OLA PERSSON
PRINCIPAL RESEARCH TOPICS

Mesoscale meteorology: Mesoscale structure of extratropical cyclones; relation between the simulation and theory of conditional symmetric instability; coastal and topographic influences on mesoscale dynamics and precipitation; remote sensing of mesoscale atmospheric structures.

Atmospheric boundary-layer: Observations of surface fluxes in maritime, high-wind regimes; observations of surface fluxes in polar climates; simulations of maritime and polar boundary layers; surface-flux and boundary-layer effects on mesoscale atmospheric structure in maritime and polar environments; flow in complex terrain.

Polar meteorology: Surface energy budgets over the polar pack ice; structure of the Arctic boundary layer; relationship between the surface energy budget, clouds, and synoptic and mesoscale disturbances in the Arctic.

Applied meteorology: Relation of airflow in complex terrain to wind energy considerations; development of real-time tools from remote sensors for operational forecasting.