

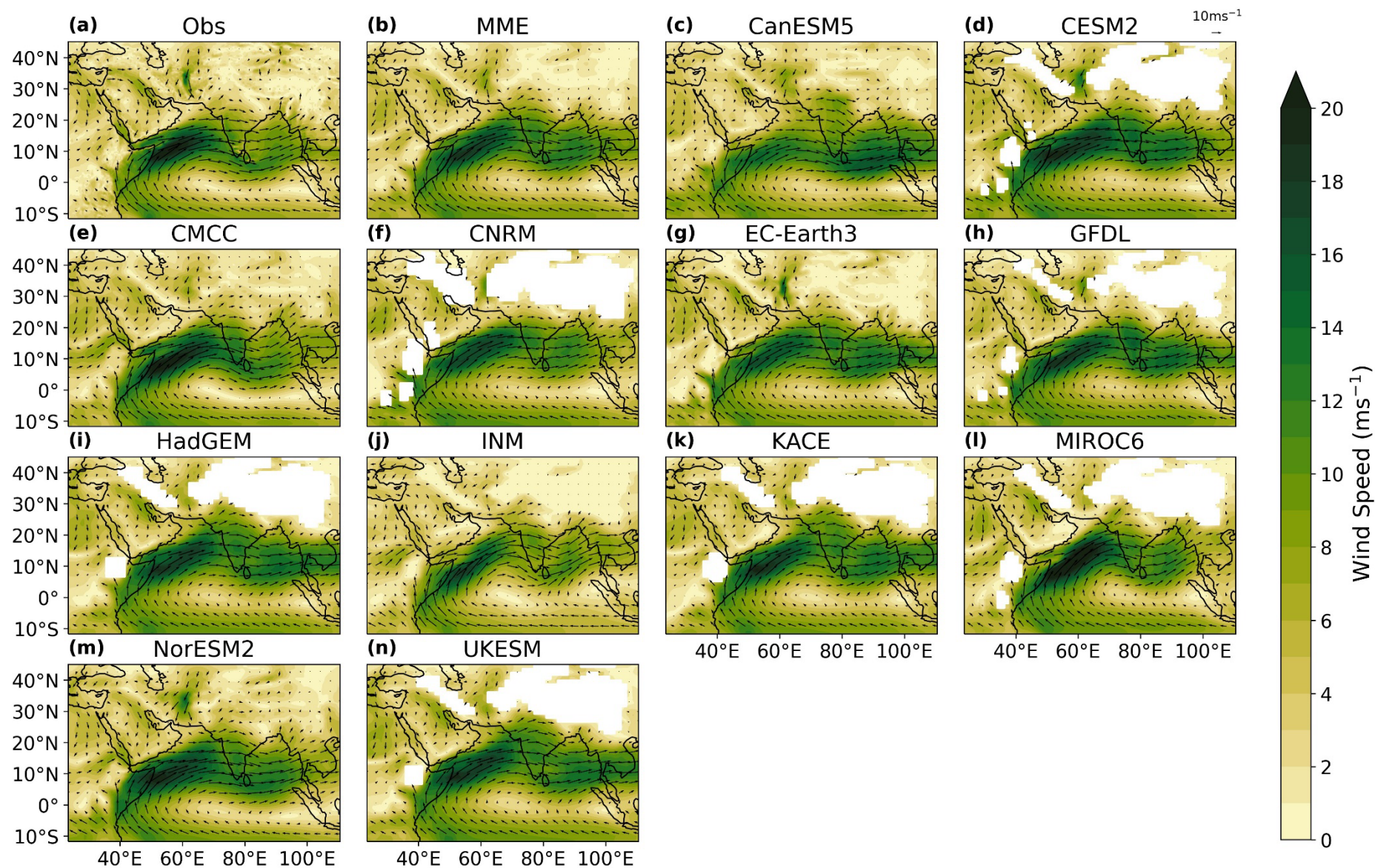


Fig. S1 - JJAS windspeed (850hPa) over South Asia (1984-2014) for observed (a), MME (b) and individual models (c-n).

