**Table** Dolomite δ26Mg data.

| Time\* | Formation(s)/Group(s)\* | Area\* | Samples\*\* | Ref |
| --- | --- | --- | --- | --- |
| Middle Cambrian | Xuzhuang | North China | n=19 | 1 |
| Cambrian | Jutana | Pakistan | n=4 | 2 |
| Edicaran to Cambrian | Aksai Chert; Lower Phosphorite | Kazakhstan | n=13 | 3 |
| Edicaran to Cambrian | - | Russia | n=32 | 4 |
| Early Ordovician | St. George | Canada | n=32 | 5 |
| Early Ordovician | Penglaiba | Tarim, China | n=25 | 6 |
| Permian to Triassic | Bellerophon; Werfen; Changhsing; Feixianguan; Wuchiaping; Daye | South Australia; South China; North China; | n=110 | 7 |
| Middle Permian | Maokou | Sichuan, South China | n=8 | 8 |
| Mississippian | Madison | Canada | n=4 | 9 |
| Norian | Hauptdolomit | Austria; Italy | n=38 | 10 |
| Miocene | - | ODP Site 1196; ODP Site 807 | n=7 | 11 |
| Modern | - | Persian Gulf | n=24 | 12 |
| Middle Triassic | Zhoucunchong | South China | n=35 | 13 |
| Albian | Hevyon | Makhtesh Hatira, Israel | n=51 | 14 |
| Norian; Late Permian; Early Visean; Wuchiapingian; Permian; Neoproterozoic; Pleistocene; Late Jurassic; Anisian; Givetian; Late Norian; Ladinian/Carnian; Late Miocene; Bashkirian | - | Greece; Austria; Belgium; USA; Angola; Abu Dhabi; Germany; Northern Italy | n=20 | 15 |
| Miocene to Late Pleistocene | - | Africa; North America | n=6 | 16 |
| Late Cambrian | Qinjiamiao | South China | n=33 | 17 |
| Albian | Givat Yearim; Soreq | Levent Margin | n=53 | 18 |
| Miocene | Monterey | Southern California | n=80 | 19 |
| Modern | Dohat Faishakh Sabkha | Qatar | n=14 | 20 |
| Cenomanian; Middle Jurassic;  Neoproterozoic; | Weradim; Hermon; Lesser Himalaya | Soreq; Mizpe Shlagim; Central Nepal | n=5 | 21 |
| Upper Ordovician; Lower Devonian; Lower Silurian; | Deschambault; Sayabec; La Vielle; West Point | Canada | n=16 | 22 |
| Miocene to Quaternary | - | ODP Site 1230;  ODP Site 685 | n=8 | 23 |
| Miocene to Quaternary | Sanya; Meishan; Huangliu; Yinggehai; | South China Sea | n=41 | 24 |
| Late Miocene to Pliocene | - | ODP Leg 166; San Salvador; Bahamas | n=39 | 25 |
| Late Miocene to Pliocene | - | Clino & Unda; Bahamas | n=66 | 26 |
| Middle to late Ordovician | Red River; Winnipegosis | Saskatchewan | n=146 | 27 |
| Middle Ordovician | Majiagou | North China | n=22 | 28 |
| Early Ordovician | Penglaiba | South China | n=44 | 29 |
| Ediacaran to Cambrian | Dengying | South China | n=36 | 30 |
| Early Jurassic | Quse | Tibet, China | n=37 | 31 |

\* Samples from multiple ages/formations/groups/locations are separated by semicolons.

\*\* In total: n=1068 samples.

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