Nat. Hazards Earth Syst. Sci. Discuss., 2, C2240–C2241, 2014
www.nat-hazards-earth-syst-sci-discuss.net/2/C2240/2014/

Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "50 years return period wet-snow load estimation based on weather station data for overhead line design purpose" *by* H. Ducloux and B. E. Nygaard

S. Fikke

fikke@metconsult.no

Received and published: 9 October 2014

Statistical analyses of meteorological events like atmospheric icing have been subject to great concern in the building industry for many decades. The greatest obstacle has been the lack of adequate data for such studies. Icing events are generally rare and field observations are extremely difficult to obtain with the accuracy ideally needed for this purpose. Yet, especially the electric overhead line industry require such extreme value assessments, at least as estimates, in order to do a proper load and safety design of a power line project as required by the society. Critical studies of such methods are therefore of great economic value to the electric industry, and any serious contribution

in this field is welcome. These concerns of the industry are also reflected in various reports from research oriented international bodies like Cigré and IEEE, and standards and technical reports from IEC, CENELEC, ASCE, Canadian Electricity Association, New Zealand and Australian Standards, ISO, etc.

The comments from Anonymous Reviewer #2 do not, in my opinion, consider this background knowledge. Furthermore, they do not comply with the commonly accepted standards for review of a scientific paper, as series of postulates are listed without any further references or documentation for their validity.

Among the many non-documented postulates is the reviewer's mentioned work on the Icelandic data, where the reviewer claims to have fit those data to 60 statistical distributions, without presenting any references, tables or curves showing the results of this study.

Another important part in this review is the lacking link between statistical assessments and, on the other hand, the physical understanding and interpretation. The postulate that the results in Table 2 are showing 5 years return period instead of 50 years, do not consider the experiences of the French electric power grids. If this was the case, the number of fatal failures of electric overhead lines in France would have been significantly higher than the actual experiences show. Also, the reviewer makes a point of the scale difference in the order of one magnitude between ice loads in France and in Iceland. This is indeed evident also from the differences in climate in those regions of Europe.

Therefore I cannot understand how the Editor can accept the Anonymous Reviewer #2's comments as appropriate to this paper. By accepting this, the relevance of this well respected journal will, in my opinion suffer, as scientists may accordingly prefer to publish their papers in other journals where they can rely on serious and adequate evaluations, as in this case the Reviewer #1.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 5139, 2014.