



Astronomy and Space Physics Department
Faculty of Physics
Taras Shevchenko National University of Kyiv

New events in the Gaia alerts data

A. Simon,

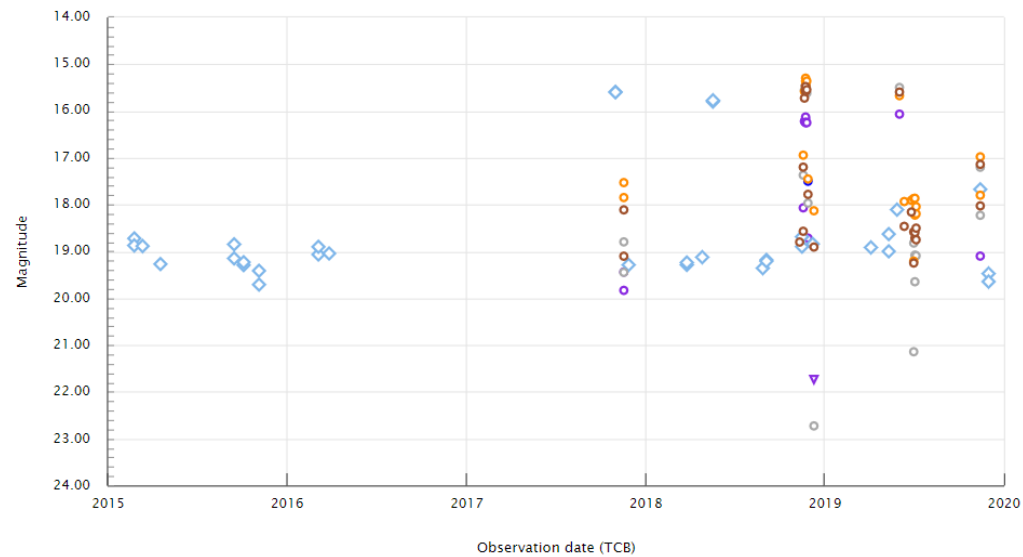
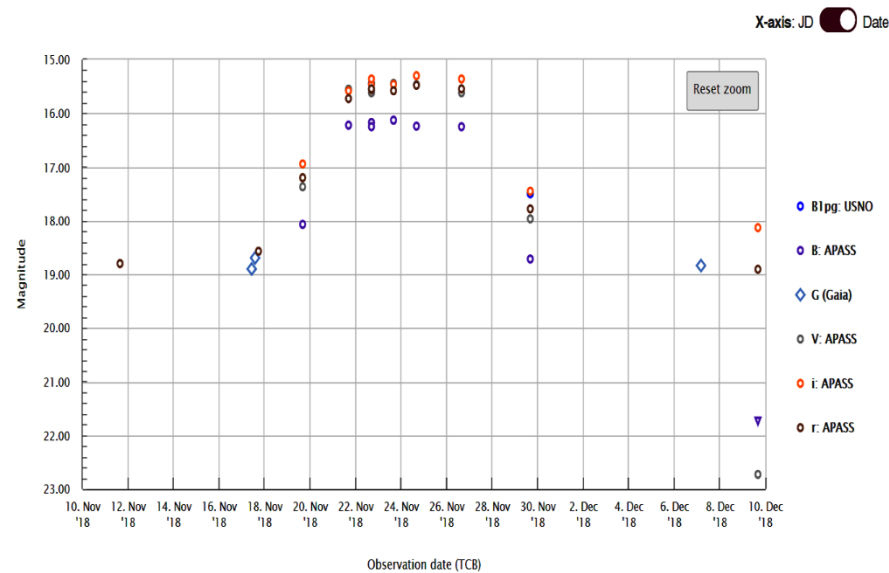
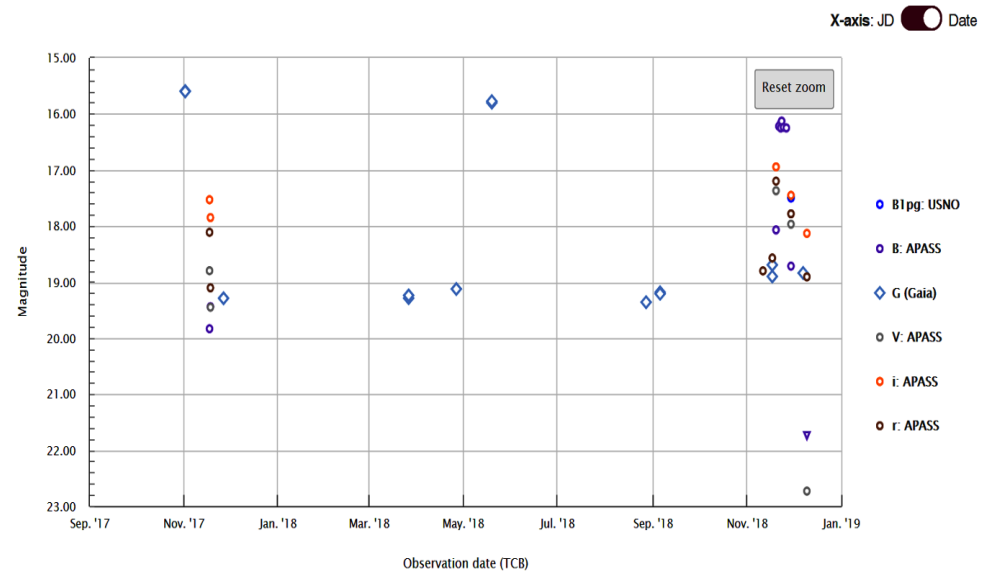
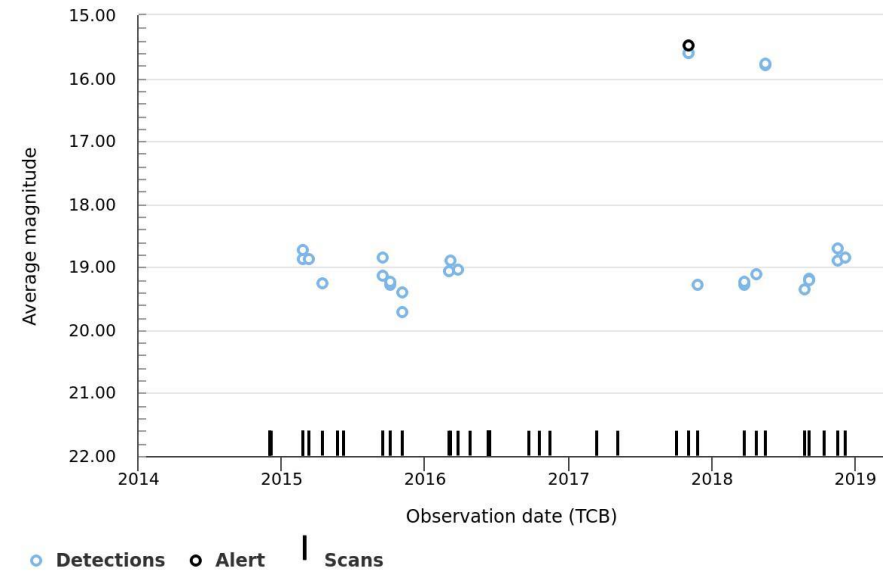
V. Reshetnyk, Ya. Pichkurova, V. Godunova, I. Izviekova,
W. Ogloza, E. Pavlenko, Yu. Babina, O. Baransky, V. Vasylenko,
Ya. Markus, A. Schurova

