Electronic Supplementary Material (ESI) for Dalton Transactions.
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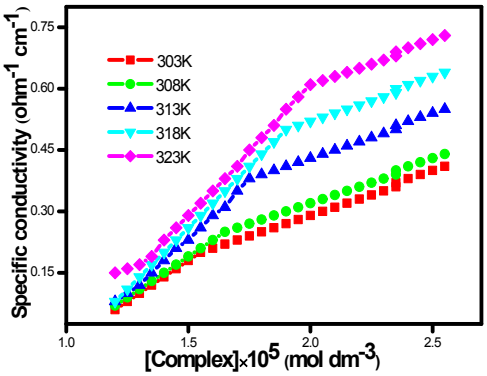
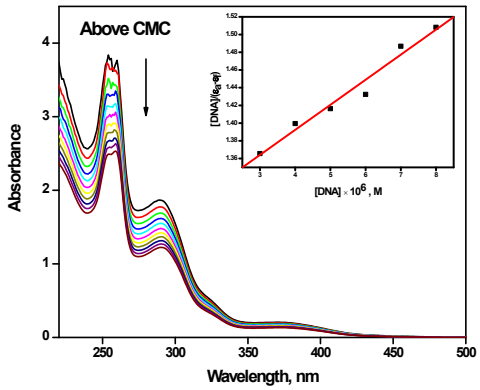
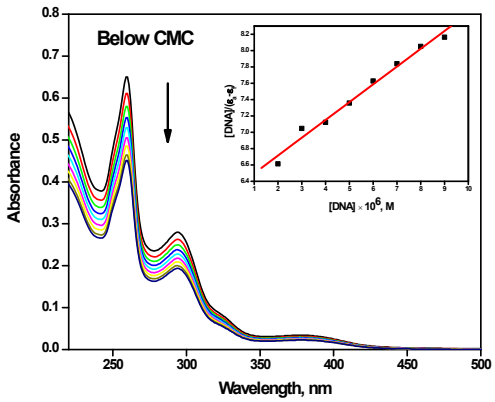
Supplementary Informations (SI)



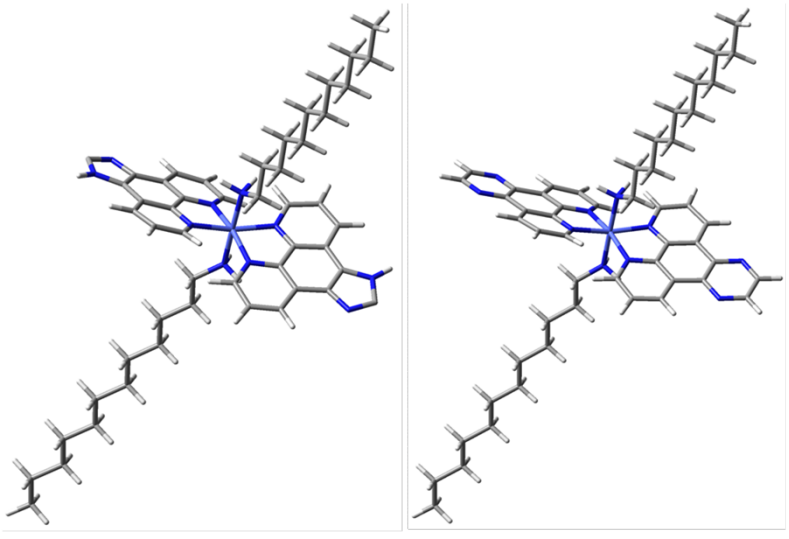
SI Fig. 1. Electrical conductivity vs. complex **(2)** concentration in aqueous solutions.



