In this work, the intra-seasonal variability of the tropical Atlantic dynamic height is investigated over the TOPEX-Poseidon decade and updated with the Jason period, in the framework of the Kelvin and Rossby waves activity. Based on satellite measurements and an OGCM simulation, we first show the morphology of the equatorial and coastal horizontal propagations observed at intra-seasonal period, and then examine the sources and sinks of the signal.

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**CHARACTERISTICS OF THE EQUATORIAL AND COASTAL PROPAGATIONS**

Oceanic Kelvin Waves and Tropical Atlantic intra-seasonal Variability. Part I: Kelvin waves characteristics.

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**MECHANISMS OF EQUATORIAL FORCING AND COASTAL PERTURBATION**