

"Observing asteroid & lunar occultations
from inside a tipi"

Vagelis Tsamis

Sparta Astronomy Association

MPC/C68 - Ellinogermaniki Agogi School Observatory

IOTA-ES

Royal Astronomy Association of Canada

Club des astronomes amateurs de Laval-QC

Société Astronomique de Liège





Copy right - Tipi Joe Creations - www.tipijoe.com

2013-2016 : saw many tipis in Canada!



What is a **tipi** (or teepee)

The tipi is a portable conical tent made of skins, cloth, or canvas on a frame of poles, used by North American Indians of the Plains and Great Lakes regions.

The word **tipi** comes into English from the Lakota language. The Lakota word **thípi** ['thipi] means "a dwelling" or "they dwell", from the verb **thí**, meaning "to dwell".

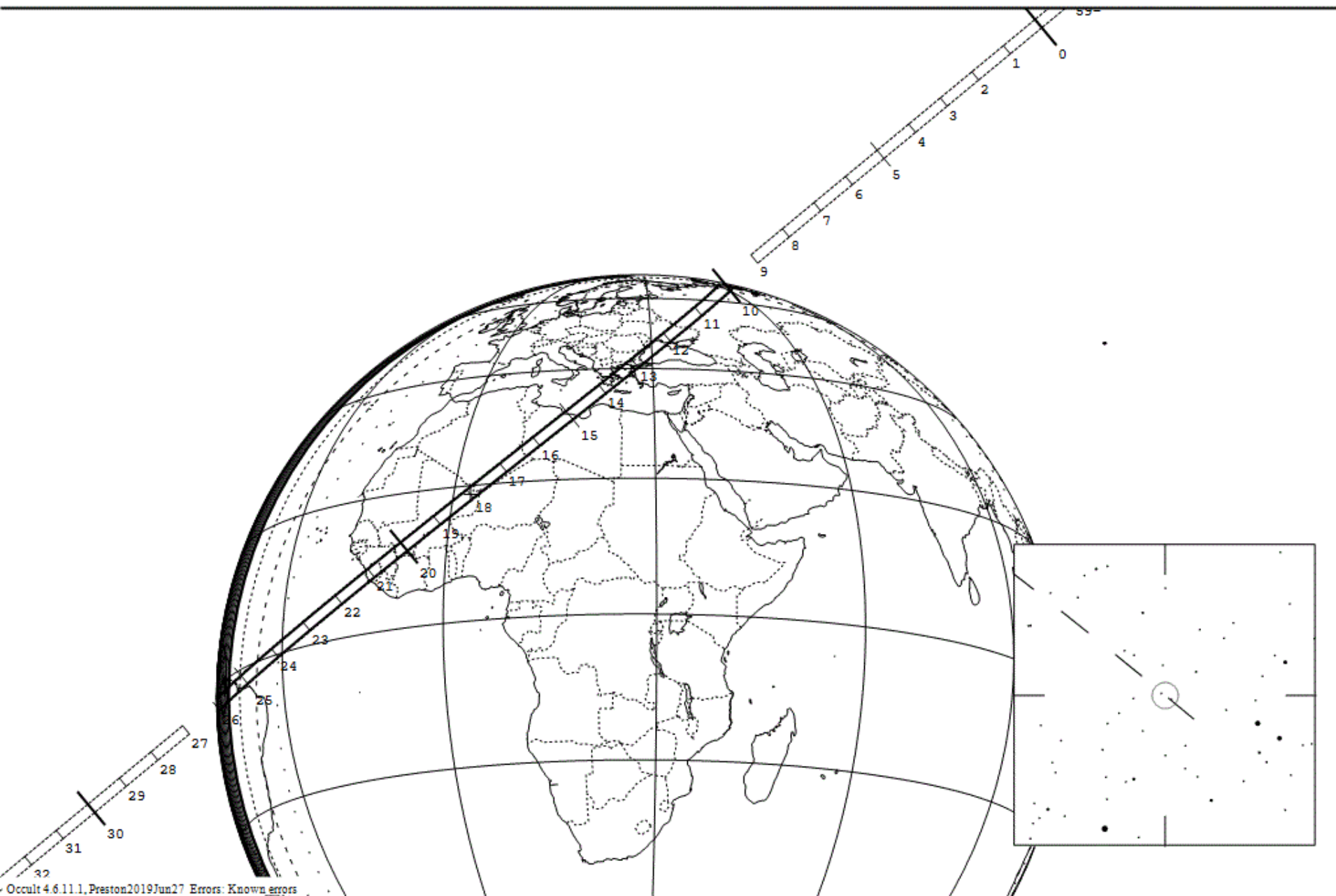


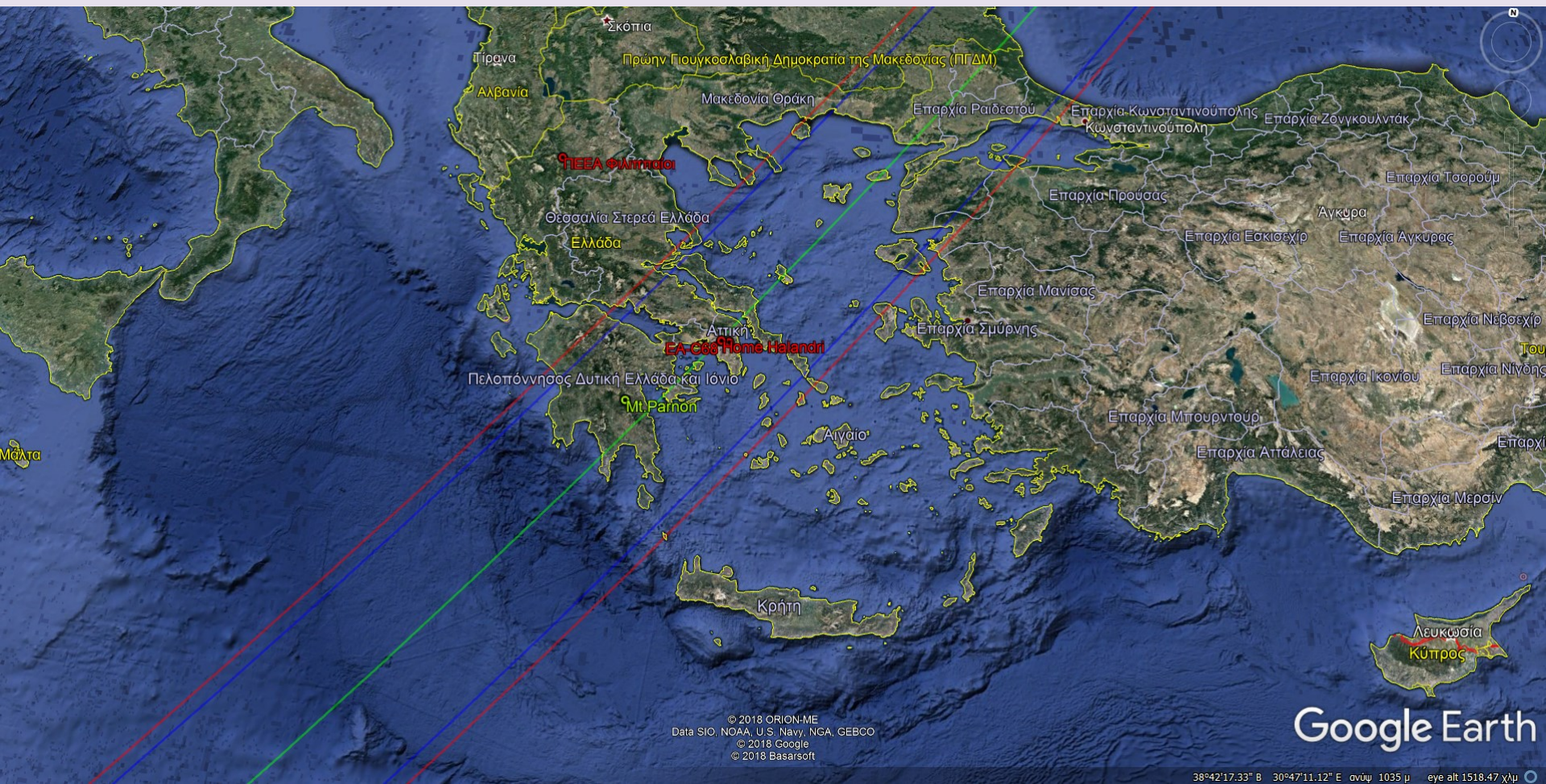
39 Laetitia occults UCAC4-394-125258 on 2019 Aug 27 from 21h 10m to 21h 26m UT

