MUSEpack

Peter Zeidler

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0.1 MUSEreduce

The MUSEreduce module is meant to streamline the process of using the standard reduction pipeline provided by ESO[1] (Weilbacher et al. 2012, 2014) to reduce the data. This pipeline is based on the ESO Reflex environment (ESORex) for automated data reduction work flows for astronomy (Freudling et al. 2013). The standard pipeline need to be installed in order for the package to work.

The directory, in which the data reduction takes place should contain a directory `raw`, where all the archive raw data of the obsevations are placed. One calls the module with the *.json filename as argument where all the options are set. The default file is found in the directory and is called "config.json" with the following options:

GLOBAL

withrvcorr bool, true if barycentric RV correction should be performed, default: true

CALIBRATION

SCIBASIC

STD_FLUX

SKY

SCI_POST

EXP_COMBINE

[1] https://www.eso.org/sci/software/pipelines/muse/

References

Freudling, W., Romaniello, M., Bramich, D. M., Ballester, P., Forchi, V., García-Dabló, C. E., Moehler, S., and Neeser, M. J. (2013). Automated data reduction workflows for astronomy. The ESO Reflex environment. *A&A*, 559, A96.

Weilbacher, P. M., Streicher, O., Urrutia, T., Jarno, A., Pécontal-Rousset, A., Bacon, R., and Böhm, P. (2012). Design and capabilities of the MUSE data reduction software and pipeline. In *Software and Cyberinfrastructure for Astronomy II*, volume 8451 of *Proc. SPIE*, page 84510B.

Weilbacher, P. M., Streicher, O., Urrutia, T., Pécontal-Rousset, A., Jarno, A., and Bacon, R. (2014). The MUSE Data Reduction Pipeline: Status after Preliminary Acceptance Europe. In Manset, N. and Forshay, P., editors, *Astronomical Data Analysis Software and Systems XXIII*, volume 485 of *Astronomical Society of the Pacific Conference Series*, page 451.