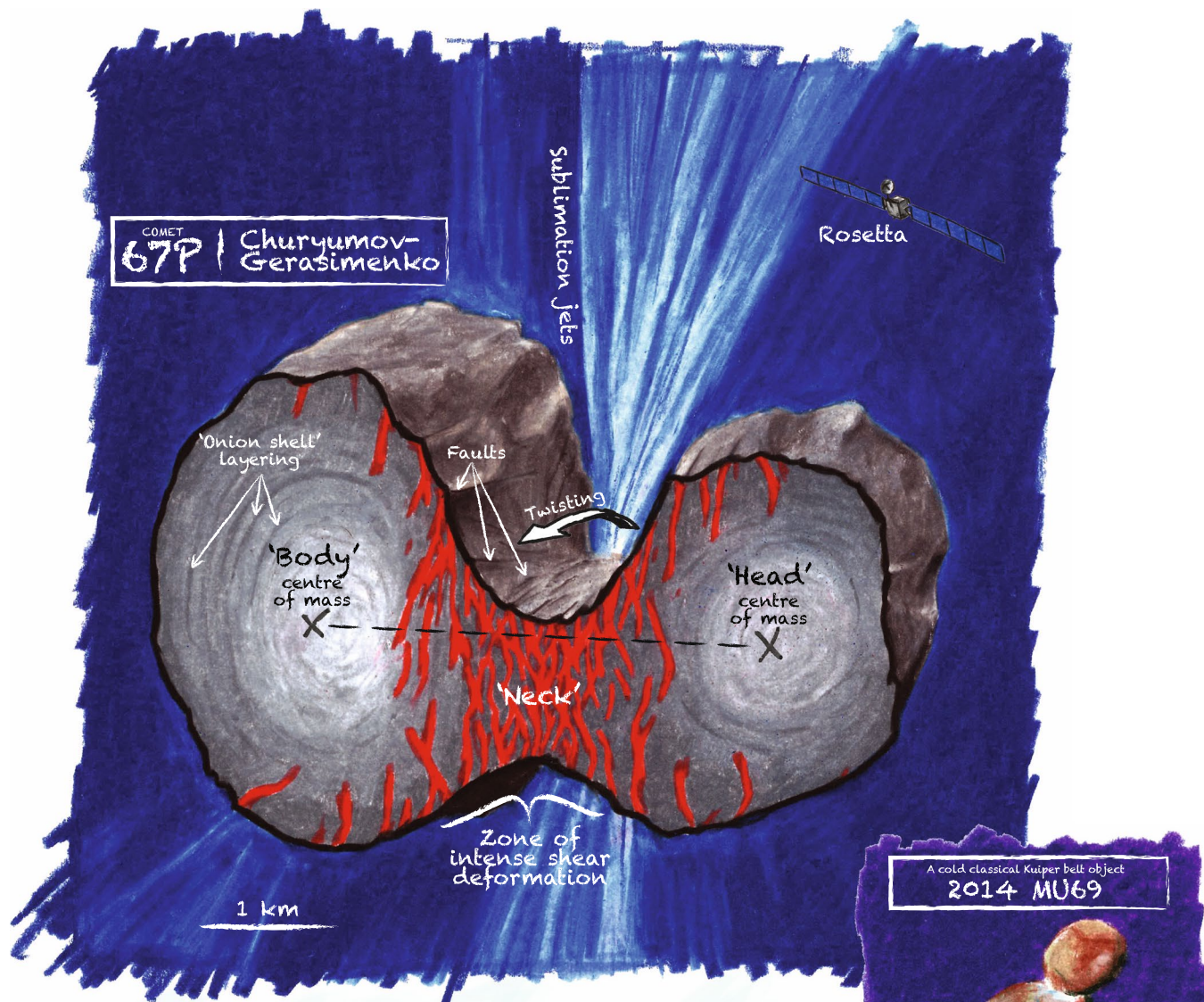


SKETCH UP

Stress in the neck of bilobate comets

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Matonti and colleagues identified sets of strike-slip faults in and around the 'neck' of Rosetta's comet, 67P. They find that 67P's bilobate shape (where the 'head' is cantilevered over the 'neck' and 'body') produces significant stresses within the entire comet – resulting in shear deformation throughout. This tectonic process is not directly driven by sublimation, and can operate when the comet is far from the Sun. Thus, this process may also be important for shaping bilobate Kuiper belt objects, like the target of the New Horizons mission: 2014 MU69.

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