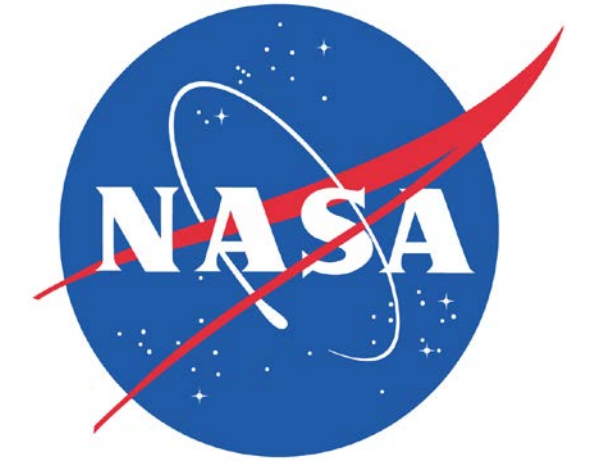




# New GES DISC Services Shortening the Path in Science Data Discovery



NASA/Goddard EARTH SCIENCES DATA and INFORMATION SERVICES CENTER (GES DISC)

Angela Li<sup>1</sup>, Chung-Lin Shie<sup>1, 2</sup>, Maksym Petrenko<sup>1,3</sup>, Mahabaleshwa Hegde<sup>1,3</sup>, William Teng<sup>1,3</sup>,  
Zhong Liu<sup>1,3</sup>, Keith Bryant<sup>1,3</sup>, Suhung Shen<sup>1,4</sup>, Thomas Hearty<sup>1,3</sup>, Jennifer Wei<sup>1,3</sup>, and Long Pham<sup>1</sup>



## Abstract

The Current GES DISC available services only allow user to select variables from a single dataset at a time and too many variables from a dataset are displayed, choice is hard.

At American Geophysical Union(AGU) 2016 Fall Meeting, Goddard Earth Sciences Data Information Services Center (GES DISC) unveiled a new service: Datalist. A Datalist is a collection of predefined or user-defined data variables from one or more archived datasets. Our science support team curated predefined datalist and provided value to the user community. Imagine some novice user wants to study hurricane and typed in "hurricane" in the search box. The first item in the search result is GES DISC provided Hurricane Datalist. It contains scientists recommended variables from multiple datasets like TRMM, GPM, MERRA, etc. Datalist uses the same architecture as that of our new website, which also provides one-stop shopping for data, metadata, citation, documentation, visualization and other available services.

We implemented Datalist with new GES DISC web architecture, one single web page that unified all user interfaces. From that webpage, users can find data by either type in keyword, or browse by category. It also provides user with a sophisticated integrated data and services package, including metadata, citation, documentation, visualization, and data-specific services, all available from one-stop shopping.

## Challenges

- Natural phenomenon study requires multiple datasets and multiple variables
- Newcomers to Earth science don't know where to start
- Current GES DISC available services
  - Only allow user to select variables from a single dataset at a time
  - Too many variables from a dataset are displayed, choice is hard

