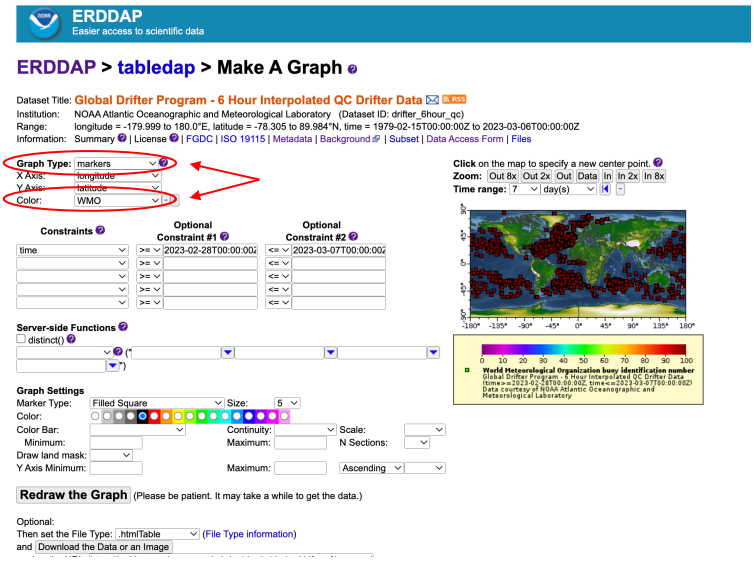
Plot quality controlled interpolated drifting buoy data

To plot quality controlled 6-hourly interpolated data from drifting buoys, please visit the NOAA GDP ERDDAP webpage at https://erddap.aoml.noaa.gov/gdp/erddap/tabledap/drifter_6hour_qc.graph . Here, you will see the list of possible variables. Examples include: deployment date, death date, drogue loss, sst data, etc.

If you would like to plot quality controlled *hourly* interpolated data from drifting buoys, please follow the hourly dataset webpage at https://erddap.aoml.noaa.gov/gdp/erddap/tabledap/drifter_hourly_qc.graph .

1. To begin, select the graph type and variable to be plotted.



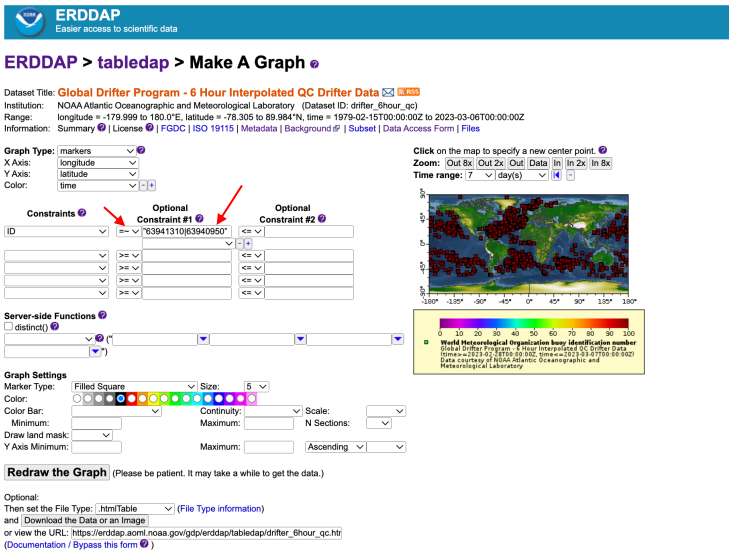
2. After selecting the desired variable, determine how you would like to isolate the dataset to be plotted.

3a. If you wish to plot interpolated drifter data by ID number, either enter the AOML Drifter ID, or the WMO number, in the respective Operational Constraint field.

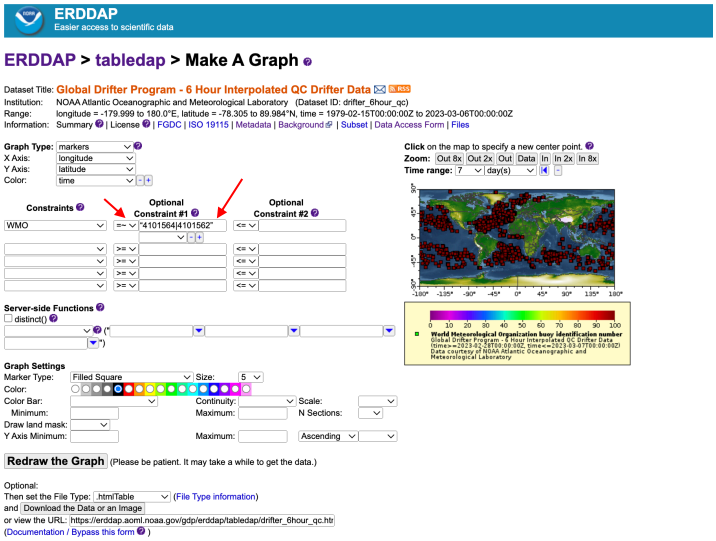
Each entry should contain double quotes ("...") and the operator for this constraint should be set to "=~". The operator selection is found to the left of the Optional Constraint field. If you are interested in data from multiple drifters, ensure the identification numbers are separated by the pipe, or bar, symbol (|) and within double quotes ("...").

