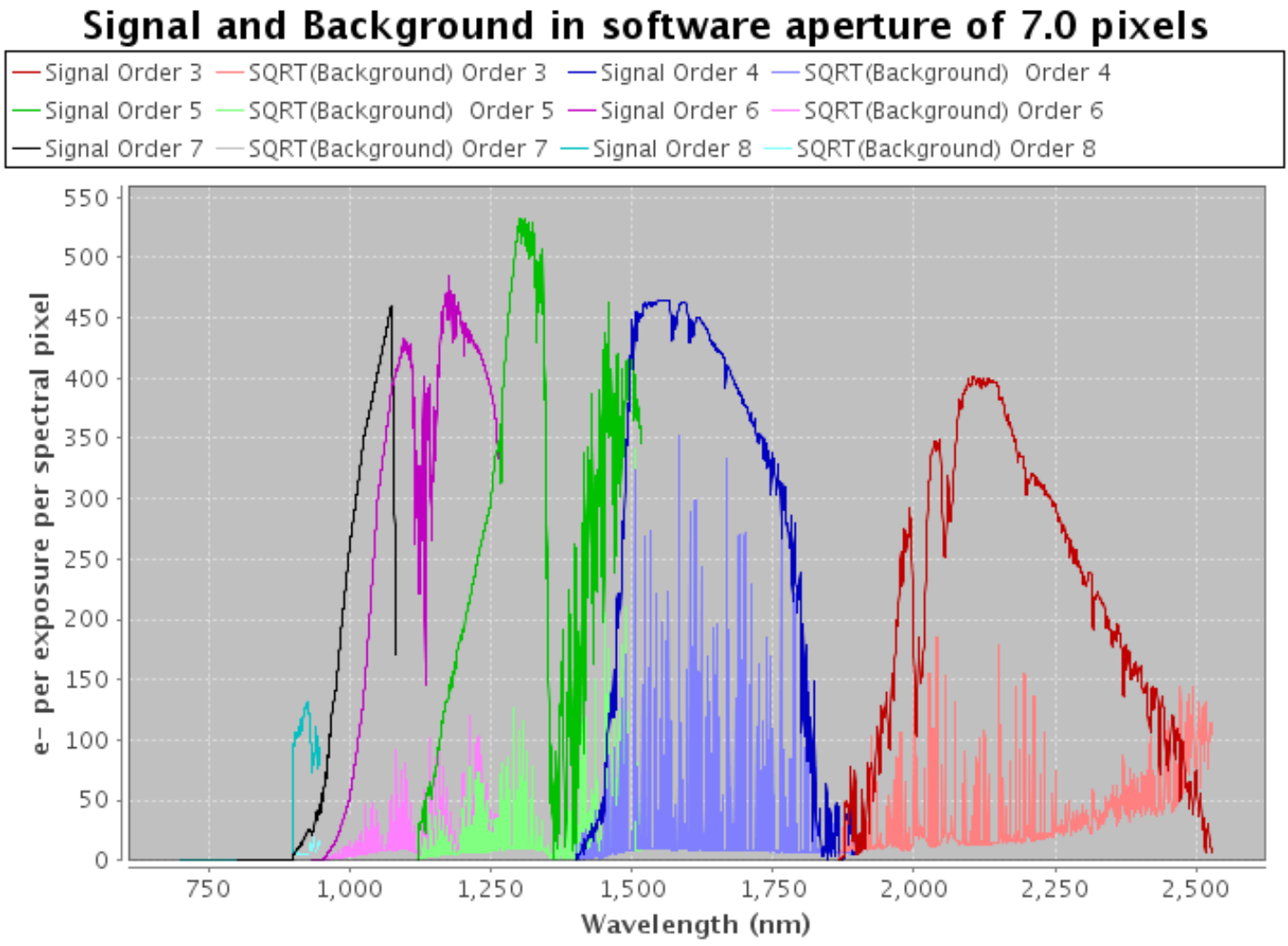
Gemini Integration Time Calculator
GNIRS version 4.0

