



NASA Worldview

USFS – NASA Joint Applications Workshop, 30 April – 2 May 2019

Presented by Paul Moth



National Snow and Ice Data Center
Advancing Knowledge of Earth's frozen regions



University of Colorado **Boulder**

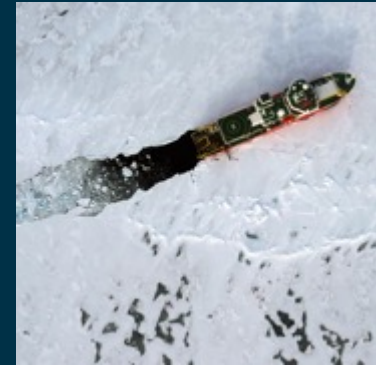
National Snow and Ice Data Center



manages and distributes
scientific data



researches the cryosphere and
data science



supports data users



supports local and Traditional
Knowledge



provides tools for data users



informs the public about the
cryosphere

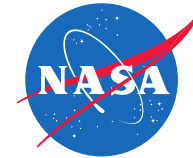
Affiliations



Cooperative Institute for Research in Environmental Science



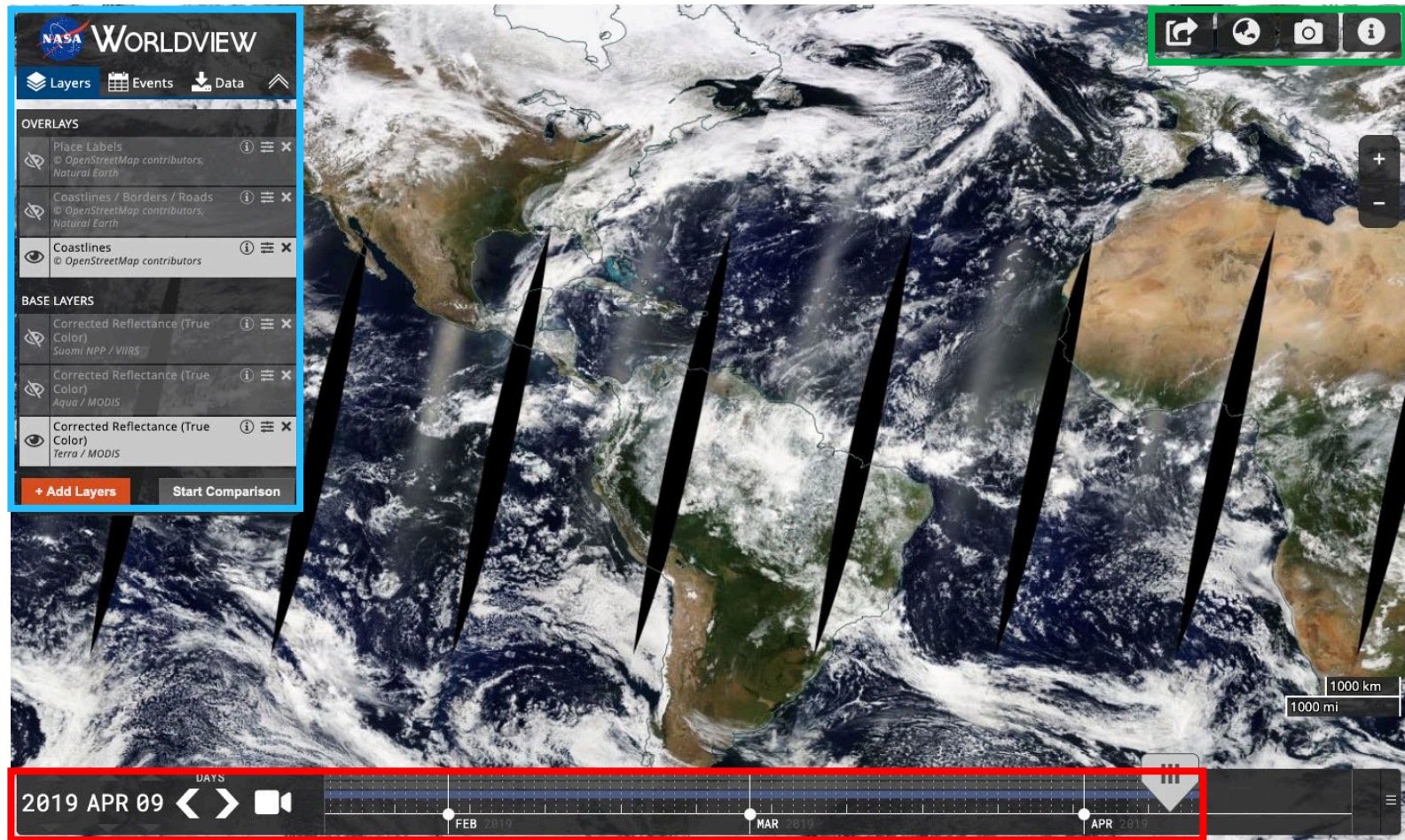
Sponsors



NASA Worldview - Overview

- <https://worldview.earthdata.nasa.gov/>
- Uses Global Imagery Browse Services (GIBS)
- Interactively browse 800+ imagery layers within hours of observation
- Download underlying data
- Add base layers and overlays to create animations and visualizations with data
- Share map links on social media
- View science related events and the underlying related data

NASA Worldview - Overview



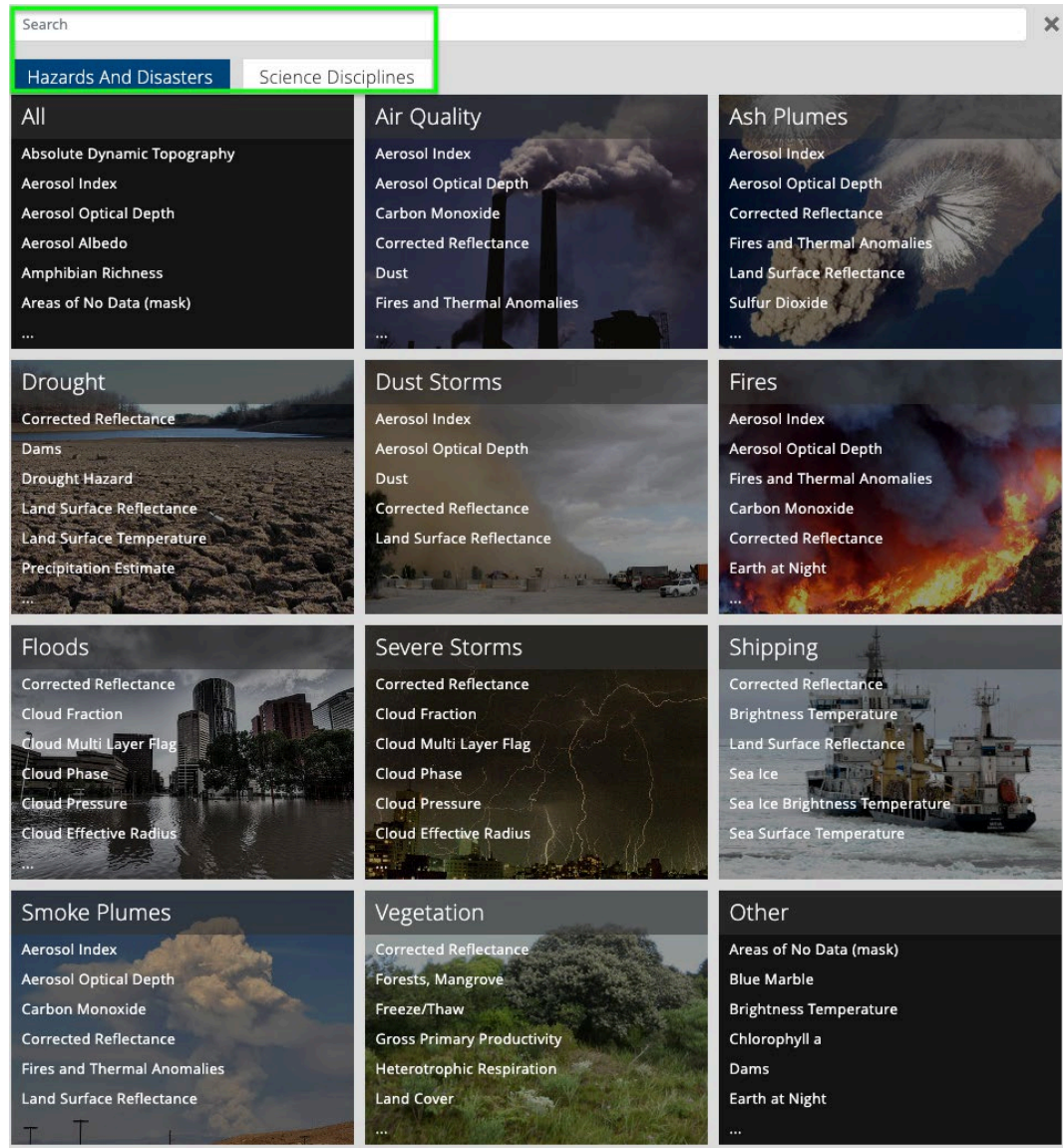
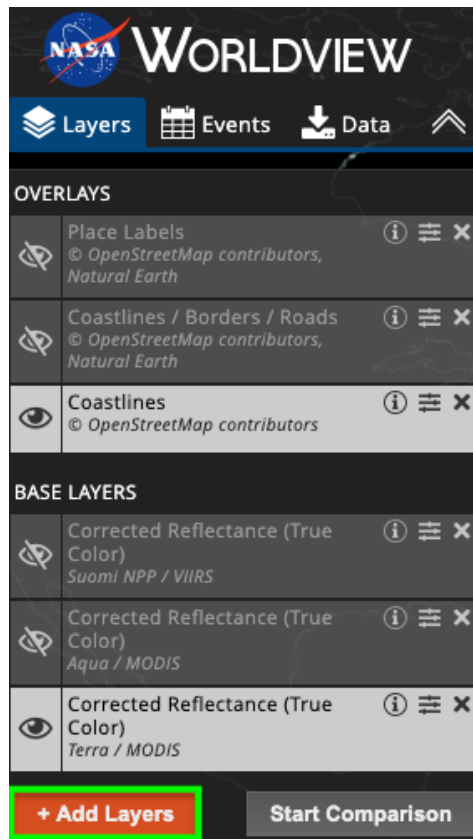
Blue: Add/remove layers and overlays, download data, adjust symbology, view Earth events, read about data, and compare data (swiping, etc.)

