Satellite Earth Observation(EO)-based flood mapping
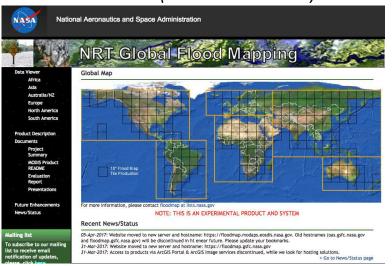
1. State-of-the-art in EO based flood mapping

   - 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.)*

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.

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

ENVISAT – Sentinel *(Patrick Matgen et al.)*