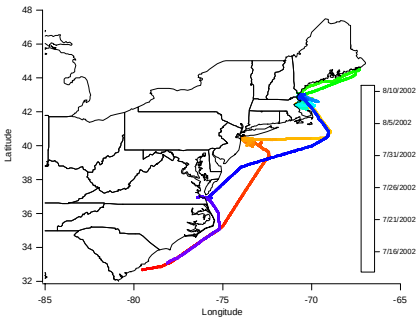
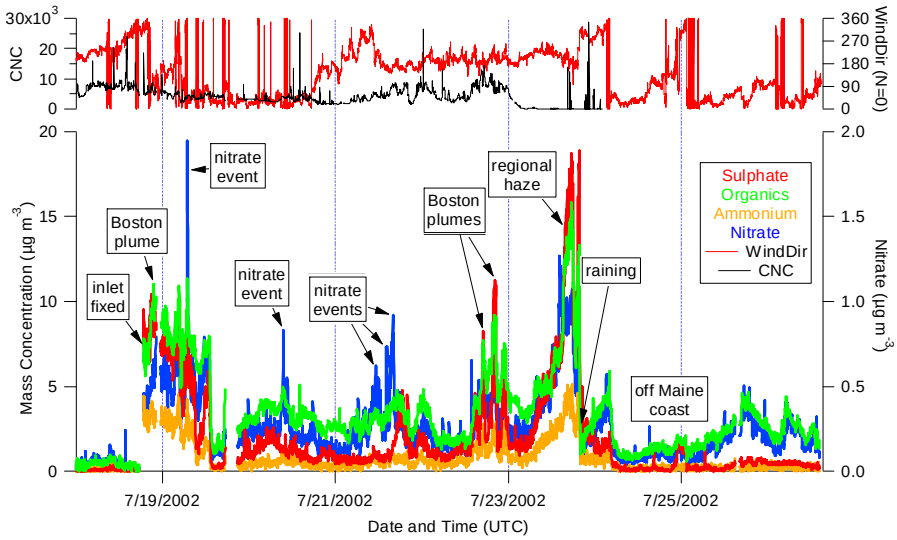
AMS on the *Ronald H. Brown* for NEAQS 2002