Star:
Mag V = 11.3
RA = 21 30 43.9726 (BCRS)
Dec = -11 23 5.435 ...
[of Date: 21 31 48, -11 17 49]
Prediction of 2019 Jul 21.0

Max Duration = 15.6 secs
Mag Drop = 0.17 (0.00r)
Sun : Dist = 167°
Moon: Dist = 156°
: illum = 10 %
E 0.018"x 0.010" in PA 81

Asteroid: (in DAMIT, ISAM)
Mag = 9.4
Dia = 161km, 0.146"
Parallax = 5.768"
Hourly dRA = -1.756s
dDec = -21.41"



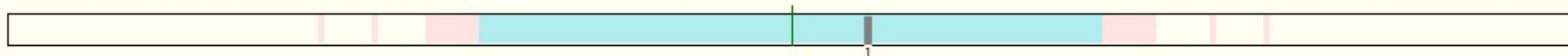


© 2018 ORION-ME
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2018 Google
© 2018 Basarsoft

Google Earth

38°42'17.33" B 30°47'11.12" E ανύψ 1035 μ eye alt 1518.47 χμ

Preferred Sites | Print



Observing locations currently announced by other observers:

Site resolution: 2.4 km

1 = Mt Parnon observing site

Right click on the map to define another observing site or click on your already announced observing site to edit it.









Windows 7 Desktop Application

Previewing

2019/08/27 22:38:28.5 0000 05# 39-Laetitia Vagelis Tsanis GR UFOCaptureHD2

LO: 02235.1791 V07
LA: 3715.58000375
190827:193828NE355

LiMovie photometry

D= UT 21:13:38.6 ± 0,2 sec

R = UT 21:13:53.4 ± 0,2 sec

TELESCOPE: Meade ETX-125

Type: Maksutov-Cassegrain

Aperture: 125mm

Mount: GOTO fork mount

TIMING & RECORDING:

Time source: GPS 1pps

Sensor: Watec 902 H2 Ultimate

Recording: UFO-Capture software

Time insertion:

TIM-10 GPS Video Time Inserter

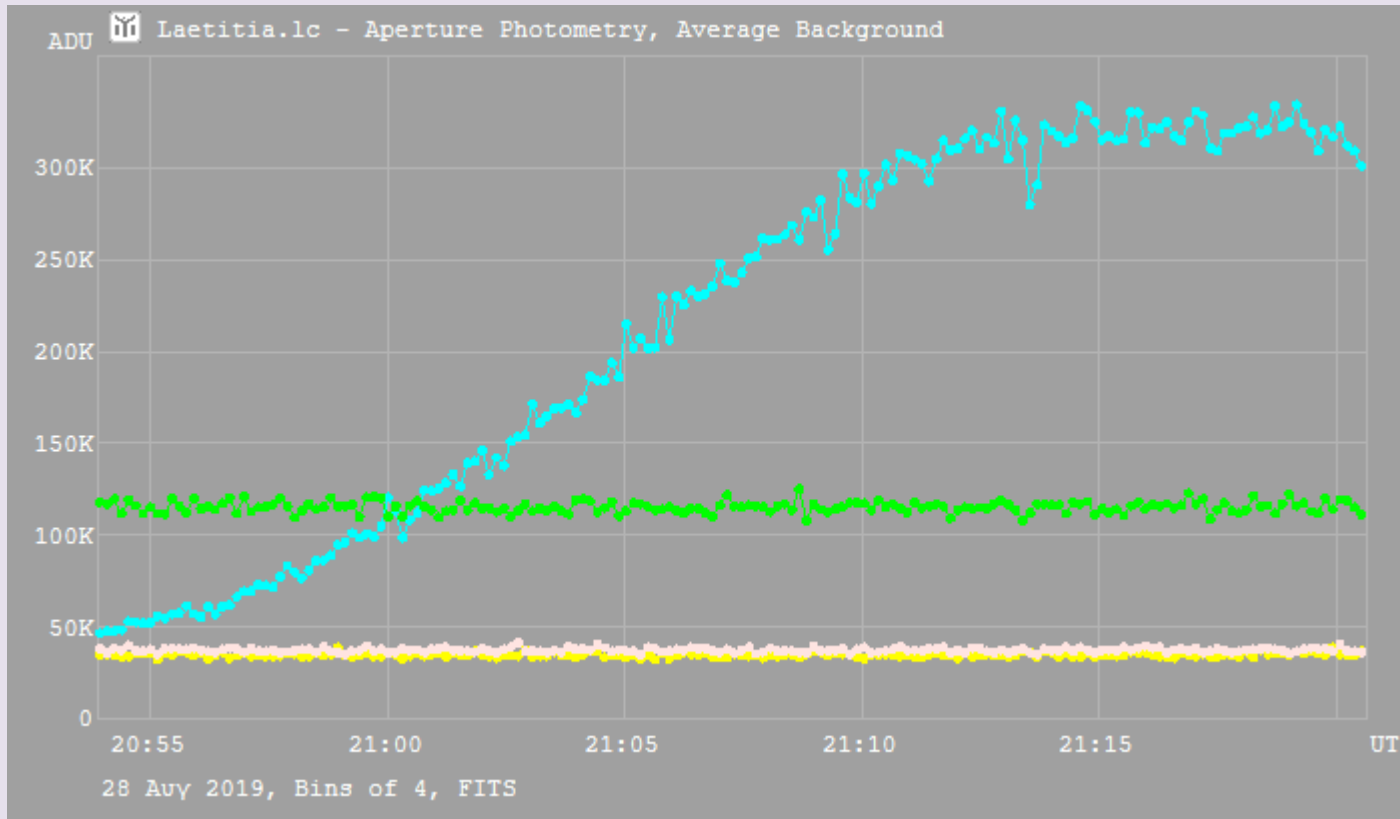
The screenshot displays the LiMovie software interface, which is used for photometry. The main window is titled "Light Measurement tool for Occultation Observation using Video Recorder [Limovie 0.9.97.3hP5]". It features a video player on the left showing a star with two concentric circles around it. Below the video player, there are several data fields: "LO: 02235.1792 V06", "LA: 3715.58040786", and "190827:211338NE746". The bottom status bar shows "2019/08/28 00:13:38.3 01000 M0000 040 38-Laetitia_Vagelis_Tsamis_GR UFOCaptureHD2".

