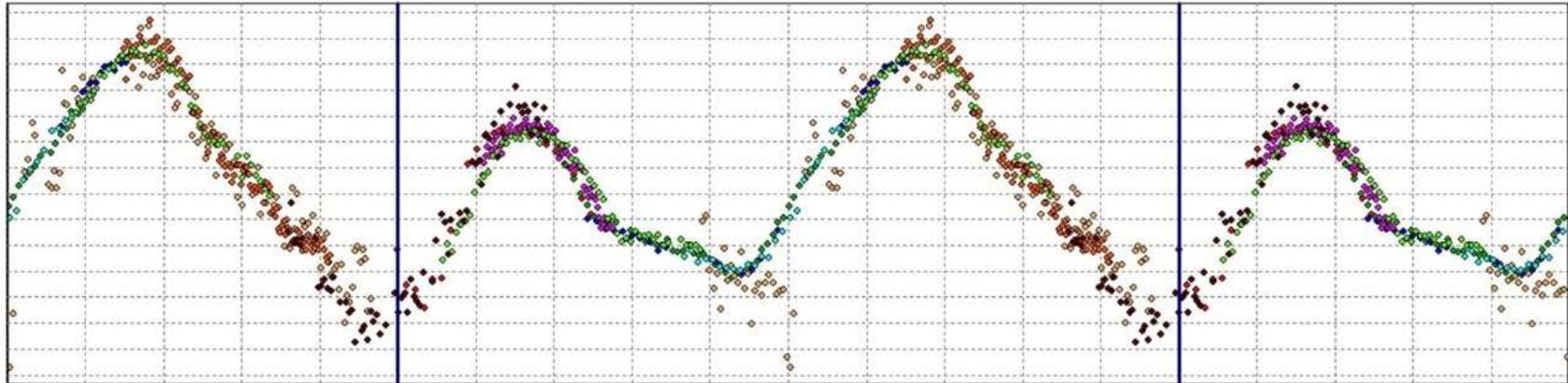


III WORKSHOP GRUPO G.O.R.A

Tanti - Córdoba
14 y 15 de Marzo 2020

3er Encuentro del Grupo de Observadores de Rotaciones de Asteroides (GORA)

Tanti (Provincia de Córdoba) - 13, 14 y 15 de marzo de 2020



Cupo limitado: 20 personas.

Inscripciones por correo electrónico: cacolazo@hotmail.com

Programa:

Viernes 13 - 15:00 a 21:00 - Para aspirantes a incorporarse al GORA.

Equipos necesarios - Técnicas de observación - Rotación en asteroides -

Fotometría diferencial - Funcionamiento del GORA.

Sábado 14 - 09:00 a 13:00 - 15:00 a 20:00 - Para todos los inscriptos.

Domingo 15 - 09:00 a 13:00 - Para todos los inscriptos.

Trabajos para publicar - Vinculación de sesiones consecutivas - Reducción de la dispersión - Calibración de imágenes - Periodogramas - Selección de objetivos para 2020 - Nuevas metodologías y recursos a utilizar - Vinculación del GORA con otros grupos.

III WORKSHOP GORA -

Tanti13,14y15/marzo/2020Inscriptos

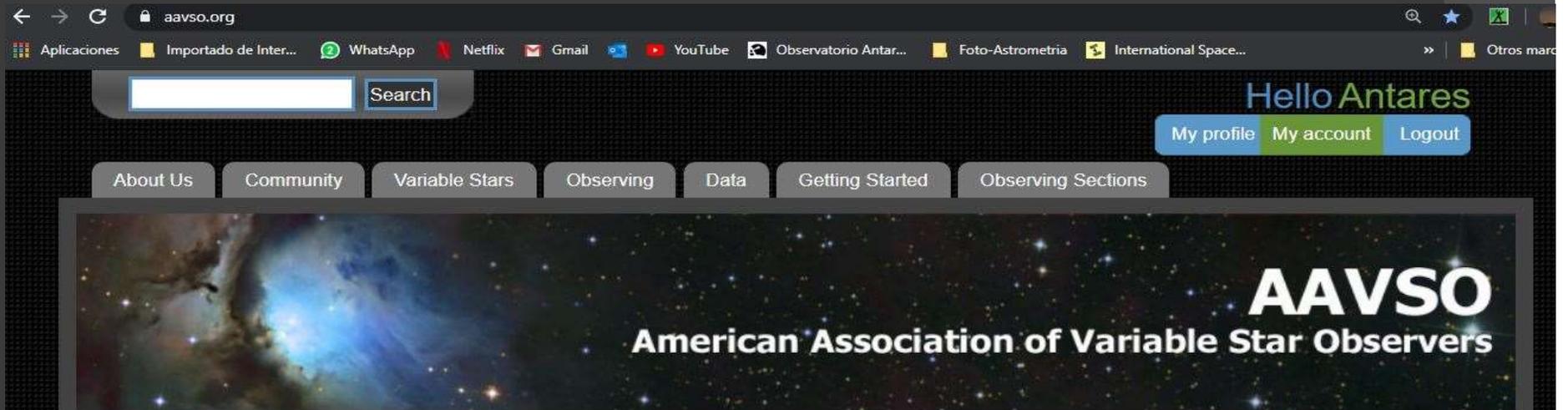
- Cesar Fornari, (Oro Verde)
Erica Hasenauer, (Oro Verde)
Jonás Alonso, (Oro Verde)
Emanuel Devoto, (Paraná)
Néstor Suarez, (Pilar-Bs.As.)
Ricardo Llanos, (Santiago del Estero)
Nicolás Vasconi, (Villa María)
Carlos Colazo, (Tanti)
Raúl Melia, (Carlos Paz)
Nicolas Melia, (Carlos Paz)
José García, (Cosquín)
Guillermo Amilibia, (Córdob
- Guillermo Ferrero, (Córdoba)
Marcos Anzola, (Córdoba)
Elisa Rodríguez, (Córdoba)
Milagros Colazo, (Córdoba)
Marcos Santucho, (Córdoba)
Matías Martini, (Córdoba)
Luis Rearte, (Córdoba)
Eduardo Pulver, (Rosario) VC
Ariel Stechina, (Reconquista) VC
Andrés Chapman, (BAires) VC
Damián Scotta, (San Carlos Centro) VC
Sergio Babino, (Montevideo) VC

Estrellas Variables



AAVSO

- ⦿ American Association of Variable Star Observers
- ⦿ <https://www.aavso.org/>



Manual AAVSO Castellano

AAVSO

Manual para la Observación Visual
de Estrellas Variables



Edición Revisada - marzo 2013
Edición Español - diciembre 2013

The American Association of Variable Star Observers

49 Bay State Road
Cambridge, Massachusetts 02138 U. S. A.

Tel: 617-354-0484
Fax: 617-354-0665
Email: aavso@aavso.org
Web: <http://www.aavso.org>

Alert Notice

Recent Activity

Variable Star Observations in Database:

40,638,587 and Counting ...

