Vertically alternating deep zonal jets of short vertical wavelength with a period of about 4.5 yr and amplitudes of more than 10 cm/s are observed, in the deep Atlantic, to propagate their energy upwards, towards the surface. They are linked, at the 10 cm/s are observed, in the deep Atlantic, about 4.5 yr and amplitudes of more than short vertical wavelength with a period of Vertically alternating deep zonal jets of specific oceans obtained in the Atlantic and Pacific Ocean. The dominant in- drift data (1°S-1°N). The amplitude of the 1,670-d cycle of zonal velocity anomaly at the Equator as well as the 1,000-m zonal velocity anomaly from Argo floats. Phases of eastward surface flow coincide with SST warm phases in the eastern equatorial Atlantic.

Fig.2: (a) Regression of SST, surface wind and rainfall (white contours, mm/d) on the harmonic fit of the ATL3 SST anomaly. (b) ATL3 SST anomaly (microwave opti- timally interpolated SST, red dashed; HadISST, red thin solid) with 1,670-d harmonic fit (black thick solid), and 1,000-m zonal velocity anomaly (1°S-1°N, 35°W-15°W) indices (b).

Fig.5: Equatorial zonal velocities from 1,000-m Argo float drift data (1°S-1°N). The dominant interannual variability in the Atlantic and Pacific oceans obtained by maximizing explained variance using a plane wave fit is visualized by color shadings.

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Reference