SpyMeSat Mobile App

Imaging Satellite Awareness & Access

brought to you by

ORBIT LOGIC

The SpyMeSat app . . .
space awareness and access for everyone

The SpyMeSat app will notify you when a satellite could be taking your picture from space!

SpyMeSat is the first mobile app to offer instant access to the latest commercial satellite imagery through in-app purchase, and the first mobile app to allow users to request new tasking of an imaging satellite!

SpyMeSat uses published satellite orbit data from NORAD and publicly available satellite information to compute and dynamically display satellite flyovers and imaging opportunities.

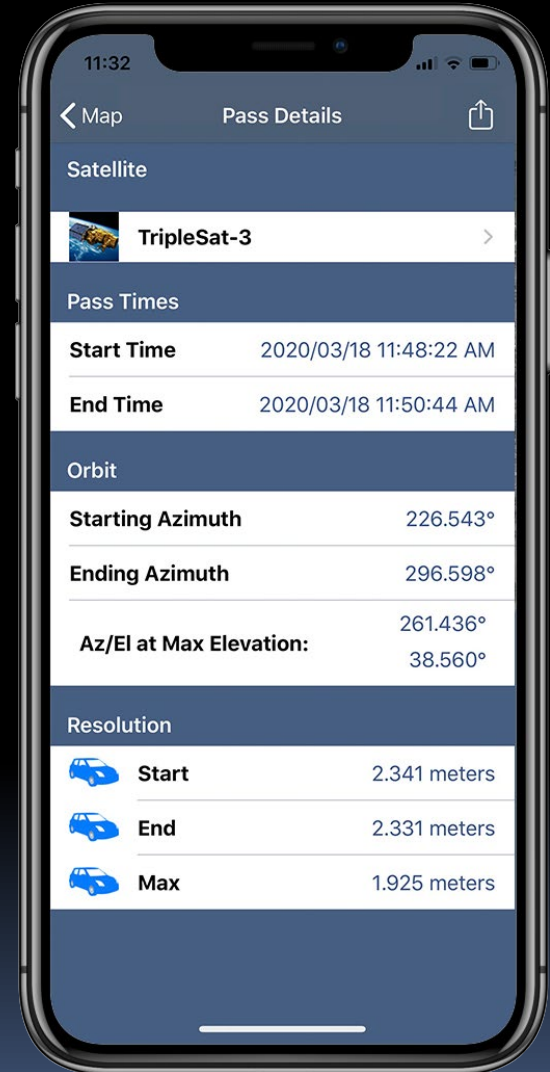Available for iPhone and Android

Pass Details

Select a pass from the list on the main page and the Pass Details page comes up

Pass Details provides additional information about a specific upcoming imaging opportunity including start and end times to 1 second fidelity, and starting, ending, and best imaging resolution
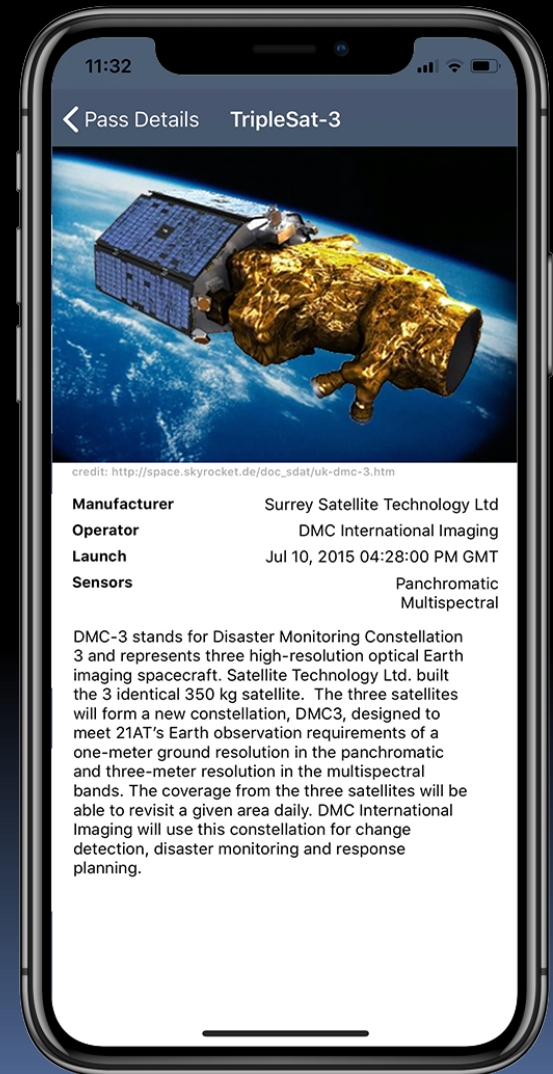
A link is also provided to find out more about the satellite

