



Hurricanes and the QBO

M. Baldwin (1), J. Kossin (2)

(1) Northwest Research Associates, Bellevue, WA, USA (mark@nwra.com / Fax +1 425 644 8422 / Phone +1 425 644 9660 x323), (2) University of Wisconsin, Madison, WI, USA.

Statistical studies have shown a link between the phase of the QBO and the likelihood of hurricanes in the Atlantic Basin. In this study we use a daily database of tropical cyclones and hurricanes in three ocean basins, together with ECMWF ERA-40 Reanalysis to examine winds and temperatures not just in the equatorial stratosphere, but in the vicinity of the cyclone locations in the tropopause region and above. We find that there appears to be a relationship between tropical cyclones and stratospheric winds only in the Atlantic basin, and that the observed relationship is weaker than found in previous studies.