Create a grid with the SST differences obtained in Lesson Detecting upwelling events I

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In a new Mirone Window select "GMT -> Interpolate -> Minimum curvature". In the window that pops up enter the file name of the files with the processed differences (1). That file is the obtained after running the *upawells.m* Matlab script. and contains 3 columns: *time lat SST_dif* Change the Griding Method to what is shown in (2)

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This tool fills the boxes with default values that are only good as guides but are almost never good in themselves and need adjustments. So do that as in (1). Hit options in (2). Enter 0 in (3); hit OK in (4) and compute in (5).

We used **8** in X Spacing because data is separated in time by **8** days. Also, we set Y *Spacing* to **0.1** because that is the approximate separation of the vertex along the digitized line. Finally, the Clip cells equal **0** means that only the cells controlled a data point will be retained in file.

Grid with the SST differences



This is the grid with the SST differences. The gaps represent nodes where either the coast or offshore lines interpolated weekly averages that themselves had NaNs. Tho see the effect of having used a *Clip cells* of **0**, load the file used to interpolate the grid (diff_xyz_2019.dat in present case). Do that using the option *File -> Open xy(z) -> Import points*

Overlay the data points



Grid with the data points overlaid