Turkish Facilities to Meet GAIA Solar System ToO Observations

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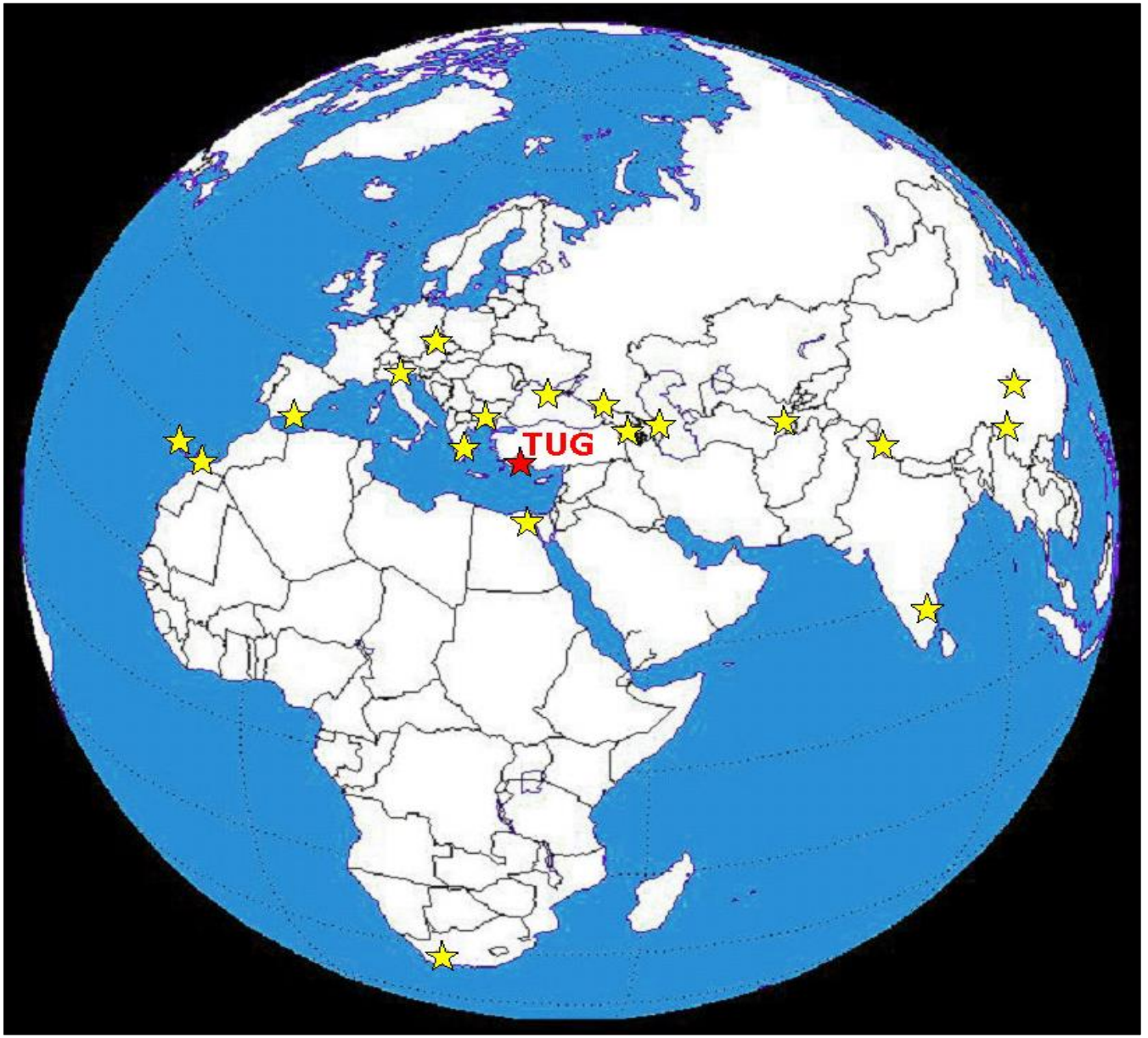
Gaia-FUN-SSO-3
Paris Observatory,
24-26 November 2014

