# Analysis Procedure

- Start with level 1.5 event file, apply GTI and status-bit filtering.
- Extract 3.3-degree wide sectors along the dispersion axis. This collects approximately 90% of the total dispersed flux with negligible dependence on wavelength.
- Extract narrow slices of spectrum ( 150 per spectrum) along with corresponding higher orders up to $|m| = 7$ (another 600 slices), excluding wavelength ranges near chip gaps. For example, extract a slice of $m\lambda = 2.0 - 2.1$ Å for +1st order, $m\lambda = 4.0 - 4.2$ Å for +2nd order, 6.0-6.3 Å for +3rd order, etc.
- For each spectral slice, determine the number of counts in order $m$ by spectral fitting. The number of counts in lower energy-orders must also be determined for pile-up corrections.
- For each value of $\lambda$, apply pile-up corrections to all relevant $m\lambda$ results, derive QE-corrected counting rates, calculate statistically weighted counting rate averages (+ and $-$) for each order, and finally compute the adjusted rate for each higher order relative to 1st order.