Информационная структура телескопа- робота МАСТЕР

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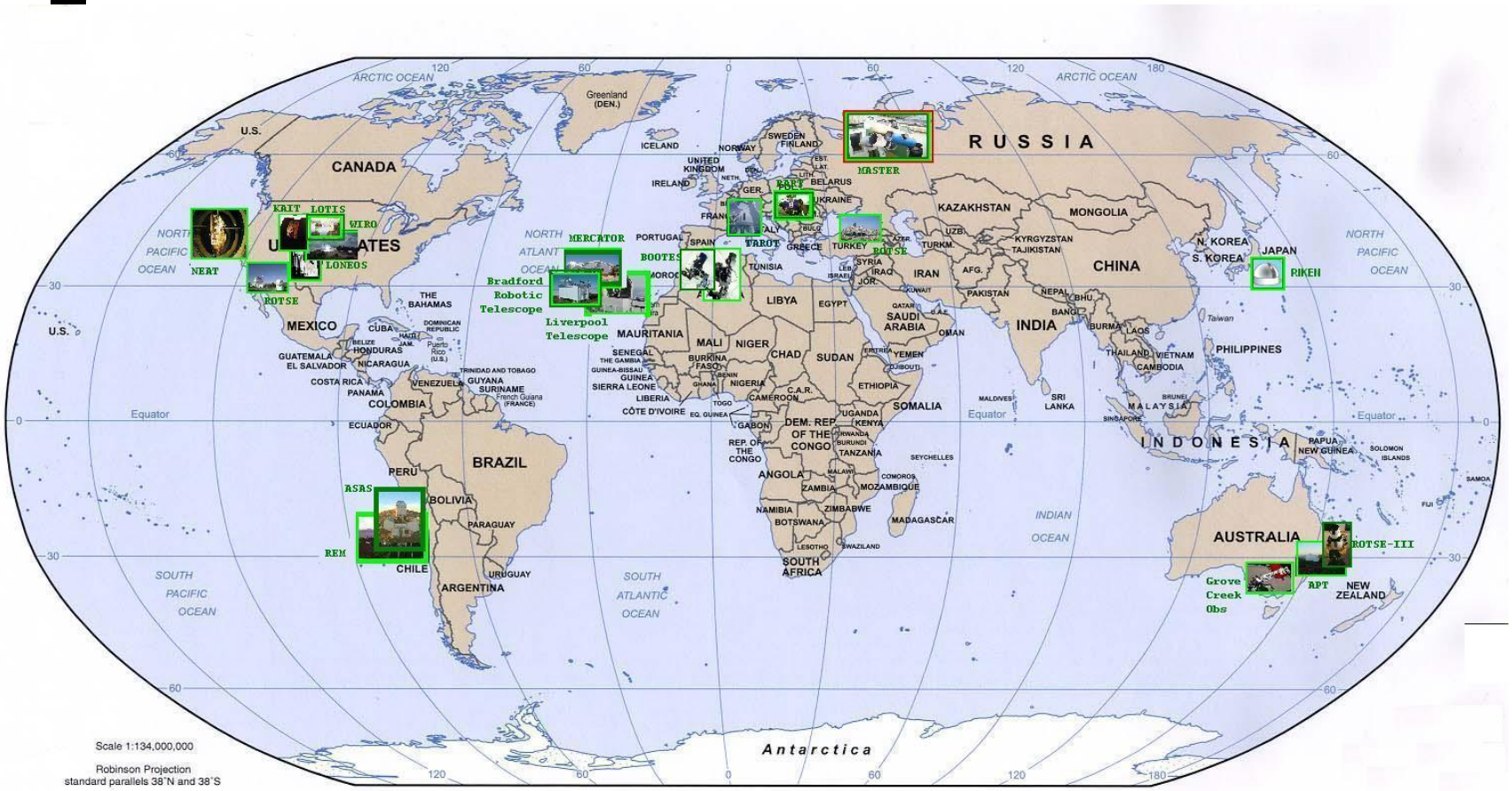
ГАИШ, г. Москва,
ГАС ГАО, г. Кисловодск

