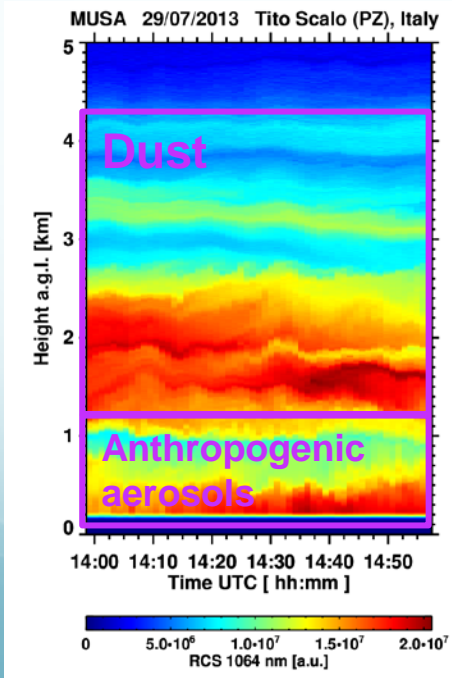
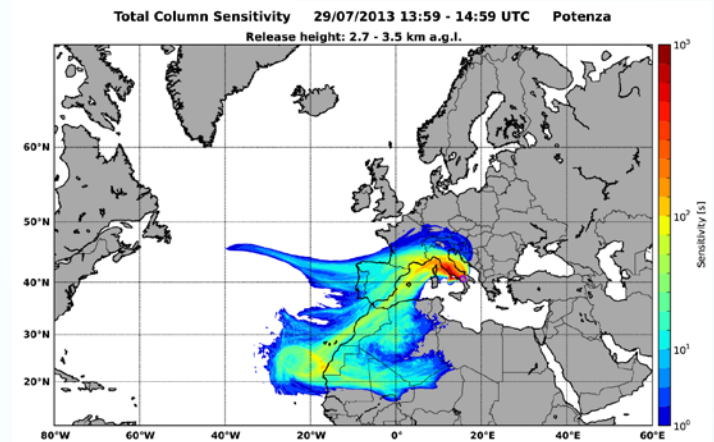


# ESR3 slides

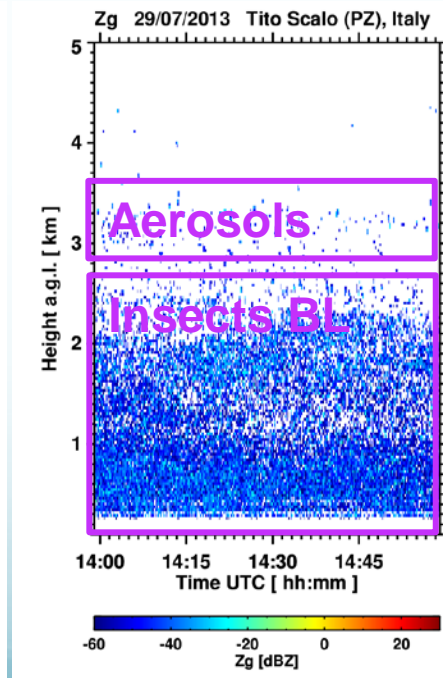
For the EXPO

# Joint lidar and radar aerosol observations (I)

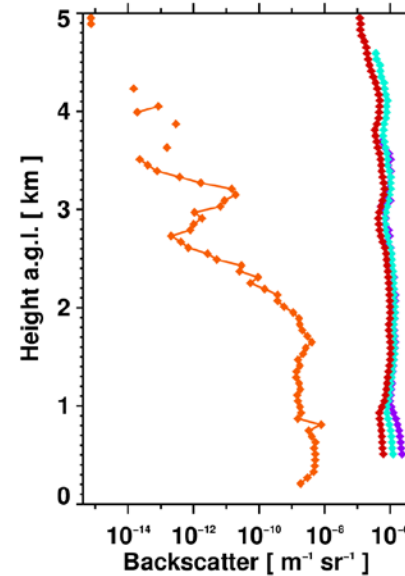
- Aerosols of different sizes are observed by the **lidar** and the **cloud radar**
- Example of **dust observations**



Lidar

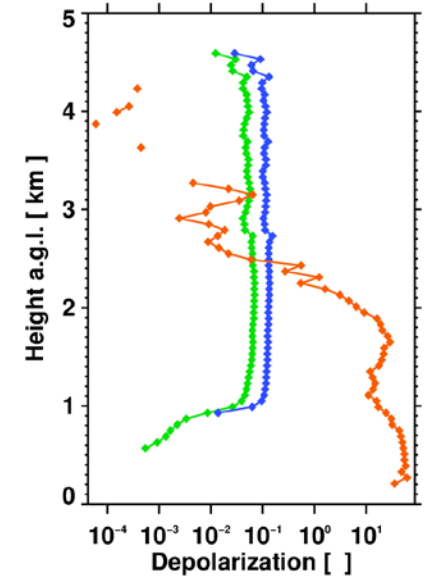


Cloud radar



$\beta_{8.45\text{mm}}$   
 $\beta_{355\text{nm}}(\text{iter.})$   $\beta_{532\text{nm}}(\text{iter.})$   $\beta_{1064\text{nm}}(\text{iter.})$

