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2 **Supplementary data1:** Depth variation of L* data (Lightness in CIE-L*a*b* method) in PC13.
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6 **Supplementary data2:** Anisotropy of magnetic susceptibility data of PC03. K_m = mean susceptibility,
7 K_{max} = maximum susceptibility, K_{int} = intermediate susceptibility, K_{min} = minimum susceptibility, $L = K_{max}/K_{int}$,
8 $F = K_{int}/K_{min}$, $P' = \exp(\sqrt{2\{(\eta_1 - \eta_m)^2 + (\eta_2 - \eta_m)^2 + (\eta_3 - \eta_m)^2\}})$ where $\eta_1 = \ln K_{max}$, $\eta_2 = \ln K_{int}$, $\eta_3 = \ln K_{min}$,
9 and $\eta_m = (\eta_1 + \eta_2 + \eta_3)/3$, $K_{max Dec}$: K_{max} declination, $K_{max Inc}$: K_{max} inclination, $K_{int Dec}$: K_{int} declination,
10 $K_{int Inc}$: K_{int} inclination, $K_{min Dec}$: K_{min} declination, $K_{min Inc}$: K_{min} inclination. K_{max} , K_{int} , K_{min} directions are
11 re-orientated a mean Paleomagnetic data of PC03 (inclination/declination = 35.9/18.4, $\alpha_{95} = 1.2$, number = 148).
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15 **Supplementary data3:** Anisotropy of magnetic susceptibility data of PC011. K_m = mean susceptibility,
16 K_{max} = maximum susceptibility, K_{int} = intermediate susceptibility, K_{min} = minimum susceptibility, $L = K_{max}/K_{int}$,
17 $F = K_{int}/K_{min}$, $P' = \exp(\sqrt{2\{(\eta_1 - \eta_m)^2 + (\eta_2 - \eta_m)^2 + (\eta_3 - \eta_m)^2\}})$ where $\eta_1 = \ln K_{max}$, $\eta_2 = \ln K_{int}$, $\eta_3 = \ln K_{min}$,
18 and $\eta_m = (\eta_1 + \eta_2 + \eta_3)/3$, $K_{max Dec}$: K_{max} declination, $K_{max Inc}$: K_{max} inclination, $K_{int Dec}$: K_{int} declination,
19 $K_{int Inc}$: K_{int} inclination, $K_{min Dec}$: K_{min} declination, $K_{min Inc}$: K_{min} inclination. K_{max} , K_{int} , K_{min} directions are
20 re-orientated a mean Paleomagnetic data of PC11 (inclination/declination = 36.8/307.6, $\alpha_{95} = 1.18$, number = 207).
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24 **Supplementary data4:** Anisotropy of magnetic susceptibility data of PC013. K_m = mean susceptibility,
25 K_{max} = maximum susceptibility, K_{int} = intermediate susceptibility, K_{min} = minimum susceptibility, $L = K_{max}/K_{int}$,
26 $F = K_{int}/K_{min}$, $P' = \exp(\sqrt{2\{(\eta_1 - \eta_m)^2 + (\eta_2 - \eta_m)^2 + (\eta_3 - \eta_m)^2\}})$ where $\eta_1 = \ln K_{max}$, $\eta_2 = \ln K_{int}$, $\eta_3 = \ln K_{min}$,
27 and $\eta_m = (\eta_1 + \eta_2 + \eta_3)/3$, $K_{max Dec}$: K_{max} declination, $K_{max Inc}$: K_{max} inclination, $K_{int Dec}$: K_{int} declination,
28 $K_{int Inc}$: K_{int} inclination, $K_{min Dec}$: K_{min} declination, $K_{min Inc}$: K_{min} inclination. K_{max} , K_{int} , K_{min} directions are
29 re-orientated a mean Paleomagnetic data of PC13 (inclination/declination = 38.1/137.2, $\alpha_{95} = 0.99$, number = 215).
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