Last Observation Received:

1 min 47 sec ago by PKT - John Pickett (US)

RV HYA Feb 16.2931 8.846TB

[Plot RV HYA light curve](#)

- » Alert Notice 701: Nova in Serpens: Nova Ser 2020 = N Ser 2020 = TCP J18104219-1534184 Feb 24
- » Alert Notice 700: EE Cep observing campaign 2020-2021 Feb 24
- » Alert Notice 699: V386 Ser HST observing schedule revised Feb 14
- » Solar Bulletin - Volume 76, Number 01 Feb 14
- » Alert Notice 698: V386 Ser to be observed with HST Feb 7

[News Archives](#)

LesvePhotometry

Quick links

[LesvePhotometry Download Page](#)

[LesvePhotometry User guide](#)

[FAQ page](#)

Description

LesvePhotometry is based on differential photometry, the more common photometry method used by amateurs. In differential photometry, we compare the amounts of light from the target star (variable star) and comparison stars.

The different steps to measure the magnitude of star from a CCD image are :

- detection of target and comparison stars on the CCD image
- calculation of the average pixel values in a circular apertures around the star and in annulus (to measure the sky background)
- calculate the magnitude of the target star from
 - the aperture measurements
 - catalog magnitudes of comparison stars

With common photometry programs, the user has to select manually the target and comparison stars (on the first image of a series) enter the catalog magnitudes of comparison stars. He has to repeat these operations each time a new photometry is launched. In LesvePhotometry, following data are provided once by the user and stored in a database:

target star

Programas-Software

- ◎ Software Programs for Variable Star Observers
- ◎ DPP Observatory
- ◎ <http://www.dppobservatory.net/AstroPrograms/Software4VSObservers.php>
- ◎ LesvePhotometry - Download page
- ◎ <http://www.dppobservatory.net/AstroPrograms/LesvePhotometryDownloadPage.php>

← → ↶ ↷ ↻ 🔍 Foto-astrometria > LesvePhotometry Buscar en LesvePhotometry

- Descargas
- Desktop
- Documentos
- Música
- Objetos 3D
- Pictures
- Videos
- T110657200D (C:)
- NESTOR (E:)
- NHS (G:)
- Bibliotecas
 - Documentos
 - Imágenes
 - Música
 - Videos
- NESTOR (E:)
 - Equipos-Programas
 - Libreria
 - System Volume Information
 - Tutorials
- NHS (G:)
- Red

FitsUpdater

LesvePhotometry

PeriodicVSOplanner

ReinschSpline

SunSetRise

Periodic VSO Planner

Periodic Variable Star Observation Planner

Path and File Name for "Planner" Excel file

Path and File Name for "Horizon" Excel file

Planning start on

Planning for ... days Time before and after max hours

Minimum Star Altitude (Rise/Set) deg

Conditions to include Time of Maxima (ToM) in report

Minimum Star altitude deg

Max Sun altitude deg

Version 1.2.0.4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	Star	UT Night of ...	ToM JD	ToM Date(UT)	ToM Time(UT)	Star Altitude	Star Azimuth	Star rise UT	Star transit UT	Star set UT	Sun Altitude	Moon Altitude	Moon Dist	Moon Phase	Obs start JD	Obs stop JD	Sta
73	V0406 Vel	Wednesday	2458829,82600	2019-12-12	07:49	70,8	184,4	03:11	07:41	12:11	-9,0	10,7	89,8	1,0	2458829,78433	2458829,86767	6
74	PT Vel	Wednesday	2458829,83085	2019-12-12	07:56	79,3	192,7	03:26	07:45	12:03	-7,9	9,6	84,7	1,0	2458829,78919	2458829,87252	7
75	V0428 Vel	Wednesday	2458829,83160	2019-12-12	07:57	70,2	149,3	04:32	09:02	13:32	-7,7	9,4	98,8	1,0	2458829,78993	2458829,87327	6
76	ET Psc	Thursday	2458830,49776	2019-12-12	23:56	44,4	349,5	23:04	23:26	NaN:NaN	-10,3	3,1	73,6	1,0	2458830,45609	2458830,53943	4
77	KW Eri	Thursday	2458830,52522	2019-12-13	00:36	73,0	152,4	21:05	01:24	05:54	-16,5	9,5	83,5	1,0	2458830,48356	2458830,56689	6
78	CW Scl	Thursday	2458830,53270	2019-12-13	00:47	55,2	258,3	17:50	21:57	02:05	-18,1	11,2	110,1	1,0	2458830,49103	2458830,57437	6
79	V0362 Pup	Thursday	2458830,55721	2019-12-13	01:22	40,2	119,9	01:21	05:40	09:59	-22,7	16,4	67,3	1,0	2458830,51554	2458830,59888	2
80	CT Scl	Thursday	2458830,55918	2019-12-13	01:25	67,0	283,9	19:55	23:45	03:36	-23,1	16,8	86,0	1,0	2458830,51751	2458830,60084	7
81	RT CMa	Thursday	2458830,58624	2019-12-13	02:04	51,0	74,9	01:09	04:43	08:17	-27,3	21,8	40,8	1,0	2458830,54457	2458830,62791	3
82	CE Scl	Thursday	2458830,59301	2019-12-13	02:13	51,2	250,6	18:54	23:01	03:09	-28,2	23,0	99,9	1,0	2458830,55135	2458830,63468	6
83	BD Dor	Thursday	2458830,61189	2019-12-13	02:41	65,2	171,9	22:38	03:08	07:38	-30,3	25,9	84,2	1,0	2458830,57023	2458830,65356	6
84	AU For	Thursday	2458830,62864	2019-12-13	03:05	61,0	260,3	20:43	00:45	04:52	-31,6	28,0	80,4	1,0	2458830,58697	2458830,67031	7
85	TW Cet	Thursday	2458830,63162	2019-12-13	03:09	50,1	278,3	20:45	00:19	04:04	-31,7	28,4	77,8	1,0	2458830,58995	2458830,67328	6
86	YZ Vol	Thursday	2458830,65593	2019-12-13	03:44	50,7	166,2	01:05	05:35	10:05	-32,5	30,7	94,5	1,0	2458830,61426	2458830,69760	4
87	V0605 Pup	Thursday	2458830,65700	2019-12-13	03:46	63,0	124,0	01:38	05:56	10:15	-32,5	30,8	70,7	1,0	2458830,61533	2458830,69867	5
88	R CMa	Thursday	2458830,66821	2019-12-13	04:02	60,1	59,7	02:27	05:49	09:23	-32,4	31,5	42,7	1,0	2458830,62655	2458830,70988	4
89	V0592 Car	Thursday	2458830,67080	2019-12-13	04:05	43,0	153,9	03:33	08:03	12:33	-32,4	31,6	98,3	1,0	2458830,62913	2458830,71247	3
90	V0675 Pup	Thursday	2458830,67097	2019-12-13	04:06	62,0	93,8	02:24	06:20	10:28	-32,4	31,6	59,5	1,0	2458830,62930	2458830,71264	4
91	V1249 Tau	Thursday	2458830,68187	2019-12-13	04:21	44,9	332,8	01:59	03:06	05:10	-32,0	32,0	28,9	1,0	2458830,64020	2458830,72353	4
92	V0397 CMa	Thursday	2458830,68289	2019-12-13	04:23	65,5	52,4	02:11	05:45	09:19	-31,9	32,0	43,6	1,0	2458830,64122	2458830,72456	5
93	V0340 Vel	Thursday	2458830,70267	2019-12-13	04:51	45,1	130,6	04:18	08:48	13:18	-30,6	32,2	91,4	1,0	2458830,66100	2458830,74434	3
94	V0452 Vel	Thursday	2458830,70691	2019-12-13	04:57	64,0	112,2	03:00	07:07	11:26	-30,2	32,1	71,4	1,0	2458830,66525	2458830,74858	5
95	KS Eri	Thursday	2458830,70749	2019-12-13	04:58	58,0	319,9	01:01	03:39	06:50	-30,2	32,1	35,8	1,0	2458830,66582	2458830,74916	6
96	V0907 Mon	Thursday	2458830,72566	2019-12-13	05:24	48,2	353,7	04:01	05:09	07:01	-28,2	31,5	17,0	1,0	2458830,68399	2458830,76733	4
97	V0440 Vel	Thursday	2458830,74529	2019-12-13	05:53	49,0	123,4	05:06	09:24	13:54	-25,4	30,1	93,5	1,0	2458830,70363	2458830,78696	3
98	V0833 Car	Thursday	2458830,75389	2019-12-13	06:05	46,8	140,6	05:17	09:47	14:17	-24,0	29,3	102,0	1,0	2458830,71222	2458830,79556	3
99	AE Vol	Thursday	2458830,75906	2019-12-13	06:13	58,0	167,8	02:45	07:15	11:45	-23,1	28,7	92,9	1,0	2458830,71739	2458830,80073	5
00	V0625 Pup	Thursday	2458830,76131	2019-12-13	06:16	82,3	159,5	02:13	06:32	10:50	-22,7	28,5	69,2	1,0	2458830,71965	2458830,80298	7
01	DQ Pyx	Thursday	2458830,76748	2019-12-13	06:25	78,1	103,3	03:16	07:24	11:31	-21,6	27,7	70,0	1,0	2458830,72581	2458830,80915	6

