

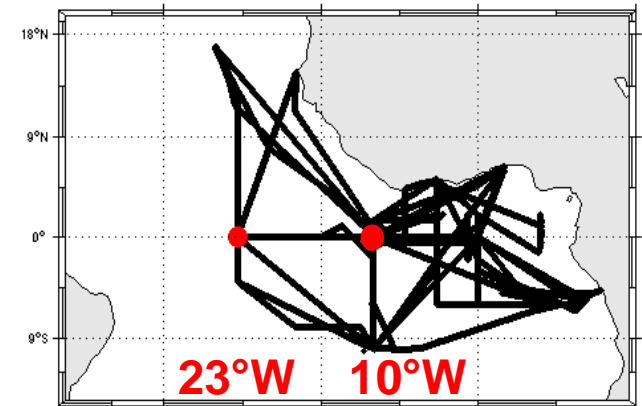
Inter-comparison of surface current *in situ* measurements in the Tropical Atlantic Ocean

Herbert, G., Habasque, J., Reverdin, G., Bourlès, B.

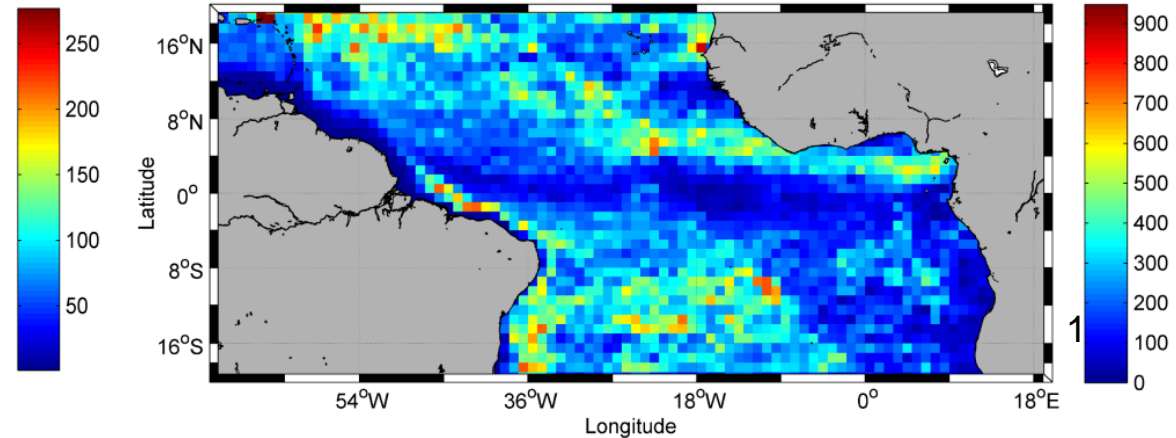
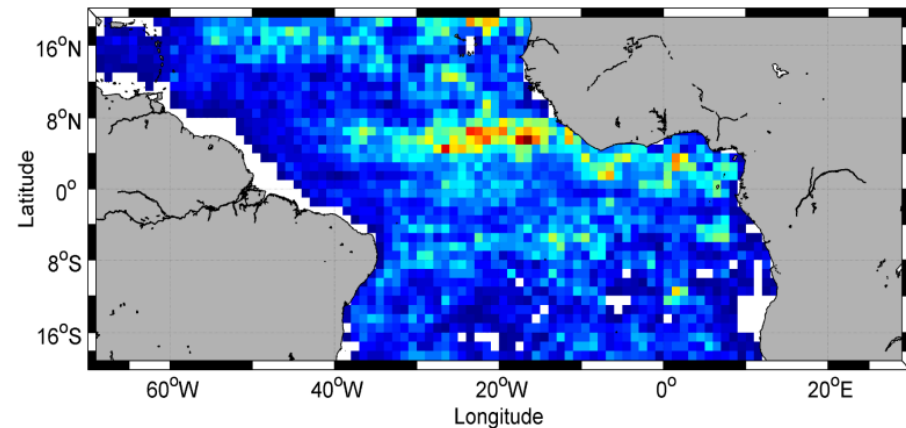
Available devices

