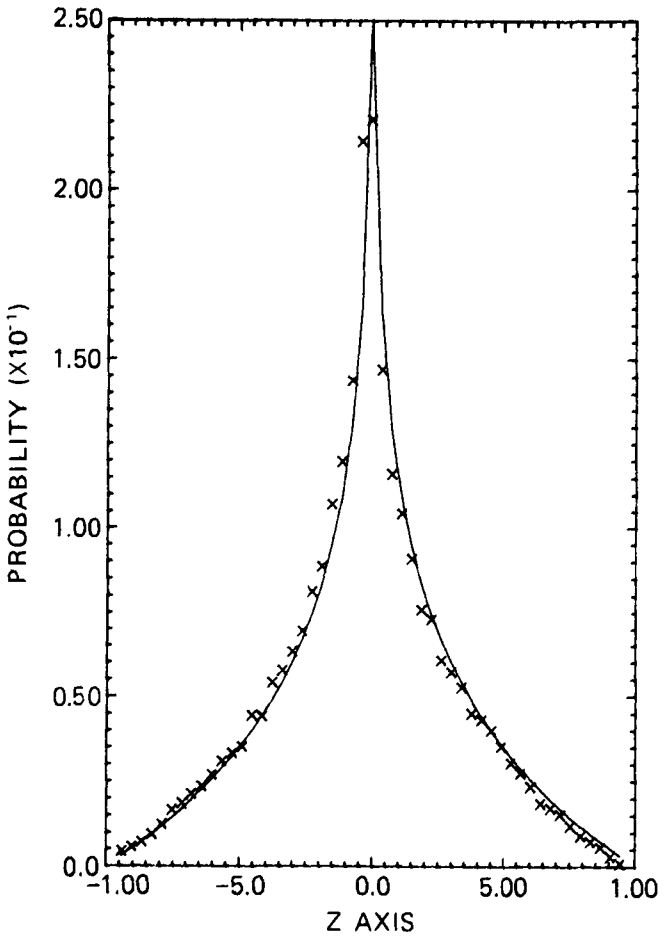

Fig. 2. Density function for product, 50 000 trials.

seems quite interesting to me because it provides a counter example to the above generalization.

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REPLY TO "FURTHER COMMENTS ON 'THE UNCERTAINTY IN ACCIDENT CONSEQUENCES CALCULATED BY LARGE CODES DUE TO UNCERTAINTIES IN INPUT' "

Baker's letter[1] is a welcome contribution to the understanding of the sensitivity of output probability density functions (pdf's) to the form of input pdf's.

In my earlier reply[2] to Ref. 3, it was stated that this sensitivity could depend "on the shapes of the input distributions (symmetric versus asymmetric, biomodal versus unimodal), on the way these distributions are combined (i.e., physical modeling), and on the number of inputs considered in the problem." I further stated that "the matter requires further study." Baker's letter constitutes a useful step in this direction, by addressing the last two points. His observation, that as the number of input variables increases "the output pdf tends to become normal," is of particular interest. If this number can be determined, regardless of the form of the input pdf's, for the physical situation under consideration, then a useful criterion could be established to check the results of the uncertainty analysis of large codes.

I would like to hereby reiterate the fact that the "confusing issue" relating to the particular example considered in my paper[4] was caused by an algebraic error in the moments of a pdf involved, not by the approximate nature of the moments matching technique employed in that paper.

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