

Interactive comment on “Water uptake and chemical composition of fresh aerosols generated in open burning of biomass” by C. M. Carrico et al.

C. M. Carrico et al.

carrico@lamar.colostate.edu

Received and published: 5 May 2010

Interactive comment on “Water uptake and chemical composition of fresh aerosols generated in open burning of biomass” by C. M. Carrico et al.

Anonymous Referee #3 Received and published: 9 April 2010

Comment: In general I think it is a very good paper suitable for publication and I largely agree with the comments of Referee #2.

Reply: Thank you. We hope our responses to Referee #2 are satisfactory also to Reviewer #3.

Comment: On page 12, lines 19-22, I disagree with the authors based on what is

C2413

shown in Figure 6 d,e,f. On that same page, lines 27-28 say there is no difference between washed and unwashed but the data seem to disagree and washed appears more hygroscopic.

Reply: We agree and have changed the sentence to read the following: “Although we observe some enhancement in hygroscopicity with coating the fuels with salt solutions as observed in Figure 6d-f, we do not observe a decrease in hygroscopicity with washing the fuels as would happen with washing away surface deposited hygroscopic salts. Similarly, as shown previously in Figure 5, the fuel chamise showed little systematic difference between experiments with washed and salt-coated fuels. The differences between washed and unwashed fuels’ smoke for a given size are similar to the experiment to experiment variability in smoke hygroscopicity with a given fuel as shown in Figures 5 and 6.”

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 3627, 2010.

C2414