



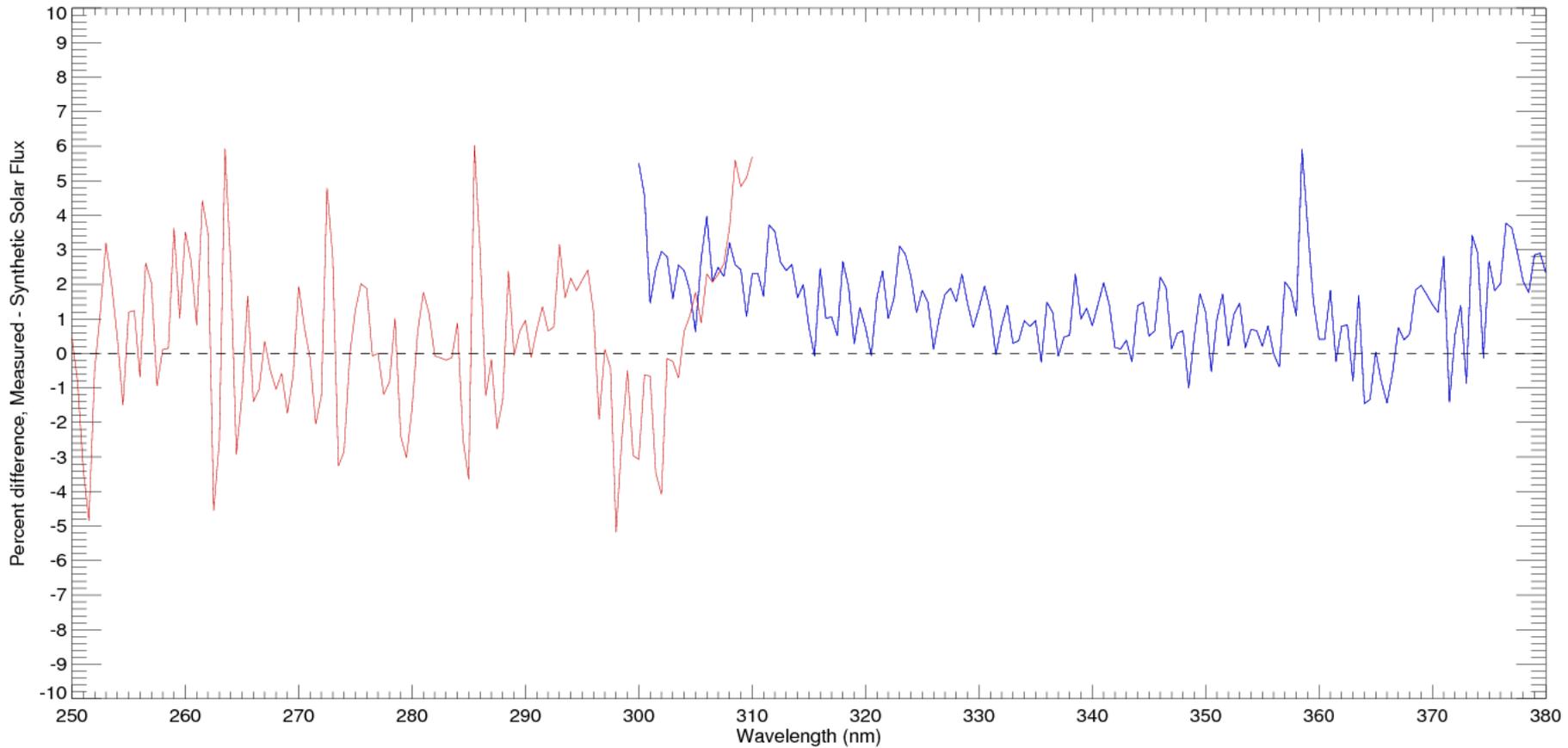
Nadir V2 Status



- 18 months of Calibration processing done
 - Comparisons of solar flux data to synthetic solar flux (from KNMI) show improvement in “transition region”
 - Analysis shows that Solar and Earth View bandpass “widths” differ
 - By as much as 4% at the far off-nadir positions
 - New “Day 1” solar flux files generated
 - Will be corrected for stray light
 - Solar flux data provided in EV (Earth View) L1B files will now be corrected to the radiance sun-earth distance
 - New CBC (channel band center) files created
- 18 months of Earth View processing under way
 - Will use this to determine “soft calibration”