On the right side, there is a "Graph" window titled "Analyzed file name [M20190828_001259_GR+vDub.avi] Photometry in each Frame". The graph plots photometry data for each frame, with the x-axis labeled "Frame No.202.0" ranging from 0 to 1100. The y-axis represents magnitude, with a mark at 1000. The data points are colored blue and yellow, showing a clear trend of increasing magnitude over time.

Below the graph, there are several control panels. The "Measurement" panel includes buttons for "START", "STOP", "DataRemove", and "SaveToCSV-File". The "Measurement Value" panel shows "Current-Frame" as 202 and "Measurement-Value" as 1643.4. The "Y Axis" panel has "Min" and "Max" buttons. The "Line" panel has checkboxes for "Axis", "Data", and "Highlight". The "Correction for absorption" panel has a "Noise Reduction" button and a "Reset" button. The "Show Image of Clicked point" panel has checkboxes for "Show Image of Clicked point" and "Reproduce Aperture Position". The "Field Order" panel has radio buttons for "Even first" and "Odd first". The "Current Object" panel has buttons for "A", "B", and "C".

New occultation observer!

George Karantzas



OBSERVING STATION: Nearest city: Athens GR

Station:

Longitude (37 56 54.7s)

Latitude (24 00 3.28s)

Altitude (m) 70

TELESCOPE: Type:Refractor Aperture: 65 /420

Mount:HEQ5Ppro

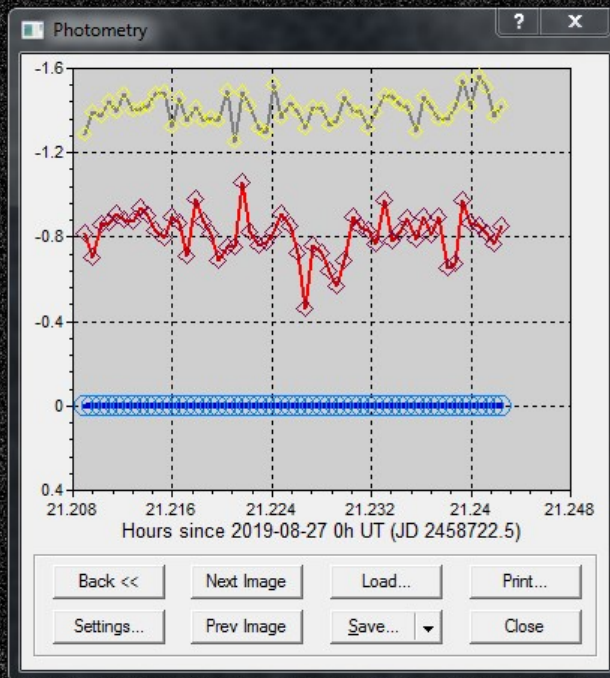
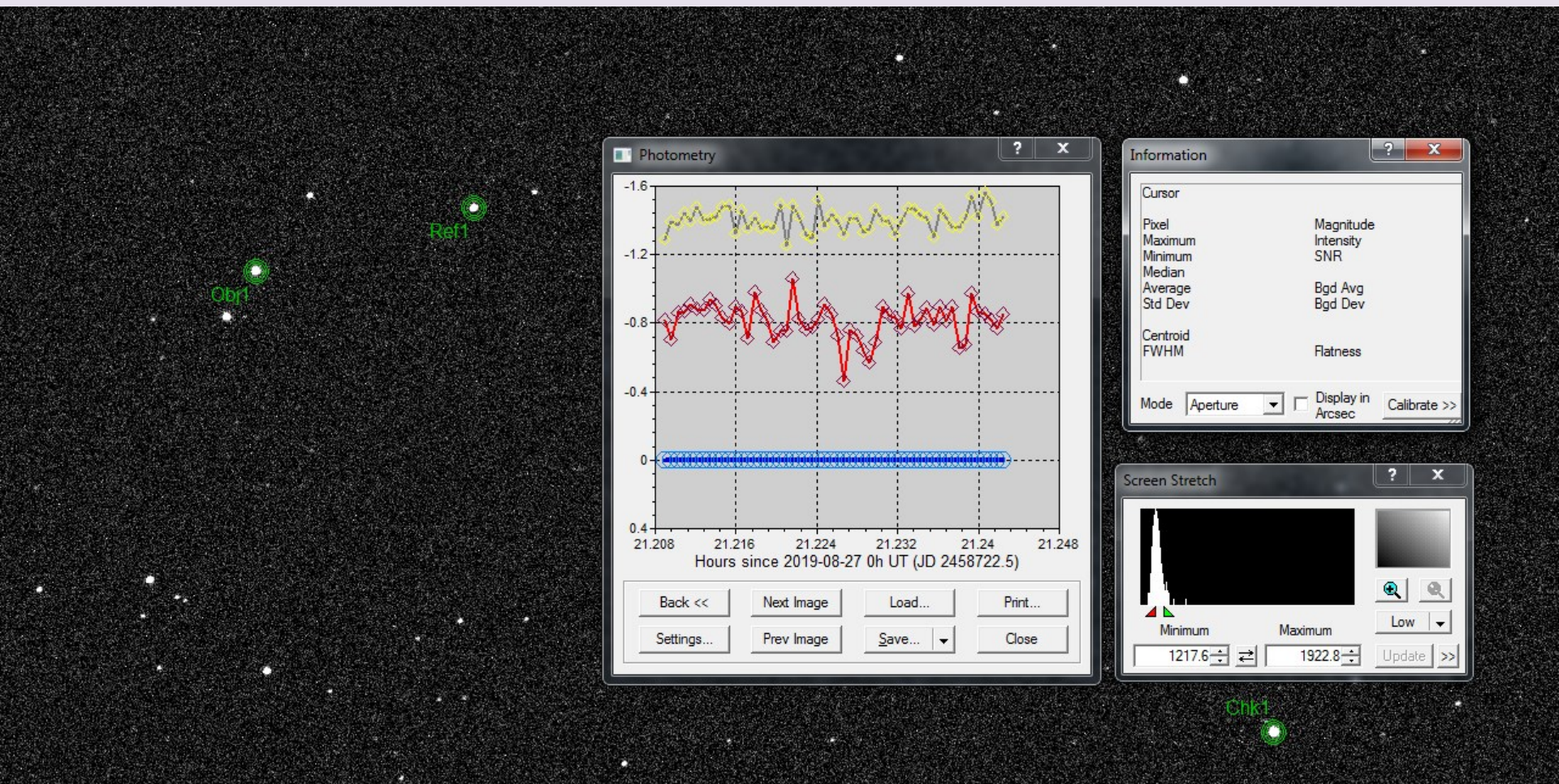
Sensor: ASI183 MMPro Recording:Sharpcap3.2