Satellite Information Pages

A separate page is provided for each satellite that includes a photo or artwork of the satellite and some background on its capabilities and operation

The Satellite Information page is reached from any pass details page or from the Settings satellite page
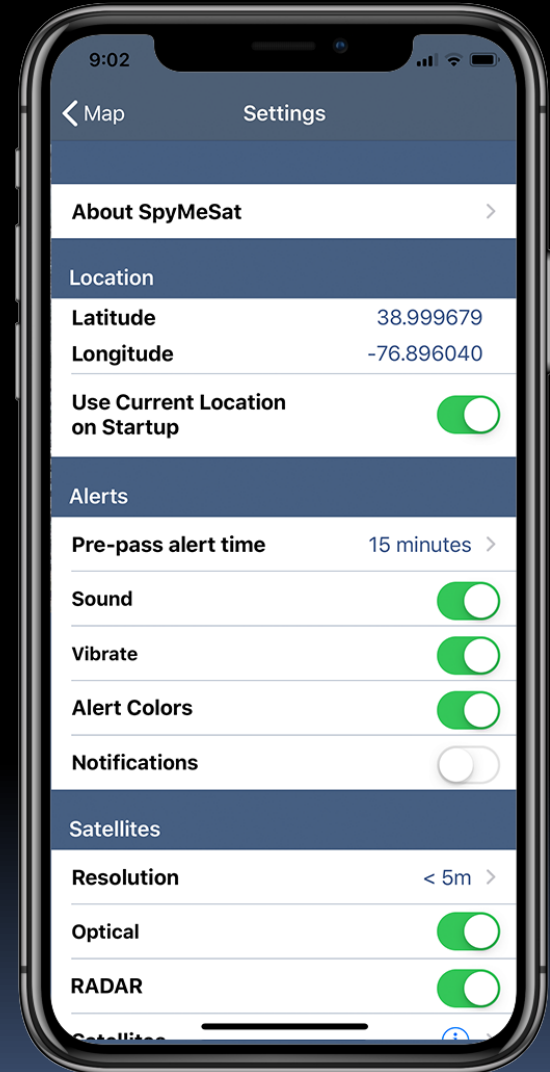
Settings

This app page is reached by selecting the configuration icon in the lower right of the main page

The user can set a variety of preferences:

- Enable/Disable specific satellites
- Set the resolution limit for notifications
- Select and set notification options
- Select period of time for computations
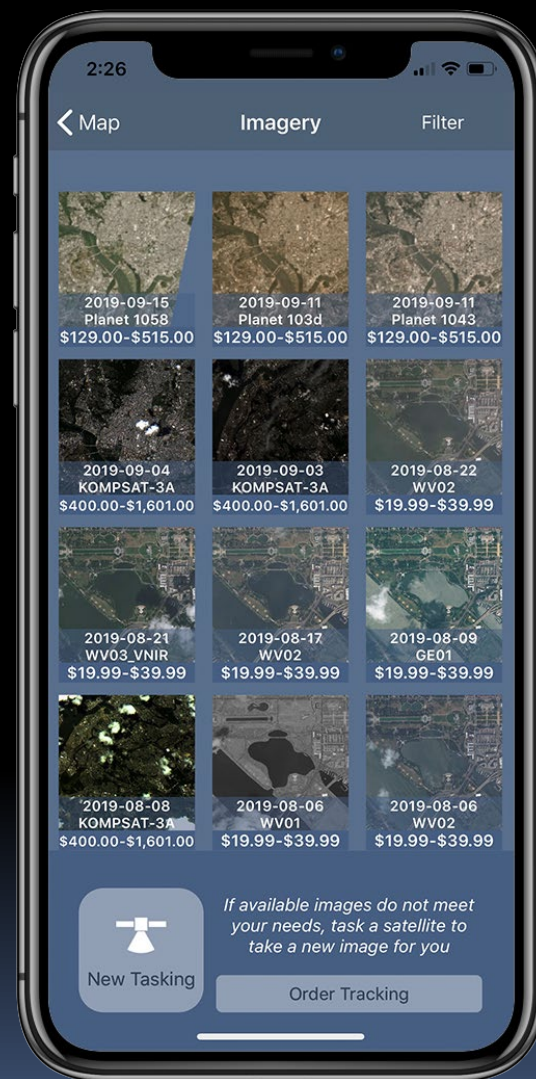- SpyMeSat imagery server login

