



# Methodology for qualitative uncertainty assessment of climate impact indicators

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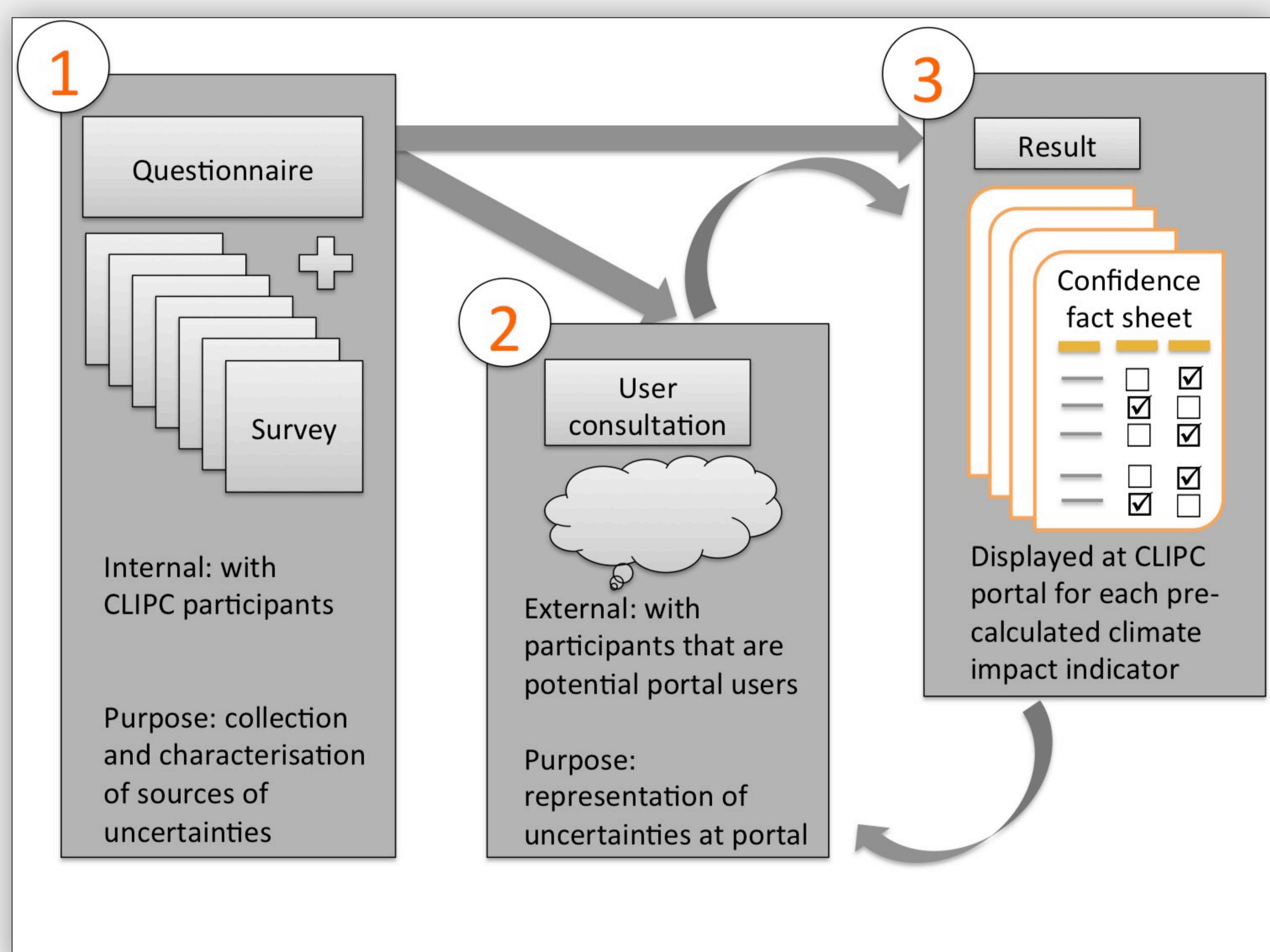
## CLIPC

The FP7 project "Climate Information Portal for Copernicus" (CLIPC, running until November 2016) is designing a platform to provide access to climate information of direct relevance to a wide variety of users, from scientists to policy makers and private sector decision makers.

The Climate Service Center Germany (GERICS) is in charge of developing a methodology to identify the uncertainty of selected climate impact indicators under consideration of the underlying climatic and non-climatic variables.

