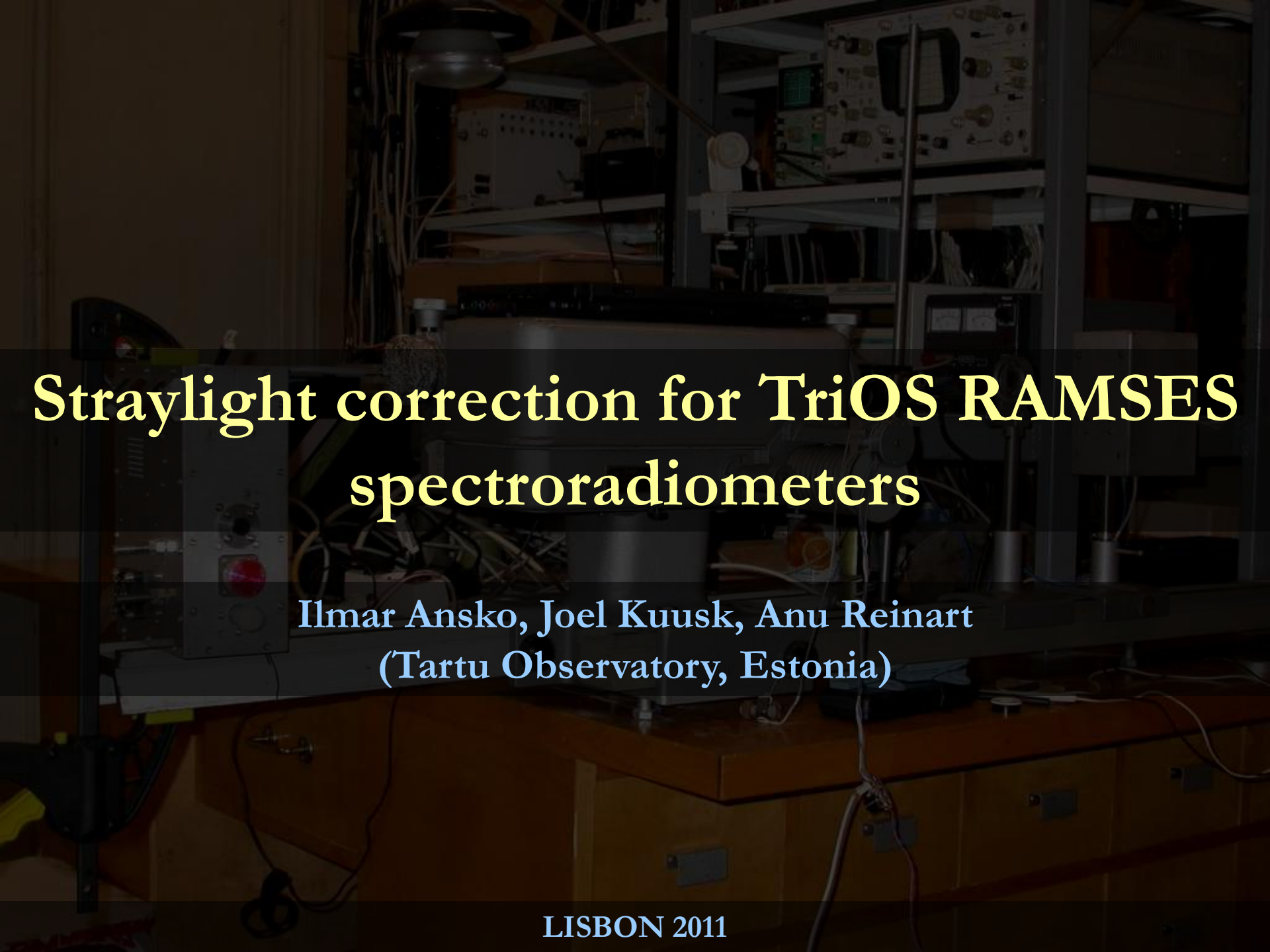
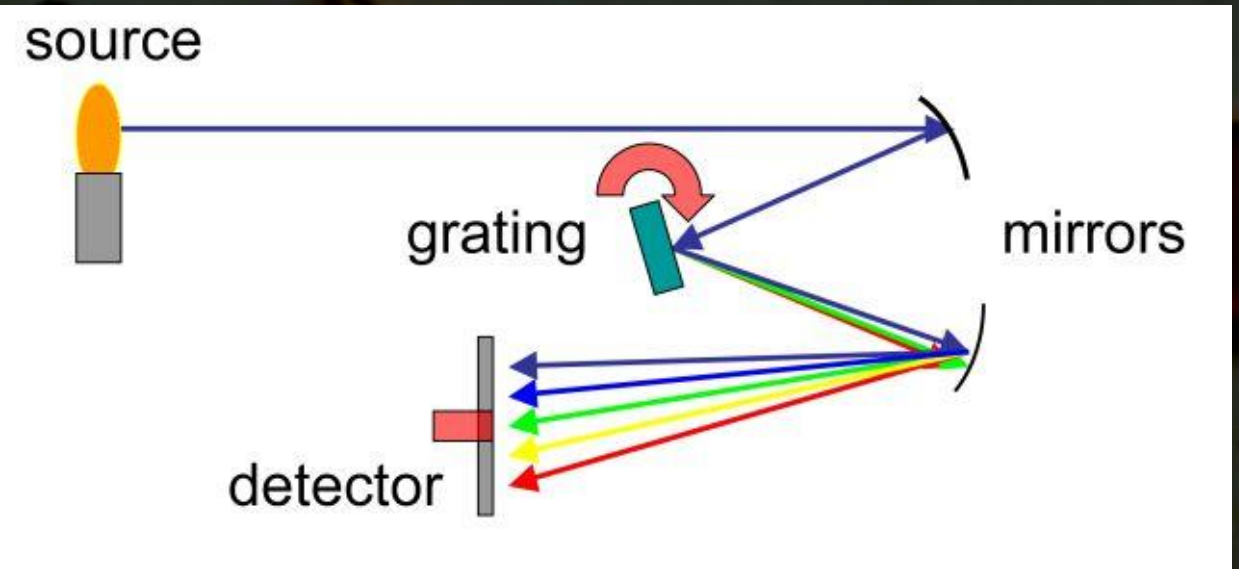


Straylight correction for TriOS RAMSES spectroradiometers

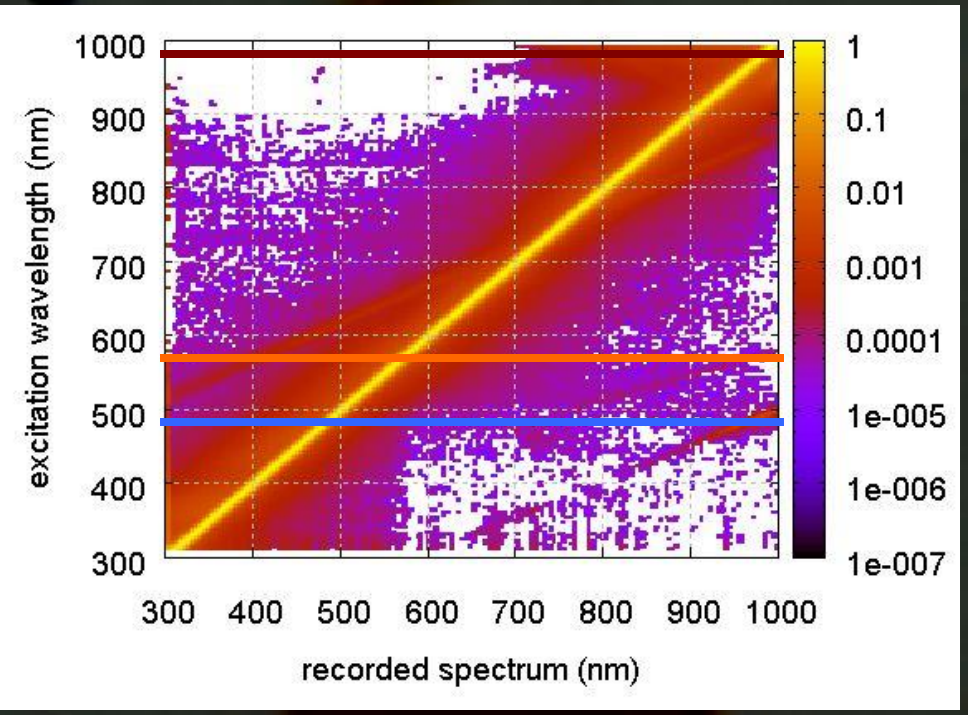
Ilmar Ansko, Joel Kuusk, Anu Reinart
(Tartu Observatory, Estonia)

