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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Hygroscopic growth and activation of HULIS particles: experimental data and a new iterative parameterization scheme for complex aerosol particles" *by* M. Ziese et al.

Anonymous Referee #3

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This paper presents very interesting results reagrding the applicability of a technique for linking hygroscopic growth to cloud activation properties. It covers aspects of the theoretical approach which are otherwise not discussed in similar studies so serves as a very useful reference for further investigations. I think this paper should be published following a few minor comments.

Page 13775 line 2 - change 'simply' to 'simple';. Page 13775 line 3 - change 'In the last years'; to something like 'Recently, humic like substances (HULIS) have gained attention in cloud research';

Page 13775 line 23 -'Despite the past efforts', remove 'the';. Also, is there a consistent

picture regarding the connection between hygroscopic growth and activation of other organic species?. Page 13775 line 24 -'The surface tension that were'; should read 'The surface tension that was'.

Page 13780 line 4 -; Here you state that particles of dry sizes 100nm have larger growth factors than 230nm particles because of the Kelvin effect...however this should be the opposite way round.

Page 13780 line 13 -remove the comma after 'fact'. Page 13780 line 28-remove the comma after 'fact';

Interactive comment on Atmos. Chem. Phys. Discuss., 7, 13773, 2007.