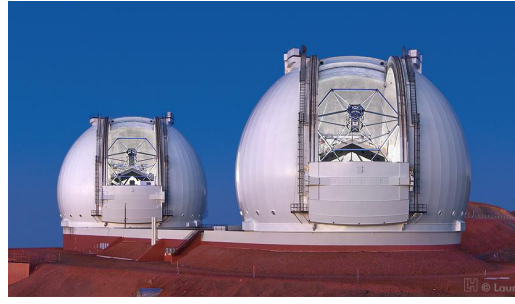




Re-Reducing the Keck/DEIMOS Stellar Archive

Marla Geha (Yale)

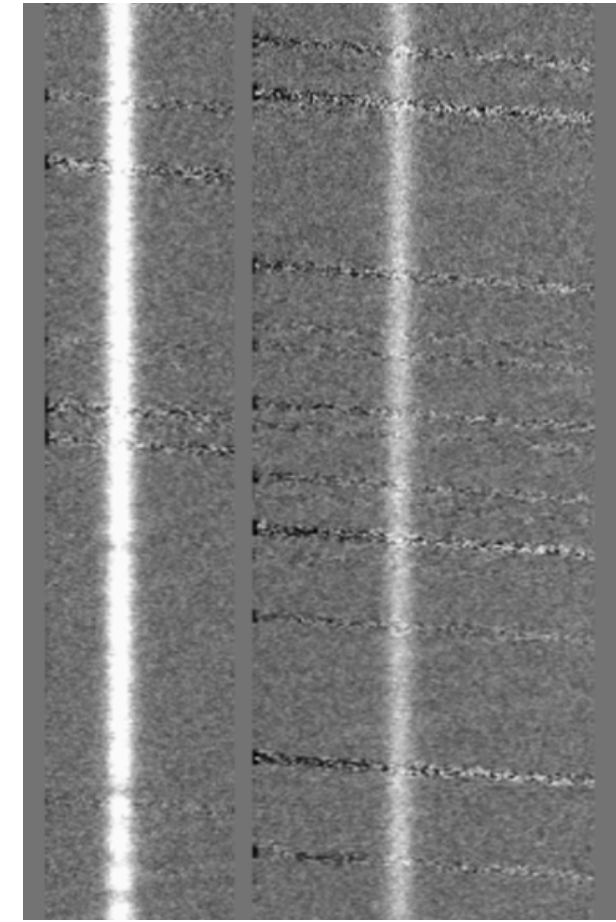


Re-reducing the Keck/DEIMOS 1200G archive with improved 2D and 1D reductions

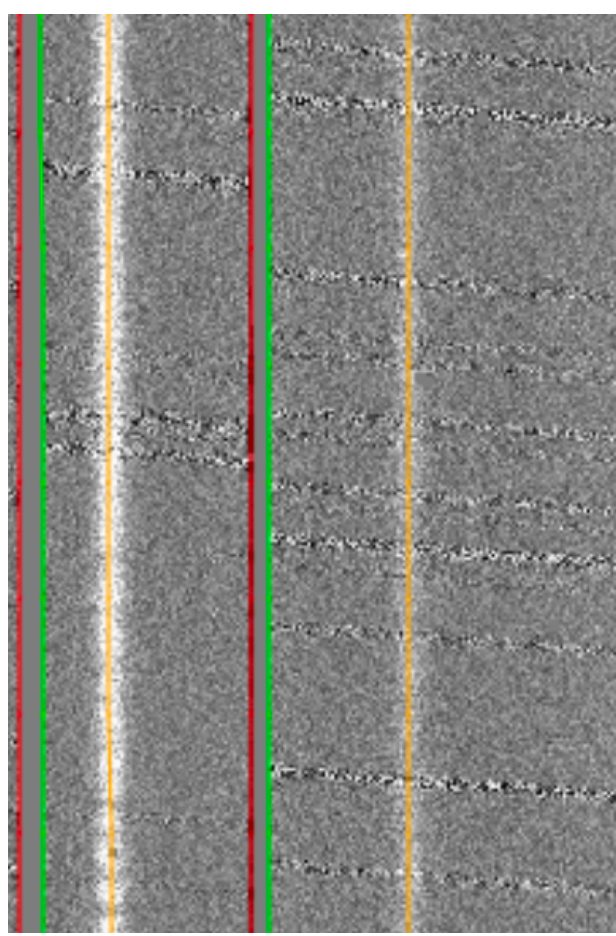
Keck/DEIMOS Archive includes:

- 35** Milky Way dwarf satellites
- 30** Milky Way globular clusters
- 38** M31 dwarf satellites
- >550** unique pointings
- >50,000** individual spectra

IDL SPEC2d

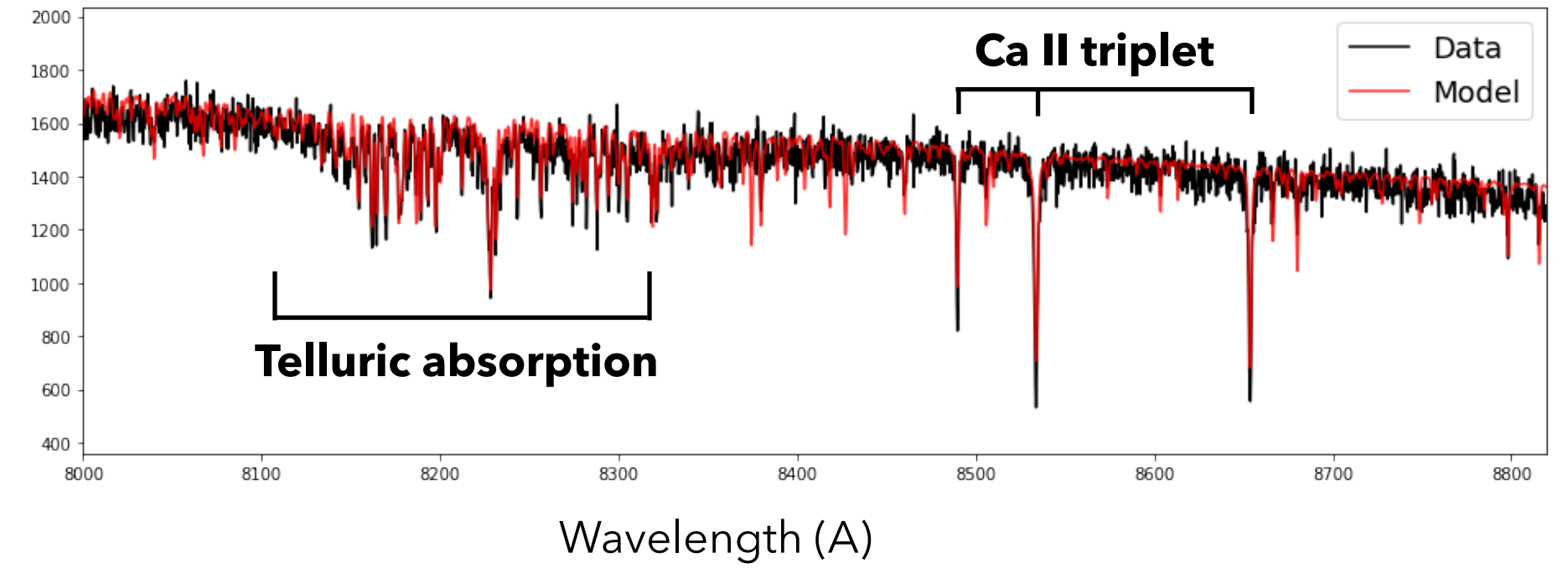


Pypeit



2D Redux with Pypeit: Pypeit is a Python-based reduction code by X. Prochaska, J. Hennawi et al.

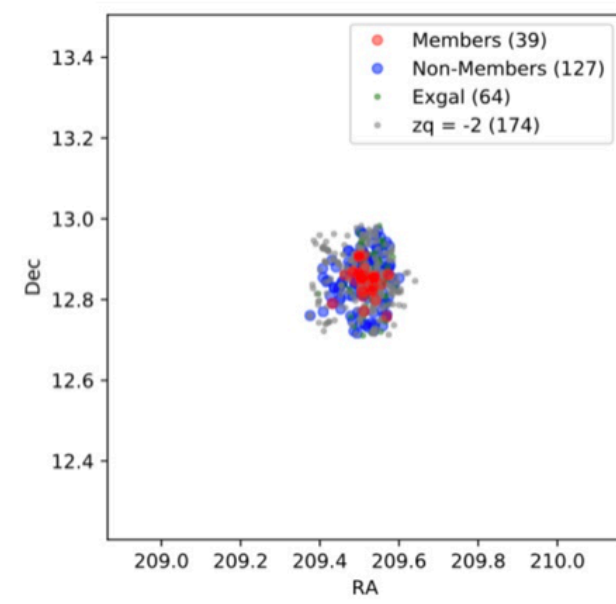
1D velocity analysis: Forward modeling of spectra per exposure. Synthetic telluric modeling. Improved noise model.