Location of TUG

[A84] 30°19'59.9''E, 36°49'31.0''N



Sites

Bakırlıtepe Site, Saklıkent

Lat.: 36° 49' 27″ N
Long.: 30° 20' 08″ E
Elev.: 2500 m

Administration, Antalya
Remote control center
Lat.: 36° 53' 59″ N
Long.: 30° 39' 14″ E
Elev.: 35 m

Public Center, Antalya

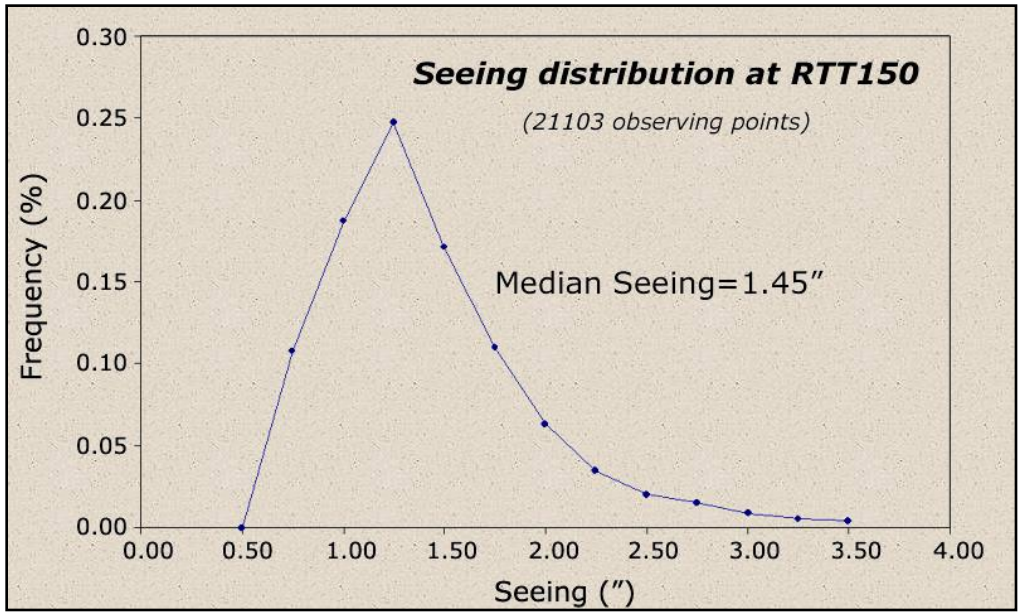
Guest House, Saklıkent

TÜBİTAK National Observatory (TUG)

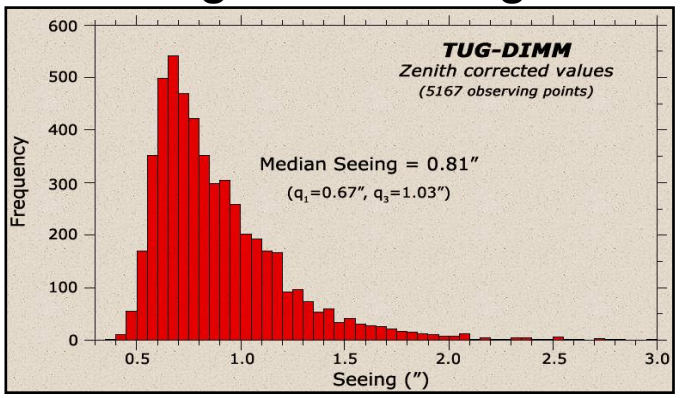
Altitude 2500 m .

Astronomical research institute of
Scientific and Technological Research Council of Turkey (TÜBİTAK).

