

Satellite Earth Observation(EO)-based flood mapping

1. State-of-the-art in EO based flood mapping
 - Automated (daily) products: **MODIS** – **LandSat** (*on demand*) – **VIIRS** – **EnviSat** † – **Sentinel-1**
2. State of the usability of EO flood mapping
3. Availability of EO-based flood map products
4. Integration of map products of different temporal and spatial scales
5. Missing information in EO based flood mapping
6. Determine users & how to better involve them in developing a EO-based monitoring system
7. Validation of EO-based products, Communication of uncertainty of EO-based flood mapping?
8. Availability of spaceborne sensors
9. Visualize flood maps

MODIS & LandSat (Fritz Policelli et al.)

NASA National Aeronautics and Space Administration

NRT Global Flood Mapping

Global Map

For more information, please contact floodmap at lists.nasa.gov
NOTE: THIS IS AN EXPERIMENTAL PRODUCT AND SYSTEM

Recent News/Status

05-Apr-2017: Website moved to new server and hostname: <https://floodmap.modaps.eosdis.nasa.gov>. Old hostnames (oas.gisfc.nasa.gov and floodmap.gisfc.nasa.gov) will be discontinued in the near future. Please update your bookmarks.
31-Mar-2017: Website moved to new server and hostname: <https://floodmap.gisfc.nasa.gov>.
31-Mar-2017: Access to products via ArcGIS Portal & ArcGIS Image services discontinued, while we look for hosting solutions.
> Go to News/Status page

Mailing list
To subscribe to our mailing list to receive email notification of updates, please click here.

MODIS/LandSat/SAR/etc (Bob Brakenridge et al.)

Dartmouth Flood Observatory

Space-based Measurement, Mapping, and Modeling of Surface Water
For Research, Humanitarian, and Water Management Applications

Community Surface Dynamics Modeling System
University of Colorado, Campus Box 450, Boulder, CO 80309 USA

Map of Flood Locations, 1985-2016

Flood Observatory Director Robert Brakenridge and Associate Director Albert Kettner
Mission Statement

Flood Observatory Web Map Server

Surface Water Watch and Record

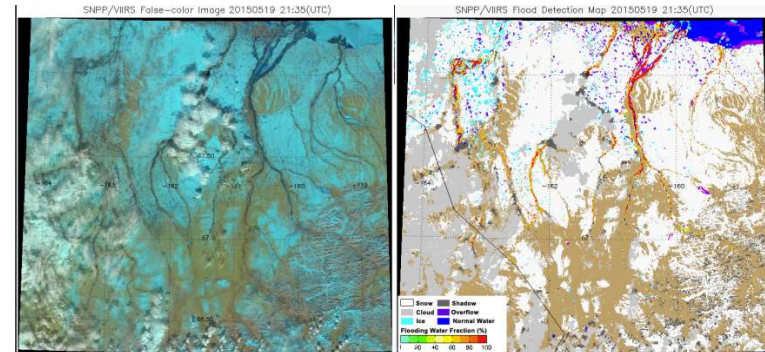
In 2017, updating of all sheets is underway. @BREMSON illustrates the new format

Current Floods, June 14, 2017

The Dartmouth Flood Observatory
CSDE, 1937-2016
University of Colorado

Whole Earth Image from JHT's Planetary Flood Emporium

VIIRS (Bill Sjoberg et al.)



Application: Near real-time flood extent monitoring.

- ✓ Coverage: any regions between 80° S and 80° N.
- ✓ Spatial resolution: 375-m
- ✓ Flood types: supra-veg/bare soil flood and supra-snow/ice flood.
- ✓ Flood maps: In a flood map, there are cloud, snow, River/lake ice, shadow (cloud shadow and terrain shades), supra-snow/ice flood cover, normal open water and flooding water fractions of supra-veg/bare soil floods.

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ENVISAT – Sentinel (Patrick Matgen et al.)

Envisat 02/01/2003 22h18