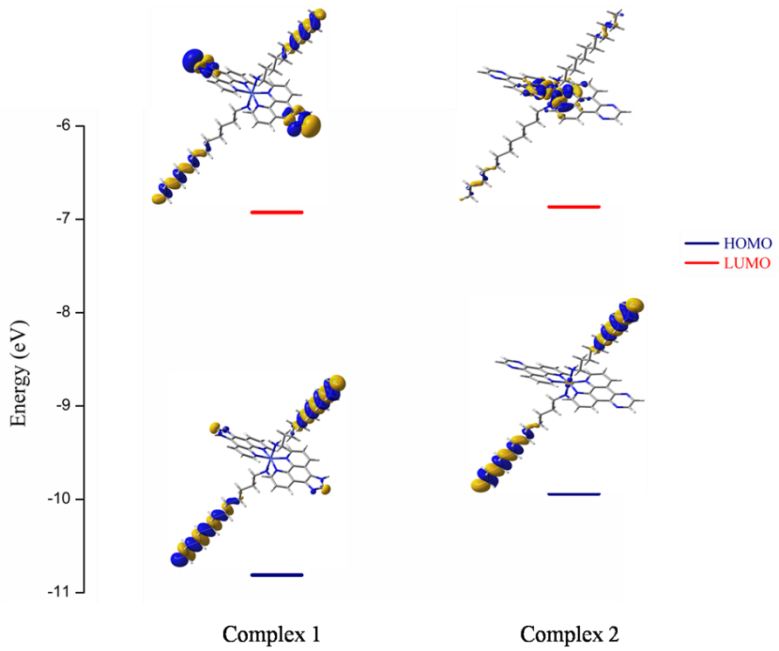
SI Fig. 2. Absorption spectra of complex **(2)** (Above cmc): in the absence (dotted line) and in the presence (solid lines) of increasing amounts of CT DNA. {Inset: Plot of [DNA] / (ε_a-ε_f) vs. [DNA]}. [complex] =1.0 × 10^{-4} M; [DNA] = 0-9.1 × 10^{-5} M.



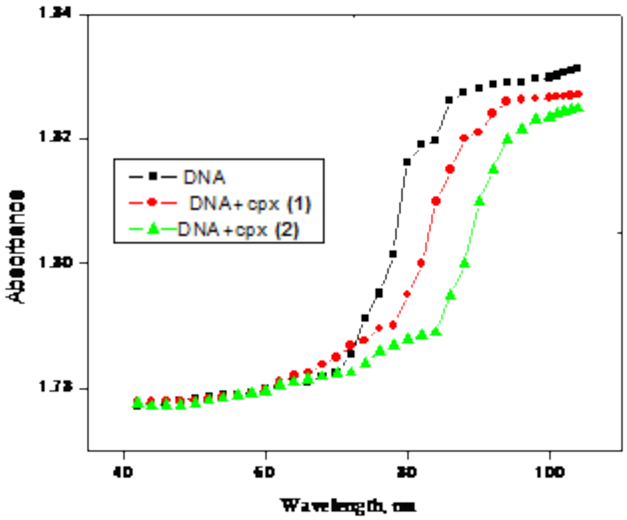
SI Fig. 3. Absorption spectra of complex **(2)** (Below cmc): in the absence (dotted line) and in the presence (solid lines) of increasing amounts of CT DNA. {Inset: Plot of [DNA] / (ε_a-ε_f) vs. [DNA]}. [complex] = 1.0 × 10^{-6} M; [DNA] = 0-9.1 × 10^{-5} M.



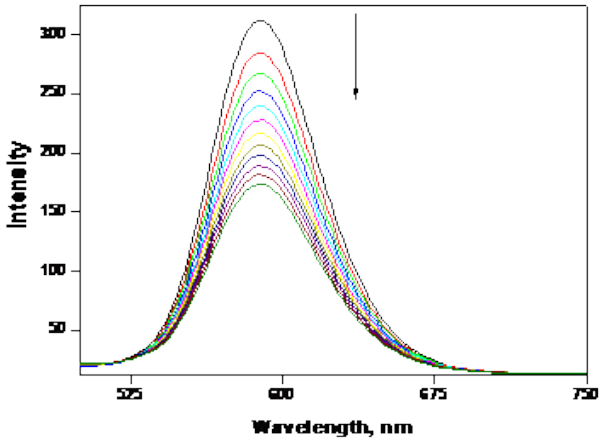
SI Fig. 4. Optimized geometries of surfactant Co(III) complexes **(1)** and **(2).**