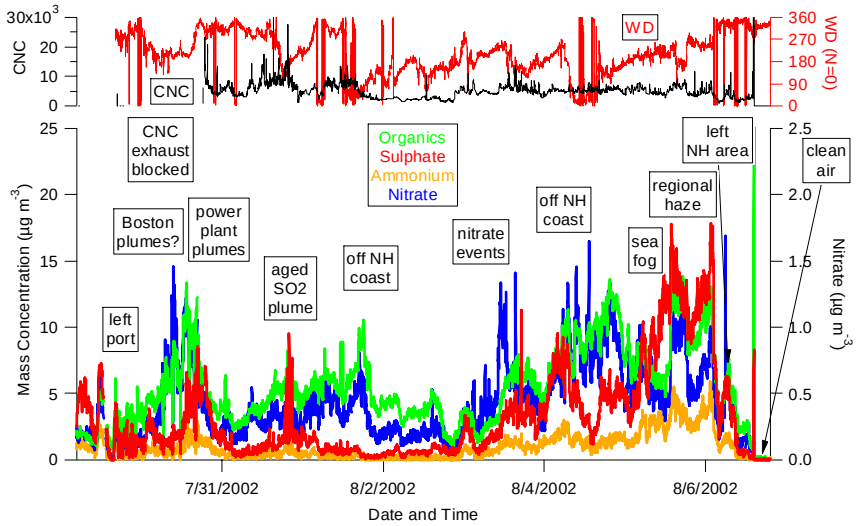


Setup on the Ron Brown

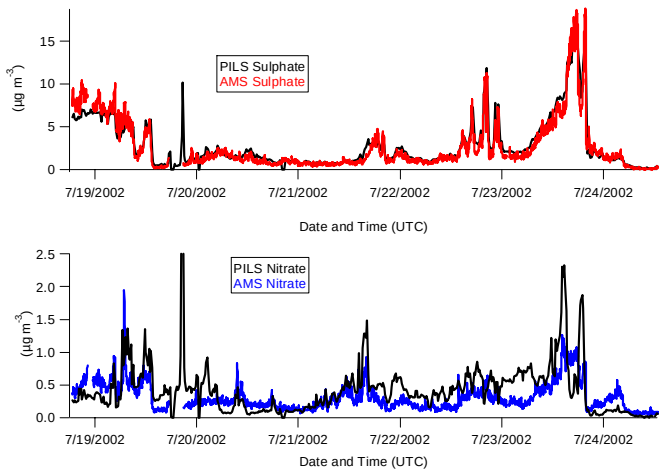
AMS Ron Brown Leg1 Data



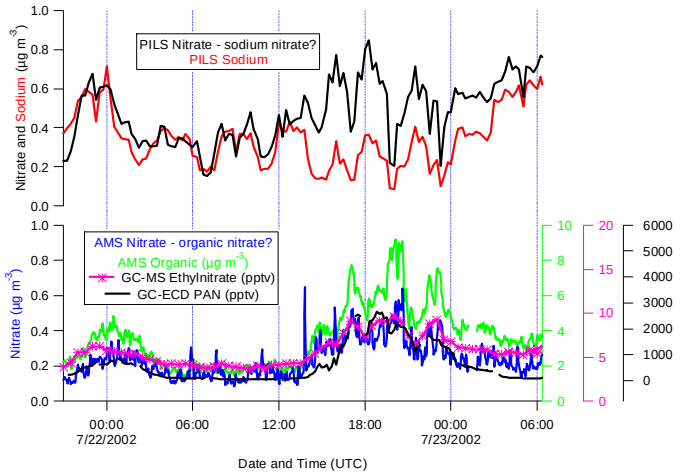
AMS Ron Brown Leg2 Data



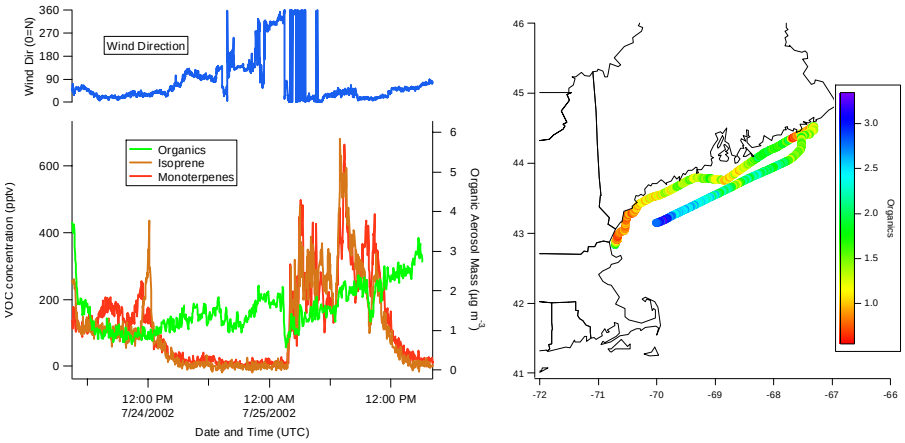
Comparison With PILS – Leg1



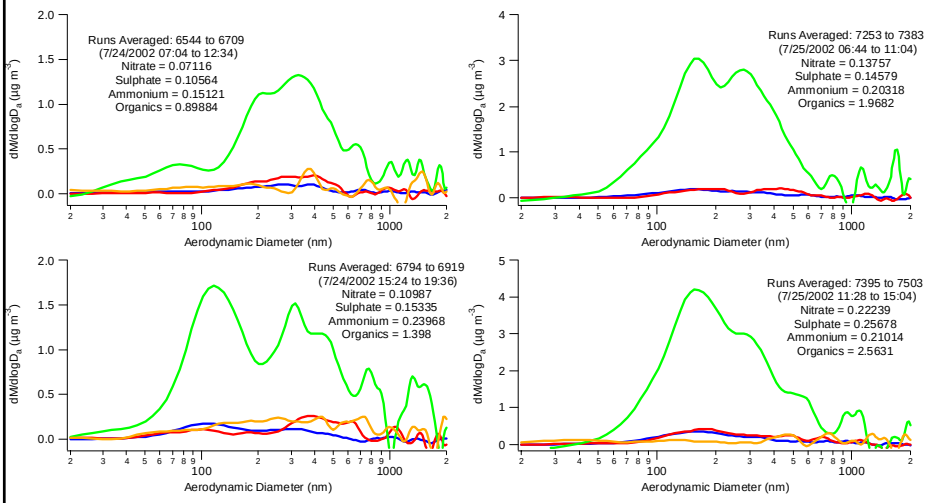
Nitrate Comparisons – Leg1



Growth of Aerosol Organics off the Coast of Maine



Organic Aerosol Growth from Biogenic VOCs



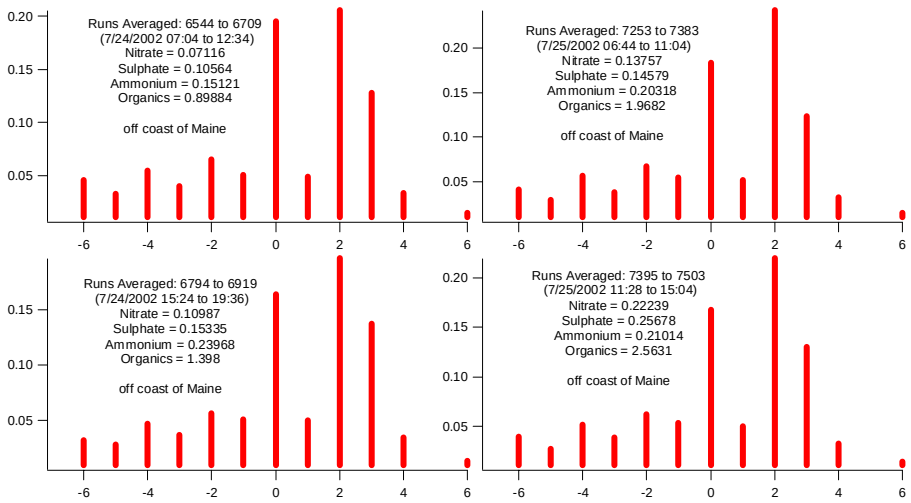
NEAQS 2002 Ron Brown Summary

- Mostly sampled off the coast of New Hampshire.
- Organic mass concentrations dominated except during pollution events, when sulfate was as large or higher.