## Solution

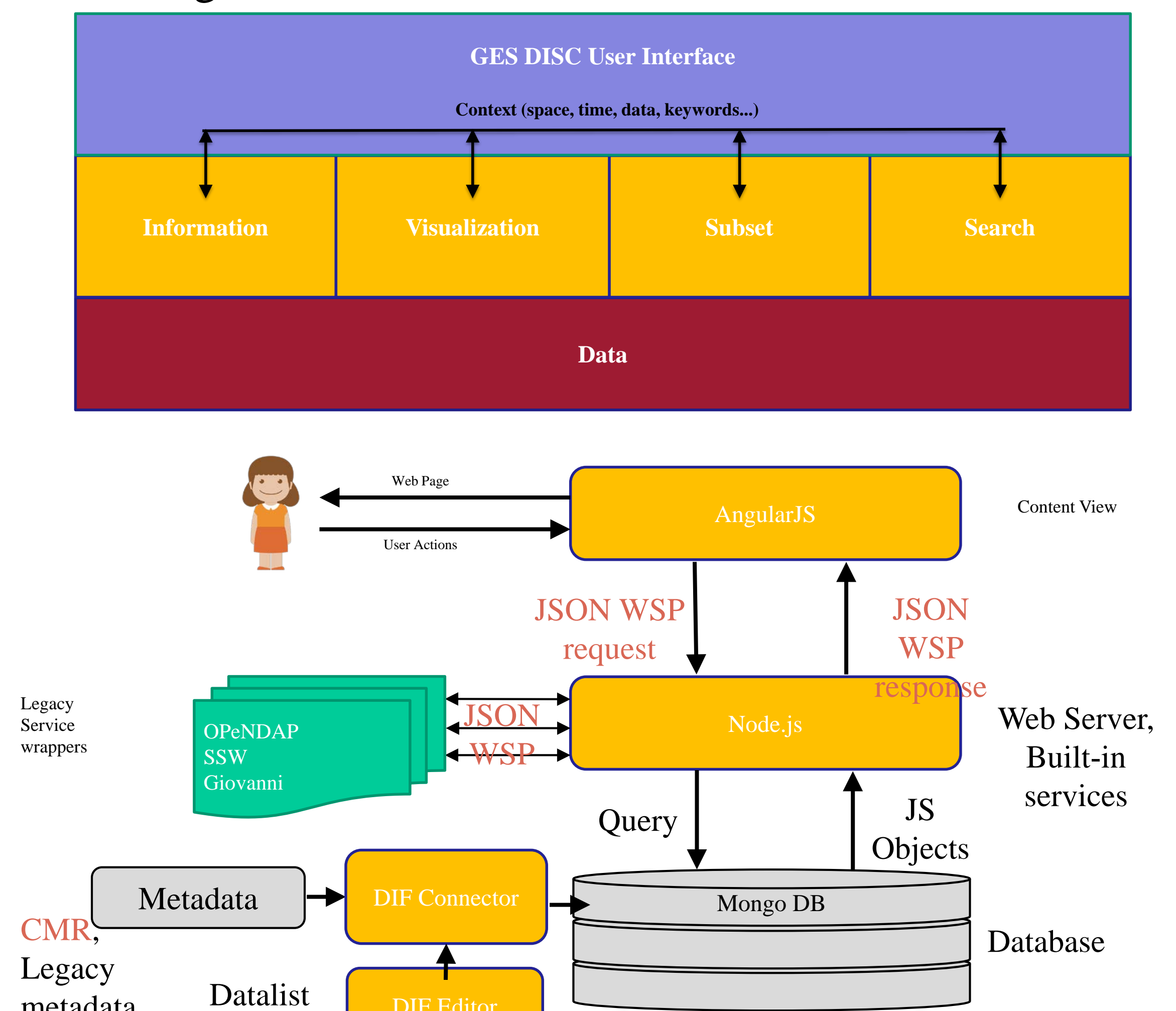
- GES DISC's new Datalist service
- A Datalist is a collection of predefined or user-defined data variables from one or more archived datasets
- Value-add service
  - Subject Area Experts are the Curators of the datalist

## Search, Access and Download

The screenshots illustrate the user workflow: starting from the homepage, searching for a datalist, viewing its details, selecting variables and dimensions for subsetting, and finally downloading the data in a single step.

## Architecture

- GES DISC's new web architecture unifies user interfaces
- Datalist is implemented with same architecture
- Curator using DIF Editor to add datalist metadata into Mongo DB



## Coming in 2017

- Datalist Curator's tool Spring
- A-Train Datalist Early Spring
- User-defined datalist Summer
- Sharable datalist Summer
- Datalist for event Fall
- Smart datalist TBD



## Authors

- <sup>1</sup> NASA Goddard Space Flight Center
- <sup>2</sup> University of Maryland, Baltimore County
- <sup>3</sup> ADNET Systems Inc.
- <sup>4</sup> George Mason University



**One Stop  
Data Download !**