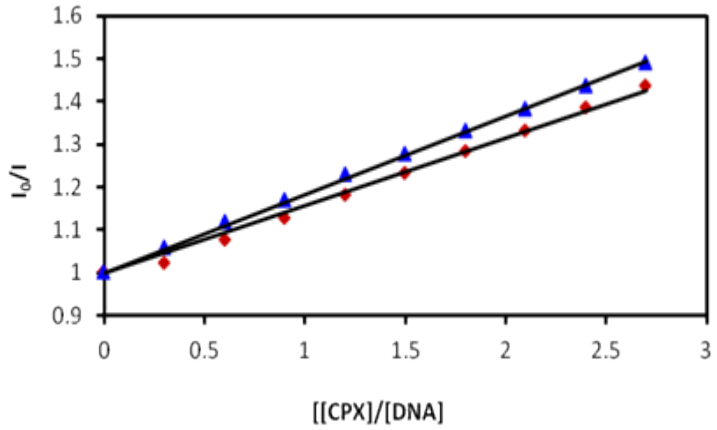
SI Fig. 5. Calculated frontier molecular orbitals of the surfactant Co(III) complexes **(1)** and **(2)** at B3LYP/LANL2DZ level.



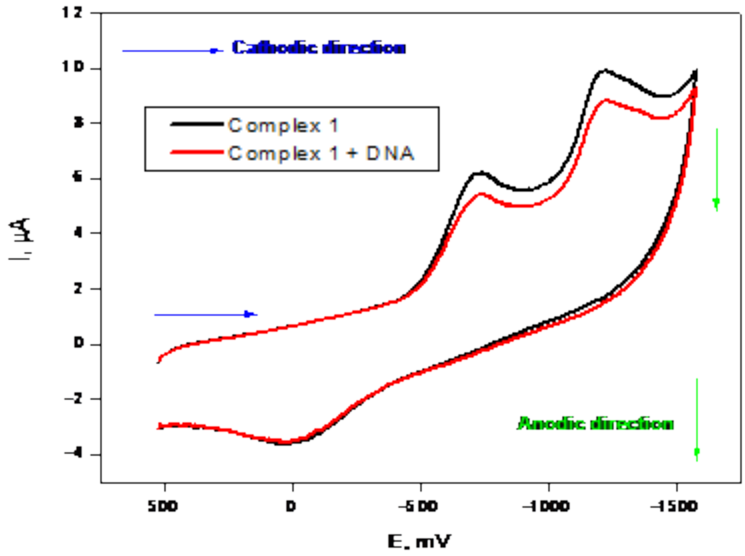
SI Fig. 6. DNA melting curves at 260 nm in the absence and presence surfactant Co(III) complexes **(1)** and **(2)** at 8 µM; [DNA] 80 µM.



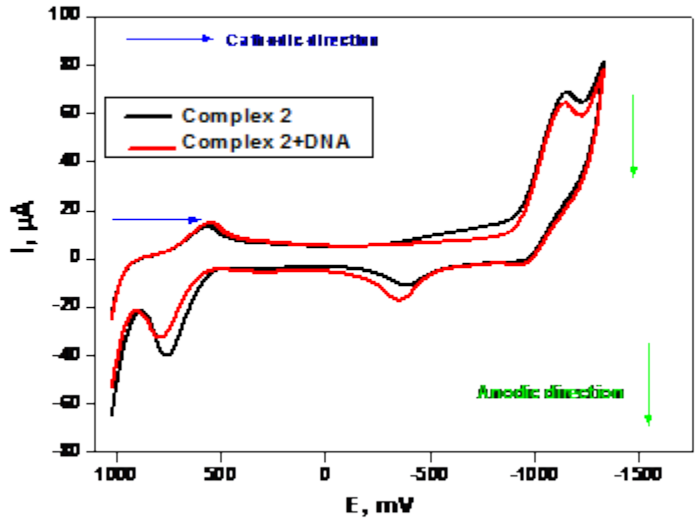
SI Fig. 7. Emission spectra of EB bound to CT DNA: in the absence and in the presence of surfactant Co(III) complex **(2).**



