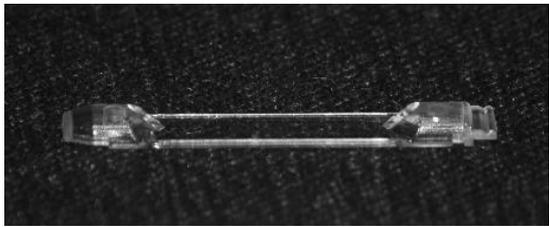
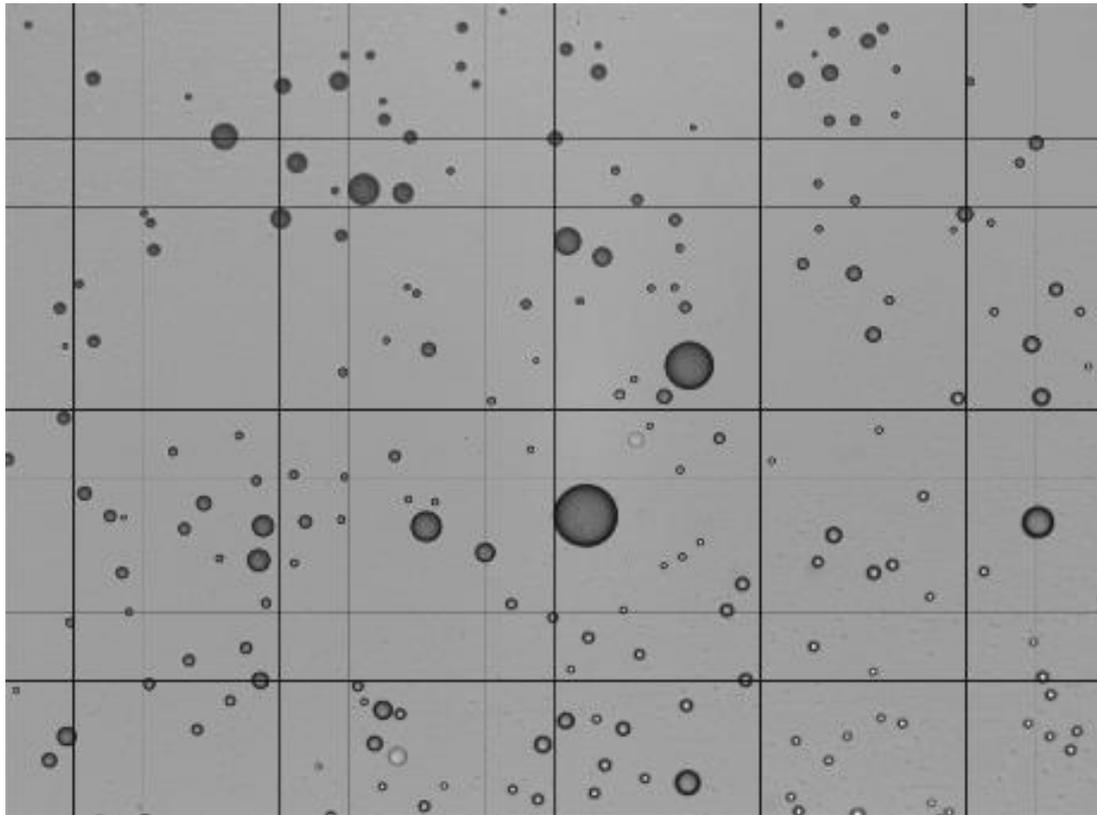


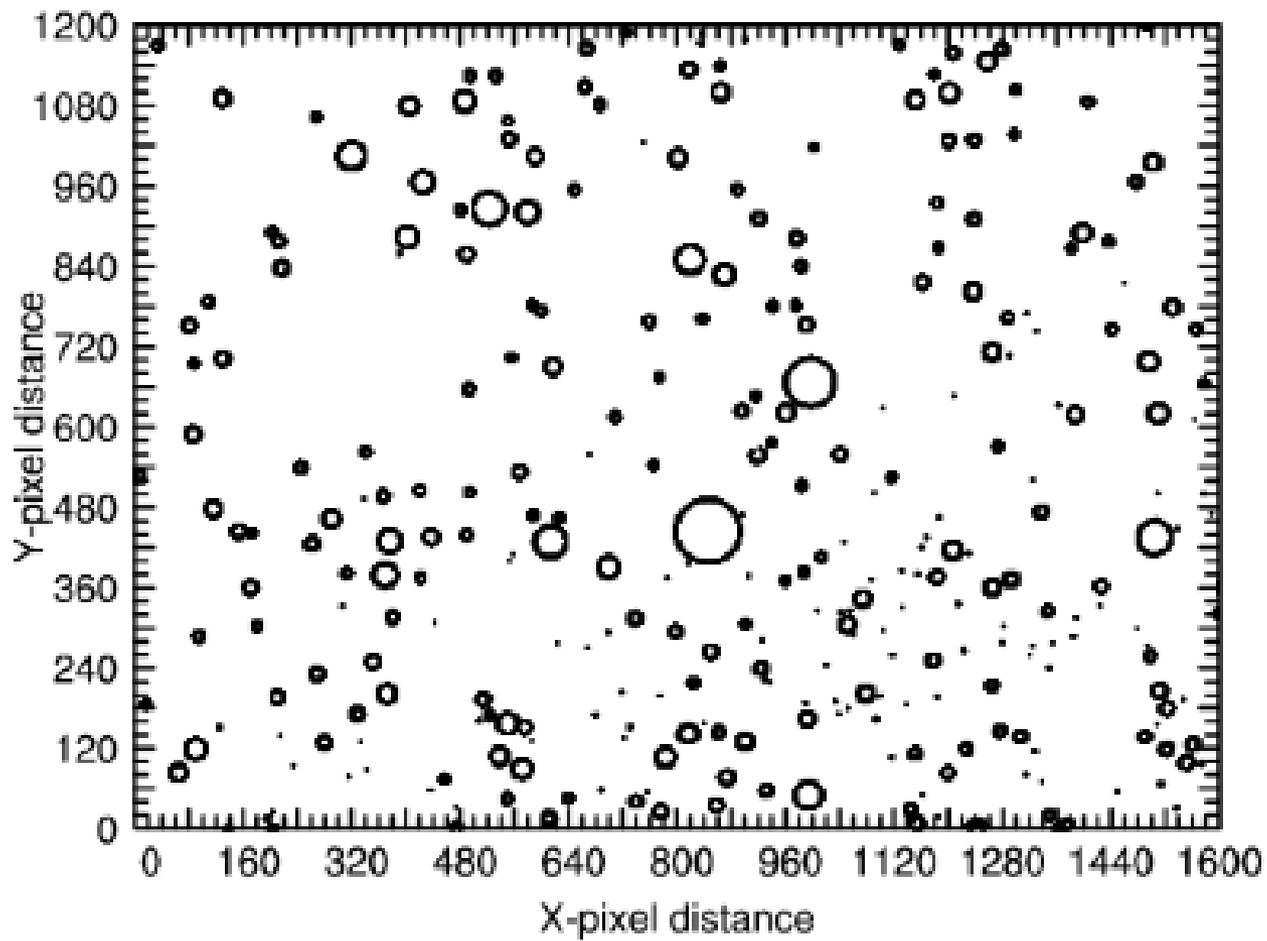
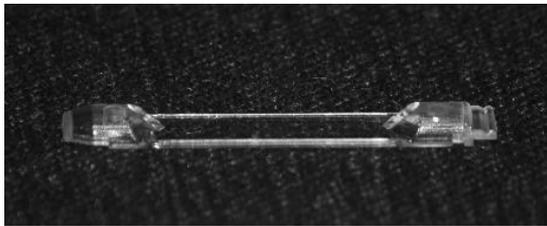
VARIABILITY OF GIANT SEA-SALT PARTICLES DURING THE VOCALS CAMPAIGN

