

Supporting Information of:

Criegee Chemistry on Aqueous Organic Surfaces

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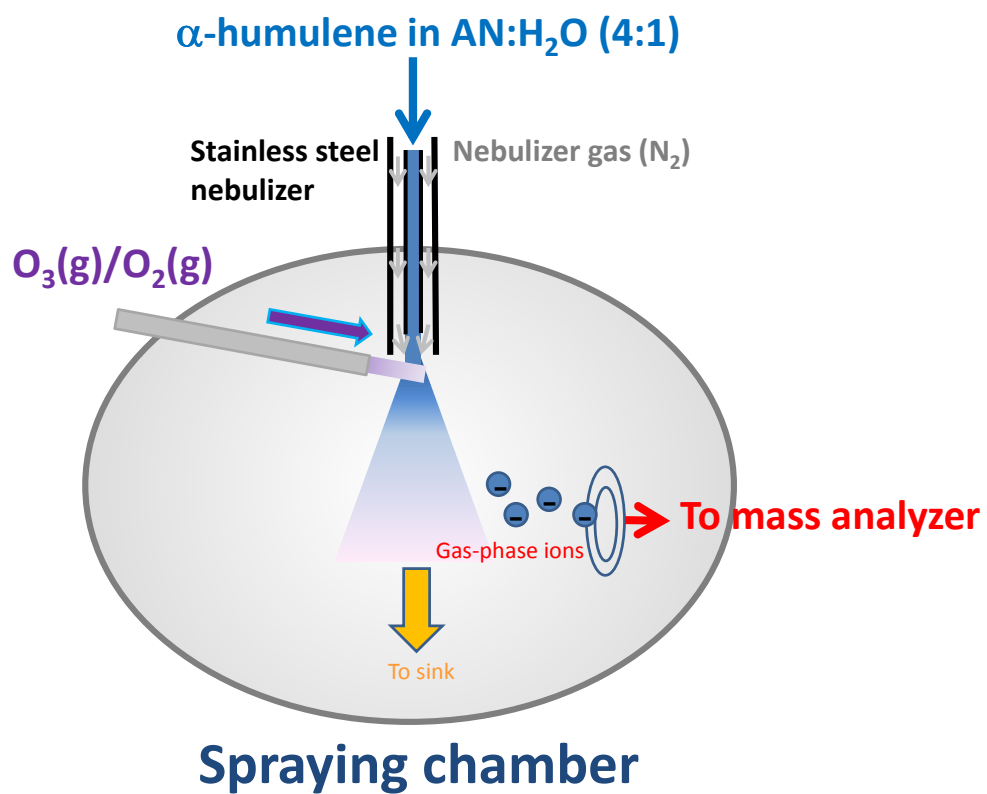


FIGURE S1: Schematic diagram of present experimental setup.

