

Snow samples collected from snow layers

70 samples  
from each 3 cm layer

21 samples  
from each 10 cm layer



Dating for dust events

Analyses of lidar data and air mass trajectory

Chemical analyses:  
Evaluation of snow layer condition

Fluorescence microscopic observation:  
determination of particulate densities

Water-drop freezing assay:  
estimation of ice-nuclei activities

MiSeq sequencing for 16S rRNA genes:  
assessment of bacterial compositions

Discussion for the relationship of  
dust-associated bacteria to ice-nuclei activities.