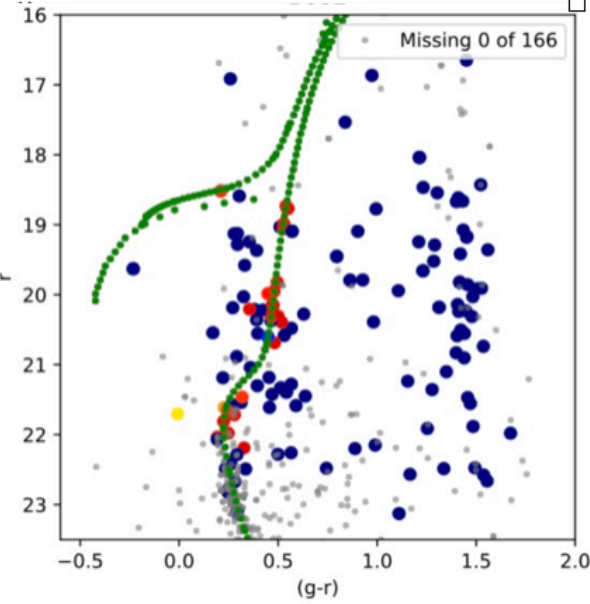
Final data products will include:

- Velocities and error distributions.
- Equivalent Width-based metallicity indicators
- Membership probabilities
- Matched photometry (CFHT and DECaLS).

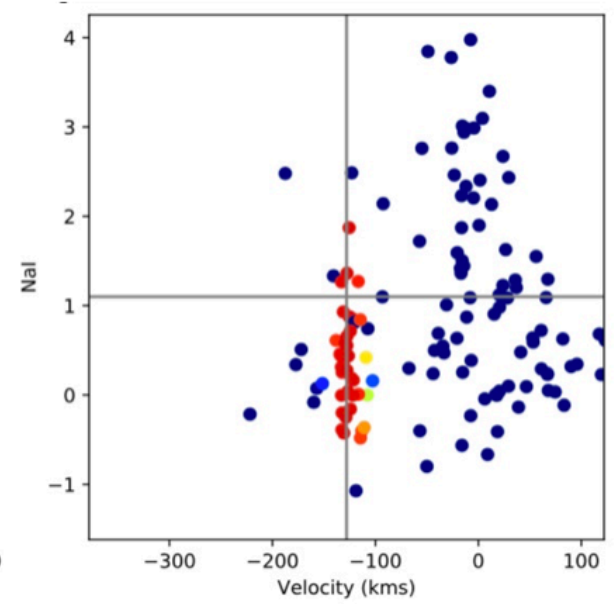
Spatial



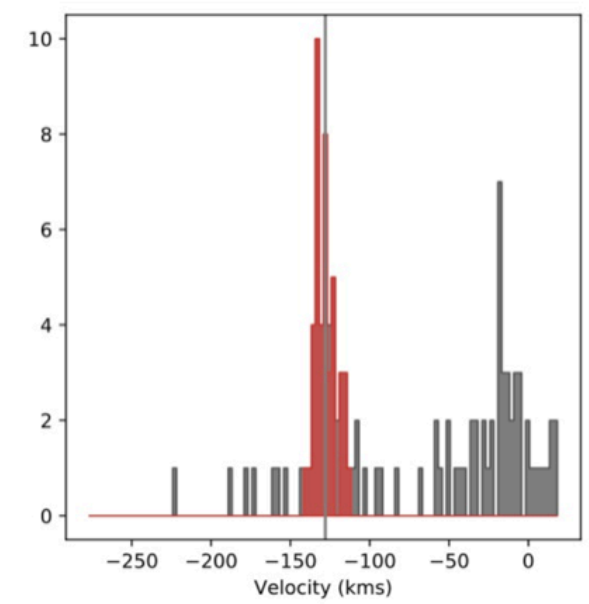
CMD



EW



Velocity



Results for 1 of 103 stellar systems!