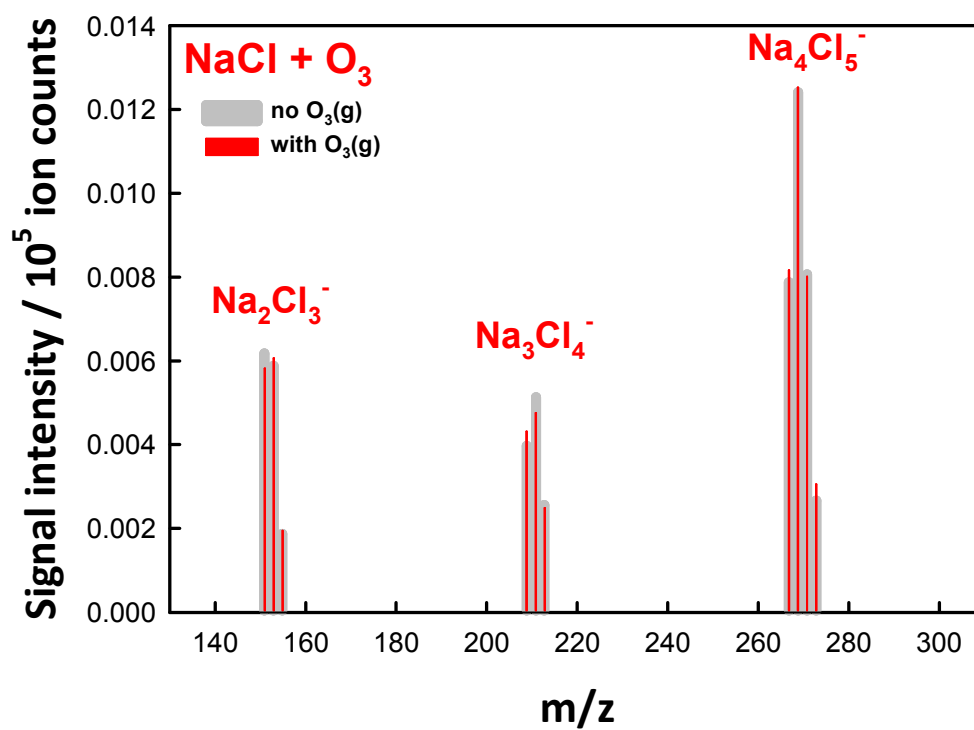


FIGURE S2: Negative ion mass spectra from 0.2 mM NaCl in AN:H₂O (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 2.4 \times 10^{11}$ molecules cm⁻³ s).