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**10th OPTICON
Gaia Science Alerts
Workshop**

**INAF Astrophysical Observatory of Catania,
Sicily, 18-20 December 2019**

Case of Gaia17cuh

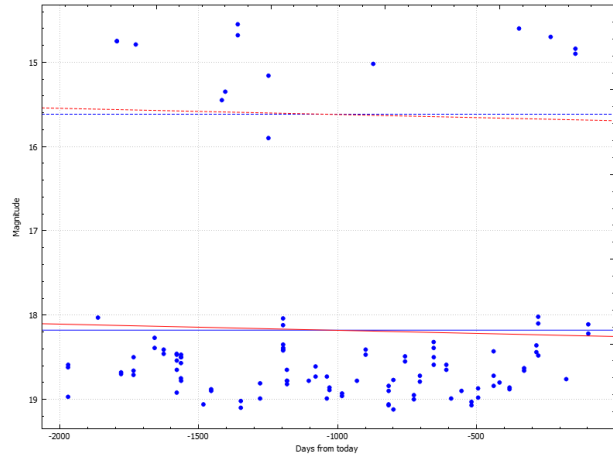


Our alerting system downloaded all the data for objects with the “unknown” status every 12 hours and compare new data with the previous one. As a result we have:

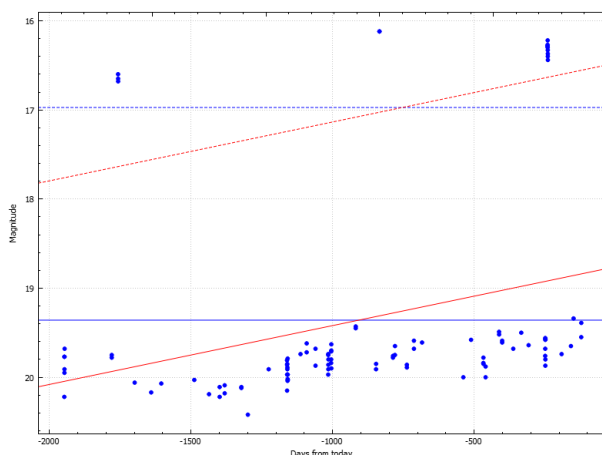
- table with main parameters of the objects and possibility to analyze them;
- e-mail with potentialy new events.