Red: View temporal coverage of data, toggle dates, and create animations

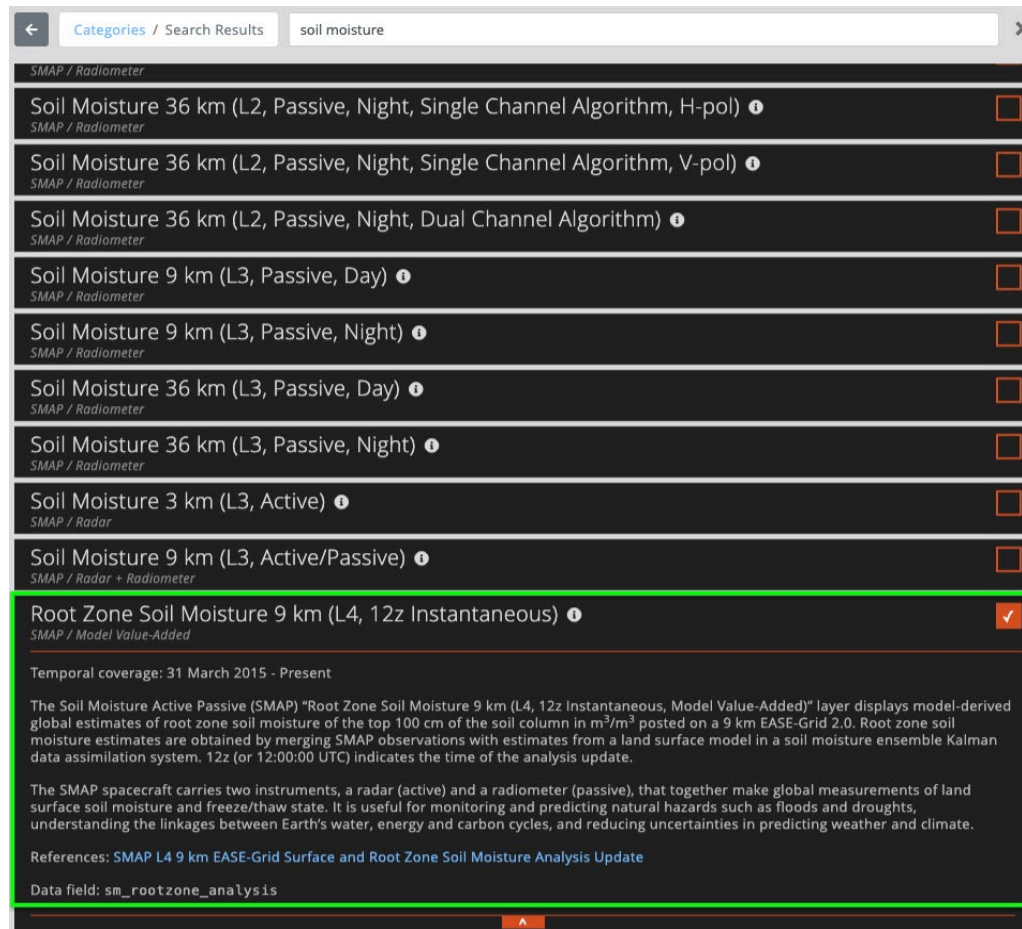
Green: Share on social media, change projection, and download snapshots