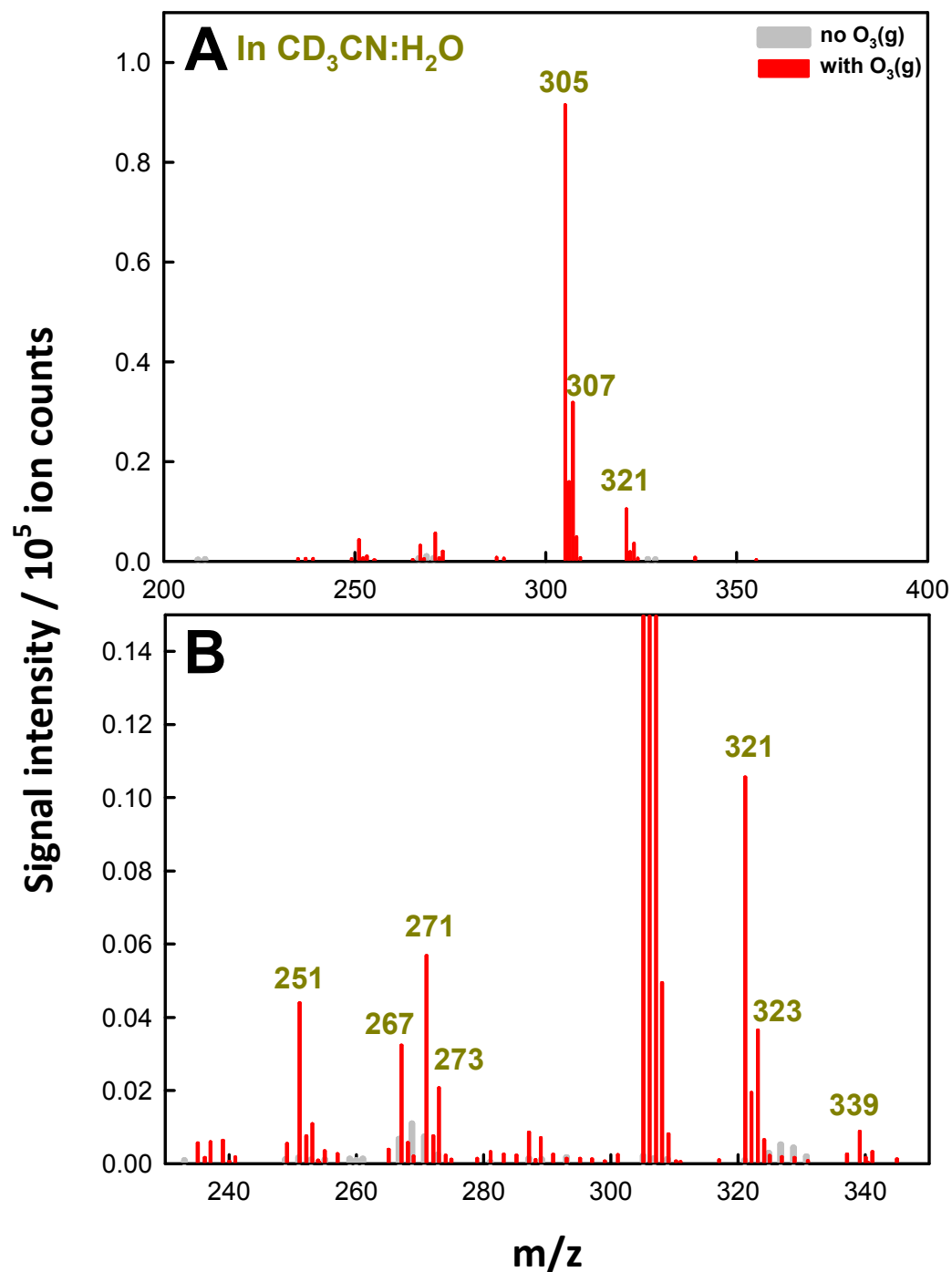


FIGURE S3: A) Negative ion mass spectra from 1 mM α -humulene + 0.2 mM NaCl in $\text{CD}_3\text{CN}:\text{H}_2\text{O}$ (4:1 = vol:vol) solution microjets in the absence (gray) and presence of $\text{O}_3(\text{g})$ (red, $E = 9.4 \times 10^{10}$ molecules cm^{-3} s). B) Zooming in the ozonation products.