Preview Available Satellite Imagery

From the main SpyMeSat Imagery page, the user can thumbnails of available satellite images for the current specified SpyMeSat location

Images are identified by the date collected and ordered by date for easy searching

From this page the user selects an available image to preview . . . or chooses New Tasking
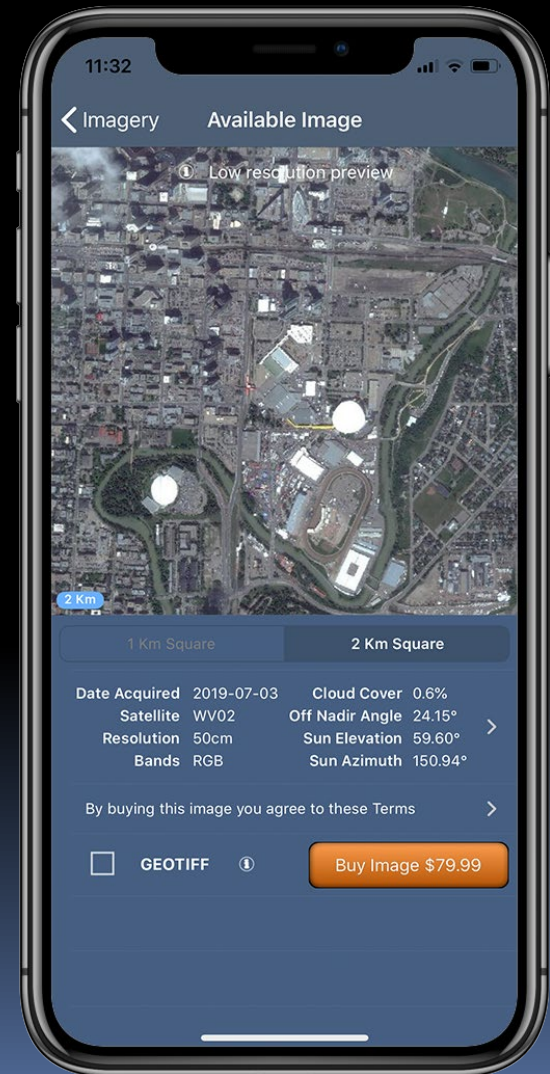
Download Satellite Images

The most recent and highest resolution commercial satellite imagery in the world is available for purchase through the SpyMeSat app

Preview a low resolution version of the available satellite images of your current location or any location you specify, select the desired image size, and click to purchase . . . As easy as buying a song!

Images come from the DigitalGlobe and Planet satellite imagery archives and are available on demand. Your purchased images are available in JPEG format on your smartphone within seconds, and also available for download in GEOTIFF format.

