JPSS EDR
Long Term Monitoring & Product Repository
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JPSS EDR Product Repository
Early Discussions

- At meetings in Fall 2014, the idea to develop a STAR JPSS program wide repository to house and share JPSS EDR product images was suggested.

- At this point, STAR ICVS had been implemented for 2 years; it seemed an ideal web interface and browsing framework for daily product information.
ICVS as an EDR Repository Platform

- Advantages of ICVS as interface for presenting EDR content:
  - Constructed and organized for browsing content that is updated daily;
  - Easy to update and edit;
  - Extensible to additional products without additional web programming;
  - Familiar to many of the prospective user groups;
  - Compliant with Section 508 and other government directives regarding web presentation and architecture;
  - Thoroughly tested and reliable across all modern browsers;
  - Interface can accommodate different content types: images, maps, charts, text, zip files, and eventually vector-based charts;
  - No surprises!
Prototype Now Online with 7 Product Groups

- Spring 2015 initiated prototyping;
- Contacted first product groups to start developing and acquiring images;
- Prototype currently houses product images from the following teams as of 8/24/2015:

<table>
<thead>
<tr>
<th>Product Team</th>
<th>Product Images Daily</th>
<th>Product Dates Available</th>
<th>Production Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soundings</td>
<td>598</td>
<td>1/1/2015 to present</td>
<td>automated</td>
</tr>
<tr>
<td>Land Surface Temperature</td>
<td>3</td>
<td>1/1/2015 to present</td>
<td>automated</td>
</tr>
<tr>
<td>Albedo</td>
<td>1</td>
<td>1/1/2015 to present</td>
<td>automated</td>
</tr>
<tr>
<td>Vegetation Index</td>
<td>3</td>
<td>6/20/2015 to present</td>
<td>automated</td>
</tr>
<tr>
<td>Active Fires</td>
<td>1</td>
<td>1/1/2015 to present</td>
<td>batch</td>
</tr>
<tr>
<td>Ozone</td>
<td>3</td>
<td>1/1/2015 to 7/15/2015</td>
<td>batch</td>
</tr>
<tr>
<td>Surface Type</td>
<td>4</td>
<td>5/1/2015 to present</td>
<td>automated</td>
</tr>
</tbody>
</table>
JPSS EDR Product Monitoring Demo

http://www.star.nesdis.noaa.gov/jpss/EDRs/index.php

• Key features:
  • Navigate by product;
  • Navigate through products by date;
  • ‘About’ popup;
  • Animation:
    • Across all metrics in each product group;
    • NEW! Animate a selected timespan for a single product;
EDRs Are Not Quite the Same as Cal/Val Metrics

- Heavy on the maps; less emphasis on other types of ‘charts’.
- Lower volume of images in most cases;

- So, we have made a few key updates to the ICVS interface to better support EDRs’ presentational needs:
  - New Animation of a single product across a user-configurable time span *(Coming soon: download the animation file)*
  - Stricter standardization of product layout, typography, labelling, and underlying map conventions
    - The less variation in presentation, the more what users will see and focus on is the data being presented.
  - Goal: developing a shareable piece of code to generate product maps for all product teams who generate in IDL;
    - *Your mileage may vary – not all ways of producing data work well with all IDL mapping commands.*
JPSS EDR Site vs. Team Sites

• Producing content for the JPSS EDR site doesn’t change what you do or don’t produce for your own team or product area websites.

• There may or may not be content overlap between the JPSS EDR site and other sites;

• The goal of the EDR Repository is ONE STOP SHOPPING; a little redundancy is no cause for concern.
Steps to Produce & Publish EDR Products - 1

- **Product Teams**: figure out what you want to include on your page. Suitable content may include:
  - EDR deliverable products (at a minimum, we need these for the site);
  - Comparison products from other satellite instruments;
  - Quality measure charts, like NEAN.
  - Usually images (.jpg, .gif, .png, but can also include .txt, .zip)
  - Please note: content for the page is ideally content that is refreshed daily.
    - Land Surface Temperature for Global Surface – 8/22/2015 – YES!
    - 10 day composite of anything – probably not.

- Meet with JPSS EDR to go over style guide, layout of maps, formatting preferences;
- Product Team develops a ‘test set’ of product images, JPSS EDR team reviews, revises, and approves.
Steps to Produce & Publish EDR Products - 2

• JPSS EDR team:
  • Establishes a directory structure on the webserver to house Team’s products;
  • Develops the CSV file that lists product file descriptions and locations;
  • Add the new Product page;
  • To add or remove content, we edit the CSV file to reflect additions / changes / deletions from the product set.

• Product Teams
  • Run charts as far back as you can (we are aiming for EDRs back to Jan. 1, 2015), and write them to the specified location on STAR webserver;
  • Set the product generation script on a cron job;
  • No website to maintain, no HTML to write, just generate your products...
Next Steps To Complete The EDR Repository

• Reach out to remaining product teams to start generating products;

• Work with existing teams to refine and improve product presentation, standardization, re-usable IDL script block;

• Integrate new features like new single product animation back into the STAR ICVS.