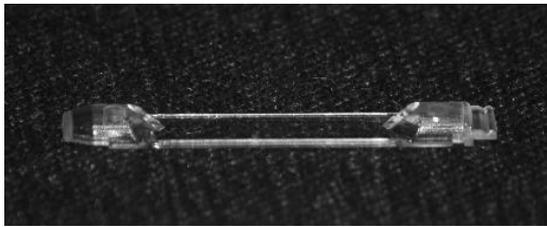
Jorgen B. Jensen
NCAR/EOL/RAF



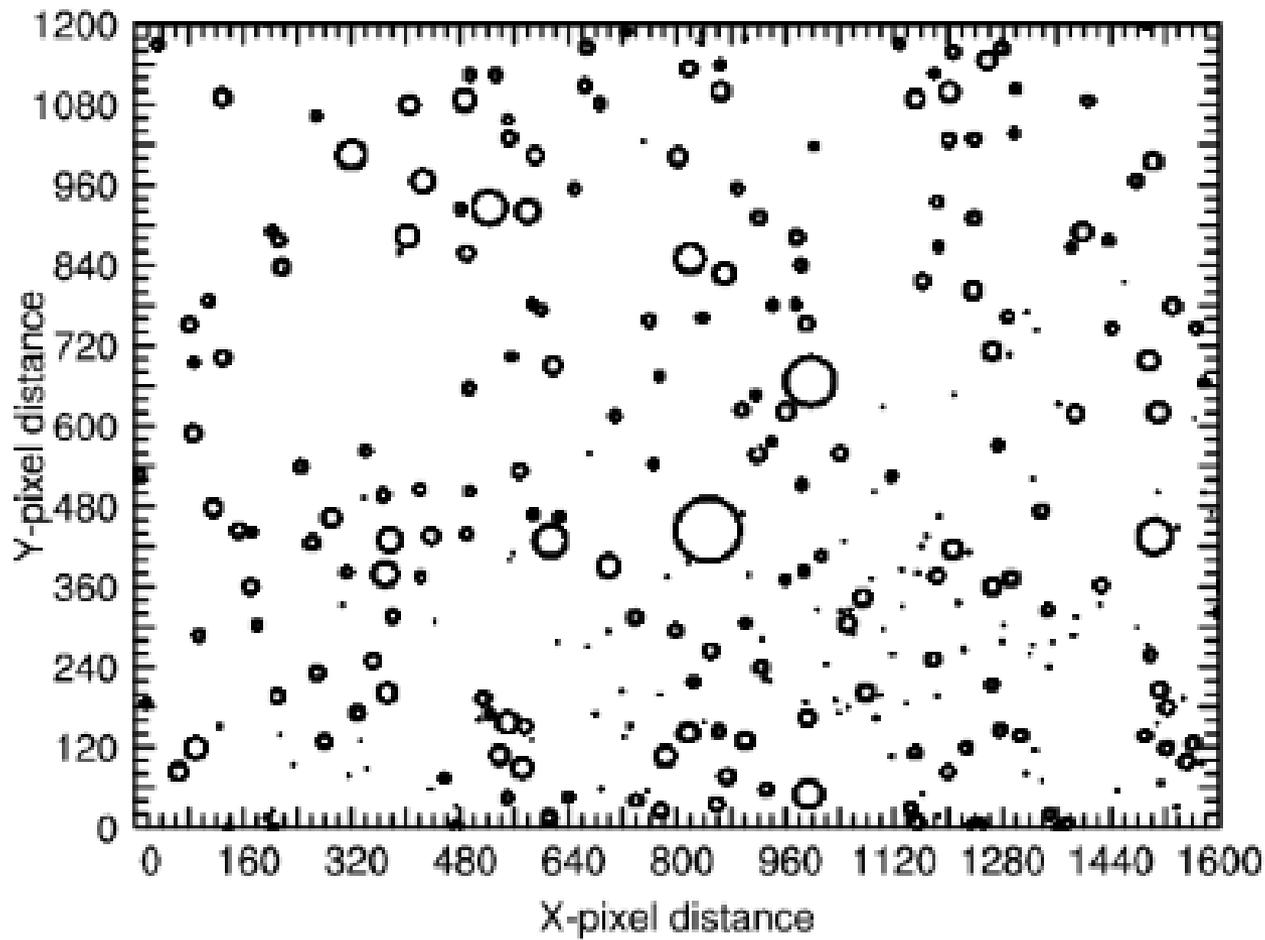
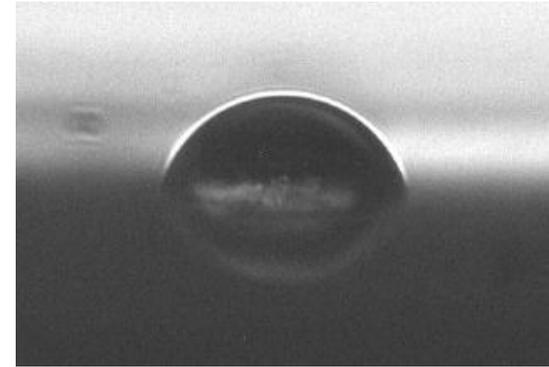
Explain

