

Measurement and Modeling of High Latitude Flights In the Southern Hemisphere

I.L.GETLEY¹, A. R.GREEN², L. G. BENNETT², B. J. LEWIS² and M.L. DULDIG³

¹Department of Aviation, University of New South Wales, Sydney / NSW 2052, Australia
²Department of Chemistry and Chemical Engineering, Royal Military College of Canada, P.O.Box 17 000 Stn. Forces, Kingston, ON K7K 7B4 CANADA
³Australian Antarctic Division, 203 Channel Highway, Kingston, Tasmania 7050, Australia

Whilst the development of predictive computer modeling has allowed airlines to monitor aircrew exposures under quiescent conditions, the predictive codes do not allow for solar particle events. These models have been extensively tested in the high northern latitudes of both Europe and North America but few flights by operators at high southern latitudes have limited the gathering of data for similar comparisons. This presentation looks at recently gathered data at various latitudes and altitudes between Australia and South Africa and the comparison to predictive code results.

Keywords: Predictive Codes, Aircrew Exposure, High Southern Latitudes.