Device	Time series	Depth range
PIRATA S-ADCP	2001-2017	15-300m
PIRATA ADCP mooring	2001-2016	15-300m
PIRATA current meter	2005-2016	10;12;20m
ARGO floats	1997-2016	Surface
Drifters	1985-2016	15m

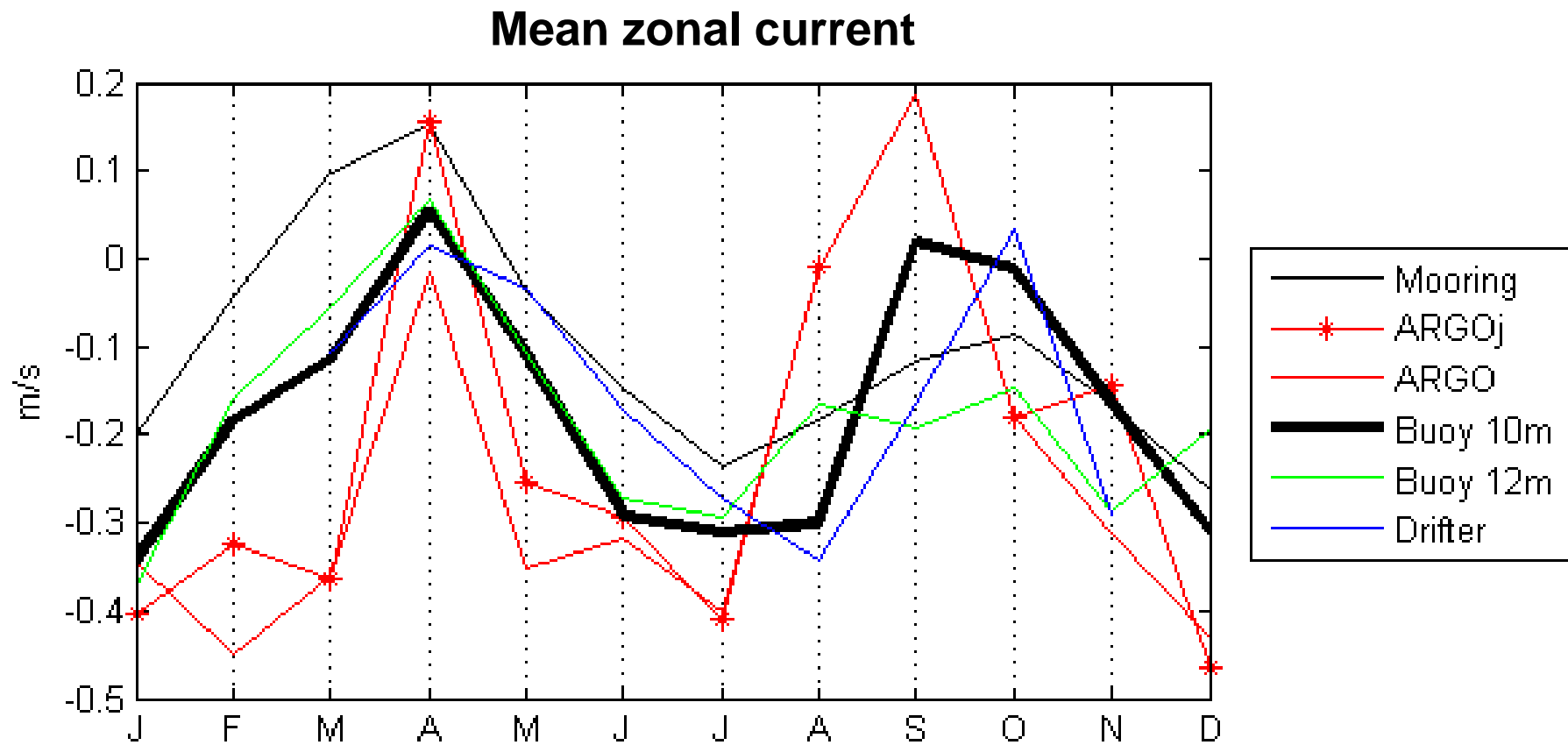
PIRATA cruises track and moorings



Lack of Argo and drifters data in the southeastern tropical Atlantic and in the equatorial band