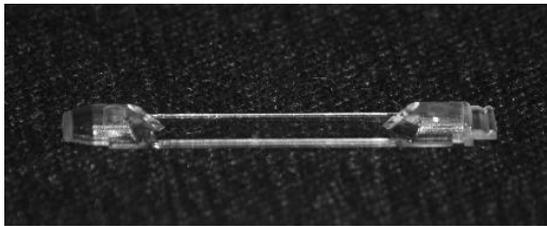




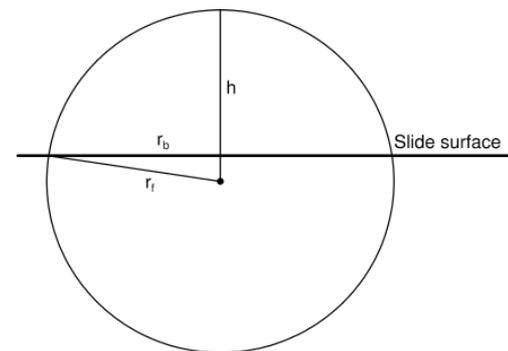
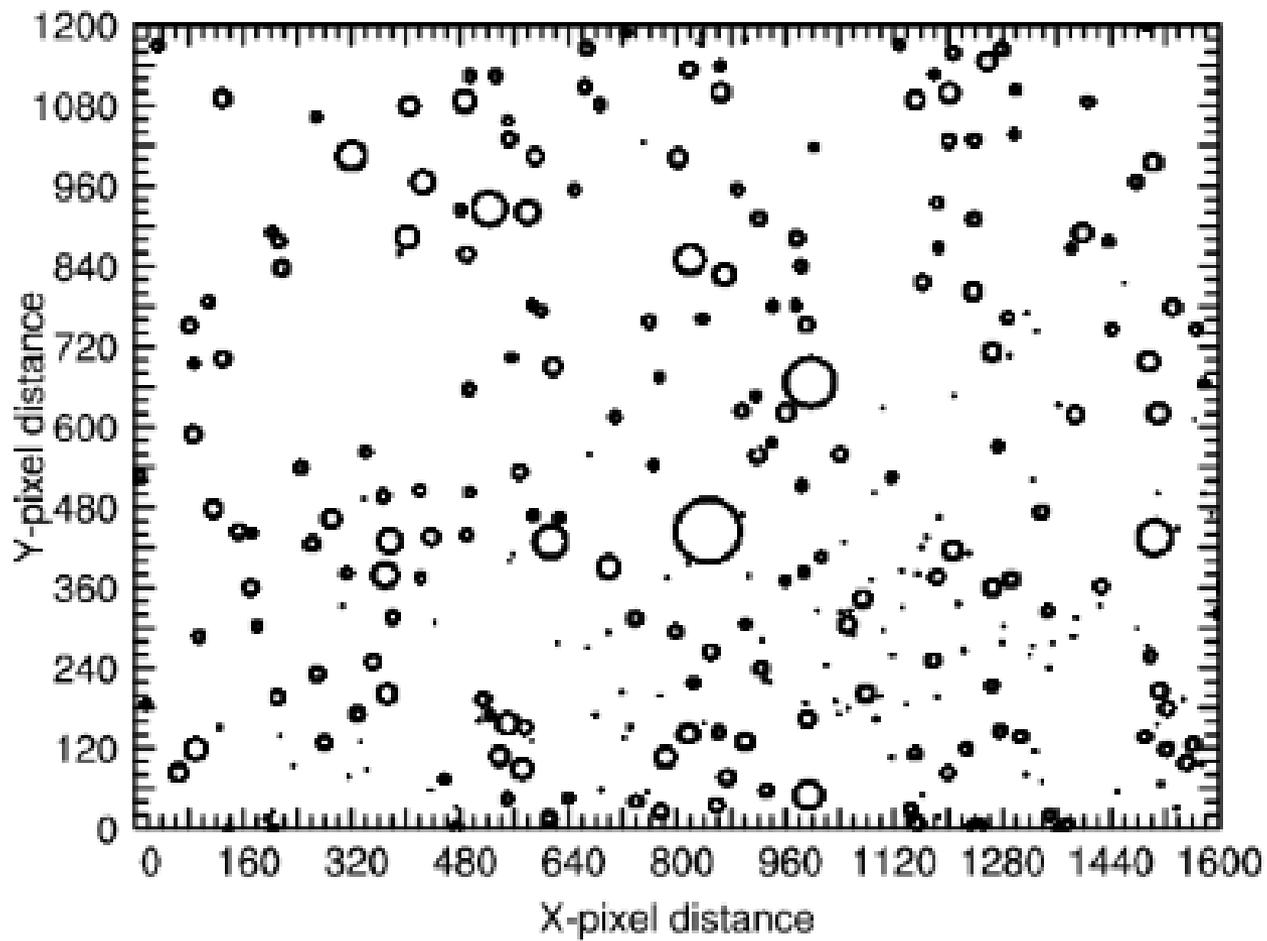
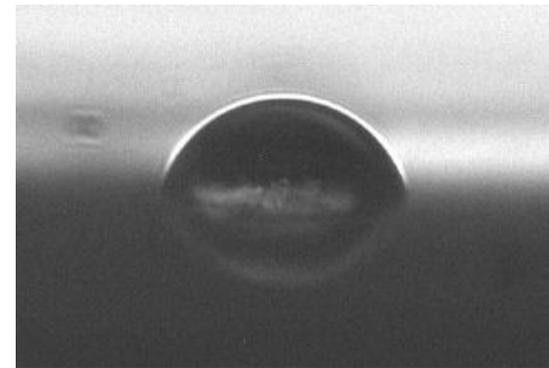


Explain





GNI system



Köhler equation



Dry NaCl equiv. size

GNI NaCl equivalent sizing:

