

**Table S1: Age model of Mochras Borehole (Ruebsam and Al-Husseini, 2020, 2021)**

| <b>Position</b>  | <b>Depth (meter)</b> | <b>Age (Ma)</b> |
|--|----------------------|-----------------|
| Base Bifrons   | 768                  | 180.9           |
| Base Falling Limb = Top post-T-CIE Plateau               | 783                  | 181.4           |
| Base post-T-CIE Plateau = Top T-CIE Rising Limb          | 801                  | 181.8           |
| Top T-CIE Valley   | 815                  | 182.2           |
| Base T-CIE Valley = Tenuicostatum/serpentinum            | 830                  | 182.6           |
| Base T-CIE Falling Limb = Top post- PI-T-CIE Rising Limb | 839                  | 183.0           |
| Base post- PI-T-CIE Rising Limb = Top PI-T-CIE Valley    | 860.5                |                 |
| Spinatum/tenuicostatum                                   | 863                  | 183.7           |
| Base PI-T-CIE Valley                                     | 864.8                | 183.84          |
| Base Lower Plateau = SB JPI8                             | 871.0                | 184.24          |
| Margaritatus/spinatum                                    | 901                  | 185.3           |