

# C-READ (Caribbean - Regional Environmental and Atmospheric Data) Management System



Caribbean Community  
Climate Change Centre



# C-READ (Caribbean - Regional Environmental and Atmospheric Data) Management System

## Module 2: C-READ CATALOGUE (CKAN)

Bridgetown, Barbados, Oct 1, 2015

Facilitated by: David Oswald, DE Design + Environment Inc.

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# C-READ Catalogue (CKAN)

## Purpose:

- The Catalogue (or Hub) is the central point of search and organization for data and meta data
- It is built in CKAN which is basically an open sourced web platform – like WordPress, but for data
- CKAN helps to manage and publish sets of data
- CKAN is used by governments, research organizations and groups who collect a lot of data

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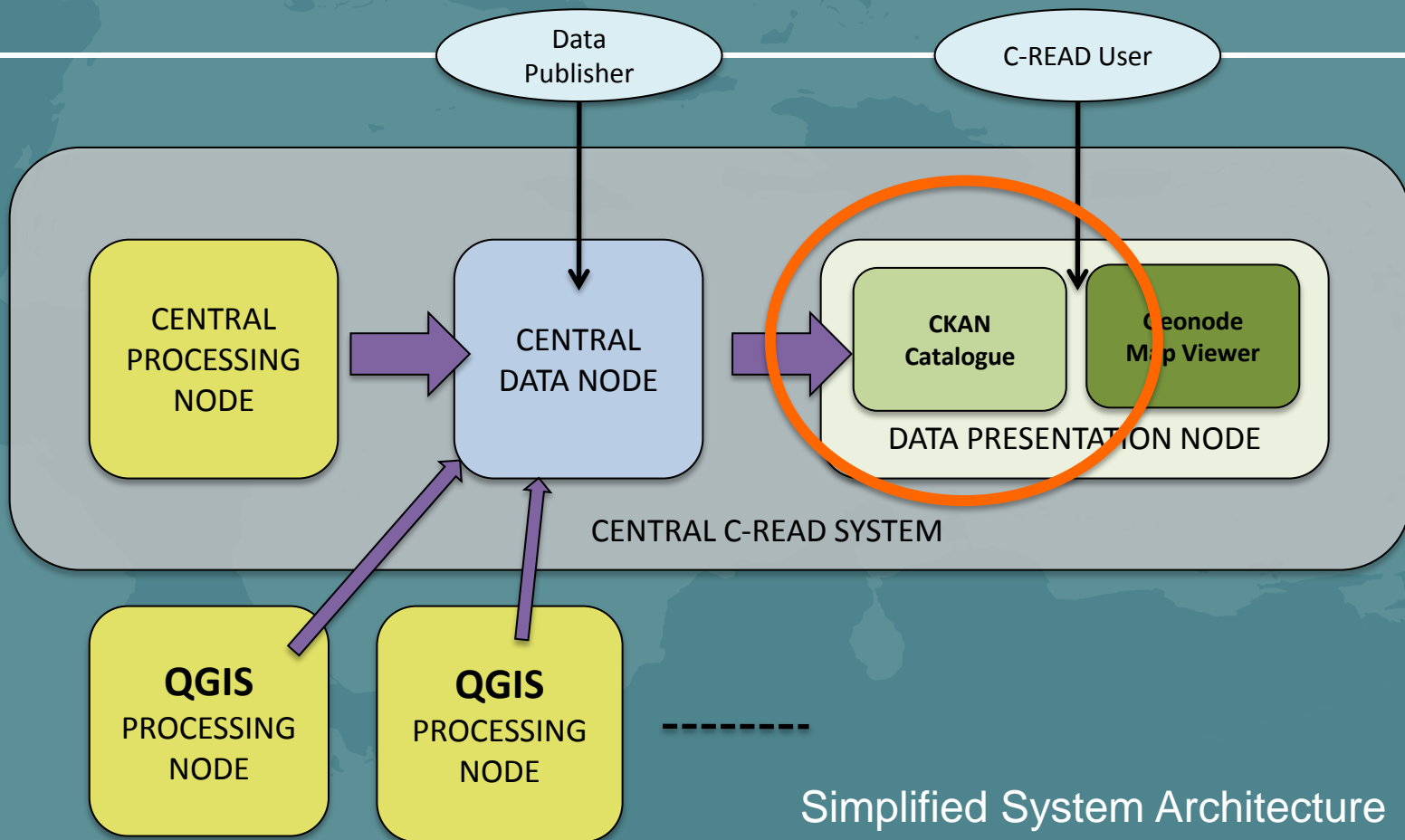
# C-READ Catalogue (CKAN)

