# Environmental Satellite Resource Center (ESRC) Overview

#### https://www.meted.ucar.edu/esrc/

The COMET® Program developed the Environmental Satellite Resource Center (ESRC) as a searchable, database-driven Website that provides easy access to a wide range of useful information and training materials on polar-orbiting and geostationary satellites. Initially sponsored by the National Polar-orbiting Operational Environmental Satellite System program and the National Oceanic and Atmospheric Administration with continuing funding from NOAA/NESDIS, the ESRC is intended for users seeking reliable sources of satellite information, training, and data.

The ESRC is intended to be a community site where organizations and individuals around the globe can easily submit their resources via online forms by providing a small set of metadata. The COMET Program's role is threefold: maintain the site, populate it with our own materials, including smaller, focused learning objects derived from our larger training modules, and provide the necessary quality assurance and monitoring to ensure that all resources are appropriate and well described before being made available.

### History/Scope of Effort

NESDIS funded the creation of the ESRC over at least an ~18 month period including involvement of focus groups from extended sponsor community, etc. It was developed based on a direct response from the extended satellite community to create a one-stop-shop for reliable information with a training and satellite system focus. We continue our support as a small part of our portfolio of activities supported with annual NESDIS funding.

- Annual low-level support and maintenance, \$2-3K
- We add new MetEd resources as new satellite related lessons are published
- Last major improvement was to add the French interface metadata to support WMO access

#### **Statistics**

As of 2014-05-06

Number of resources: 627

Number of resources added by COMET: 448

Organizations that have added resource: FMI, CIRA, NOAA, DWD, CPTEC, Navy, Oman Met

Service, South African Weather Service, EUMETSAT, CIMH, BoM, NASA, SSEC, MSC

Language interfaces and resources:

Spanish interface: Translated and active.

Resources: 16

French interface: Translated and active.

Resources: 13

Russian interface: Translated but not yet activated.

Resources: 2

Other foreign language resources:

Portuguese: 5

Chinese: 1 - the following are all related to the same resource

Japanese: 1 Czech: 1 Finnish: 1 Danish: 1 Icelandic: 1 Norwegian: 1 Polish: 1 Dutch: 1 Ewe: 1 Italian: 1 Swedish: 1

Google Analytics: May 2013 - May 2014

Overall usage:

Total sessions: 1955 Unique users: 1231 Page views: 5031

Those numbers look ok until you look at user behavior:

Of the 5031 page views, 4930 are to the index, help, and about pages and include the entry of new resources. At best, only 70 search results have been generated in the past year. See appendix pages for details.

## **Ongoing Operational Risks**

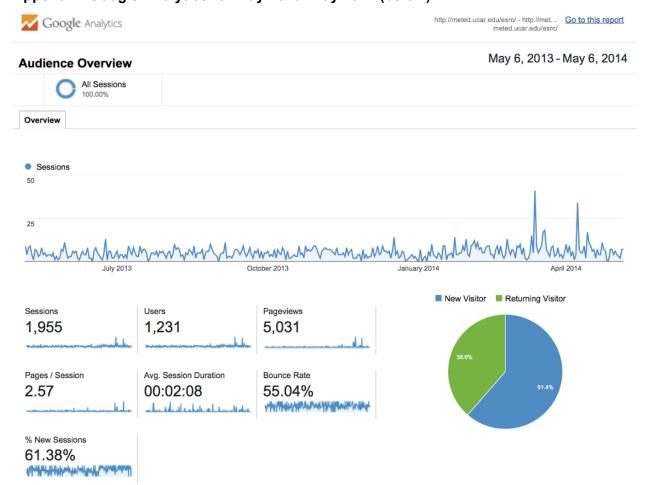
#### Risks

- Site contains incomplete data because others do not contribute their resources
- Warehouses metadata in a unique format which doesn't match MetEd or any of the standard schemas for instructional material (WIS, IEEE, ISO/IEC, Dublin Core, LAR, etc.)
- Cost of ongoing maintenance and adding of MetEd resources
- Accumulation of dated resources since no one is monitoring status of current resources
- Updating of static MetEd learning objects: content from full modules has been pulled and packaged as stand alone content. When full modules get updates or are retired, stand alone content is not updated or pulled.
- Changes in MetEd API or registration could impact how deep linked MetEd content is accessed

