**Introducing the Zwicky Transient Facility and the Be Star Variability Program: A Progress Report at the National Central University**

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ABSTRACT

The Zwicky Transient Facility (ZTF) is a wide-field optical survey to systematically explore the transient and variable sky. The main facility of ZTF is the 48-inch Samuel Oschin Schmidt telescope located at the Palomar Observatory. This telescope is equipped with a mosaic CCD camera that provides a field-of-view of 47 squared degree, while maintaining a pixel scale of 1-arcsecond per pixel. The allocated observing time of ZTF can be divided to the partnership time (i.e. the ZTF science consortium, for 40%), the public time (for 40%) and the Caltech time (for 20%, since Caltech, or the California Institution of Technology is the P.I. institution of ZTF and the Palomar Observatory). In this presentation, we first provide an overview of the ZTF, with emphasis given to the public time that consist of two surveys: a 3-days cadence for the Northern Sky Survey and a 1-day cadence for the Galactic Plane Survey (for further details, see www.ztf.caltech.edu/page/msip). We then present the recent progress of one of the program conducted at the National Central University (NCU) – the ZTF Be stars variability (ZTF-BeV) program. The preliminary results based on the first six months of ZTF data, including the commissioning data, suggests that the light curves of those Be stars/candidates exhibiting variability can be identified by ZTF. Here, we present our ZTF result of one SDSS/APOGEE Be star, CoRoT 102762536, with rotational variability detected by CoRoT space telescope. Its variation characteristic is clearly shown in our ZTF light curve. Download and management of the ZTF catalogs data at NCU will also be briefly discussed.

*Keywords: Time-Domain Astronomy; Be Stars; Telescope Facility*