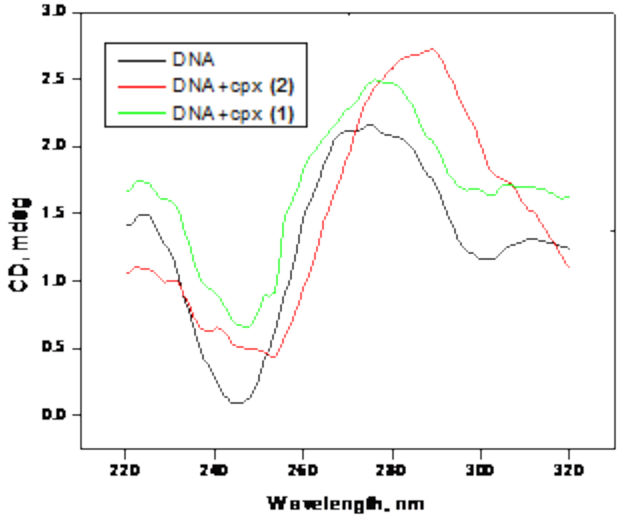
SI Fig. 8: Fluorescence quenching curves of EB bound to DNA by surfactant Co(III) complexes (red),$[Co(ip)_2(C_{12}H_{25}NH_2)_2](ClO_4)_3$ and (blue), $[Co(dpq)_2(C_{12}H_{25}NH_2)_2](ClO_4)_3$; Plot of [complex]/[DNA] vs. I_0/I}. [DNA] = 1×10^{-4} M ; [complex] = 5×10^{-4} M.



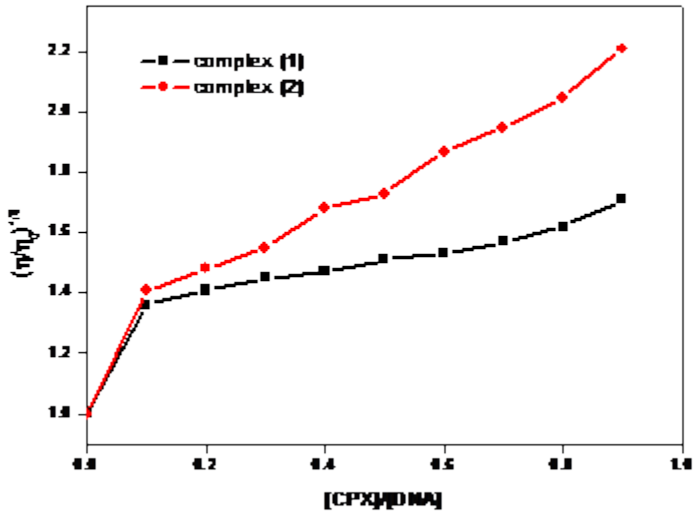
SI Fig. 9. CV spectra of complex **(1)** in the absence (black solid line) and in the presence (red solid line) of CT DNA. [Complex] = 1×10^{-3} M; [DNA] =0 – 2.68×10^{-5} M.



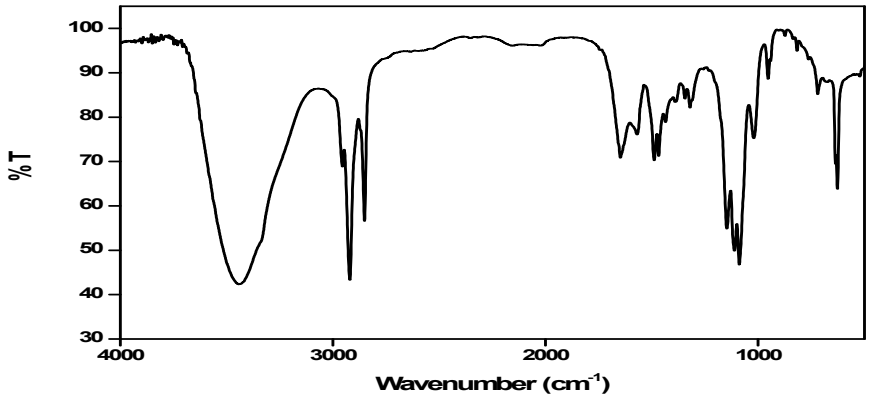
SI Fig. 10. CV spectra of complex **(2)** in the absence (black solid line) and in the presence (red solid line) of CT DNA. [Complex] = 1×10^{-3} M; [DNA] =0 – 2.68×10^{-5} M.



