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EUROPEAN CO-ORDINATED QUADRANGLE MAPPING OF MERCURY

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ABSTRACT

MESSENGER data are being used to create 1:3M quadrangle geologic maps of Mercury [1], in preparation for BepiColombo [2]. Maps H02-H05 have already been published [3-6] and others are in progress [e.g. 7-12] or scheduled with the exception of H01 (Figure 1). Mapping uses 166 mpp mosaics, and digitization is at a scale of 1:300k. The mapper for each quadrangle maps a 5° overlap with adjacent quadrangles, and it will be possible to produce a globally merged product. Mapping protocols follow the mapping standards document of the Planmap project [13], which are modelled closely on the USGS equivalent.

References: [1] Galluzzi V. et al. (2019) *Geophys. Res. Abs.*, 21, EGU2019-18802-1. [2] Rothery D. A. et al. (2020) *Space Sci. Rev.*, 216, 66. [3] Galluzzi V. et al. (2016), *J. Maps*, 12, 227–238. [4] Guzzetta, L. et al. (2017) *J. Maps*, 13, 227–238. [5] Mancinelli et al. (2016) *J. Maps*, 12, 190–202. [6] Wright J. et al. (2019) *J. Maps*, 15, 509–520. [7] Giacomini L. et al. (2018), *EPSC 12*, EPSC2018-721-1. [8] Lewang A.M. et al. (2018), *LPS XLIX*, Abstract #1846. [9] Malliband C.C. et al. (2019), *LPS L*, Abstract #1807. [10] Semenzato A. et al. (2018), *EPSC 12*, EPSC2018-344. [11] Pegg D.L. et al. (2019), *LPS L*, Abstract #1271. [12] Man et al. (2020), *British Planetary Sci Conf.* 2020, 80. [13] <https://wiki.planmap.eu/pages/viewpage.action?pageId=4980741>

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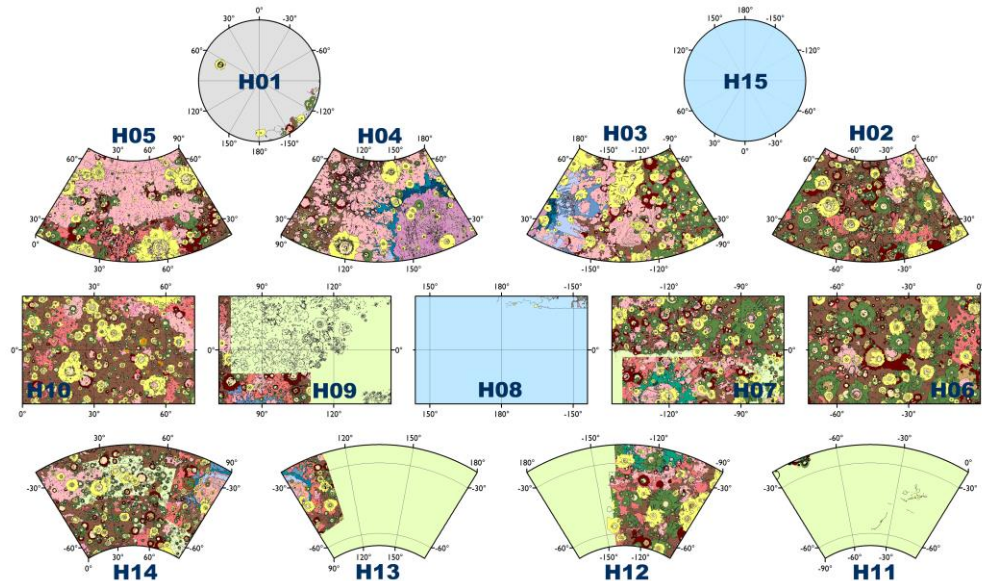


Figure Caption: The status of European quadrangle mapping on Mercury. Maps in the equatorial and southern rows are not yet published. H10 and H14 are expected in 2020. Green = in progress, blue = scheduled.