

## **FOLLOW-UP NEA OBSERVATIONS IN SHAO**

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The goal of current research project is to implement regular observations of NEAs with rotating-drift-scan CCD (RDS CCD) technique at Shanghai Astronomical Observatory (ShAO) with particular attention to fast moving and newly discovered objects and to obtain additional high precision astrometric positions for them during discovery apparition. The IAU MPC observatory code was obtained for the Lishan Observing Station (National Time Service Center of Chinese Academy of Sciences, NTSC of CAS, China) in 2019 and regular observations were started. The specific astrometric reduction software was developed to obtain topocentric astrometric positions of the objects. The part of observations was obtained around time moment of minimal distance to the Earth during current CA when apparent motion substantially exceeds diurnal motion. Follow-up observations during discovery apparition allows to extend the time intervals of the observed orbital arc for refining the orbit and reducing the orbital uncertainty, so it will be possible to recover them in next apparitions.

The astrometric results of NEAs observations, including new discovered one, are presented and analyzed. The comparative analysis of astrometric and ephemeris positions was done regarding to JPL's HORIZONS system and NEODyS-2 service. The residual differences (O-C) often show high values for newly discovered NEAs during observation date as well as big differences between ephemerid positions of mentioned services. The data for such NEAs is presented.