SpyMeSat is the first mobile app to offer on-demand download of high resolution satellite images
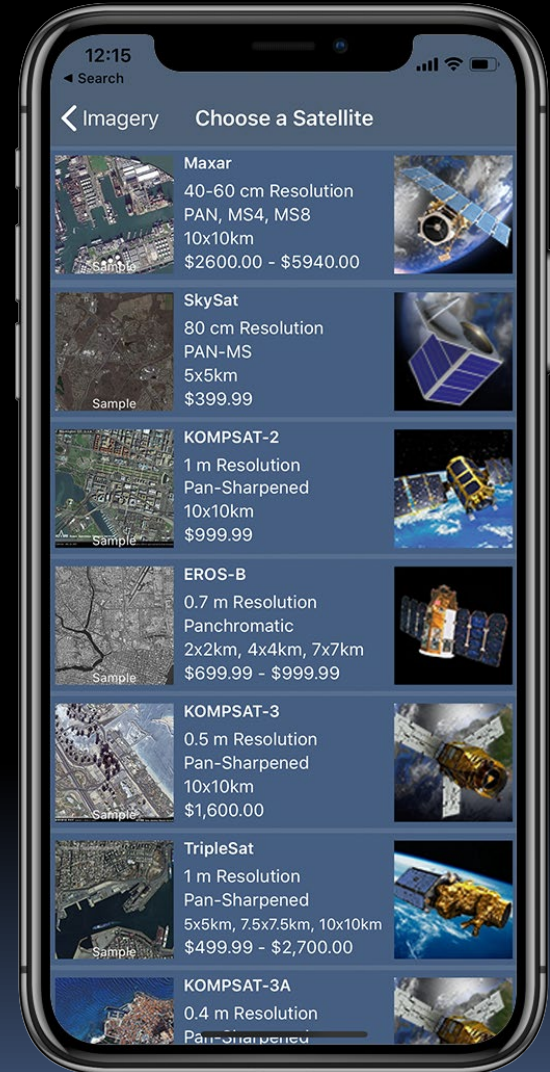
New Tasking
(Choose a Satellite)

SpyMeSat users may request a new image be taken by a satellite . In the industry this is known as "New Tasking"

New Tasking has never before been available to the public through a mobile app

The first step for New Tasking is to select a satellite for tasking

Resolution, color, image size options, and pricing are summarized here for each satellite to help the user make a selection

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New Tasking

User selects the start and end dates for tasking (minimum day range applies for some satellites), and the size option, adds a note (optional), and hits Order Image.
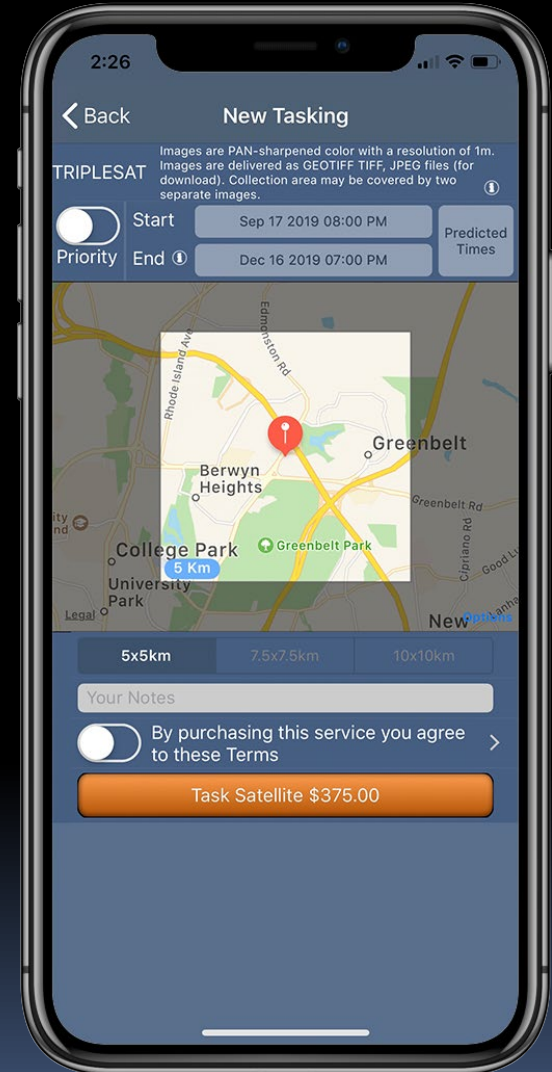
Pricing ranges from $250-$5940 USD, depending on the satellite selected, and the size of the image requested.

Payments are made via Apple Pay or credit card

EULA is available from this order page (and from the archive image purchase page as well)

Images are collected by the EROS-B, TripleSat, Maxar, Planet, or KOMPSAT satellites:

