

## **Description of Additional Supplementary Files**

**File name:** Supplementary Data 1

**Description:** U-Pb analytical results for samples K01 and H01 in this study.

**File name:** Supplementary Data 2

**Description:** Cyclostratigraphic data.

**File name:** Supplementary Data 3

**Description:** Geochemical data.

**File name:** Supplementary Data 4

**Description:** Palynological data.