



**Figure S1:** Mixing ratios of CFC-114 and CFC-114a measured in firn air collected at the Berkner (BKN, purple dots) and Dome C (DC, green dots) Antarctic sites, the modelled firn profiles (green and purple lines) and resulting atmospheric time series (black lines) compared to Cape Grim air archive data (blue dots). For CFC-114, the atmospheric trends from Sturrock et al. (2002) (firn air based, red dashed line) and Martinerie et al. (2009) (AFEAS emissions based, red continuous line) are also shown.