Analysing George's fits with MaximDL

D = UT 21hr13min 33.5sec \pm 1 sec

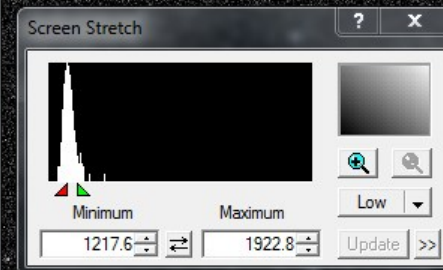
R = UT 21hr13min 47sec \pm 1 sec

Duration 13.5 sec \pm 2 sec



Cursor	
Pixel Maximum	Magnitude
Pixel Minimum	Intensity
Pixel Median	SNR
Pixel Average	Bgd Avg
Pixel Std Dev	Bgd Dev
Centroid	Flatness
FWHM	

Mode: Aperture Display in Arcsec



CHK1

Laetitia occultation light curve

Manos Kardasis

Location: Glyfada, near Athens GR

full report to be received soon



Kosmas Gazeas

University of Athens Observatory

Section of Astrophysics, Astronomy and Mechanics - Department of Physics

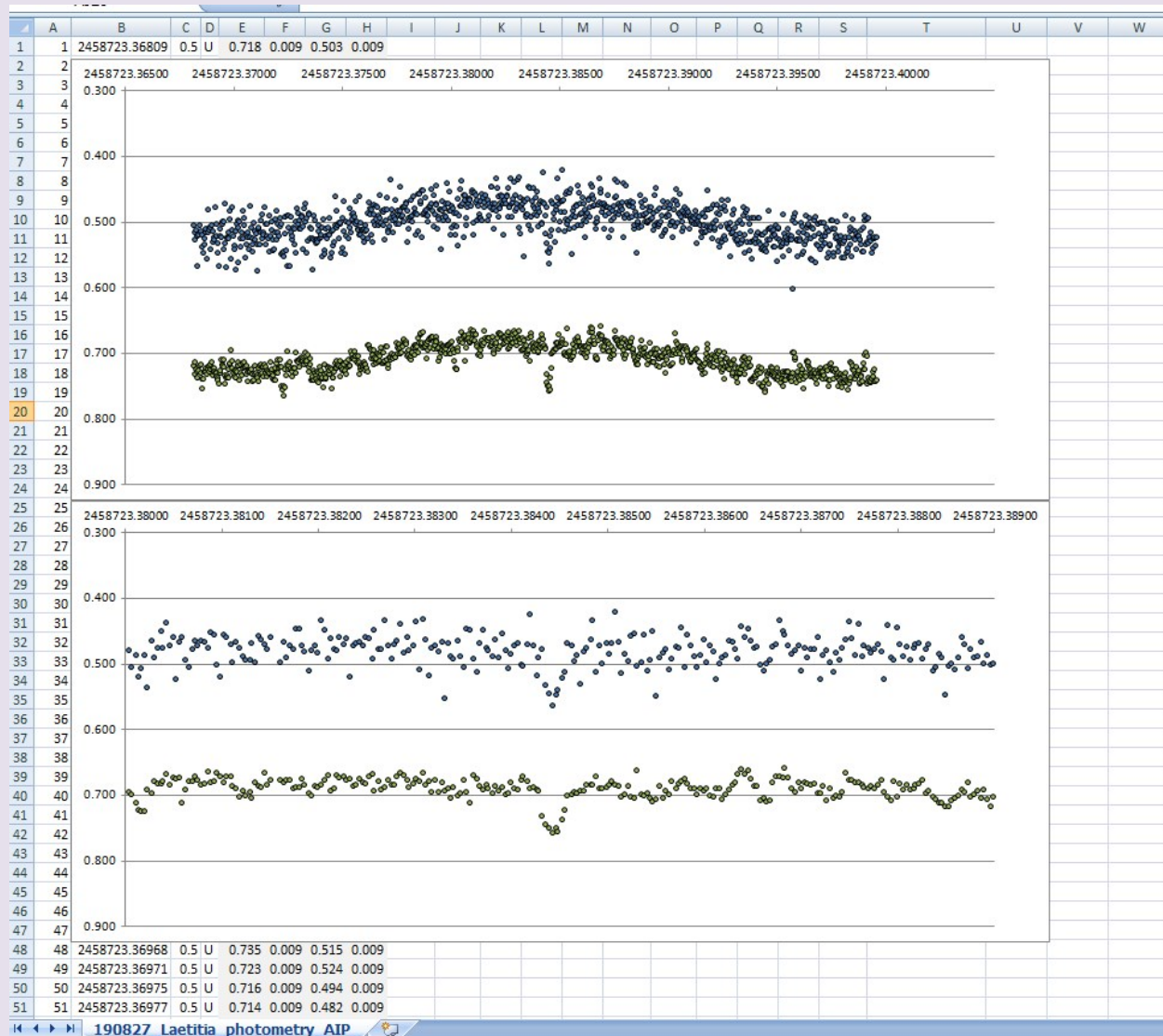
Coordinates: 37°58'06.8"N 23°47'00.1"E (37.968561, 23.783368)

