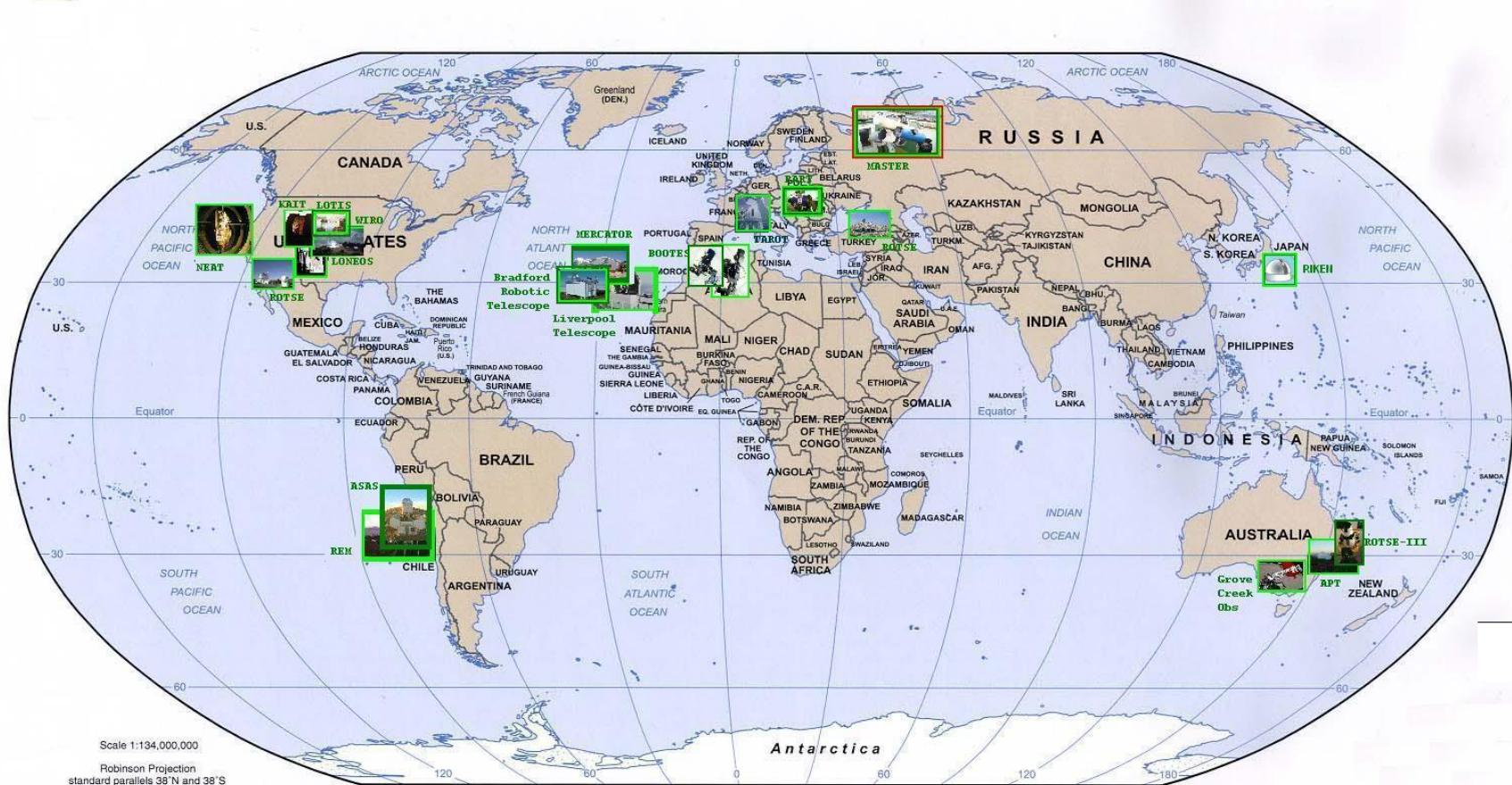


# Информационная структура телескопа- робота МАСТЕР

Середжинов Р.Т., Пархоменко А.В, Белинский А.,  
Корнилов В.Г., Шацкий Н.И., Горбовской Е.С.

