VSOS

Variable Star Observers Switzerland

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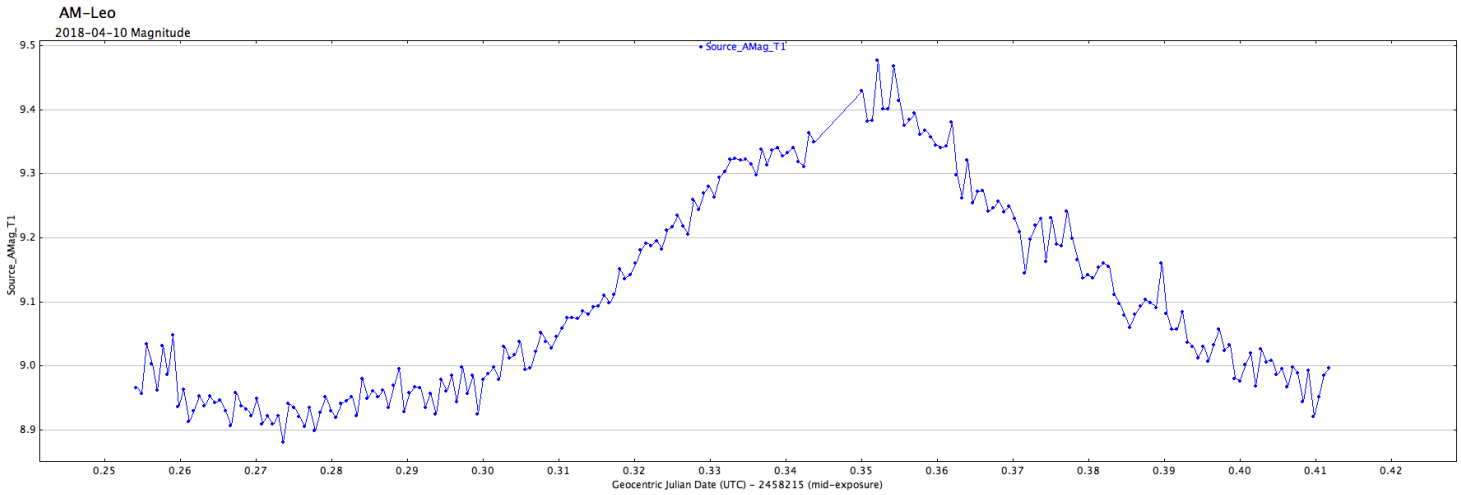
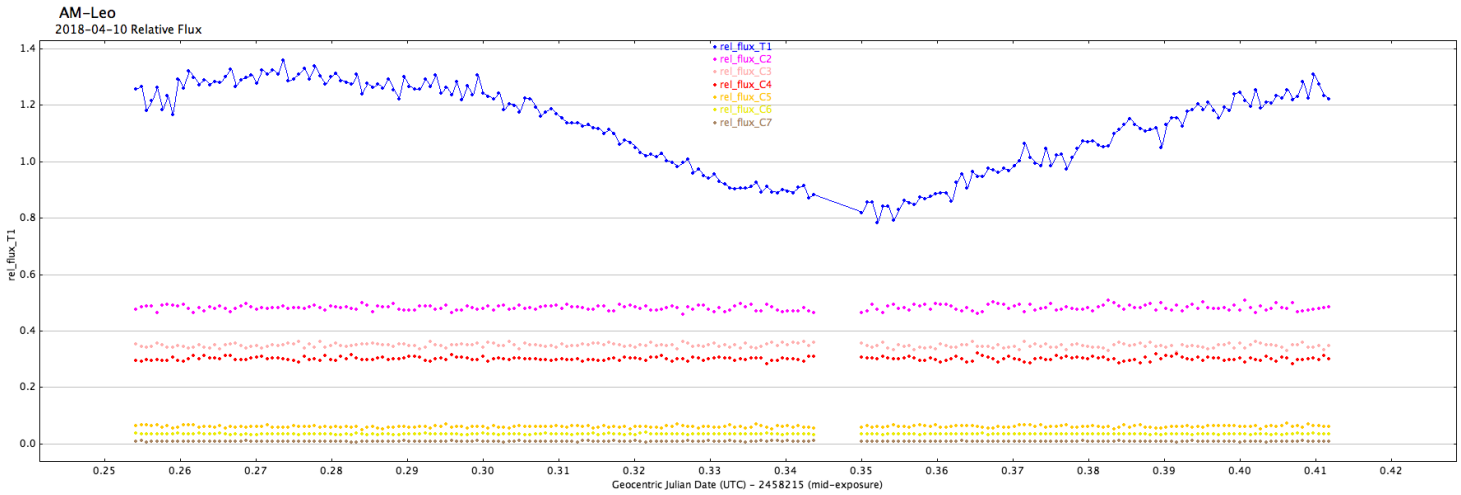
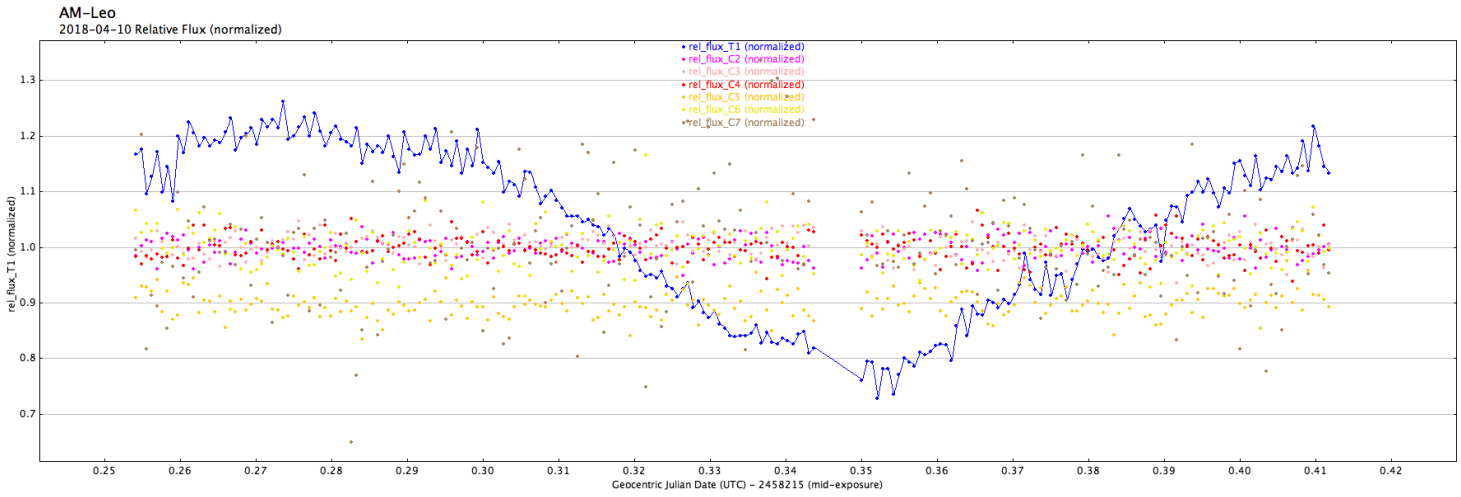
Star					
AM - Leo		Epoch	2453739.8344	Period	0.365799
RA	11.052005°	DEC	9.977703°		
Date & Time UT					
2018-4-10		First Exposure	19:15	Last Exposure	23:02
Station					
Magden					
Latitude	47.531250	Longitude	7.812861	Altitude	352
Telescope					
Officina Stellare Hyper 130		Focal Length	780mm	Aperture	130mm
Reducer	- -	Filter	Lum		
Camera					
Starlight Xpress Trius SX-814 b/w		Pixel L	3388	Pixel W	2712
Size	3.7	Length	12.5mm	Width	10.0mm
Exposure Time	10sec	Binning	1x1	Number of Frames	220
Software					
Capture	kStars - Ekos	PreProcessing	Nebulosity	badPixel-map and Bias - no Flats	
Aligning	pixInsight	Photometry	AstroImageJ		
Control Stars					
BD + 10 2232		C2	Mag 10.52		
BD + 10 2238		C3	Mag 10.61		
TYC 0847-0142-1		C4	Mag 10.74		
TYC 0850-1129-1		C5	Mag 11.38		
GAIA 3867728207369208064		C6	MAg 12.93		
GAIA 3867671238922995456		C7	Mag 14.49		