For example, a single drifter should appear as: =~ "300234063941310" or =~ "4101564", depending if you reference the AOML ID, or the WMO number. For multiple drifters, the entry should appear as: =~ "300234063941310|300234063940950" or =~ "4101564|4101562".

Please Note: There are no spaces between the identification numbers and the pipe or bar symbol (|).



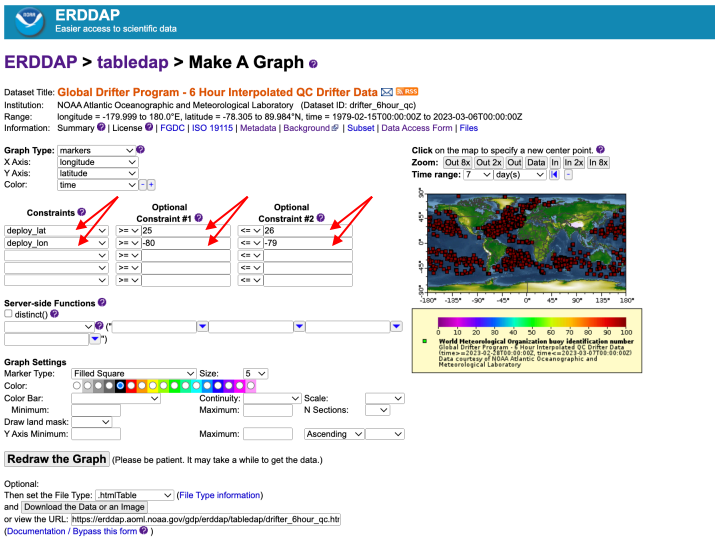
or



3b. If you wish to plot interpolated drifter data for all deployments at a given location, enter the coordinates of the desired deployment area into the deploy_lat and deploy_lon Operational Constraint fields.

For example, to obtain data for all buoys deployed between 25N and 26N, and between 079W and 080W, you would enter the following: deploy_lat ”>=” 25 “<=” 26 and deploy_lon “>=” -80 “<=” -79.

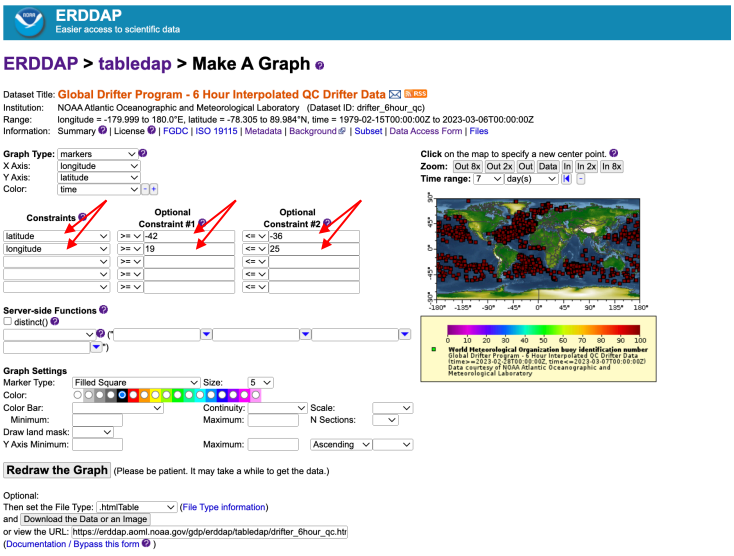
Please Note: Longitudinal values range between -180 and 180. Therefore, you must include a negative sign for western longitude values to obtain the correctly formatted value.



3c. If you wish to plot interpolated drifter data for all drifters that have entered a given area, enter coordinates for the desired area into the longitude and latitude Operational Constraint fields.