ГАИШ, г. Москва,  
ГАС ГАО, г. Кисловодск

# Телескопы-роботы



# Система МАСТЕР в Кисловодске

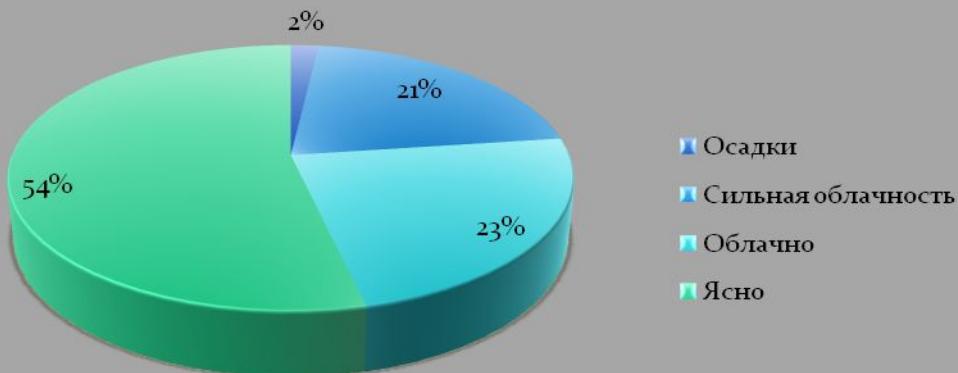
Задачи:

- 1) Поиск предсвечения гамма всплесков
- 2) Постоянный мониторинг неба с целью обнаружения и дальнейшего исследования любых транзиентных явлений
- 3) Наблюдение метеоров
- 4) Наблюдение спутников

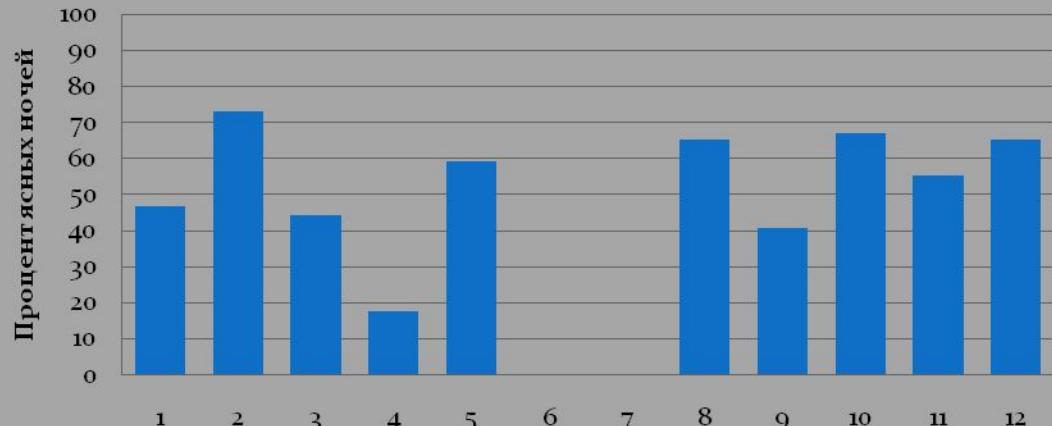
## Метеорологическая станция и Web-камера контроля

## Установка MASTER WFC

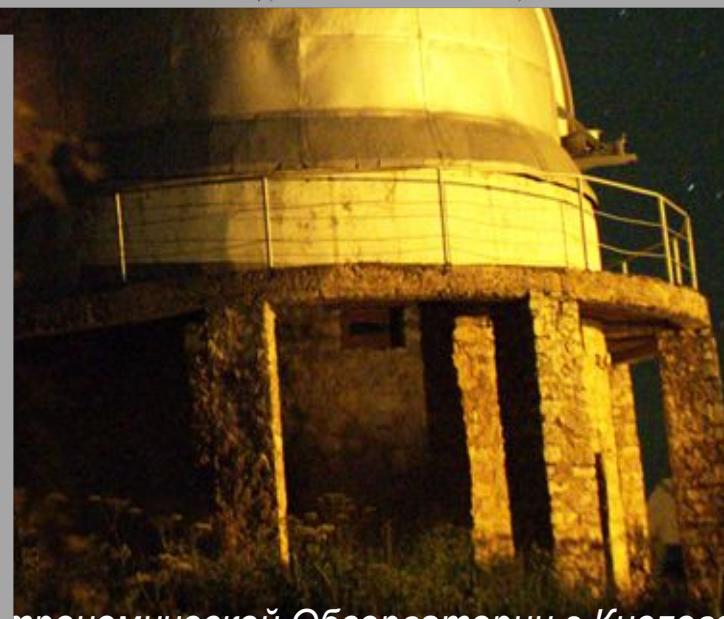
Погода на месте строительства нового телескопа  
ГАИШ близ г.Кисловодск усред. с 08.06 по 05.07



