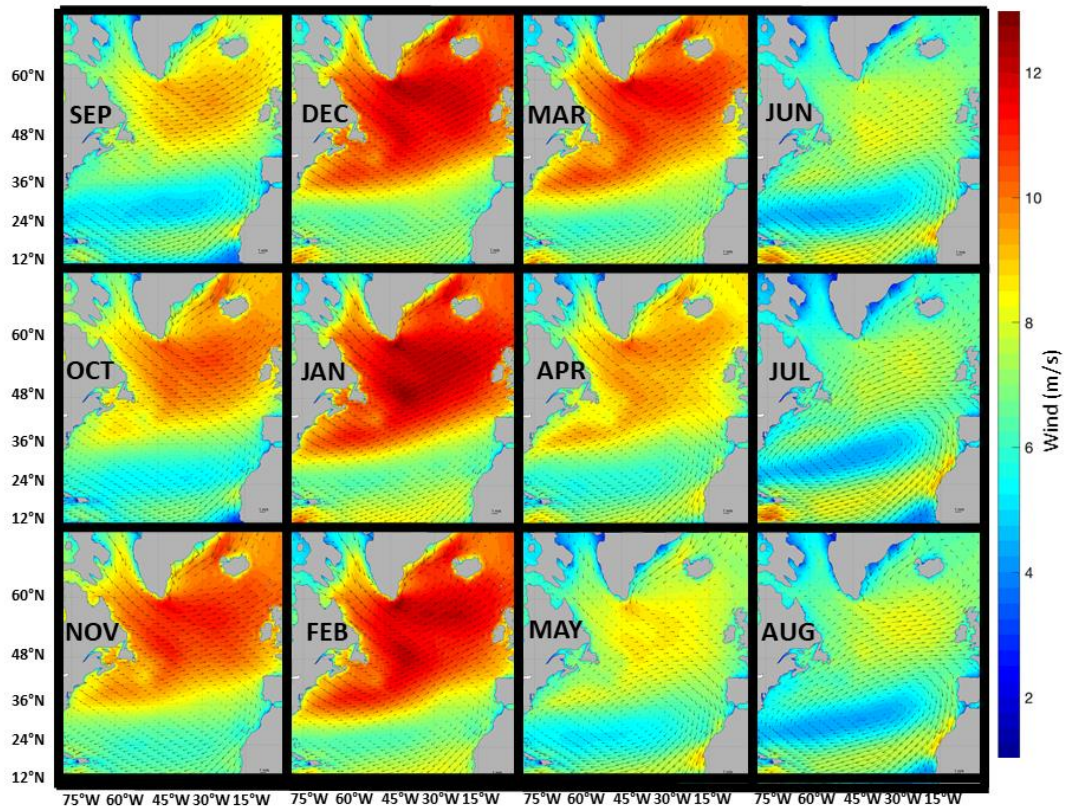
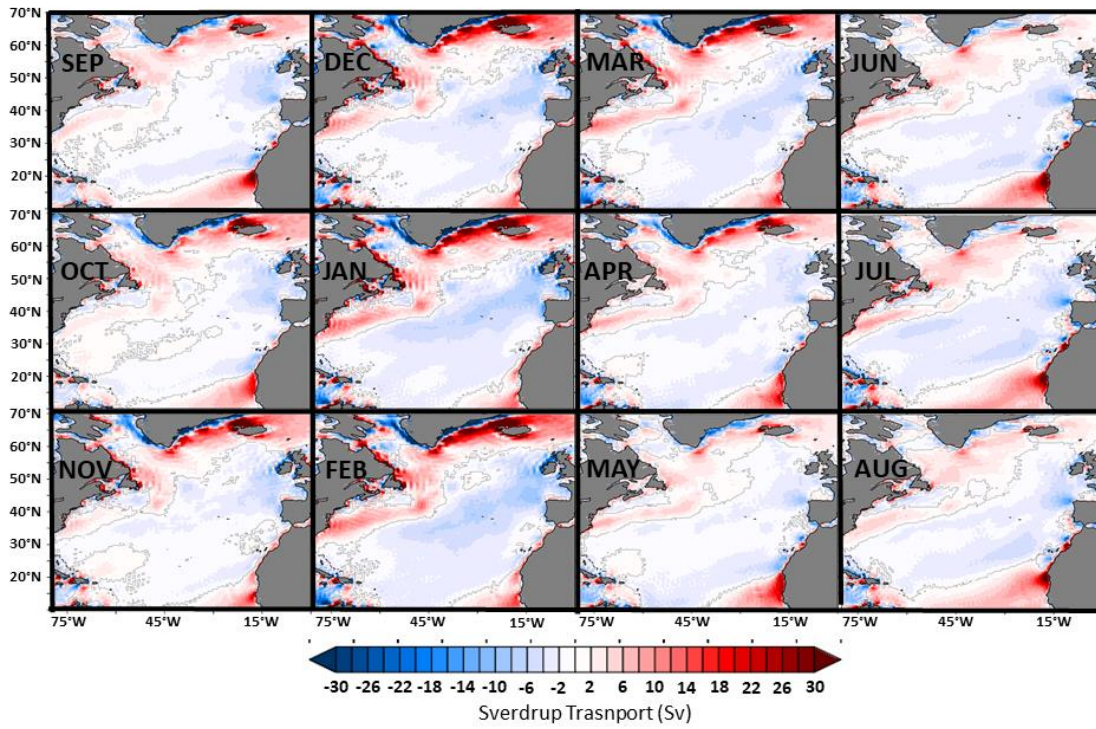
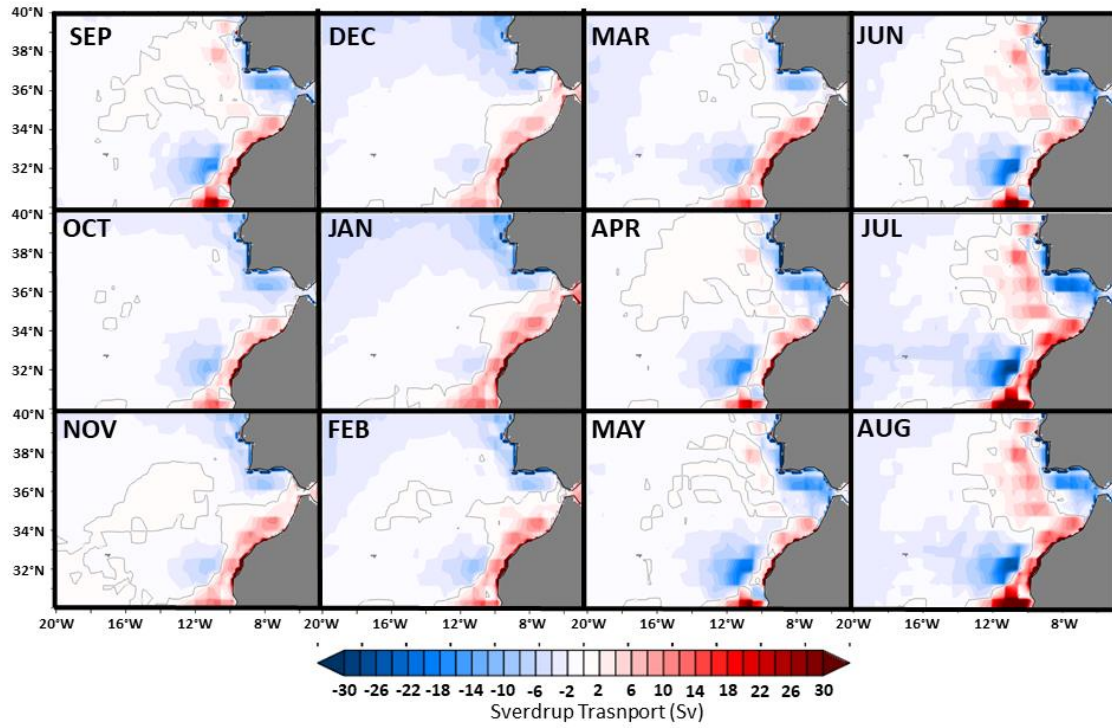
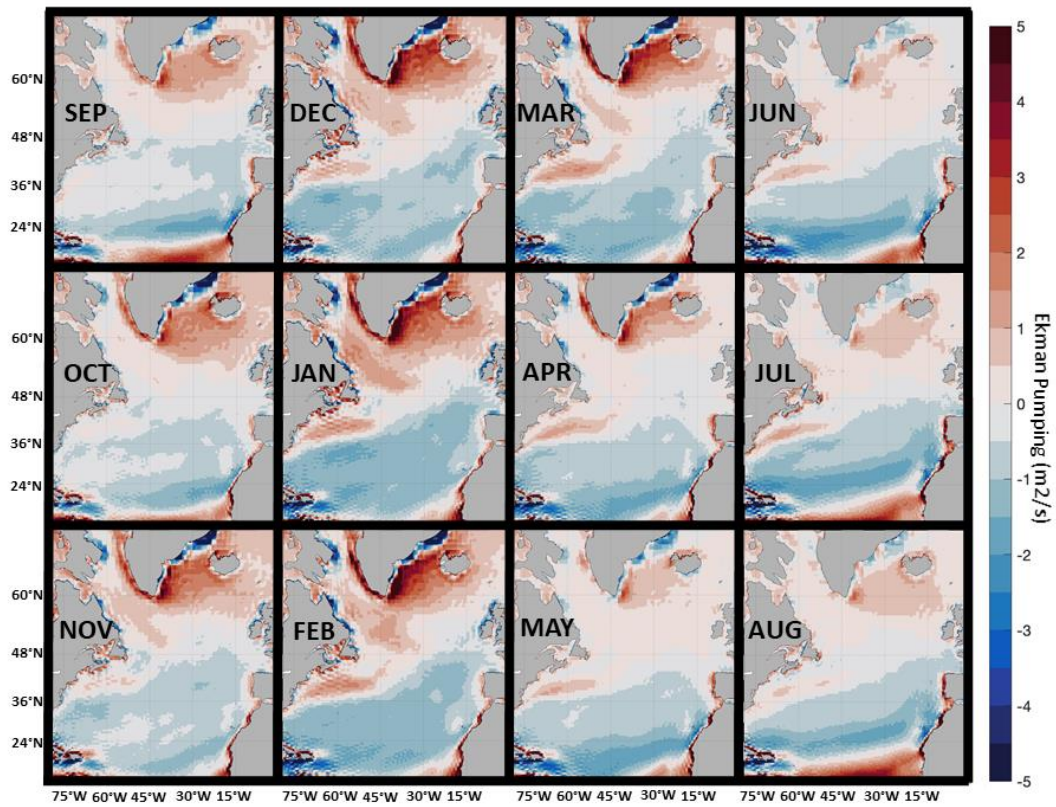
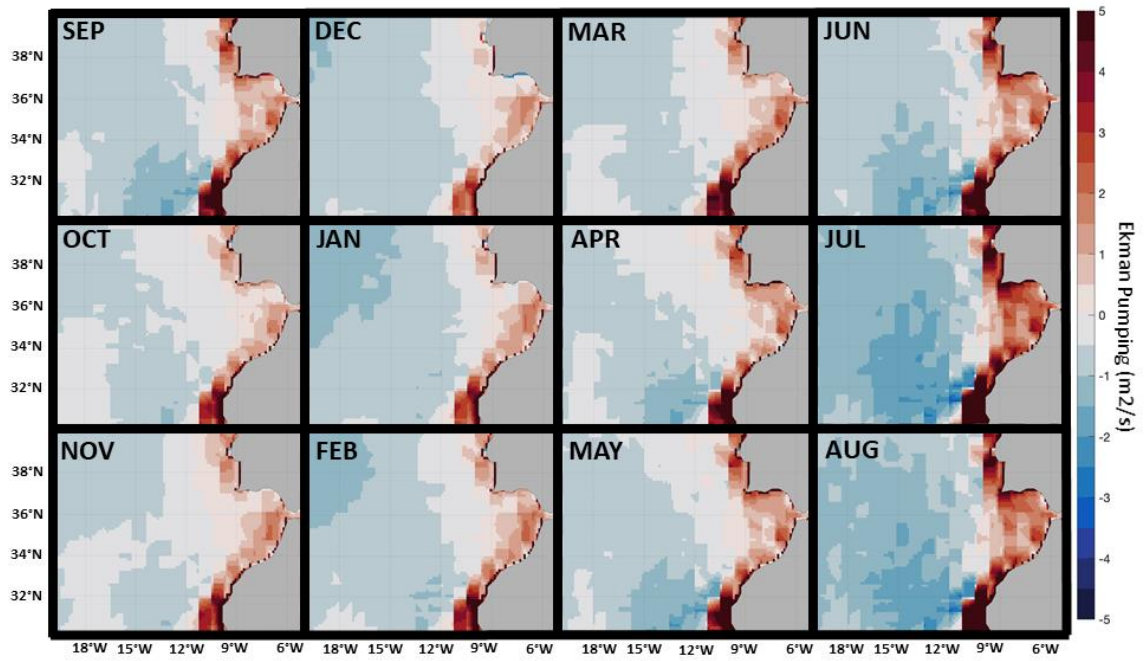
Sup_1. Predominant intermediate water mass between 400-1000 m in every profile. From left to right: autumn, winter, spring and summer. From top to bottom: every water mass; AAIW, ENACW, SAIW, MW

Sup_2. Monthly Maps of surface winds in the North Atlantic Ocean.

Sup_3. Monthly Maps of Sverdrup transport in the North Atlantic Ocean.

Sup_4. Monthly Maps of Sverdrup transport in the Gulf of Cádiz.

Sup_5. Monthly Maps of Ekman Pumping in the North Atlantic Ocean.

Sup_6. Monthly Maps of Ekman Pumping in the Gulf of Cádiz.