- Sampled several plumes from Boston (7/19, 7/22, and 7/30) as well as regional haze events (7/23 and 8/5) and power plant plumes (7/31).
- Observed clean air off the coast of Maine with growth of organics in smaller particle mode (7/24-25).
- Nitrate curiously tracked organic concentrations except during a few “nitrate events” (7/19-21 and 8/3).
- Comparisons with PILS highlighted differences between methods (sodium nitrate vs. organic nitrate) and sampling inlets.
- Still analyzing data!

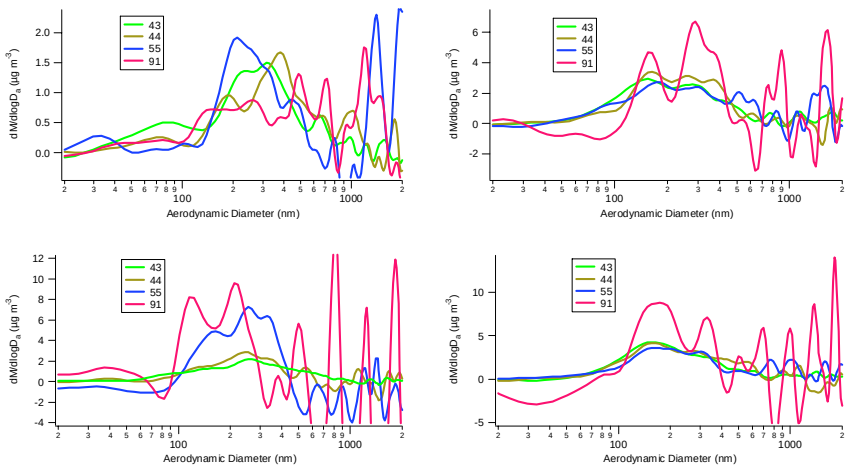
Thank you!

Especially John, James, Alice, Frank, Joost, Carsten, Bill, Paul, and Matt, Doug, and Manjula!

