Argument for “inflating” uncertainty:

* Dream world vs. realistic setting

Dream world:

Pros of the perfect world

* As much uncertainty as possible
	+ Information about uncertainty
	+ Reduce the unkown unkown
	+ Wider application possible
	+ Quantification uncertainty
	+ Probabilitic information
	+ Robustness
	+ Past performance vs. future performance
	+ What is enough information? Could be assessed
	+ Time of emerging (signal-to-noise –ratio)
		- Internal variability
		- Realization (decadal)
	+ Access to data

Cons of perfect world

* Redundant information \_>
	+ Dependency of models
	+ Postprocessing of uncertainty to get the uncertainty spread
* User information
* Unkowns unkowns -> “pragmatic solution”
* Constrain in resources
* Characterization of uncertainty
* “True model” lose momentum
* Internal variability -> decadal projections (discussion on the internal variability)

Restrictions to the perfect world:

* Time, money, work, resources -> Sparce GCM, RCM matrix
* observations
* availability
* Non-stationarity of bias (transferfuntions, model biases, etc…)
* Different experimental designs

Tailoring to user needs:

* Reduce redundancy -> find the “true available known spread.
* Filter for mutual independency
* Response surfaces are a method to help concise the uncertainty spread
* Obs. Calibration by user vs. scale?

Citation Real world:

* Räisanen 2014, CMIP 2,3,5 are very similar, comparision, redundancy