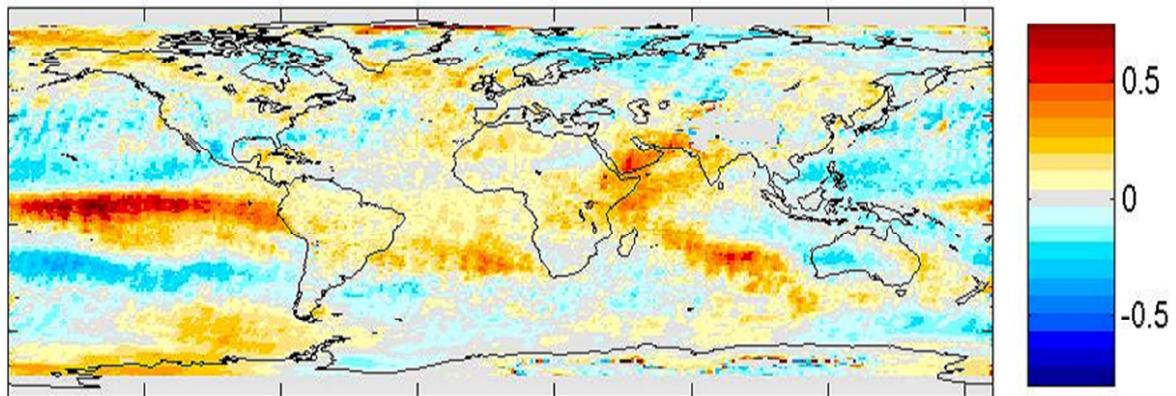
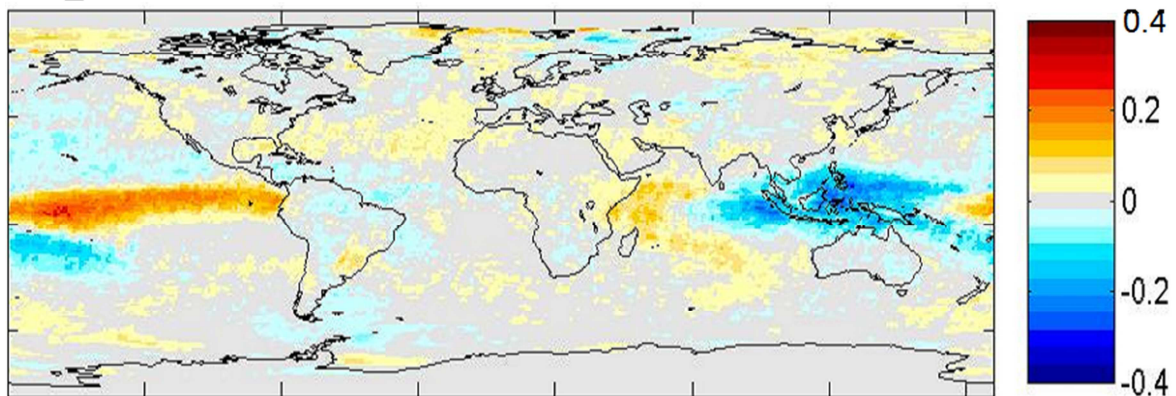


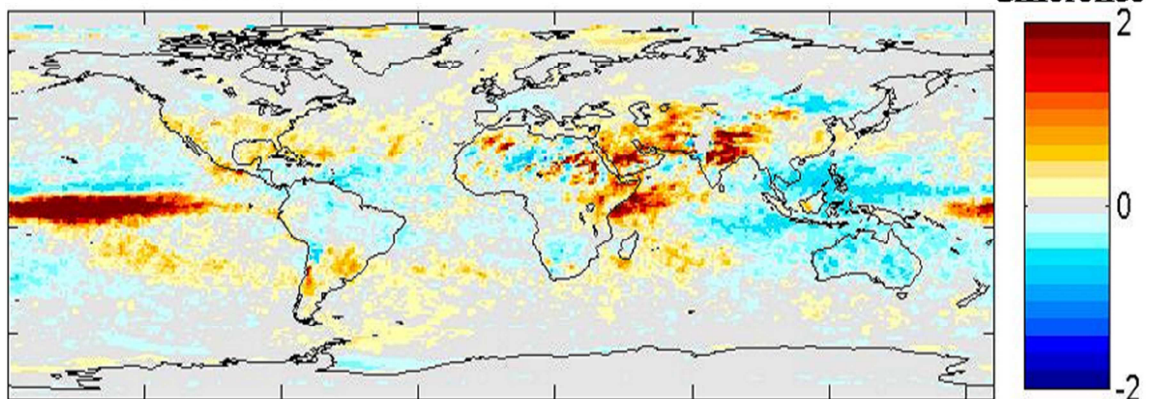
Water vapor column



O₂ 'cloud shielding'



cloud fraction



Relative anomalies of water vapor, cloud shielding and cloud fraction during the strong ENSO event of 1997/98 derived from GOME-1 observations (Wagner et al., 2005). Strong enhancements for all quantities occur over the tropical Pacific, where the sea surface temperature is also enhanced. The O₂ cloud shielding indicates the reduction of the O₂ absorption at 650 nm caused by clouds. Note that significant El-Niño induced anomalies are found not only for the tropics but also for mid and high latitudes (Wagner et al., 2005). Courtesy: Thomas Wagner (MPIC).