

# NOAA Hurricane Response Imagery Workflow



Pre-hurricane Monitoring



FEMA or DHS provide NOAA-RSD AOI for ER imagery



Flight lines are developed



JPEG RGB aerial imagery, GPS/IMU data is acquired



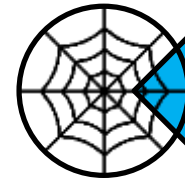
Imagery uploaded to commercial cloud after landing



Ortho-rectification, mosaic processing & web-map tiling in cloud



Mosaicked tiles are warehoused in Azure storage



TileServer PHP & MapBox API are used to make the data web accessible

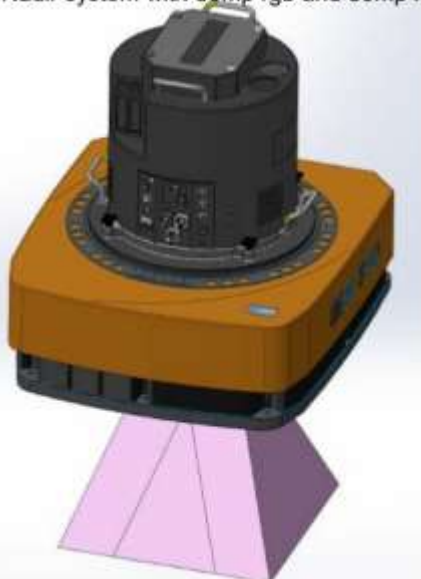


Public website is created

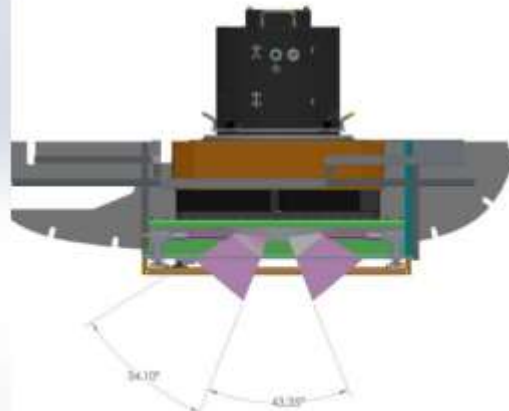
# NOAA Image Acquisition Platform



Nadir system with 80mp rgb and 60mp nir



Oblique system with two 39mp rgb



# Use Cases

- Safety of navigation
- Search and rescue / Situational awareness
- Modeling damage and estimating debris removal
- Assisting with recovery efforts (i.e. expedited rental assistance for residents)
- Humanitarian support
- Research (development of machine learning algorithms for automated pixel scale-classification and change analysis)

# Demo

ER Imagery Demo - <https://arcg.is/9GKeC>

Hurricane Michael Imagery -

<https://storms.ngs.noaa.gov/storms/michael/index.html#19/30.33141/-85.41852>