

IAU Working Group - Astrometry by Small Ground Based Telescopes

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Annual Report 2016

This Working Group belongs to the IAU Division A on Fundamental Astronomy. It has been initiated during the XXVIth General Assembly of the IAU in Prague, in August 2006 by the Division 1 (Fundamental Astronomy). It has been extended for a new triennium at the XXVIIth IAU General Assembly held in Rio de Janeiro in August 2009, then in 2012 during the XXVIIIth IAU GA held in Beijing and during the XXIXth IAU General Assembly held in Honolulu in 2015.

The goal of this continuously active WG is to update and maintain information on astrometric programmes and activities carried out by small telescopes, to diffuse news through web pages and by e-mails, to facilitate the collaborations and to help for the coordination of the activities, when possible, in astrometry from ground-based telescopes.

Here it follows a brief summary of our activities in 2016.

We welcome Nadiia Maigurova from the Nikolaev Observatory, Ukraine, as a new member of our WG. Dr. Damijanovic Goran reported the establishment of a new site, the Astronomical Station Vidojevica - ASV (of Astronomical Observatory in Belgrade, Serbia), with a new 1.4 m telescope (made by ASA, Austria) under the scope of the BELISSIMA FP7 project. More about it can be seen at belissima.aob.rs web site. It was also put into operation the Serbian-Bulgarian mini-network telescopes (now, 6 telescopes). All these instruments are collecting useful data for Gaia astrometry, GAIA-FUN-SSO, GAWEBT, etc.

In USA Dr. Norbert Zacharias continues with the URAT project and with astrometric observations from USNO supporting the observation of stellar occultations by Pluto and other transneptunian objects. William Van Altena's recent book "Astrometry for Astrophysics: Methods, Models, and Applications" keeps being a valuable resource for graduate students as well as for astronomer researchers.

Brazilian astronomers Dr. Roberto Vieira Martins and Dr. Marcelo Assafin report on the astrometric use of 0.6m to 2.2m class telescopes at Brazil, Chile, Australia, France and Spain in supporting the observation of stellar occultations by Pluto and other transneptunian objects and Centaurs, and also in the astrometry of natural and irregular satellites.

Dr. Jean-Eudes Arlot continues with his project of digitizing old photographic plates of natural satellites with a new precise scanner machine under the auspices of the IMCCE - Observatoire de Paris, France. Dr. Dan Pascu made a huge contribution on this respect allowing for the use of the USNO collection of Martian and Jovian satellites.

Dr. William Thuillot reports on the effective beginning of the Gaia-FUN-SSO activities of following up solar system objects, mostly asteroids. These astrometric observations are triggered by GAIA-FUN-SSO alerts for a broader community of registered observers

throughout the world (<https://gaiafunso.imcce.fr>). He also reports on the continuity of the GBOT activities, which collects astrometric observations of the GAIA probe in support for the ESA mission. The GAIA-FUN-SSO and the GBOT activities involve many of our members and constitute an important part of the activities supported by this WG.

Please visit our refreshed web page:

at http://www.imcce.fr/hosted_sites/iau_wgnps/astrom.html for more historic and updated reports on the activities of this WG.