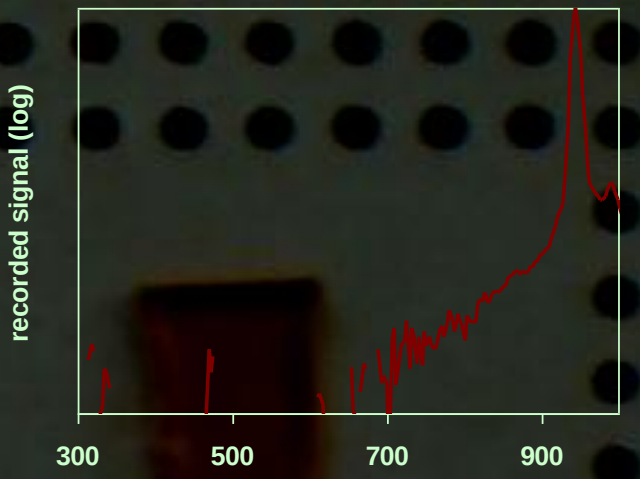
LISBON 2011

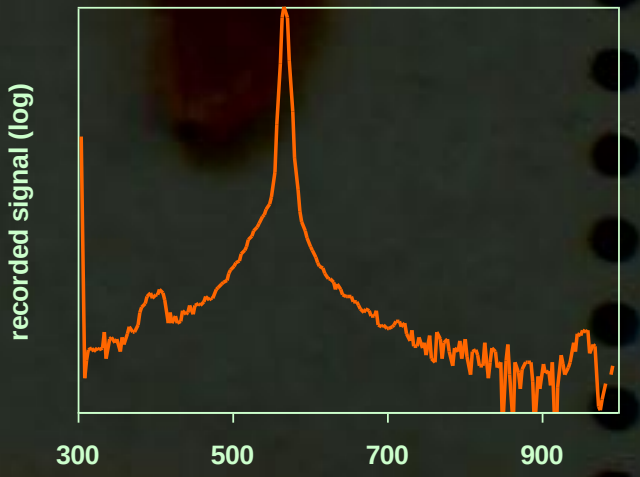
Straylight: the problem

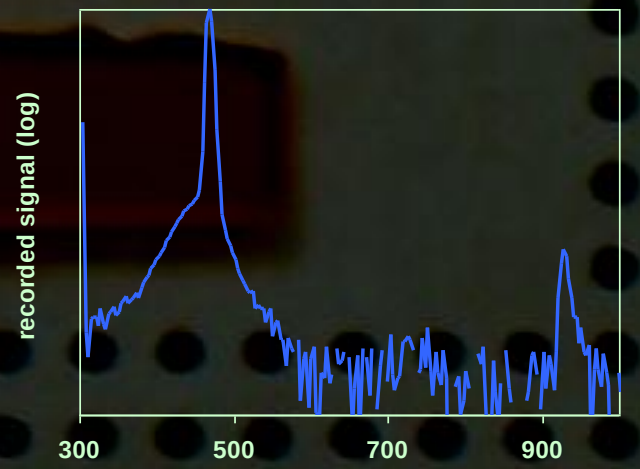


Slit-scattering function

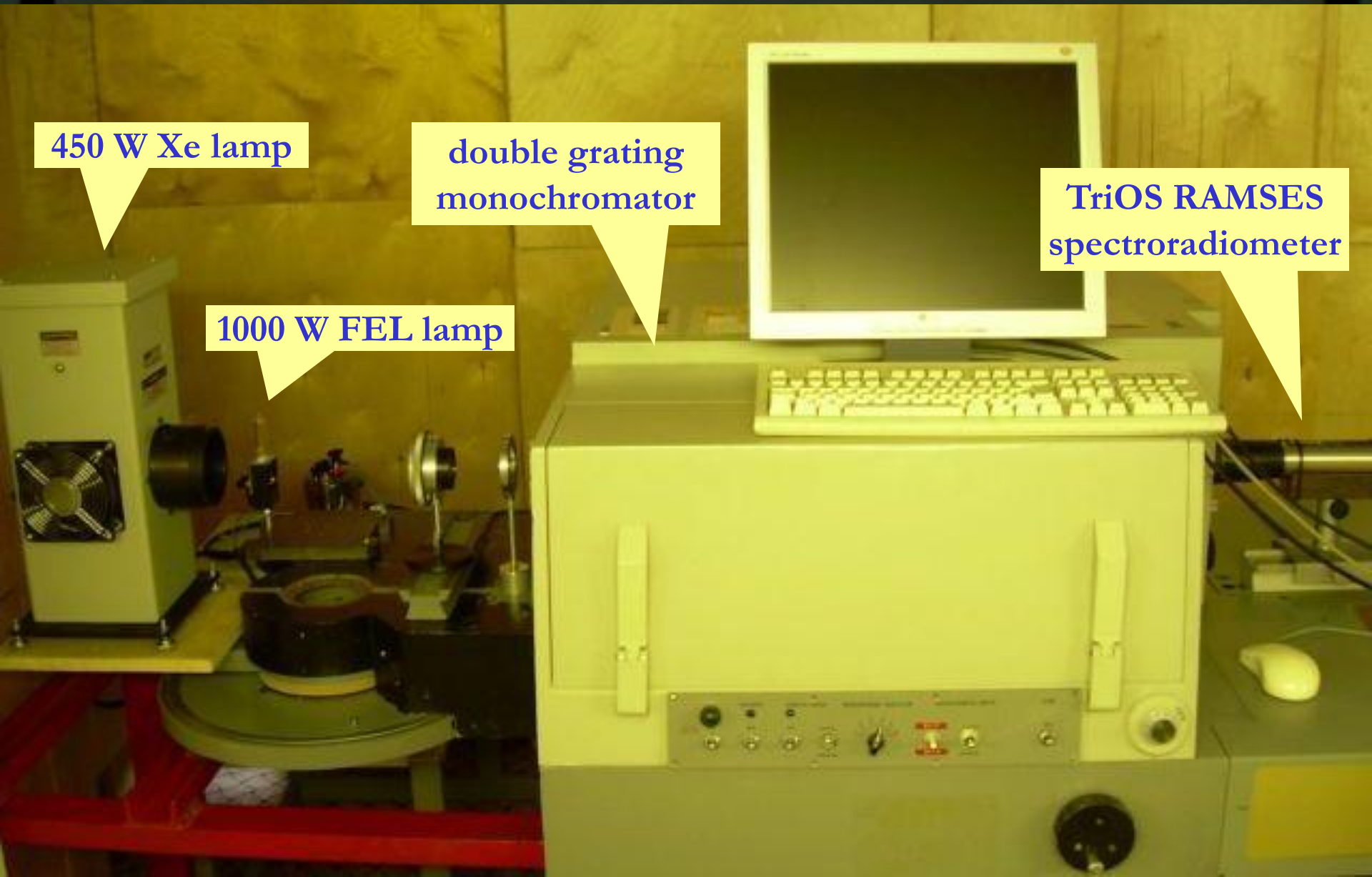




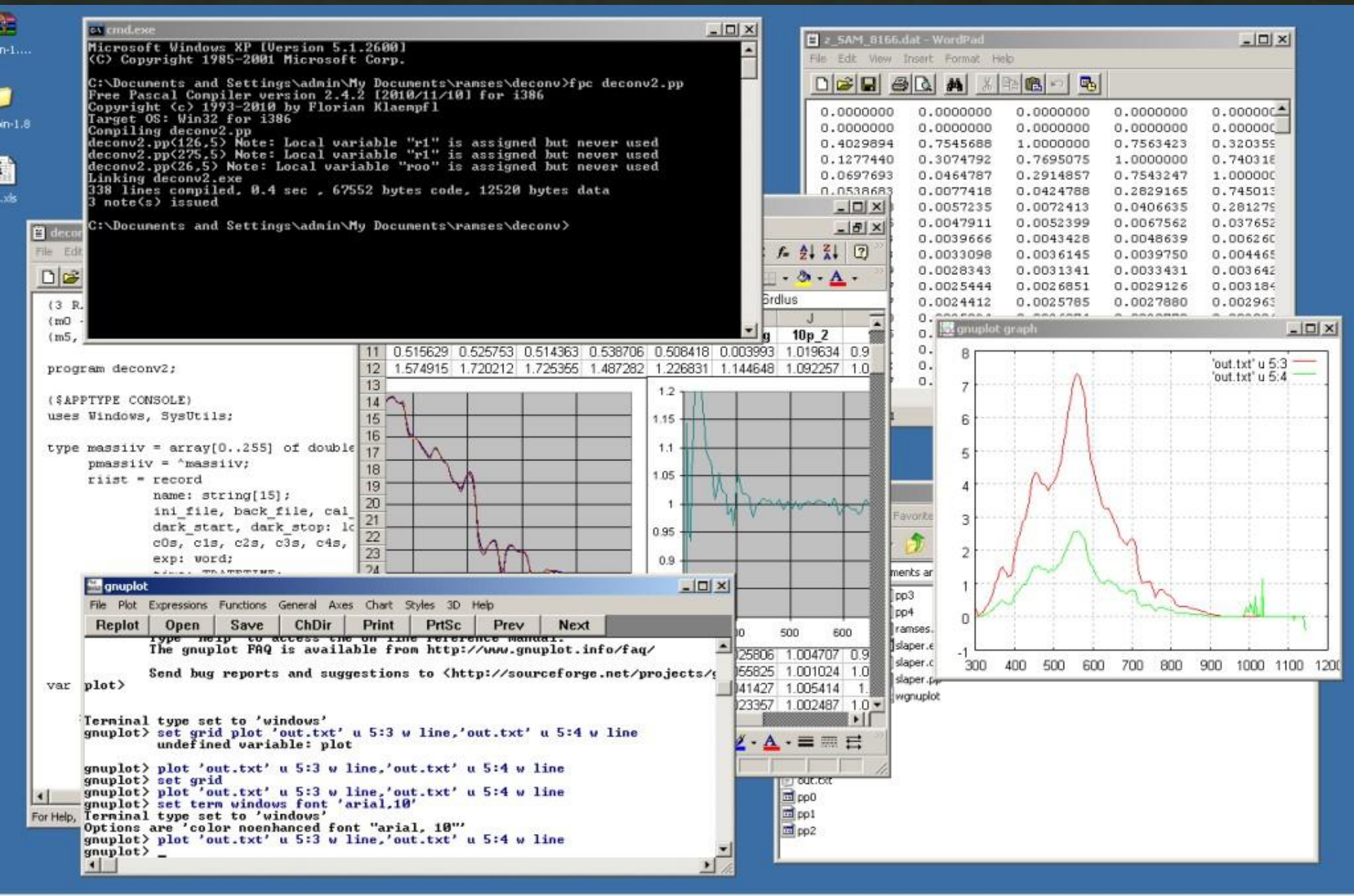




