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Transport of polar tropospheric BrO towards mid-latitudes

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In this work we investigate vertical column densities of BrO measured by GOME from 1996 to 2001 with respect to enhanced tropospheric BrO concentrations. During polar spring BrO can be liberated by heterogeneous reactions on surfaces or aerosols enriched in halogens especially over areas covered with fresh sea ice and frost flowers. Transport events of polar tropospheric BrO towards mid-latitudes will be presented. These transport events allow the derivation of a lower boundary of the lifetime of free tropospheric BrO.