



THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

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Information Technology and Systems Center

DRAFT

**User's Manual for the Real Time Image Viewer**

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INFORMATION TECHNOLOGY AND SYSTEMS CENTER

# User's Manual for the Real Time Image Viewer

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# The Real Time Image Viewer

The Real Time Image Viewer (RTIV) is used to access, display and animate image files stored on an FTP server. It has a search interface that allows users to select the category, start and end dates, and start and end times. When the user goes to the RTIV web site at URL <http://www.gomrc.org/visualizations/imageviewer.html> the window shown by Figure 1 below will appear.



**Figure 1 Main Window of the Real Time Image Viewer**

## Searching for Imagery

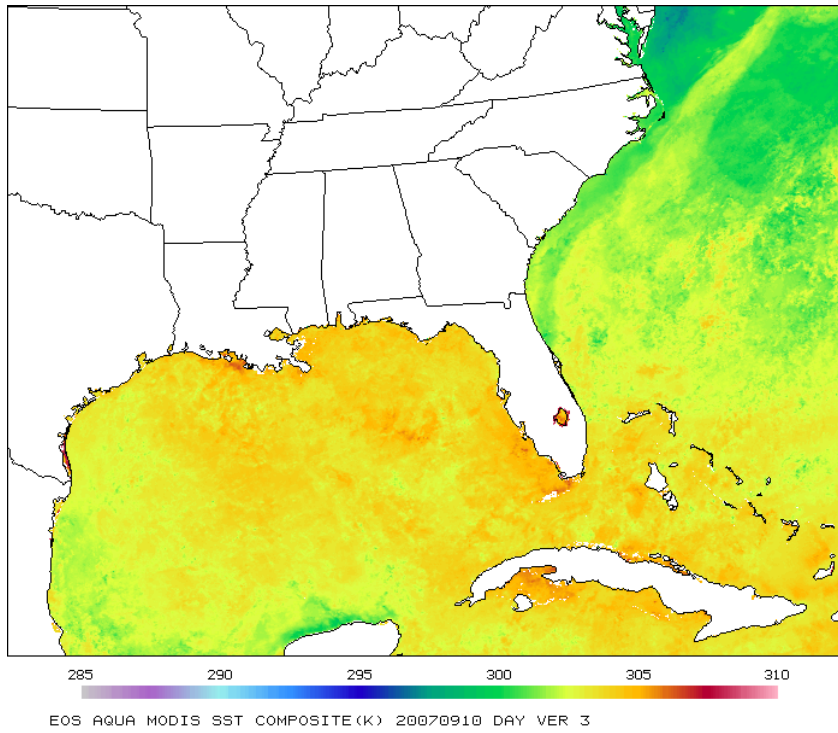
The user begins by selecting an image product from those listed on the drop down list to the left on the green bar entitled Image Products. Users can accept the default start and end dates and times or constrain the search results by choosing a beginning date and time and an ending date and time. This can be accomplished by typing the dates and times into the respective text boxes or by clicking on the calendar icons. After selecting the Image Product and setting the start and stop dates and times the user clicks on the “Go” button at the far right to generate a search request. This causes the RTIV to construct a search for the image products specified. The results are presented in a list as shown by Figure 2.



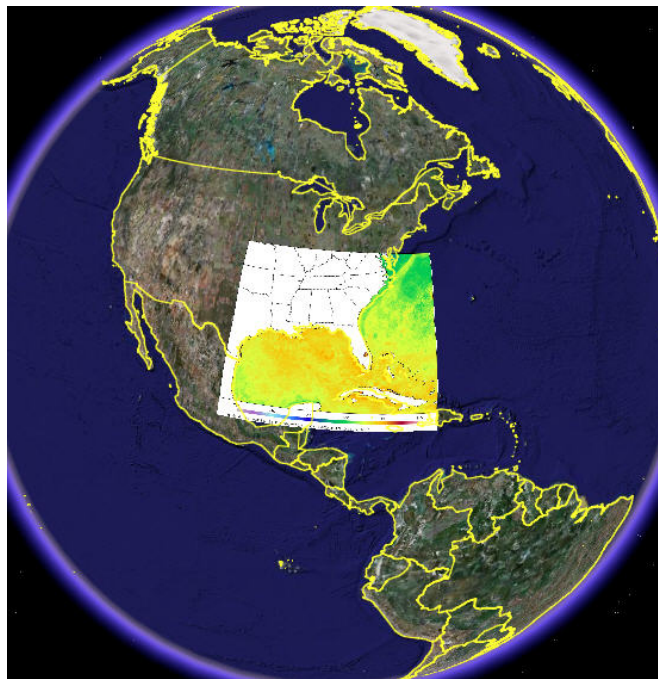
**Figure 2 Search results on Aqua SST imagery**

## Viewing Specific Image Files

The list of image files that match the search criteria are presented as a list organized by date. Each file name is also a hyperlink. The image can be displayed in a separate window by clicking on the file name (Figure 3). To the right of the file name is a button entitled “View in Google Earth”. Choosing this button will launch Google Earth with the corresponding image visible in the 3D window. (Note: The user must have Google earth installed on the workstation.) Figure 4 shows the Aqua SST image file for September 10, 2007 displayed with Google Earth.