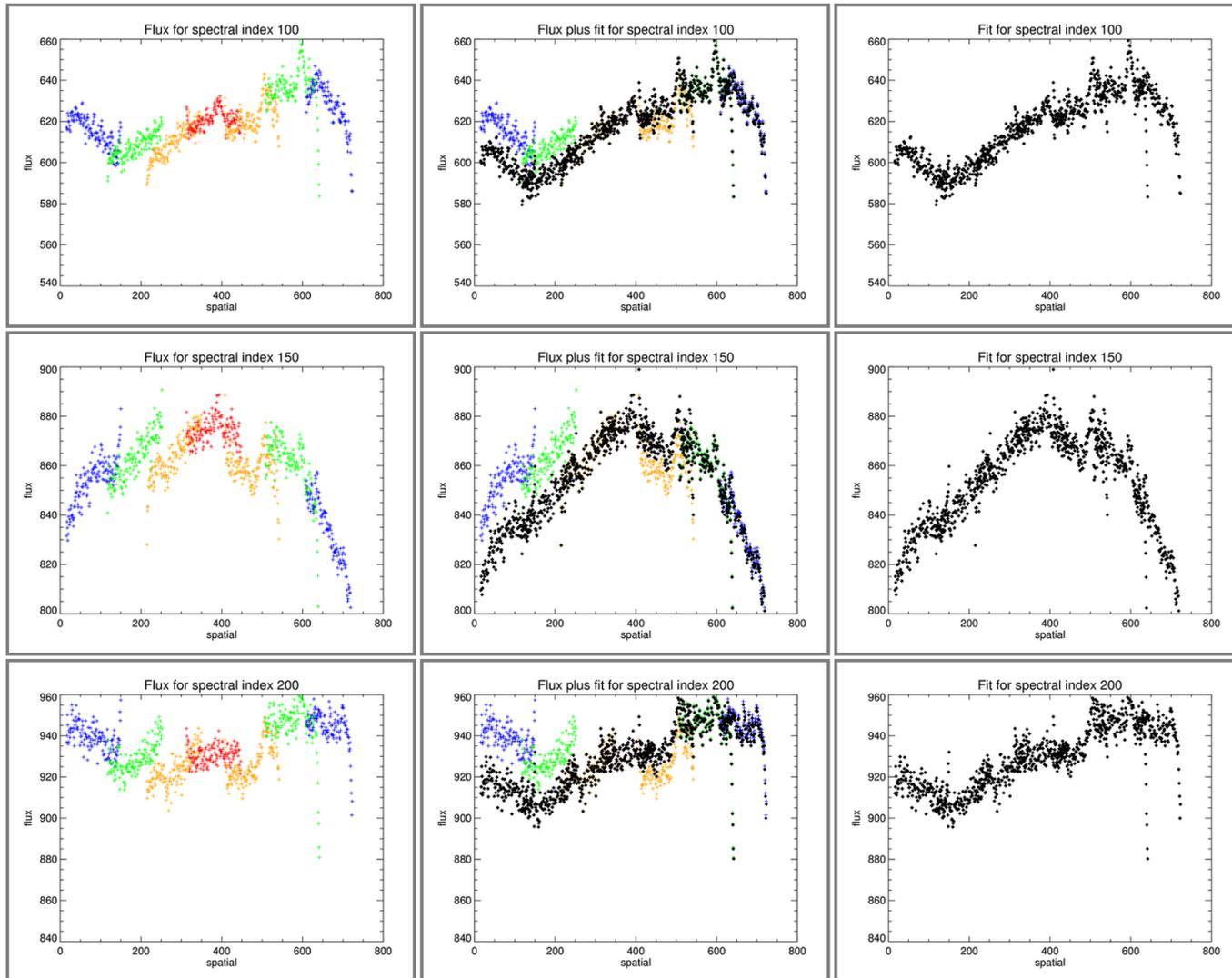


Comparison of Day 1 solar flux to Synthetic (KNMI) solar flux





“Stitching” Together NM Day-1 Solar Flux from 7 Diffuser Positions

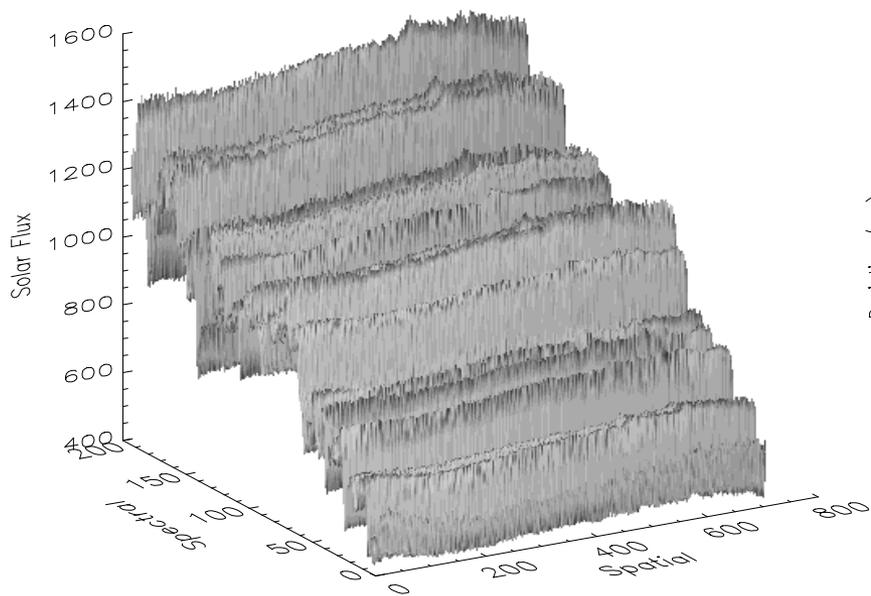




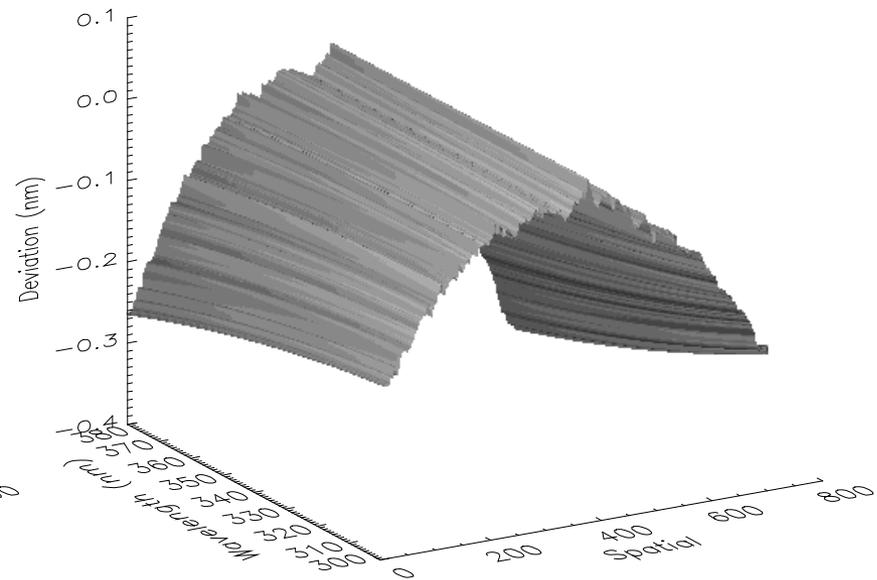
Day-1 Solar Flux and Solar CBCs (Channel Band Centers)