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

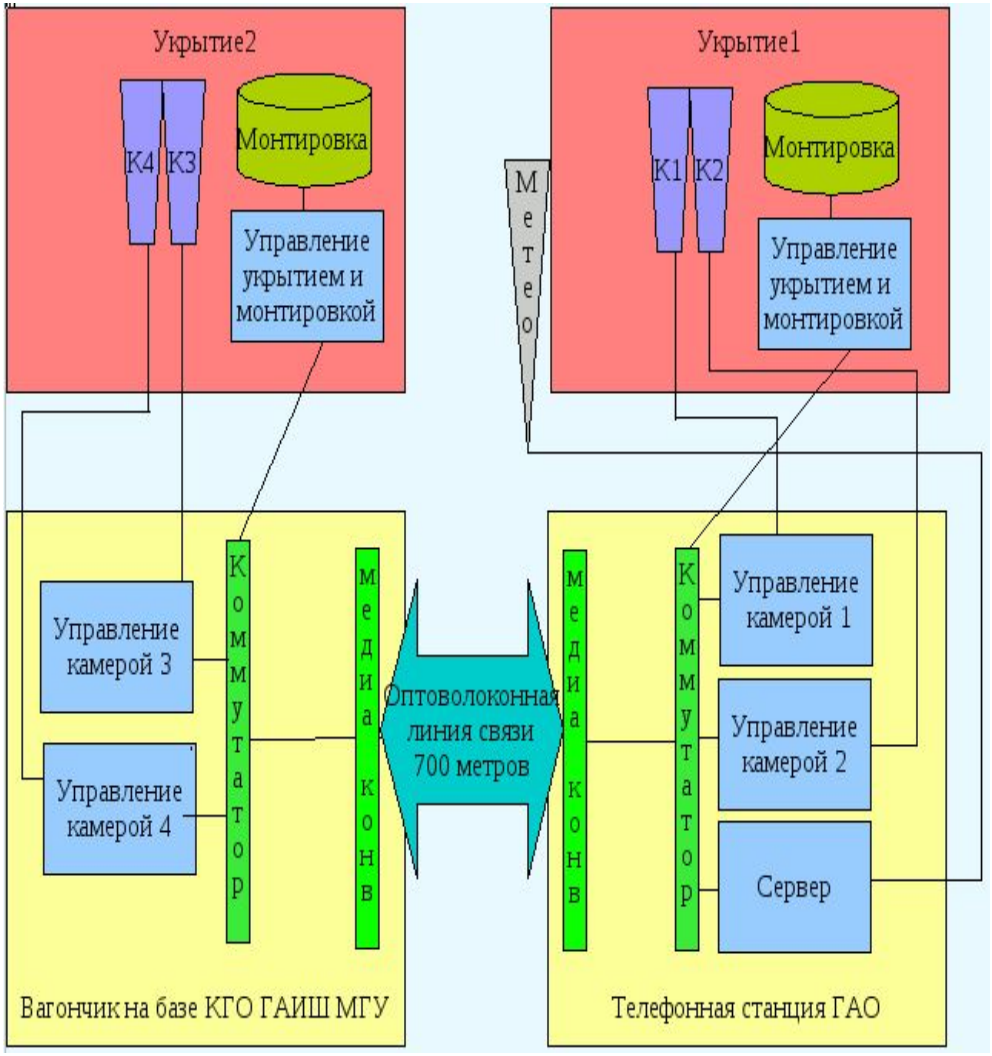
3) Наблюдение метеоров

4) Наблюдение спутников

Метеорологическая станция и Web-камера контроля

Установка MASTER WFC

Локальная информационная структура системы МАСТЕР



Web-Мониторинг

MASTER-II Kislovodsk

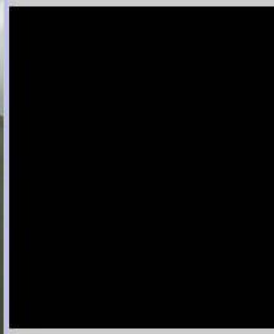
Mobile Astronomical System of TElescope-Robots

Sternberg Astronomical Institute, Moscow Union "Optic", Kislovodsk Solar Station

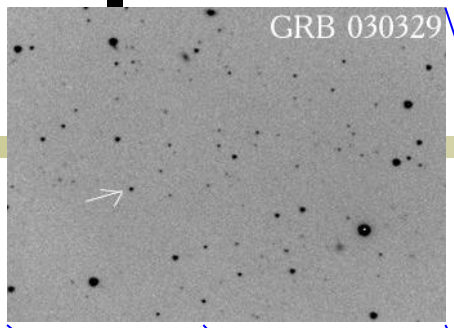
MASTER II (8 square degress) + MASTER VWF-4 Very Wide Field Cameras (FOV (max) = 4 x 25.5 x 39.8 =4060 square degrees, Time resolution up to 150 ms, 4 CCD 11 Mpix

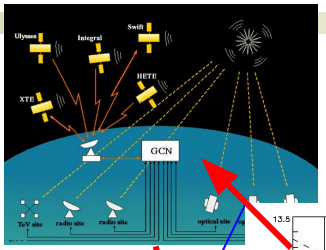
Geographical Coordinates: 43d 44'.767N; 42d 31'.417 E; Altitude: 2067m