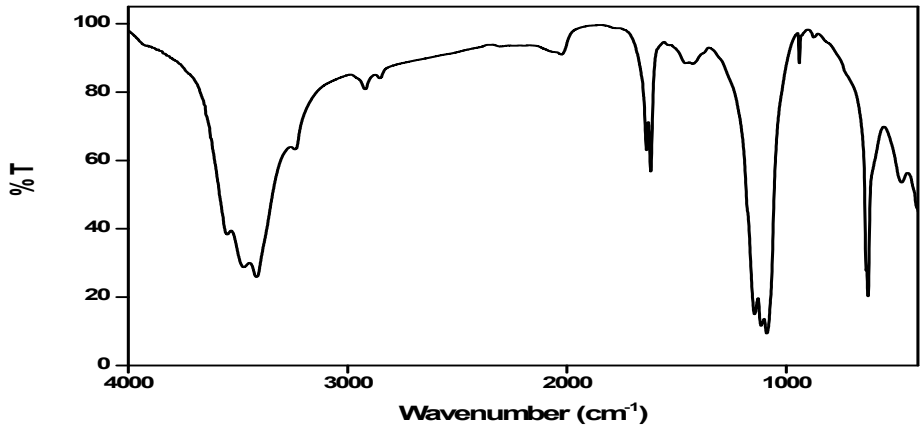
SI Fig. 11. Circular dichroism spectra in the absence (dotted line) and in the presence of surfactant Co(III) complex **(1)** and **(2)**. [complex] = 5×10^{-5} M; [DNA] = 1×10^{-4} M.



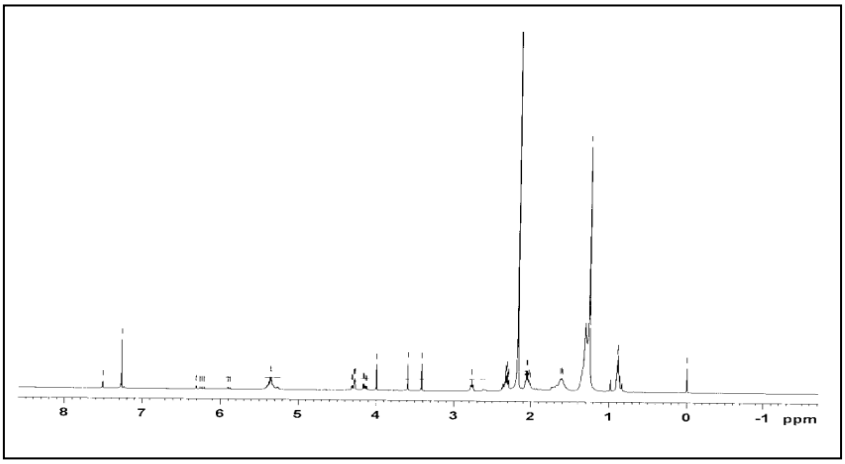
SI Fig. 12. Effects of increasing amounts of surfactant Co(III) complexes in presence of CT DNA on the relative viscosities of calf thymus DNA at 29.0 (± 0.1)ºC.



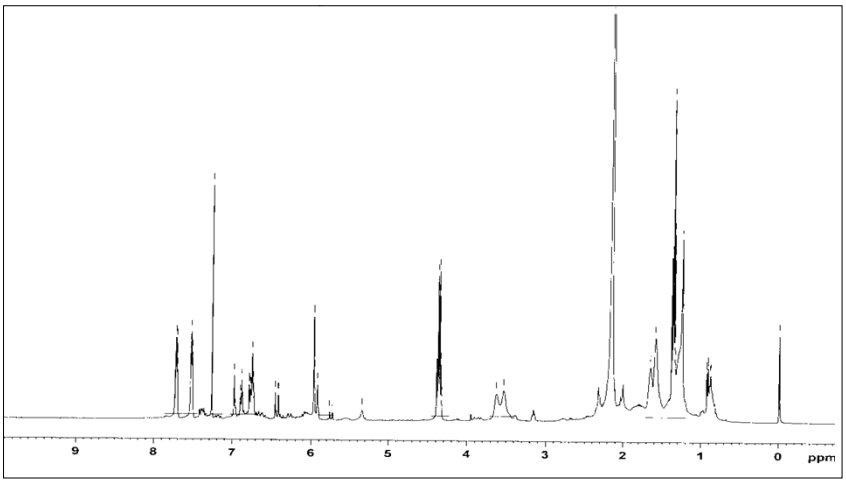
SI Fig. 13. IR spectrum of *cis*-$[Co(ip)_2(DA)_2](ClO_4)_3$