Combined sizing uncertainty* as a function of dry radius, r_d

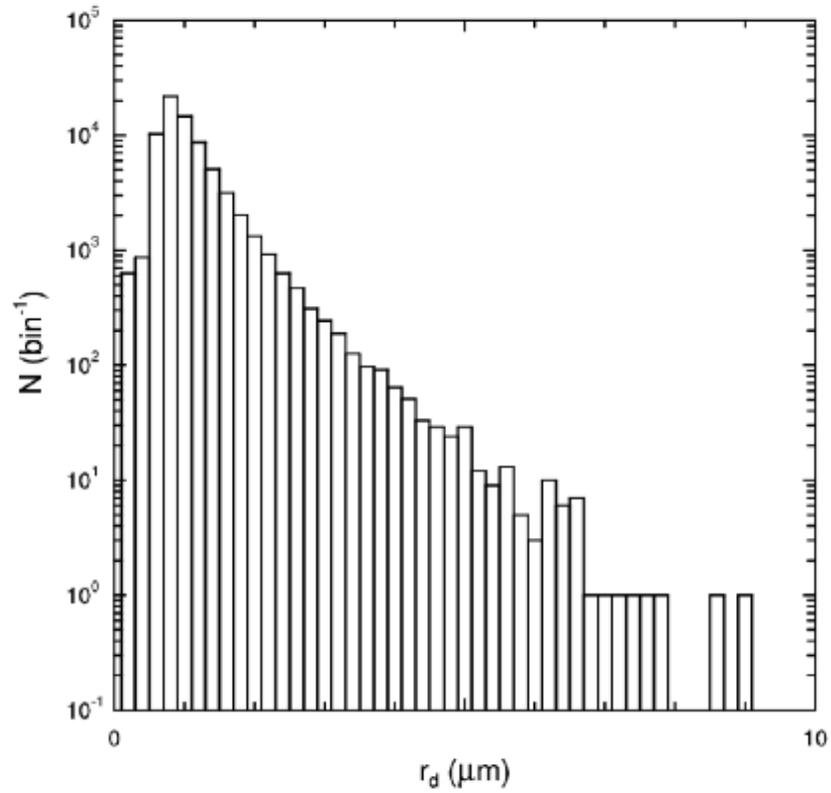
$r_d=1\ \mu\text{m}$ $r_d=2\ \mu\text{m}$ $r_d=4\ \mu\text{m}$ $r_d=8\ \mu\text{m}$ $r_d=16\ \mu\text{m}$

Conc.*	7%	7%	7%	7%	8%
Sizing**	8%	6%	6%	6%	6%

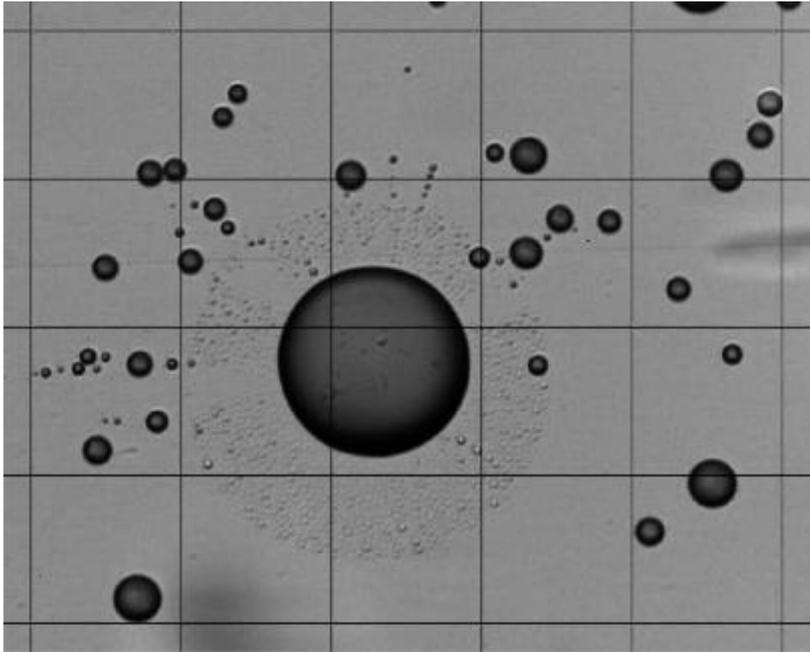
* Due to slide exposure time, air speed, concentration enhancement factor, and ambient saturation ratio.

** Due to focus, bead mis-sizing, spherical cap ratio, microscope temperature, surface tension and water activity.

GNI NaCl equivalent sizing:

