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On the Seasonal variability eastern boundary of the North Atlantic Subtropical Gyre

Maria Dolores Pérez-Hernández¹, Pedro Vélez-Belchí², Verónica Caínzos¹, Daniel Santana-Toscano¹, Cristina Arumí-Planas¹, Melania Cubas Armas¹, Carmen Presas Navarro², and Alonso Hernández-Guerra¹

¹Unidad Océano y Clima, Instituto de Oceanografía y Cambio Global, IOCAG, Universidad de Las Palmas de Gran Canaria, ULPGC, Unidad Asociada ULPGC-CSIC, Canary Islands, Spain

²Centro Oceanográfico de Canarias, Instituto Español de Oceanografía, Santa Cruz de Tenerife, Canary Islands, Spain

On the eastern region of the North Atlantic Subtropical Gyre, the Canary Current connects the Azores Current with the North Equatorial Current. Several studies link the seasonality of the AMOC (as measured by the RAPID program) to the seasonality of the main flows existing on the Canary basin. Since 2003, the RaProCan project which is the Canary Islands component of the Spanish Institute of Oceanography ocean observing system, monitors the Canary basin. In 2015, the RaProCan project joined efforts with the Seasonal Variability of the AMOC: Canary Current (SeVaCan) project of the Instituto de Oceanografía y Cambio Global (IOCAG) to increase the temporal resolution of the observations. Hence, during 2015 a hydrographic cruise took place in each season (February, April, July, and November) to complete the seasonal cycle of the basin. Here we present results from these cruises to describe the seasonal cycle of the area. A sensitive analysis is carried out to understand the representativeness of the cycle to be able to compare it with the AMOC seasonal cycle.