Pick a star

Support the AAVSO

Planning AAVSO's future

Become a Member

Donate Today

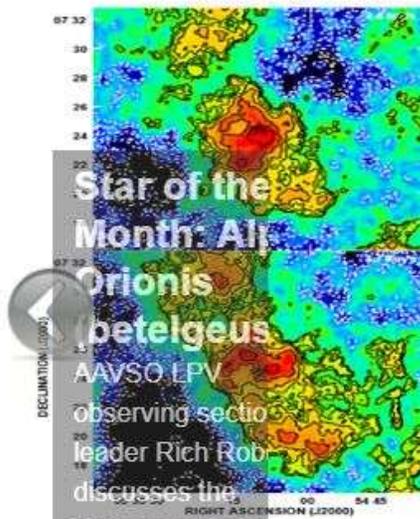


Figure 7. Contour plot of the Orion region showing emission peaks. The plot is labeled "Star of the Month: All Orionis" and "Betelgeuse". The axes are "DECLINATION (J2000)" and "RIGHT ASCENSION (J2000)". A central star is marked with a white circle.

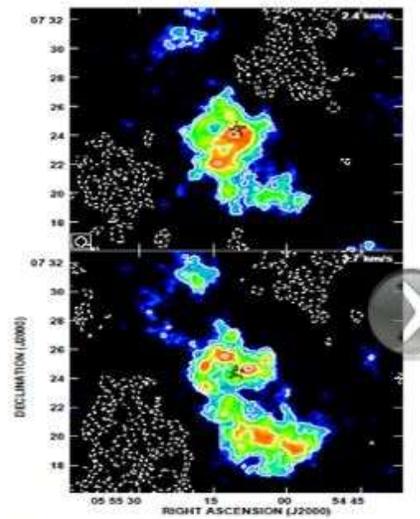


Figure 8. Same as Fig. 7, but restricted to baselines larger than 0.2 kA. The contour levels here are (-8, -5.6, -4, 4, 5.6, 8, 11.2) x 3.9 mJy/beam.

5. INTERPRETATION



Pick a Star

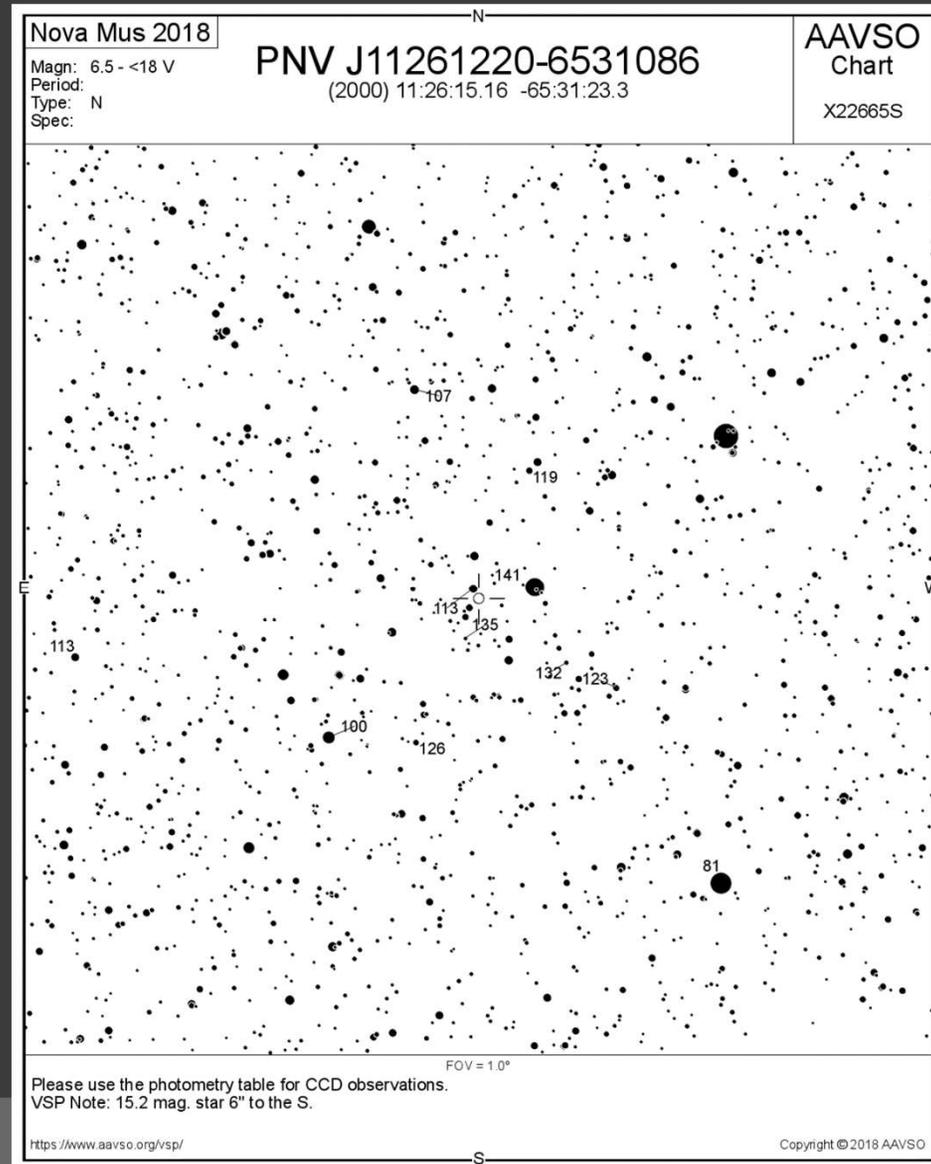
Nova Mus 2018

Type star name then click action.

