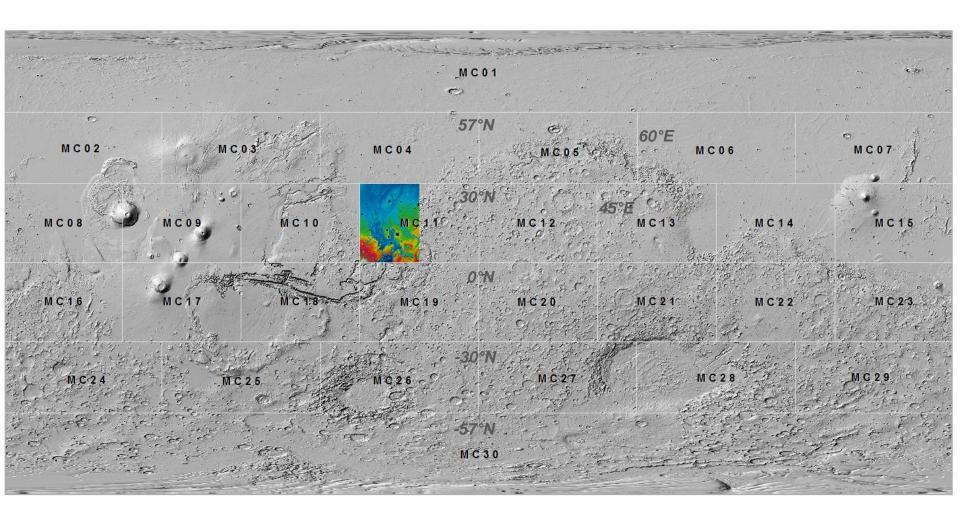
HMC-30 Scheme (modified from Batson, 1990)

Equidistant cylindrical (+/-57° latitude)
Polar Stereographic (beyond 65° N and S)
Supplementary Lambert conformal or azimutal (+/-30° to +/-65° latitude)



HMC30 Tiling Scheme and Naming Convention

HMC-nnE00 (22.5° longitude range)

Naming convention for HRSC Level-5 products:

HMC_nnHtt_pp5

HMC = HRSC Mars Chart

nn = MC number

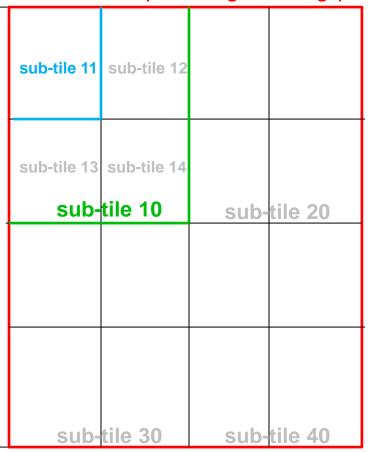
H = E or W for east or west part

tt = sub-tile index

pp = product type identifier

- dt5 spheroid DTM
- da5 areoid DTM
- nd5 panchromatic image
- co5 rgb color image

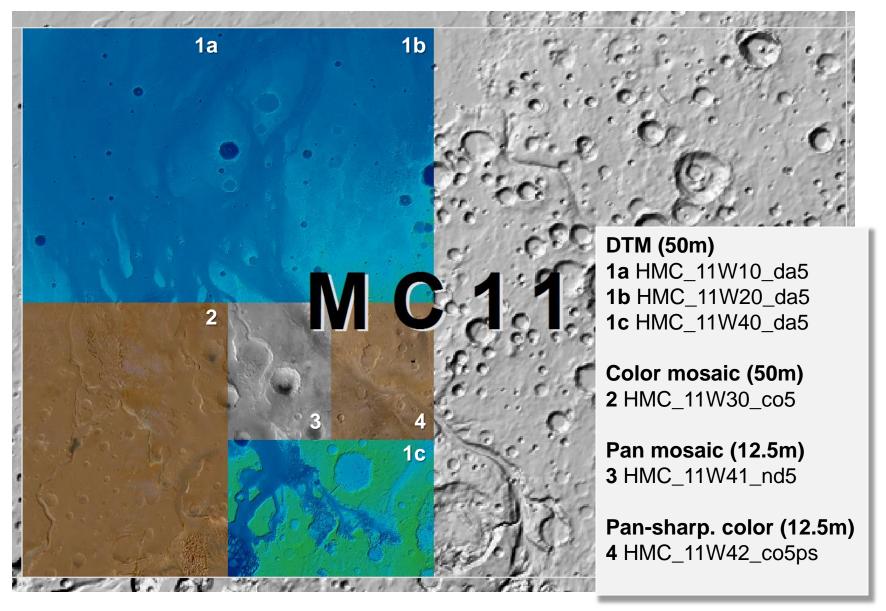
e.g. HMC_07W44_nd5 is the southernmost and easternmost subtile of the pan mosaic for the western half of MC-07