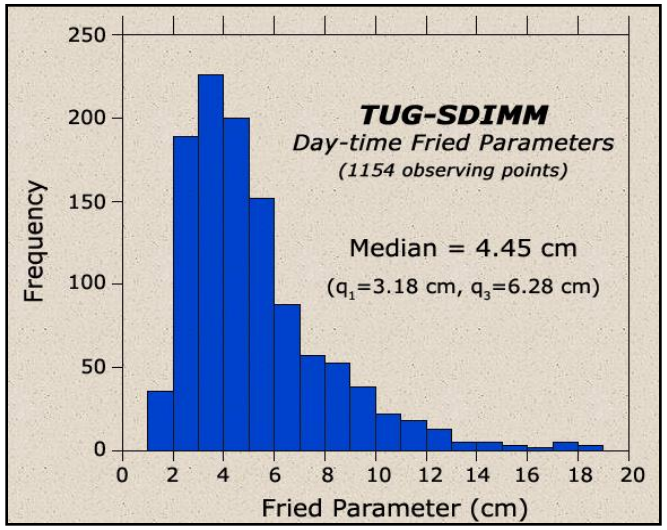
Site Characteristics



Nightime Seeing



Daytime Seeing



Clear nights : 220 day/year
Sky background: 22th mag

Mean temperature : 5°C (range of **–19** to +22)
Mean humidity : 50% (range of **2** to 99)
Mean wind speed : 17 km/h (range of 0 to **290**)
Dominated direction: SE

Russian-Turkish Telescope RTT150

PROTOCOL: TÜBİTAK, Kazan State University and Moscow Space Research Institute

TIME SHARING: TR %55, RUS %45

- 150 cm aperture, RC telescope
- f/7.7, f/48

Time allocation to follow-up **Gaia** ToO

80 hours/year

CCD Cameras

TFOSC CCD
(2048x2048, 15 μ)

Andor DW436
(2048x2048, 13.5 μ)

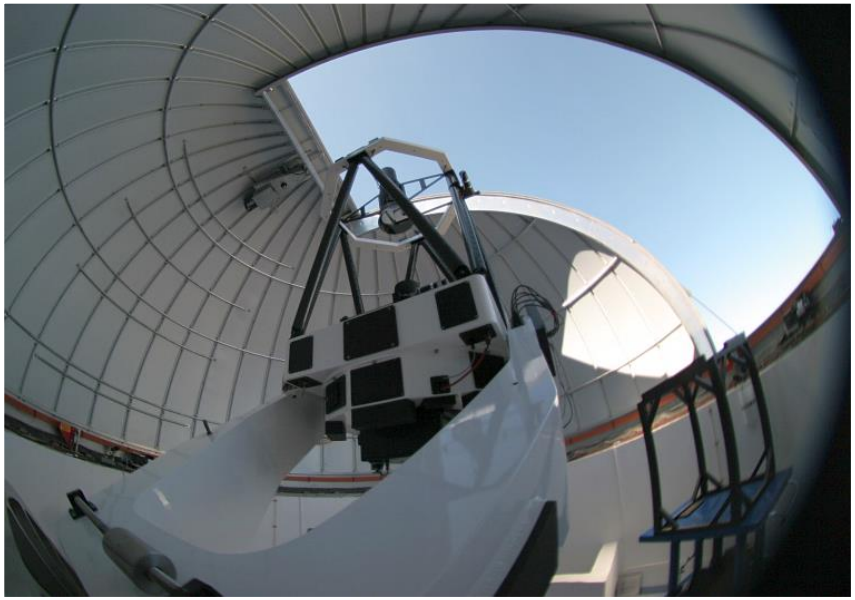
Andor iXon EM CCD
(1024x1024, 13 μ)