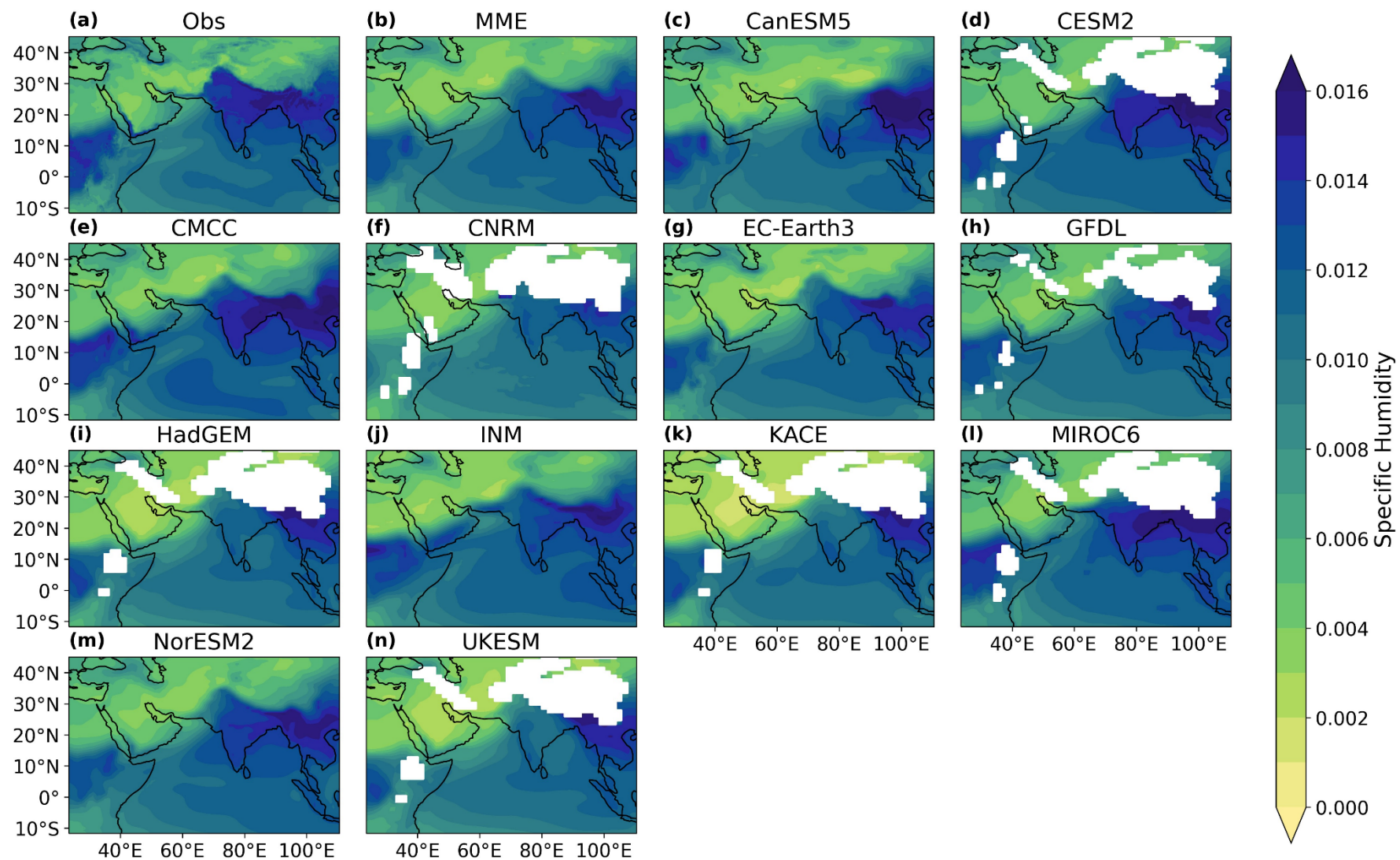


Fig. S2 - JJAS specific humidity (850hPa) over South Asia (1984-2014) for observed (a), MME (b) and individual models (c-n).

