



Mixing across the subtropical tropopause during the PRE-AVE campaign

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Mixing properties across and above the tropopause are studied from tracer-tracer relations measured during the PRE-AVE campaign in the tropical and subtropical regions and ensembles of random Lagrangian trajectories. Our study shows that tracer-tracer relations can only be interpreted by combining fast vertical mixing events due in particular to convection and horizontal transport across gradients induced by the subtropical jet. We will show attempts at estimating the local mixing rate from the comparison of observed and reconstructed tracer-tracer relations.