

Interactive comment on “Black carbon record based on a shallow Himalayan ice core and its climatic implications” by J. Ming et al.

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This paper is suitable for publication after minor revisions.

The manuscript needs to be proofread, as there are some extraneous characters and missing characters, e.g: Abstract line 4. Remove the "13" after "carbon". Abstract line 9. Remove the "18" before "climbing". Change "Asias" to "Asia's". I have not scanned the entire manuscript for such glitches.

Page 14416 line 5. What is the flow regime? Did the ice at the bottom of the core originate at the col, or upstream?

page 14418 line 22. Cachier et al 1989 is missing from the reference list.

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page 14419 line 23. Warren and Clarke 1990 computed a scavenging ratio of 150 for the East Antarctic Plateau.

page 14420 line 5. What value of scavenging ratio was assumed for this computation?

page 14422 line 3. "It is difficult to assess what is the exact forcing on the ice body". An assessment of radiative forcing can be obtained from Figure 2 of Warren and Wiscombe 1985: In old melting snow, 20 ppb of black carbon reduces albedo by 0.02; 50 ppb reduces albedo by 0.04.

Figure 6. To better see the correlation, these data should also be plotted as a scatter-diagram (BC versus number of T2 trajectories).

References: Warren, S.G., and A.D. Clarke, 1990: Soot in the atmosphere and snow surface of Antarctica. *J. Geophys. Res.*, 95, 1811-1816. Warren, S.G., and W.J. Wiscombe, 1985: Dirty snow after nuclear war. *Nature*, 313, 467-470.

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