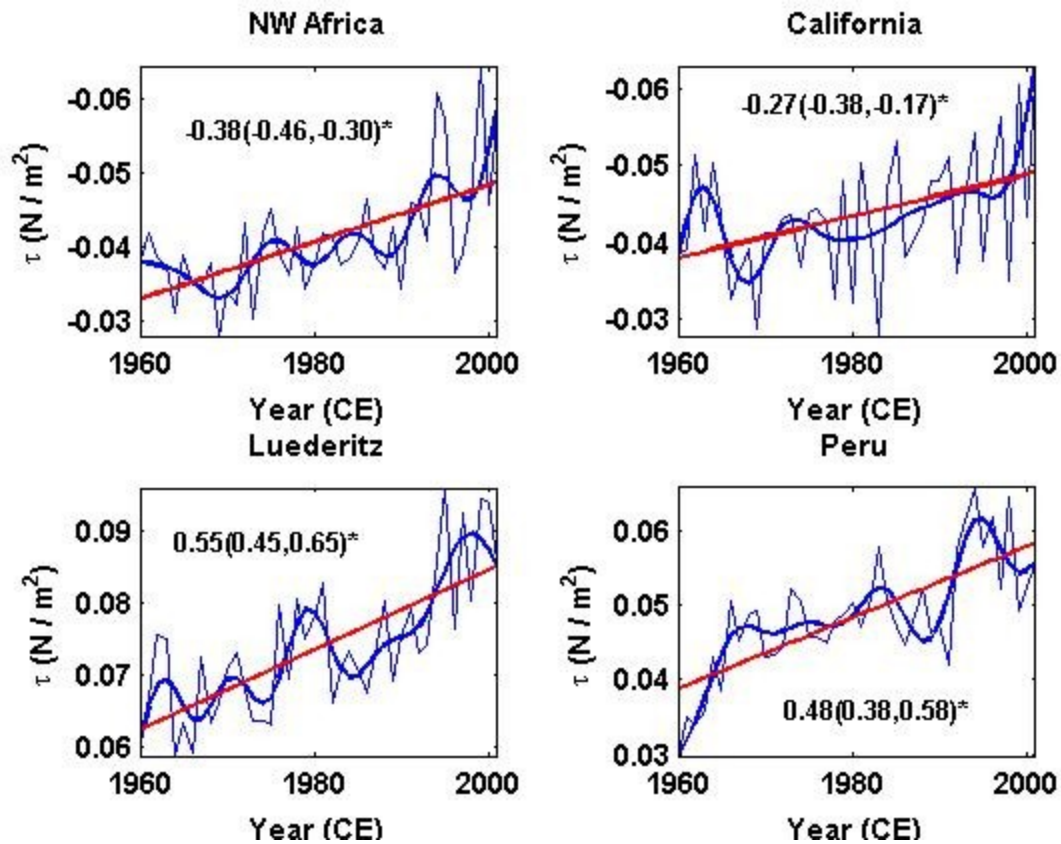


The comparison of COADS wind stress (blue) and SST index (black) from HadSSTI dataset (unsmoothed) in the Lüderitz coastal upwelling area. Correlation coefficient of 0.66 is observed between the time series. Similar analysis was done in NW Africa ($r=-0.42$), California ($r=-0.46$) and Peru ($r=-0.28$).

Region	COADS	NCEP	ERA	CALCOFI	HadISST	
					1870-2004	1960-2004
NW Africa	+	-	0	NA	0 (-)	+
California	+	0	0 (-)	+	0	+
Lüderitz	+	+	+	NA	-	+
Peru	+	- (0)	+	NA	-	-

Table 1. Summary of trend analysis on the unsmoothed dataset. The + sign represent increasing trend, - sign represent decreasing trend and 0 represent statistically insignificant trends. Trends from datasets supporting the main conclusion (COADS, HadISST 1960-2004) are unaltered by the low-pass filter. The trends which differ in the original analysis are shown in red.



Updated as Fig. 3 (in manuscript). Linear trends (red lines) of meridional wind stress from COADS (Slutz et al., 1985) calculated by the method of least squares from smoothed time series (solid lines). All regions show a significant increase of coastal upwelling. In the Northern Hemisphere a negative slope indicates an increase of coastal upwelling. The value of the slope and its confidence interval are given in each panel (in units of $10^{-3} \text{ Nm}^{-2} \text{ yr}^{-1}$). A * indicates that the slope is statistically significant at the 0.05 level. Also shown are the unsmoothed time series (thin lines).