- 40cm to 1m resolution
- Color or Black & White or RADAR
- JPEG image delivered for mobile app
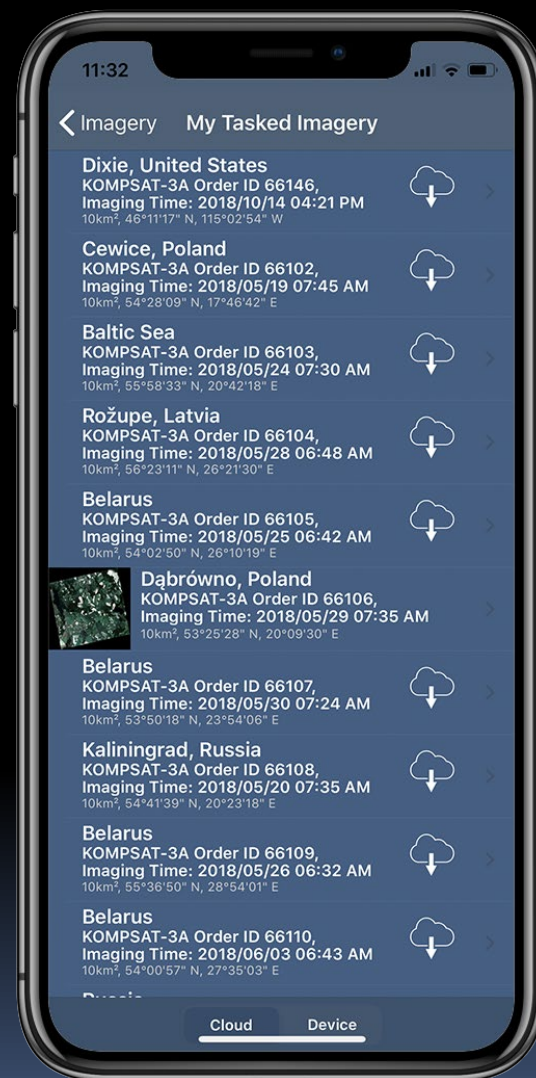- Link provided via email to download GEOTIFF image

Tasking Status
(and notifications)

The My Tasked Imagery page (reached from the Imagery page) provides the user status of all tasked images

Thumbnails of successfully collected images are shown, if available

Tasking notifications let the user know BEFORE IMAGING of the EXACT time of imaging for some satellites . . . enabling "space selfies" !!!
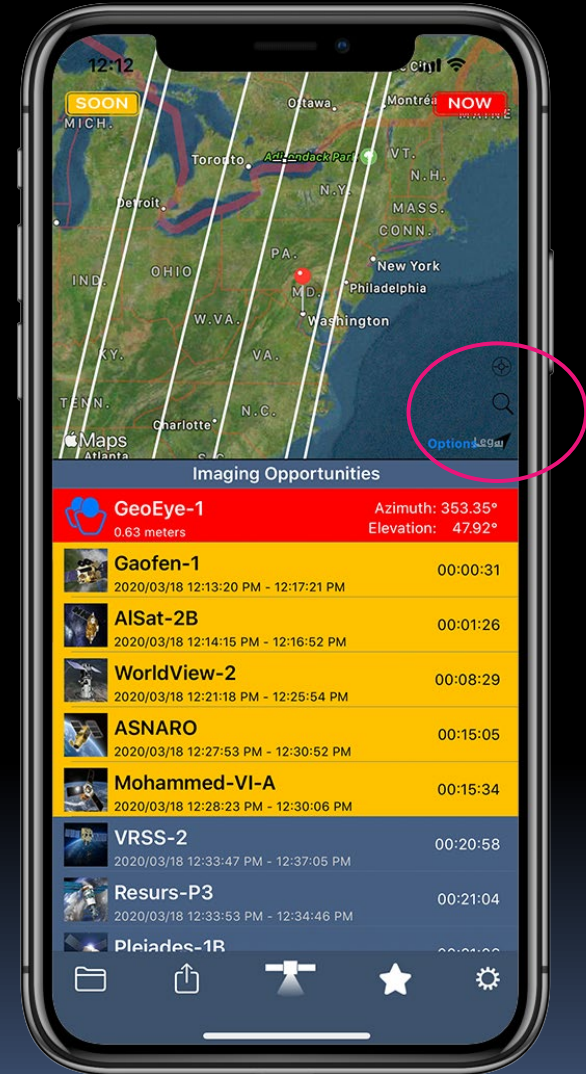
Setting Location

SpyMeSat uses the mobile devices current location

- If Location Services are available
- If "Use Current Location on Startup" is selected on the Settings page (default)

