

SEMINAIRE CNRM-GAME
N° 2015_21*jeudi 2 juillet 2015 à 14h***THE CHALLENGE OF EVENT ATTRIBUTION -
WHEN AND HOW SHOULD WE POSE THE QUESTION?****par Francis ZWIERS**
(Université de Victoria, Canada)**en salle de conférences au CIC**Résumé :

Most event attribution studies conducted to date have posed questions about the causes of specific extreme events in a retrospective fashion, that is, after an event has occurred. Further, in most cases, the question that is posed is constructed in such a way that we are lead to comparing the climate of today's Earth system, with its elevated atmospheric concentration of greenhouse gases, with a corresponding counterfactual world that might have been, in which greenhouse gas concentrations remain at preindustrial levels. In this talk, I argue that collectively, we might be better served by prospective studies that estimate changes in the frequencies or magnitudes of generic classes of events that are not specifically tied to the most recent event to have occurred. It is this type of anticipatory information that is more apt to be useful for adaptation planning, risk assessment, the development of risk sharing schemes (insurance), etc. However, prospective event attribution questions are inevitably less specific than retrospective questions, and have answers that are necessarily described statistically, for example, via descriptions of projected regional changes in frequency-intensity relationships. The call for a framing of event attribution questions that is more physically based, for example, to answer questions such as how much of the moisture delivered by storm X was due to the anthropogenically induced warming of the source region for the storm's moisture is clearly useful and instructive, but it does not lend itself well to a prospective approach to event attribution.