

Extended Data Figure 2 | Rotation periods for different activity models. Absolute magnitudes based on Swift/UVOT photometry (black circles) are corrected for different relationships (characterized by A) between the activity of the comet and its distance to the Sun (see Methods). An

increase in A corresponds to an increase in the rotation period that is needed to phase the overlapping sine curve segment (red triangles). Top, A=0, period = 46 h; middle, A=28, period = 57 h; bottom, A=35, period = 60 h. Error bars indicate  $1\sigma$  stochastic uncertainties.