#### **Opportunities**

- Leverage lessons learned through development/hosting of the ESRC for Global Campus content sharing/metadata, etc.
- Continued growth of packaging learning objects out of our content. Leading to smarter content pathing for our users.
- Enhance our ability for packaging of reusable content pulled from full lessons into smaller, stand-alone pieces
- Expand experience with database-driven user interfaces
- Diversify knowledge of the satellite community by monitoring resource submissions.

## Appendix: Google Analytics for May 2013- May 2014 (below)



|    | Language | Sessions | % Sessions |
|----|----------|----------|------------|
| 1. | en-us    | 1,171    | 59.90%     |
| 2. | zh-cn    | 153      | 7.83%      |
| 3. | es       | 120      | 6.14%      |
| 4. | en-gb    | 74       | 3.79%      |
| 5. | es-es    | 55       | 2.81%      |
| 6. | pt-br    | 54       | 2.76%      |
| 7. | fr       | 40       | 2.05%      |
| 8. | ko       | 21       | 1.07%      |
| 9. | zh-tw    | 20       | 1.02%      |
| 10 | J. de-de | 17       | 0.87%      |



## **Pages**

May 6, 2013 - May 6, 2014



Explorer

#### Pageviews

300



| Page Title |   | Pageviews |  | Unique<br>Pageviews |  | Avg. Time on<br>Page                         | Entrances                                  | Bounce Rate                              | % Exit                                   | Page Value |                             |
|------------|---|-----------|--|---------------------|--|--|--|--|--|------------|-----------------------------|
|            |   | %         | 5,031<br>of Total:<br>100.00%<br>(5,031) |                     | 3,377<br>of Total:<br>100.00%<br>(3,377) | 00:01:22<br>Site Avg:<br>00:01:22<br>(0.00%) | 1,955<br>% of Total:<br>100.00%<br>(1,955) | 55.04%<br>Site Avg:<br>55.04%<br>(0.00%) | 38.86%<br>Site Avg:<br>38.86%<br>(0.00%) |            | 0.00<br>of Total<br>(\$0.00 |
| 1. E       | Environmental Satellite Resource Center                               | 4,558     | (90.60%)                                 | 3,016               | (89.31%)                                 | 00:01:20                                     | 1,897 (97.03%)                             | 54.19%                                   | 39.10%                                   | \$0.00 (   | (0.00%                      |
| ')         | Environmental Satellite Resource Center -<br>About                    | 332       | (6.60%)                                  | 245                 | (7.25%)                                  | 00:01:28                                     | 20 (1.02%)                                 | 80.00%                                   | 36.14%                                   | \$0.00 (   | (0.00%                      |
|            | Environmental Satellite Resource Center -<br>Help                     | 40        | (0.80%)                                  | 32                  | (0.95%)                                  | 00:02:14                                     | 1 (0.05%)                                  | 100.00%                                  | 17.50%                                   | \$0.00 (   | (0.00%                      |
|            | Satellite Identification of Fog over Southern<br>Australia            | 21        | (0.42%)                                  | 14                  | (0.41%)                                  | 00:02:44                                     | 13 (0.66%)                                 | 69.23%                                   | 61.90%                                   | \$0.00 (   | (0.009                      |
| 5          | Environmental Satellite Resource Center -<br>Keywords                 | 20        | (0.40%)                                  | 20                  | (0.59%)                                  | 00:00:22                                     | 18 (0.92%)                                 | 94.44%                                   | 90.00%                                   | \$0.00 (   | (0.009                      |
| 6.         | Hurricane Katrina Rain Rates  | 9         | (0.18%)                                  | 6                   | (0.18%)                                  | 00:03:30                                     | 0 (0.00%)                                  | 0.00%                                    | 0.00%                                    | \$0.00 (   | (0.00                       |
|            | GOES Channel Selection: Longwave infrared                             | 8         | (0.16%)                                  | 8                   | (0.24%)                                  | 00:00:12                                     | 0 (0.00%)                                  | 0.00%                                    | 0.00%                                    | \$0.00 (   | (0.00                       |
