

—○— Daytime ozone vertical structure

—○— Nighttime ozone vertical structure

Free atmosphere

Convective mixing layer (CML)

Residual layer (RL)

$$[O_3]_{RL} = a * [O_3]_{CML}$$

a: 0.90 (January), 0.69 (April), 0.43 (July), 0.90 (October)

Convective mixing layer (CML)

$[O_3]_{CML}$

$[O_3]_{RL}$

$\Delta T/\Delta z$

Vertical mixing

Stable boundary layer

Vertical mixing

MDA8 O₃ enhancement

Nocturnal O₃ enhancement

Daytime

Nighttime

Following daytime