Spectrographs

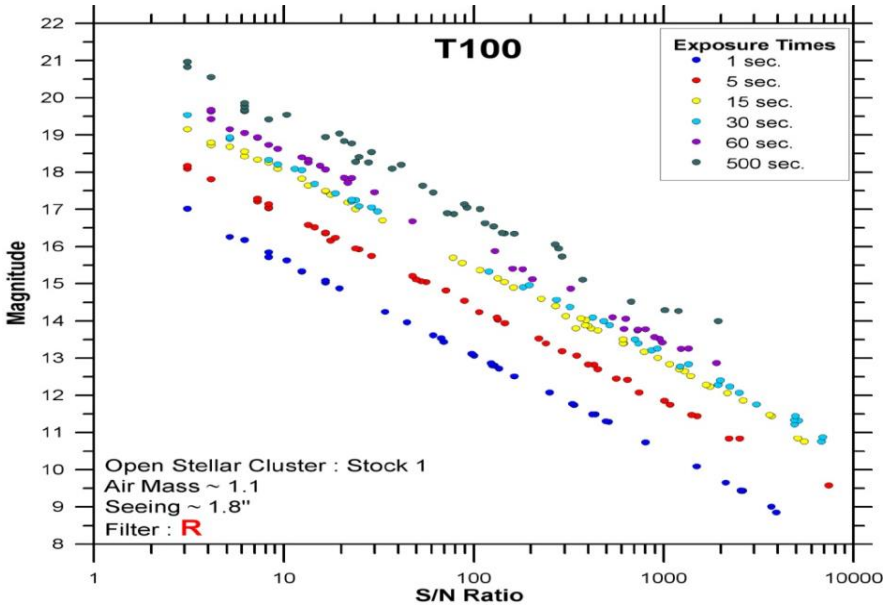
TFOSC
Coudé
DEFPOS

T100 Fully Automatic & Remote Control Telescope

(PIPELINE)



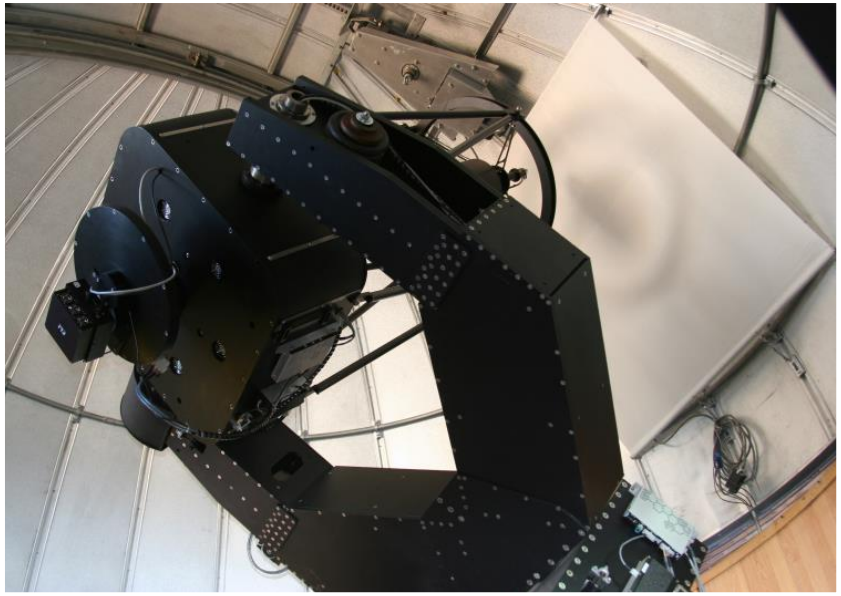
- 100 cm aperture, f/10, RC telescope
- SI 4Kx4K BB, “Cryo-cooling” CCD large FoV (21.5'×21.5')
- 0.32”/pixel
- UBVRI, **SDSS** and narrow band filters
- Installed in Aug., 2010
- Time available for follow-up **Gaia** alerts of **80 hours/year**

