

December 20, 1994

Mr Robert J Morgan, Director  
Technical Committee Operations  
American Society for Testing and Materials  
1916 Race Street  
Philadelphia, PA  
USA 19103

Subject : **D5549-Standard Guide for Reporting  
Geostatistical Site Investigations**

Dear Mr Morgan:

I am pleased with the course of action described in your letter of December 2nd in response to mine of November 25th. Perhaps ASTM Committee E11, too, will frown upon a variant of statistics that thrives without degrees of freedom. I do regret, however, that a convention and a couple of workshops in Eastern Canada make it impossible for me to attend the International Symposium on Geostatistics.

In 1993 I wanted to attend an International Forum on *Geostatistics into the Next Century*, but when I submitted an abstract for a paper entitled "*The Properties of Variances*" the formula for the variance of the weighted average turned out to be at variance with geostatistics, and I did not qualify as a participant. For your information I enclosed a paper that has been caught in geostatistical limbo for years. In fact, one of the many geostatistical referees noticed "an erroneous concept of degrees of freedom" but Dr Roderick J A Little, Editor of the Journal of the American Statistical Association, found no such fatal flaw. What a pity that I cannot listen to Shrivastava's explanation why covariances and variances of functionally dependent variables are valid parameters in geostatistics but invalid in applied statistics.

While I wish you the Compliments of the Season, I remain,

Yours truly,

J W Merks  
President

Enclosure : copy of "The Properties of Variances"