Plot quality controlled interpolated drifting buoy data

To plot quality controlled interpolated data from drifting buoys, please visit the NOAA OSMC ERDDAP webpage at http://osmc.noaa.gov/erddap/tabledap/gdp_interpolated_drifter.graph. Here, you will see the list of possible variables. Examples include: deployment date, death date, drogue loss, sst data, etc.

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

![ERDDAP Graph Selection](image)

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

For example, a single drifter should appear as: =~ “63941310” or =~ “4101564”, depending if you reference the AOML ID, or the WMO number. For multiple drifters, the entry should appear as: =~ “63941310|63940950” or =~ “4101564|4101562”. **Please Note: There are no spaces between the identification numbers and the pipe or bar symbol (|).**

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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 dlat and dlon 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: dlat ”>” 25 ”<=” 26 and dlon ”>” 280 ”<=” 281.

**Please Note: Longitudinal values range between 0 and 360. Therefore, you must subtract western longitude values from 360 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 36S and 42S, and between 019E and 025E, you would enter the following: longitude “>=” 19 “<=” 25 and latitude “>=” -42 “<=” -36.

**Please Note: Longitudinal values range between 0 and 360. Therefore, you must subtract western longitude values from 360 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 dlat and dlon 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: dlat “>” 25 “<” 26 and dlon “>” 280 “<” 281 AND time (UTC) “>” 2010-01-01 “<” 2016-02-14.

4. 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).
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.