

# **Ionospheric drifts' response to F10.7 in Hainan**

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The response of the low-latitude ionospheric drifts to the solar radiation F10.7 index is investigated by analyzing the ionospheric plasma drift data obtained in Hainan from Mar 2002 to Mar 2004. The main results are as follows. (1) Vertical plasma drifts have strong dependence on the F10.7 index in the equinox and weak dependence in winter. In General, the F10.7 radiation has strong effect on the vertical drifts in the sunset and the sunrise and less in the daytime. (2) The meridian drifts have less dependence on the F10.7 radiation. (3) The nighttime eastward drifts increase with the F10.7 in all the seasons; daytime westward drifts are strong when F10.7 index is small. The difference of the plasma drift responses to the F10.7 between the Hainan station and Jicamarca station is discussed, too.