Recent observations of 3200 Phaethon and 1981 Midas

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We will review recent photometric observations of two asteroids – 3200 Phaethon and 1981 Midas. The first one was observed with a 0.61-m and a 1.3-m telescope at the Skalnaté Pleso Observatory in High Tatra Mountains (Slovakia), a 2-m Ritchey-Chretien-Coude Telescope at the Terskol Observatory (Russia), and a 1-m Zeiss at the Sanglok Observatory (Tajikistan). The second one at the Skalnaté Pleso Observatory only. Phaethon's data from October-December 2017 allows us to estimate color indices $B-V$ and $V-R$, absolute magnitude ~ 14.4 mag and diameter > 5.5 km. Previous diameter 5.1 km has been underestimated because the new radar observations from Arecibo tells about 6 km in size. Also spin axis orientation, the sense of rotation, and the shape model of Phaethon was determined. In the case of Midas we acquired BVR data from 5 nights in March 2018 before its closest approach to the Earth. All data showed a low amplitude ~ 0.1 mag which is in contrast with ~ 0.8 mag from previous works. We computed also color indices $B-V$ and $V-R$ and diameter slightly larger than 2 km.
Later we will say few words about two telescopes and the postfocal equipments at our Observatory.