Leveraging Google Earth Engine to Derive High Quality Water Reference Data for Disaster Decision Support [1]

Submitted by kevindobbs on Mon, 2015-01-05 16:55 **Event:** Winter Meeting 2015 [2] **Abstract:**

Within the over 40 years of Landsat data and over 15 years of MODIS data are is rich information on the dynamics the behavior of water and flooding at a global scale. By using the Google Earth Engine API to query and analyze these data we can develop relevant seasonal inundation layers that can be incorporated into decision support systems such as the NASA Flood Dashboard for Namibia. Through collaborations with NASA, Google Earth Outreach, and the European Commission Joint Research Centre a strategy has been developed to harvest the relevant derived flood information from Landsat and MODIS data into the Flood Dashboard. In addition to the empirically derived flood information, we are integrating modeled flood data using the Segmented Library of Inundation Extents (SLIE) method developed at the University of Kansas.

Author(s): Name: Kevin Dobbs [3]

Organization(s): <u>University of Kansas</u> [4]

Keywords: Flood [5]

Disaster [6]
Landsat [7]
MODIS [8]
NASA [9]
JRC [10]
Decision Support [11]

Source URL: https://commons.esipfed.org/node/7871

Links

- [1] https://commons.esipfed.org/node/7871
- [2] https://commons.esipfed.org/2015WinterMeeting
- [3] https://commons.esipfed.org/node/1983
- [4] https://commons.esipfed.org/taxonomy/term/641
- [5] https://commons.esipfed.org/taxonomy/term/1854
- [6] https://commons.esipfed.org/taxonomy/term/588
- [7] https://commons.esipfed.org/taxonomy/term/1775
- [8] https://commons.esipfed.org/taxonomy/term/1776
- [9] https://commons.esipfed.org/tags/nasa
- [10] https://commons.esipfed.org/taxonomy/term/1855
- [11] https://commons.esipfed.org/taxonomy/term/332