This paper reviews the literature on the connection between risk premia and the social cost of carbon, with a special emphasis on the treatment of catastrophic risks. This is an important area that has wanted such a review for some time now. The authors add some original insights that enliven the paper. Inevitably, any such review has some rough spots simply because one is comparing different studies of uneven methodology and content. Here are a few small suggestions for possible improvements.

Around line 221 there is a phrase about "normalizing by unit change in consumption." This is awkward terminology and might be clarified.

Around line 221 it is stated that "IAMs are built around the deterministic Ramsey model." This is true of Nordhaus's DICE model, but most of the others lack a full optimal growth framework.

Around line 342, one might elaborate a little further on the dual role of eta as a coefficient of relative risk aversion and the intertemporal elasticity of substitution. For little uncertainty the discounting aspect dominates. For a lot of uncertainty, the risk premium aspect can dominate. It might be useful to go over this briefly.

Bottom line: this is a useful review of an important topic.