



## **Transpressional Structures on Mercury**

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Mercury is classically dominated by contractional features at a global scale (e.g. Watters et al.2009, EPSLJ). Nonetheless, numerous evidences of strike-slip kinematics have been found on Mercury Dual Imaging System (MDIS) camera images mainly derived from the three MESSENGER flybys and acquired near the terminator. This proves that several lobate scarps and high-relief ridges may be interpreted as transpressional structures more than thrust and back-thrusts systems. This finding may support either tidal despinning or residual mantle convection on ruling the nucleation and development of lobate scarps, although within the general framework of planetary contraction and cooling. In addition, the presence of faults with a clear strike-slip kinematic component may possibly affect future estimates of the hermean radius shortening.