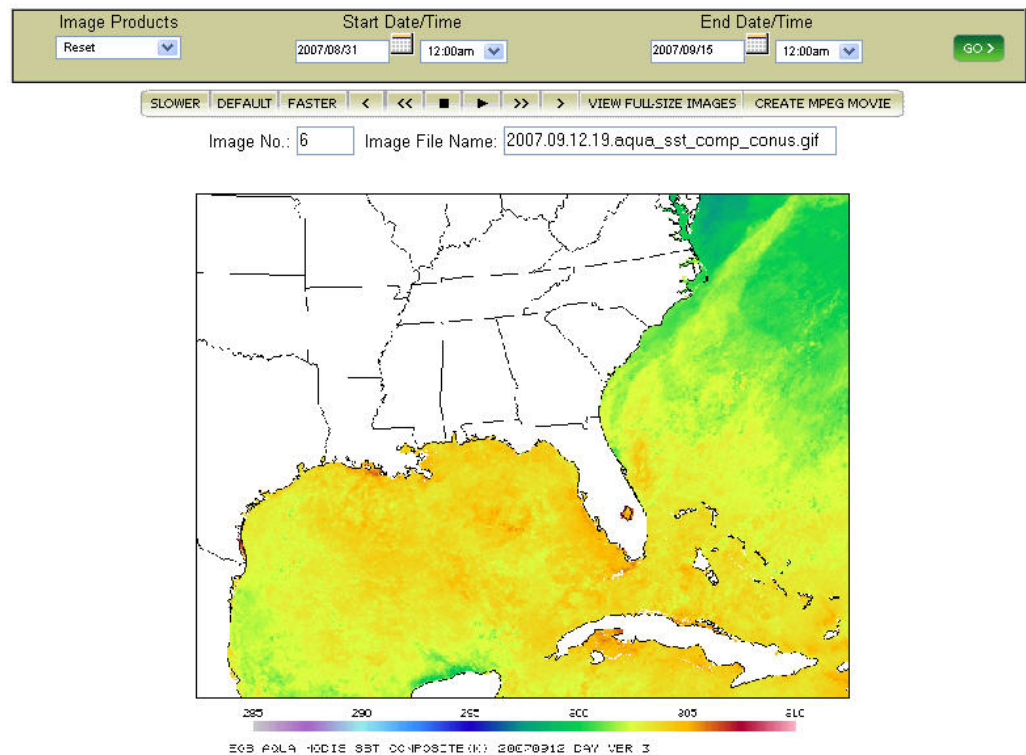
**Figure 3** Single image produced by clicking image file name



**Figure 4** Aqua SST image displayed with Google Earth

## Creating Animations

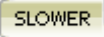
As shown by Figure 2 there is a check box located to the left of each image file name. In addition there is a check box to the left of the date just above the image file name. This is for convenience of selecting all images on a given date. In the example there is only one file per day. To create an animation, the user checks the files of interest and then clicks the “Create Animation with Selected Files” button. It is not necessary to choose contiguous files. The RTIV will create an animation from the selected image files and display the animation in a new window (Figure 5).


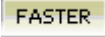






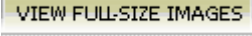



**Figure 5 Animation created from selected Aqua SST images**

## Controlling Animations

The RTIV animation window has a control bar that allows users to direct the playing of the animation. There are eleven buttons on the control bar. The function of each is described below:

-  Clicking this button slows the pace of the animation. It may be clicked repeatedly to slow the animation further.

-  Clicking this button restores the animation speed to the default pace.
-  Clicking this button increases the pace of the animation. It may be clicked repeatedly to speed up the animation
-  Single frame mode, reverse: Clicking this icon displays the images frame by frame in the reverse
-  Play in reverse: Clicking this button causes the animation to play in reverse.
-  Stop: Clicking on the solid square icon stops the animation.
-  Play: Clicking on the right arrow icon plays the animation.
-  Play forward: Clicking this icon causes the animation to play in its normal forward mode.
-  Single frame mode, forward: Clicking this icon causes the animation to proceed frame by frame in the forward direction.
-  By default, large images are scaled to fit within the browser window. To view the images at full resolution, click on this button. A new window will open with an animation of the full resolution images.
-  Clicking this button will cause the RTIV to create an mpeg movie of the animation. When choosing this option the user should be aware that this operation may take a lot of time. The amount of time depends on the number of frames (image files) selected for the animation. The user will be presented with a message in a separate window when the movie is completed.

## Invoking the RTIV

The RTIV may be invoked with a URL string specifying a path to the directory containing imagery files. If the user has a specific product they want to animate (such as SST to remain consistent with the examples shown above) then they may invoke the RTIV directly by appending the product name to the URL as shown below:

**<http://www.gomrc.org/cgi-bin/imageviewer/imageviewer.pl?prod=aquaSSTcomp>**

If the above URL is entered into a web browser then the RTIV animation window will appear with the animated sequence of Aqua SST images loaded. No search is necessary.