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The northward flow of South Atlantic Water into the Caribbean Sea and across 16 °N

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The transport into the Caribbean Sea is composed of two components: the wind-driven regional circulation and the global meridional overturning. The MOC drives a flow from the equatorial region into the North Atlantic, carrying south Atlantic origin waters into this region. Studies from model results suggest, that the warm water MOC flow enters the Caribbean Sea basically south of Martinique, while the flow through the northern passages is of wind-driven North Atlantic gyre origin. The alternative route for South Atlantic origin water is across 16N, later turning westward. In this presentation the South Atlantic water distribution and transports in the area will be discussed with ship cruise data and ARGO float profiles.