















## Long-term drying of Mars by sequestration of ocean-scale volumes of water in the crust

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*Science* **372** (6537), 56-62.

DOI: 10.1126/science.abc7717 originally published online March 16, 2021

### Burying Mars' ancient water in the crust

Mars once had oceans of liquid water on its surface but little of that water remains today in the planet's ice caps and atmosphere. This discrepancy is usually interpreted as loss of water to space, supported by the atmospheric deuterium/hydrogen (D/H) ratio, but this has been difficult to reconcile with other constraints. Scheller *et al.* propose that water could instead have been incorporated into minerals in the planet's crust, which were later buried (see the Perspective by Kurokawa). They simulated the evolution of the D/H ratio and atmospheric loss rates for a range of plausible conditions, finding that 30 to 99% of Mars' initial water was buried in the crust.

*Science*, this issue p. 56; see also p. 27

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