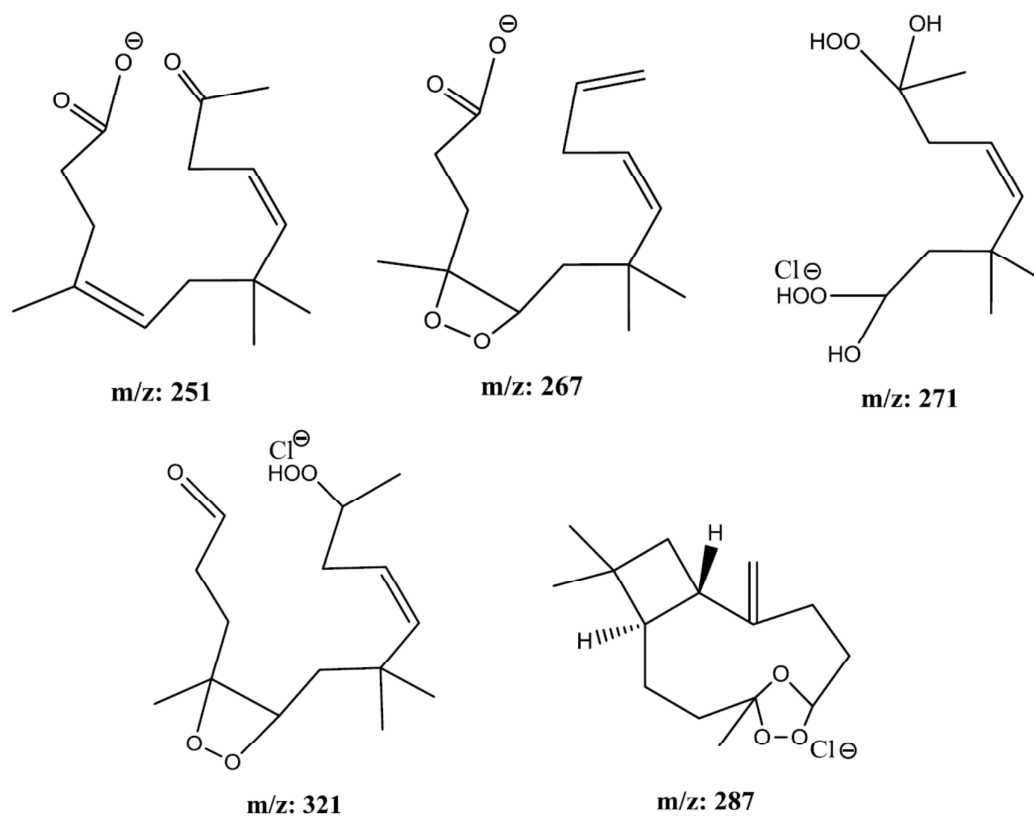


FIGURE S4: Possible structures of m/z 251, 267, 271 and 321 from α -H ozonolysis and m/z 287 from β -C ozonolysis