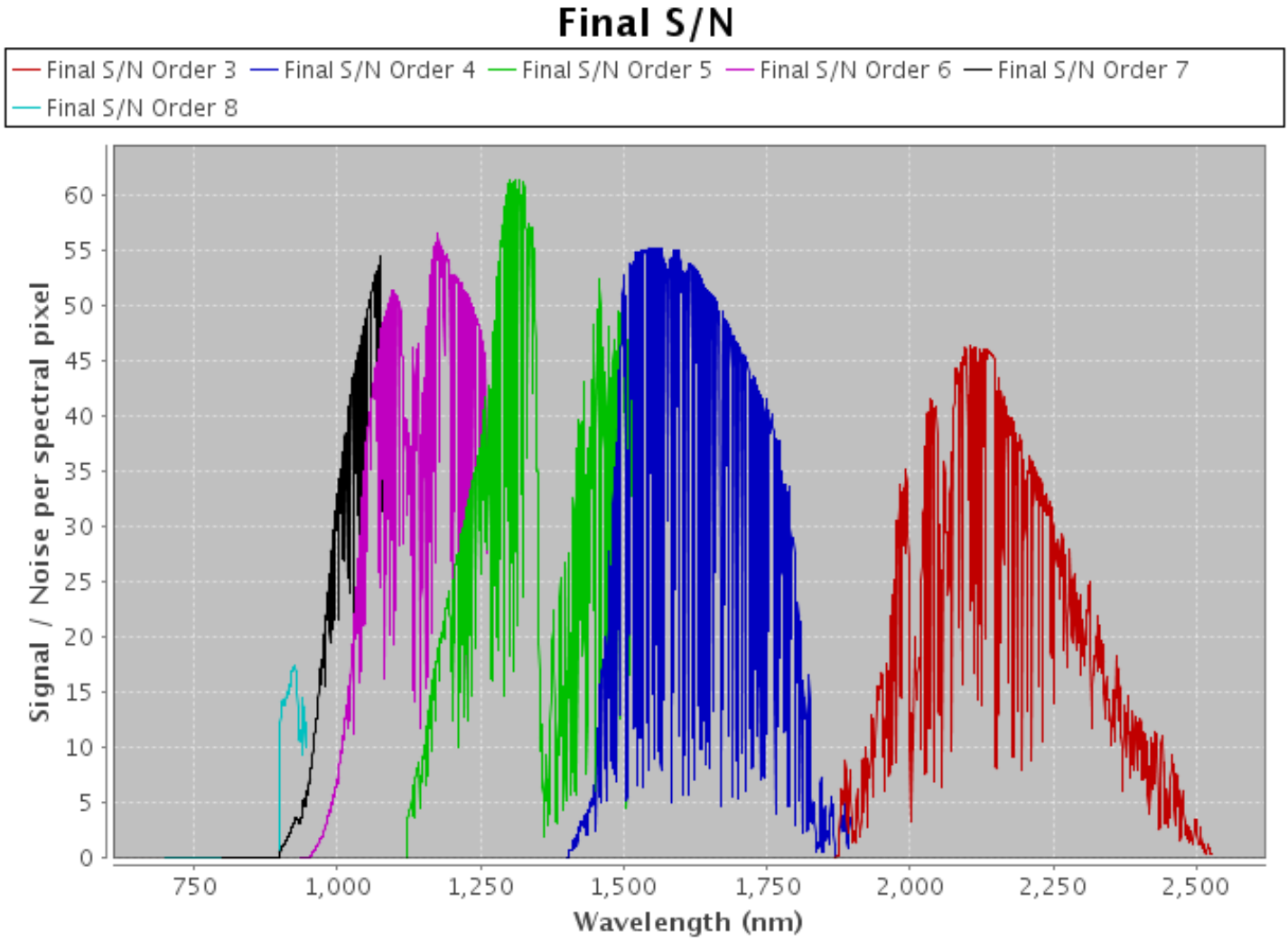
Click here for help with the results page.
software aperture extent along slit = 1.07 arcsec
fraction of source flux in aperture = 0.62
derived image size(FWHM) for a point source = 0.76arcsec

Sky subtraction aperture = 1.0 times the software aperture.

Requested total integration time = 1800.00 secs, of which 1800.00 secs is on source.



Click here for ASCII signal spectrum.
Click here for ASCII background spectrum.



Click here for Final S/N ASCII data.

Input Parameters:
Instrument: GNIRS

Source spatial profile, brightness, and spectral distribution:
The z = 0.0 point source is a 5000.0K Blackbody, at 16.55 mag in the J band.

Instrument configuration:
Optical Components:
- Filter: XD
- Cross-Dispersing Prism
- Fixed Optics
- Camera: 0.15arcsec/pix (Short Blue)
- Detector - 1K x 1K ALADDIN III InSb CCD
- Focal Plane Mask: slit0.675
- Grating: G32
- Read Noise: 10.0
- Well Depth: 90000.0

Central Wavelength: 1616.85 nm
Pixel Size in Spatial Direction: 0.15arcsec
Pixel Size in Spectral Direction(Order 3): 0.647nm
Pixel Size in Spectral Direction(Order 4): 0.485nm
Pixel Size in Spectral Direction(Order 5): 0.388nm
Pixel Size in Spectral Direction(Order 6): 0.323nm
Pixel Size in Spectral Direction(Order 7): 0.277nm

Pixel Size in Spectral Direction(Order 8): 0.242nm

Telescope configuration:
- silver mirror coating.
- side looking port.
- wavefront sensor: pwfs

Observing Conditions:
- Image Quality: 70.00%
- Sky Transparency (cloud cover): 50.00%
- Sky transparency (water vapour): 80.00%
- Sky background: 80.00%
- Airmass: 1.50

Frequency of occurrence of these conditions: 22.40%

Calculation and analysis methods:
- mode: spectroscopy
- Calculation of S/N ratio with 30 exposures of 60.00 secs, and 100.00 % of them were on source.
- Analysis performed for aperture that gives 'optimum' S/N and a sky aperture that is 1.00 times the target aperture.

Output:
- Spectra autoscaled.