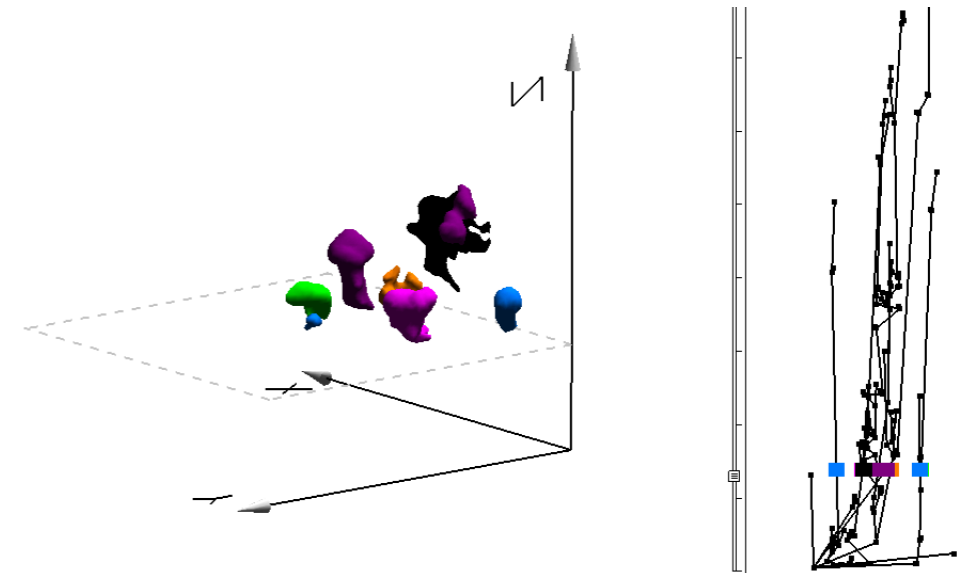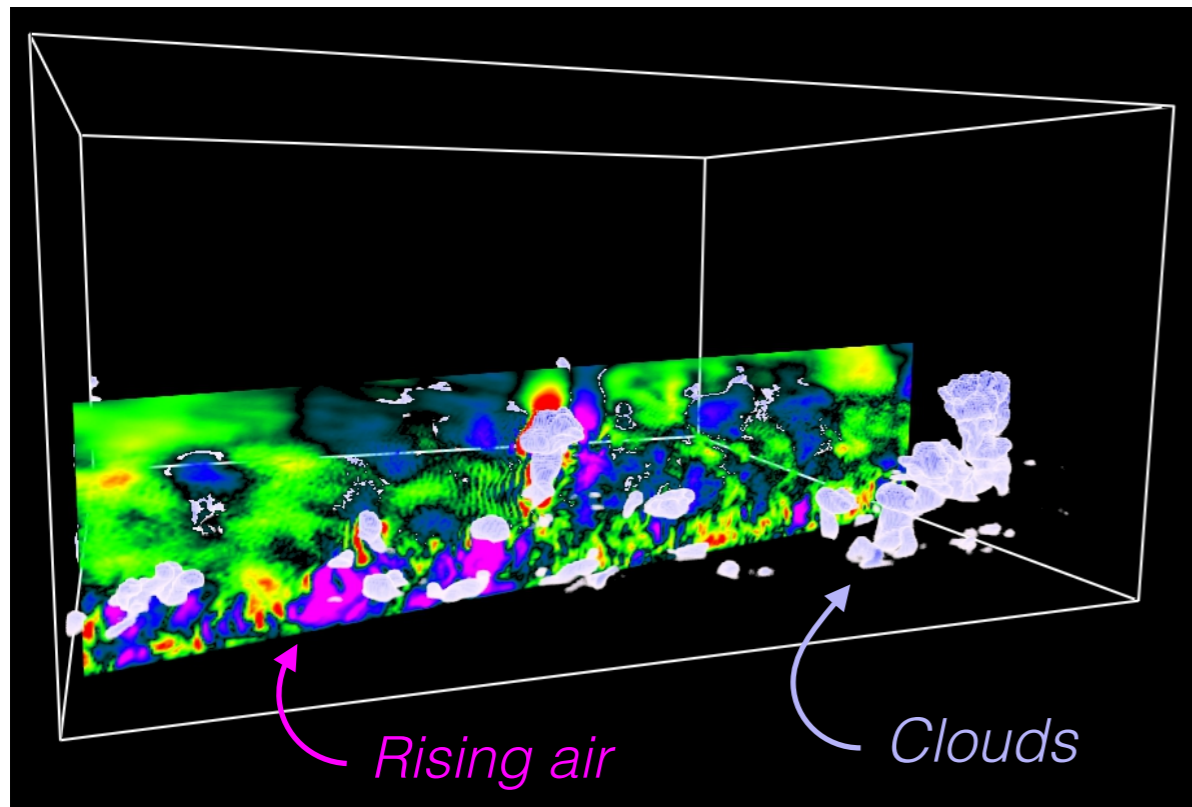# Topological analysis of convective clouds
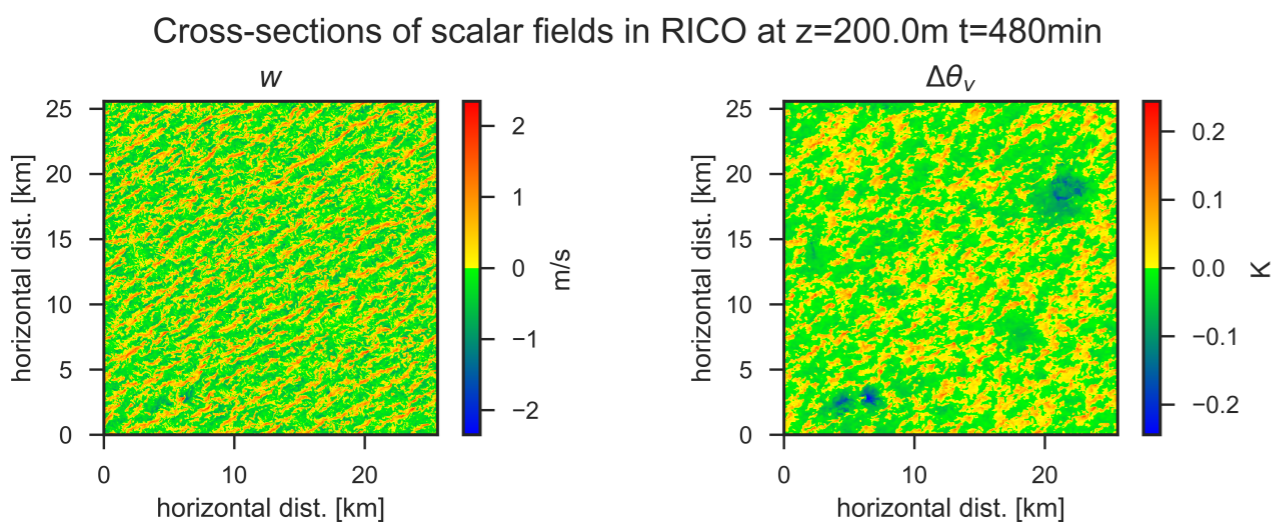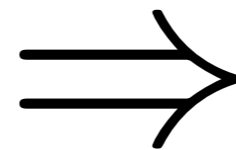
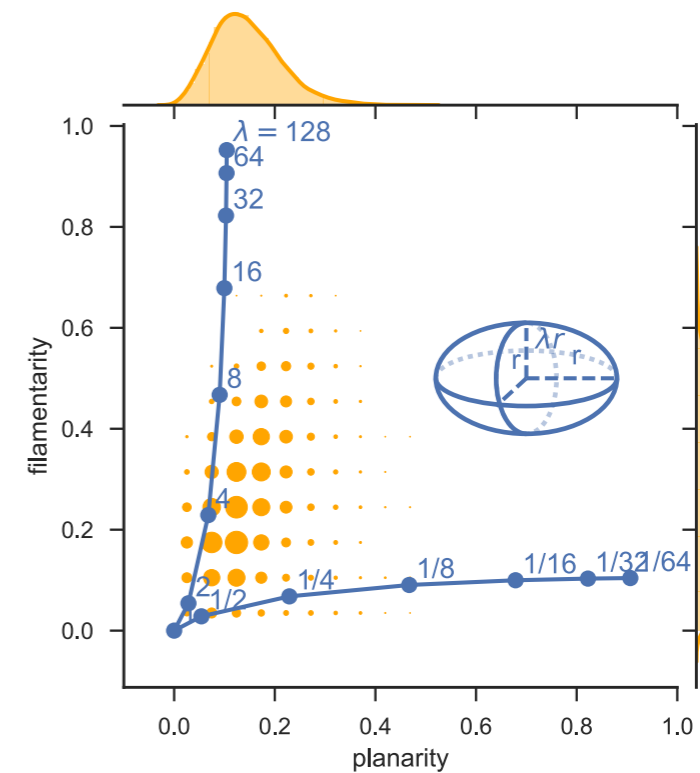*Quantifying the extent of structure coherence in the boundary layer*

Rising air

Clouds

Studying topology using contour-trees

Cross-sections of scalar fields in RICO at z=200.0m t=480min

w

$\Delta\theta_v$

Buoyant elements in boundary-layer show varying structure

Quantifying topology by filamentary and planarity (via Minkowski functionals)