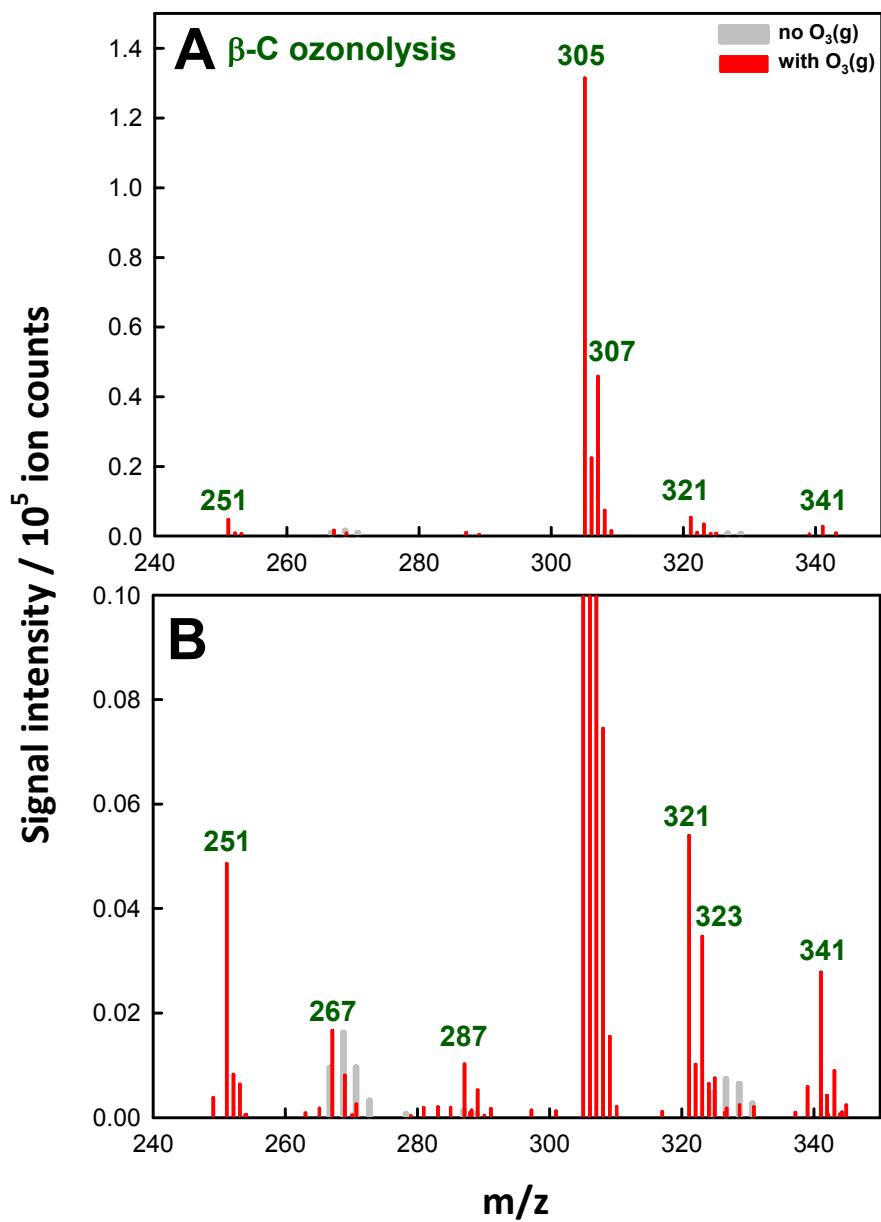


FIGURE S5: A) Negative ion mass spectra from 1 mM β -caryophyllene (β -C) + 0.2 mM NaCl in AN:H₂O (4:1 = vol:vol) solution microjets in the absence (gray) and presence of $O_3(g)$ (red, $E = 8.8 \times 10^{10}$ molecules cm^{-3} s). B) Zooming in the ozonation products.