Measured Solar Flux

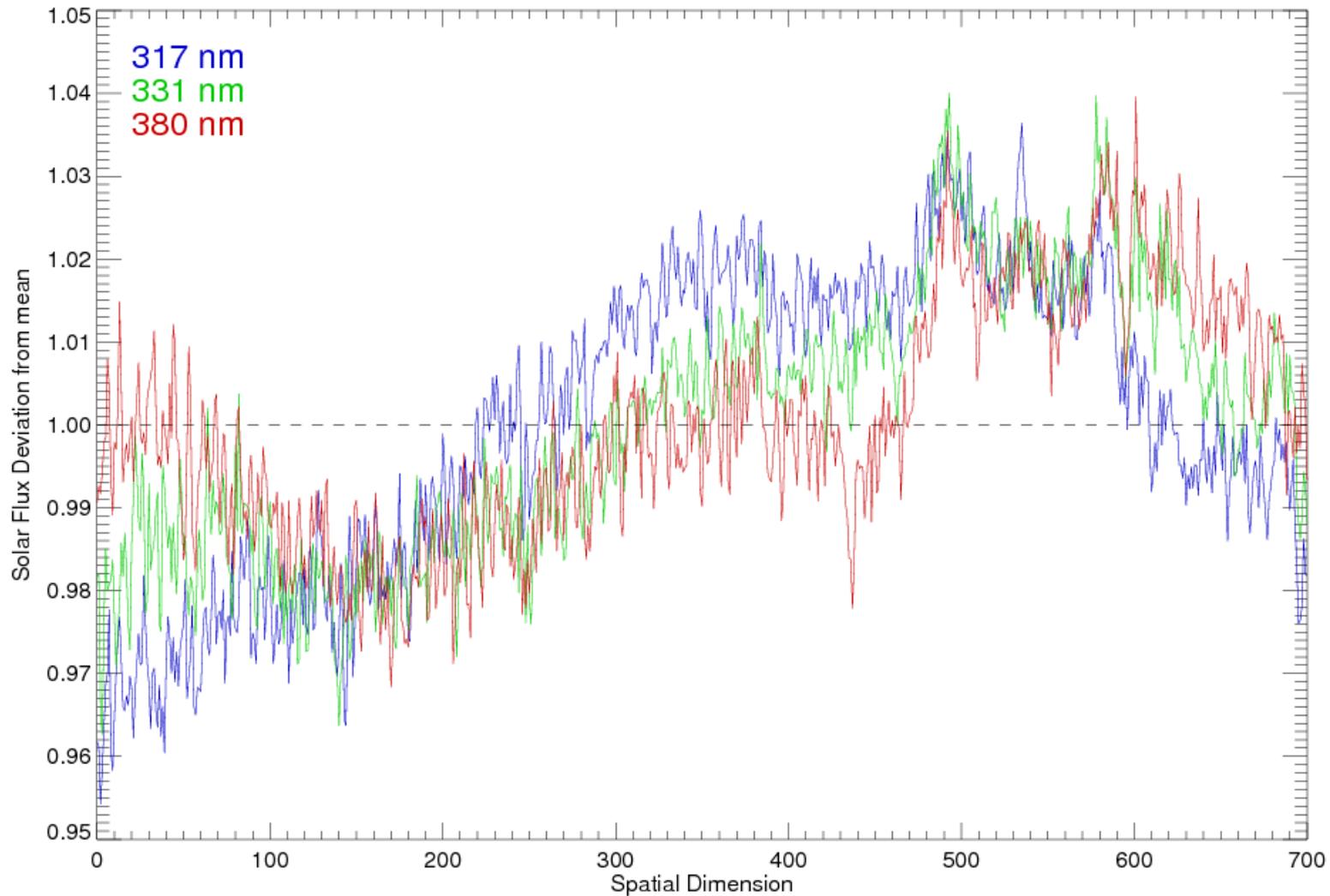


Channel Band Centers





Variation of Day-1 Solar Flux About Mean

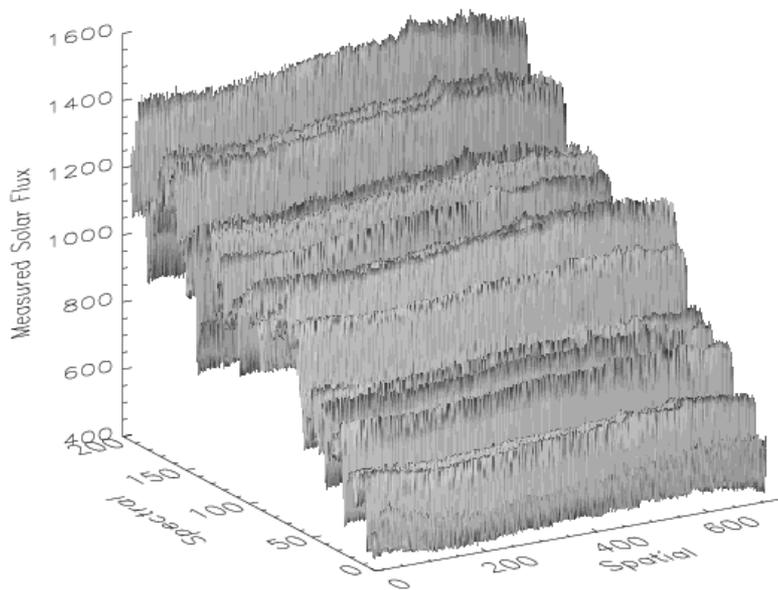




