Lightcurves of the synchronous eclipsing binary asteroids

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Brightness variation of the synchronous eclipsing binary asteroid shows two-component lightcurve with each showing the same period. The first component is associated with the rotation of two non-spherical bodies (*rotational lightcurve*); the second one, showing two sharp minima is due to mutual eclipse/occultation events in the binary system (*eclipsing lightcurve*). It means that the rotational periods of both bodies are equal to the orbital period, which is characteristic for synchronous rotation. Models and *eclipsing lightcurves* of such asteroids will be presented and compared with the observational data known for some objects.