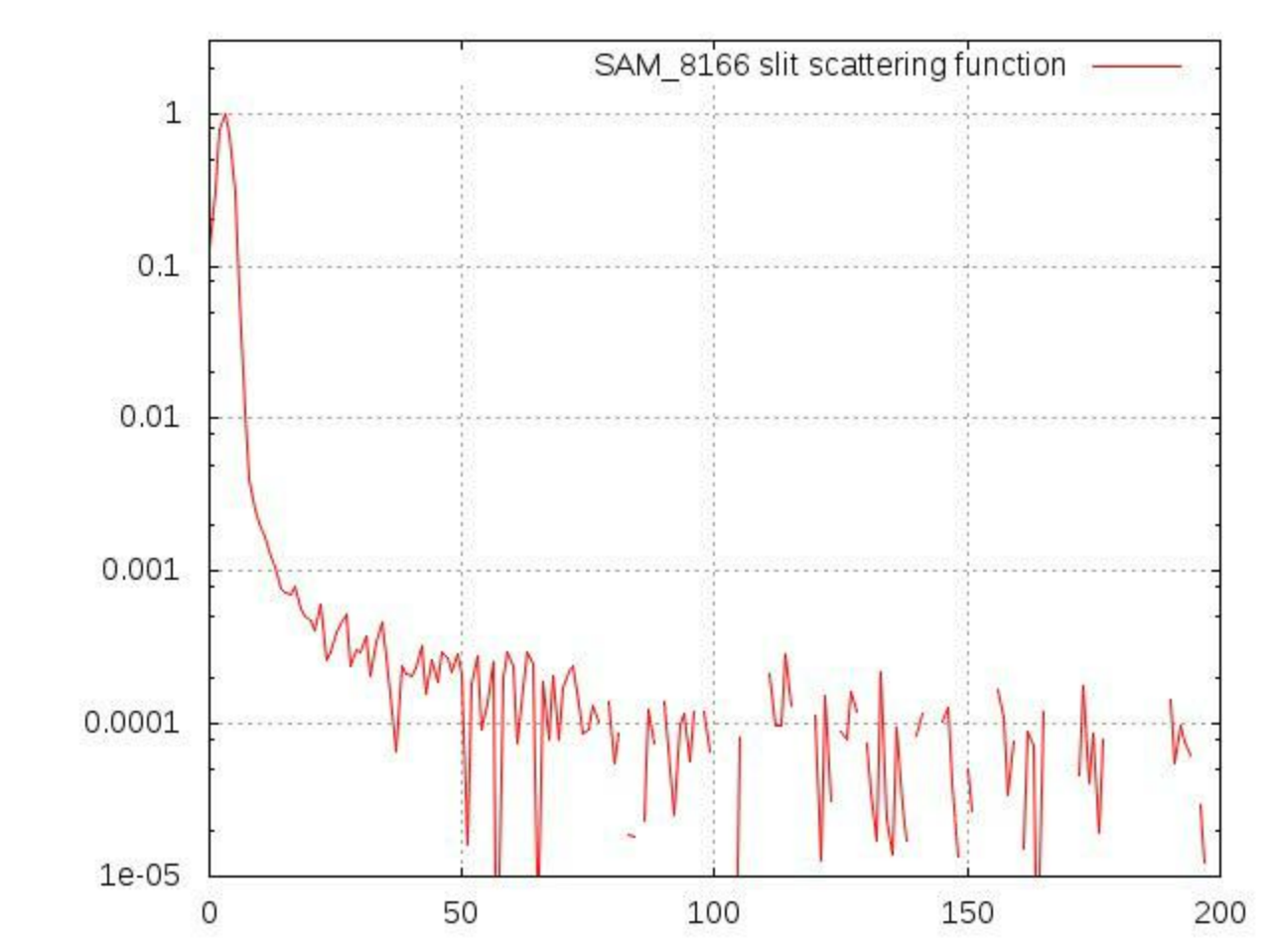
Measurement setup



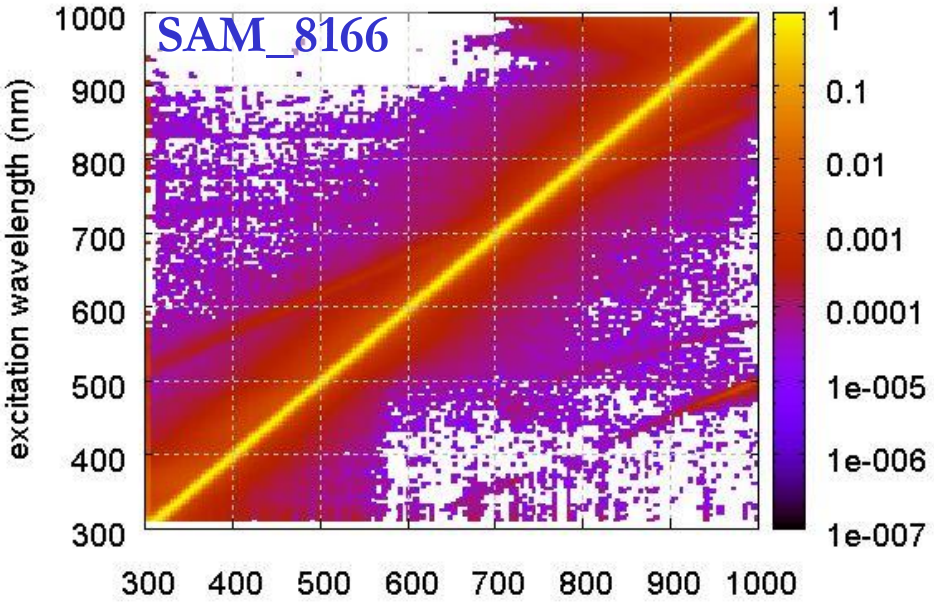
Data processing

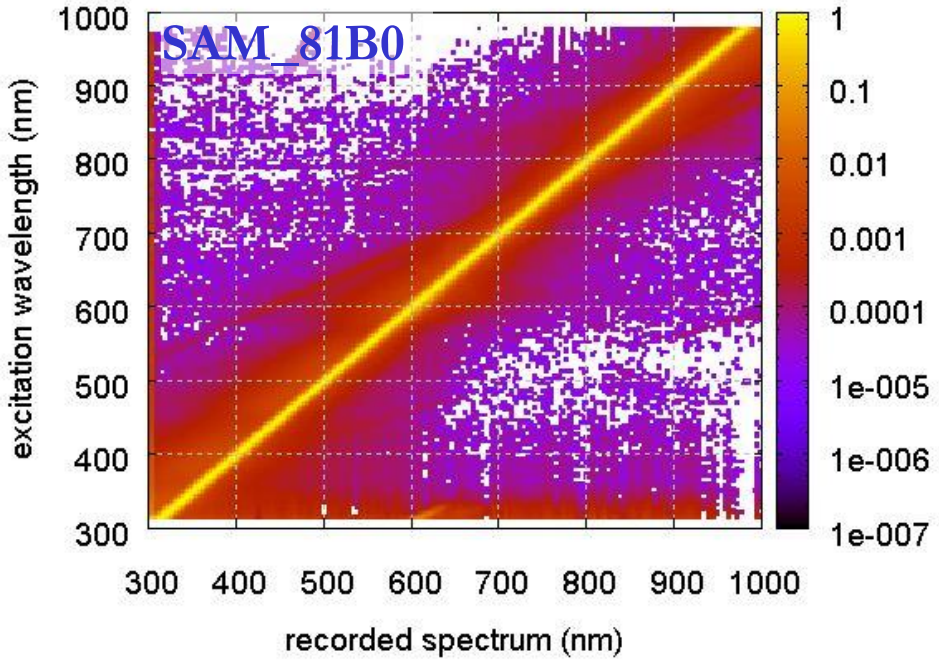


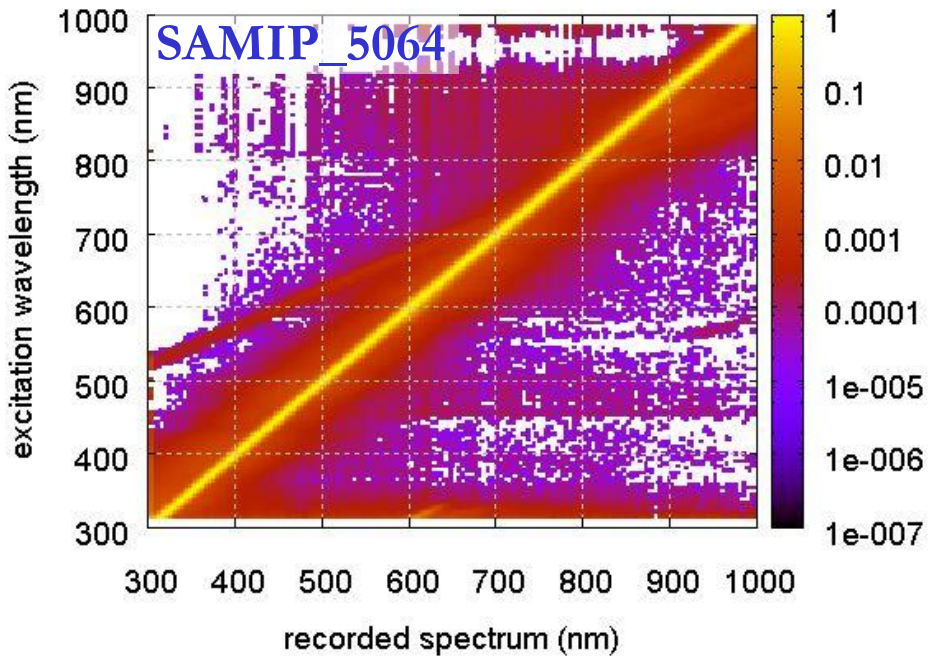
RAMSES ARC SAM_8166 slit-scattering function