NASA Worldview – Search for data



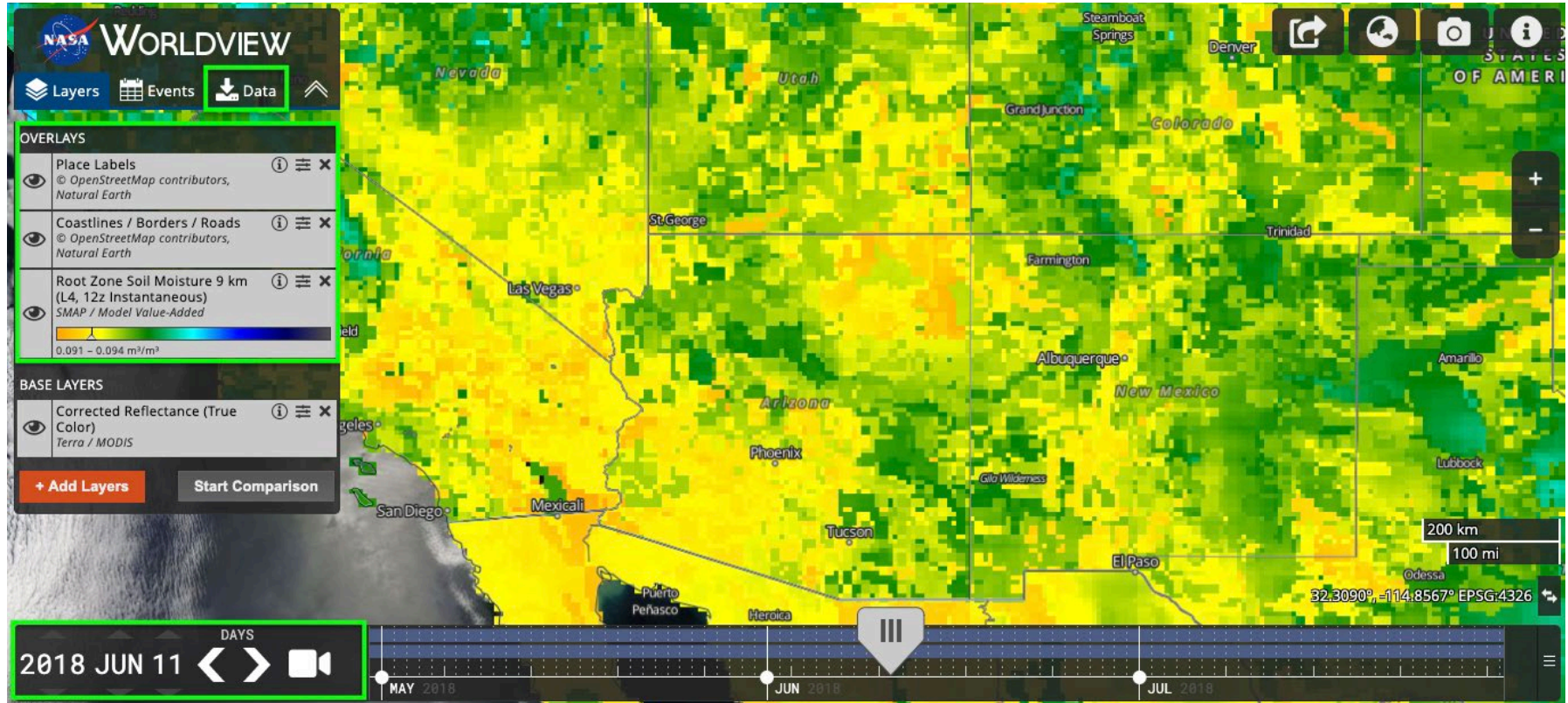
NASA Worldview - Search for and add SMAP Level-4 9km Root Zone Soil Moisture data



