Data processing of CRIRES data: FAQs

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Data processing of CRIRES data: Frequently asked questions

- **Are there any known problems with CRIRES data?**

Answer: The quality control group keeps a list of know problems at

http://www.eso.org/observing/dfo/quality/CRIRES/qc/problems_qc1.html

- **How can I read in CRIRES reduced data using IDL or IRAF?**

Answer: See Appendix A and B of the CRIRES data reduction cookbook.

- **Is there a script to associate science and calibration data, create master frames and do the data reduction?**

Answer: See Appendix C of the CRIRES data reduction cookbook after using the CalSelector to download files from the archive. Nodding only is supported.

- **I have two objects in the CRIRES slit, and I want to extract both spectra, how do I do it?**

Answer: Use the recipe parameter "spec zone". Note that "y_pos_c1,2,3,4" is a list of Y positions on detectors 1-4 where to perform the wavelength calibrations (default is to use the spectrum position)" and **not** where the extraction is performed.

- **I have a very low S/N spectrum and/or just emission lines, how can I reduce my spectra?**

Answer: At the moment this is not supported by the ESO pipeline. You could use e.g. IRAF or IDL to extract the spectra.

- **There are few ThAr lines in my wavelength calibration spectra, what do I do?**

Answer: In order to obtain a good wavelength solution with CRIRES, you should have at least two or three ThAr lines visible on each detector, preferably well spaced, at

least for a 2nd order polynomial. Otherwise the results of the solution will likely not be trustworthy. Obviously this is not a problem of the pipeline but with the wavelength calibration source itself. If you have a few lines then the best you can probably do is to use the recipe crires_model_fix with a model file and (x,y,wavelength) position of known lines.

- **How do I plot my reduced spectra?**

Answer: Please use the recipe CRIRES util plot.

- **Can I run the ESO CRIRES pipeline with MacOS?**

Answer: See section 6.2 of the data reduction cookbook.