

I am very grateful to you for posting everything and also giving the link to the GRAZPREP-software. I would be glad if you also added the information that I designed GRAZPREP to be a rather easy to use tool for any single user to find out about his or her local total and grazing occultation events with all necessary details to successfully observe these events. GRAZPREP works well together with Google Earth as it creates a reliable KML-code to show up in Google Earth. It appears to me that, as GRAZPREP does the job, it is not necessary to fix problems with older software solutions.

Before anyone decides to install the software, the manual can be opened with the upper selection bar on www.grazprep.com to find out whether the software is useful for personal needs and interest. Also, a planetarium function is included now which is graphically optimized for lunar occultations. Total occultations for any location can be calculated with a time accuracy between 0,1 and 0,5 seconds as comparisons with quite a few observations show. The prediction of D's and R's during grazes sometimes shows greater differences due to the lack of profile accuracy. This can nicely be shown graphically with GRAZPREP's planetarium when the surface of the animated moon scratches along the star and 1/50th of an arc second or less to decide about an occultation or none. BTW, also Baily's Beads can be graphically simulated. The installation of GRAZPREP requires a password, which is IOTA/ES .

The small differences to the OCCULT calculation may be caused by different refraction algorithms. Anyhow all predictions have a limited accuracy because of the low altitude of Spica but are in any case good enough to see many contacts.