Backscatter

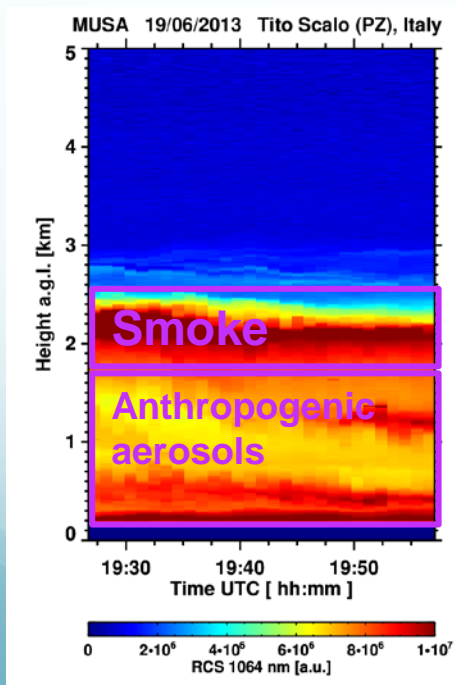
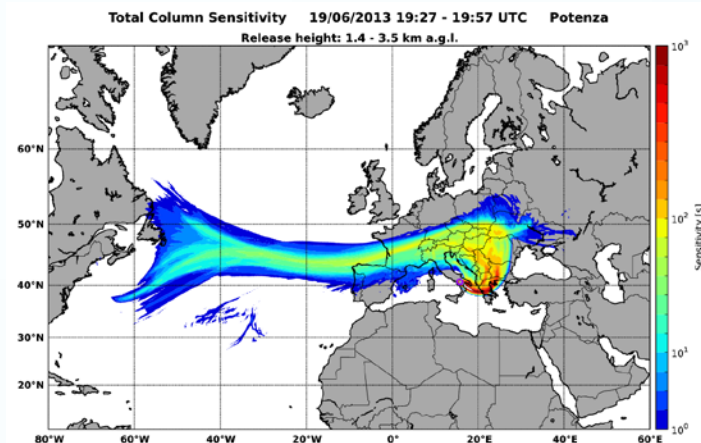


$\delta_{v,532\text{nm}}$   $\delta_{p,532\text{nm}}$   $\delta_{v,8.45\text{mm}}$

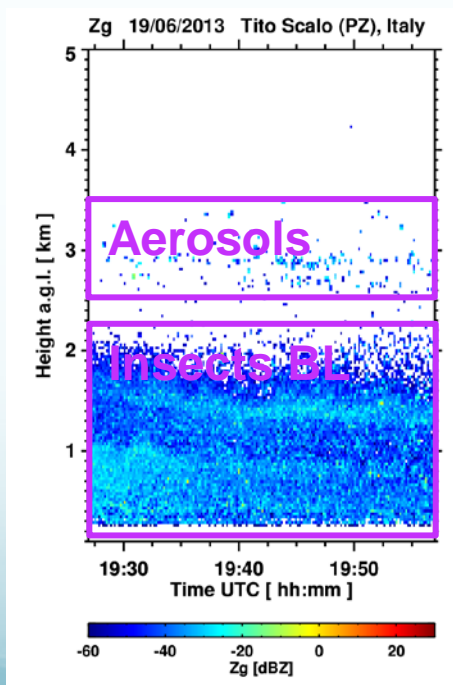
Depolarization

# Joint lidar and radar aerosol observations (II)

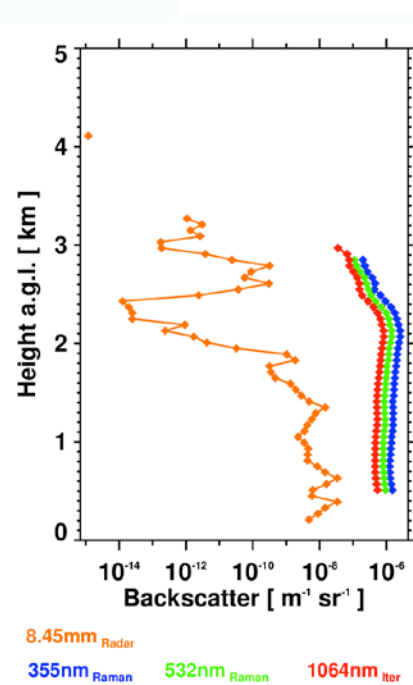
- Aerosols of different sizes are observed by the **lidar** and the **cloud radar**
- Example of **smoke observations**



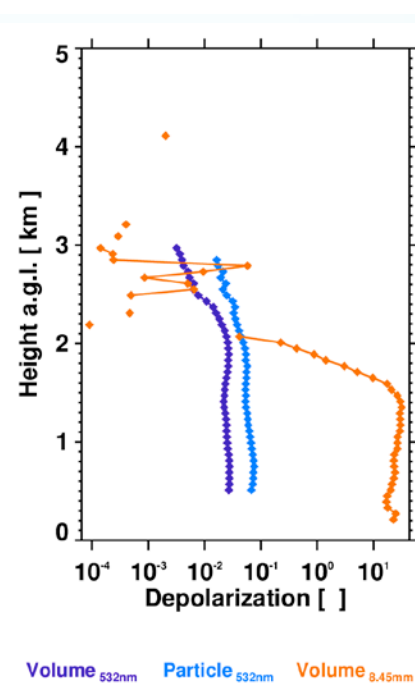
Lidar



Cloud radar



Backscatter



Depolarization