Idea: Andrii Simon.
Developer: Volodymyr Reshetnyk.

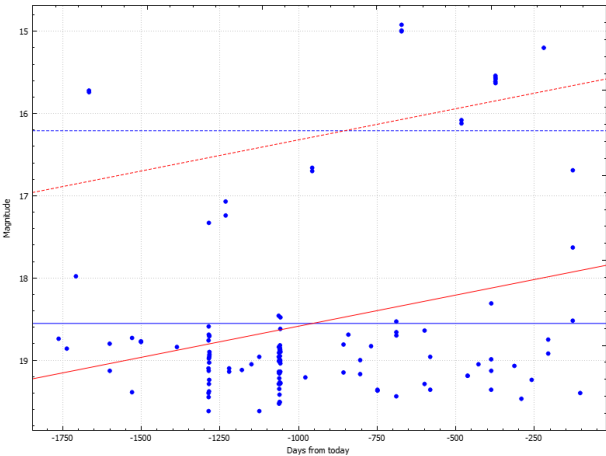
gaiaAlerts_v2															
	Alert	Class	N	N*	Min	Delta	Mean	Stddev	N>2sigm	N last>2sigm	N line>2sigm	Stddev*	Multiply		
1	Gaia16adj	unknown	146	107	14,55	4,57	18,179	1,2807	13		13		76,09		
2	Gaia17cfd	unknown	141	105	16,12	4,3	19,3591	1,193	14		14		71,82		
3	Gaia15afz	unknown	162	125	14,92	4,7	18,5534	1,1721	13		11		71,616		
4	Gaia19dkg	unknown	124	89	14,85	5,24	19,2144	1,2975	9		9		61,192		
5	Gaia16aeh	unknown	108	91	15,11	4,42	18,5537	1,2565	11		11		61,092		
6	Gaia17bnx	unknown	94	63	16,02	4,82	19,5681	1,4047	9		9		60,939		
7	Gaia18dvy	unknown	100	78	14,63	4,74	18,0538	1,5928	8				60,4		
8	Gaia16ame	unknown	125	118	16,6	3,46	18,8775	1,0084	17		17		59,315		
9	Gaia16ald	unknown	108	39	15,93	5,07	19,859	1,6461	6		6		50,077		
10	Gaia18dev	unknown	159	135	15,08	4,13	18,2366	0,9214	13		14		49,471		
11	Gaia19ajj	unknown	100	73	13,94	5,48	17,2048	1,4248	6		2		46,847		
12	Gaia19cpj	unknown	82	49	14,68	5,97	19,5084	1,5062	5		5		44,963		
13	Gaia19cvt	unknown	111	80	15,9	4,57	16,8347	1,2217	8		3		44,665		
14	Gaia17bqw	unknown	105	90	14,46	4,79	18,4151	1,1382	8		8		43,616		
15	Gaia18ddv	unknown	149	47	15,62	4,88	19,2911	1,4591	6		6		42,723		
16	Gaia17bxy	unknown	67	56	14,34	5,28	17,9077	1,6126	5		5		42,575		
17	Gaia18bzb	unknown	144	118	16,08	5,69	18,658	0,8207	9		9		42,032		
18	Gaia16akq	unknown	132	75	16,01	4,49	19,3473	1,1431	8		8		41,06		
19	Gaia18ajs	unknown	75	56	14,64	4,73	16,093	1,238	7		5		40,99		
20	Gaia18dju	unknown	129	62	16,58	3,93	19,569	1,1384	9		9		40,268		
21	Gaia19blu	unknown	110	39	14,75	5,96	19,6992	1,6825	4		4		40,112		
22	Gaia18dzq	unknown	84	71	14,38	4,82	18,0161	1,1846	7		7		39,97		



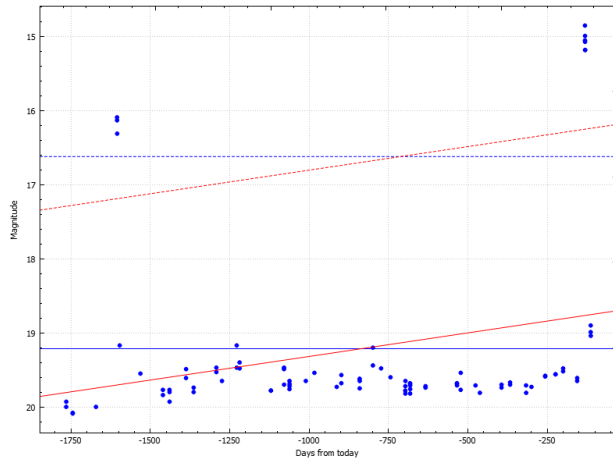
Gaia19dkg.csv, Coord=297.52812,29.39596, Class=unknown