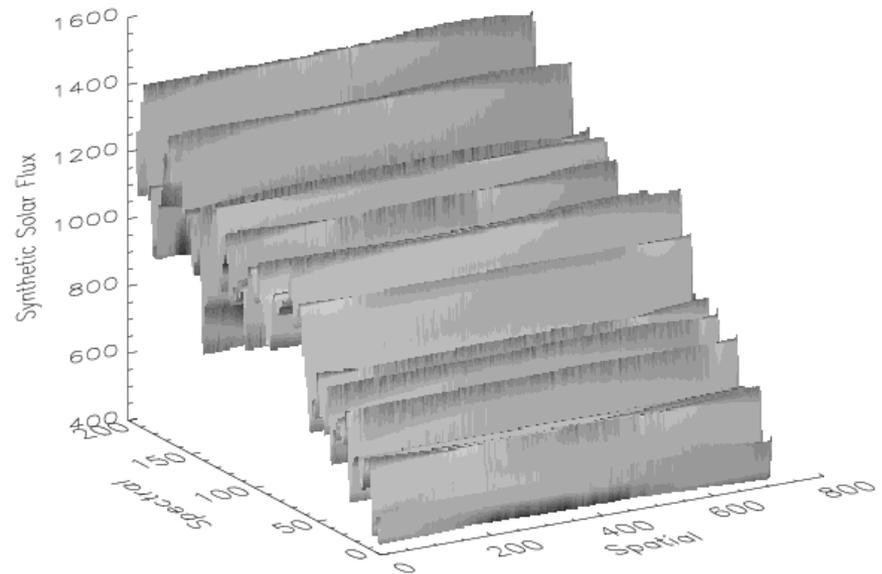
Day-1 Measured vs Synthetic Solar Flux



Measured Solar Flux

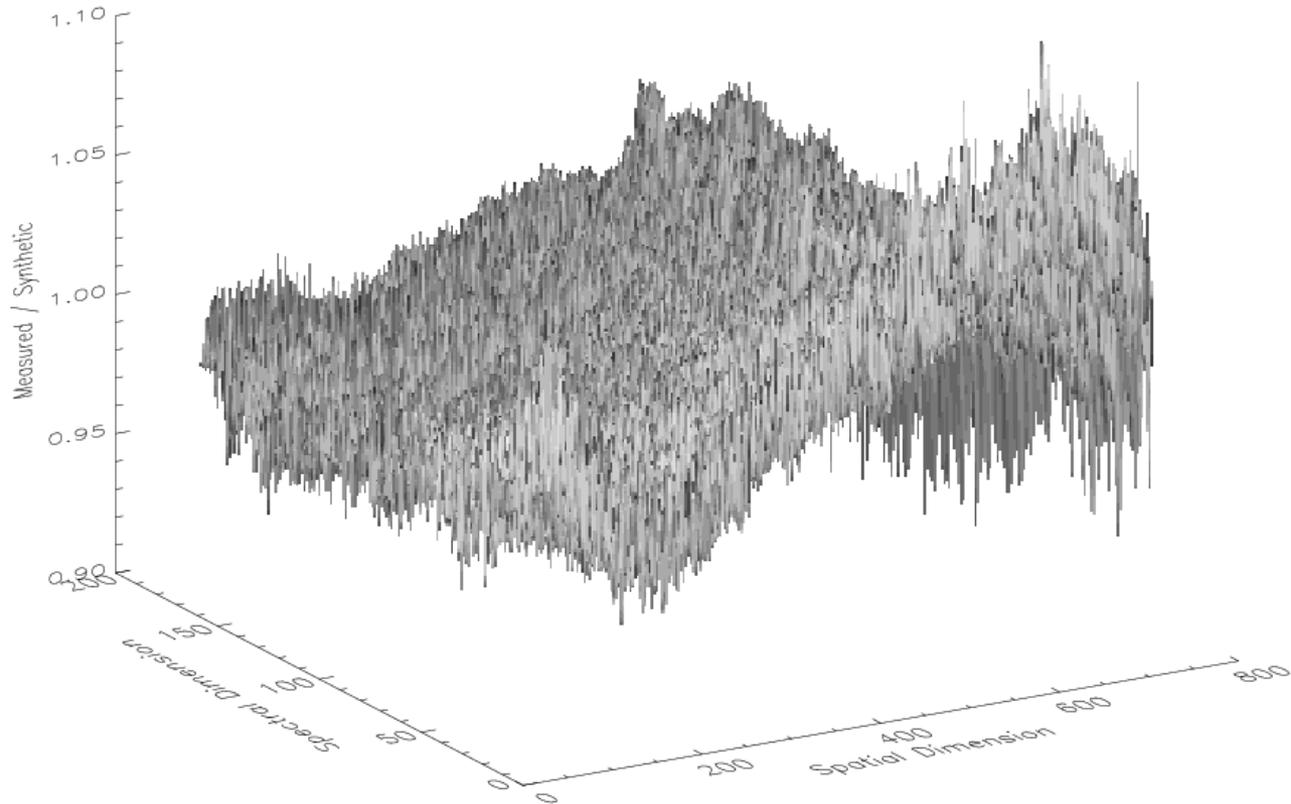