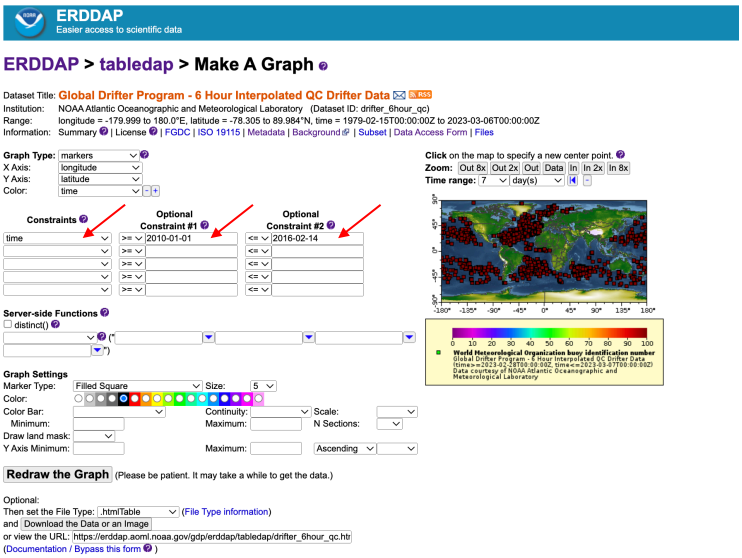
For example, to obtain data for all buoys that have passed between 019E and 025E, and between 36S and 42S, you would enter the following: latitude “>=” -42 “<=” -36 and longitude ”>=” 19 “<=” 25.

Please Note: Longitudinal values range between -180 and 180. Therefore, you must include a negative sign for western longitude values to obtain the correctly formatted value.



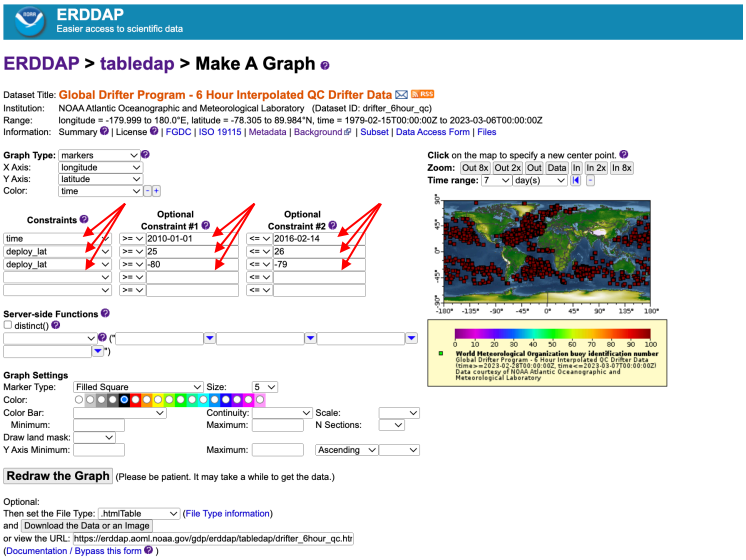
3d. If you wish to plot interpolated drifter data for all drifters within a particular time period, enter the desired beginning and end dates into the time (UTC) Operational Constraint fields.

For example, to obtain data for all buoys transmitting data between 1 January, 2010 and 14 February, 2016, you would enter the following: time (UTC) ”>=” 2010-01-01 “<=” 2016-02-14.



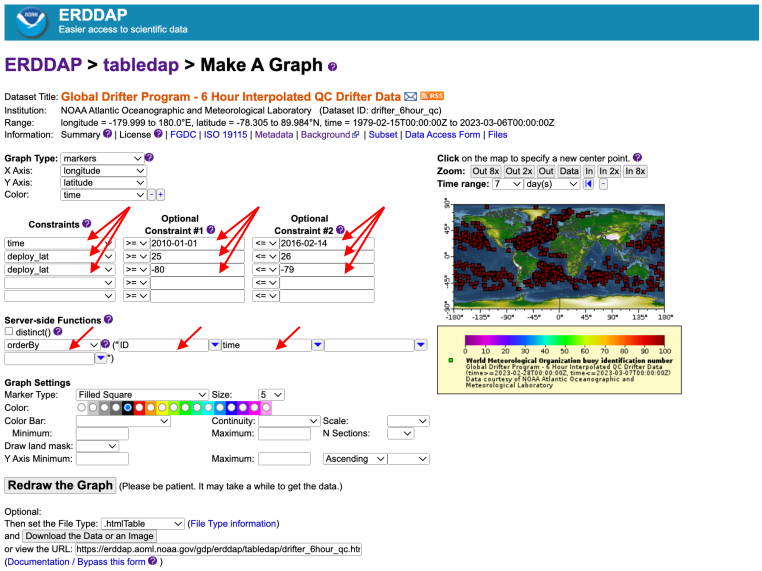
3e. If you wish to combine variables and obtain interpolated drifter data for all drifters within a particular time period that were deployed at a precise location, enter the desired beginning and end dates into the time (UTC) Operational Constraint fields, along with the desired deployment area into the deploy_lat and deploy_lon Operational Constraint fields.

