

***Interactive comment on “Modeling sea-salt aerosol in a coupled climate and sectional microphysical model: mass, optical depth and number concentration” by T. Fan and O. B. Toon***

**Anonymous Referee #1**

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Apologies, I forgot to add some comments on the figures to the review.

Fig. 1: In legend, ‘Caffery’ should be ‘Caffrey’?

Fig. 5: ‘Resident Time’ should be ‘Residence Time’ on y-axis

Fig. 6: Could you also show the results using the Gong parameterisation? Another useful statistic to calculate would be the normalised mean bias:  $((\text{model} - \text{observation}) / \text{observation})$ .

Fig. 7: Would be useful to see a scatter plot as in Fig. 6, with statistics including bias.

Fig. 9: Please be more specific than ‘roaring forties’, give latitude band.

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Fig. 9: ‘The dash lines...’ should be ‘The dashed lines...’ in the caption.

Fig. 10: Also calculate bias.

Fig. 11: Are the ‘measurements’ actually from Eq. 24?

Fig. 12: Need to mention in figure caption the  $10 \text{ cm}^{-3}$  offset.

Fig. 20: In caption, need to mention that plot shows surface level number.

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Interactive comment on Atmos. Chem. Phys. Discuss., 10, 24499, 2010.