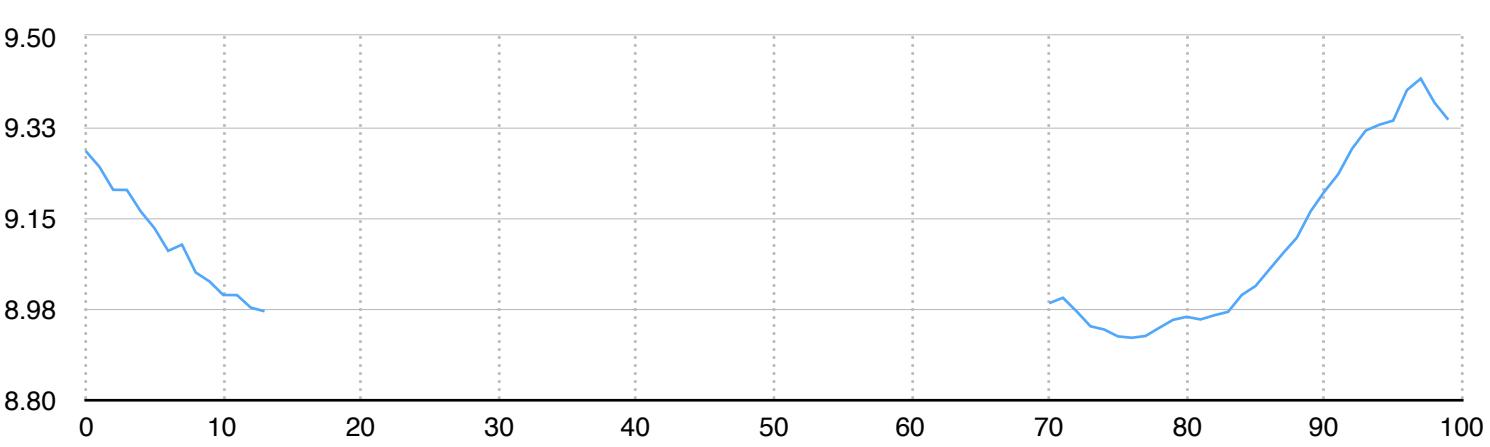
Disclaimer
This observation is probably not very accurate, because I gathered the data during a stress-test of a new set-up of my equipment and while adjusting new settings of my guiding software. Therefore I didn't refocus until after the meridian flip (exposure 131). The radius of the stars got so big, that AM-Leo's neighbor started to interfere and couldn't be separated for the calculations. Furthermore, the JD on the x-axis in the AIJ graphs are off by 4.04021d due to a faulty timestamp in the fits header (?). The Position within the period should be correct.



