



**Supplementary Figure 3.** Distinguishing combustion sources in sediments from Sky Pond (SKP1) using backfield isothermal remanent ratios (IRM-20 mT/SIRM and IRM-300 mT/SIRM), a variation of a magnetic bi-plot used to discriminate between fly ash and vehicular dusts (Hunt et al., 1984). SKP exhibits similar magnetic mineralogy throughout the core, with a slight shift to ‘harder’ antiferromagnetic minerals in the majority of post-1997 samples, characteristic of fly ash emissions (Hunt et al., 1984; Oldfield, 2014).