

RSIG Quick Reference

1. Select up to five data sources and variables.

The screenshot shows the RSIG interface. At the top, there are two rows of controls. The first row, labeled 'Data Sources', has five checked dropdown menus: CALIPSO, MODIS, CMAQ, AQS, and GOES-BB. The second row, labeled 'Variables', has five dropdown menus: TAB 532nm, AOD, PM 2.5, PM 2.5, and PM 2.5. To the right of these are two unchecked checkboxes: 'Modis COT' and 'CMAQ Wind' in the first row, and 'Tool tips' and 'Verbose' in the second row. Below this is a map of the United States with a red bounding box around the central and eastern regions. A red arrow points to the top-right corner of the bounding box. At the bottom, there are four control panels: 'Show/Save/Help/Cancel' buttons; 'Date Controls' with a date of 2006 Jul 05 and 'Number of days to process' set to 1; 'Bounding Box' with coordinates N: 50, S: 24, W: -126, E: -66; 'Playback Controls' with a 'Play Rate' of 30; and 'Map Controls' with a vertical slider and a 'Globe' button.

2. Check extra information on or off. (Optional)

3. Use the mouse to draw a box around the area you want.

5. Enter a start date and the number of days to process.

4. Use the Map Controls to move to or zoom in and out of an area.

Tips

Check "Verbose" to see all of RSIG's system messages.

Right-click to center the map in the RSIG viewer.

A Play Rate of 5 is slow, 30 is fast.

6. Click Show to display the selected data.

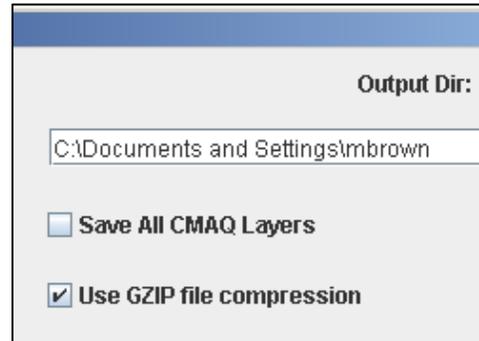
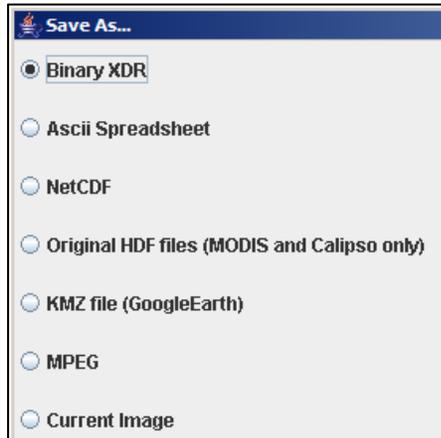
Click Cancel if it's taking too long.

Click Save to save the subsetting data to files on your computer.

7. Use the Playback Controls to start and to control the animation.

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Saving Data

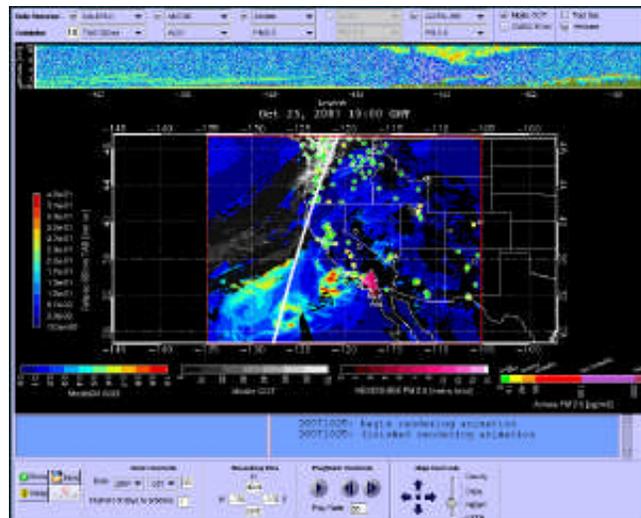


Enter an output directory to specify where RSIG should save its files.

- Check **Save All CMAQ Layers** to include that data in your downloaded file. You must select CMAQ data in the RSIG viewer for this option.
- Check **Use GZIP file compression** to keep downloaded file sizes small. Use any decompression program to unzip the files.

After viewing the animation, click Save to display the Save As... dialog and select one of the following formats.

- **Binary XDR.** Simple, compact, portable efficient, streamable format recommended for reading into other data-processing programs.
- **ASCII Spreadsheet.** Tab-delimited text file that is human-readable and can be imported into Excel, ARCView, etc. Not recommended for large amounts of data.
- **NetCDF.** Network Common Data Format enables data sharing with GIS and climatology applications.
- **HDF.** For satellite data only (MODIS and CALIPSO). These are the original, **unsubsampled** files tarred and compressed. Caution: large and slow.
- **KMZ.** Animation to import into Google Earth.
- **MPEG.** Animation playable by most movie player programs.
- **Current Image.** Save the currently displayed image as a PNG file.



Example RSIG Runs

Enter the following settings and coordinates to see the types and variety of atmospheric data RSIG can access and display.

Hurricane Katrina

Date. August 27, 2005; 5 days.

Datasets. MODIS AOD, MODIS COT, CMAQ PM2.5, CMAQ Wind, AQS PM2.5.

Play rate = 5

Area. Gulf of Mexico area, including Texas, Virginia, and Cuba in the selection area.

California Wildfires

Date. October 22, 2007; 6 days.

Datasets. CALIPSO TAB 532, MODIS AOD, NESDIS PM2.5, AIRNow PM 2.5, AQS PM 2.5, GOES-BB PM 2.5.

Play rate = 5

Area. W: -135, S=26, E=-105, N=50

CALIPSO

Date. July 5, 2006; 4 days.

Datasets. CALIPSO TAB 532, MODIS AOD, MODIS COT, AQS PM2.5..

Play rate = 1

Area. Zoom out to see most of North America, then select from above Canada to include all of the continental US in the selection area.