



Figure S3: Oriented X-ray diffraction patterns of clay and non-clay minerals in the Lower Cretaceous sedimentary rocks cement of the Northern Yamato Ridge.

(a) Chlorite (Chl) with illite (Ilt), analcime (Anl), quartz (Qz), and plagioclase (Pl).

(b) Swelling chlorite (SChl) (NL) with illite-smectite (Ilt-Sme), laumontite (Lmt), calcite (Cal), quartz (Qz), and plagioclase (Pl) [25,26].

1 – air-dried, 2 – glycol-saturated, 3 – heated at 550°C.

Number represents diffraction peak in nm.