

Step 1: sounding only

Relative humidity

Supersaturated layer?

0: No cloud

1 & $T > 0^{\circ}\text{C}$: warm SLC

1 & $T < 0^{\circ}\text{C}$: cold SLC

>1 & $T > 0^{\circ}\text{C}$: warm MLC

>1 & $T < 0^{\circ}\text{C}$: cold MLC

Step 2: sounding & cloud radar

Number of confirmed cloud layers per layer triplet

Radar signal

Cold MLC seeding

No cloud

Cold MLC seeding & non-seeding

Cold SLC

Cold MLC non-seeding

seeding sub-saturated layer

non-seeding sub-saturated layer

3

0

2, no gap

3

2, gap

sublimation calculation