

**PDC2015**  
**Frascati, Roma, Italy**

- Planetary Defense – Recent Progress & Plans
- NEO Discovery
- NEO Characterization
- Mitigation Techniques & Missions
- Impact Effects that Inform Warning, Mitigation & Costs
- Consequence Management & Education

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**Status of NEO confirmation observations at the Thüringer Landessternwarte**

**Bringfried Stecklum<sup>(1)</sup>**

*<sup>(1)</sup>Thüringer Landessternwarte, Sternwarte 5, 07778 Tautenburg, Germany,  
+49-36427-86354,*

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**ABSTRACT**

In 2010 the Thüringer Landessternwarte (IAU station code 033) joined the world-wide effort to classify newly detected minor bodies. In the meanwhile, more than 2500 positions were submitted to the Minor Planet Center, based on images taken with the Tautenburg Schmidt telescope. Recent improvements helped to increase the accuracy and efficiency of the observations. This has been achieved by using a new broad-band filter which provides a higher throughput as well as revising the observing strategy. Contrary to the initial method of tracking stars, the telescope now tracks at the asteroid's rate, thereby achieving a higher sensitivity compared to trailed images. This change was possible by applying a refined method to establish proper astrometry from stellar trails based on deconvolution. For what concerns mid-term improvements, funding has been secured to replace the CCD by a state-of-the-art device which offers a larger field at better spatial sampling.

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