## Purpose:

- In the case of C-READ – the Catalogue is an efficient and effective way of viewing a variety of data sets
- It organizes environmental data in a logical framework with the proper documentation to allow users to quickly find what they are looking for
- In C-READ, the Catalogue will be primarily a read-only tool as the majority of data integration will be through the data node (GeoNode and GeoServer)

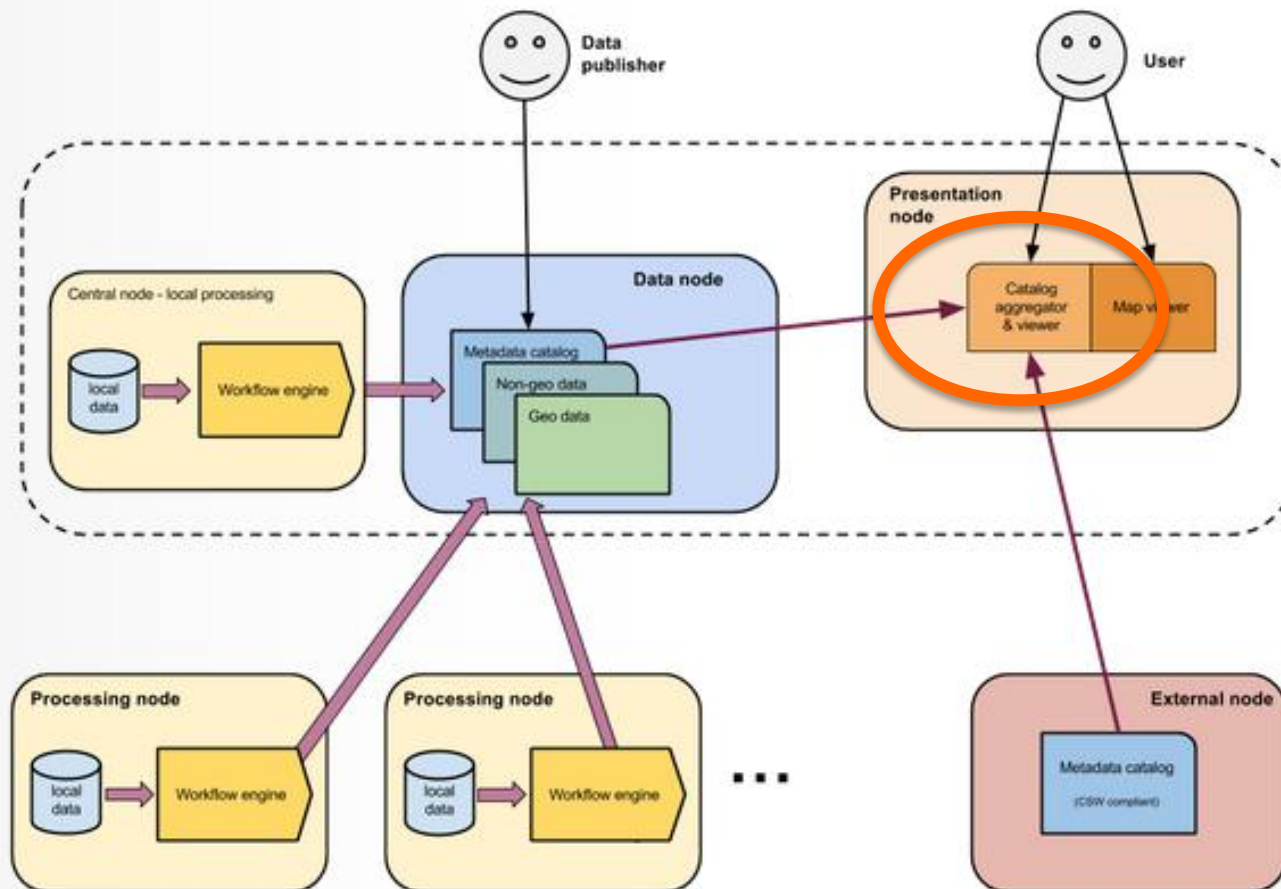
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Full System Architecture

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## Interface:

- The interface is specifically designed to make information easy to access
- The functional hierarchy was drawn from the Gap Analysis
- <http://hub.cread.geo-solutions.it>

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SEARCH YOUR DATA

POPULAR TAGS [Jamaica](#) [jamaica](#) [Emergency](#)



