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Origin, evolution and dynamics of ISSRs

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Ice supersaturation in the upper troposphere is mosty confined to regions where the air flow is upward, divergent, and anticyclonic. However, these characteristics alone do not suffice to predict ice supersaturation. Whether an air parcel in a region with upwind, divergence and anticyclonic flow is supersaturated or not depends on its origin and history. Trajectory calculations are the means to study this, and as an additional incentive they provide information on the lifetime distribution of ice supersaturated regions. In this talk I will present analyses of trajectories that lead to ice supersaturation and analyses of the dynamical fields within ice supersaturated regions.