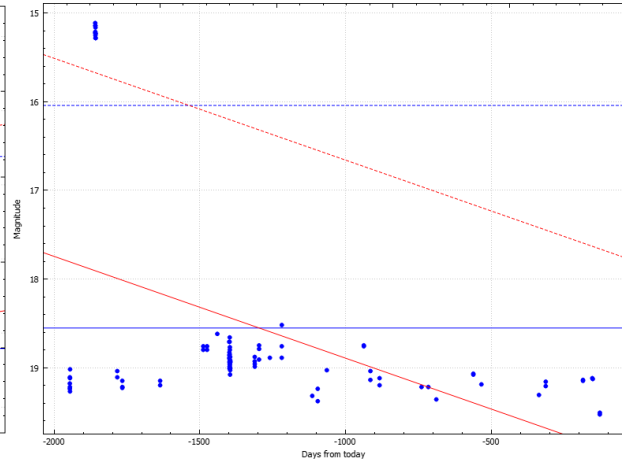
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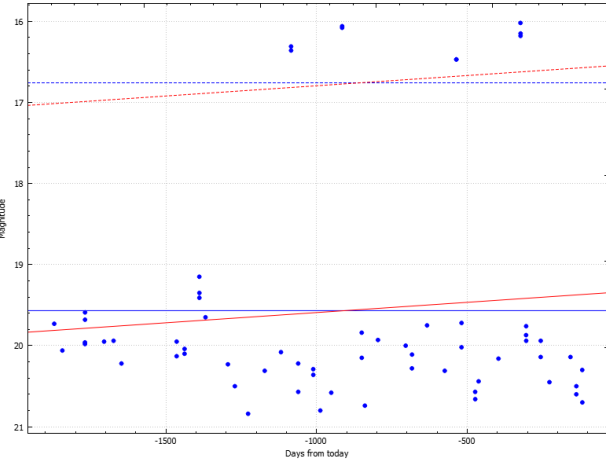
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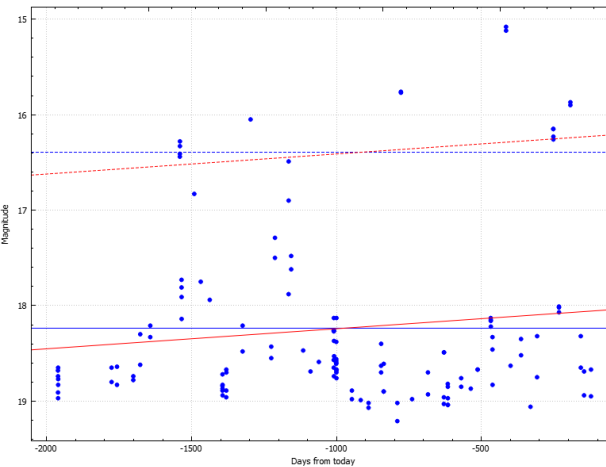
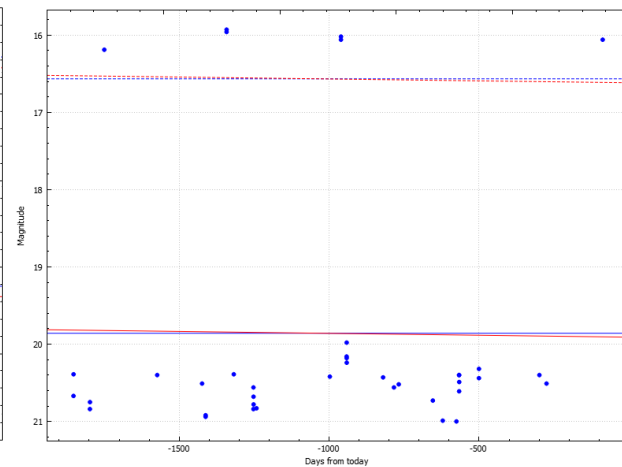
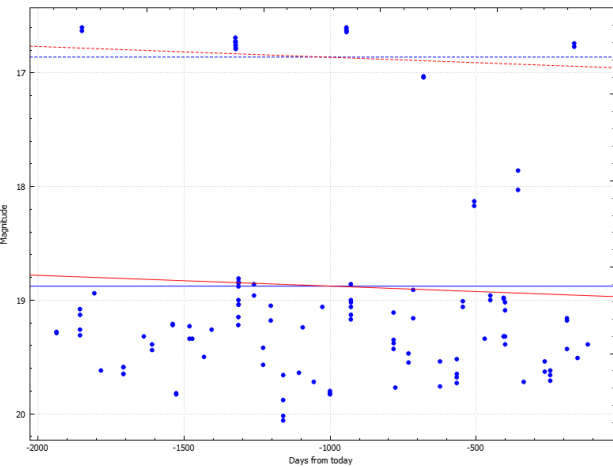
Gaia16ame.csv, Coord=17.00196,58.85840, Class=unknown

