Table S1. Pearson correlation coefficient (r) between Ca and Sr and the seven next most abundant elements detected in Orgueil for the dl\*-data subset for each of the three cross-section slices.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Ca** | **Ti** | **Cr** | **Mn** | **Fe** | **Co** | **Cu** | **Zn** | **Sr** |
| **CS1** | **Ca** | - | 0.02 | 0.01 | 0.29 | 0.05 | 0.03 | 0.02 | 0.00 | 0.65 |
| **Sr** | 0.65 | 0.05 | 0.02 | 0.27 | 0.04 | 0.18 | 0.06 | 0.02 | - |
| **CS3** | **Ca** | - | 0.06 | 0.06 | 0.14 | 0.08 | 0.04 | 0.02 | 0.04 | 0.70 |
| **Sr** | 0.70 | 0.08 | 0.16 | 0.14 | 0.28 | 0.16 | 0.07 | 0.11 | - |
| **CS2** | **Ca** | - | 0.02 | 0.01 | 0.13 | 0.03 | 0.00 | 0.00 | 0.02 | 0.43 |
| **Sr** | 0.43 | 0.08 | 0.06 | 0.15 | 0.07 | 0.21 | 0.06 | 0.11 | - |

\*dl: depth-limited subset includes only data from near-surface regions (down to approx. 50 µm depth).