The table below provides an overview on derived rotational parameters. Thereby the orientation of the rotation axis is parameterized by the declination $\delta(t) = \delta_0 + \delta_1 t/\text{cy}$ and right ascension $\alpha(t) = \alpha_0 + \alpha_1 t/\text{cy}$. The temporal evolution of the right ascension and declination angles is described by a linear function, where the first term gives the orientation of the rotation axis at the J2000 epoch (with respect to ICRF) and the second term denotes the long-term precession of the rotation axis (‘cy’ refers to Julian century, i.e. 365.25 days). The rotation about that axis is defined by the prime meridian angle $W(t) = W_0 + W_1 t/d + W_2 n(t)$, which is composed of the prime meridian constant $W_0$, the mean rotation rate $W_1$ and the forced libration in longitude $W_2 n(t)$. The amplitude of the latter is denoted by $A_{\text{lib}} = \max W_2 n(t)$. Values in rows below the dashed line are based on MESSENGER observations. Rotational parameters adopted for MESSENGER cartographic products are highlighted in bold face. Computed values refer to the orientation and precession of the orbit plane normal and to the rotation rate obtained by the assumption of a 3:2 spin-orbit resonance.

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