Synthetic Solar Flux



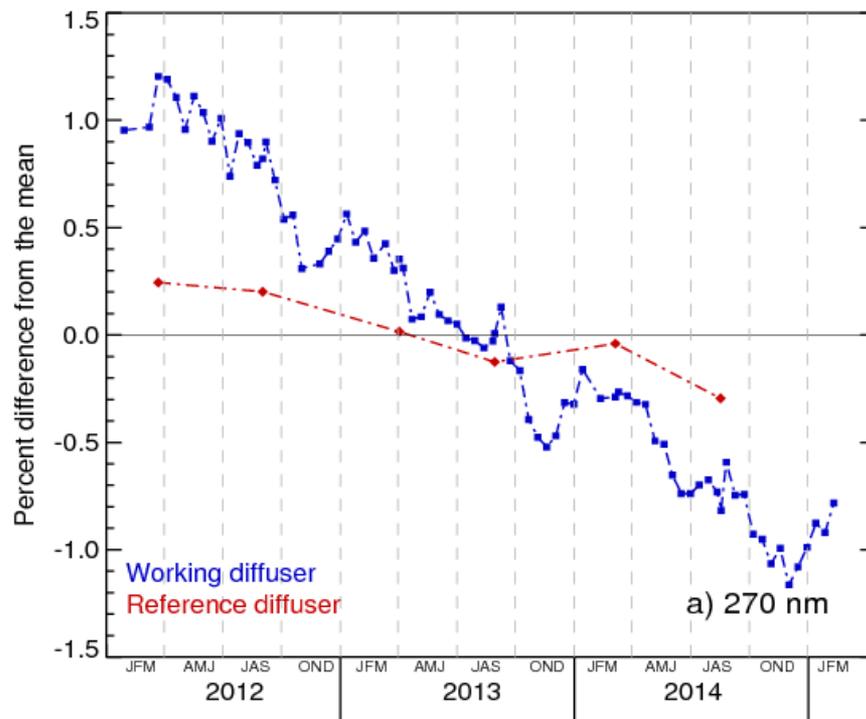


Day-1 Measured / Synthetic Solar Flux



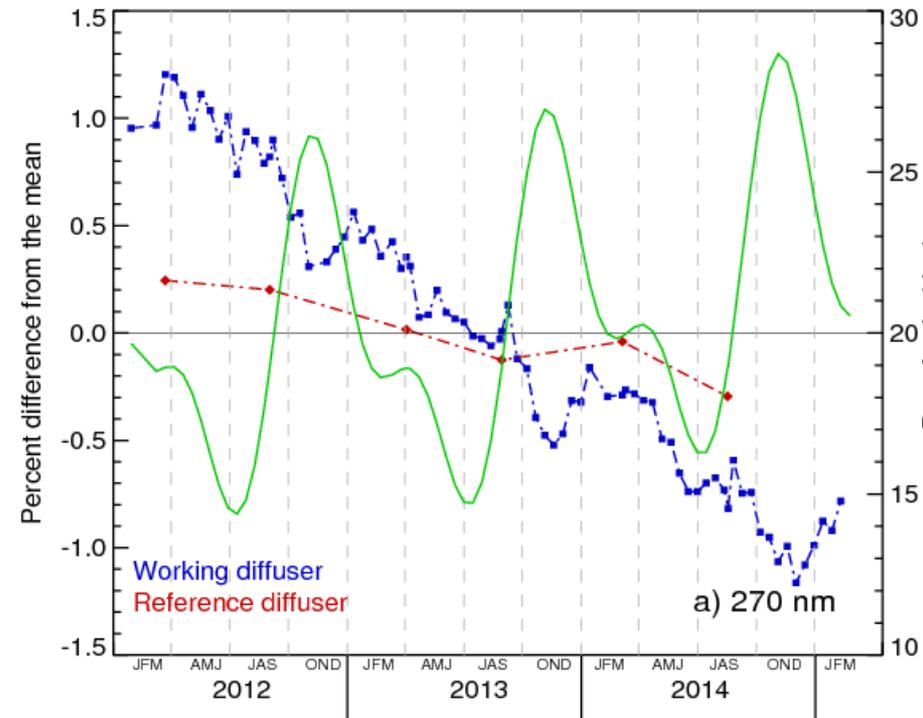
