

AMM1 and MAMM Mosaics

Three versions of the AMM1 and MAMM Ascending dataset are available, a radiometrically smoothed mosaic, a log-scaled 8-bit version of the radiometrically smoothed mosaic, and a σ° mosaic. The MAMM Descending mosaic was never radiometrically smoothed, and thus only two versions exists, one converted to a σ° mosaic and a log-scaled 8-bit version.

Dataset	Rad. Smoothed	Log-scaled 8-bit	σ°
AMM1	Final Tiles & Tile Overviews	e.g. amm1mos_100m	amm1sig0_100m32bit
MAMM Asc.	Final Tiles & Tile Overviews	e.g. mamm_asc_log100m	mammsig0_asc_100m32bit
MAMM Desc.	NA	e.g. mammsig0_desc_100m	mammsig0_desc_100m32bit

The following equations were used to compute amplitude for the different datasets following inversion of radiometric smoothing. Amplitude calculation was an intermediate calculation for calculating σ° please reference AMM1_Sig0_evalr4.pdf for information on AMM1 sig0 product creation and Sigma0_Processing.pdf for MAMM Ascending and Descending sig0 product creation.

The AMM1 Amplitude equation:

$$Amplitude_{AMM1} = \frac{DN_{no_radiometry_applied}}{6000} - 0.0005$$

The MAMM Ascending and Descending Amplitude equation:

$$Amplitude_{MAMM} = \frac{DN_{no_radiometry_applied} - 500}{10700}$$