



Figure 5 Systems diagram (Kump et al. 2010) showing two ways in which anthropogenic climate forcing and concomitant Greenland temperature increase ΔT_{grl} drive sea level rise (cf. Fig. 2). Our study captures both the shortening of the GIS response time scale τ and the increase in equilibrium sea level contribution ΔV with temperature increase; semi-empirical modeling studies (e.g. Grinsted et al. 2009; Jevrejeva et al. 2012) neglect the shortening of the GIS response time scale τ identified by this work