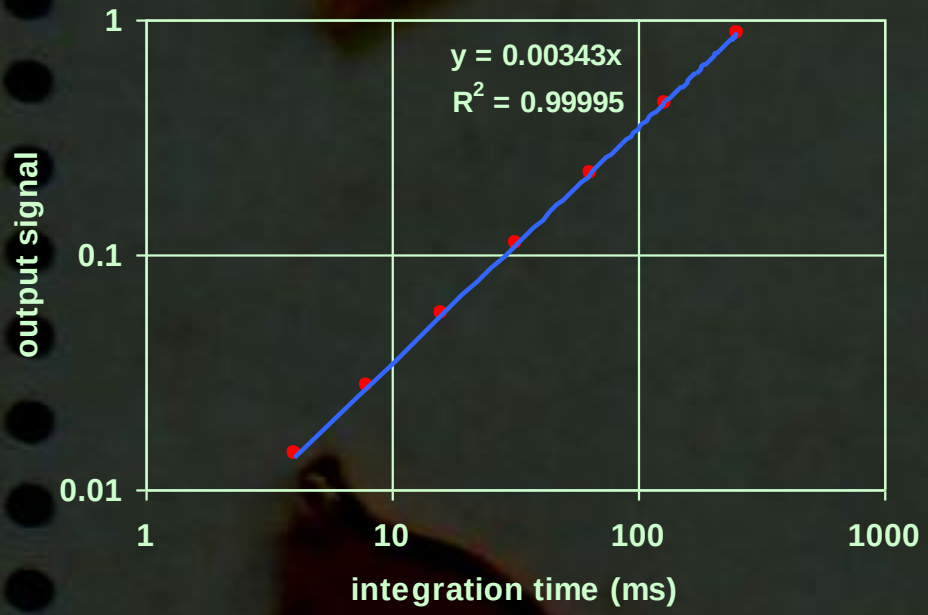
Results: slit-scattering function

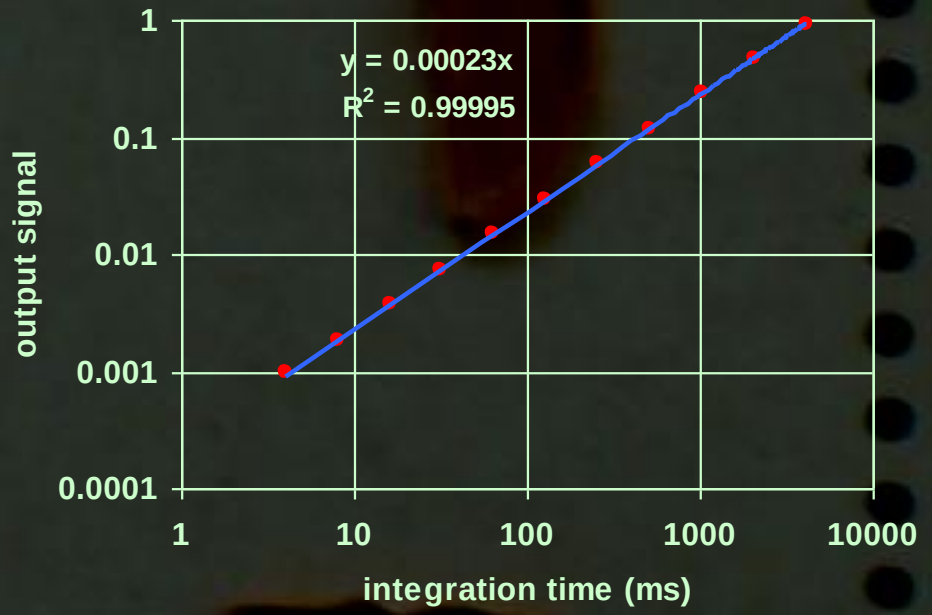




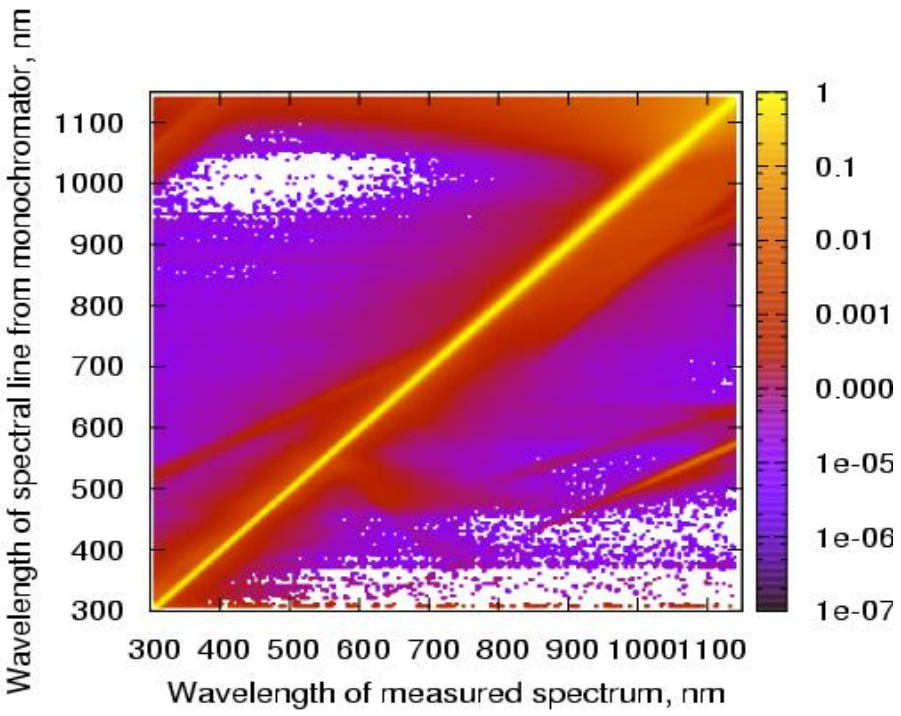


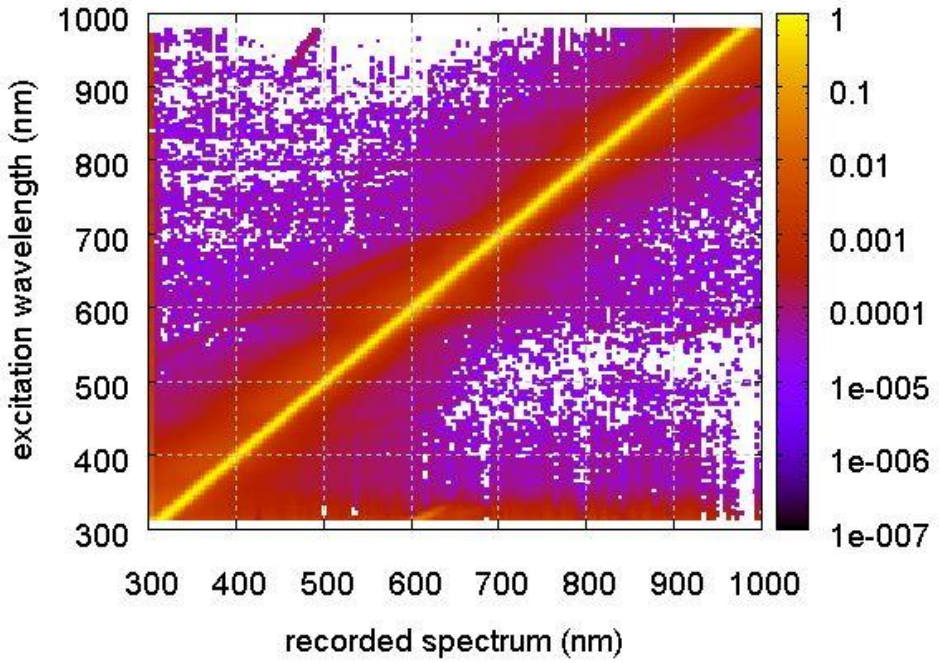
Radiometric linearity





Slit-scattering function: comparison to Zeiss MMS1

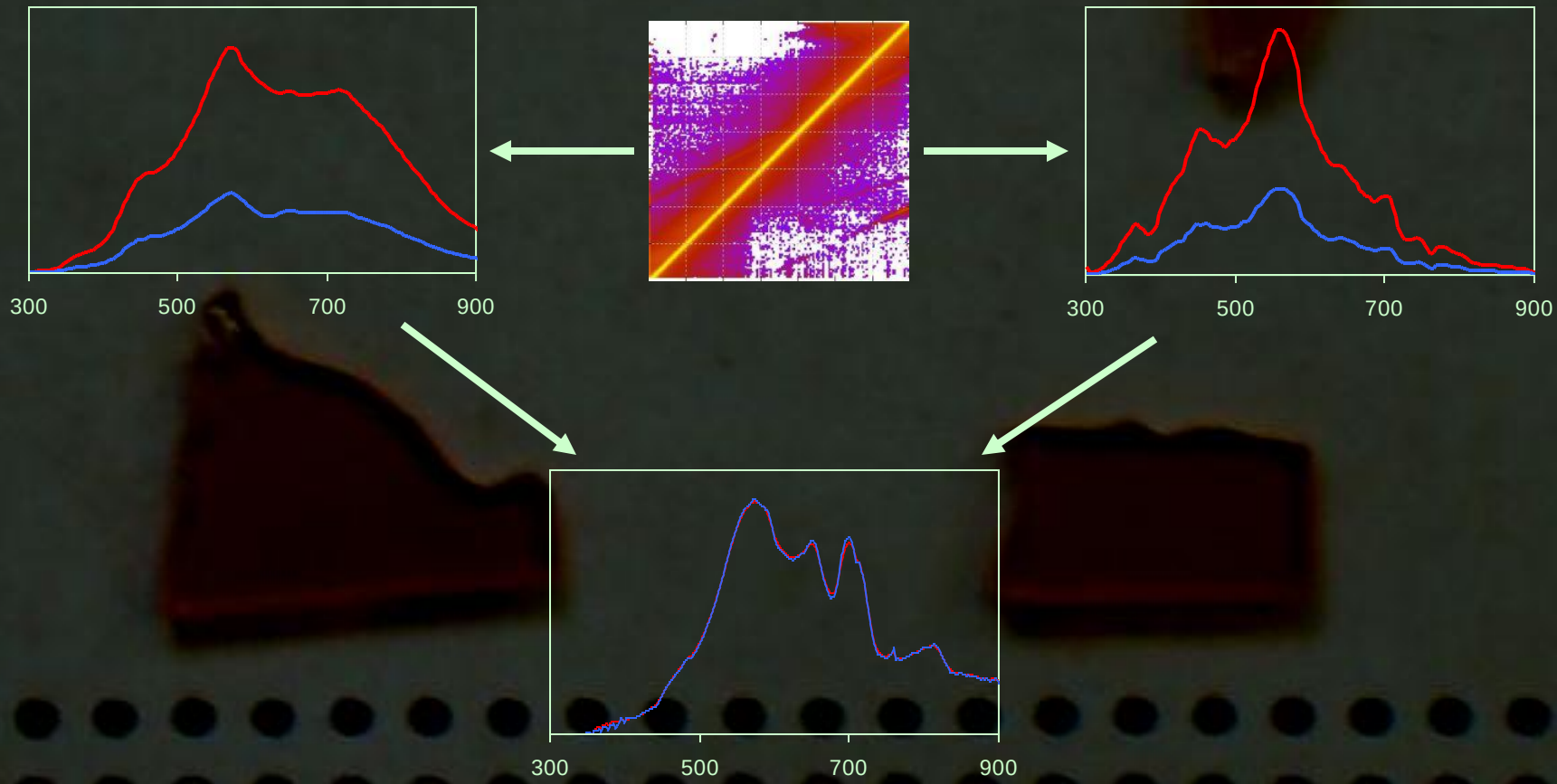




