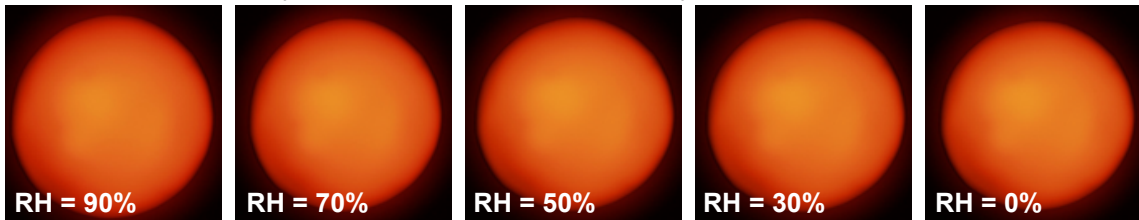


(a)  $\beta$ -caryophyllene/ $\text{O}_3$  SOA (O/C = 0.40) +  $\alpha$ -pinene/ $\text{O}_3$  SOA (O/C = 0.50)



(b)  $\beta$ -caryophyllene/ $\text{O}_3$  SOA (O/C = 0.40) + toluene/OH SOA (O/C = 1.05)