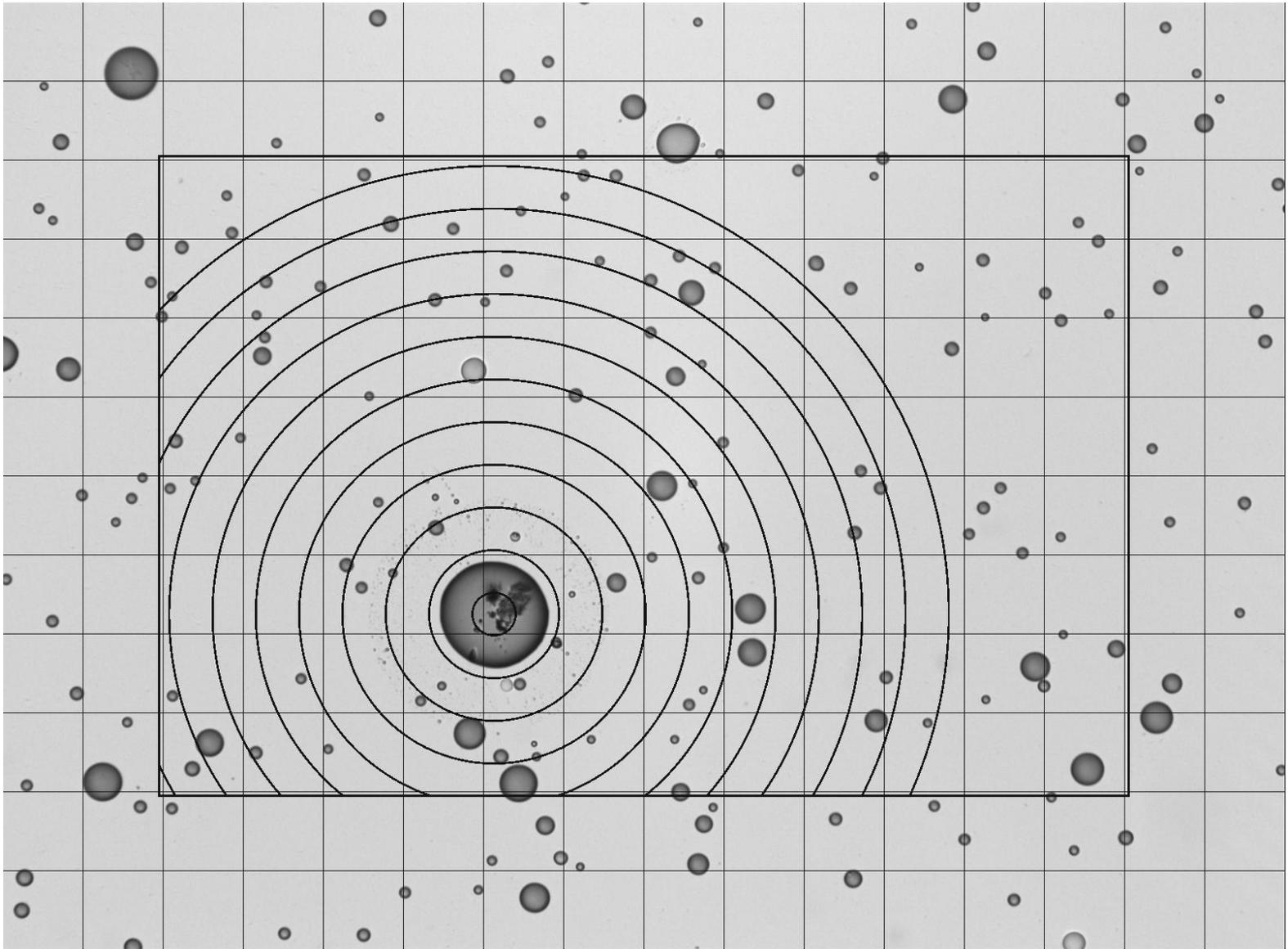


Some splash impact effects:



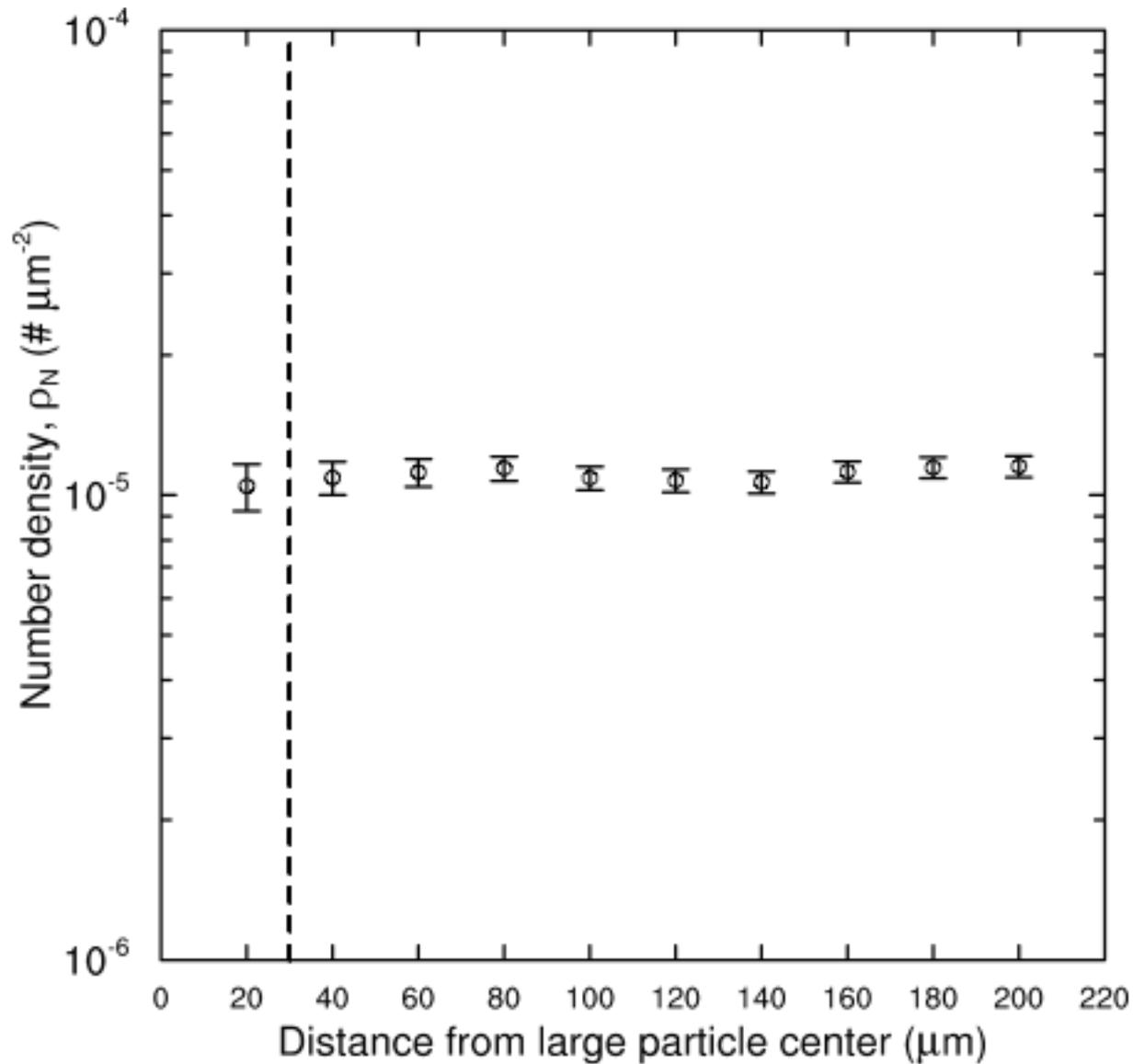
Some splash impact effects:

Are there more small particles surrounding large particles?



