Saturn and Titan EUVFUV Observations

The observations with ID EUVFUV in the CIMS database are generic spectral image cubes with 1024 spectral elements for each of EUV and FUV channes (no binning) and 64 X N spatial elements, where N is the number of time steps in the observation. Time steps are typically several minutes duration but may be as much as 20 minutes duration. Time steps are separated by ~ 1 mrad perpendicular to the slit so as to form a raster image. Fig. 1 UVIS\_220SA\_EUVFUV\_PRIME (2015-232T13:18:00) gives an example for Saturn. Sometimes the steps overlap considerably because only a part of the disk (e.g. the lit crescent) is targeted.



These spectral images are the workhorse of much of the Saturn and Titan science since they capture all spectral elements over a 2-dimensional image raster. They are too numerous to list here. An example is shown in Fig. 2 at two wavelengths (reflected sunlight continuum and Lyman-alpha) of Saturn’s north polar region.

