

Data Rods Explorer: Regression Tests

Supporting [Data Rods Explorer](#)

Date Updated	Editor	Notes
Nov 30, 2016	D. Arctur	First edition, DRE 1.0.0
Jan 13, 2020	D. Arctur	Updated for DRE 1.0.4

Configuration

- Check [dates_and_spatial_range.txt](#) looks complete, correct and current
- If any issues, check [model_config.txt](#) is current with the [NASA Data Rods Variables spreadsheet](#)

General

- “Click” on map in multiple different points; verify only one orange dot persists.
- Scroll functionality compatible with mouse and scroll buttons on map.
- Menu should be visible in upper left and functioning properly.
 - Should work to collapse/expand the menu.
- About button in correct location and functioning properly.
 - Send to help page (user manual).
- Drawing Layer, Basemap Layer, Model Extents and Variable layers functioning properly.
 - Drawing Layer opacity check.
 - Drawing Layer show/hide check.
 - Basemap Layer opacity check.
 - Basemap Layer show/hide check.
 - Model 1 Extents opacity check.
 - Model 1 Extents show/hide check.
 - Model 1 Extents - click to zoom to extent bounds.
 - Variable layer opacity check.
 - Variable layer show/hide check.
 - Variable layer - click to zoom to extent bounds.
- Start-up message displaying properly: “Click on map”
- Messages show up when expected.
- All drop-down menus working appropriately.
 - Text fully visible in drop-down.
 - Drop-down selection creates expected map and plot.
 - Verify product/model
 - Verify variable

- Verify date
 - Verify time
- Display map button correctly displays map
 - Disabled if any of {model, variable and date} are not selected
 - May require > 1 minute; should complete in < 5 minutes
- Plot button correctly creates plot
 - Disabled till plot point location chosen
 - Should complete loading in < 1 minute
 - Verify for one-variable plot
 - Verify for two-variable plot
 - Verify for year-on-year plot
- Selecting “Compare two variables” displays new plotting options
 - Second model
 - Second variable
 - Start date
 - End date
 - Initial date range may be modified depending on valid dates of second model/var
- Selecting “Year-on-year changes” displays new plotting options
 - Year selection
- Loading screen functioning properly
 - Once “Display Map” or “Plot” command is input by user, ensure that ‘Loading...’ image is displaying as expected.

Display Map

- Display map over entire US for one variable from each dataset.
- Display map outside of time range for each dataset; should receive error message.
- Display two maps in a row: display one map, then display a different map. Both maps show in Map Control Panel.

Plot one variable

- Verify user-entered lon-lat coordinates work.
- Verify that most recently clicked location is the point plotted, after clicking multiple times.
- Plot outside of time range for each dataset; should receive error message.
- Display two plots in a row: display one plot, then display a different plot. First plot should be erased.

Plot two variables

- Verify user-entered lon-lat coordinates work.

- Verify that most recently clicked location is the point plotted, after clicking multiple times.
- Plot outside of time range for each dataset; should receive error message. Try first with one dataset out of range, then again with both datasets out of range.
- Display two plots in a row: display one plot, then display a different plot. First plot should be erased.

Year-on-year changes

- Verify user-entered lon-lat coordinates work.
- Verify that most recently clicked location is the point plotted, after clicking multiple times.
- Plot outside of time range for each dataset; should receive error message.
- Display two plots in a row: display one plot, then display a different plot. First plot should be erased.

Download ASCII, Plot, netCDF

- Plot a variable time series, then click to download ASCII; should appear in new browser tab.
- Click to download Plot; should appear in new browser tab.
- Click to download NetCDF; should get a file download dialog in new browser tab.
- Verify these all generate multiple new browser tabs when comparing 2 vars, or yr-to-yr changes.

Download HighCharts data and image

- Plot a variable time series, then click 3-bar menu icon in upper-right above the graph. Test all downloads.