

## Observations

Vaisala CL51

Lufft CHM15k

Radiosonde observations

## Models

GA7.0

GA7.1

MERRA-2

Pseudo-radiosonde  
profiles

COSP  
surface lidar  
simulator

Pseudo-lidar  
profiles

Lidar processing

*Noise reduction*  
*Cloud detection*

Radiosonde processing

*Lifting Condensation Level (LCL)*  
*SST Lifting Level (SLL)*

**Lidar statistics**

**Radiosonde statistics**