Interactive comment on “Ideas: a simple proposal to improve the contribution of IPCC WG1 to the assessment and communication of climate change risks” by Rowan T. Sutton

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I recommend acceptance subject to revision, not because I agree with the proposal, but rather because I think the discussion is useful. The article should be revised to provide a more balanced view of the applicability of the uncertainty language, and to recognize that the IPCC has a formal scoping process that produces a scoping report that is approved by the IPCC Plenary and gives scientists direction for the assessment that they should produce. That process could be used to direct the IPCC to produce assessments of high impact scenarios or storylines if this is judged to be desirable by the governments that comprise the IPCC.

Comment:

A potential decision to focus the work of IPCC WGI more heavily on high impact scenarios, or storylines, has little to do with how the IPCC uncertainty language is defined. Rather, this is a scoping issue – that is, one that should be dealt with through the scoping process. If governments feel that this is key information that is required, then they, of course, could seek advice from their scientific communities about whether such an assessment is feasible, and request an assessment if the received advice pointed in that direction. Such an assessment could be included as part of either the full assessment report or, given sufficient literature and importance, could be undertaken as a special report. A key question that arises almost immediately when a high impact scenario or storyline is described is, what are the odds of the occurrence of such an event? It would be entirely reasonable for governments and decision makers to ask scientists to assess, if possible, a likely range for the odds of occurrence of a scenario based on an assessment of the confidence that we have in our understanding of the physical, ecological and socio-economic processes that would produce the scenario. That is, the uncertainty language can be applied to the assessment of high impact storylines just as it can be applied to changes in mean conditions. It is not the uncertainty language that prevents such an analysis of rare, high impact events and the processes that might produce them.