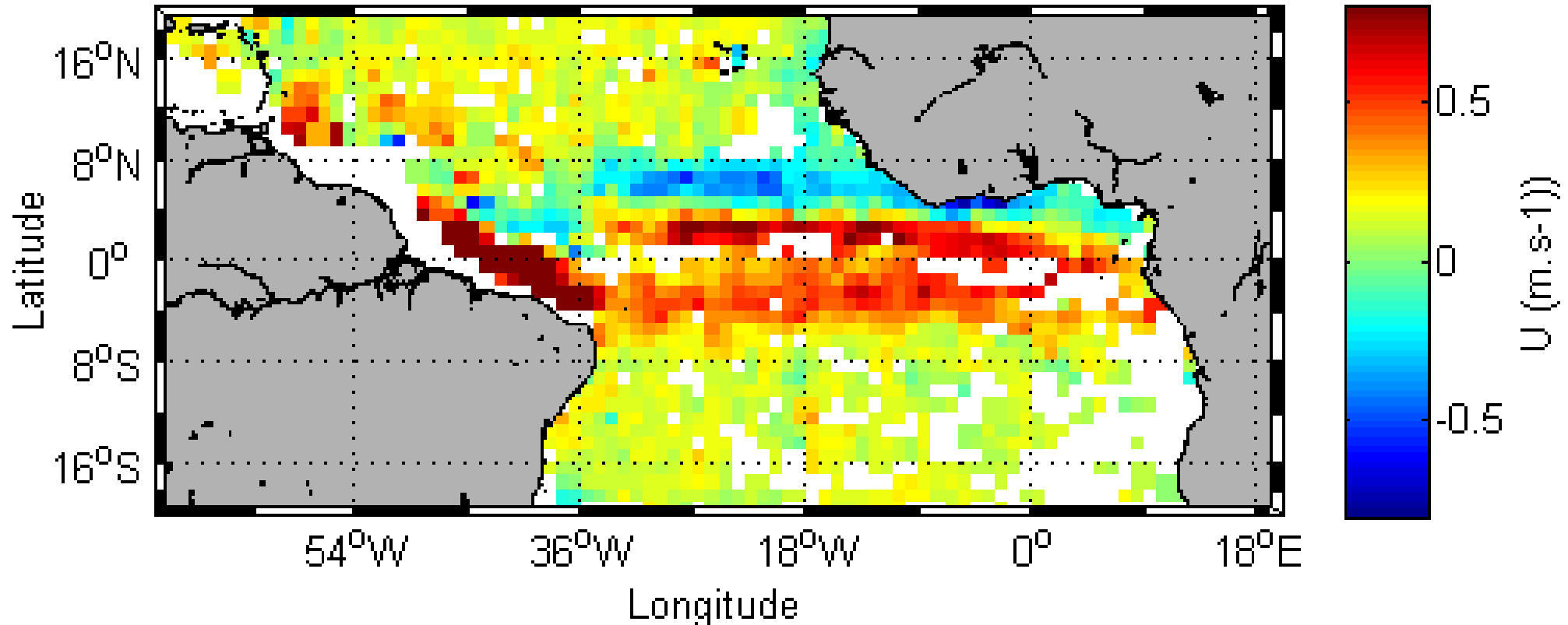
Mean seasonal cycle at 23°W



Relatively good agreement between the different devices

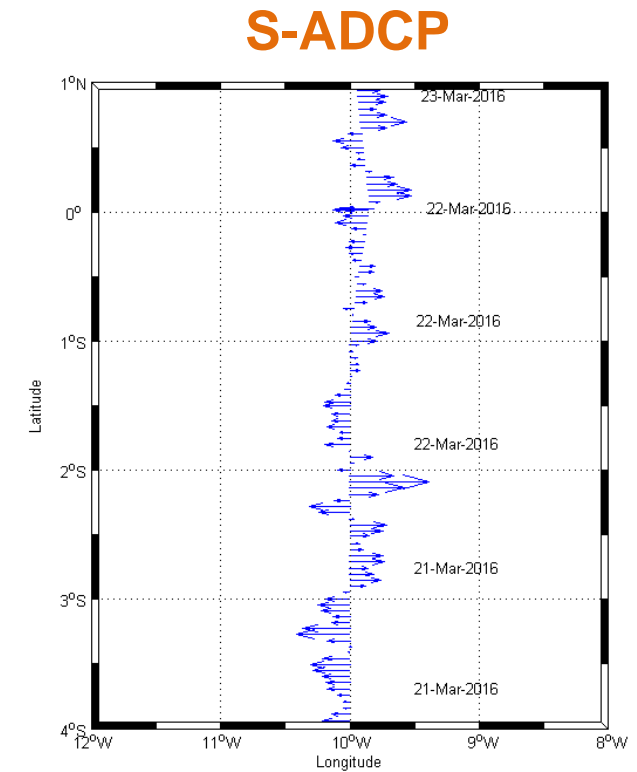
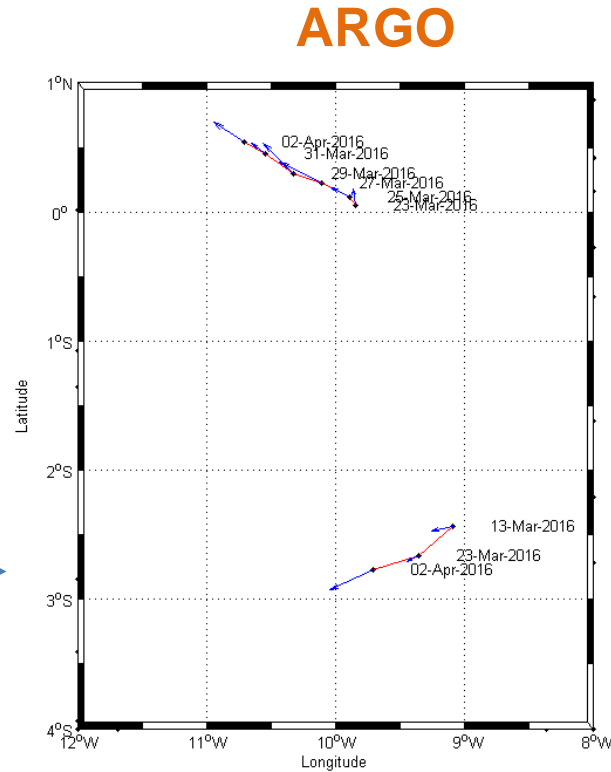
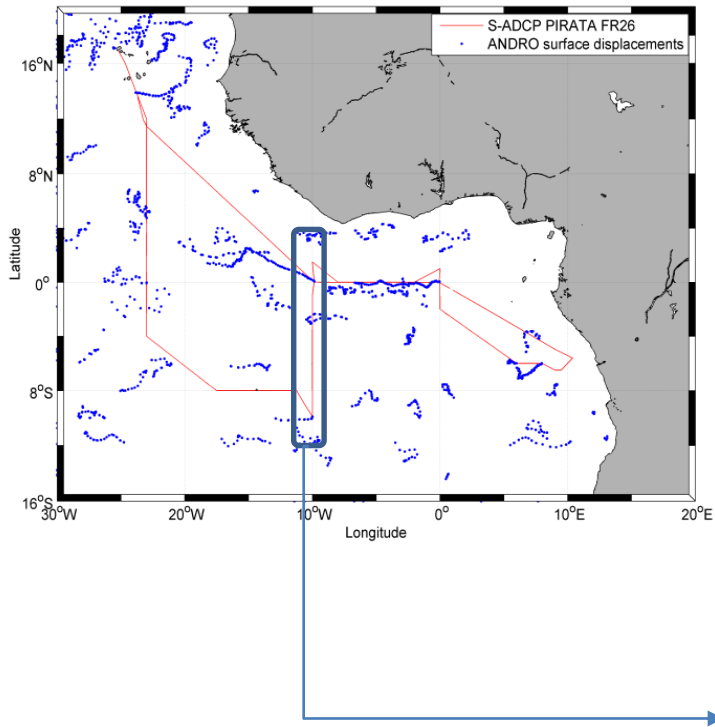
Surface current shear

Mean zonal velocity difference between Argo (surface) and drifter (15m) for June



- Maximum positive values both side of Equator (sSEC and nSEC)
- Maximum negative values around 6° - 7°N (NECC and Guinea Current)

ARGO vs S-ADCP measurements inter-comparison



Limitations in the comparison of ARGO floats data and S-ADCP data due to the time variability of the current and the Argo data sampling