## Methodology

- 1 Questionnaire filled-in by experts to identify sources of uncertainty and to obtain expert judgement for each selected climate impact indicator
- 2 User engagement while developing methodology to extract most important uncertainty information
- 3 For each climate impact indicator, the condensed information of the questionnaire is shown as 'degree of confidence' and in a 'confidence fact sheet'

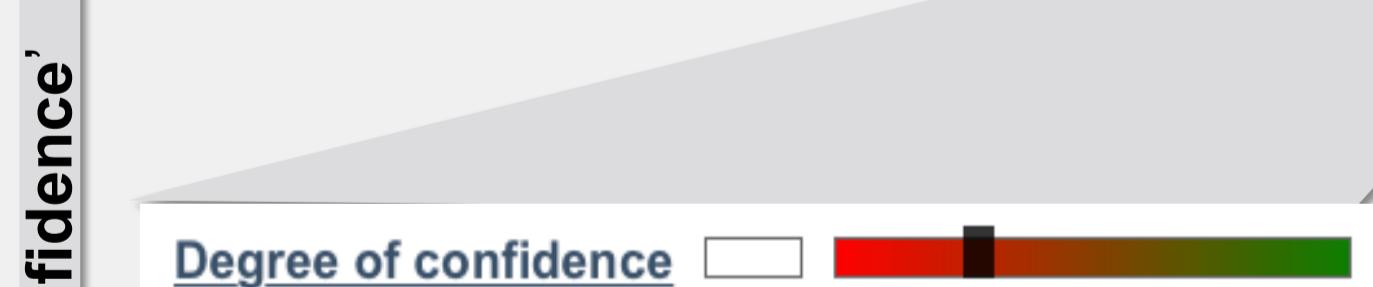


## Implementation at CLIPC portal in the indicator toolkit

The 'degree of confidence' expresses the degree to which we trust an outcome. It ranges from low to high and is based on:

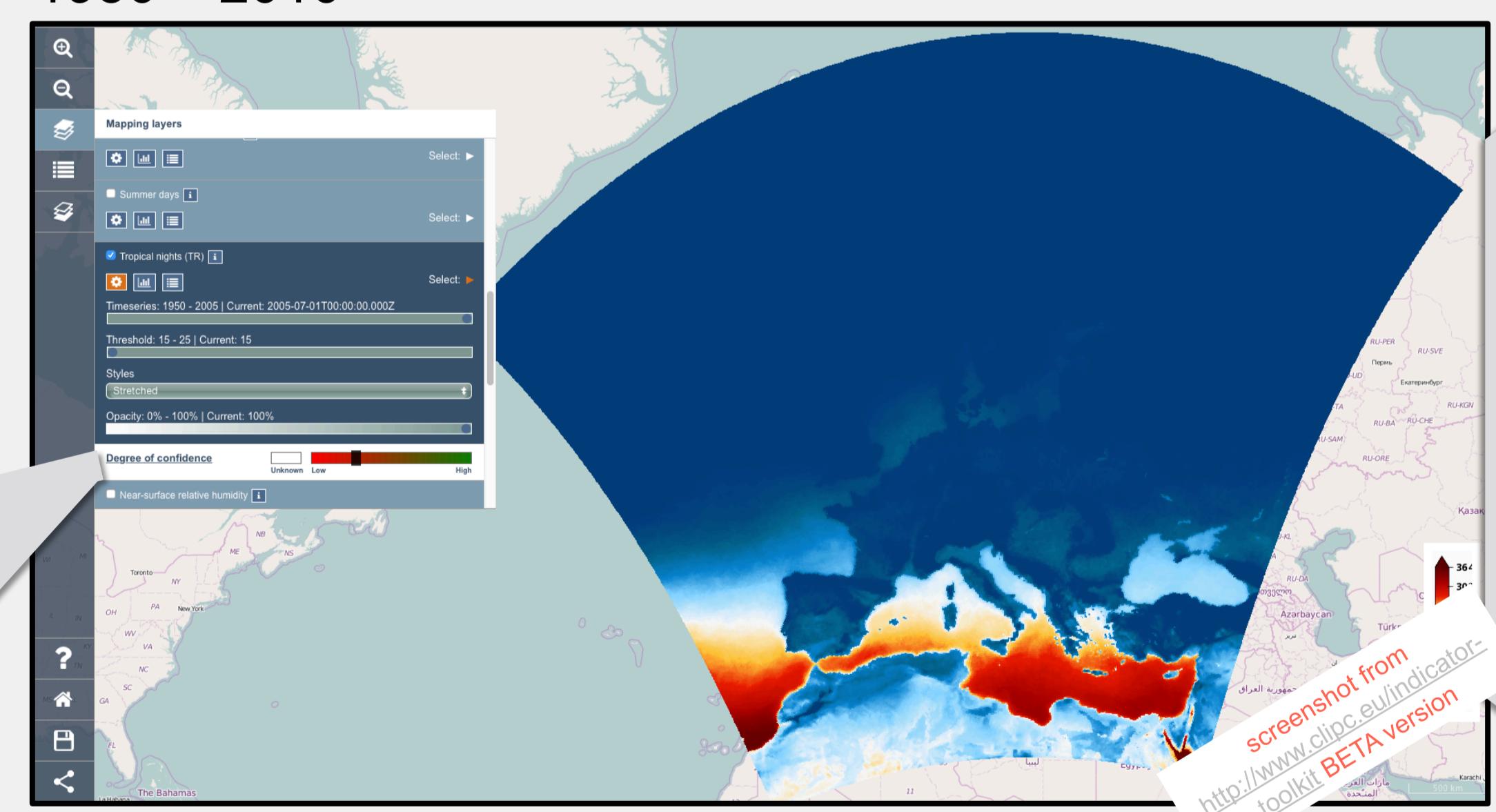
- evidence and agreement
- data and method