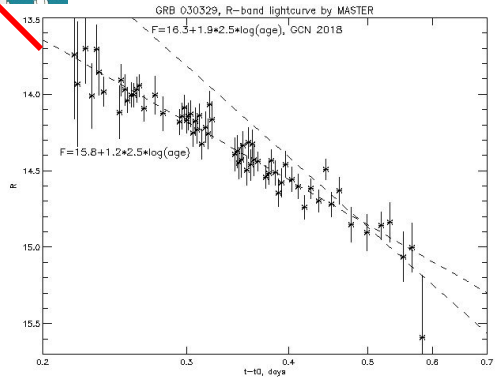
2009 July 23 11:59:46

Weather & Roof status	Web-camera South	Web-camera North	Last imag
Sky Sns Amb Status -11.3 +20.2 +15.8 Cloudy Last socket data obtained: 2009 July 23 11:59:14 Sun Alt: 48 deg GAS roof status: **closed** Robot is **ON** GAS VWF-camera direction: dec=-873545. ra=105511. KGO roof status: **closed** Robot is **ON** KGO VWF-camera direction: dec=-863260. ra=105515. MASTER-II: Robot is **OFF** head is **ON** telescope direction:			12030095 

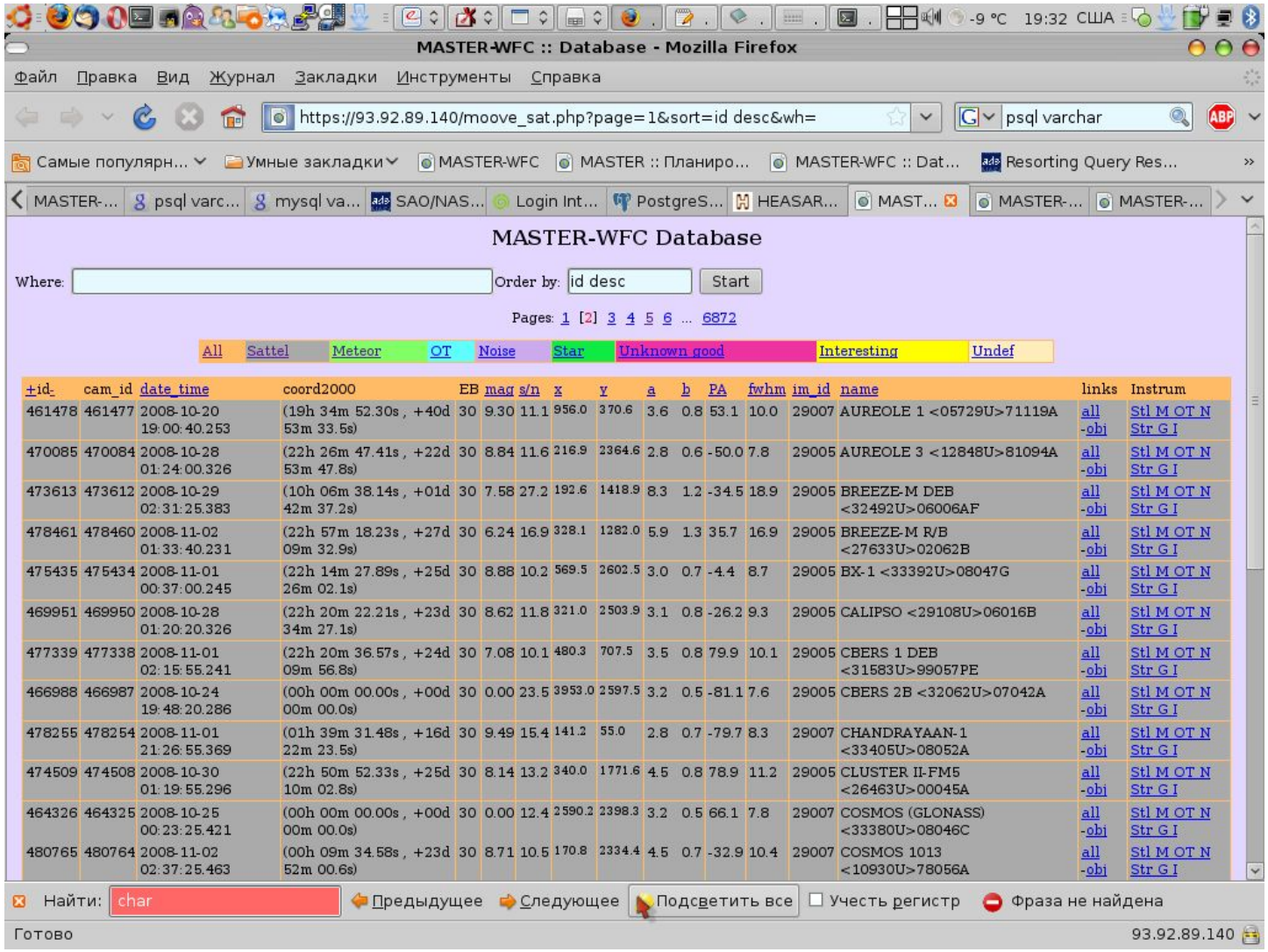
Как работает МАСТЕР





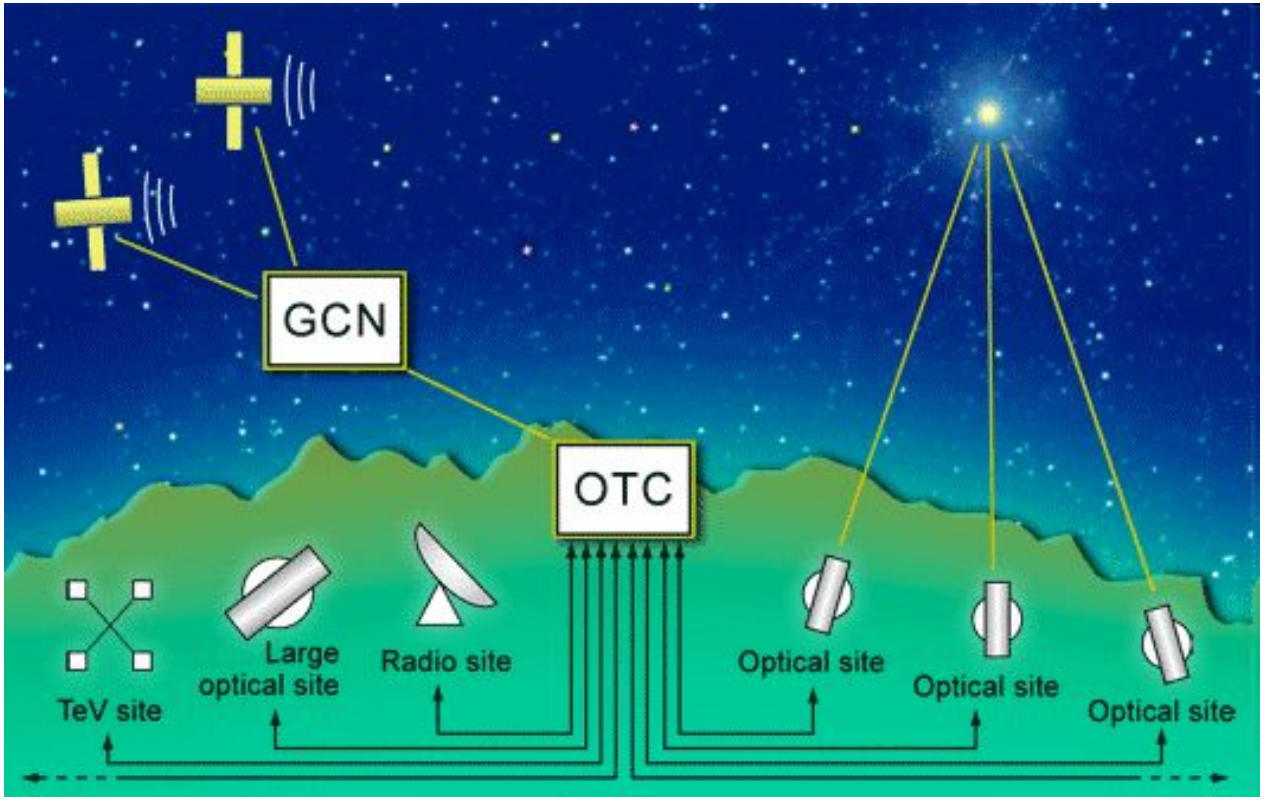


База данных ИСЗ



+id-	cam_id	date_time	coord2000	EB	mag	s/n	x	y	a	b	PA	fwhm	im_id	name	links	Instrum
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
466988	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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I
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	all -obj	Stl M OT N Str G I

Центр 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
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K.Ivanov, S.Yazev
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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 befoure, 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 the each emage is ~8 m at the center of FOW (some cloudy on the sky). The limit of coadded five images ~ 9 m.

Благодарю за внимание!