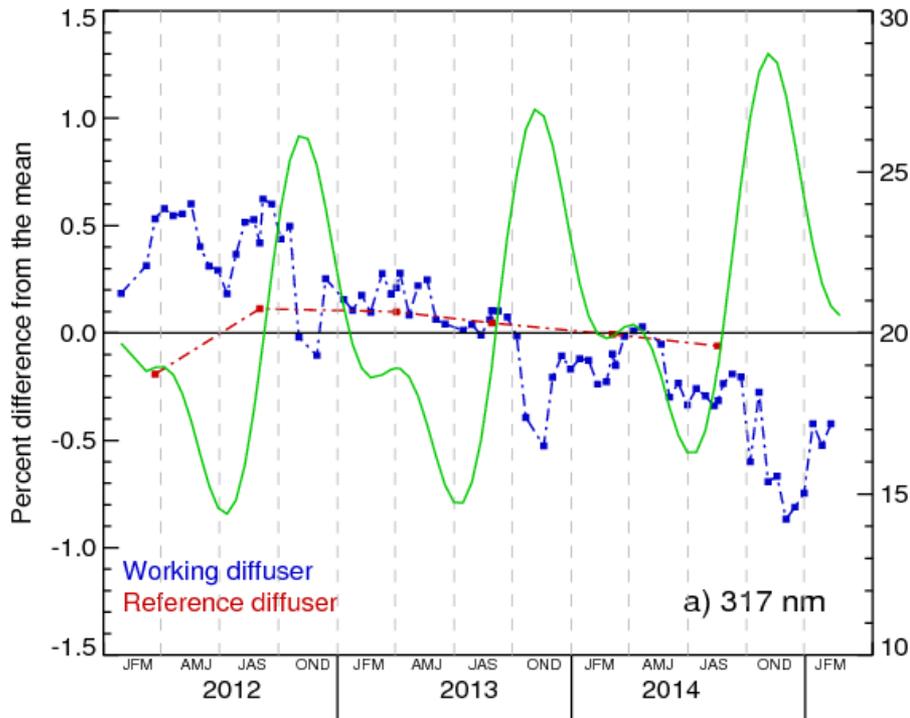


OMPS NM/NP Sensors Are Extremely Stable





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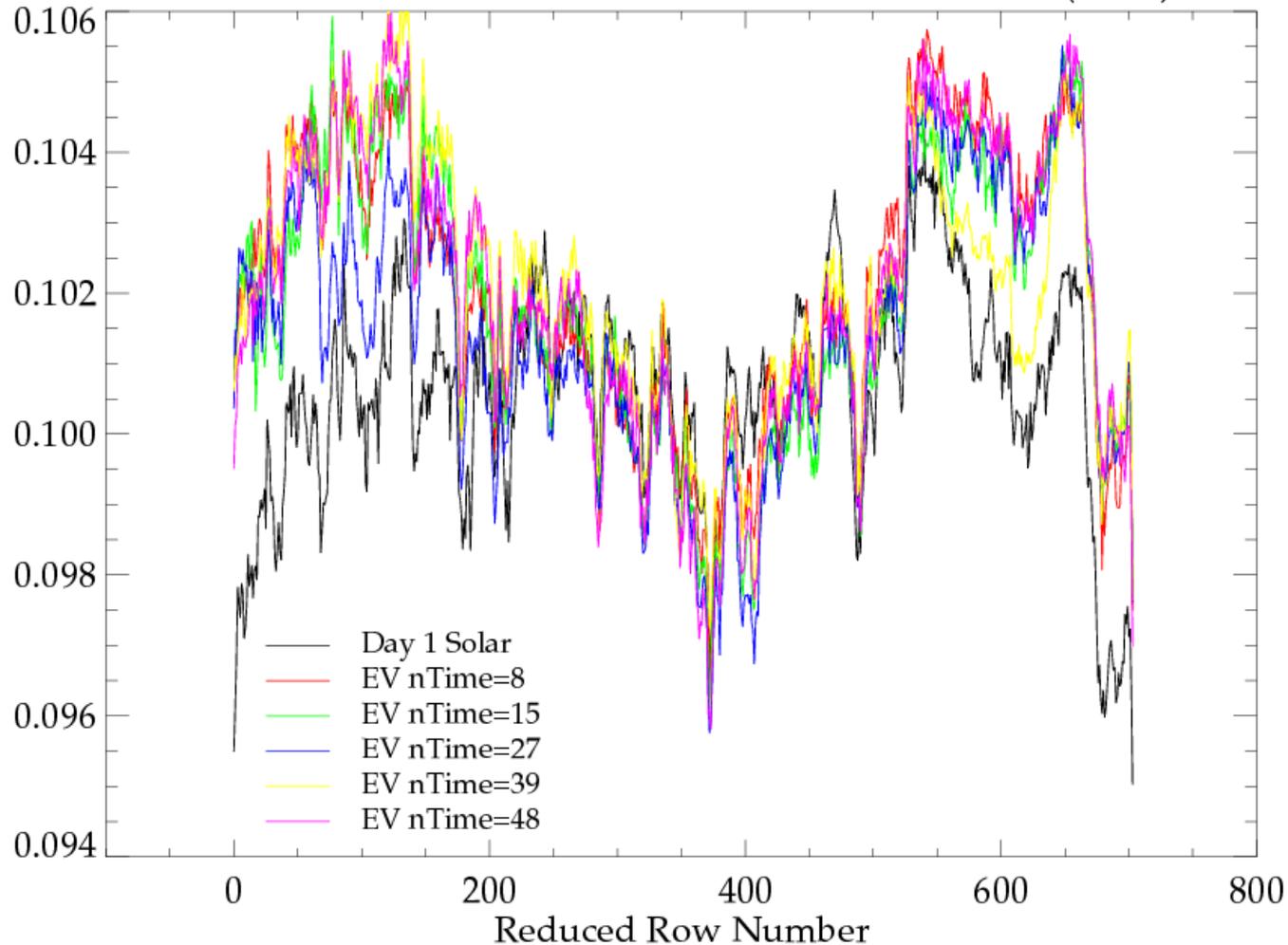