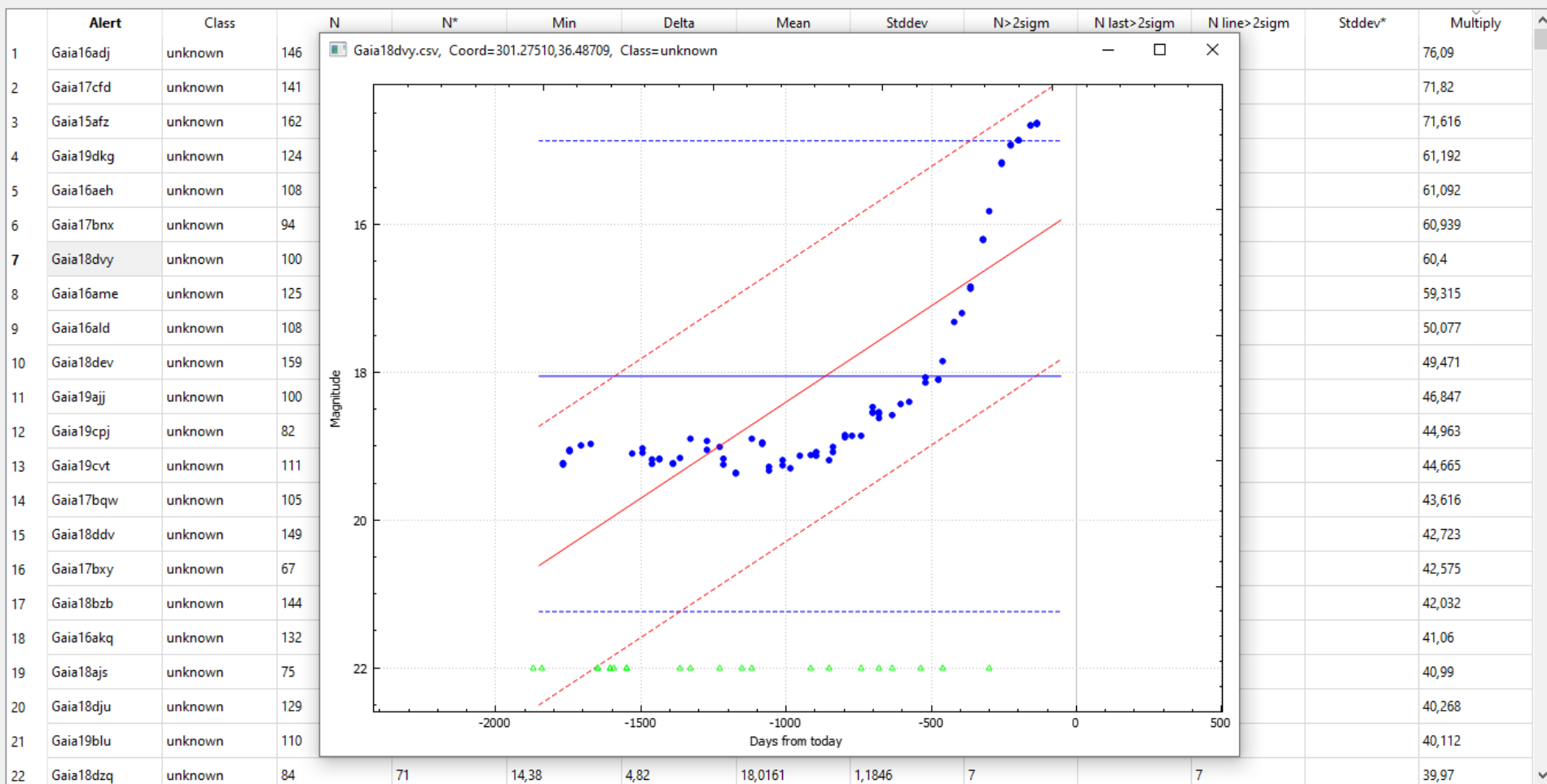


Gaia16ald.csv, Coord=268.46354,-64.20441, Class=unknown



Gaia18dev.csv, Coord=154.72292,-40.11213, Class=unknown





● Detections
 ○ Alert
 |
 Scans
 ◆ Untrusted

Green points: Untrusted and Null

**Andrii Simon** <gaiapostalerts@gmail.com>

кому мені ▾

🌐 англійська ▾ > українська ▾ [Перекласти повідомлення](#)

alert stddev

Gaia15afz 3 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia15afz/>Gaia17abv 1 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia17abv/>Gaia18ama 3 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia18ama/>Gaia18bft 3 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia18bft/>Gaia18ble 3 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia18ble/>Gaia18bxx 0.75 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia18bxx/>Gaia18bzb 0.5 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia18bzb/>Gaia18cnz 3 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia18cnz/>Gaia18ddq 1 <http://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia18ddq/>