Delta Patterns During Biogenic Growth

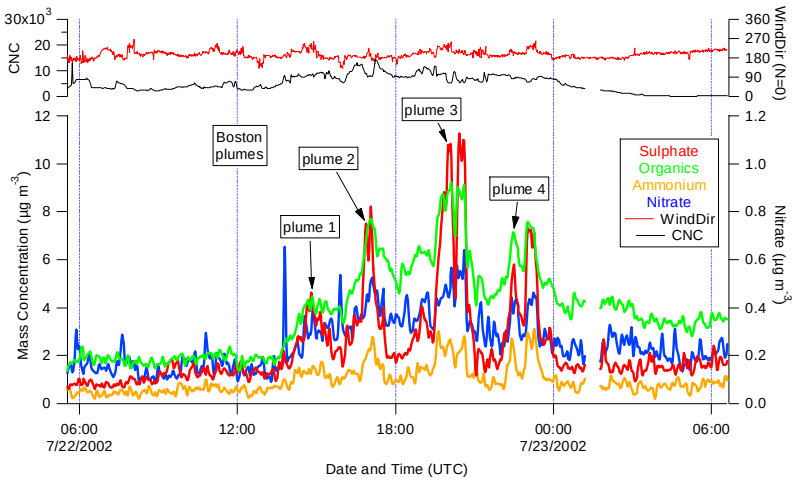


Growth from Biogenic VOCs



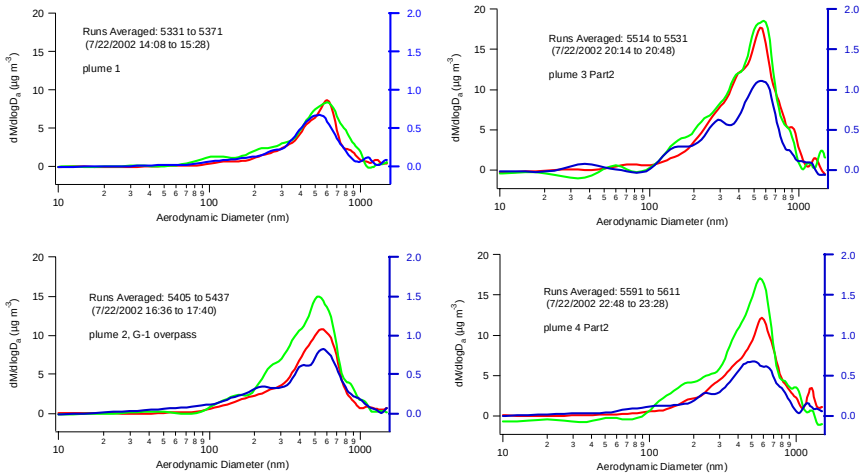
Plume Day and G-1 overpasses

7/22/02 NEAQS 2002



Plumes from Boston

7/22/02 NEAQS 2002



Clean Marine Aerosol

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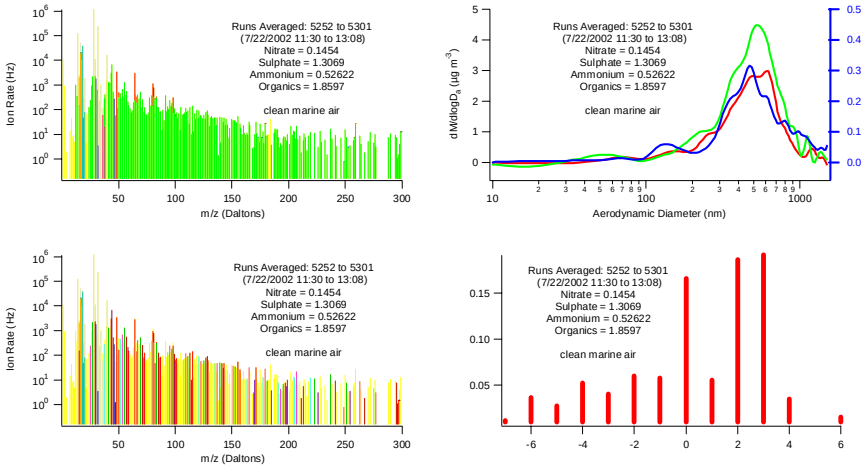
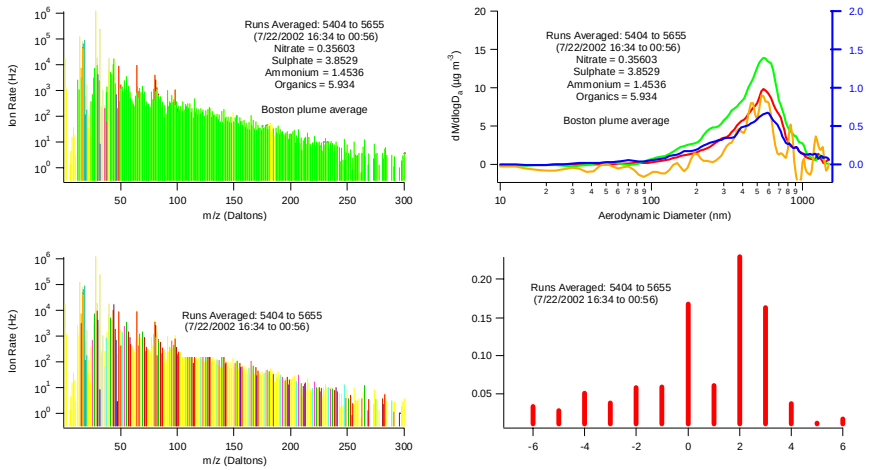


Boston Plume Averages

7/22/02 NEAQS 2002