Altitude: 250 m

40 cm Cassegrain reflector

0.5 sec exposures

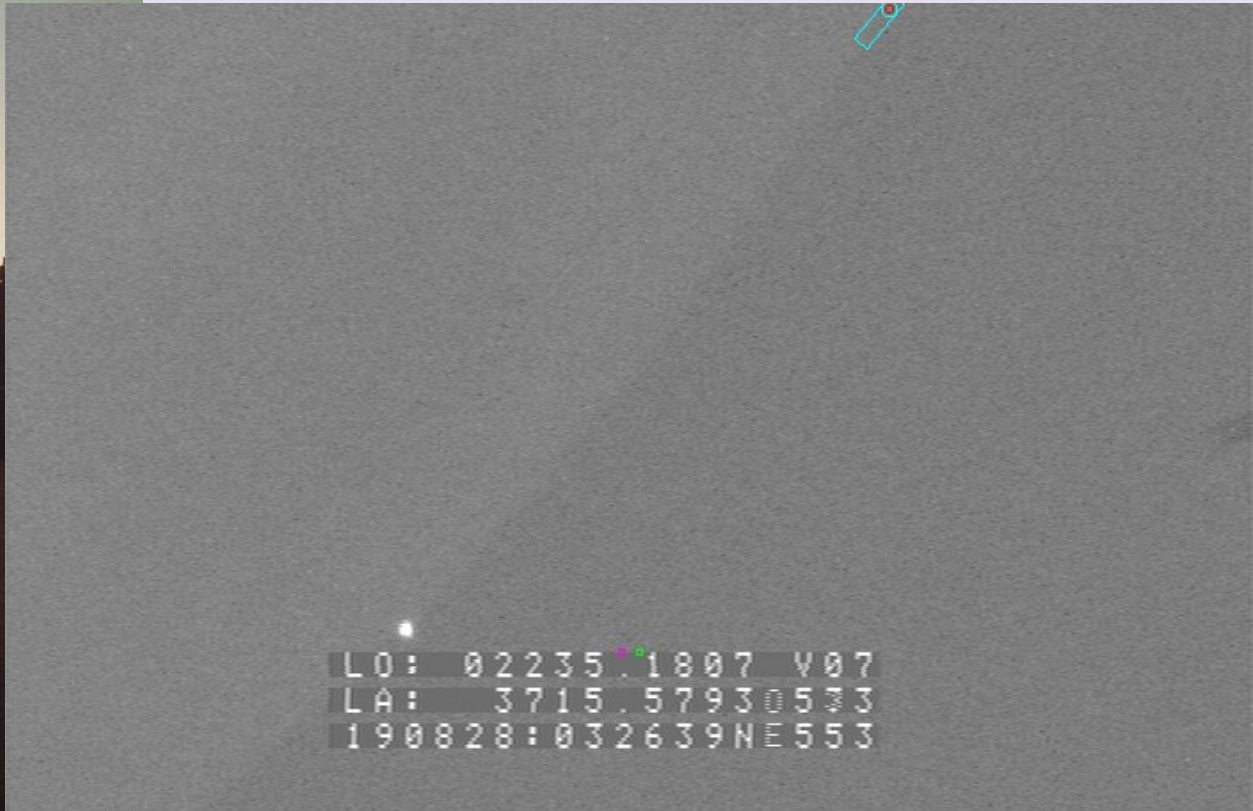
clear filter



[HIP 40866](#)

