



## Multiple constraints revisited

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We always expect to learn from additional information, and this principle can be expressed formally in mathematical terms. Thus, it is only natural to consider how accurately and precisely we can estimate and predict the behaviour of the Earth System when we take account of all relevant information. This process of "combining multiple constraints" has previously been attempted but only in rather simplistic terms and here we revisit this question in more detail.

A major unresolved issue is the extent to which different constraints can be considered independent, and if not, how to deal with this additional complication. Here we discuss this issue in more detail, present some examples based on Annan and Hargreaves (Earth System Dynamics 2017) and ongoing work which aims to synthesise recent research in estimating the equilibrium climate sensitivity.