In spite of strong evidence and agreement, the method is not state-of-the-art → low.

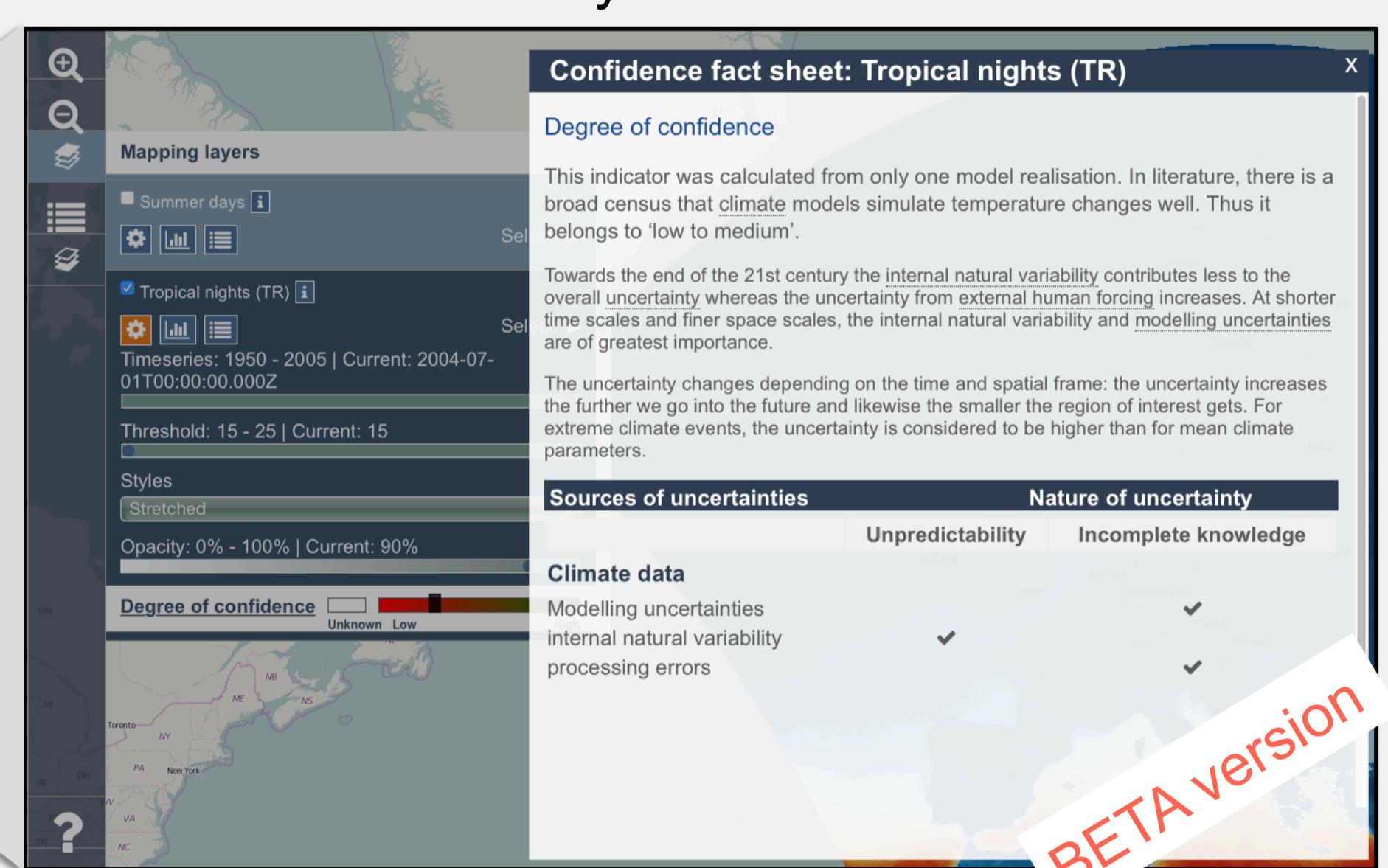


The 'degree of confidence' increases with state-of-the-art data and methods, i.e. the use of an ensemble of climate projections.