The user may change the specified location through the main map page by:

o Scroll/zoom on the map and press/hold to drop a pin

o Enter a specific location using the "Search" icon option (by landmark, address, or lat/lon)

o Selecting the "Use Current Location" icon

o Return to center the map on the set location and default zoon level using the "pointer" icon

o Set the map background options (satellite, map, hybrid) using the "Options" button

SpyMeSat Imagery Archive Account

With a SpyMeSat account the user can store images on the SpyMeSat cloud and re-download purchased images, and make new tasking requests

Reached from the bottom of the Settings page

Automatically syncs purchased images across multiple user devices

Registering for a SpyMeSat account is required to purchase archive images and to request new tasking
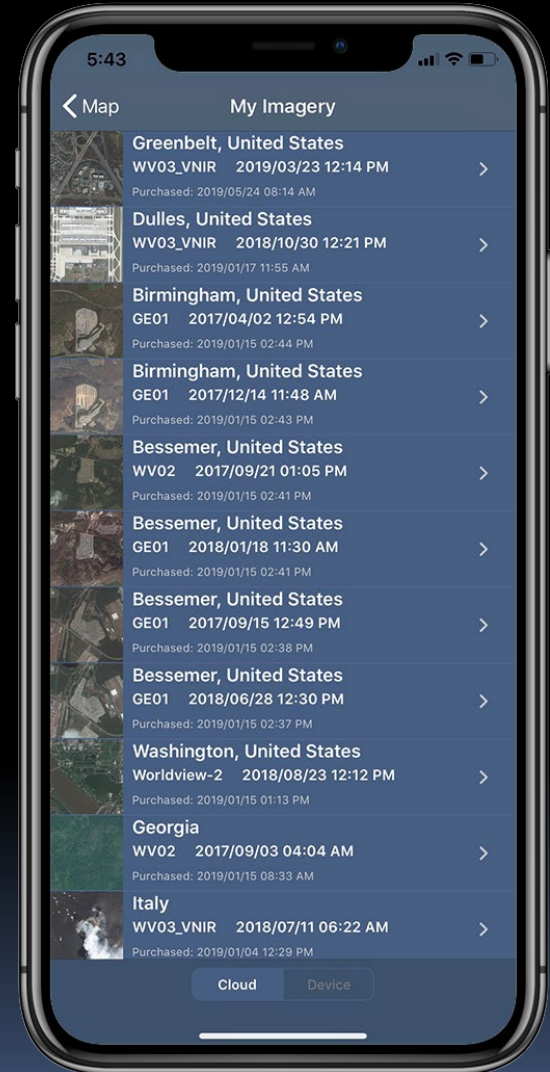
My Satellite Imagery

Reached from the SpyMeSat Imagery page by selecting the View button

All purchased images and image details are stored here, including status of tasked images

The cloud tab shows the images loaded on the device and images the user has stored on the SpyMeSat cloud.

The user is able to re-download any purchased images from the cloud in seconds

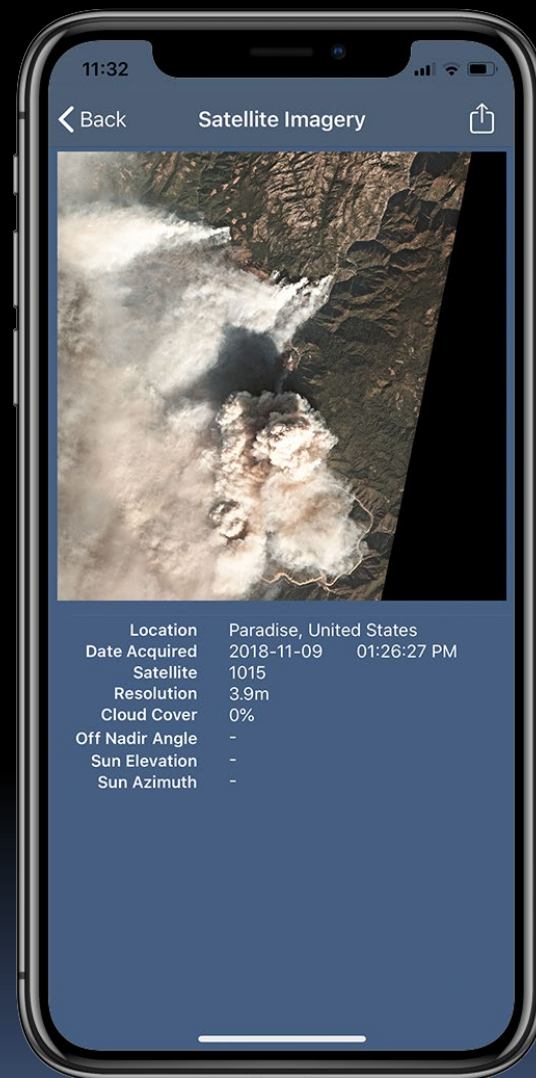The Device tab will only show the user the images that are currently stored on the device

View and Share!