Solar & Earth View Bandpass Widths



BPS Grid Parameter for NM EV FF o09942 (0-62)



41 points
from -2 to 2
nm at 0.1
nm grid
spacing is
“nominal”

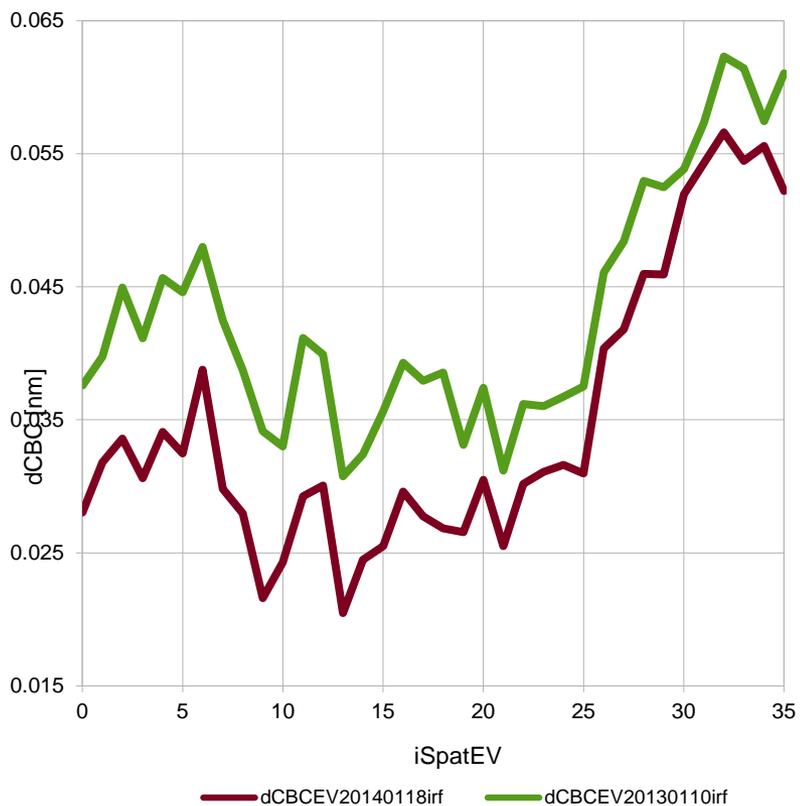


Comparison of NM Earth View Wavelengths to Solar Wavelengths

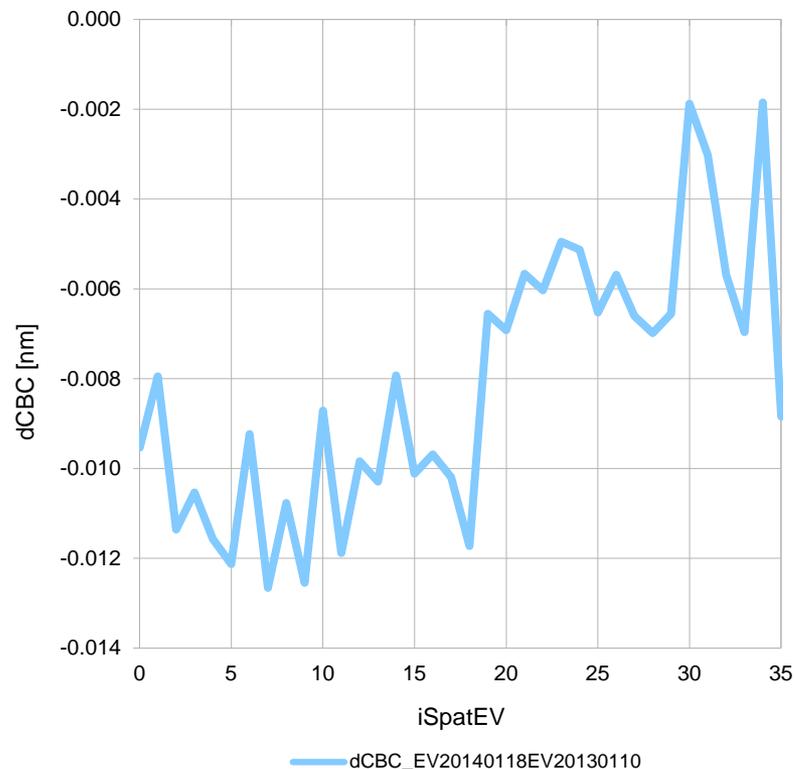


Show Difference

- ▶ TC cross-track offset -- mid-EV - IRF at EV resolution, EV orbits 6238, 11531