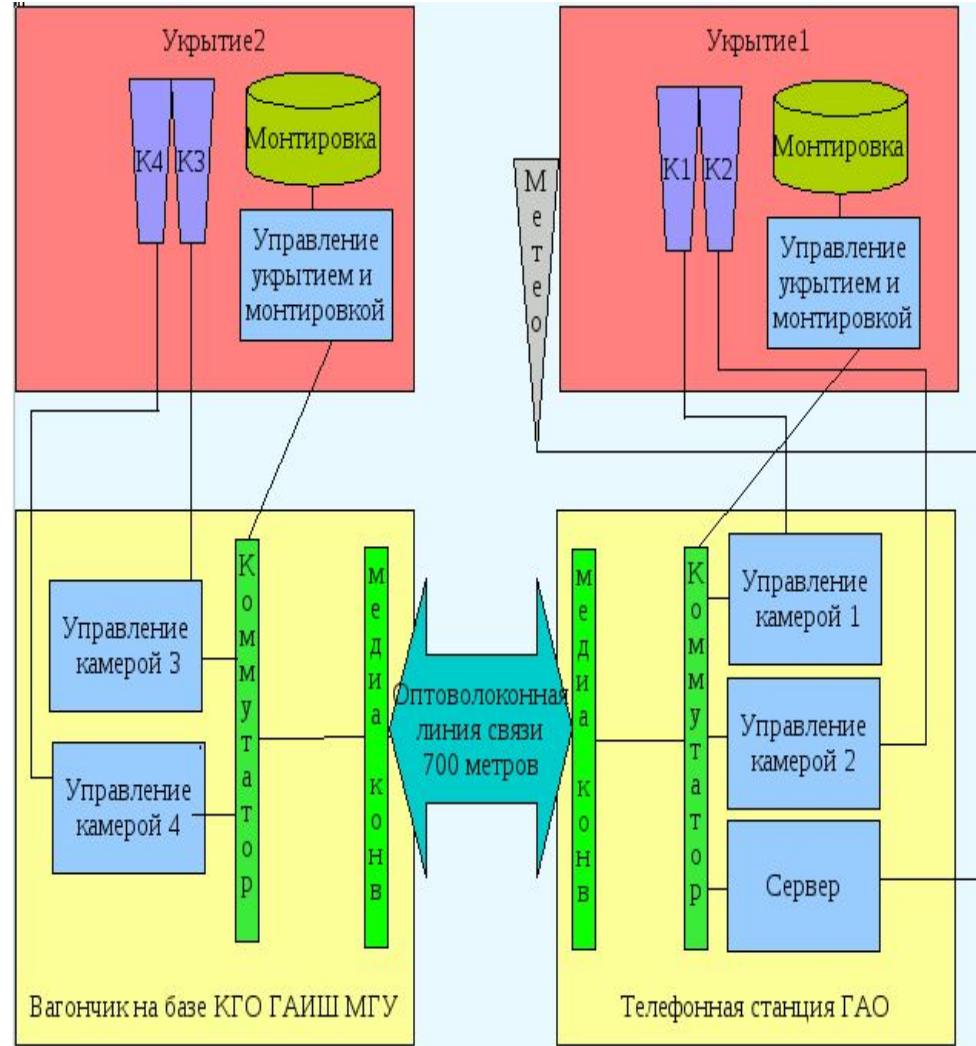
## Процент ясных ночей на месте строительства нового телескопа ГАИШ близ г.Кисловодск



Номер месяца с августа об по май 07 (для июня и июля данных на данный момент нет)