- » Plot a light curve
- » Check recent observations
- » Create a finder chart
- » Search VSX

[Learn More](#)

Variable Star Plotter



Field Photometry

Field photometry for PNV J11261220-6531086 from the AAVSO Variable Star Database

Data includes all comparison stars within 0.5° of RA: 11:26:15.16 [171.56316667°] & Dec: -65:31:23.3 [-65.52313889°]

Report this sequence as **X22665W** in the chart field of your observation report.

AUID	RA	Dec	Label	V	B-V	Comments
000-BMN-395	11:23:39.14 [170.91308594°]	-65:50:03.7 [-65.83435822°]	81	8.149 (0.040) 37	0.114 (0.079)	BINO_COMP
000-BMN-400	11:27:51.09 [171.96287537°]	-65:40:31.6 [-65.67544556°]	100	10.006 (0.032) 37	0.490 (0.074)	
000-BMN-708	11:26:55.51 [171.73129272°]	-65:17:35.1 [-65.29308319°]	107	10.747 (0.019) 29	1.061 (0.078)	
000-BJK-553	11:31:05.74 [172.77391052°]	-65:09:14.8 [-65.15411377°]	110	11.030 (—) ¹⁹	0.680 (—)	VSP_VOLUME_07.TXT NOMAD ID:0248-0232350 11.682T 11.005T 10.560B 0.25
000-BMN-709	11:26:18.73 [171.57804871°]	-65:30:42.4 [-65.51177979°]	113	11.264 (0.019) 29	0.752 (0.043)	
000-BKB-381	11:30:32.19 [172.63412476°]	-65:35:01.3 [-65.58369446°]	113	11.340 (0.006) 29	0.636 (0.012)	

Proceso de SeqPlot

- ⦿ Cuando no tenemos un ploteo de la zona a capturar podemos usar SeqPlot
- ⦿ Provisto por AAVSO, nos permite consultar diversos catálogos al mismo tiempo
- ⦿ Luego presenta una carta (chart) con información de fotometría de las estrellas en ese campo

SeqPlot

Pantalla inicial

Sequence Plotter 4.0 - Request Star

Choose a catalog or catalogs (the "source number" is given in parentheses):

<input checked="" type="checkbox"/> APASS (29)	<input checked="" type="checkbox"/> OC61 (32)
<input checked="" type="checkbox"/> BSM - North (28)	<input checked="" type="checkbox"/> SRO35 (18)
<input checked="" type="checkbox"/> BSM - South (37)	<input checked="" type="checkbox"/> SRO50 (33)
<input checked="" type="checkbox"/> COKER30 (44)	<input checked="" type="checkbox"/> TMO61 (42)
<input checked="" type="checkbox"/> GCPD (20)	<input checked="" type="checkbox"/> Tycho-2 (1)
<input checked="" type="checkbox"/> NOFS (10)	<input checked="" type="checkbox"/> W28 (30)
<input checked="" type="checkbox"/> K35 (34)	<input checked="" type="checkbox"/> W30 (31)

Star Name:

RA:	<input type="text"/>	HH MM SS.SS or degs.
Dec:	<input type="text"/>	(-)DD MM SS.SS or degs.
Field Size:	<input type="text" value="60"/>	arcminutes
Limiting Mag:	<input type="text" value="20.0"/>	

SeqPlot: Búsqueda del objetivo

Sequence Plotter 4.0 - Request Star

Choose a catalog or catalogs (the "source number" is given in parentheses):

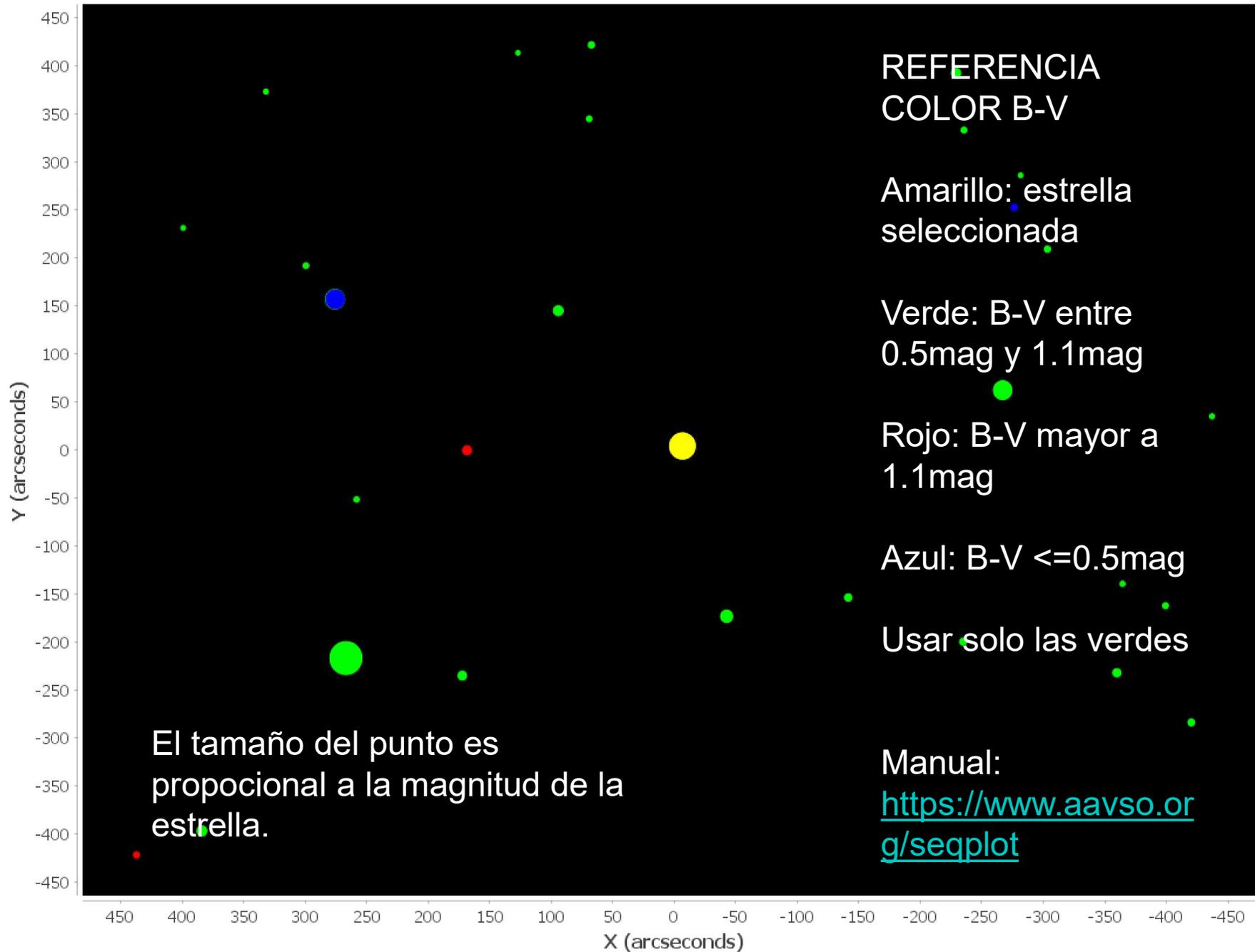
<input checked="" type="checkbox"/> APASS (29)	<input checked="" type="checkbox"/> OC61 (32)
<input checked="" type="checkbox"/> BSM - North (28)	<input checked="" type="checkbox"/> SRO35 (18)
<input checked="" type="checkbox"/> BSM - South (37)	<input checked="" type="checkbox"/> SRO50 (33)
<input checked="" type="checkbox"/> COKER30 (44)	<input checked="" type="checkbox"/> TM061 (42)
<input checked="" type="checkbox"/> GCPD (20)	<input checked="" type="checkbox"/> Tycho-2 (1)
<input checked="" type="checkbox"/> NOFS (10)	<input checked="" type="checkbox"/> W28 (30)
<input checked="" type="checkbox"/> K35 (34)	<input checked="" type="checkbox"/> W30 (31)