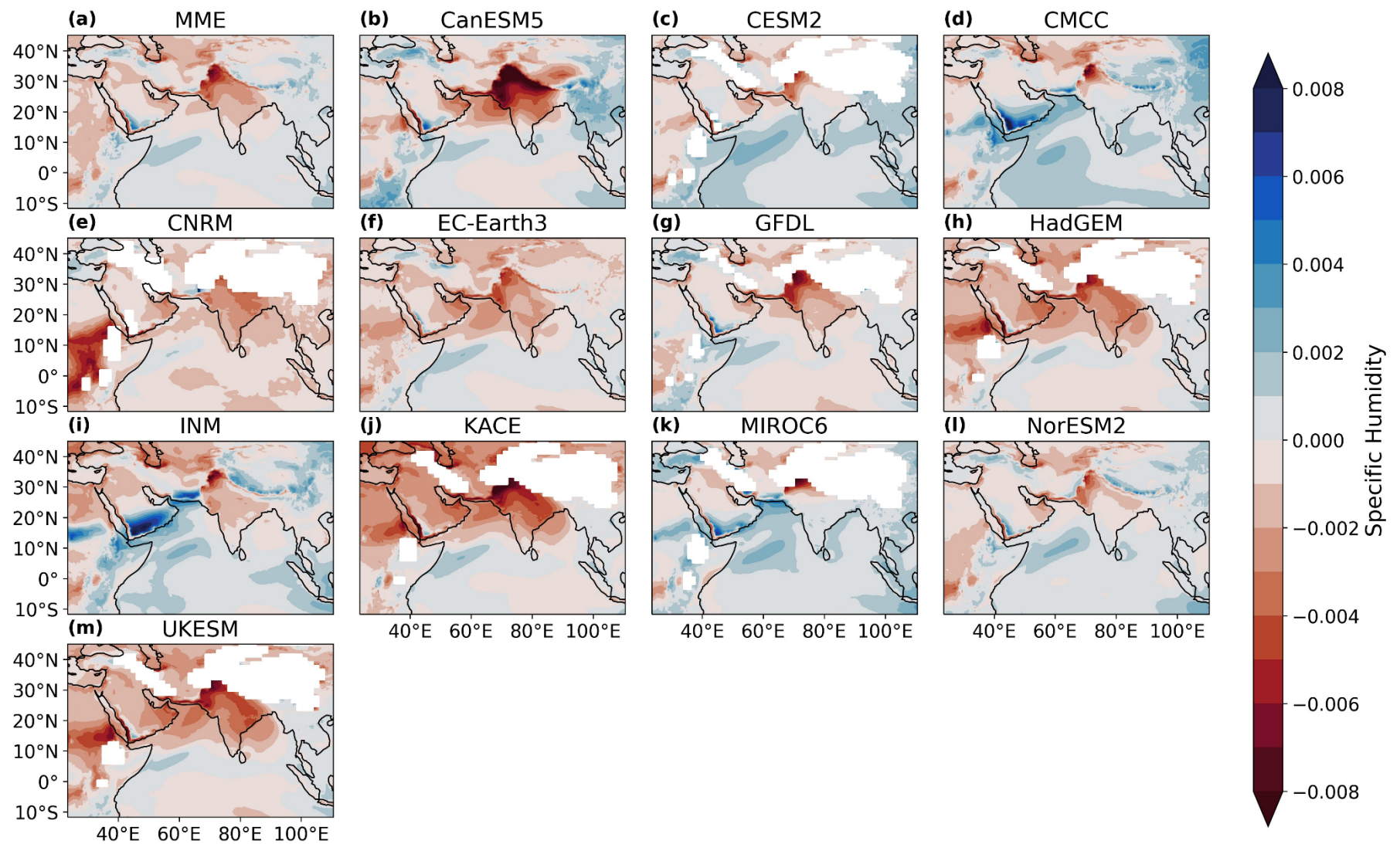


Fig. S3 - JJAS specific humidity (850hPa) bias over South Asia (1984-2014) for MME (a) and individual models (b-m) compared to observed values.