# Локальная информационная структура системы МАСТЕР



# Web-Мониторинг

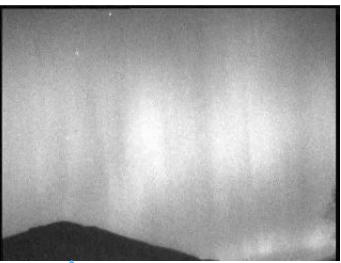
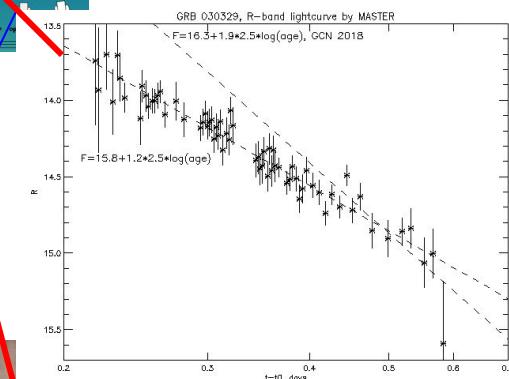
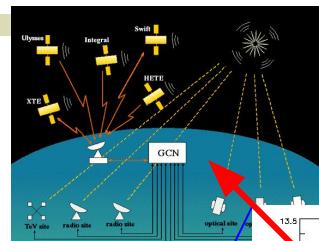
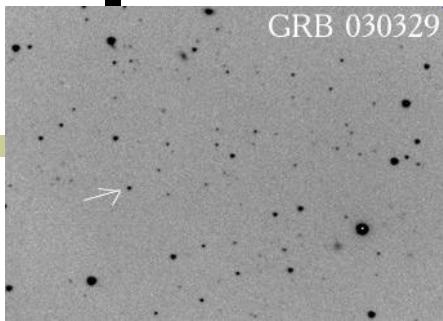
**MASTER-II Kislovodsk**  
Mobile Astronomical System of TElescope-Robots  
*Sternberg Astronomical Institute, Moscow Union "Optic", Kislovodsk Solar Station*



*MASTER II (8 square degrees) + MASTER VWF-4 Very Wide Field Cameras (FOV (max) = 4 x 25.5 x 39.8 = 4060 square degrees, Time resolution up to 150 ms, 4 CCD 11 Mpix*  
Geographical Coordinates: 43d 44' 7.67N; 42d 31' 41.7E; Altitude: 2067m  
2009 July 23 11:59:46

Weather & Roof status	Web-camera South	Web-camera North	Last imag
Sky Sns Amb Status <u>-11.3 +20.2 +15.8</u> Cloudy			
Last socket data obtained: 2009 July 23 11:59:14			
Sun Alt: 48 deg			
GAS roof status: <b>closed</b> Robot is <b>ON</b> GAS VWF-camera direction: dec=-873545. ra=105511.			
KGO roof status: <b>closed</b> Robot is <b>ON</b> KGO VWF-camera direction: dec=-863260. ra=105515.			
MASTER-II: Robot is <b>OFF</b> head is <b>ON</b> telescope direction:			

# Как работает МАСТЕР



# База данных ИСЗ

MASTER-WFC :: Database - Mozilla Firefox

Файл Правка Вид Журнал Закладки Инструменты Справка

https://93.92.89.140/moove\_sat.php?page=1&sort=id desc&wh= psql varchar

Самые популярн... Умные закладки MASTER-WFC MASTER :: Планиро... MASTER-WFC :: Dat... Reporting Query Res...

MASTER-... psql varc... mysql va... SAO/NAS... Login Int... PostgreS... HEASAR... MAST... MASTER-... MASTER-... >

