

G.10 Synoptic measurements of GPS link behaviour in the equatorial region

R M Thomas¹, M A Cervera¹, et al

¹Surveillance Systems Division, DSTO Edinburgh, South Australia 5111

We describe synoptic measurements of the effects of ionospheric scintillation on GPS links in the equatorial region during solar maximum years, paying particular attention to the number of links affected at different threshold levels of amplitude scintillation, and to the number of links remaining below each scintillation threshold. The daily occurrence of loss-of-lock events throughout the year is also examined. Data from Ionospheric Scintillation Monitors located at a selection of receiving stations in the South East Asia and Oceania regions are employed in the analysis.