

Biogenic Aerosol in the Arctic from Eight Years of MSA Data from Ny Ålesund (Svalbard Islands) and Thule (Greenland)

Silvia Becagli ^{1,*}, Alessandra Amore ¹, Laura Caiazza ¹, Tatiana Di Iorio ², Alcide di Sarra ², Luigi Lazzara ³, Christian Marchese ^{4,5}, Daniela Meloni ², Giovanna Mori ³, Giovanni Muscari ⁶, Caterina Nuccio ³, Giandomenico Pace ², Mirko Severi ¹ and Rita Traversi ¹

¹ Department of Chemistry, University of Florence, Sesto Fiorentino, 50019 Florence, Italy; silvia.becagli@unifi.it (S.B.); ale.amore@gmail.com (A.A.); laura.caiazza@unifi.it (L.C.); mirko.severi@unifi.it (M.S.); rita.traversi@unifi.it (R.T.)

² ENEA, Laboratory for Observations and Analyses of Earth and Climate, 00123 Rome, Italy; tatiana.diiorio@enea.it (T.D.I.); alcide.disarra@enea.it (A.D.S.); daniela.meloni@enea.it (D.M.); giandomenico.pace@enea.it (G.P.)

³ Department of Biology, University of Florence, Sesto Fiorentino, 50019 Florence, Italy; luigi.lazzara@unifi.it (L.L.); giovanna.mori@unifi.it (G.M.); catnuccio@unifi.it (C.N.)

⁴ Département de Biologie, Chimie et Géographie, Université du Québec à Rimouski, Québec G5L 3A1, Canada; christian.marchese@uqar.ca (C.M.)

⁵ ARCTUS Inc., Rimouski, QC G5L 3QA1, Canada

⁶ Istituto Nazionale di Geofisica e Vulcanologia, INGV, Rome 00143, Italy; giovanni.muscari@ingv.it

* Correspondence: silvia.becagli@unifi.it

Supplementary material

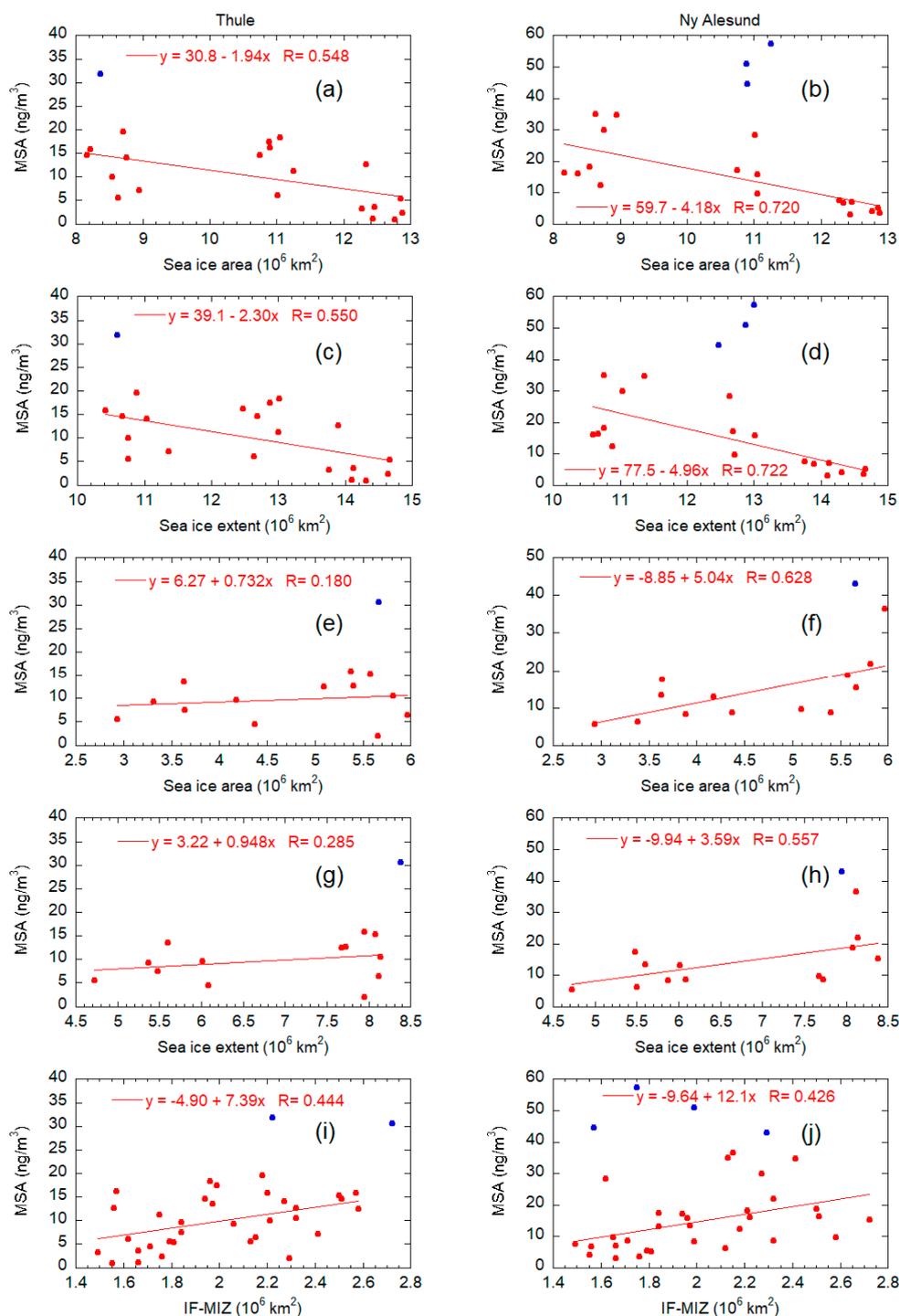


Figure S1. Correlation between monthly mean MSA and: sea ice area in April, May, June (plot a and b); sea ice extent in April, May, June (plot c and d); sea ice area in July and August (plot e and f); sea ice extent in July and August (plot g and h); ice free area in the marginal ice zone (IF-MIZ) from April to August (plot i and j). Plots on the left are related to Thule and plots on the right are related to Ny Alesund. Blue dots are excluded from the calculation of linear correlation. Blue dots represent outlier values out of the range calculated as follows: $(Q_1 - k(Q_3 - Q_1)); Q_3 + k(Q_1 - Q_3)$ where Q_1 and Q_3 are the lower and upper quartiles respectively, $k=1.5$ indicates an “outlier” [1]. The outlier data are excluded by the correlation.

References

01. Tukey, J.W. *Exploratory Data Analysis*, Addison-Wesley, **1977**, ISBN 978-0-201-07616-5. OCLC 3058187