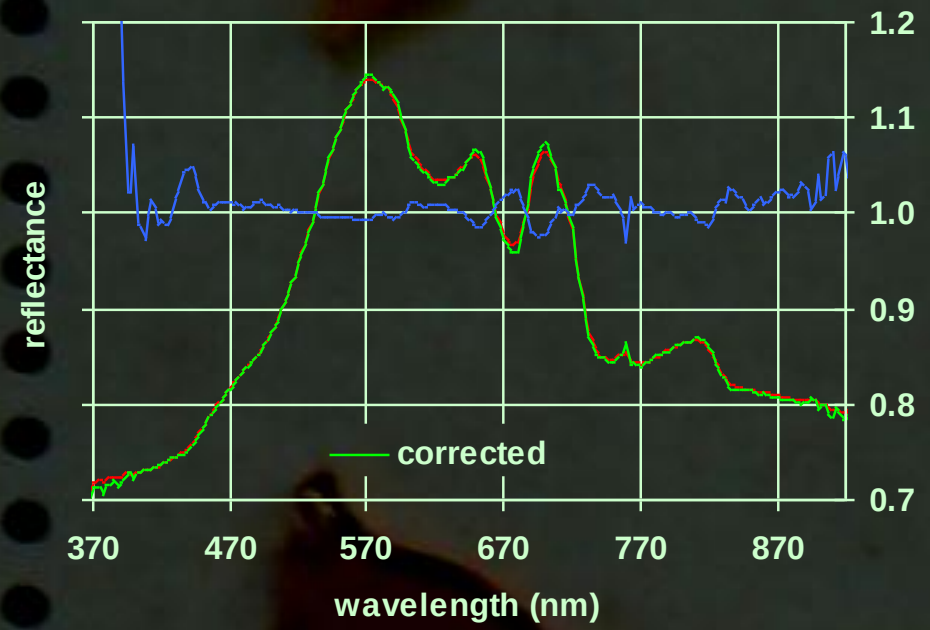
Straylight correction

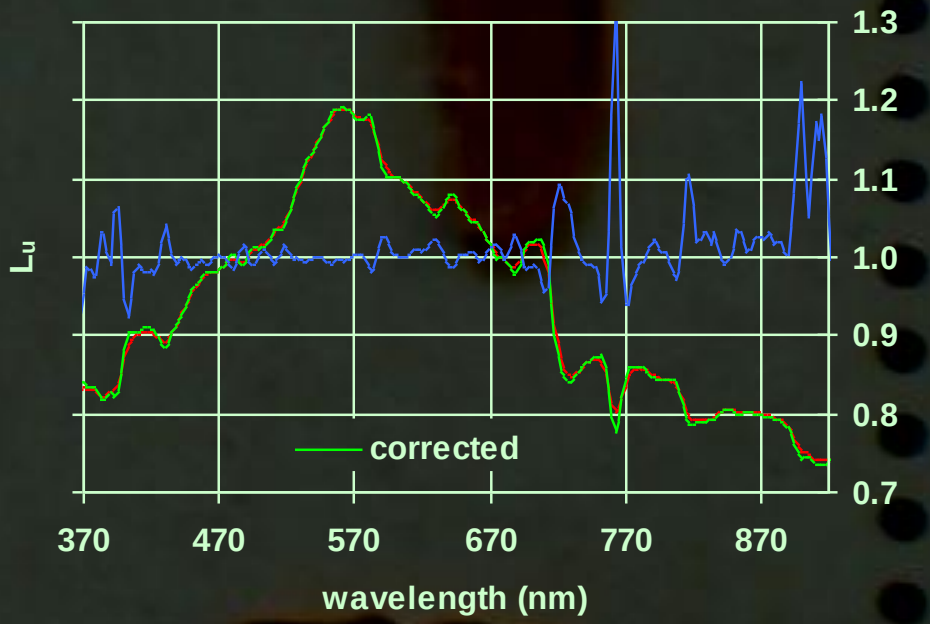
a) [Kostowski HJ: Reliable Spectroradiometry]

b) [Slaper H et al.: Comparing ground-level spectrally resolved solar UV measurements using various instruments: A technique resolving effects of wavelength shift and slit width]

