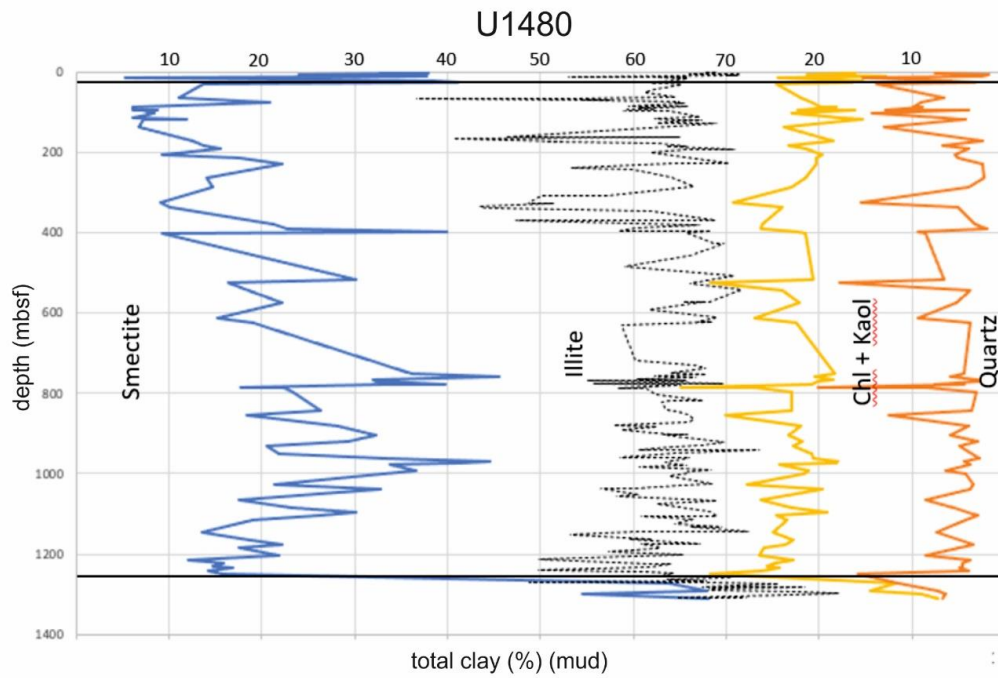
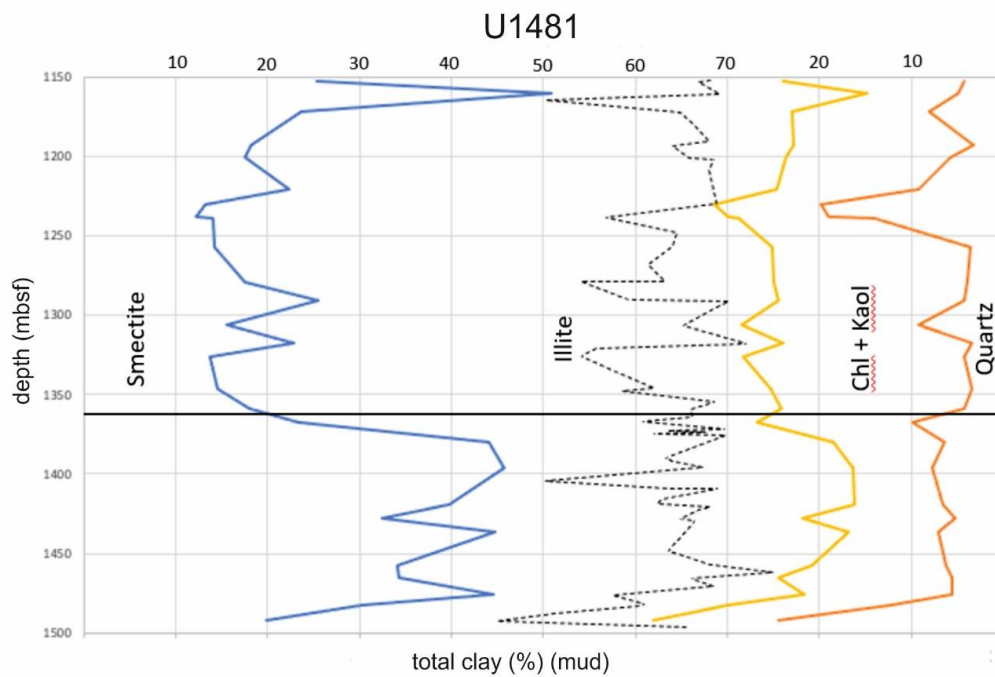


a)



b)



**Figure S1:** Clay mineral from clay (<2mm) separates, reported by Rosenberger et al., (2020) for U1480 and U1481 drill holes respectively in (a) and (b). Solid horizontal lines in (a) indicate base of Unit-I (Upper line) and base of Unit-II (Lower line) encountered at U1480 drilling site. Solid horizontal in (b) indicates base of Unit-II encountered at U1481 drilling site. Heating experiments (Rosenberger et al., 2020) indicate chlorite accounts for 66-100% Chl+Kaol fraction.