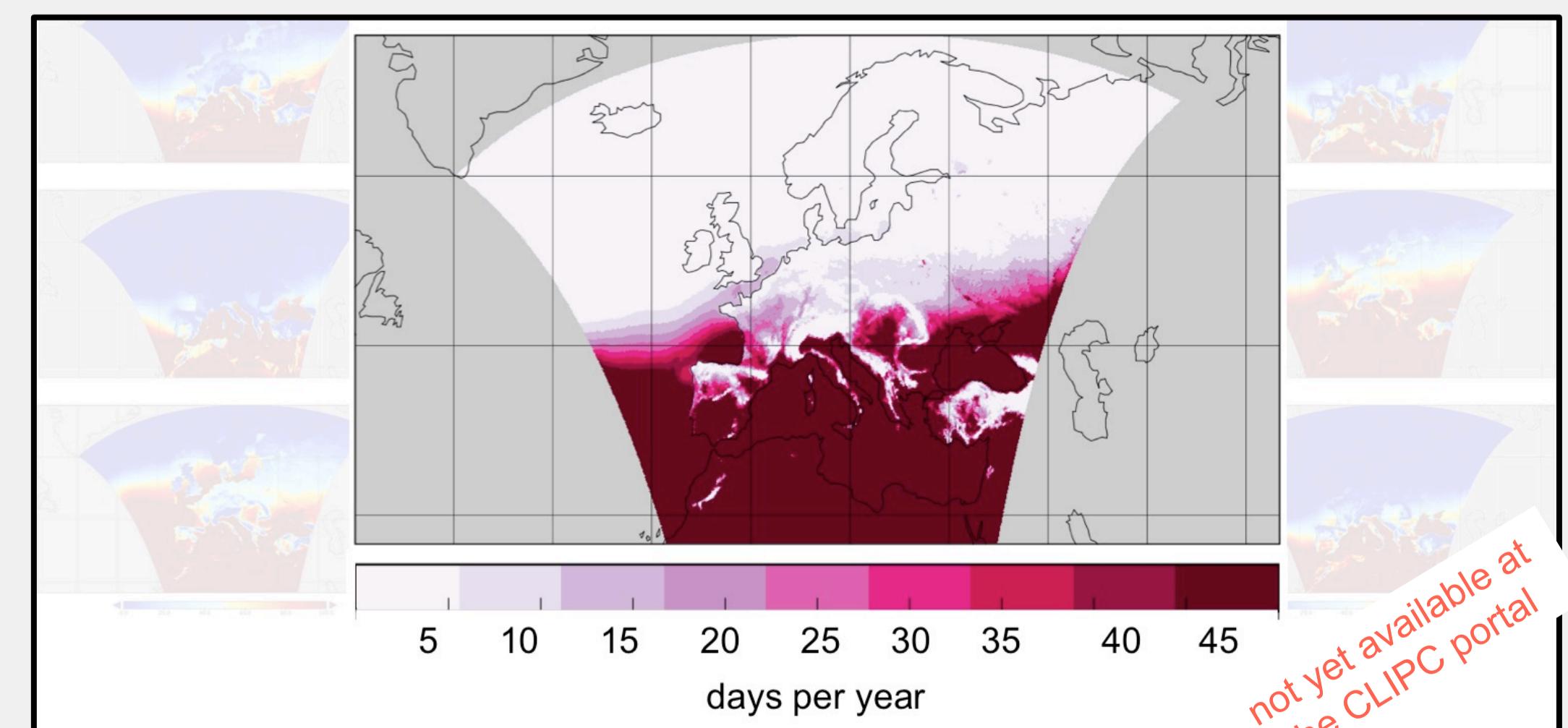
*Tropical nights* (days per year when min. temperature is above 20 °C) calculated from **one** model simulation for 1950 – 2010



'Confidence fact sheet' provides an explanation for the 'degree of confidence' and indicates the sources of uncertainty.



*Tropical nights* calculated from an ensemble of **nine** climate projections (EURO-CORDEX, RCP 8.5) for 2071-2100



- Methodology is based on questionnaire and user consultation
- The use of state-of-the-art data and methods increase the 'degree of confidence'
- CLIPC is the only portal that uses qualitative uncertainty assessment