For example, to obtain data for all buoys deployed between 25N and 26N, and between 079W and 080W, between 1 January, 2010 and 14 February, 2016, you would enter the following: deploy_lat ">=" 25 "<=" 26 and deploy_lon ">=" -80 "<=" -79 AND time (UTC) ">=" 2010-01-01 "<=" 2016-02-14.

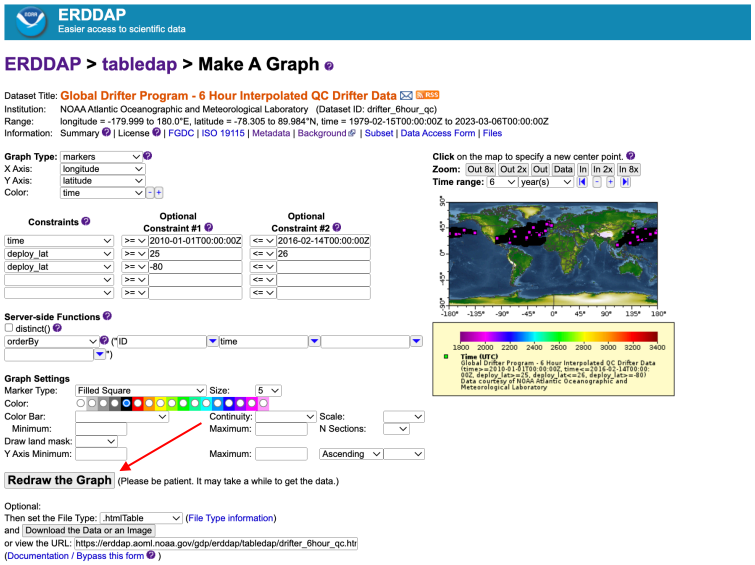


4. OPTIONAL: Once all desired variables have been chosen, for best output results, under "Server-side Functions", order variables by "ID or WMO" and "time". By doing so, the output will be displayed by identification number and time (chronologically).

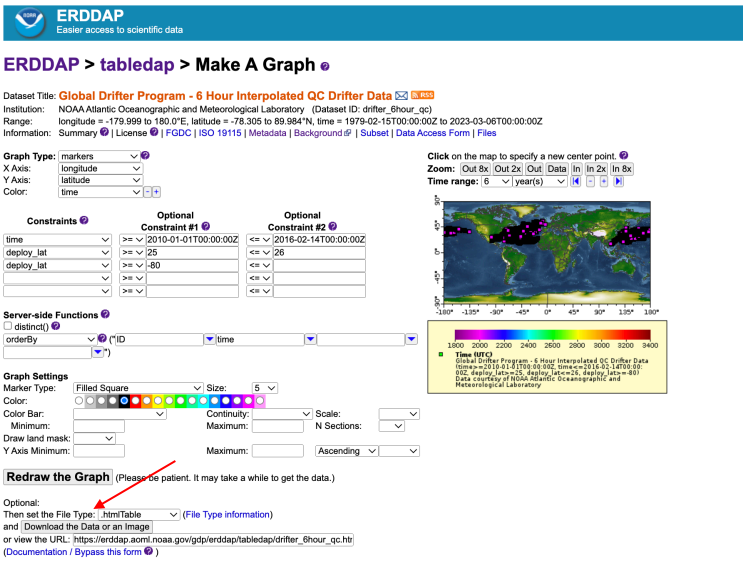
WARNING: Using the “orderBy” feature on large ERDDAP graph requests may trigger a HTTP 413 “outOfMemoryError” response when you complete step 5. If this error appears, we suggest that you divide your original data request into multiple smaller requests, or resubmit your original request without the “orderBy” feature.



5. To preview the plot from the desired selections, click “Redraw the Graph”. After doing this, you will see the plot appear in the upper right corner of the page.



6. If the plot preview is acceptable, select the desired output file format.



Options include: .csv, .html, .asc, .png, .mat, .pdf, .transparentPng, Google Earth (.kml), etc.

7. Once you have entered the desired information and chosen the output file type, click “Download the Data or an Image” to receive the plot, or generate a URL that saves the specified variables. The URL can be used to reference the dataset parameters at a later date, and/or can be shared with colleagues.