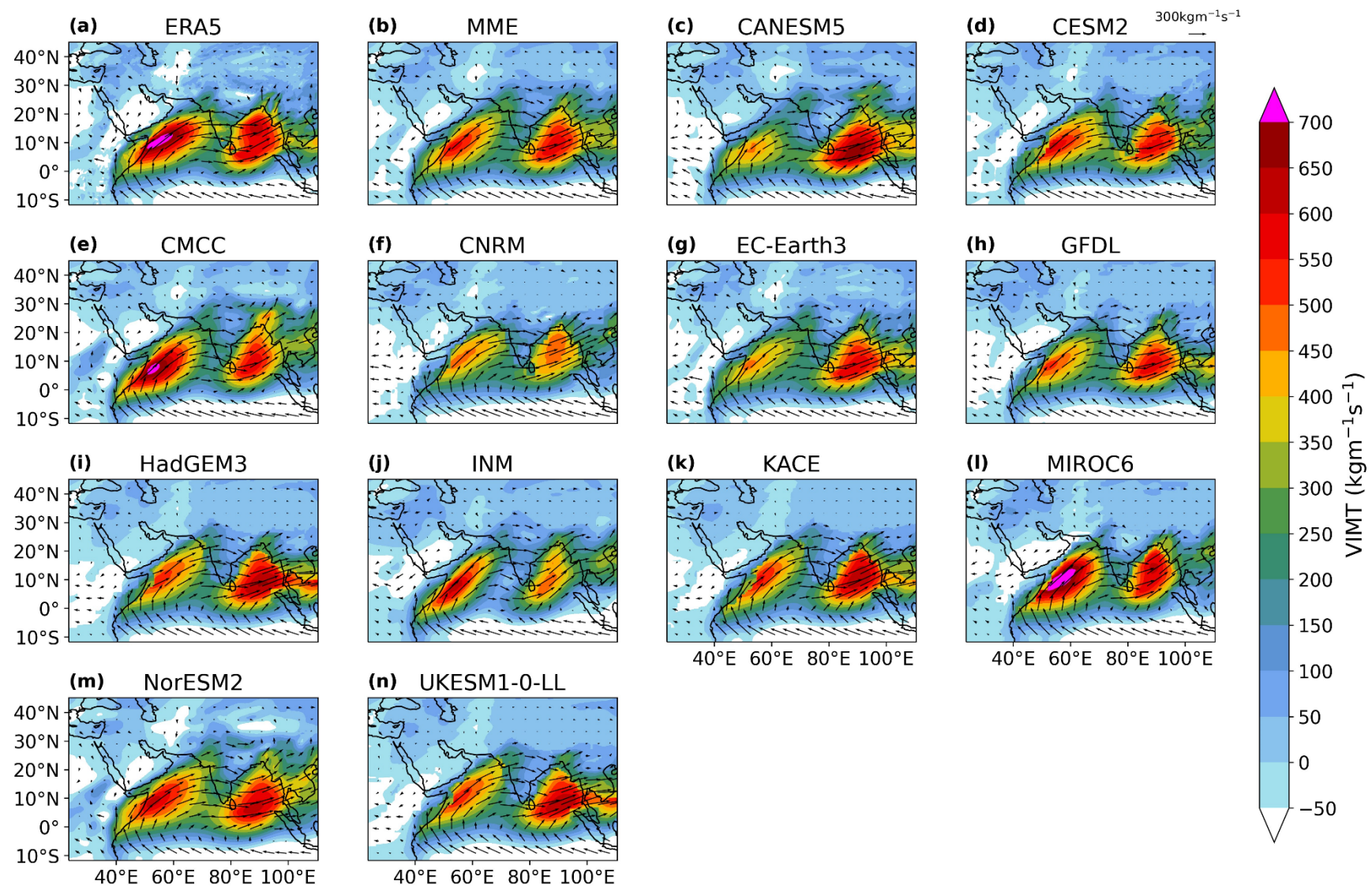


Fig. S4 – Vertically integrated moisture transport for ERA5 (a), MME (b) and individual models (c-n) over South Asia, shown from 1000-100hPa.