- ▶ dCBC for TC: mid-EV, Jan 2014 – Jan 2013, orbits 6238,11531





NM Wavelengths Also Change Along the Orbit

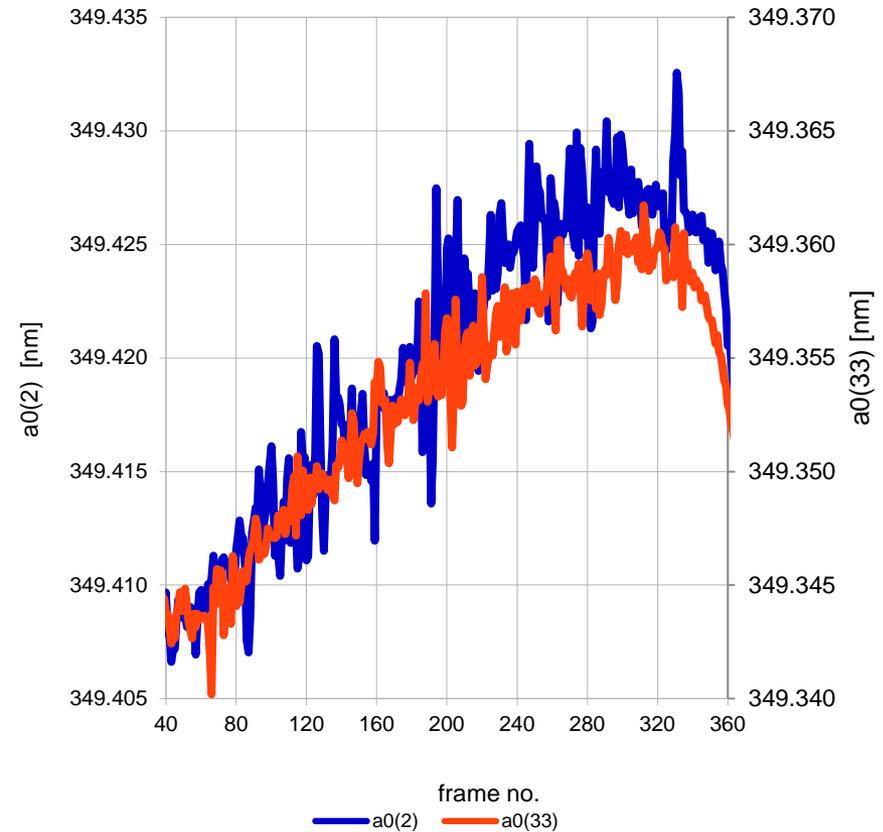
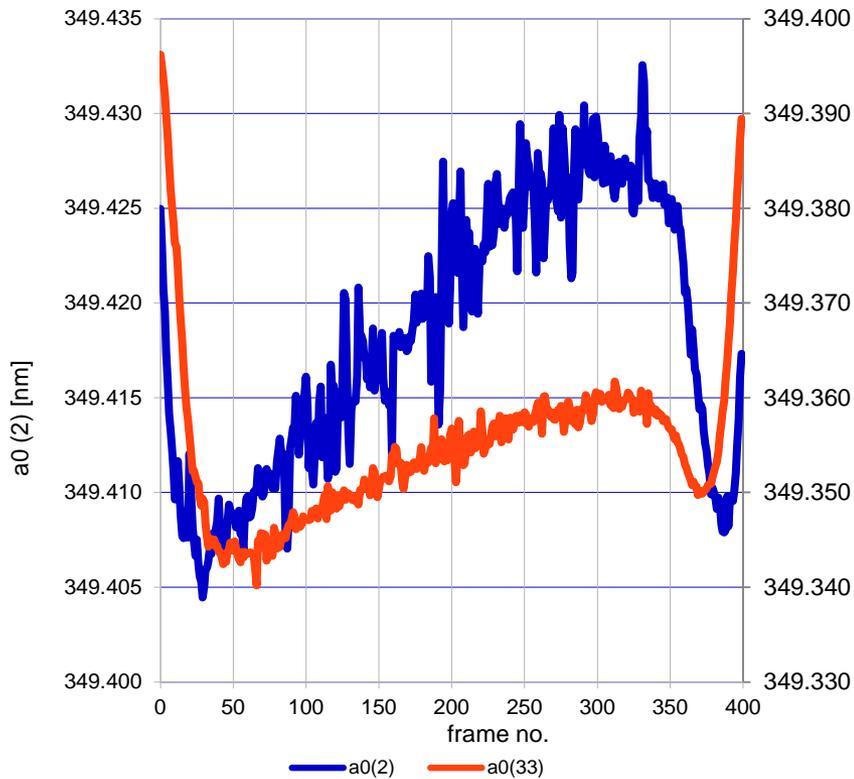


Full EV (400 frames)

First and last 40 frames clipped

Blue is FOV 2

Red is FOV 33





NP Wavelengths Exhibit a Seasonal Dependence



Spectral shift in red
Telescope temperature in blue

