Supplement

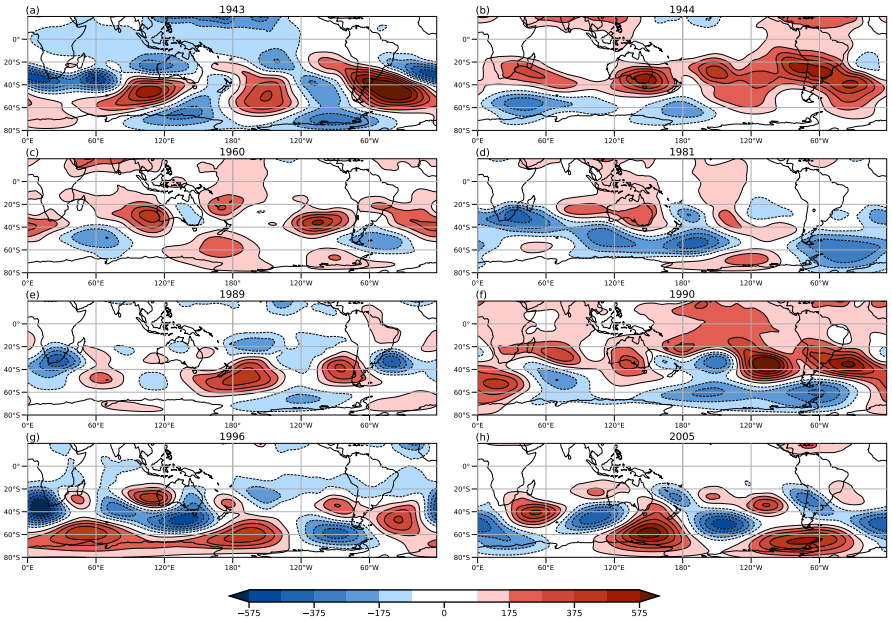

Figure S1: z anomaly fields at 200hPa for each negative IOD events in the period 1940-2020.

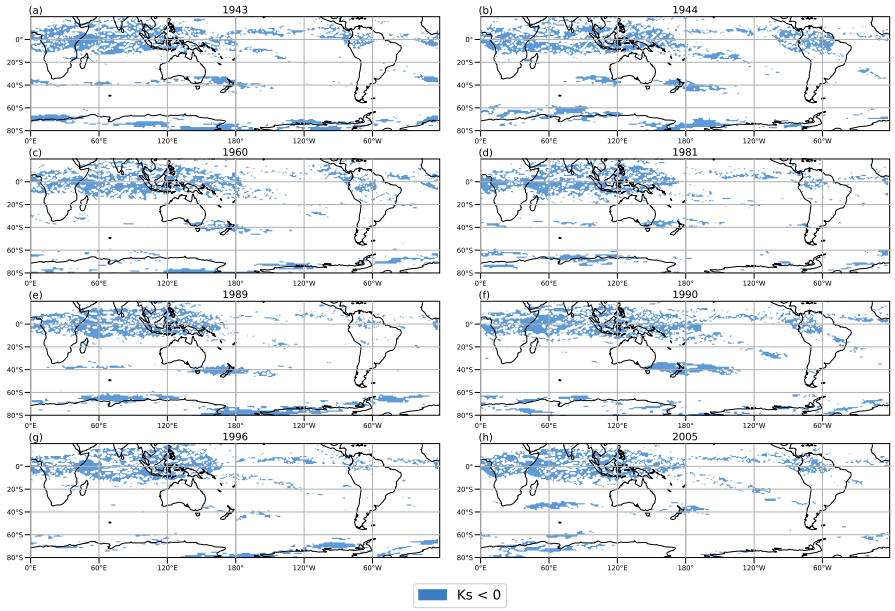

Figure S2: Stationary wave number Ks fields for each negative IOD event in the period 1940-2020.

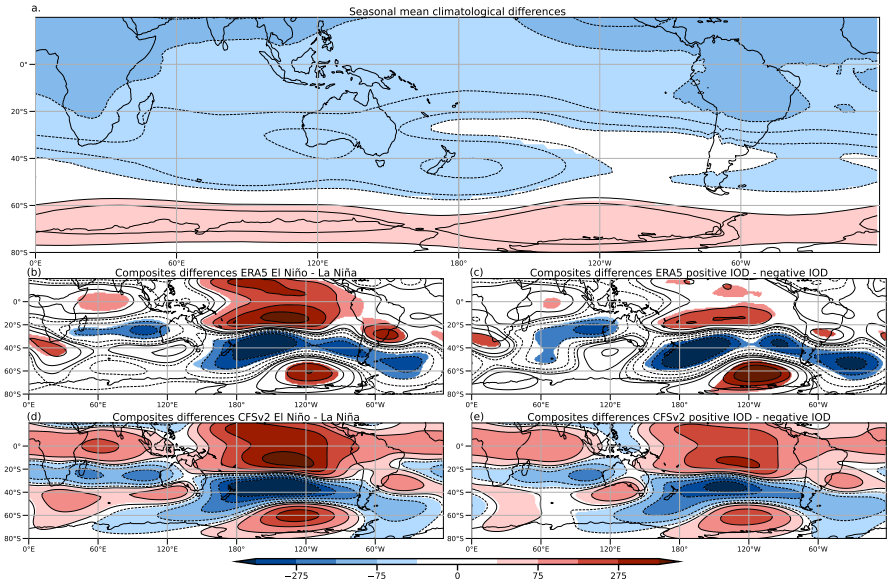

Figure S3: (a) Differences in the mean field of geopotential height (m) at 200hPa between CFSv2 and the ERA5 model in SON for 1982-2020 period. Differences between the mean fields of geopotential height anomalies (m) at 200hPa between the positive and negative phases of the ENSO (b, d) and IOD (c, e) events for ERA5 (b, c) and CFSv2 (d, e).