

Review of

“Importance of Dry Deposition Parameterization Choice in Global Simulations of Surface Ozone” by A. Y. H. Wong, et al.

The paper is an investigation of the impact of different ozone dry deposition parameterizations on the calculation of dry deposition velocities and the global modeling of surface ozone concentrations. The paper is generally well written and presents a thorough study of the uncertainties generated by the choice of dry deposition parameterization in atmospheric chemistry models. My only general criticism is that the figures need to be presented in a larger form that will be easier for readers to see. The work is timely and well done and should be published as is with only minor editing changes as suggested below.

Specific Suggestions:

p. 1, line 27: Should be “The trend in July ...”, not “trends”.

p. 2, line 62: Should be “... compiled ...”.

p. 2, line 63: Should be “measurements from the EC and GM ...”.

p. 7, line 205: Should be “... simulation described in the next sub-section.”

p. 7, line 211: Should be “... to investigate how ...”.

p. 7, line 216: Should be “... the increase in atmospheric ...”.

p. 8, line 233: Should be “... developed by NOAA’s National Centers for Environmental Prediction (NCEP) and the NASA Global ...”.

p. 13, line 409: Should be “... We use the Theil-Sen method ...”.

p. 14, lines 430-431: I believe it should be “... a concomitant decrease in July mean surface ozone ...”.

p. 15, line 461: Should be “... as they allow for ...”.

p. 16, line 497: Should be “... This suggests that the IAV ...”.

p. 17, line 527: Should be “... To better constrain regional dry ...”.

p. 17, line 530: Should be “... would be greatly benefited if results of ozone flux measurements were reported as both ...”.

p. 17, line 538: Should be “... a vast majority of land in ...”.

p. 18, line 558: Should be "... mainly concentrates in **the** drier part of ...".

p. 18, line 562: Should be "... deposition measurements **s** poses ...".

p. 18, line 566: Should be "... The magnitudes of trends **s** are ...".

p. 19, line 597: I believe it should be something like ... "... contribute to understanding the role of gaseous dry deposition on air quality, but also to biogeochemical cycling."

p. 19, line 600: Should be "... global nitrogen cycles **s**."

p. 19, line 607: Should be "... scarcity of measurements **s**."

p. 24, lines 660-661: The blue dots are very difficult to see on these figures. The figures should be made larger!