# NASA DISASTERS MAPPING PORTAL
# DATA PUBLICATION GUIDE
## Version 1.1
## January 25, 2019

## Overview

This document is intended for any NASA Disasters Program Coordinator, NASA scientist, and any additional person who wishes to have data published to the NASA Disasters Mapping Portal. The requirements and guidelines for data format and metadata standards described below must be satisfied before data will be published to the Portal. Any questions related to this document should be directed to the Disasters Mapping Portal Operations and Maintenance (O&M) Team listed at the bottom of the document.

## What is the NASA Disasters Mapping Portal?

The NASA Earth Science Division (ESD) Disasters Program is uniquely positioned to provide near real-time data and value added products to support the preparedness, response, recovery and mitigation of disasters both domestically and around the world.  While NASA is not a response agency, it does have specialized Earth Observing satellites and airborne assets that can provide unique capabilities to assess impacts and inform actionable decisions through all phases of the emergency management cycle. The NASA Earth Science's Disasters Program operates two websites: the Disasters Mapping Portal (https://maps.disasters.nasa.gov) and the Disasters Program Website (https://disasters.nasa.gov).

The NASA Disasters Mapping Portal is used as a platform to host and provide access to geo-enabled near real-time and value added products through web applications, Portal layers, and Representational State Transfer (REST) endpoints. The Disasters Mapping Portal provides NASA date in a beneficial format for emergency managers and GIS specialists within local, state, federal and international disaster response agencies.

The Disasters Program Website is used to showcase all facets of the Disasters Program and displays value added products produced during a disasters response. The data posted to the website are images that are not inherently GIS friendly and are often similar to what is commonly seen in scientific papers. If the image cannot be produced in a georeferenced format, the image can be posted on the NASA Disasters Program Website (https://disasters.nasa.gov/) by submitting the image in any format at this link.

## How to Submit Data for the NASA Disasters Mapping Portal:

**Data Format:**

All images that are to be posted to the Disasters Mapping Portal must be in a georeferenced format. Acceptable data formats grouped by order of preference are listed below:

1. **Best:** GeoTIFF*, REST Endpoint
2. **Very good:** KML/KMZ (Google Earth File), Web Map Service (WMS) URL, Shapefile
3. **Good:** Georeferenced JPEG, PNG, TIF, etc. These must include a Worldfile.
4. **OK**: HDF; HDF files need to be properly georeferenced prior to being delivered, and the subset(s) to be used must be explicitly defined.

5. **Unacceptable/Content for Program Website:** PDF, PowerPoint, non-georeferenced image file (JPEG, PNG, TIF, etc.)

> *Note: Raster GeoTIFFs should be sent as a floating point raster unless the image is an RGB composite.

**Symbology:**

If there is a preference for a particular symbology or color bar for the image, please include:

- Properly symbolized image with legend
- ArcGIS Raster Function Template (.rft) file

If the values of the pixels need to be represented in the legend, the file must be sent over as a floating point (single band) raster and not a three-band raster image. If clarification is needed on this requirement, contact the NASA Disasters Portal O&M Team listed at the end of this document.

**Required Metadata:**

Submit metadata via email to Disasters Portal Team or as a text file with the data file(s)

- Summary:
  - Description of the data including date(s) and time(s) covered and any significant analysis if applicable.
  - Focus on emergency management and non-scientific use.
- Suggested Usage:
  - Explain how your image can be interpreted by a user.
  - Explain what each color identifies in the image.
  - Provide as much information as possible.
- Satellite/Sensor/Resolution:
  - Satellite and sensor that was used to collect the image.
  - If the product was derived from a model, include information about it.
  - Spatial resolution of the product.
- Credits:
  - How this image should be credited/cited.
  - A point of contact can also be provided.
  - Link(s) to the data source and/or project.
- Access and Use Constraints:
  - Special access or use constraints if needed (i.e. products derived from ESA Copernicus and JAXA data).
- Date of Next Image
  - If there is expected to be an additional image(s) produced during this disaster, include the date that the image is expected to be delivered to the Disasters GIS Team
  - If no additional images or products are expected to be produced, note that here

**Where to submit products:**

Submit via email, ftp, or NASA Large File Transfer to:
Disasters Mapping Portal Operations & Maintenance (O&M) Team
Jeremy Kirkendall (jeremy.j.kirkendall@nasa.gov)
Garrett Layne (garrett.w.layne@nasa.gov)