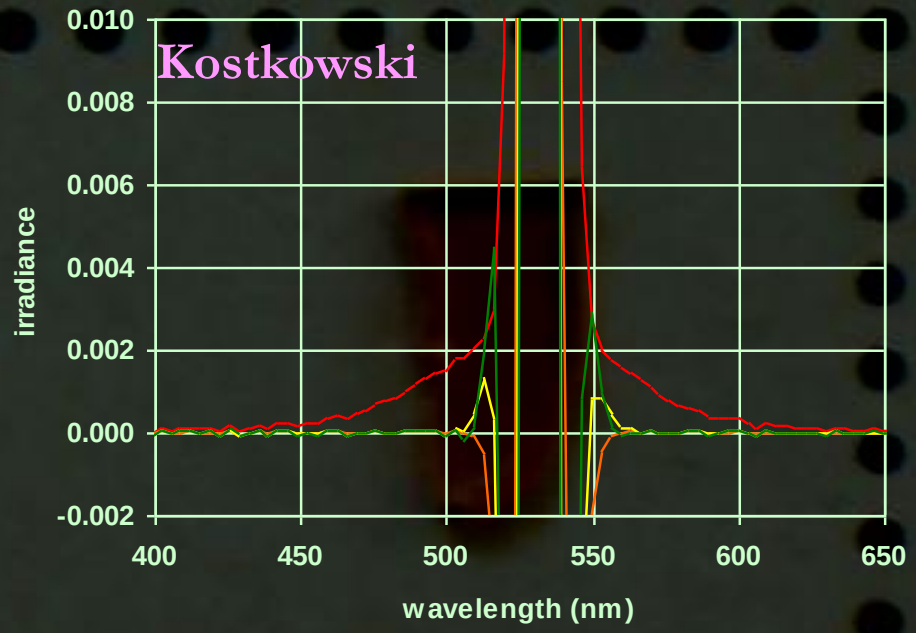


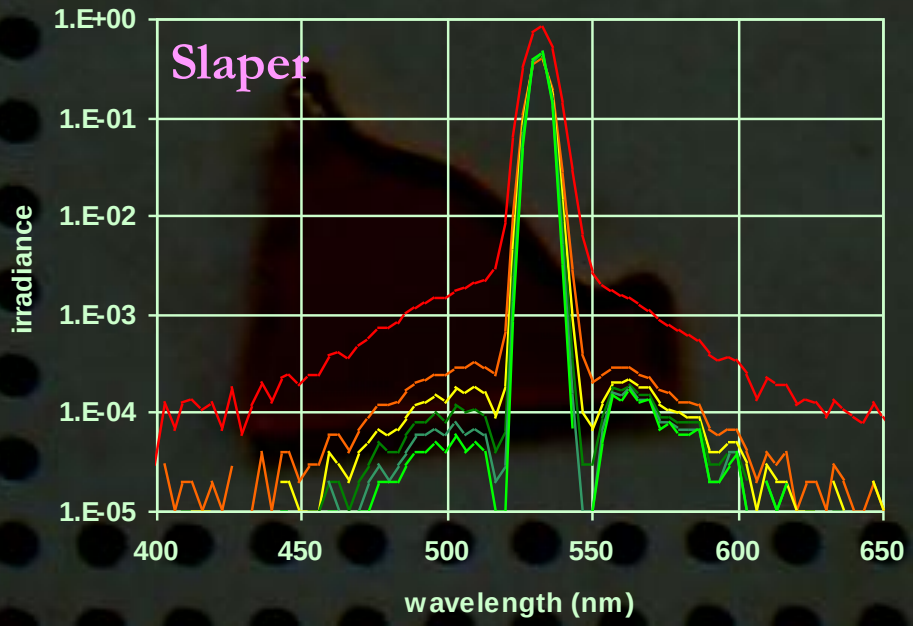
Straylight correction

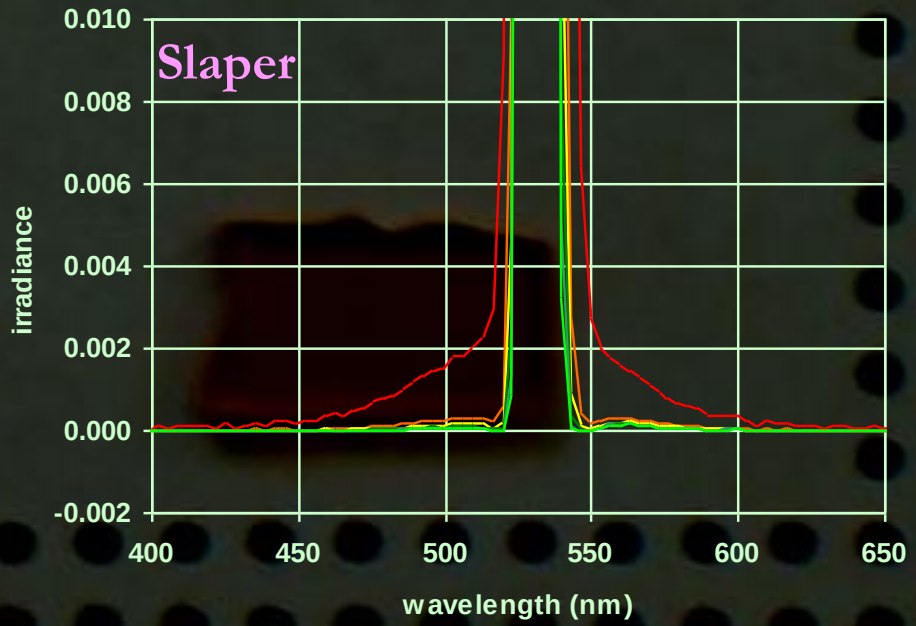




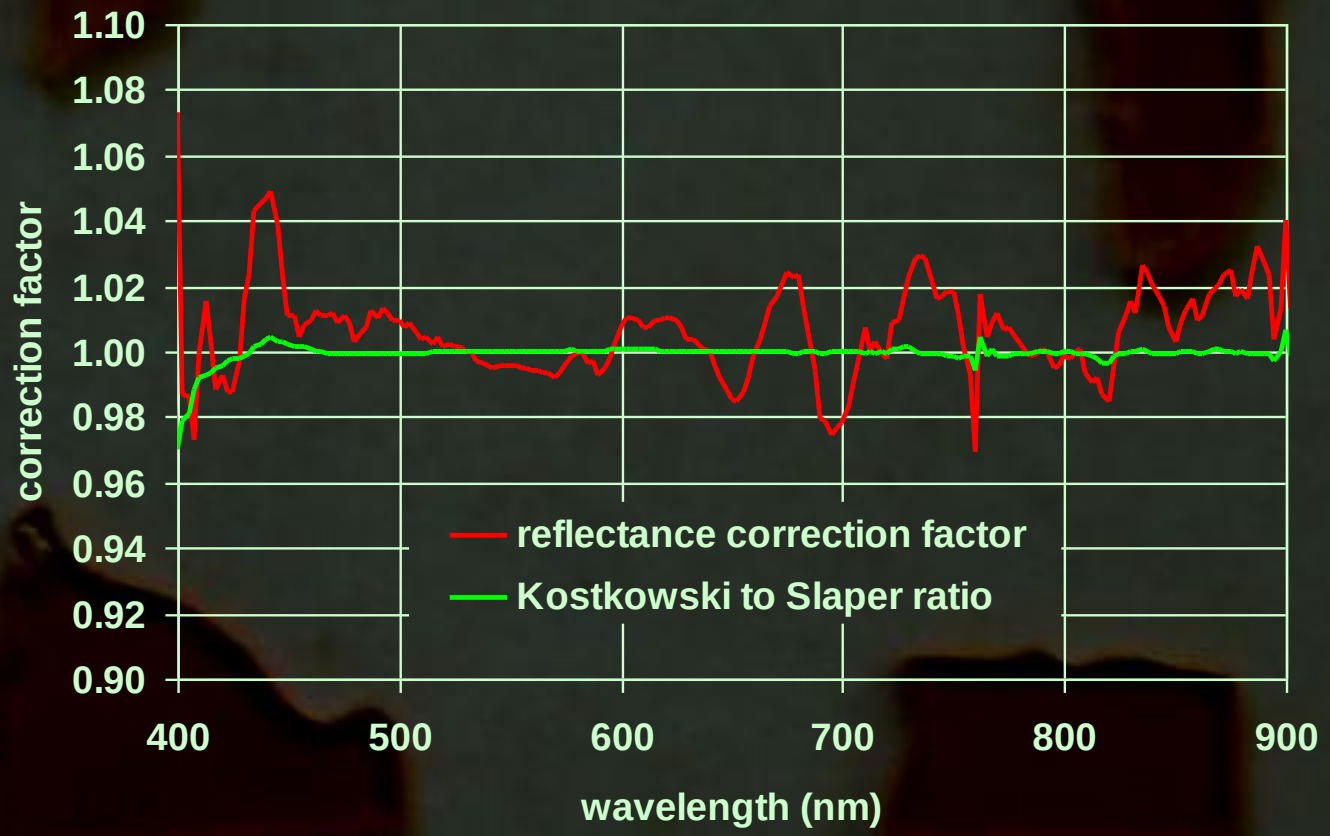
