

WEAVE Data Flow

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The **WEAVE** data flow, from survey definition through construction of the fields to be observed, observing, quality control, final data reduction and data releases to the community, is shown on the right.

WEAVE is a new wide-field (2-deg) spectroscopic survey facility for the prime focus of the 4.2-m William Herschel Telescope.

Three observing modes:

- Individual objects in fibres (~1000 fibres)
- Mini integral-field units (mIFUs)
- Large integral-field unit (LIFU)

Dual-beam spectrograph:

- blue and red arm
- Low resolution ($R \sim 5000$)
- High resolution ($R \sim 20000$)

Main science goals

- Milky-Way archaeology (Gaia follow-up)
- Galaxy evolution
- Cosmology

CPS Core-Processing (CASU, Cambridge)

Fully automated data reduction pipeline.

★ Integrity checks and initial QC processing. Software used for quick look immediately after observation. Survey progress metric.

★ Image processing and spectral extraction. Spectra with wavelength calibration, corrected for sky subtraction and telluric absorption and flux calibrated.

APS Advance Processing (IAC, La Laguna)

★ Extracts the basic physical information: Spectral type, radial velocity, overall metallicity, element abundances, etc.

WAS WEAVE Data Archive

★ Stores raw observational data and data products from CPS and APS. Access to the data for users.