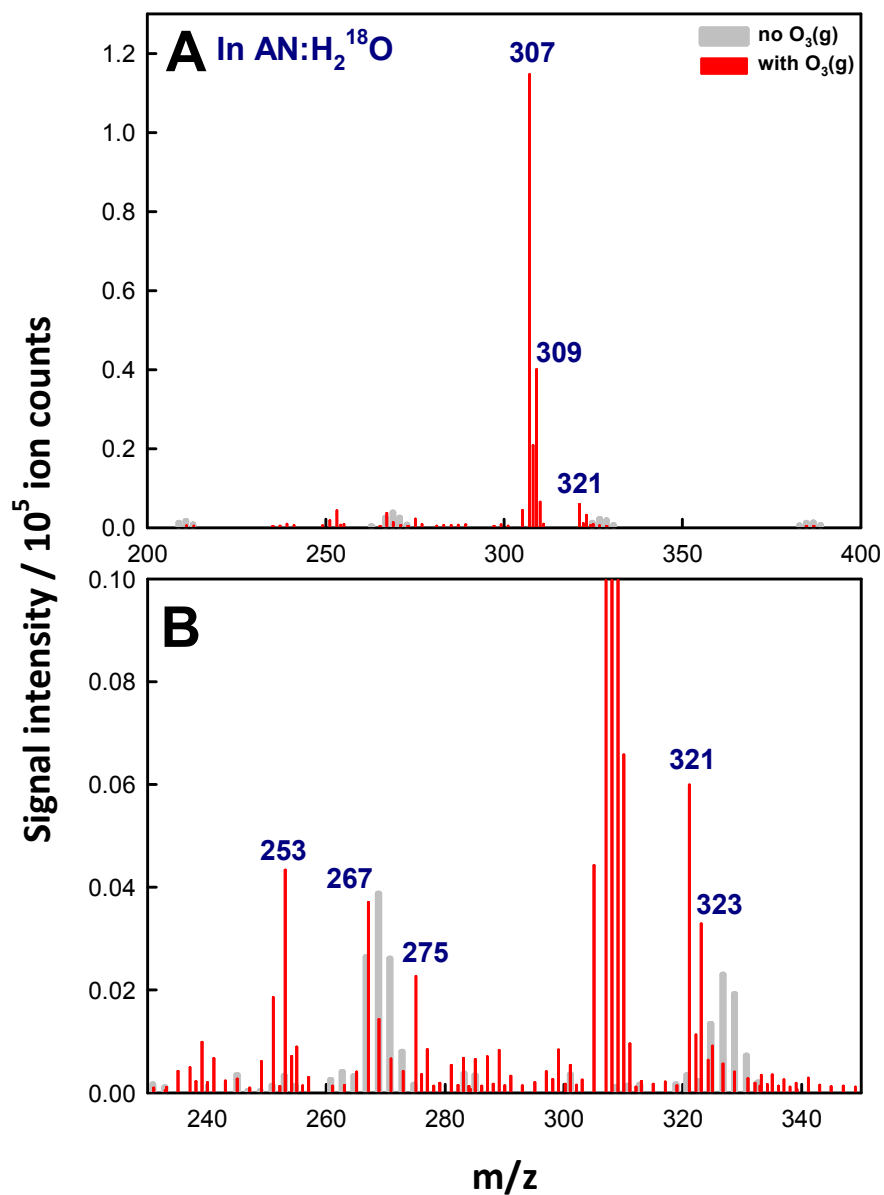


FIGURE S6: A) Negative ion mass spectra from 2 mM α -humulene + 1.2 mM NaCl in AN:H₂¹⁸O (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 9.4 \times 10^{10}$ molecules cm⁻³ s). B) Zooming in the ozonation products.