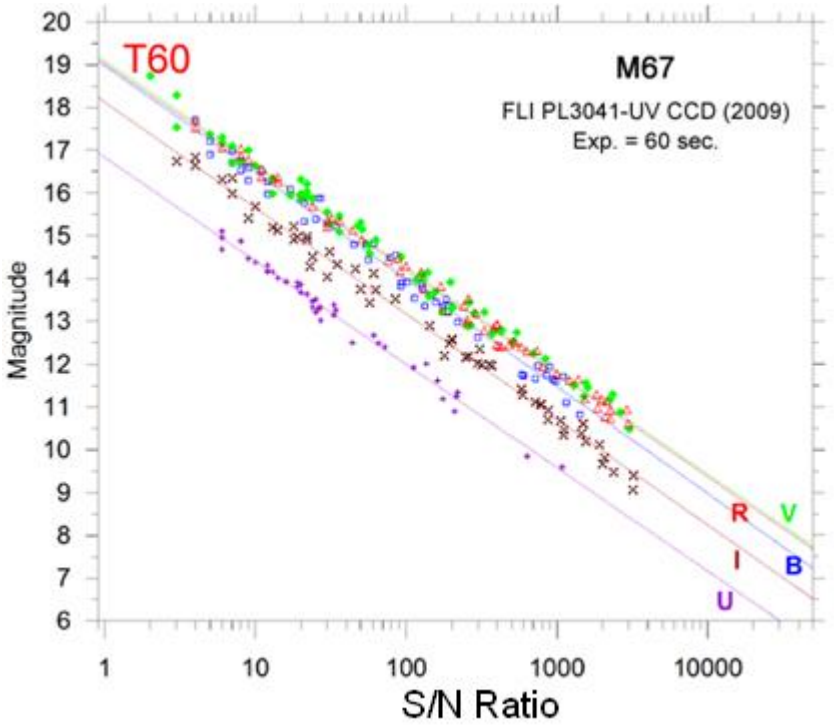


T60 Fully Robotic Telescope

- 60 cm aperture, f/10, RC, robotic telescope

- FLI Proline 2K×2K BB CCD, UBVRI, **SDSS** and narrow band filters
- Fov of 17.5'x17.5‘ 0.51”/pixel
- Installed in Sep., 2010
- Time available for follow-up **Gaia** alerts of **10-15%** of the total observation time





Observation of Solar System Objects proposed on TUG Telescopes T100

PI	Afilliation	Project Name	Status
Zeki Eker	Akdeniz University	Gaia Solar System ToO Observations	Ongoing
Zeki Eker	Akdeniz University	Rotational Properties of (832) Karin Young Family Asteroids	2013-Continue
Murat Kaplan	Akdeniz University	Rotational Properties of Baptistina Asteroid Family	2014-Continue
Murat Kaplan	Akdeniz University	Rotational Properties of Maria Asteroid Family	2012-2014
Nilda Oklay	MaxPlanck Institute	What will happen to the sungrazing comet C/2012S1(ISON)	2013
Mustafa Helvacı	Akdeniz University	Determination of Yarkovsky Effect for Selected Near-Earth and Main Belt Asteroids	2012-2013
Serdar Evren	Ege University	Determination of Physical Parameters of Karin Asteroid Family	2012-2013
Ethem Derman	Ankara University	Determining rotational periods of asteroids with no periods.	2011-2012
Zeki Eker	Akdeniz University	Determining properties of some selected Near Earth Asteroids	2011-2012
Mustafa Helvacı	Akdeniz University	Observing Near Earth Asteroids	2011-2012
Ethem Derman	Ankara University	Surface feature analysis of minor planets	2011-2012

Observation of Solar System Objects proposed on TUG Telescopes RTT150

PI	Afilliation	Project Name	Status
Zeki Eker	Akdeniz University	Gaia Solar System ToO Observations	Ongoing
Selçuk Helhel	Akdeniz University	Design of TFOSC compatible polarimeter for polarimetric observations of asteroids.	2014-Continue
Irek Khamitov	TUG	Observation of selected asteroids - Before and during GAIA	2013-2014
Zeki Aslan	Kultur University	Kinematic and physical properties of the selected small bodies in the Solar System	2008-2010

OBSERVERS PUBLIC IAWN

(11 submitted discov.)