Optical classification of Gaia15afz as a SU UMa type dwarf nova

ATel #13314; *A. Simon (National Taras Shevchenko University of Kyiv, Ukraine), V. Godunova (ICAMER Observatory of NASU, Ukraine), I. Izviakova (ICAMER Observatory of NASU, Ukraine), E. Pavlenko (Crimean Astrophysical Observatory, Republic of Crimea), V. Vasylenko (National Taras Shevchenko University of Kyiv, Ukraine)*

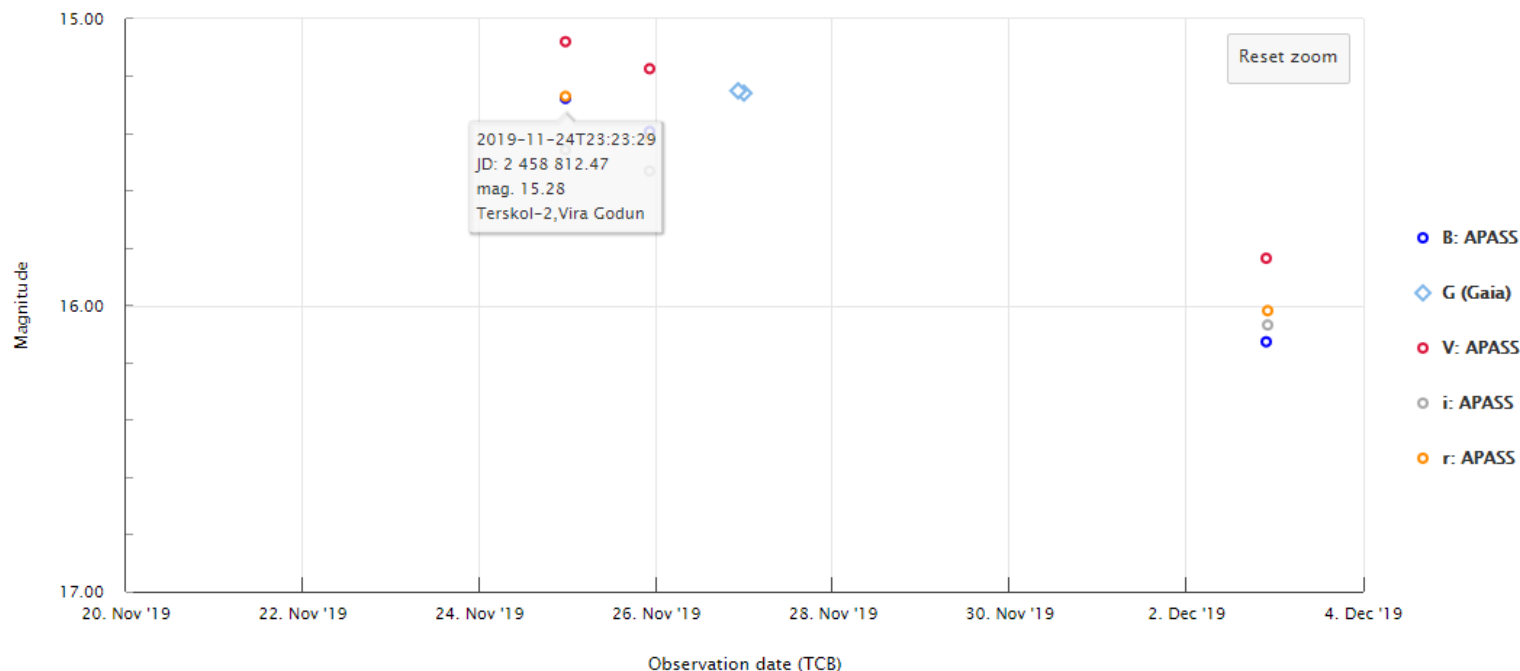
on 27 Nov 2019; 01:05 UT

Credential Certification: Andrew Simon (skazhenjandrew@gmail.com)