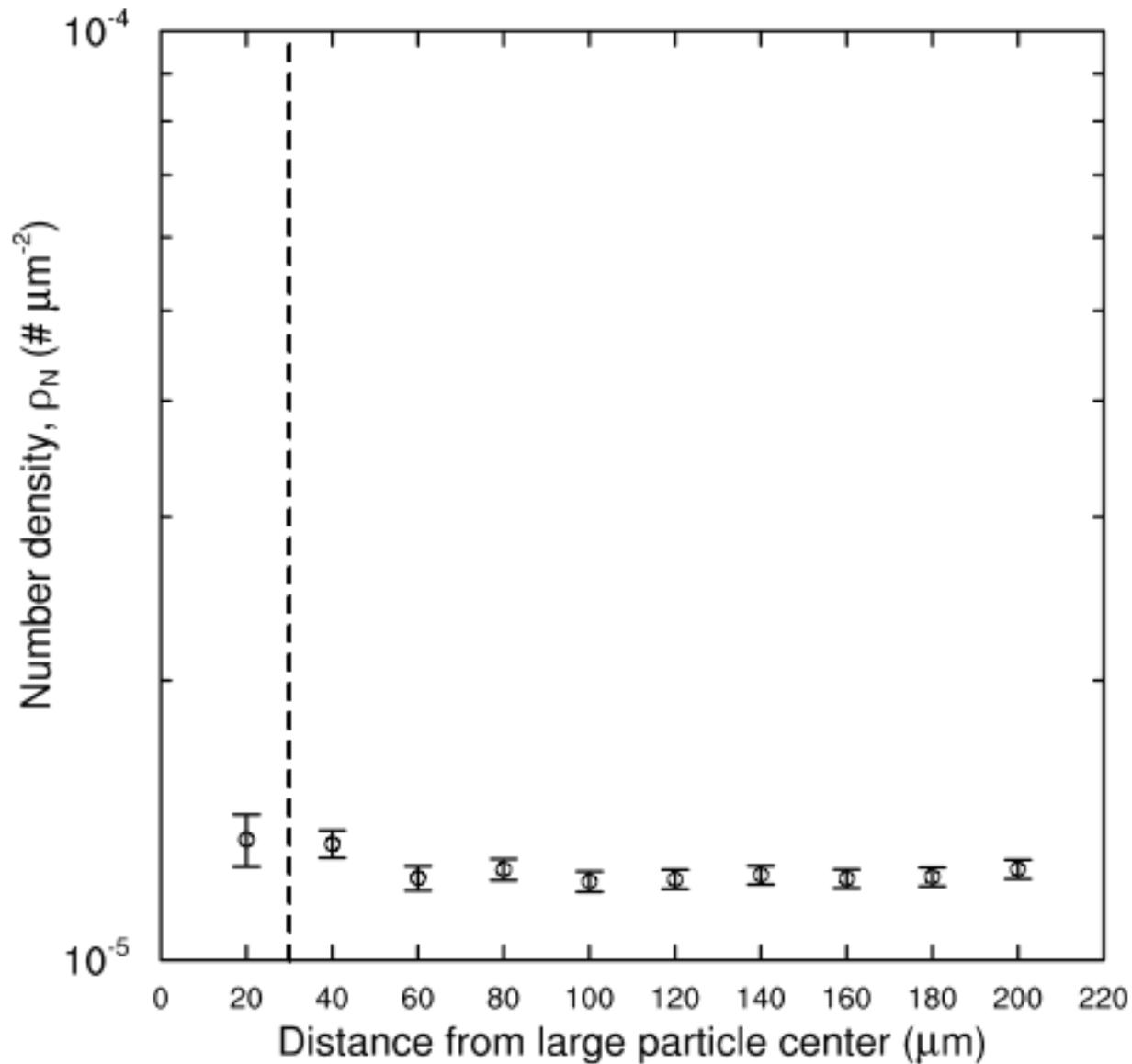
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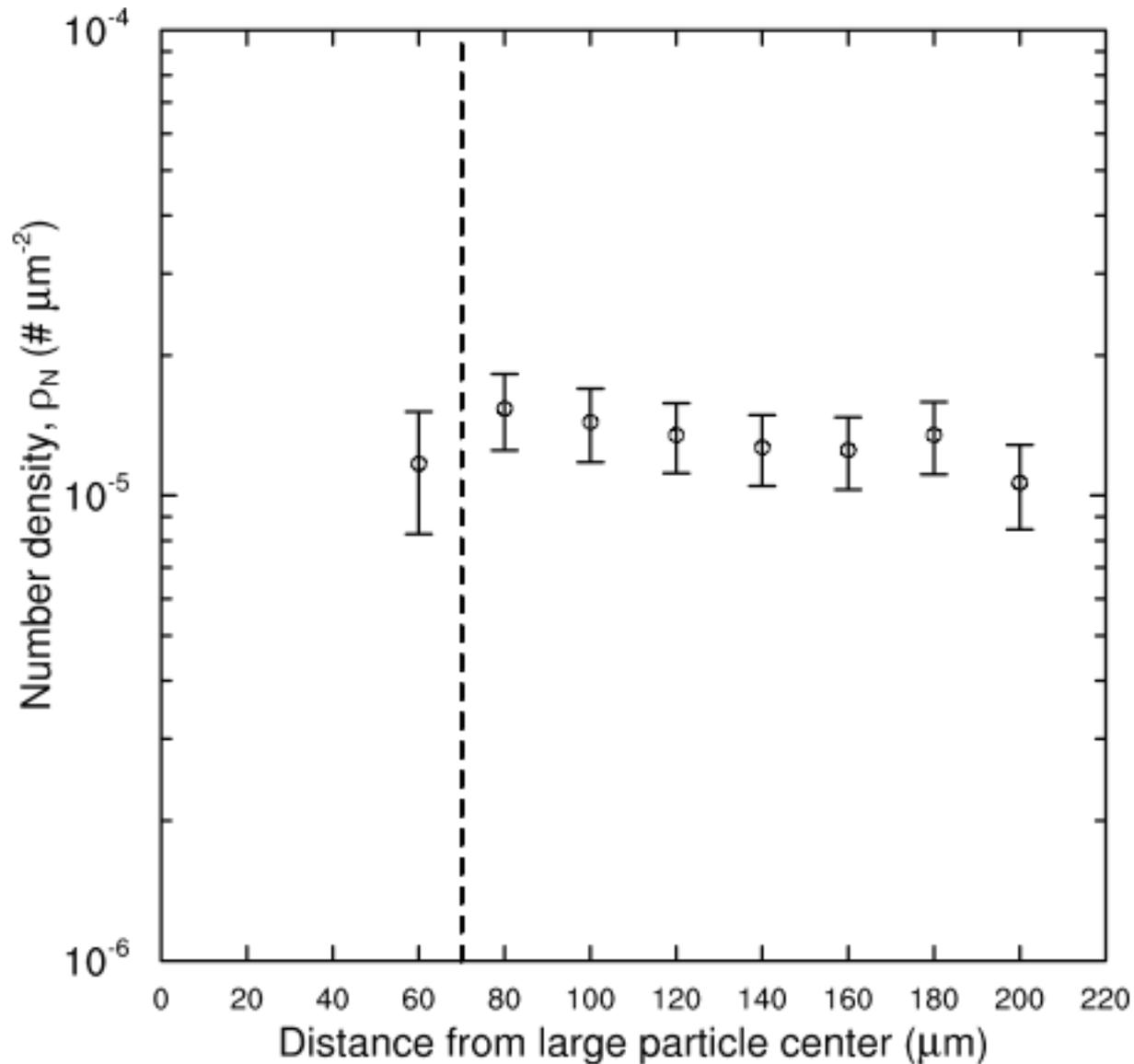
