



CHARACTERIZATION OF THE EFFECTS OF GRAVITY WAVES IN THE IONOSPHERE USING VLF

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ABSTRACT

Gravity Waves (GW) are mechanisms that affects the transport, circulation and thermal structure at the middle atmosphere. They are mostly investigated using airglow all-sky imagers, which give their characteristics at about 90km of height. Here we will investigate their impact on the base of ionosphere, at D-region, using very low frequency (VLF) radio measurements done at Brazilian Antarctic Station Comandante Ferraz (EACF) on King George Island. The characteristics of GW detected using VLF during 2007 is compared with air-glow observations done at EACF. The preliminary results suggest a close association of the GW properties detected using VLF with the ones observed using airglow.