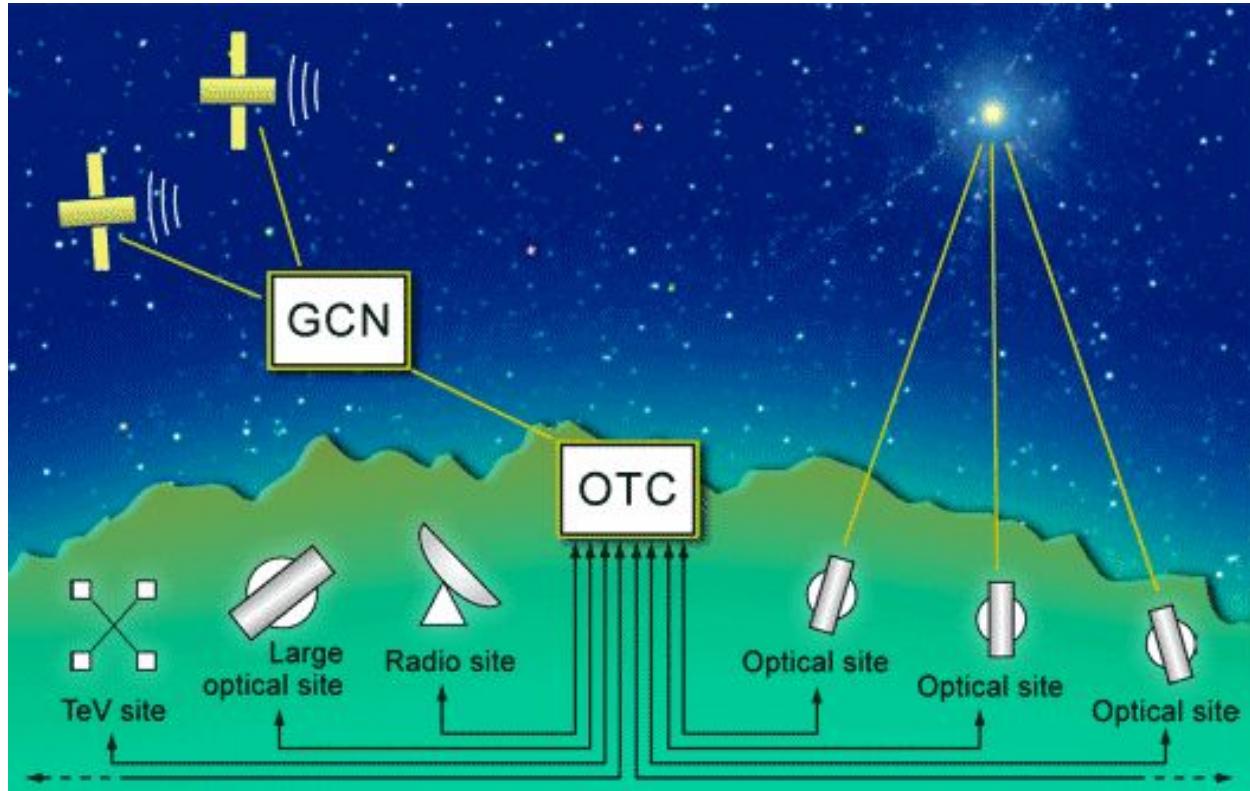
**MASTER-WFC Database**

Where: Order by: id desc Start Pages: 1 [2] 3 4 5 6 ... 6872

All	Sattel	Meteor	OT	Noise	Star	Unknown good	Interesting	Undef								
<a href="#">+id</a>	<a href="#">cam_id</a>	<a href="#">date_time</a>	<a href="#">coord2000</a>	<a href="#">EB</a>	<a href="#">mag</a>	<a href="#">s/n</a>	<a href="#">x</a>	<a href="#">y</a>	<a href="#">a</a>	<a href="#">b</a>	<a href="#">PA</a>	<a href="#">fwhm</a>	<a href="#">im_id</a>	<a href="#">name</a>	<a href="#">links</a>	<a href="#">Instrum</a>
461478	461477	2008-10-20 19:00:40.253	(19h 34m 52.30s, +40d 53m 33.5s)	30	9.30	11.1	956.0	370.6	3.6	0.8	53.1	10.0	29007	AUREOLE 1 <05729U>71119A	<a href="#">all</a>	<a href="#">St1 M OT N</a>
470085	470084	2008-10-28 01:24:00.326	(22h 26m 47.41s, +22d 53m 47.8s)	30	8.84	11.6	216.9	2364.6	2.8	0.6	-50.0	7.8	29005	AUREOLE 3 <12848U>81094A	<a href="#">all</a>	<a href="#">St1 M OT N</a>
473613	473612	2008-10-29 02:31:25.383	(10h 06m 38.14s, +01d 42m 37.2s)	30	7.58	27.2	192.6	1418.9	8.3	1.2	-34.5	18.9	29005	BREEZE-M DEB <32492U>06006AF	<a href="#">all</a>	<a href="#">St1 M OT N</a>
478461	478460	2008-11-02 01:33:40.231	(22h 57m 18.23s, +27d 09m 32.9s)	30	6.24	16.9	328.1	1282.0	5.9	1.3	35.7	16.9	29005	BREEZE-M R/B <27633U>02062B	<a href="#">all</a>	<a href="#">St1 M OT N</a>
475435	475434	2008-11-01 00:37:00.245	(22h 14m 27.89s, +25d 26m 02.1s)	30	8.88	10.2	569.5	2602.5	3.0	0.7	-4.4	8.7	29005	BX-1 <33392U>08047G	<a href="#">all</a>	<a href="#">St1 M OT N</a>
469951	469950	2008-10-28 01:20:20.326	(22h 20m 22.21s, +23d 34m 27.1s)	30	8.62	11.8	321.0	2503.9	3.1	0.8	-26.2	9.3	29005	CALIPSO <29108U>06016B	<a href="#">all</a>	<a href="#">St1 M OT N</a>
477339	477338	2008-11-01 02:15:55.241	(22h 20m 36.57s, +24d 09m 56.8s)	30	7.08	10.1	480.3	707.5	3.5	0.8	79.9	10.1	29005	CBERS 1 DEB <31583U>99057PE	<a href="#">all</a>	<a href="#">St1 M OT N</a>
466984	466987	2008-10-24 19:48:20.286	(00h 00m 00.00s, +00d 00m 00.0s)	30	0.00	23.5	3953.0	2597.5	3.2	0.5	-81.1	7.6	29005	CBERS 2B <32062U>07042A	<a href="#">all</a>	<a href="#">St1 M OT N</a>
478255	478254	2008-11-01 21:26:55.369	(01h 39m 31.48s, +16d 22m 23.5s)	30	9.49	15.4	141.2	55.0	2.8	0.7	-79.7	8.3	29007	CHANDRAYAAN-1 <33405U>08052A	<a href="#">all</a>	<a href="#">St1 M OT N</a>
