



HIRDLS Analysis of Gravity Waves in the 2006 Arctic Stratosphere

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Observations from HIRDLS are used to quantify gravity wave momentum fluxes in the middle atmosphere in order to investigate the the period around the 2006 Arctic Sudden Stratospheric Warming (SSW), during which a substantial elevation of the stratopause occurred. Analysis of the HIRDLS results, together with analysis of ECMWF zonal winds, provide direct evidence of wind filtering of the gravity wave spectrum during this period, validating the hypothesis of previous model studies (e.g. Siskind et al 2007).