Observations

8032 total observations, 4 discoveries. –

These data are available for download (format description).

← Previous **1** 2 Next →

Date (UT)	Object	Type	J2000 RA	J2000 Dec	Magn	Location	Ref
2002 07 30.97102	2002 NY40	minor pl.	21 34 45.30	-05 04 22.8	16.1	A84 – TUBITAK National Observatory	MPS 67932
2002 07 30.97337	2002 NY40	minor pl.	21 34 45.26	-05 04 22.0	15.5	A84 – TUBITAK National Observatory	MPS 67932
2002 07 30.97572	2002 NY40	minor pl.	21 34 45.24	-05 04 21.2	15.5	A84 – TUBITAK National Observatory	MPS 67932
2002 07 30.97807	2002 NY40	minor pl.	21 34 45.21	-05 04 20.6	16.2	A84 – TUBITAK National Observatory	MPS 67932
2002 07 30.98752	2002 NY40	minor pl.	21 34 45.08	-05 04 17.8	15.8	A84 – TUBITAK National Observatory	MPS 67932
2002 07 30.98987	2002 NY40	minor pl.	21 34 45.05	-05 04 17.2	15.6	A84 – TUBITAK National Observatory	MPS 67932
2002 07 30.99223	2002 NY40	minor pl.	21 34 45.03	-05 04 16.6	15.8	A84 – TUBITAK National Observatory	MPS 67932
2002 07 30.99459	2002 NY40	minor pl.	21 34 44.99	-05 04 15.6	15.6	A84 – TUBITAK National Observatory	MPS 67932

2002-2014

8032 observations, 4 discoveries and 1 confirmation of a discovery reported

GGSG - Group of Gaia Solar System

Since: Feb 23, 2014

OBJECTIVES

1. To be organized to do SSO ToO Observations at RTT150,T100 and T60
2. Follow-up Gaia SSO Alerts
3. Reduction and reporting of ToO observations
4. To do and collect all SSO observations including SSO ToO observations, later to evaluate of all (a paper)
5. Training new members

GGSG-Group of Gaia Solar System

Name	Afilliation
Zeki Eker	Akdeniz University
Murat Kaplan	Akdeniz University
Tolga Atay	Akdeniz University
Akif Esendemir	Akdeniz University
Orhan Erece	Akdeniz University
Gürkan Aslan	Akdeniz University
Doğan Tekay Köseoğlu	Akdeniz University
Süleyman Kaynar	Tubitak National Observatory
Tuncay Özışık	Tubitak National Observatory
Nilda Oklay	Max-Planck Institut
Jean Baptiste Vincent	Max-Planck Institut
Adnan Ökten	Istanbul University
Remziye Canbay	Istanbul University
Songül Özırmak	Istanbul University
Seda Kaptan	Istanbul University
Nazım Aksaker	Cukurova University
Arif Solmaz	Cukurova University
Sacit Özdemir	Ankara University
Eda Güzel	Ege University

ORGANIZED MEETINGS and WORKSHOPS

5-9 September & 12-13 September 2011


Summer School on Astrometry
5-9 September 2011
Antalya - TÜRKİYE
TUG
http://www.tug.tubitak.gov.tr/aass/


EXIT


PLUTO
REVOLVE IN PEACE


Workshop on Astrometry
TUG

5-8 August 2014


FEN FAKÜLTESİ
07 CDF
78

CONCLUSION

GGSG and TUG FACILITIES are ready to MEET

GAIA SOLAR SYSYEM ALERTS

THANK YOU