Boris Galperin

Experimental Investigation of the Momentum and Mass Transfer by Zonal Jets

In collaboration ith Dr. Stefania Espa at the DICEA Sapien a Uni ersita di Roma, Magnetoh drod namicall -prod ced east ard onal jets ill be in estigated. While est ard jets prod ce energetic eddies, east ard jets generate basin- ide g res. As a res lt, most eddies in the atmospheres of J piter and Sat rn here the jet o s are profo nd reside in the icinit of the est ard jets. In Earth's oceans, the continental constraints prod ce estern bo ndar c rrents that gi e rise to east ard jets, s ch as the G lf Stream and the K roshio E tension, hich, in t rn, spa n large recirc lation g res. We are in estigating the s bleties of s ch jets and g res, as ell as their interaction. This collaboration ill pro ide intellect al impet s and infrastr ct ral s pport for the ork being done in USF's College of Marine Science.

Partnerships:

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