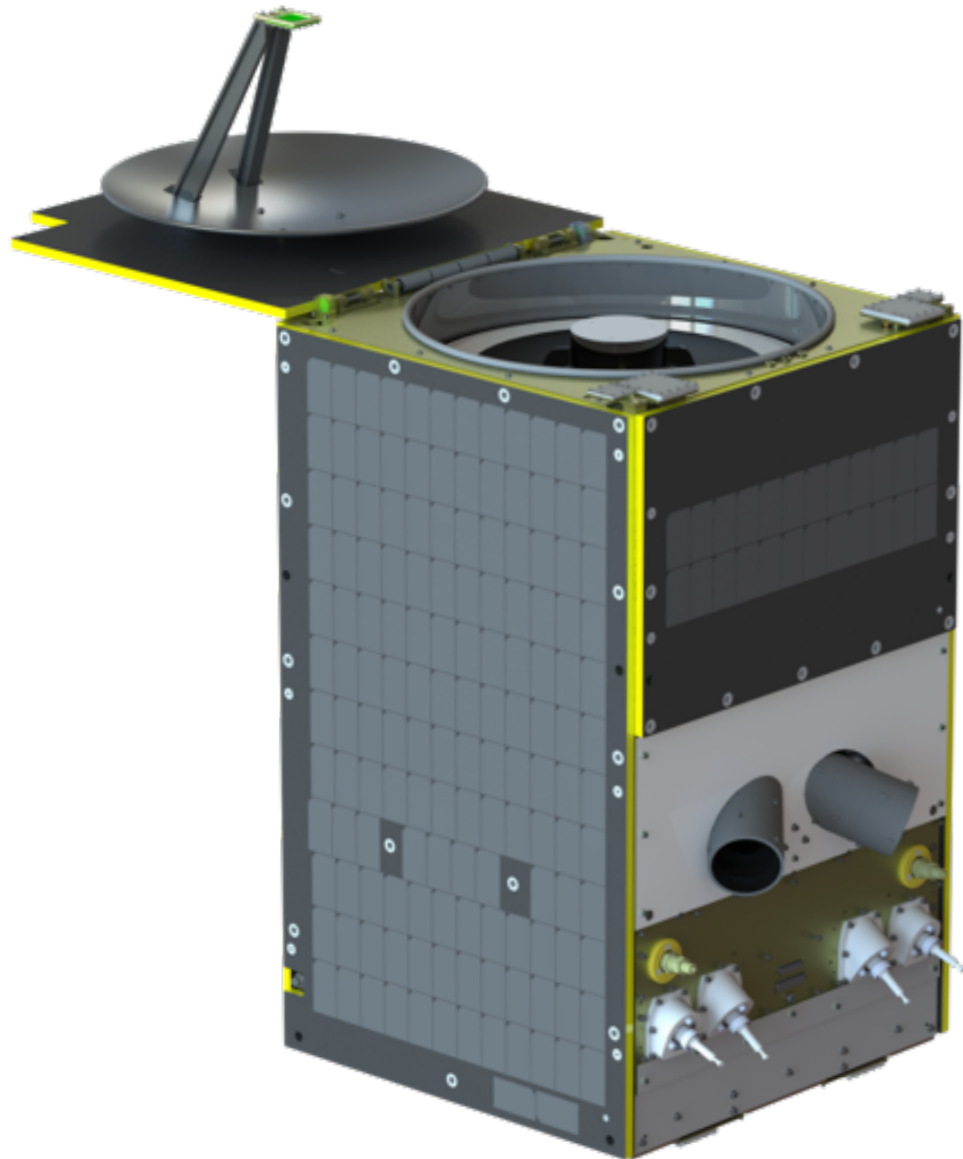


BRDF

Requires absolute radiometric calibration



# SkySat-2



## Specification

## Parameter

**Design Life**

6+ years

**Dimensions (stowed)**

60 cm x 60 cm x 95 cm

**Satellite Mass**

120 kg

**LEO Orbit**

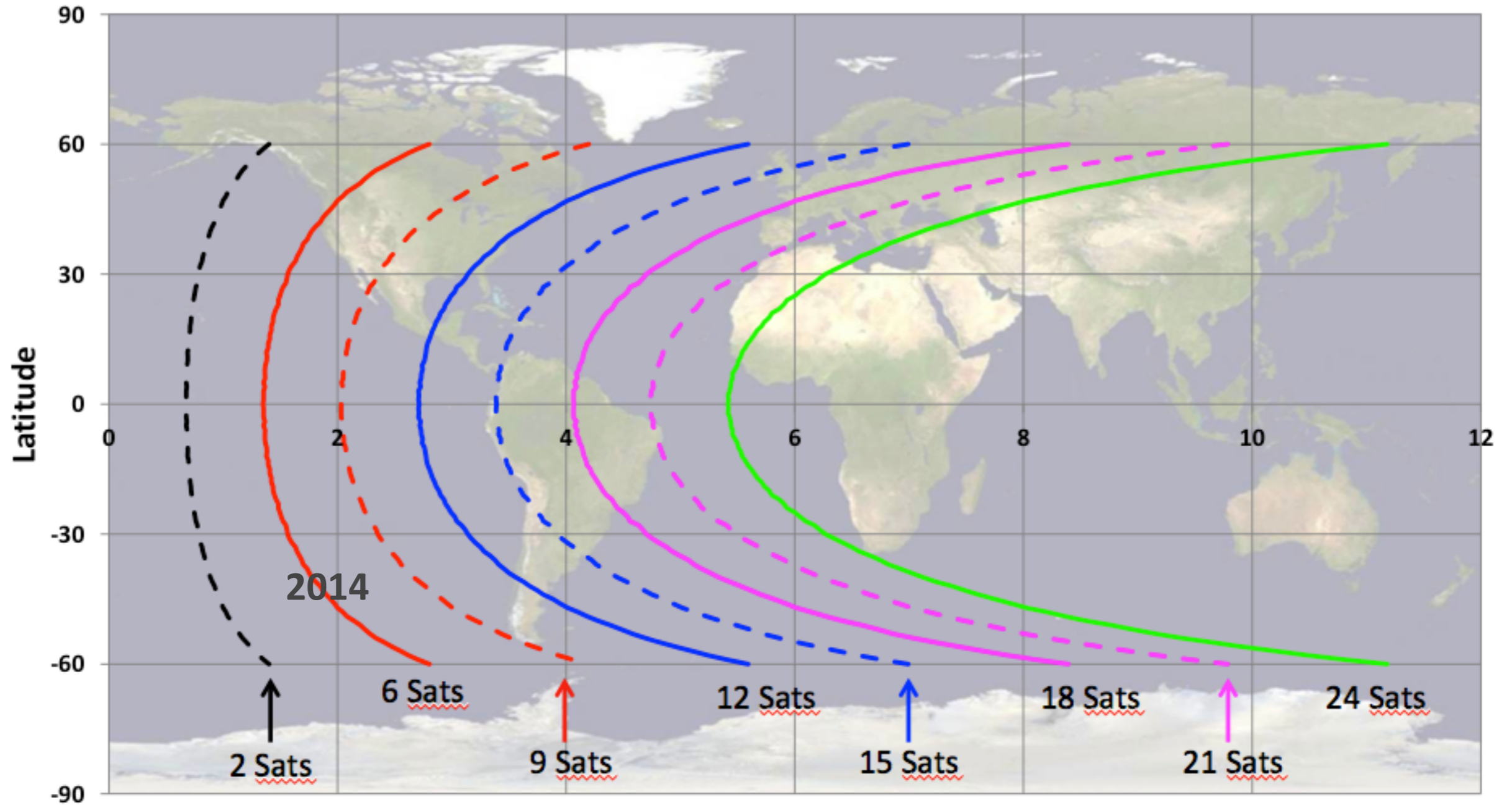
600 km sun synchronous @  
9:00AM rise time

**Launch**

July 8, 2014, Soyuz (scheduled)

# Skybox's Access Roadmap

Average # of collection revisits per day



# Video Applications of the Future

The Skybox constellation will enable video applications of the future

Repeat stereo/BRDF  
Change detection  
Persistent imaging  
Geohazard monitoring  
Worldwide glacier characterization  
And more...



# Get in Touch.

We are continually seeking to expand our partner network. Technology innovators, data providers, service providers, distributors, software integrators - we'd love to talk to you.

Feel free to email us at [partners@skybox.com](mailto:partners@skybox.com).

We look forward to hearing from you.

[www.skybox.com](http://www.skybox.com)