Space Weathering on Mercury

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Space weathering is a proposed mechanism that darken and redden the reflectance spectra of airless bodies such as the moon and asteroids. It is caused by formation of nanophase iron particles due to high-velocity impacts of interplanetary dust. Because of close distance to the sun, space weathering on Mercury is stronger and more prevailing than on the moon or asteroids. Observation by BepiColombo is important to clarify the Mercurian space weathering.