474509	474508	2008-10-30 01:19:55.296	(22h 50m 52.33s, +25d 10m 02.8s)	30	8.14	13.2	340.0	1771.6	4.5	0.8	78.9	11.2	29005	CLUSTER II-FM5 <26463U>00045A	<a href="#">all</a>	<a href="#">St1 M OT N</a>
464326	464325	2008-10-25 00:23:25.421	(00h 00m 00.00s, +00d 00m 00.0s)	30	0.00	12.4	2590.2	2398.3	3.2	0.5	66.1	7.8	29007	COSMOS (GLONASS) <33380U>08046C	<a href="#">all</a>	<a href="#">St1 M OT N</a>
480765	480764	2008-11-02 02:37:25.463	(00h 09m 34.58s, +23d 52m 00.6s)	30	8.71	10.5	170.8	2334.4	4.5	0.7	-32.9	10.4	29007	COSMOS 1013 <10930U>78056A	<a href="#">all</a>	<a href="#">St1 M OT N</a>

Найти: char Предыдущее Следующее Подсветить все Учесть регистр Фраза не найдена Готово 93.92.89.140

# Центры данных по оптическим вспышкам



GCN - Gamma Center Network (<http://gcn.gsfc.nasa.gov/>)

OTC - Optical Transients Center (<http://otc.pereplet.ru>)

# Информационное письмо

TITLE: GCN CIRCULAR

NUMBER: 9233

SUBJECT: GRB 090424: MASTER-Net prompt optical observations

DATE: 09/04/24 21:01:23 GMT

FROM: Vladimir Lipunov at Moscow State U/Krylov Obs <gcncirc@observ.inetcomm.ru>

E. Gorbovskoy, V. Lipunov, V.Kornilov, A.Belinski, N.Shatskiy, N.Tyurina,  
D.Kuvshinov, P.Balanutsa, V.V.Chazov, P.V.Kortunov, A.Kuznetsov  
Sternberg Astronomical Institute, Moscow State University

K.Ivanov, S.Yazev  
Irkutsk State University

A. Tlatov, A.V. Parhomenko,  
Kislovodsk Solar Station of the Pulkovo Observatory

V.Krushinski, I.Zalognikh, T.Kopytova  
Ural State University, Kourovka

There are 6 MASTER Very Wide Field cameras located at Kislovodsk and Irkutsk  
with common FOW = 6000 square degrees (<http://observ.pereplet.ru/>).

One of the two MASTER Very Wide Field Cameras located at Irkutsk  
(D=50 mm, 2x1000 square degrees, 11 Mpx, 72" per pix in binning regime)  
has observed UVOT error box (Cannizzo et al., GCN 9223) with 1s exposure  
before, during and after GRB Time without time gap between images.  
The error box is near at the center of our FOW.

Our unfiltered images are calibrated relative to Tycho stars (V).  
The magnitude limit of each image is ~8 m at the center of FOW (some  
cloudy on the sky). The limit of coadded five images ~ 9 m.

[

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Благодарю за внимание!