Straylight correction of the laser line



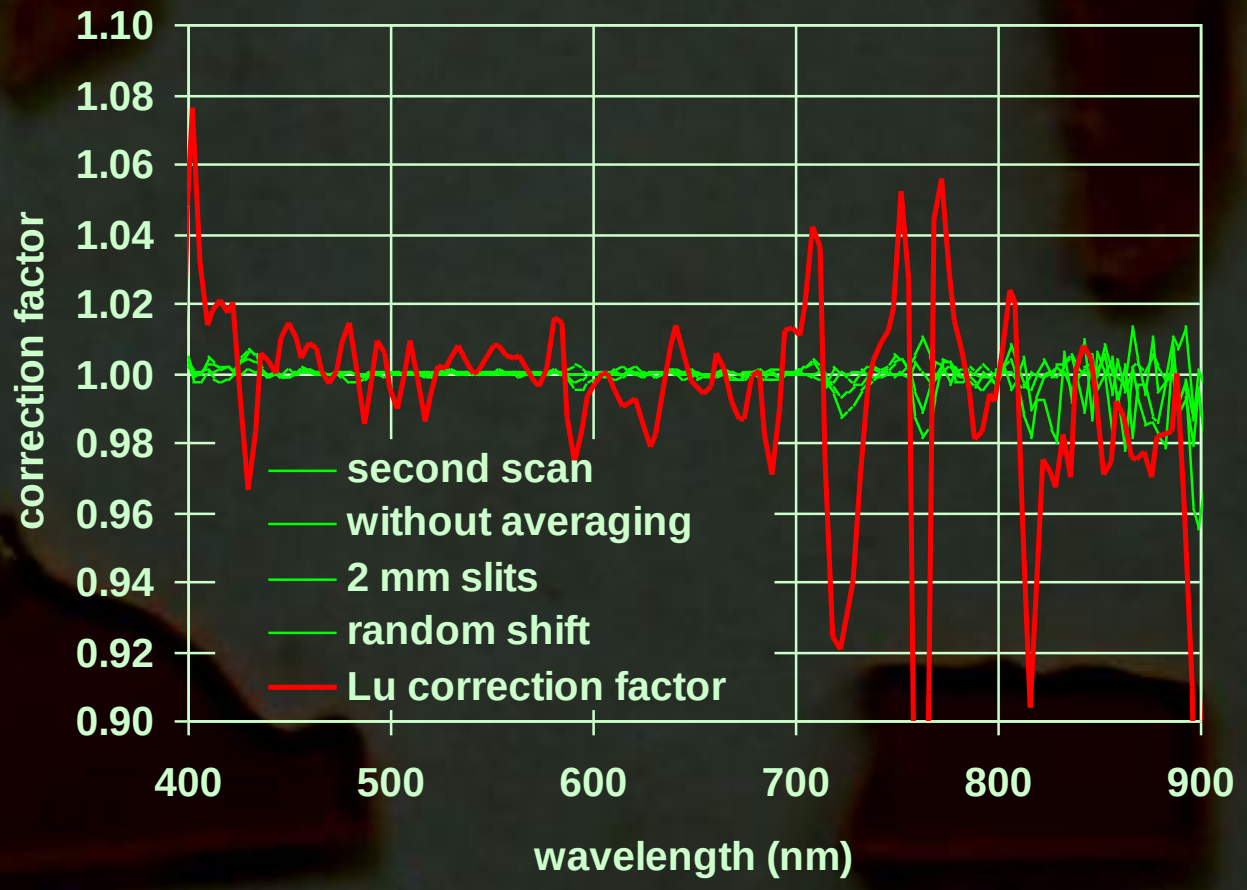




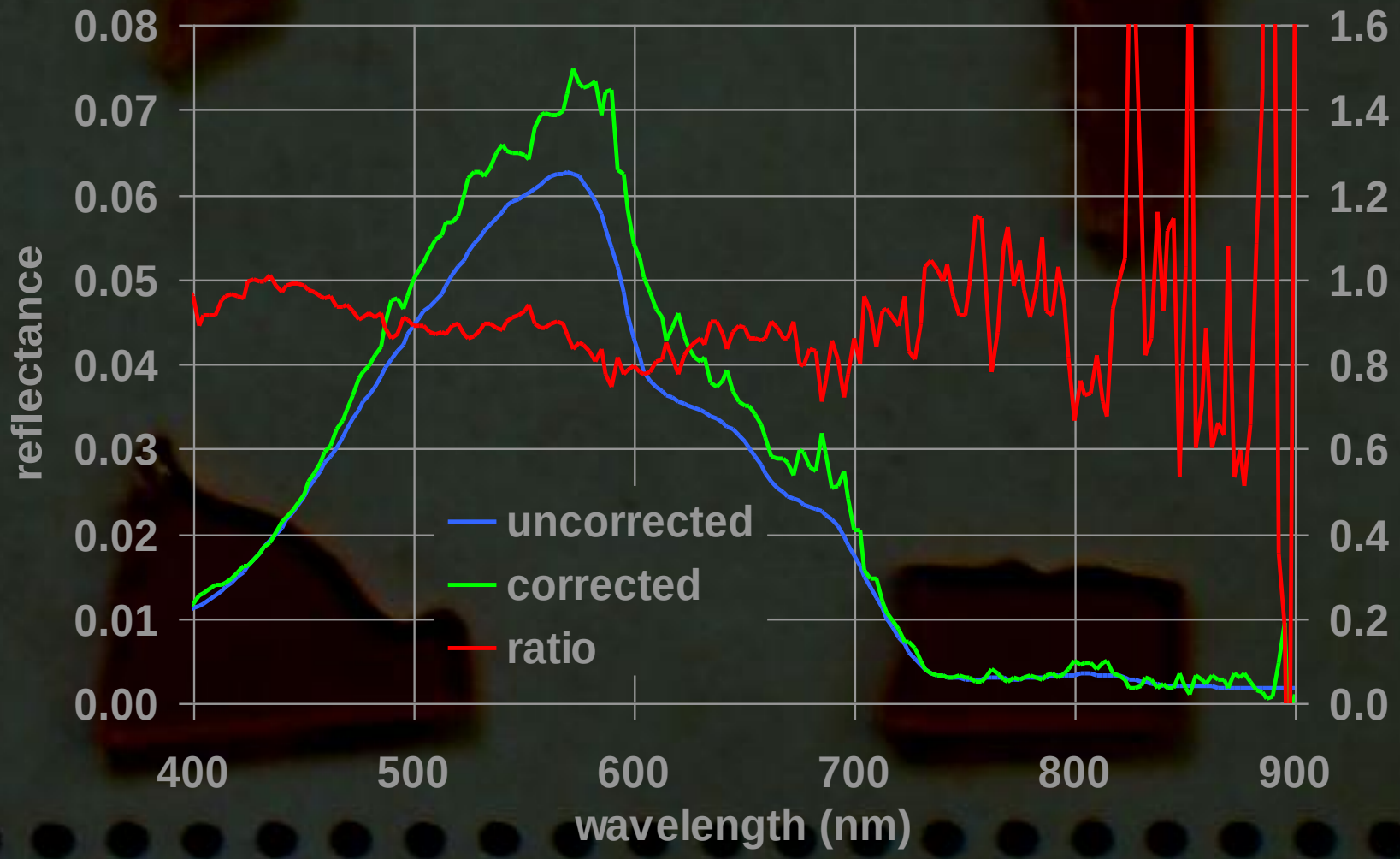
Straylight correction: Kostkowski vs Slaper