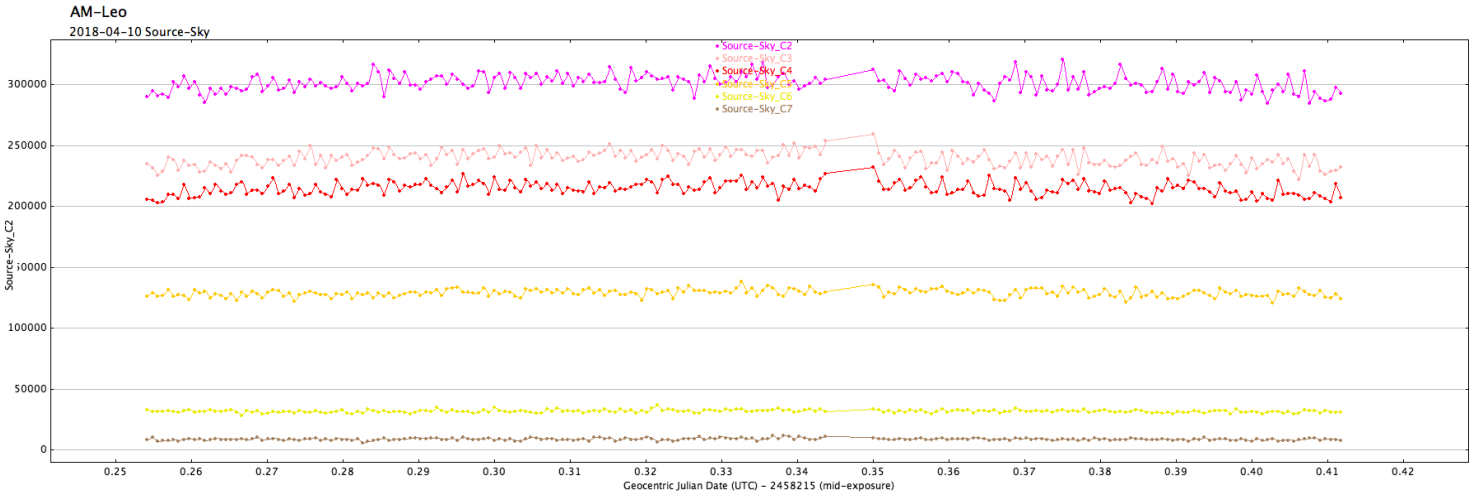
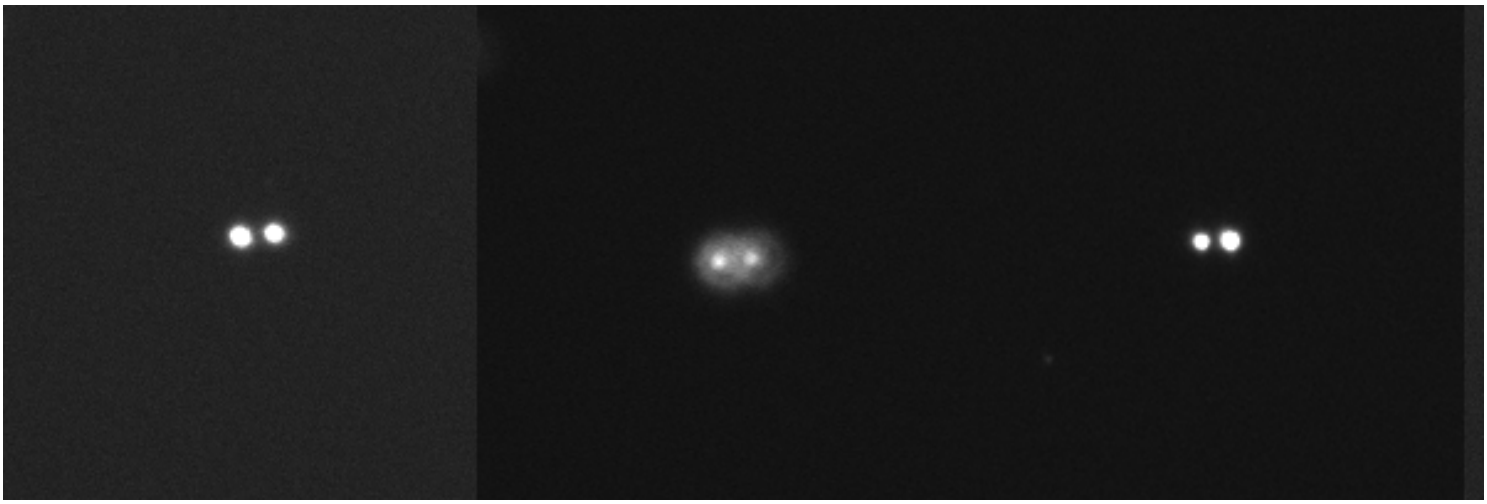
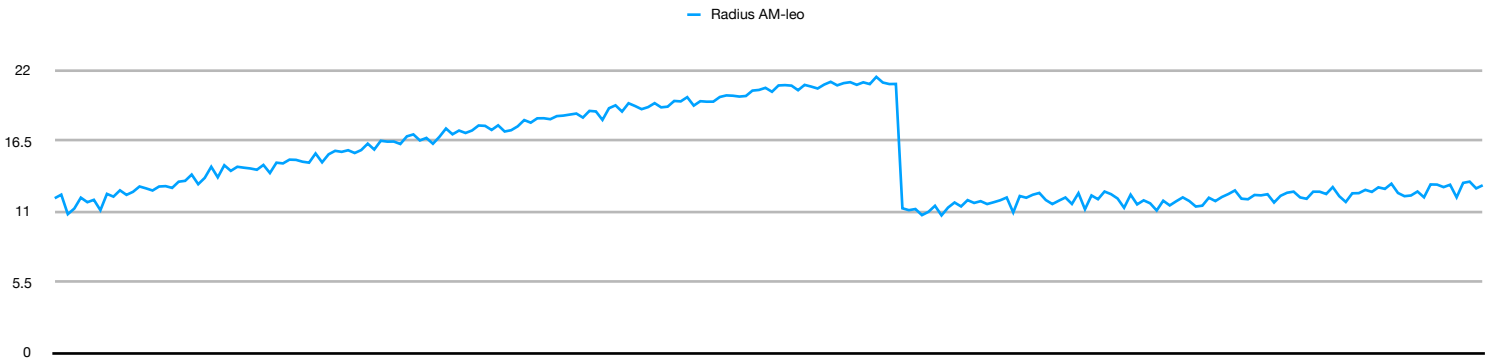




Position of the Observation within the Period (Epoch JD 2453739.8344, Period 0.365799d)



Remarks, concerning the focus or lack of…
The graph below shows the ‚pixelCount-Sky' of the control stars over all 220 frames. Very accurate focussing doesn't seem to be overly important for the control stars. But in the double Star system AM-Leo — Hip 53934, I'm pretty sure good focussing would provide better data.



AM-Leo and Hip 53934 (dist 11.5“) @ frame 1 - frame 130 and after Meridian Flip frame 131