**Cat 9: Socio-Economy**  
Socio-Economic Status  
**105 Datasets**



**Cat 8: Energy**  
Energy: Use, Generation,  
and Availability  
**101 Datasets**



**Cat 1: Hydromet**  
Meteorological and  
Hydrological Data and  
Projection  
**7 Datasets**



**Cat 5: Land Cover**  
Land Cover and Land Use  
**6 Datasets**



**Cat 4: Coastal**  
Coastal Zone and Ocean  
**4 Datasets**



**Cat 3: Environment**  
Geographical and  
Biophysical Environment  
**3 Datasets**



**Cat 6: Agriculture**  
Agriculture and Food  
Security  
**1 Dataset**



**Cat 7: Water**  
Water: Availability,  
Quality, and Use  
**3 Datasets**



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# C-READ Catalogue (CKAN)

## How do you use it? .... Searching

- Searching is performed by a combination of keywords
- Filters can be used to narrow down the results
- Geographic extent can be used on the map in order to focus on a specific area

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# C-READ Catalogue (CKAN)

## How do you use it? .... Searching

- You can focus on a particular organization by selecting 'Organizations' at top of the main page
- Each organization on C-READ Catalogue will be shown
- By selecting an organization you will see all datasets that are linked to it

<http://hub.cread.geo-solutions.it>

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# C-READ Catalogue (CKAN)

## Datasets and Resources:

- In the C-READ catalogue data is published in units called 'datasets' which is essentially a parcel of data and
- Results of queries will be a list of datasets
- Datasets contain two things: (a) metadata (b) resources
- Metadata is data about data – eg. Date, format, title, publisher, projection, etc.

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# C-READ Catalogue (CKAN)

## Datasets and Resources:

- Resources are items that hold the data itself – eg. .csv file, .pdf file, etc.
- Can be stored on the catalogue or be linked to another source on the web
- A dataset may have multiple resource – eg. Data for different years, or data in different formats

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**Cat 4: Coastal**  
Coastal Zone and Ocean read more

Followers **0** Datasets **4**

**ORGANIZATIONS**

- CCCCC (2)
- C-READ (2)

**GROUPS**

- Cat 1: Hydromet (0)
- Cat 2: Hazards and ... (0)
- Cat 3: Environment (0)
- Cat 4: Coastal (4)
- Cat 5: Land Cover (0)
- Cat 6: Agriculture (0)
- Cat 7: Water (0)
- Cat 8: Energy (0)

**Datasets** | Activity Stream | About

SEARCH DATASETS...

**4 DATASETS FOUND** ORDER BY: Relevance

**Belize coastline**  
Coastal Zone and Ocean  
*Coastal Zone Monitoring - Beach profile / coastal change*

Coastline of Belize

WMS CSV KML GeoJSON XLS GML SHP PNG PDF IPEG

ADD TO MAP PREVIEW ON MAP

**Ambergris Caye shoreline**  
Coastal Zone and Ocean  
*Coastal Zone Monitoring - Beach profile / coastal change*

This Layer shows the shore line for the entire Ambergris Caye.

WMS CSV KML GeoJSON XLS GML SHP PNG PDF IPEG

ADD TO MAP PREVIEW ON MAP

**Climate Change and Tourism in Barbados: An Assessment of the Perceptions of C...**

The Barbados Tourism Vulnerability Capacity Assessment Study seeks to provide information to assist in reducing the vulnerability, risk, and losses from climate change in the...

PDF

**Vulnerability and Capacity Assessment of the Climate Change and Sea-Level Ris...**

This vulnerability and capacity assessment examines the Cayman Islands' susceptibility to climate change in light of its physical characteristics and the predicted...

PDF

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# C-READ Catalogue (CKAN)

## Viewing a Dataset

- When you find a dataset you are interested in you can click on it to get more information
- The dataset screen will show the geospatial footprint and will list the number of resources
- Additional information is listed

<http://hub.cread.geo-solutions.it>

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Home / Organizations / C-READ / Belize coastline

**BELIZE COASTLINE**

FOLLOWERS  
**0**

**ORGANIZATION**



**C-READ**

THERE IS NO DESCRIPTION FOR  
THIS ORGANIZATION

**SOCIAL**



Dataset Groups Activity Stream Related

**DATASET EXTENT**



Map data © OpenStreetMap contributors  
Tiles by MapQuest

**Belize coastline**

Coastline of Belize

**Coastal Zone and Ocean**

Resources for Download (geonode:belize\_coastline\_wgs84)