- Search soil moisture
- Add other parameter layers to visualize multiple parameters at once
- Click on the i button to learn about the data set, temporal coverage, and links to the data set web page

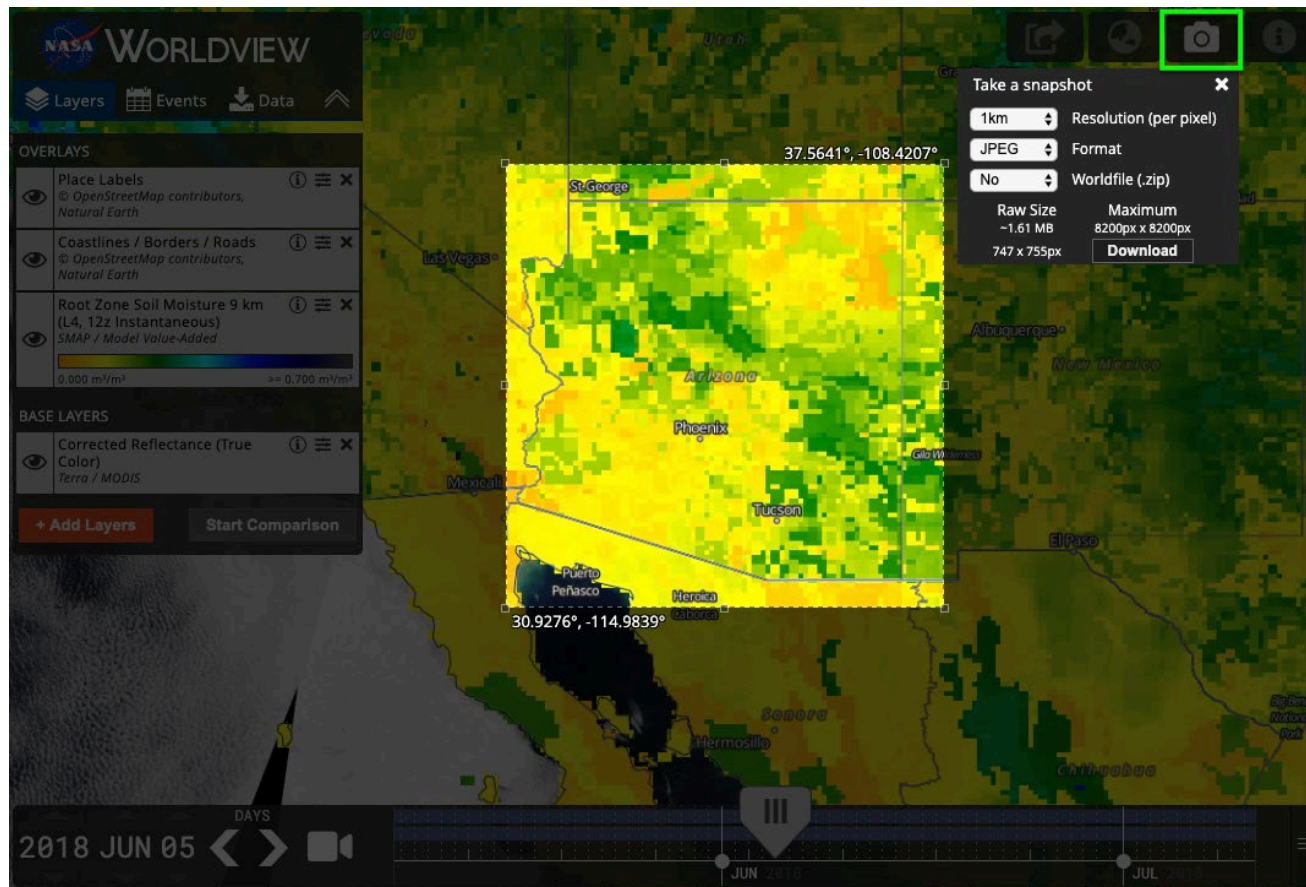


NASA Worldview – Visualize soil moisture



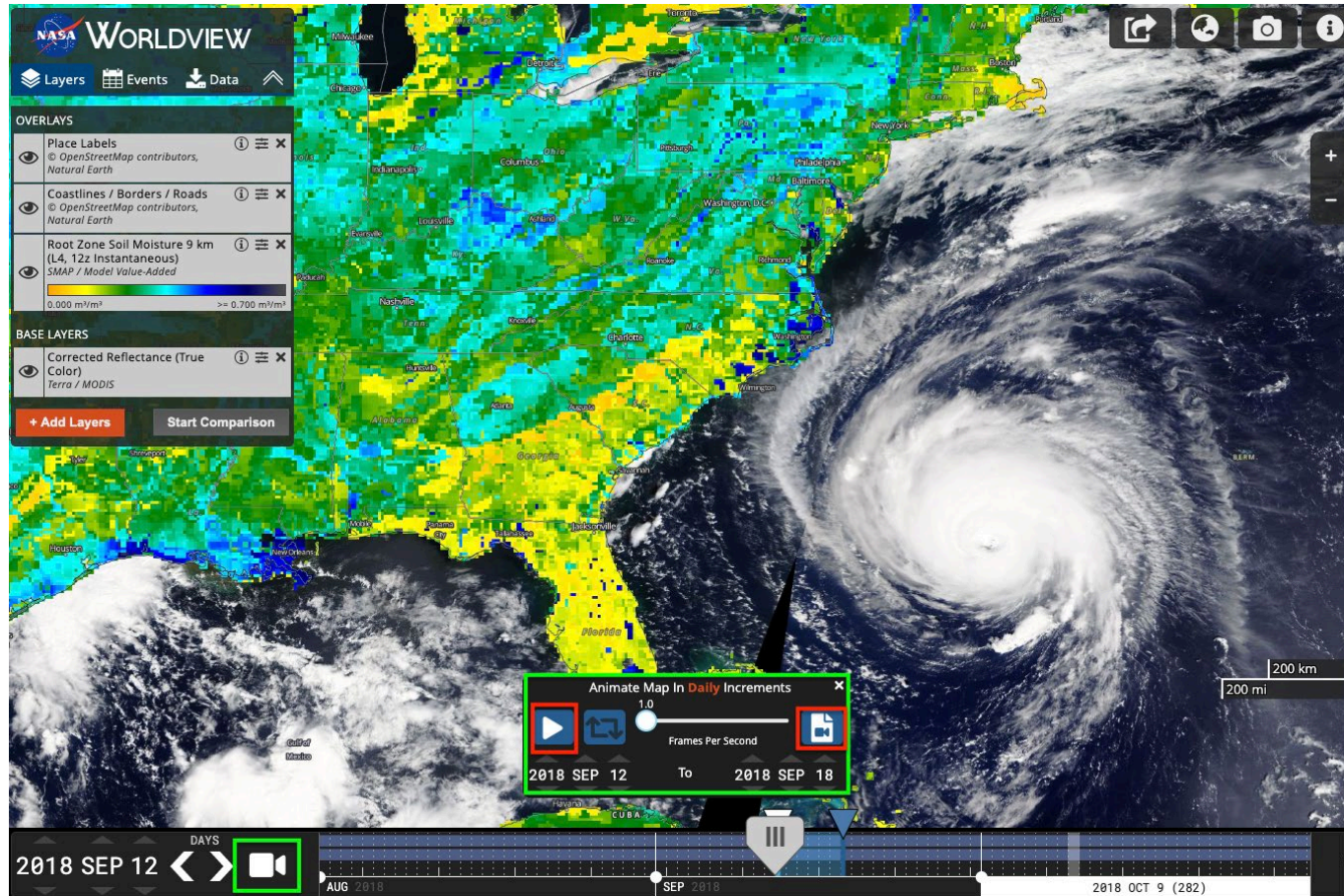
- Turn on Place Labels and Coastlines and place on top of SMAP data
- Toggle through dates to view time series
- Zoom into area of interest
- Change symbology and opacity of data layers
- Hover over a pixel to view data value in legend



NASA Worldview – Soil moisture snapshot



- Click on the camera icon
- Adjust the pixel download resolution
- Change to desired format (GeoTIFF, JPEG, KMZ, and PNG)
- Choose .zip file or not
- Click Download

NASA Worldview – GIF for Hurricane Florence



- Click on the video camera icon
- Adjust dates to include in animation
- Click  to view the animation
- Click  to create a .GIF

NASA Worldview – GIF for Hurricane Florence

