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Poster
The interaction of shelf circulation with an open-ocean boundary current and mesoscale eddies can be of tremendous importance as it often results in significant export of coastal water to the deep ocean. However, the dynamics of this interaction are not well understood, and may not be well represented in regional or larger scale numerical models of ocean circulation. We used long-term satellite altimeter data, coastal sea level and shelf hydrography observations, as well as numerical modeling experiments to examine the dynamics of shelf circulation and biomass variability and their responses to the Gulf Stream (GS) meanders and open-ocean eddies. Case study results of an extremely large offshore meander of the GS, its causes and impact on shelf waters off the Southeast U.S. will be discussed.
OSTS session
Science Results from Satellite Altimetry
Meeting name
Ocean Surface Topography Science Team (OSTST) Meeting
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