

***Interactive comment on “Factors influencing chloride deposition in a coastal hilly area and application to chloride deposition mapping” by H. Guan et al.***

**H. Guan et al.**

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Dear Editor and Reviewers,

Thanks for your time and effort on this manuscript. Attached is the revised manuscript in response to your comments and suggestion. It is submitted in company with our response to your comments. The major revisions are summarized below.

(1) Dr. Oleg Makhnin from Department of Mathematics of New Mexico Tech is added as a contributing author. (2) The bulk chloride deposition uncertainty map is reconstructed, following Prof. Goovaerts' advice. The uncertainty of the bulk chloride concentration map is revised as well. (3) The issue of t-test assumption is clearly stated, and the partial correlation significance test part is rephrased. (4) The reason of doing residual kriging, instead of co-kriging or kriging with external drift is given. (5) Discussion on terrain aspect and slope effect on chloride deposition is shortened. An optional interpretation, besides the wind, is given. (6) Figures (1, 2, 3, 7) and Table 1 are improved. The order of figures 5 and 6 is switched.

Look forward to hearing your further comments and suggestion.

Sincerely,

Huade Guan On behalf of the co-authors

Please also note the Supplement to this comment.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 5851, 2009.