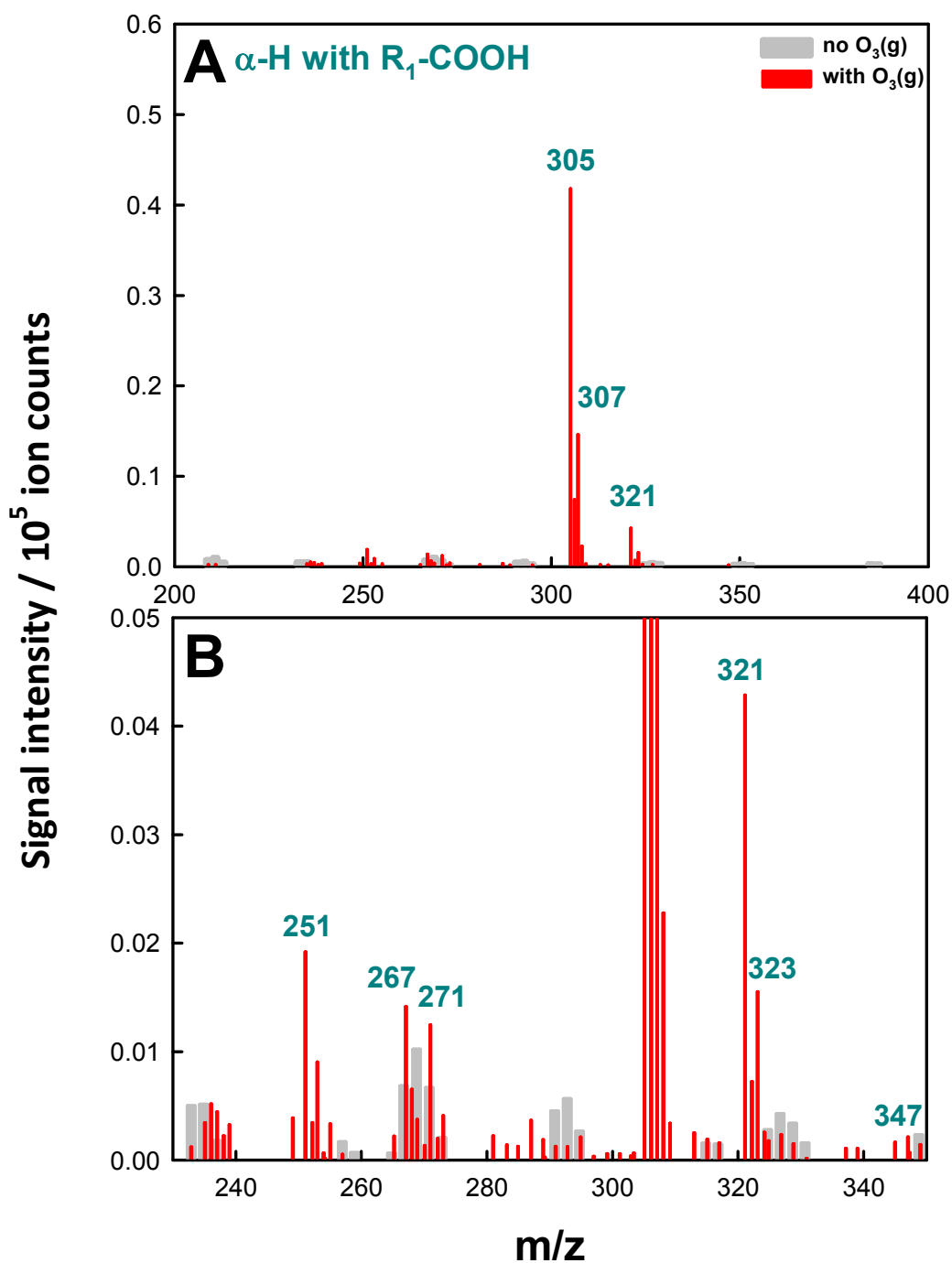


FIGURE S7: A) Negative ion mass spectra from 1 mM α -humulene + 0.2 mM NaCl + 100 mM acetic acid (R₁-COOH) in AN:H₂O (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 2.4 \times 10^{11}$ molecules cm⁻³ s). B) Zooming in the ozonation products.

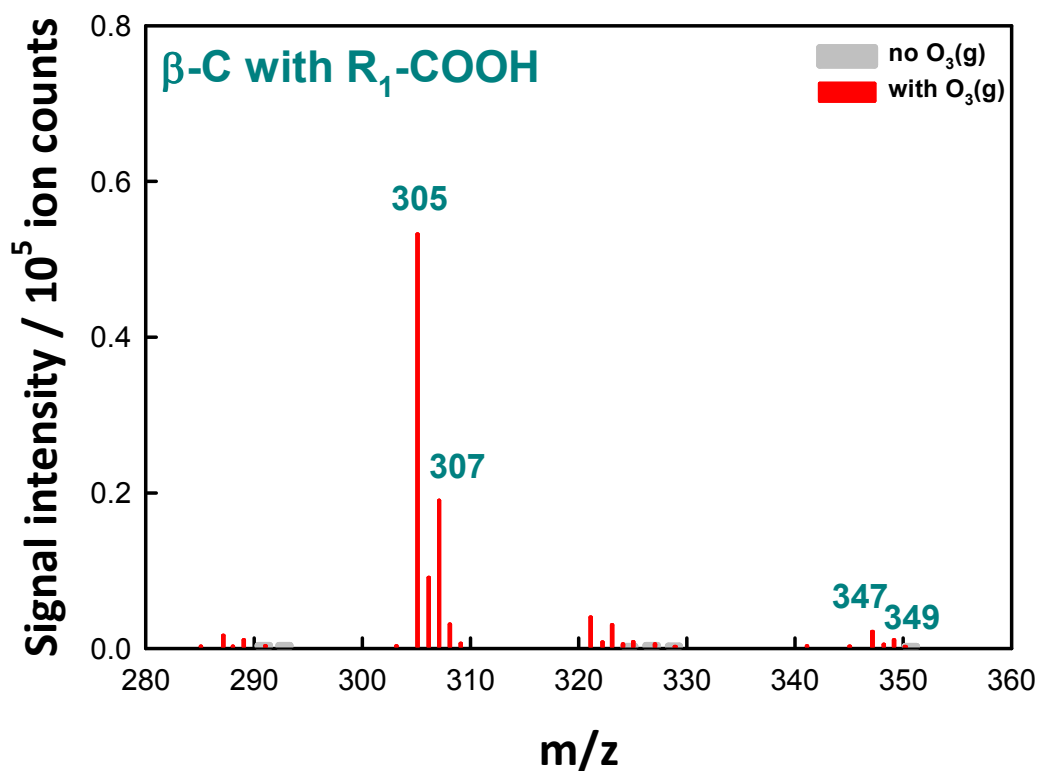


FIGURE S8: Negative ion mass spectra from 1 mM β -caryophyllene + 0.2 mM NaCl + 100 mM acetic acid (R₁-COOH) in AN:H₂O (4:1 = vol:vol) solution microjets in the absence (gray) and presence of O₃(g) (red, $E = 2.4 \times 10^{11}$ molecules cm⁻³ s).