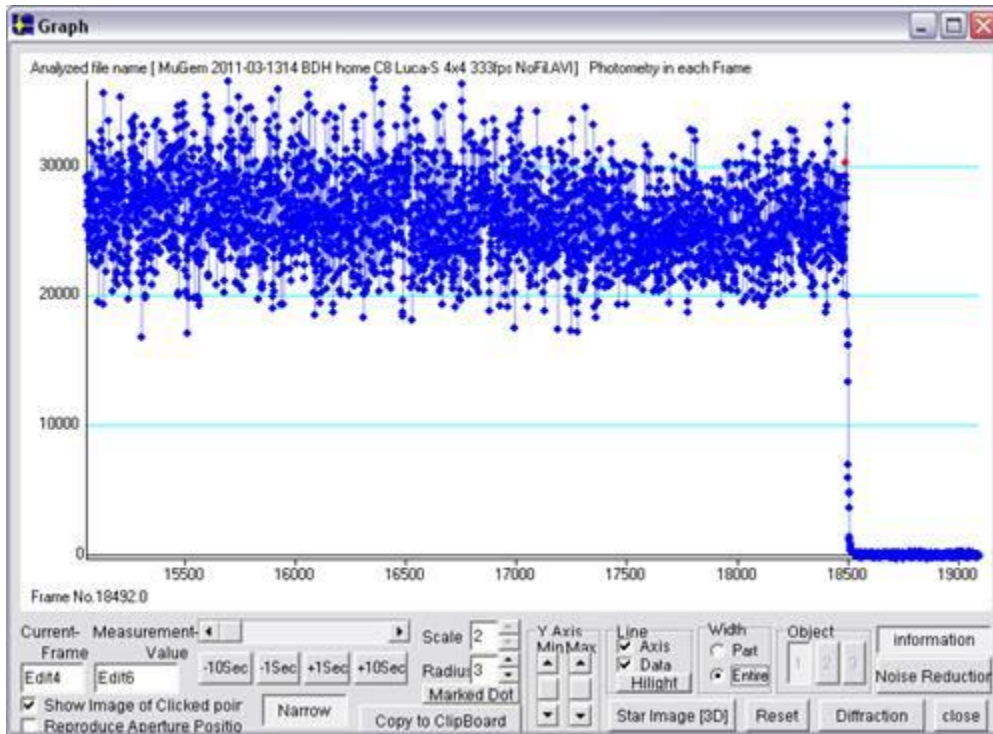


Mu Gem Lunar Occultation 1314 March 2011

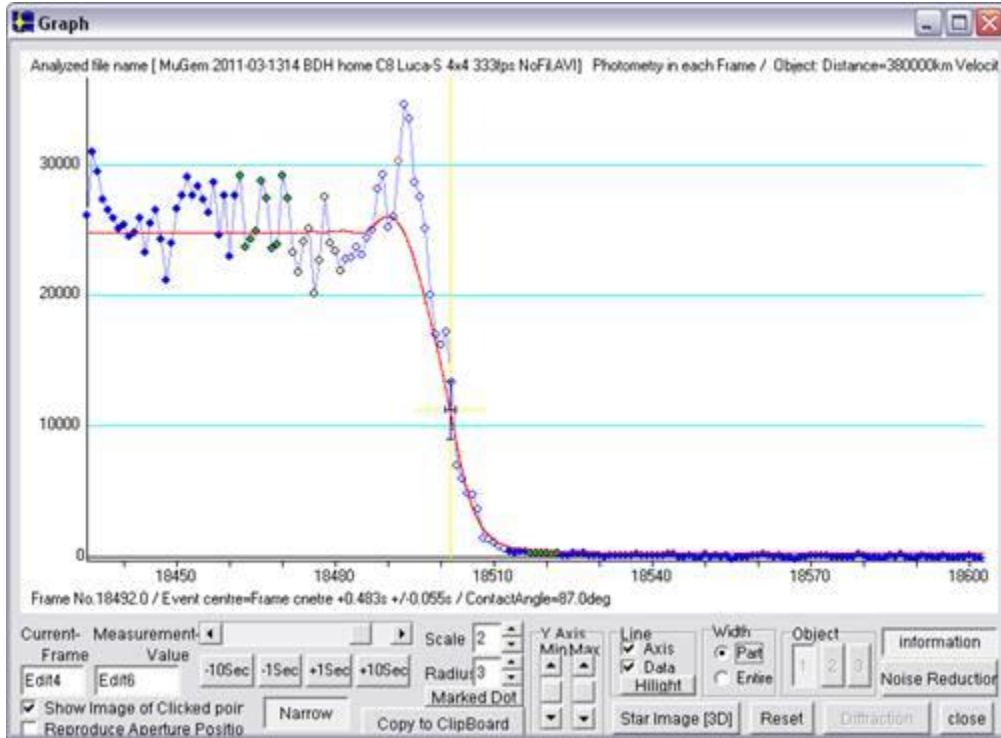
Bruce Holenstein and Dylan Holenstein

We observed the Lunar occultation of mu Gem on the evening of 1314 March 2011. We used a C8, Luca-S camera, WinFluor software operating at 333fps, no filter, 75 meter elevation at a location near Media, PA USA.

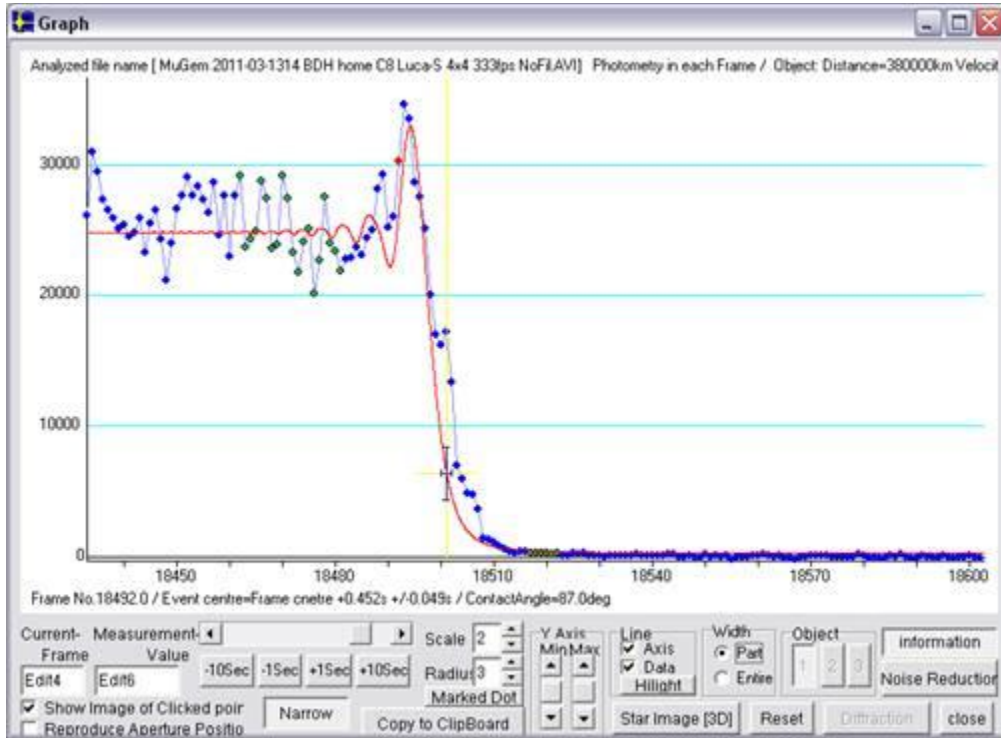
Zoomed out in time, the flux peak near the occultation event appears to be mainly just noise and not diffraction. The literature gives mu Gem as about 16.5 mas in diameter (Nelson 1975) so it is not expected to have a big diffraction peak. We fit the light curve below using LiMovie. Could there be a hot spot? It looks like it is probably just scintillation. We need results from several 1-m class scopes to reduce the scintillation problem.



Fit with 16.5 mas diameter star



Fit with 0 mas diameter star



Reference

Nelson, Mark R. 1975, *ApJ* 198: 127-129