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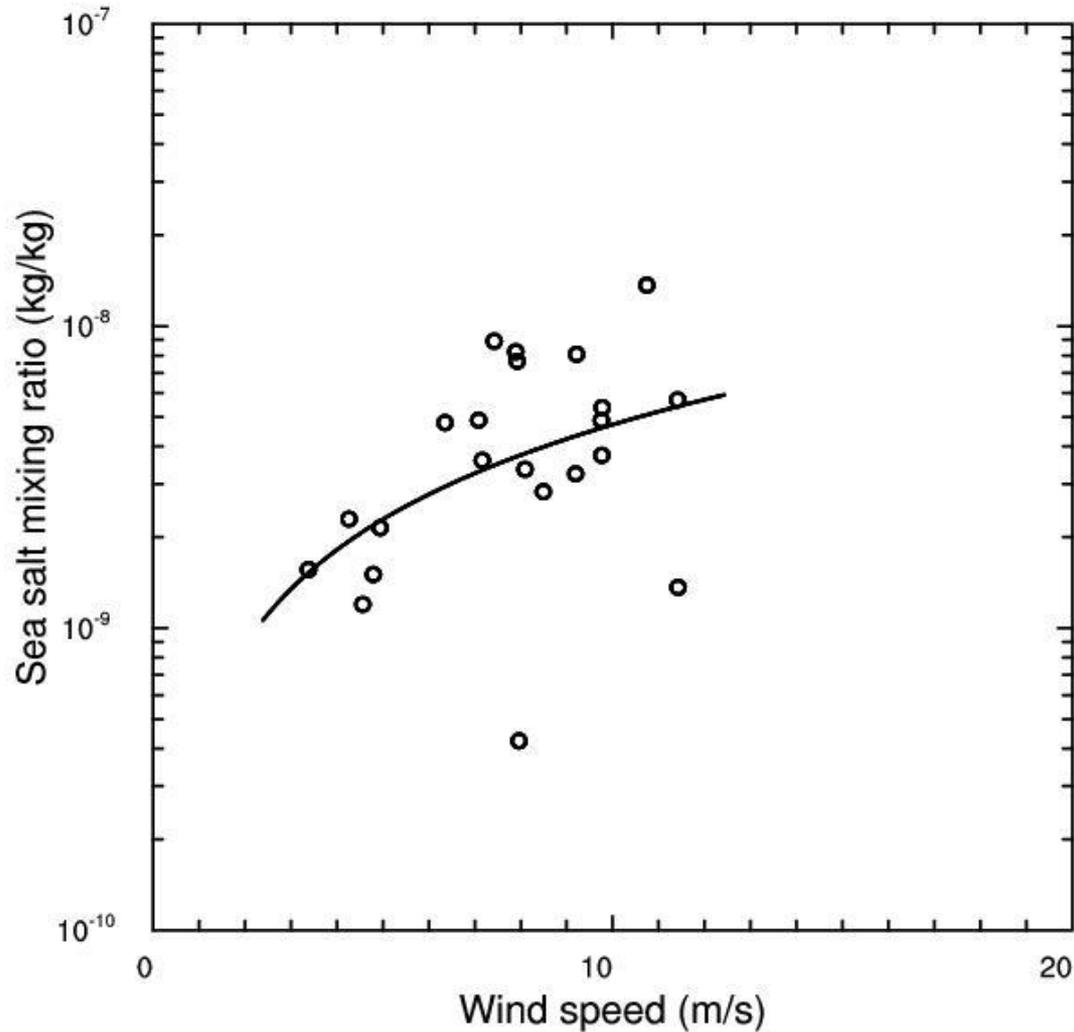