Star Name:

RA:	<input type="text" value="26.73542"/>	HH MM SS.SS or degs.
Dec:	<input type="text" value="-9.75272"/>	(-)DD MM SS.SS or degs.
Field Size:	<input type="text" value="60"/>	arcminutes
Limiting Mag:	<input type="text" value="20.0"/>	

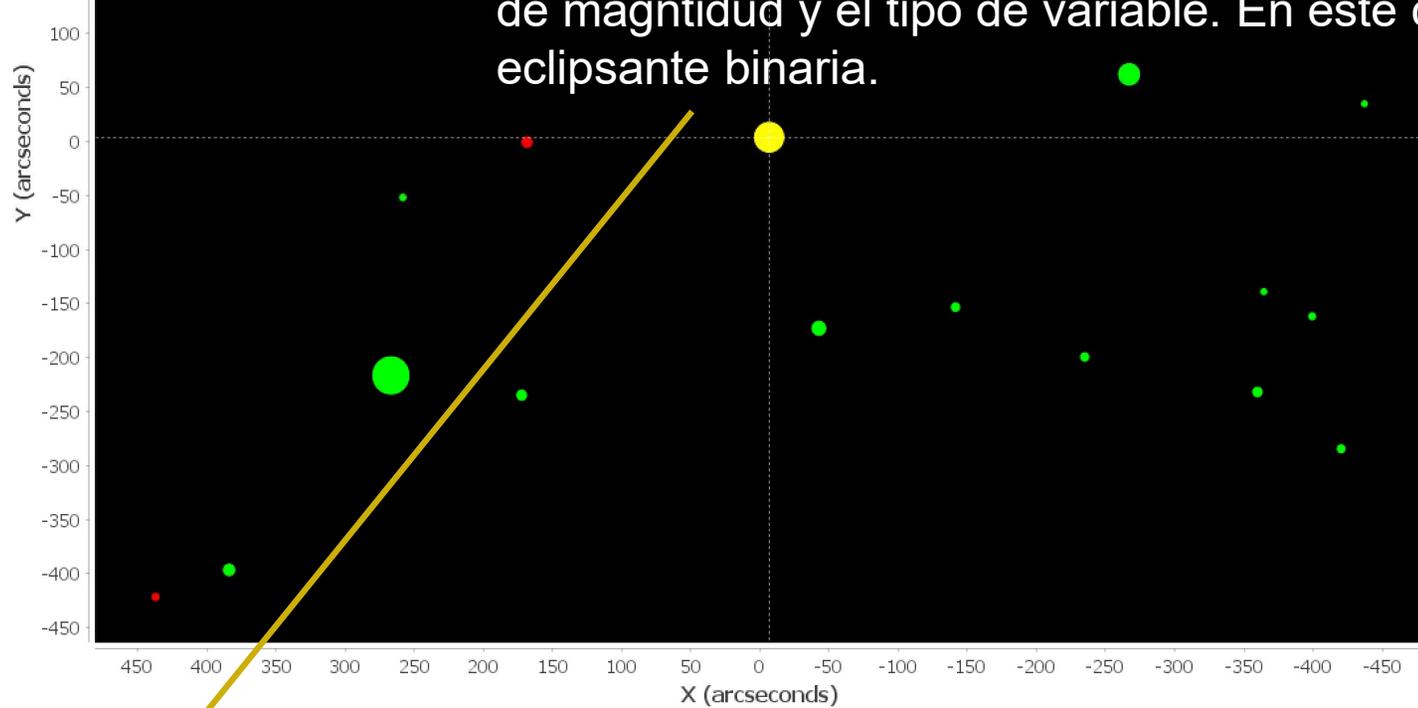
TT Cet RA: 26.73542 DEC: -9.75272 (15 arcminutes)

