

Supporting information for:

Rapid, concurrent formation of organic S and iron sulfides during the experimental sulfurization of sinking marine particles

M. R. Raven^{1*}, R. G. Keil², S. M. Webb³

¹ Department of Earth Science, University of California, Santa Barbara, Santa Barbara CA 93117, USA

² School of Oceanography, University of Washington, Seattle WA 98195, USA

³ Stanford Synchrotron Radiation Lightsource, Stanford University, Menlo Park CA 94025, USA

Contents of this file:

Figure S1

Tables (see .xlsx file)

- S1** Sample IDs and collection details
- S2** Carbon isotope and elemental compositions of particle materials
- S3** Sulfur isotope data
- S4** XAS fits, macro (500 μm^2) spots for bulk speciation
- S5** XAS fits, micro (1 μm^2) spots for map speciation

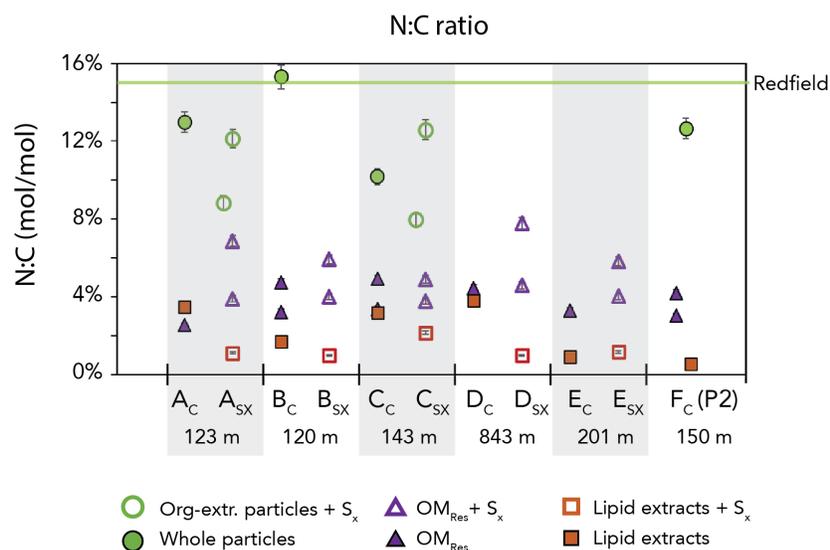


Fig. S1 Molar N:C ratio of particle materials, before and after S_x exposure. Filled symbols represent controls (e.g., 'A_C'), and hollow symbols represent experiments (e.g., 'A_{SX}'), as detailed in Table S1. Whole and organic-solvent-extracted particles contain both OM_{Hyd} and OM_{Res}. Samples with multiple symbols represent discrete filter splits rather than duplicates of homogenized samples. Error bars indicate the long-term reproducibility of standards (2 σ).