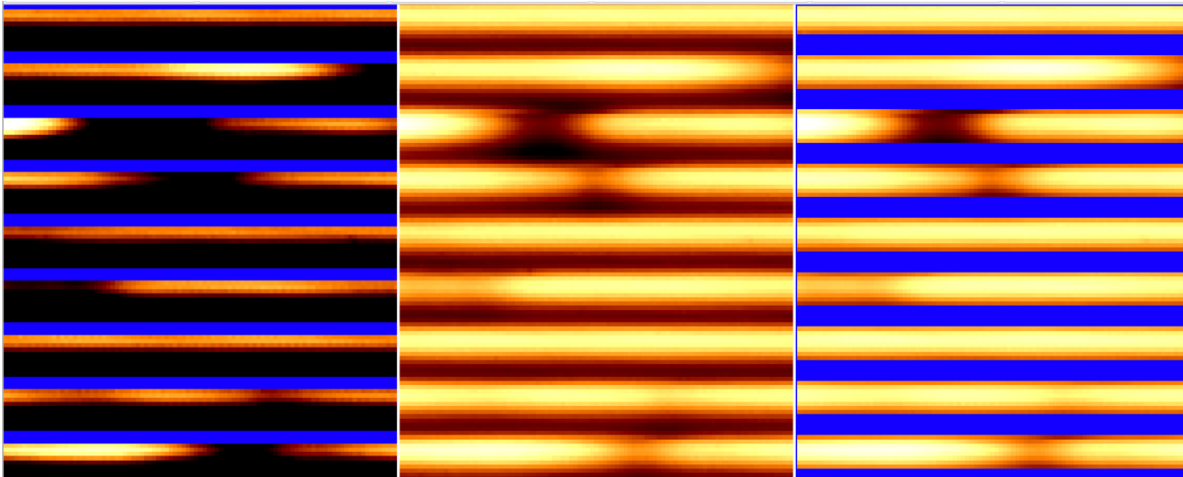


## Custom Wavemap Generating

Occasionally, users might find that the default wavemap generated by the pipeline is not the optimal version for their data. The Jupyter notebook “customWavemap.ipynb” has been provided to help users generate a text file that can be read by redux at the “make\_flat” step for high-low & high-medium mode observations. An example below is from a high-low observation of IRC +10216 centered around  $805\text{ cm}^{-1}$  (75\_0106\_275):



From left to right are zoomed in regions of: the default pipeline CAL file, the UND file that shows the order boundaries before the “correct\_calibration” step, and the CAL file after producing and using a custom wavemap for this setting. The result is a CAL file with much better order boundaries centered around the signal from the star.

A custom wavemap is also a great way to extract extra data, which can be either more coverage in a particular order or adding a new order entirely. Note that if the latter is being done, then the central wavenumber will need to be refined in the “refine\_wavecals” step.