|            | GOES Channel Selection: Carbon Dioxide<br>Channel                     | 7         | (0.14%)                                  | 6                   | (0.18%)                                  | 00:00:25                                     | 0 (0.00%)                                  | 0.00%                                    | 0.00%                                    | \$0.00 (   | (0.00                       |
| 9. 1       | improvements on GOES-13, -14, and -15                                 | 6         | (0.12%)                                  | 5                   | (0.15%)                                  | 00:00:34                                     | 0 (0.00%)                                  | 0.00%                                    | 16.67%                                   | \$0.00 (   | (0.00                       |
| 10.        | Overview of Derived Satellite Products                                | 5         | (0.10%)                                  | 4                   | (0.12%)                                  | 00:00:08                                     | 0 (0.00%)                                  | 0.00%                                    | 20.00%                                   | \$0.00 (   | (0.00                       |
| 11         | GOES Channel Selection: Shortwave infrared                            | 4         | (0.08%)                                  | 3                   | (0.09%)                                  | 00:01:07                                     | 0 (0.00%)                                  | 0.00%                                    | 25.00%                                   | \$0.00 (   | (0.00                       |
| 12. (      | GOES Channel Selection: Water Vapor                                   | 4         | (0.08%)                                  | 3                   | (0.09%)                                  | 00:00:05                                     | 0 (0.00%)                                  | 0.00%                                    | 25.00%                                   | \$0.00 (   | (0.00                       |
| 13. I      | Benefits of Additional Spectral Information                           | 3         | (0.06%)                                  | 3                   | (0.09%)                                  | 00:02:20                                     | 0 (0.00%)                                  | 0.00%                                    | 66.67%                                   | \$0.00 (   | (0.00                       |
| 14. (      | Creating RGBs: An In-Depth Look                                       | 3         | (0.06%)                                  | 1                   | (0.03%)                                  | 00:00:27                                     | 0 (0.00%)                                  | 0.00%                                    | 33.33%                                   | \$0.00 (   | (0.00                       |
| 15.        | Trung tâm Tài nguyên môi trường vệ tinh                               | 3         | (0.06%)                                  | 3                   | (0.09%)                                  | 00:07:55                                     | 1 (0.05%)                                  | 0.00%                                    | 33.33%                                   | \$0.00 (   | (0.00                       |
|            | Combining Polar and Geostationary Data for Optimal Rain Rate Products | 2         | (0.04%)                                  | 2                   | (0.06%)                                  | 00:00:00                                     | 0 (0.00%)                                  | 0.00%                                    | 100.00%                                  | \$0.00 (   | (0.00                       |
| 17.        | 环境卫星资源中心 - 关于   | 2         | (0.04%)                                  | 2                   | (0.06%)                                  | 00:00:00                                     | 2 (0.10%)                                  | 100.00%                                  | 100.00%                                  | \$0.00 (   | (0.00                       |
|            | Precipitation Estimation Using Microwave Data                         | 1         | (0.02%)                                  | 1                   | (0.03%)                                  | 00:00:00                                     | 1 (0.05%)                                  | 100.00%                                  | 100.00%                                  | \$0.00 (   | (0.00                       |
| 14         | Satellite Channel Selection for Lake Effect Snow                      | 1         | (0.02%)                                  | 1                   | (0.03%)                                  | 00:00:00                                     | 1 (0.05%)                                  | 100.00%                                  | 100.00%                                  | \$0.00 (   | (0.00                       |
|            |   |           |  |                     |  |  |  |  |  |            |                             |