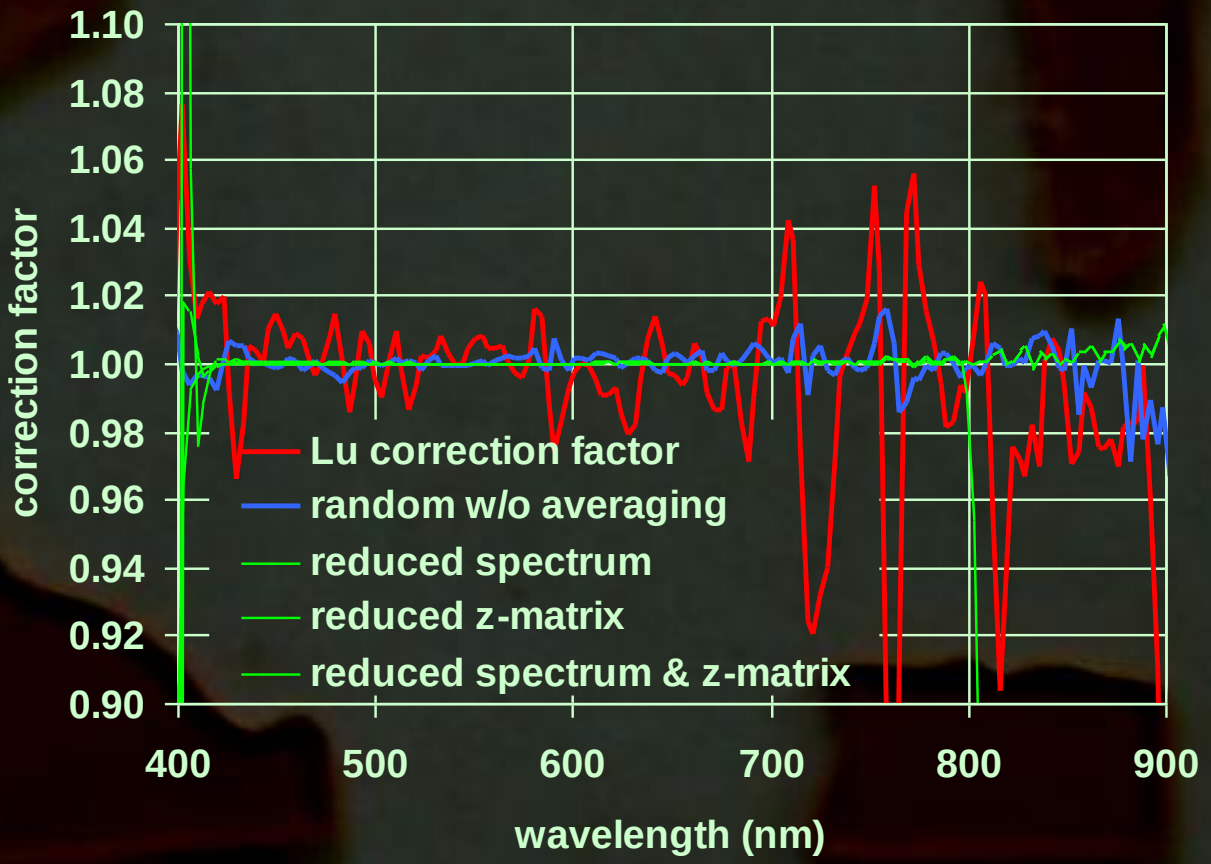
Stability of the straylight removal algorithm I



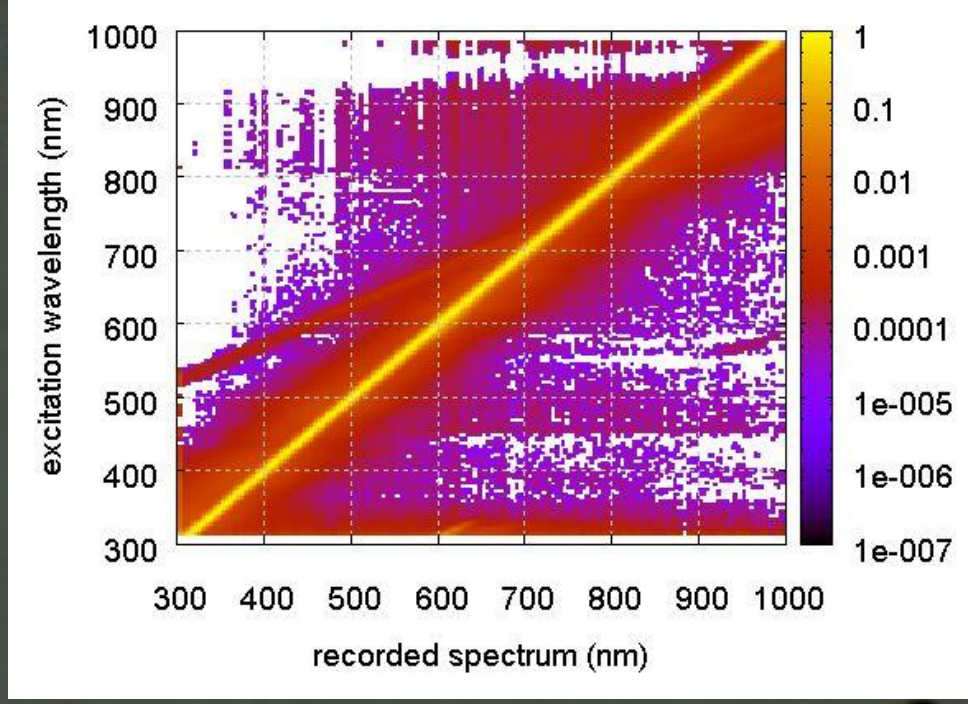
Previous results



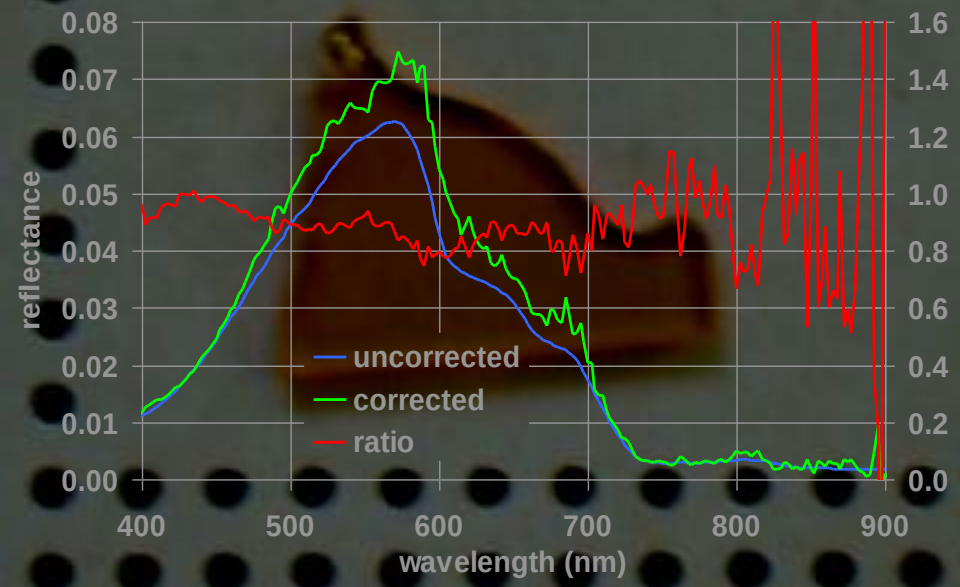
Stability of the straylight removal algorithm II



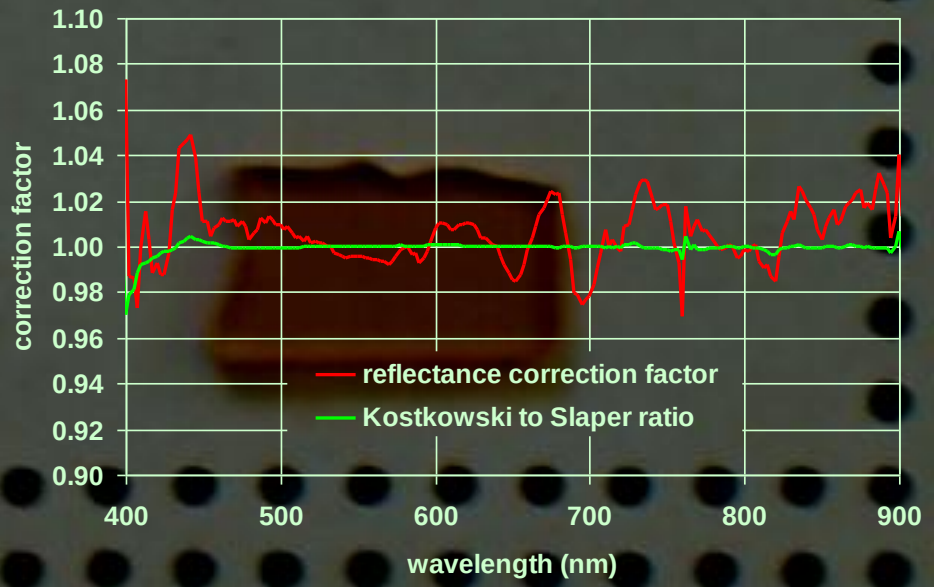
Conclusions



before...



...after



Next steps

radiometric linearity
wavelength scale
z-matrix stability
validation with filter measurements
uncertainty analysis
maturing the setup
independent validation (tunable lasers)