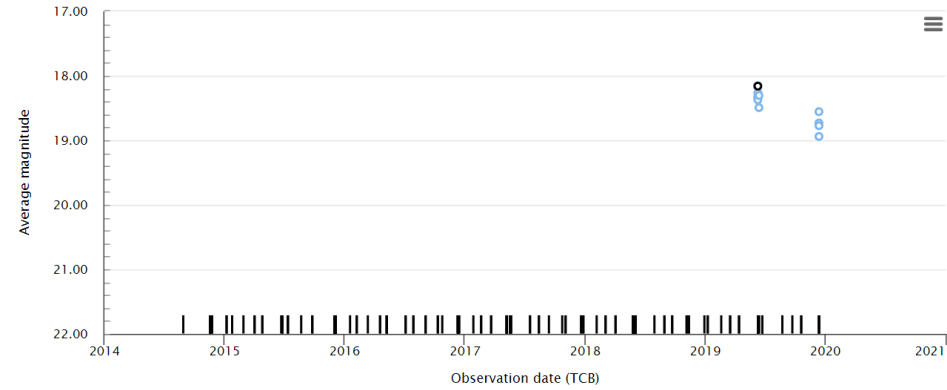
Subjects: Optical, Cataclysmic Variable, Transient



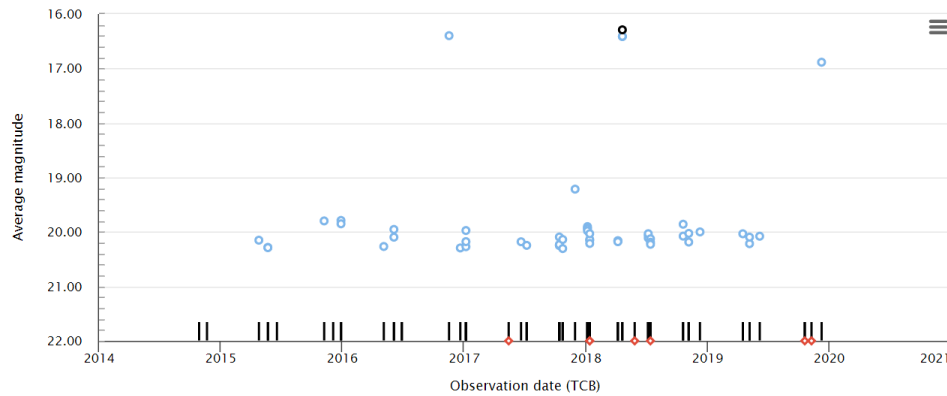
We report on photometric observations of Gaia15afz, which were performed on 2019, November 25 with the Zeiss-600 telescope (f/12.9 Cassegrain) at the Terskol Observatory. The blue hostless transient Gaia15afz was discovered on 2015-05-25 by A. Delgado et al. (University of Cambridge) on behalf of the Gaia Alerts team at magnitude $G = 15.72$. In 2019, our follow-up photometry revealed some outbursts of this object (<https://gsaweb.ast.cam.ac.uk/alerts/alert/Gaia15afz/followup/>), and now Gaia15afz is undergoing a new outburst. On its light curve obtained over approximately 3 hours in R-band, we detected variations with a period of about 0.065(2)d and amplitude of 0.2 mag that is peculiar to a SU UMa type dwarf nova during superoutburst. Further observations are encouraged in order to more exactly define the superhump period of Gaia15afz and its evolution. We acknowledge ESA Gaia, DPAC and the Photometric Science Alerts Team (<http://gsaweb.ast.cam.ac.uk/alerts/>).