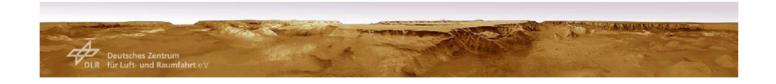


",sub-tile" 00 = entire MC half-tile

MC-nn, 45° longitude range (60° at mid-latitude ranges)

Example: HMC-11W





HRSC Mars Chart (HMC-30) products





The HRSC Mars Chart (HMC30) products include multi-orbit digital terrains models (DTMs) and orthorectified image mosaics derived from HRSC images, as well as follow-up data products such as pansharpened versions of the color image mosaics, color-coded shaded relief maps of the DTMs, and ready to print map sheets of the Topographic Image Map Series Mars 1: 700,000.

Below we provide a list of data products currently available for download (in GeoTIFF format).

HMC-30 data products are organized according to a modified version of the USGS MC-30 global tiling scheme. All HMC-30 data products are based on improved modeling of imaging geometry using bundle-block adjustment, and are exact copies of the datasets produced by the Global Topography and Mosaics Task Group (GTMTG) of the HRSC Science Team.

Release of these data products, conforming to PDS standards, is currently in preparation through the Planetary Science Archive (PSA). Information on PDS volume and citation information will be provided on this page as soon as available.

http://hrscteam.dlr.de/HMC30



Information on tiling scheme and naming conventions

HMC-30 filenames contain information on the quadrangle and sub-tile, and on the type of product. DTMs are distinguished by the type Identifiers "da5" (areoid DTMs) and "dt5" (spheroid DTMs). File names of panchromatic and color mosaics are identified by "nd5" and "co5", respectively, pan-sharpened color mosaics by "co5ps" and color-coded shaded relief maps by "da5cs". Information on tiling scheme and naming conventions is also provided in the following document:

HMC30 tiling scheme and file naming.pdf

References

For information on the HRSC instrument and on processing methodology please refer to the papers below and references therein:

Gwinner, K., et al., 2016. The High Resolution Stereo Camera (HRSC) of Mars Express and its Approach to Science Analysis and Mapping for Mars and its Satellites. Planet. Space Science 126, 93–138, doi:10.1016/j.pss.2016.02.014. (Overview on processing methodology and product characteristics)

Jaumann, R., et al., 2007. The High Resolution Stereo Camera (HRSC) experiment on Mars Express: instrument aspects and experiment conduct from interplanetary cruise through the nominal mission. Planet. Space Sci. 55 (7-8), 928–952, doi:10.1016/j.pss.2006.12.003. (HRSC instrument paper)

Kersten, E., et al., 2018. Topographic mapping of the Mars MC quadrangles using HRSC data. EPSC Abstracts Vol. 12, EPSC2018-352. (Technical paper on topographic map series)

Michael, G., et al., 2016. Systematic processing of Mars Express HRSC panchromatic and colour image mosaics: Image equalization using an external brightness reference. Planet. Space Science 121, 18–26, doi: 10.1016/j.pss.2015.12.002 (Technical paper on brightness normalization for mosaic generation)

http://hrscteam.dlr.de/HMC30