R1 = 2019 08 28 03hr 26min 39sec 513msec

R2 = 2019 08 28 03hr 26min 39sec 553msec



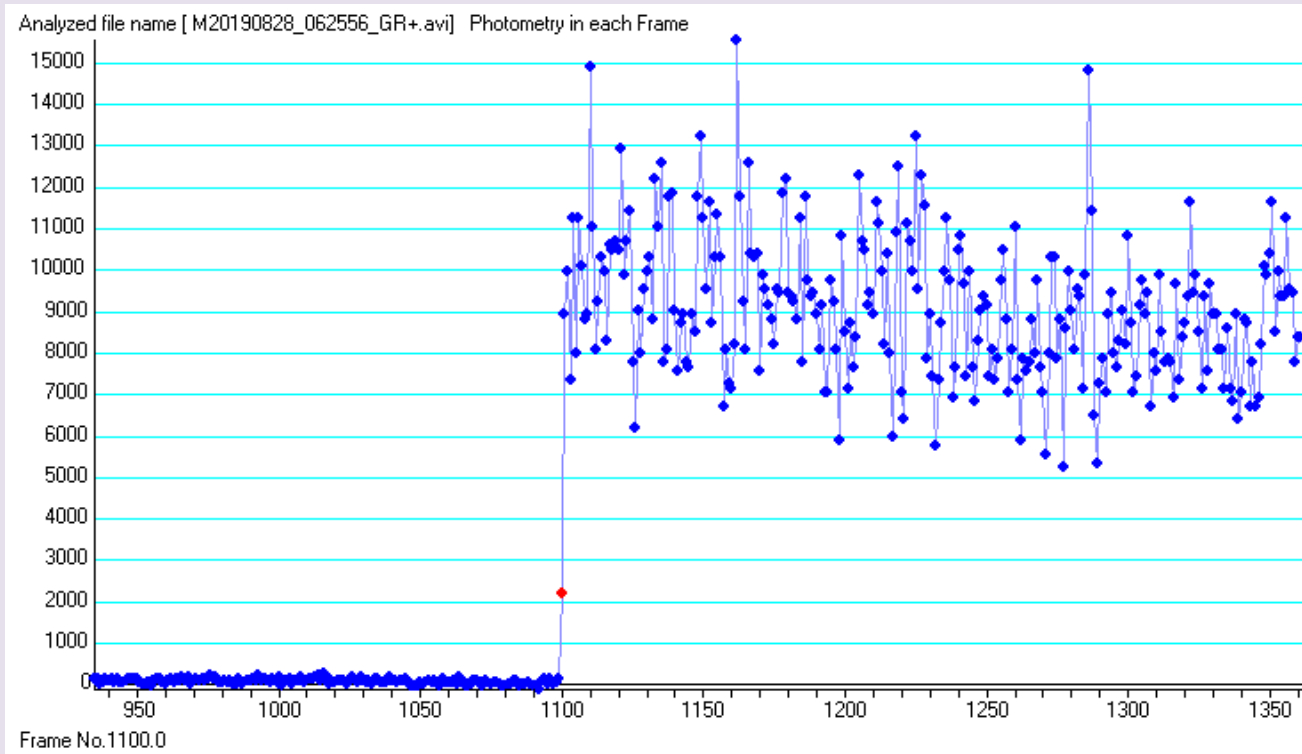
L0: 02235.1807 V07
LA: 3715.57930533
190828:032639NE553

Occultation prediction for Parnon

E. Longitude 22 35 12.0, Latitude 37 15 34.0, Alt. 1420m; Telescope dia 25cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%Elon	Sun	Moon							
y	m	d	h	m	s	No	D	v	r	V	ill	Alt	Alt	Az	o	o
19	Aug	28	3	26	39.1	R	1250	pK1	5.8	5.2	7-	32	-7	24		

*** A light curve is desired as 1250 is in the Kepler2 program {ID = 212029623}
1250 is double: 3.1 8.9 350.0, dT = 0.00sec



"Observing asteroid & lunar occultations
from inside a tipi"

Thank you for your attention!

Vagelis Tsamis

Sparta Astronomy Association

MPC/C68 - Ellinogermaniki Agogi School Observatory

IOTA-ES

Royal Astronomy Association of Canada

Club des astronomes amateurs de Laval-QC

Société Astronomique de Liège