X-axis: JD ☒ Date

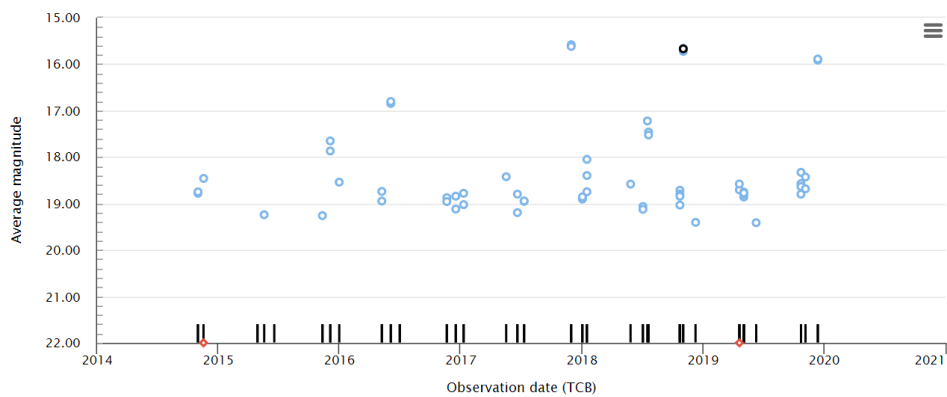
New events in the CV candidates



● Detections ● Alert | Scans ◆ Untrusted

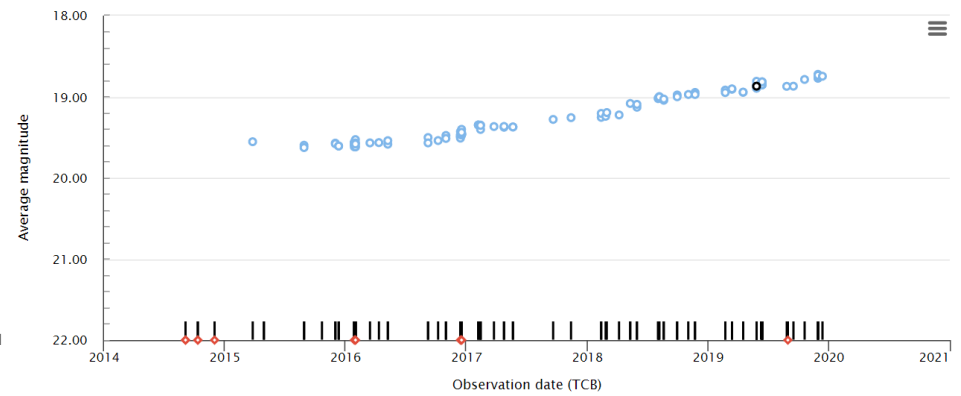


● Detections ● Alert | Scans ◆ Untrusted

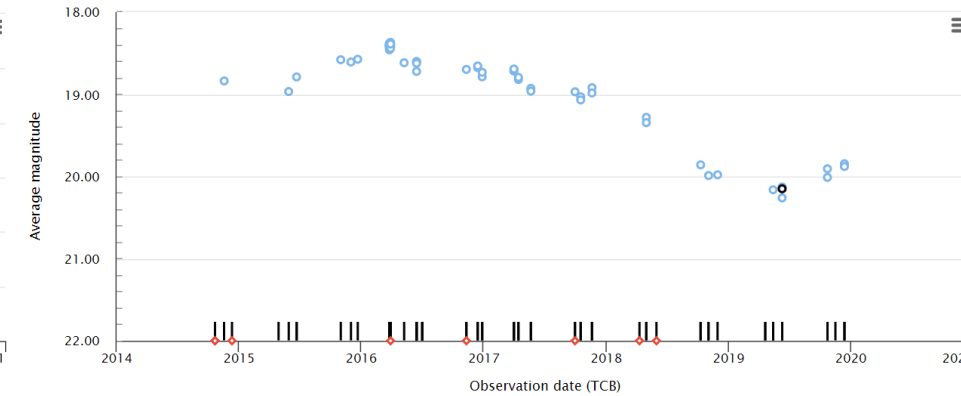


● Detections ● Alert | Scans ◆ Untrusted

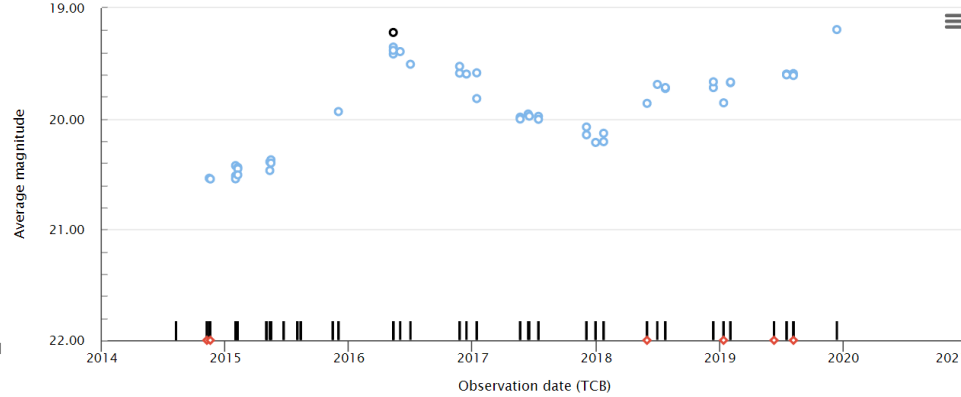
Other objects from our alerting messages



● Detections ● Alert | Scans ◆ Untrusted



● Detections ● Alert | Scans ◆ Untrusted



● Detections ● Alert | Scans ◆ Untrusted

Telescopes involved in CV monitoring

- 0.7-m AZT-8 (Kyiv)
- 0.48-m AZT-14A (Kyiv)
- 0.6-m Cassegrain (IC AMER)
- 2-m Ritchey-Chretien (IC AMER)
- 0.38-m Cassegrain (Crimea)
- 1.25-m AZT-11 (Crimea)
- 0.6-m PlaneVawe (Adiyaman)
- 0.6-m Cassegrain (Stara Lesna)



Thank you for attention!