Once the user has purchased an image it can be viewed within the SpyMeSat app or sent to external applications for viewing

Here you can see the Image Location, Date Acquired, Time Acquired, and the Satellite

The user also has the ability to share the JPEG image (via Email, Facebook, etc.) using the top right box/arrow icon

About Page

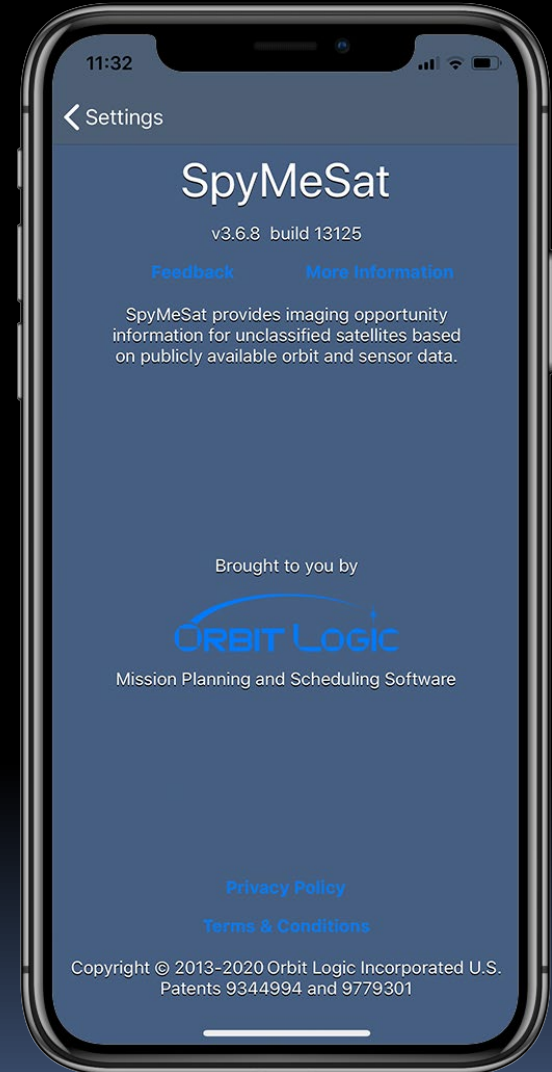Reached from a button at the top of the Settings/Configuration page

Provides a link to www.spymesat.com for additional information

Provides a button to generate a feedback email that is sent to the Orbit Logic SpyMeSat app team at spymesat@orbitlogic.com

Provides a logo button to take the user to the Orbit Logic website

Provides some disclaimer information, privacy policy and terms of use links, and patent information

Apple Watch

SpyMeSat notifications and reminders appear on your Apple Watch

- Enable this through the Apple Watch app on your iPhone

Apple Watch App

- Overflight countdowns and color coding appear on the watch and in the Dock

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Why SpyMeSat?

"When I speak with people outside the space industry about what I do they are always very interested and have many questions about satellites and imaging satellites in particular.

I realized that there was a place for an app that provided information, education, and awareness about imaging satellites . . . and access to the latest satellite imagery.

SpyMeSat is the result . . . and it's lots of fun!"