Data from the Calibration Database - limiting magnitude 17.0



Referencia Estrella variable

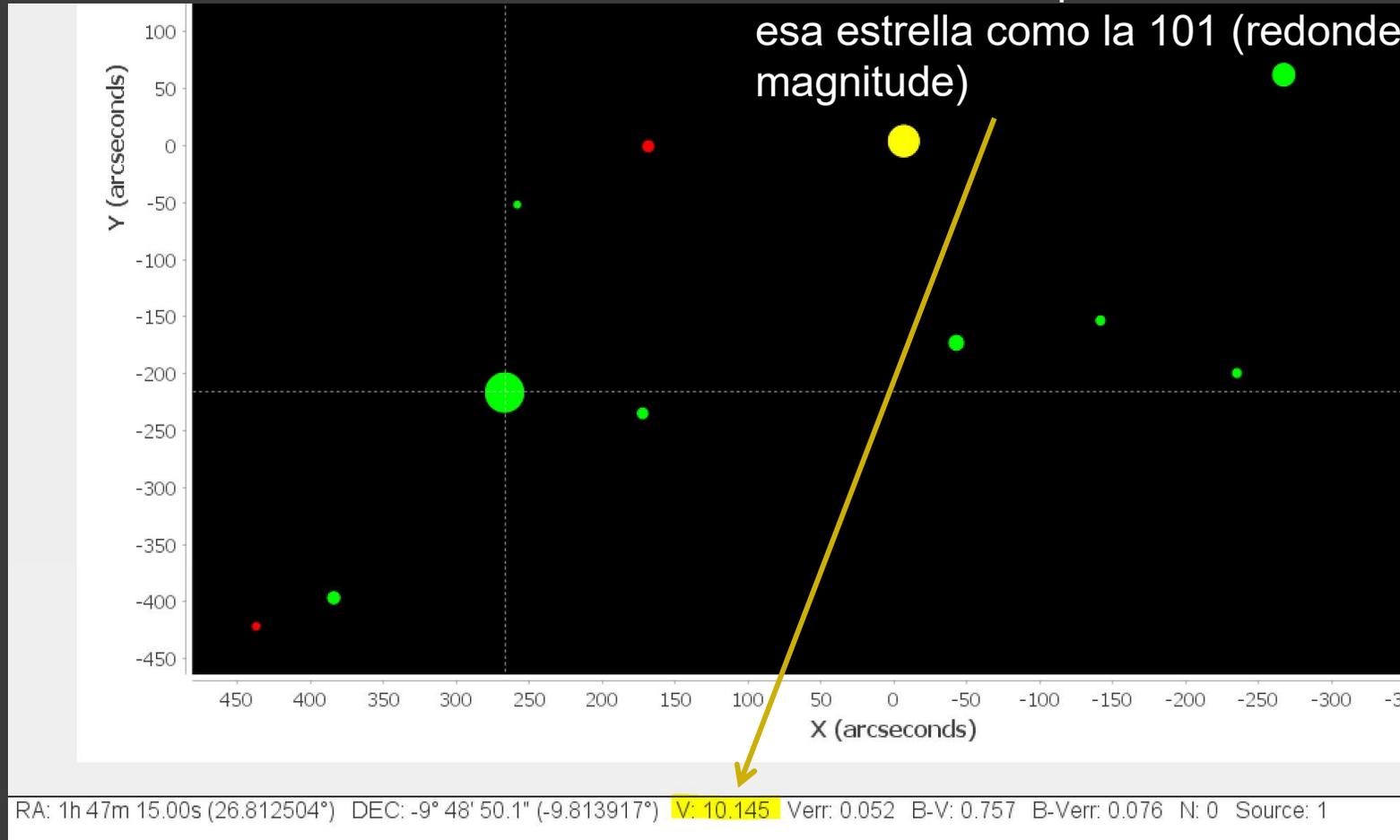
Cuando se selecciona la Estrella variable (amarilla) la información al pie indica valores máximos y mínimos de magnitud y el tipo de variable. En este caso una eclipsante binaria.



Variable: TT Cet Type: EW/KE: Max: 10.8 V Min: 11.32 V RA: 1h 46m 56.50s (26.735437°) DEC: -9° 45' 9.8" (-9.752715°) V: 10.907 B-V: 0.451 Source: 1

Información

Al hacer click sobre una Estrella verde se informan al pie los distintos valores para cada filtro. En este caso tomamos el V en 10.145. En el reporte nos referiremos a esa estrella como la 101 (redondeo de su magnitud)



Aladin-Simbad

Aladin v8.0

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location 07:15:46.09 -59:20:55.6

Frame ICRS

DSS SDSS 2MASS WISE GALEX PLANCK AKARI XMM Fermi Gaia Simbad NED +

DSS colored

Basic controls:
-Type any object name or coordinates for moving on it.

epoch -
size -
opac. -
zoom -

Frame: ICRS

19.11' x 7.785'

	MAIN ID	OTYPE	RA	DEC	COO ...	COO ...	C...	PMRA	PMDEC	B	V	R	J	H	K	SP T...	GA...	GA...	G...	BI...
<input type="checkbox"/>	V* V604 Car	EB*W...	07 14 50.63...	-59 16 04.1...	0.019	0.023	90	28.55	-19.86	9.893	9.311		8.301	8.12	8.018	F7IV/V				10
<input type="checkbox"/>	V* V604 Car	EB*W...	07 14 50.63...	-59 16 04.1...	0.019	0.023	90	28.55	-19.86	9.893	9.311		8.301	8.12	8.018	F7IV/V				10
<input type="checkbox"/>	V* V604 Car	EB*W...	07 14 50.63...	-59 16 04.1...	0.019	0.023	90	28.55	-19.86	9.893	9.311		8.301	8.12	8.018	F7IV/V				10

Filtros Johnson-Cousins

Banda central efectiva en nm

- U: 365.6nm (“ultravioleta”)
- B: 435.3nm (“azul”)
- V: 547.7nm (“visual”)
- R: 634.9nm (“rojo”)
- I: 879.7nm (“infrarojo”)

Filtros Sloan

Banda central efectiva en nm

- ⦿ u': 358.0nm (ultravioleta)
- ⦿ g': 475.4nm (verde)
- ⦿ r': 620.4nm (rojo)
- ⦿ i': 769.8nm (infrarojo)
- ⦿ z': 966.5nm (infrarojo)

https://en.wikipedia.org/wiki/Photometric_system

Filter Letter	Effective Wavelength Midpoint λ_{eff} for Standard Filter ^[2]	Full Width Half Maximum ^[2] (Bandwidth $\Delta\lambda$)	Variant(s)	Description
Ultraviolet				
U	365 nm	66 nm	u, u', u*	"U" stands for ultraviolet.
Visible				
B	445 nm	94 nm	b	"B" stands for blue.
V	551 nm	88 nm	v, v'	"V" stands for visual.
G ^[3]	464 nm	128 nm	g'	"G" stands for green.
R	658 nm	138 nm	r, r', R', R _c , R _e , R _j	"R" stands for red.
Near-Infrared				
I	806 nm	149 nm	i, i', I _c , I _e , I _j	"I" stands for infrared.
Z	900 nm ^[4]		z, z'	
Y	1020 nm	120 nm	y	
J	1220 nm	213 nm	J', J _s	
H	1630 nm	307 nm		
K	2190 nm	390 nm	K Continuum, K', K _s , K _{long} , K ⁸ , nbK	
L	3450 nm	472 nm	L', nbL'	
Mid-Infrared				
M	4750 nm	460 nm	M', nbM	
N	10500 nm	2500 nm		
Q	21000 nm ^[5]	5800 nm ^[5]	Q'	

Fotometría diferencial

Una vez obtenidos los datos necesarios (nombre de la estrella y selección de Estrella de referencia y de control) se debe utilizar un software de fotometría diferencial tales como:

- Maxim DL (\$600)
- Iris (gratis)
- Lesve Photometry (gratis)
- FotoDif (gratis)

Estos programas generan reportes fotométricos respetando algún standard, en nuestro caso el de AAVSO:

<https://www.aavso.org/aavso-extended-file-format>

AAVSO Extended File Format

Version: 1.2

Release Date: July 27, 2011 (latest update: June 13, 2017)

This is one of two plain text (ASCII) formats that the AAVSO accepts for uploading a file of variable star observations. Please use the [WebObs File Upload page](#) to upload your file in the AAVSO Extended Format. The other format, which is intended for visual observers, is called the [AAVSO Visual File Format](#).

Visit the [Software that exports to AAVSO format](#) page to help format your observations.

The extended format has two components: parameters and data. Each component is discussed in detail below.

The format is not case sensitive.