Resources for Preview

**geonode:belize\_coastline\_wgs84**  
WMS resource

**Preview**

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# C-READ Catalogue (CKAN)

## Viewing Resources in a Dataset

- In each dataset there will be one or more resources
- Links and descriptions for each resource are provided
- Preview options are provided for the resources

<http://hub.cread.geo-solutions.it>

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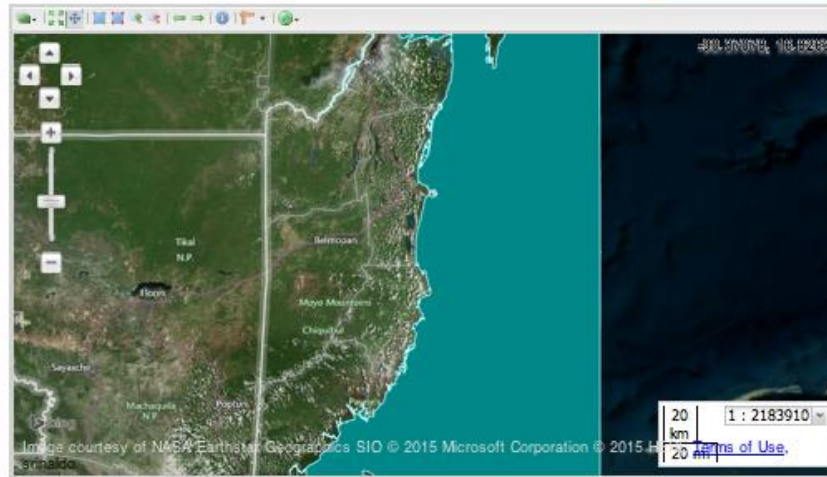
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Home / Organizations / C-READ / Belize coastline / **geonode:belize\_coastline\_wgs84**

**geonode:belize\_coastline\_wgs84**

WMS resource

Show in Advanced Viewer



#### RESOURCES

geonode:belize\_coastline\_...

geonode:belize\_coastline\_...

#### SOCIAL

#### ADDITIONAL INFORMATION

Field	Value
Last updated	August 13, 2015
Created	August 13, 2015
Format	wms

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# C-READ Catalogue (CKAN)

## Activity Streams / Related

- For each dataset you can see the history of things that have happened to it with the Activity Stream
- Related items can also be identified

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# C-READ Catalogue (CKAN)

## Previewing Data

- The table data can be previewed by looking at it in grid, graph, or map form (such as a CSV file)
- Data is often previewed on the map (spatially explicit data)
- Multiple layers can be added to the map for preview
- GeoNode is the web platform for viewing geospatial data
- The Catalogue and GeoNode are closely related as viewing platforms

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## Previewing Data – Catalogue Map Preview

- Maps of data can be previewed either on the platform itself, or via an advanced viewer (via mapstore)

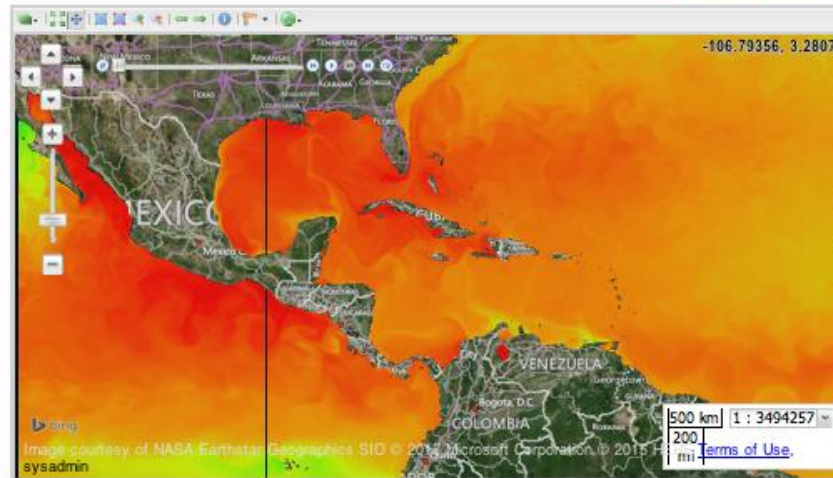
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geonode:GLOBAL\_ANALYSIS\_FORECAST\_PHYS\_001\_002\_sst

WMS resource

Show in Advanced Viewer



#### RESOURCES

geonode:GLOBAL\_ANALYSIS\_F...