Alex Herz
President, Orbit Logic Incorporated

Sources of Data

- SpyMeSat uses only publicly available orbit data from NORAD published on www.celestrak.com

- SpyMeSat uses only publicly available satellite and sensor data (usually from the satellite operator's own website)

- SpyMeSat does not use any proprietary satellite data

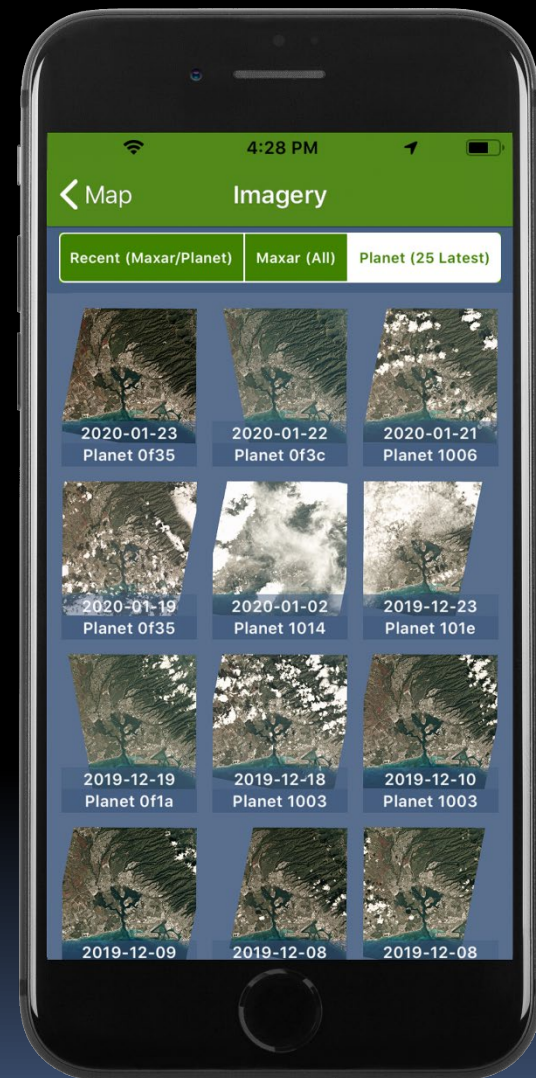- SpyMeSat does not include any classified satellite from any nation

Custom Solutions

- Customized mobile apps based on SpyMeSat can be quickly implemented:
  - Any desired set of satellites
  - Any desired source of orbit data
  - Any desired imagery archive(s)
  - White-labeling/rebranding
- Dedicated SpyMeSat Server available
- Integration with Order Logic web application for order management and feasibility checks
- Integration with CPAW for satellite collection planning and mission planning

SpyMeSatGov
(custom solution for NGA)

- Based heavily on the SpyMeSat consumer app

- Available for download from NGA's Geoint App Store

- Tasking removed due to NGA legal concerns

- Requires separate logins for access to the Maxar and Planet archives

For More Information

- Download the app from the Apple App Store or Google Play
- Visit the SpyMeSat website at www.spymesat.com
- Send app feedback or questions to spymesat@orbitlogic.com

- Visit the Orbit Logic website at www.orbitlogic.com
- Call or email Alex Herz at Orbit Logic
  - alex.herz@orbitlogic.com
  - 301-982-6233

- Visit us or send us snail mail (please call or email to pre-arrange a visit)
  - Orbit Logic Incorporated
  - 7852 Walker Drive, Suite 400
  - Greenbelt, MD 20770

New Vendor Onboarding

- For imaging satellite operators who want to join the SpyMeSat marketplace . . .

1. Send standard Reseller Agreement and related product specifications, pricing and order form(s)
   - May require revisions for mobile app purchase workflow
2. Send archive imagery API information
   - Thumbnails
   - Full resolution imagery products
3. Provide Tasking Request API information
   - As an alternative, Orbit Logic can provide an email ICD for tasking
   - Tasking workflow: request, confirm, planned, acquired, delivered

Security

- General
  - iTunes and Google Play not generally available in countries under U.S embargo or to people on Denied Parties list

- Archive Image Purchase
  - Image purchase disabled if Location Services is off or not available to the SpyMeSat app
  - Image purchase disabled if current location is within an embargoed country
  - Embargoed country list changed monitored automatically and Orbit Logic personnel alerted of any changes (SpyMeSat server updated as needed)

- New Tasking
  - Region constraints applied (can be satellite-specific)
  - Requires user registration including name, address, and country of citizenship
  - Requires payment method including verification of billing address
  - Denied parties check made at registration and at new tasking requests
  - Denied parties list updated automatically through daily SpyMeSat server interaction with Treasury and State Department websites
    - Orbit Logic personnel notified of any attempts by denied parties to initiate new tasking
    - Denied party user receives generic-looking "server error" at purchase attempt