Parameters

The Parameters are specified at the top of the file and are used to describe the data that follows. Parameters must begin with a pound sign (#) at the start of the line. There are six specific parameters that we require to exist at the top of the file. Personal comments may also be added as long as they follow a pound sign (#). These comments will be ignored by the software and not loaded into the database. However, they will be retained when the

Webobs Menu

- [Main WebObs Page](#)
- [Submit an Observation](#)
- [Upload a File](#)
- [Search for Observations](#)

Tipo: **estrella**
 Magnitud: **10.70** (reducida a **10.86** por **1.22** Masas de aire)
 índice de color (B-V): **0.73**
 HIP 16397
 RA/Dec (J2000.0): 3h28m36.86s/-66°55'12.4"
 RA/Dec (en fecha): 3h28m48.90s/-66°51'04.8"
 HA/Dec: 22h28m41.35s/-66°50'29.8" (aparente)
 Az./Alt.: +164°36'12.0"/+54°55'23.9" (aparente)
 Gal. long./lat.: -77°06'48.8"/-43°35'23.9"
 Supergal. long./lat.: -133°00'11.4"/-28°54'46.7"
 Ecl. long./lat. (J2000.0): +341°11'24.6"/-75°16'49.4"
 Ecl.-long./lat. (en fecha): +341°28'58.8"/-75°16'51.6"
 Oblicuidad eclíptica (en fecha): +23°26'10.2"
 Luz mínima siguiente: 1h57m27.3s
 Hora Aparente Sideral: 1h57m26.2s
 Tránsito: 23h38m
 Circumpolar (nunca se oculta)
 Constelación IAU: Ret

