



**Supplementary Figure 2: Sensitivity of global net primary productivity from the B4F model. The original B4F simulations were driven with CO<sub>2</sub> input derived from the EPICA Dome C (EDC) ice core record (blue line). B4F was then forced at each time slice with 20 ppm higher and lower CO<sub>2</sub> concentrations than the EDC record in order to examine the sensitivity of NPP to CO<sub>2</sub>. We subsequently used the CO<sub>2</sub> sensitivity obtained at each time slice in combination with knowledge of the difference in CO<sub>2</sub> from the EDC and Bereiter et al (2013) records to estimate what the modelled NPP would be if forced with the Bereiter et al. (2013) CO<sub>2</sub> record itself (red curve).**