

PRINT ONLY: ASTEROIDS, COMETS, SMALL BODIES

Filonenko V. S.

Some Properties of Secular Variations of Brightness of Some Periodic Comets [#1597]

The results of the study of secular fading of some short-periodic comets during their all observed returns are presented. An influence of the 90-year solar activity cycle upon the changes of secular variations of these comets had been found.

Golubeva L. Shestopalov D.

Are There Pyroxenes on A-Asteroid Surfaces? [#1228]

The 500-nm absorption feature in the reflectance spectra of the A-asteroids 289 Nenetta and 446 Aeternitas indicates that pyroxenes are present on these asteroids. By the “olivine minimum” of the 500-nm band we estimated that olivine for these asteroids contains approximately 55 wt.% forsterite.

Greenspon J. A. Mardon A. A. Mardon E. G.

Representations of Halley's Comet in April 1066 A.D. Found in the Bayeaux Tapestry and Other Contemporary Written Accounts [#1527]

Halley's Comet has been a significant character in global history — foretelling of events serving as a forecast tool to astrologers for centuries. A look at its significance in 1066 is presented herein.

Mardon E. G. Mardon A. A.

References to Historical Comets from 497 A.D. to 1402 A.D. in English Manuscripts [#1092]

The following abstract is a compilation of the cometary references found in English Medieval Manuscripts from the 5th Century to the 14th Century AD. The references to comets in England over the Medieval period shows an interest in cometary astronomy in England.

Perov N. I.

Forecasting the Closest Approach of Undiscovered Before Now Comets with the Earth [#1018]

In terms of a pairwise three-dimensional two-body problem—Sun-comet and planet-comet—the space-time domains for new comets are localized. Jupiter and Saturn are considered as detectors of the epochs of appearances near the Earth of undiscovered hazardous comets.

Shestopalov D. Golubeva L.

Compositional Variations of the 495-nm Absorption Band in Olivine Reflectance Spectra [#1227]

The long-wavelength shift of the 495-nm absorption band center in the olivine reflectance spectra is observed when forsterite content decreasing. The shift of band center depends on grain size and gives the error of forsterite estimation amounting to ± 10 wt%.

Slyuta E. N.

Shapes of Small and Planetary bodies: Case of Phoebe [#1088]

Shapes of small and planetary bodies principal differ from each other. Phoebe on the shape parameters is not a small body and belongs to planetary bodies.

Tikhomirova E. N. Perov N. I.

Perturbations of Meteors' Particles Motion Under Action of Photons and Protons [#1089]

The new integrals of meteors motion with taking into account the effect of Poynting-Robertson and drag caused by solar wind are deduced and used in practice. The life-time of future meteor showers of comet Tempel I is estimated (after explosion made July 4, 2005).