



## **Does Energetic Particle Precipitation affect the dynamics of the southern hemisphere MLT?**

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Recent work has demonstrated how long-term changes in atmospheric ozone can influence the dynamics of the high latitude southern hemisphere mesosphere and lower thermosphere (MLT) during spring time. Changes in the latitudinal gradient in stratospheric ozone are seen to influence the timing of the break up of the polar stratospheric vortex which in turn feeds back into the MLT through changes in gravity wave filtering. Here we assess whether short-term changes in ozone, driven by the effects of energetic particle precipitation into the middle atmosphere, elicit a similar dynamical response in the MLT.