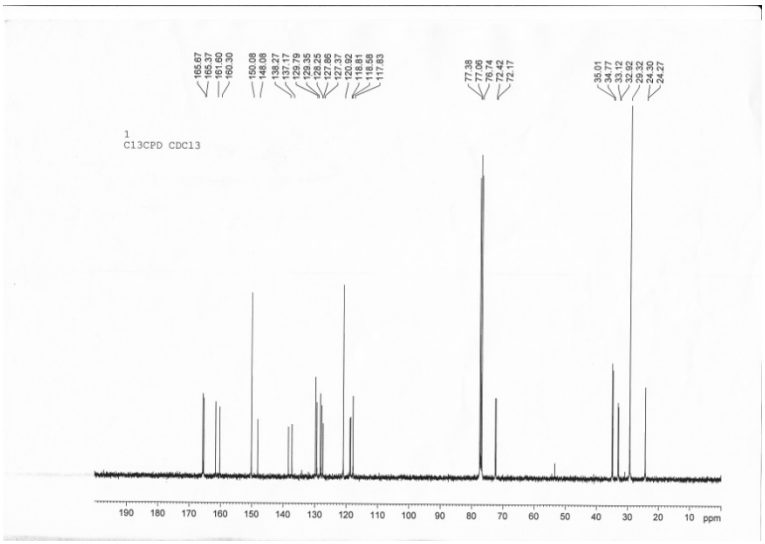
SI Fig. 14. IR spectrum of *cis*-$[Co(dpq)_2(DA)_2](ClO_4)_3$



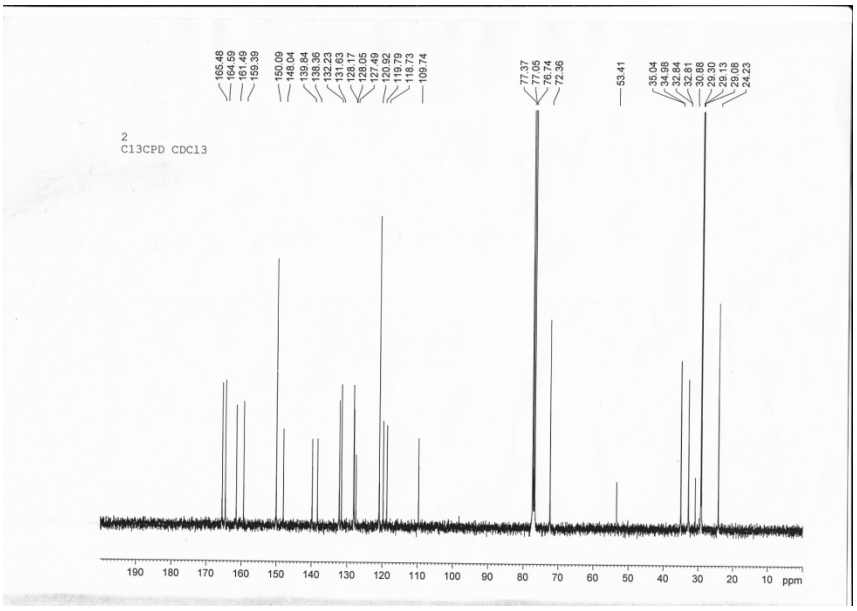
SI Fig. 15. ^{1}H NMR spectrum of *cis*-$[Co(ip)_2(DA)_2](ClO_4)_3$



SI Fig. 16. ^{1}H NMR spectrum of *cis*-$[Co(dpq)_2(DA)_2](ClO_4)_3$



SI Fig. 17. ^{13}C NMR spectrum of *cis*-$[Co(ip)_2(DA)_2](ClO_4)_3$



SI Fig. 18. ^{13}C NMR spectrum of *cis*-$[Co(dpq)_2(DA)_2](ClO_4)_3$

SI Tables

SI Table 1. CMC values of the surfactant Co(III) complex **(2)** in aqueous solution.

Temperature	CMC × 10^5	$-\Delta G^0_{mic}$ (kJ mol^{-1})	$-\Delta H^0_{mic}$(kJ mol^{-1})	$T\Delta S^0_{mic}$ (kJ mol^{-1})
303K	1.55	-28.36	-11.76	16.60
308K	1.65	-30.63	-12.34	18.29
313K	1.75	-31.44	-17.51	13.93
318K	1.91	-35.56	-19.36	16.20
323K	2.07	-38.39	-27.76	10.63