Sea salt mixing ratio as a function of (instantaneous) wind speed

VOCALS C-130Q flight

2008/10/21

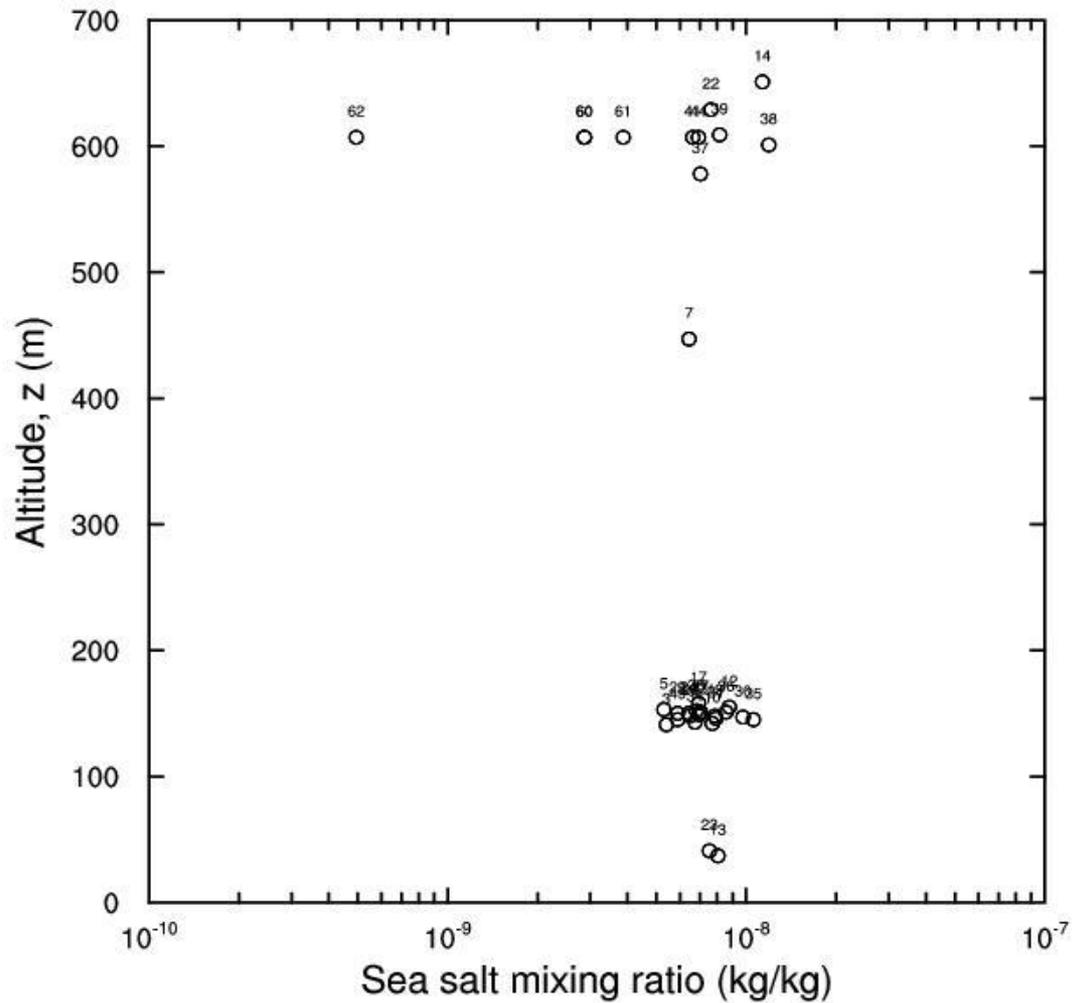
RF03

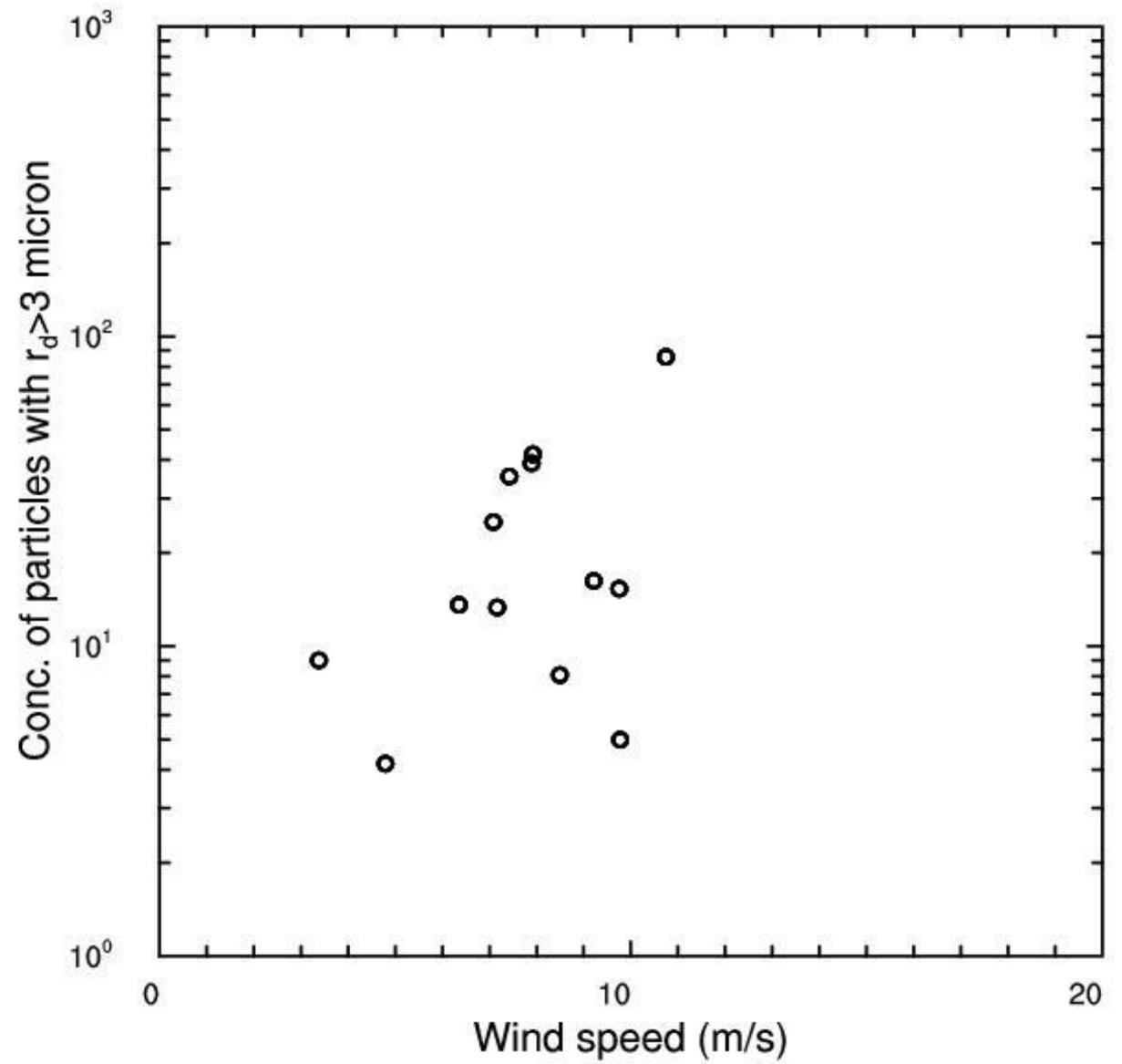


Sea salt mixing ratio as a function of altitude

VOCALS C-130Q flight 2008/10/18
Only NaCl-significant slides included

RF02





Wind speed increases (in general) towards the west

Sea-salt loading increases non-linearly with wind speed

The concentration of very large particles increases non-linearly with sea-salt loading

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The end