

Faster, Easier Access to Airbus Satellite Imagery for ArcGIS Users

Automated Downloading of Airbus Imagery from the OneAtlas Platform

ArcGIS users now have easier access to SPOT, Pléiades, and Pléiades Neo satellite imagery from the Airbus OneAtlas platform. The new Airbus OneAtlas Data Downloader toolbox enables users to automate the process of downloading and extracting image data files from their OneAtlas My Data workspace into ArcGIS Pro or ArcGIS Online for visualization, analysis, and publishing.

OneAtlas is an online platform that enables users to easily obtain the best satellite image, or combination of imagery, for their specific application, area of interest, and budget. Providing access primarily to the unrivaled Airbus constellation of optical imaging satellites – SPOT, Pléiades, and Pléiades Neo – OneAtlas is the gateway for geospatial professionals to select from the industry’s most diverse offering of image data resolutions, spectral bands, modes, swaths, and revisits.



OneAtlas offers three options for obtaining satellite data sets:

Living Library

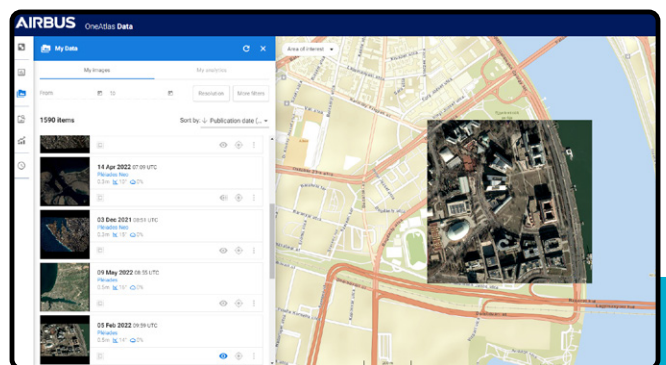
A subscription service, the Living Library contains a curated set of premium 1.5m, 50cm, and (coming soon) 30cm imagery available for streaming and downloading with virtually no minimum AOI requirements and accessible via a web UI and API.

Satellite Tasking

Users can place tasking orders for SPOT, Pléiades and Pléiades Neo to acquire imagery of an AOI today, tomorrow, or anytime in the future, with purchasing by the km².

Pléiades Neo Archive

Users can search the entire archive of imagery acquired by the new Pléiades Neo constellation and purchase data by the km². Pléiades Neo provides the highest native spatial resolution (30cm) and best geolocation accuracy (3.5m CE90) commercially available today.



OneAtlas provides users with secure cloud storage of imagery purchased for downloading in the OneAtlas My Data workspace. Images saved here can be reviewed and downloaded directly into ArcGIS with the Airbus OneAtlas Data Downloader.

Faster Access with the Airbus OneAtlas Data Downloader

The Airbus OneAtlas Data Downloader is available for free to all ArcGIS users and can be downloaded and added to ArcGIS Pro. The image files can be automatically decompressed and retain their full spatial and spectral information content – ready

for enhancement, analysis, and 2D/3D visualization, as well as publishing, with the new ArcGIS Create Hosted Imagery wizard in ArcGIS. The Airbus OneAtlas Data Downloader gives Esri users faster access to their satellite data by automating the download and extraction

procedure for one or more products, without leaving the ArcGIS environment. Whether accessing an Airbus satellite image for custom processing or setting up an ongoing workflow for recurring analysis of streaming imagery, the Downloader toolbox is easy to use.

Using the Airbus OneAtlas Data Downloader

1 Download the Toolbox

ArcGIS Pro users can download the Airbus OneAtlas Data Downloader toolbox from inside their desktop environment. The toolbox will be saved in a folder that can be accessed at any time within ArcGIS Pro. For ArcGIS Online users, the Downloader includes an ArcGIS Notebook that can also be opened whenever it's needed.

2 Connect to the OneAtlas My Data Workspace

After opening the Downloader toolbox within the ArcGIS Pro environment, the user is prompted to enter their unique OneAtlas API key they receive with their OneAtlas account. This connects ArcGIS to the user's OneAtlas My Data workspace where all imagery data sets that have been purchased from OneAtlas are saved in the Airbus cloud.

3 Download and Decompress the Selected Imagery

The user can select one or multiple satellite images to download from the My Data workspace to the user's computer for use in ArcGIS Pro. The Downloader tool asks the user to specify a destination folder for the accessed imagery. The user also has the option of only downloading the file or downloading and extracting the data. Extraction means the image data file is decompressed with no loss of information into a format that is fully exploitable by the entire workbench of processing and visualization functions in ArcGIS.

4 Process Your Airbus Imagery

ArcGIS Pro offers a sophisticated suite of functions to exploit images and extract information from them once the imagery has been decompressed. These functions can be used to visualize imagery in 2D & 3D, create custom band combinations, apply contrast stretches, run pixel classifications, and apply complex analysis algorithms including deep learning.

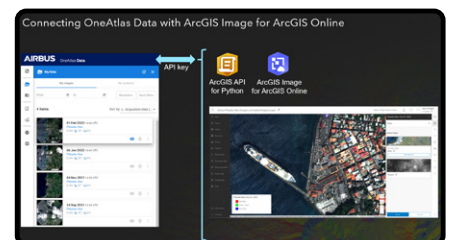
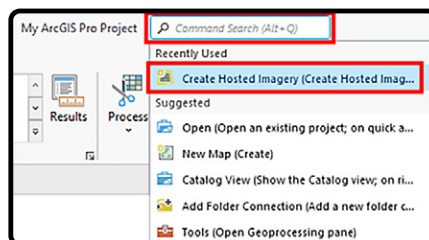
5 Publish Your OneAtlas Imagery

Publishing the imagery as image services to ArcGIS Online allows other users within the ArcGIS organization to perform visualization and analysis functions. Starting in ArcGIS Pro 2.9, the Create Hosted Imagery wizard was introduced which publishes selected imagery as Hosted Imagery Layers in ArcGIS Online – extending the visualization and analysis capabilities to members of the ArcGIS Online Organization.

For ArcGIS Notebooks users, the service publishing functions are conducted in Python code - directly between the OneAtlas My Data workspace and ArcGIS Online – using commercial cloud networking speeds for the imagery transfer. Whether publishing with ArcGIS Pro from downloaded imagery or with the ArcGIS Notebook, an ArcGIS Image for ArcGIS Online user type extension is required.

6 Automate Repetitious Tasks

ArcGIS Notebook users can streamline their image publishing productivity by setting up automated workflows with a connection to the OneAtlas My Data workspace to repeatedly obtain imagery from the workspace to feed data into scheduled image publishing and downstream analysis tasks.



Documentation on both workflows can be found on GitHub:
<https://github.com/dkwright/Airbus-OneAtlas-Data-Downloader>

Visit oneatlas.airbus.com

Get started