TAGCAMS Earth Gravity Assist (EGA) Data Caveats

April 13, 2018

1. On Day of Year (DOY) 265 two NavCam 1 (ncm) images of the Earth were acquired with exposure times of 0.2 s and 0.4 s and two NavCam 2 (nft) images of the Earth were acquired with exposure times of 0.2 s and 0.4 s. Those four images of the Earth were significantly over-exposed and the portions of the Earth-disk in the image are saturated. This was done on purpose to demonstrate NavCam over-exposure control in-flight in preparation for operations at Bennu.

2. Using two cameras (NavCam 1, ncm and NavCam 2, nft) a total of 40 images were acquired over a period of three days on DOY 266, 268 and 271 using 2 s exposure times with the Moon in the cameras' fields of view. The Lunar disk is overexposed in these images. This was done purposely to test optical navigation algorithm performance in flight.

3. On DOY 268 eleven StowCam images of the OSIRIS-REx sample return capsule (SRC) and spacecraft deck were acquired. This is a standard image set that we have been acquiring in cruise and four of the eleven images in this set are quite dark due to the illumination conditions at the time the exposures were acquired.