AR/Dec (J2000.0): 3h32m51.08s/-66°22'31.28s



Fecha y hora		HIP 15820	Día Juliano		
2019	- 12 - 2		22	:	6 : 34

HIP 16368

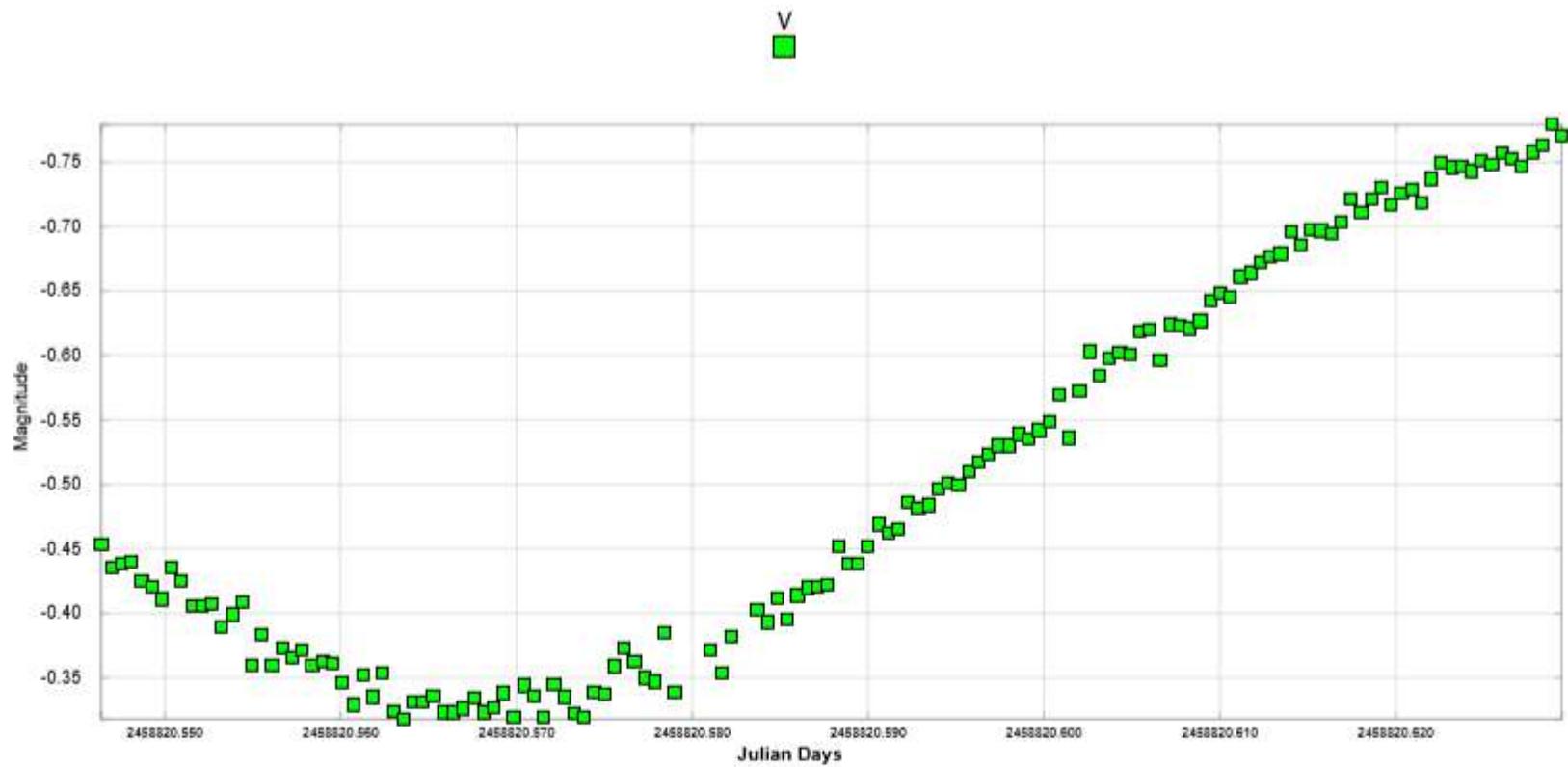
HIP 16527

HIP 16903

Tierra, Observatorio Antares, 20 m

FOV 0.97° 7.48 FPS 2019-12-02 22:08:34 UTC-03:00

HIP 16002



AAVSO Light Curve: **VZ Ret** 2019/12/03 to 2019/12/03

WebObs Search Results

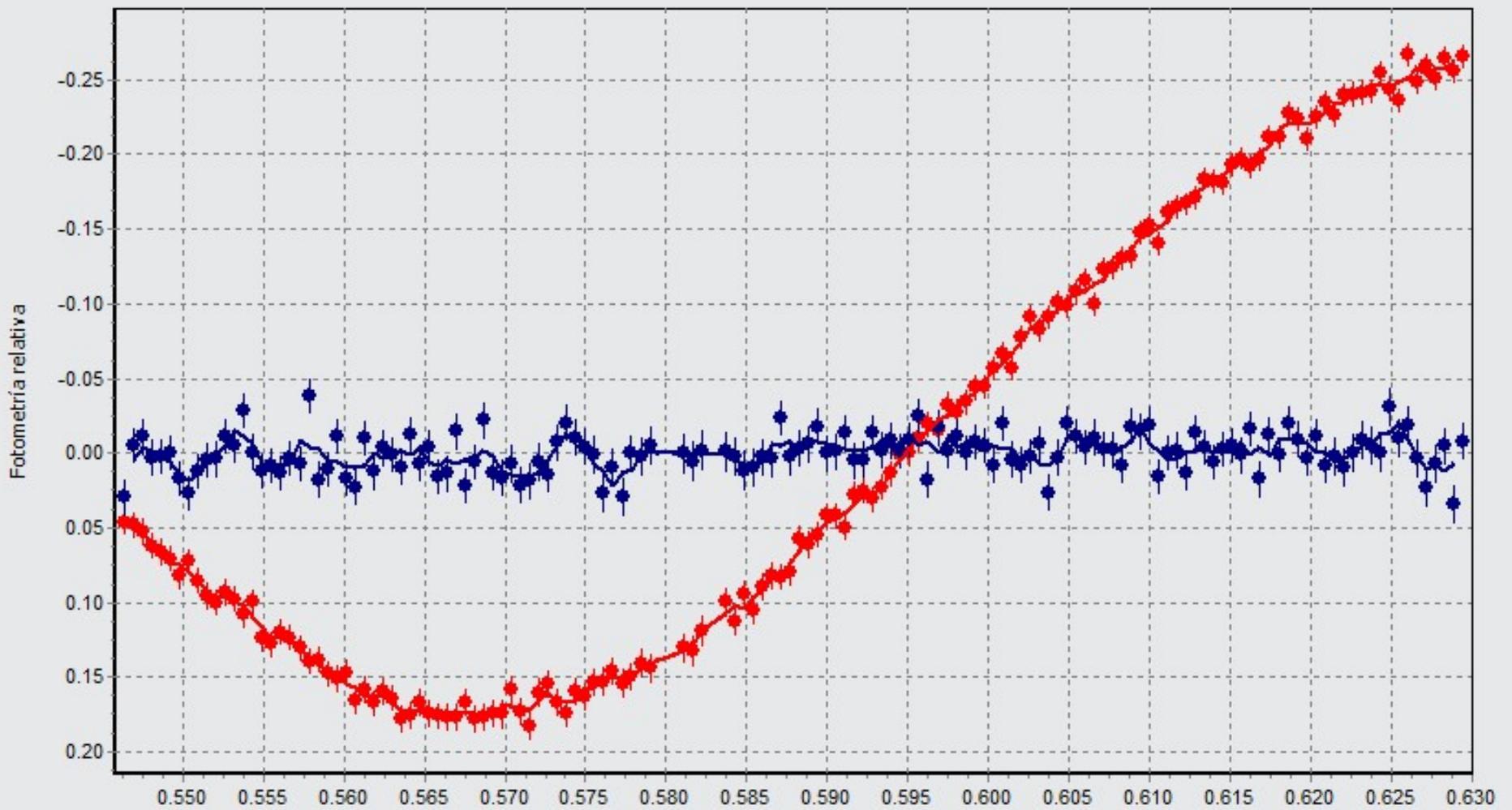
Showing **142** observations for **VZ Ret** from **1** observer

Plot a Chart Generate a Light Curve Search VSX

<input type="checkbox"/>		Star	JD	Calendar Date	Magnitude	Error	Filter	Observer	Collapse All Expand All
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.629473	2019 Dec. 03.12947	-0.771	0.008	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.628906	2019 Dec. 03.12891	-0.779	0.008	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.628328	2019 Dec. 03.12833	-0.763	0.008	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.62776	2019 Dec. 03.12776	-0.758	0.009	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.627193	2019 Dec. 03.12719	-0.747	0.008	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.626615	2019 Dec. 03.12661	-0.753	0.009	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.626047	2019 Dec. 03.12605	-0.757	0.009	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.625469	2019 Dec. 03.12547	-0.748	0.009	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.624902	2019 Dec. 03.12490	-0.751	0.009	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.624323	2019 Dec. 03.12432	-0.743	0.009	V	SNEA	Details...
<input type="checkbox"/>	Edit Delete	VZ RET	2458820.623756	2019 Dec. 03.12376	-0.747	0.009	V	SNEA	Details...

VZ RET

CONTROL



Fecha Juliana Geocéntrica: 2458820 +

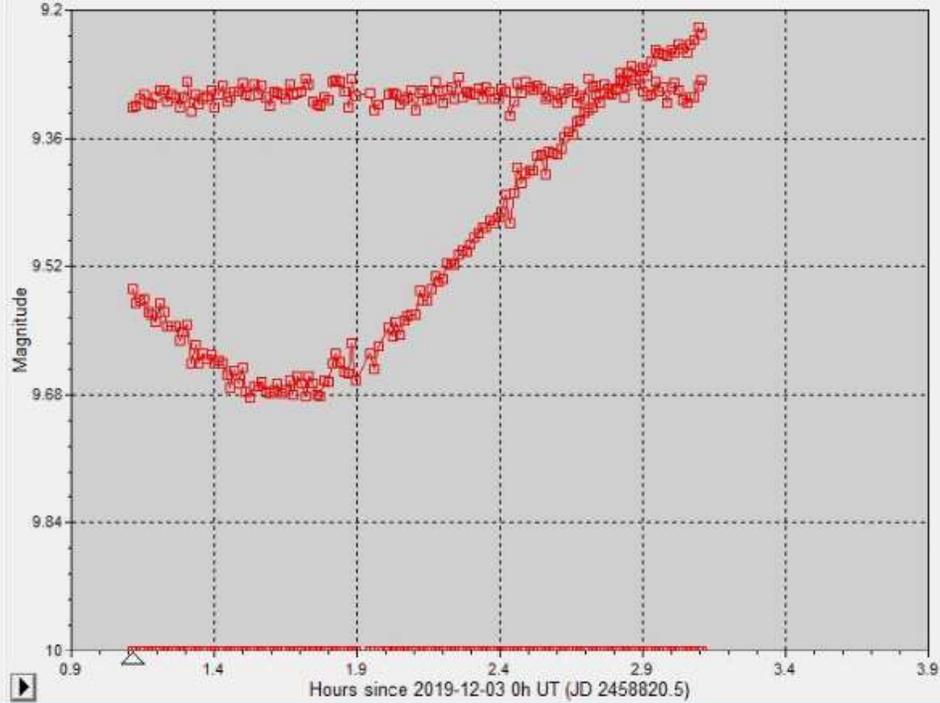
Observador: Nestor Suarez-Observatorio Antares

FotoDif 3.93

Photometry

- VZ Ret
- VZ Ret-0001VZRet.fit
- VZ Ret-0002VZRet.fit
- VZ Ret-0003VZRet.fit
- VZ Ret-0004VZRet.fit
- VZ Ret-0005VZRet.fit
- VZ Ret-0006VZRet.fit
- VZ Ret-0007VZRet.fit
- VZ Ret-0008VZRet.fit
- VZ Ret-0009VZRet.fit
- VZ Ret-0010VZRet.fit
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- VZ Ret-0012VZRet.fit
- VZ Ret-0013VZRet.fit
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- VZ Ret-0026VZRet.fit
- VZ Ret-0027VZRet.fit
- VZ Ret-0028VZRet.fit
- VZ Ret-0029VZRet.fit
- VZ Ret-0030VZRet.fit
- VZ Ret-0031VZRet.fit

Select | Quality | Match | Identify | Graph |



Information

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

Mode: Aperture | Display in Arcsec | Calibrate >>