#### SOCIAL

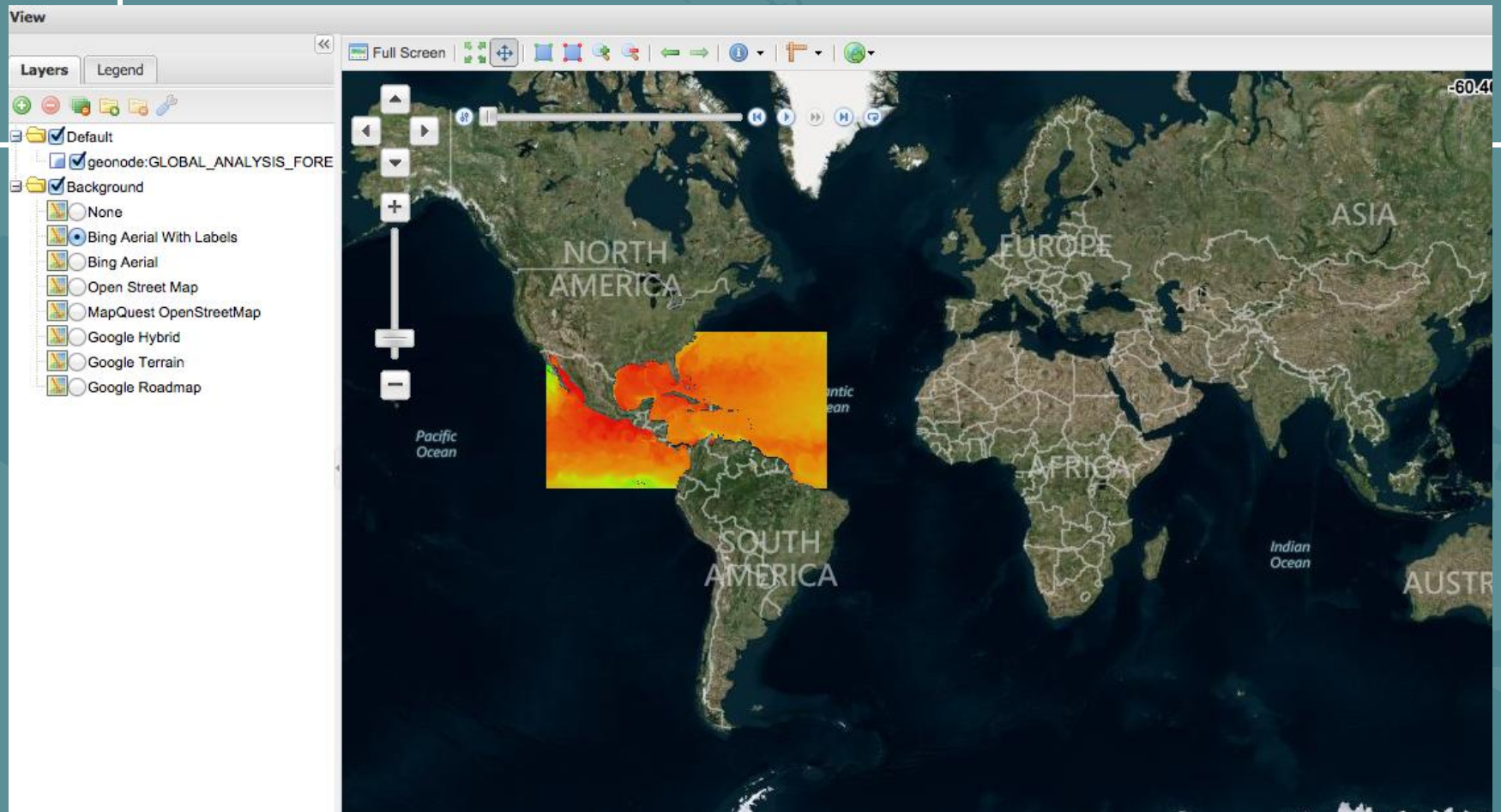


#### ADDITIONAL INFORMATION

Field	Value
Last updated	August 24, 2015
Created	August 24, 2015
Format	WMS
License	No License Provided

Map view of SST on Catalogue

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Advanced View of SST on Mapstore

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# C-READ Catalogue (CKAN)

## Previewing Data – Catalogue Map Preview

- Maps that are previewed on the Catalogue can be downloaded
- Multiple resources can be combined on the map
- This part of C-READ is **read-only** and none of the maps can be saved for later use
- The individual resources can be downloaded
- Geonode is the part of the C-READ where new datasets are created

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# Thank You

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