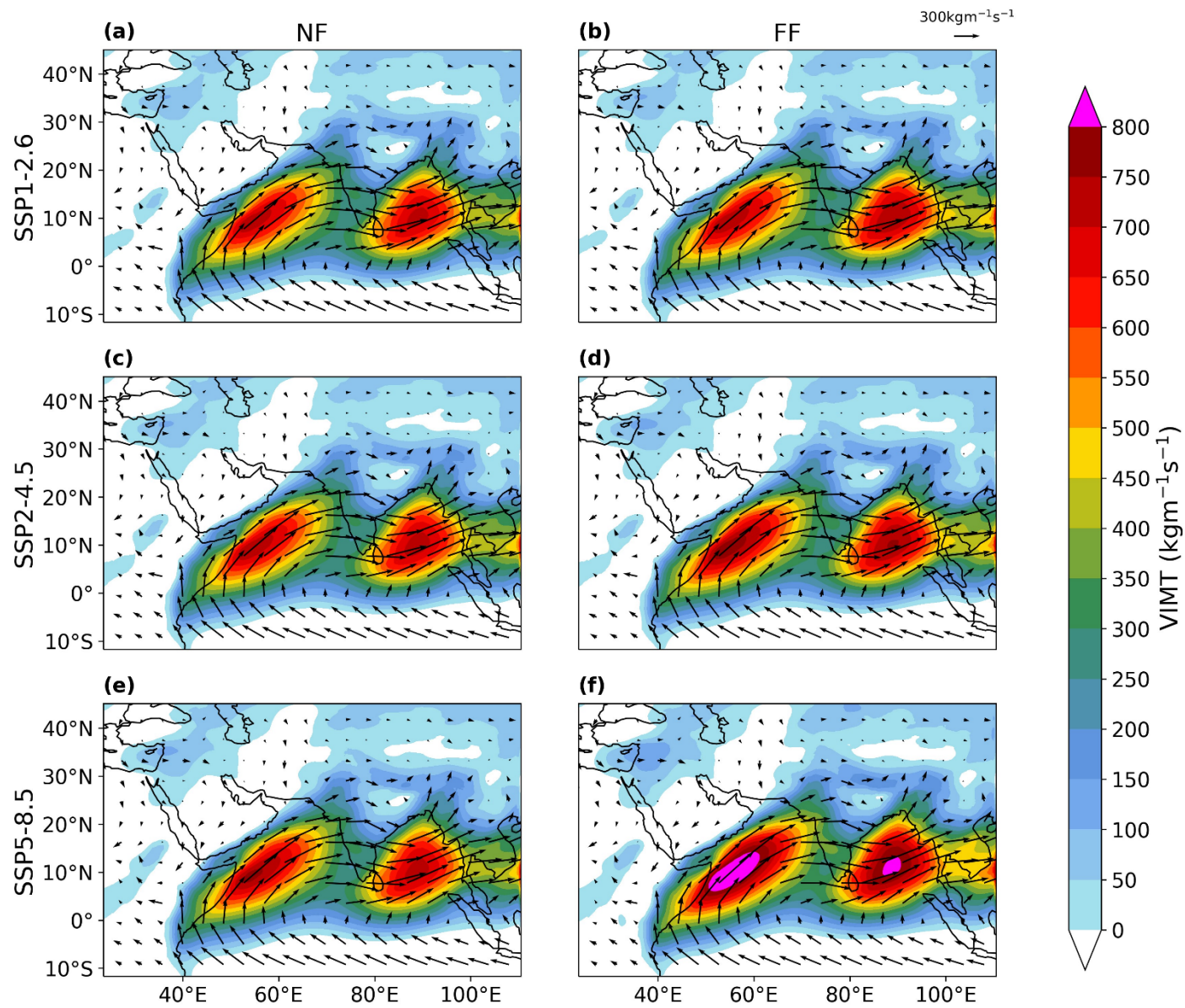


Fig. S5 – Vertically integrated moisture transport from 1000-100hPa over South Asia for SSP1-2.6 (12a, b), SSP2-4.5 (12c, d) and SSP5-8.5 (e, f). The SSPs are split into NF (a, c, e) and FF (b, d, f).