Netherlands Environmental Assessment Agency

Visualising uncertainty in maps

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Once a map is drawn, people tend to accept it as reality

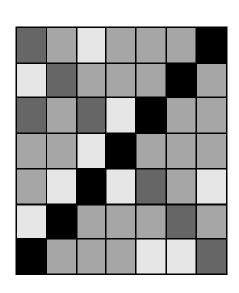


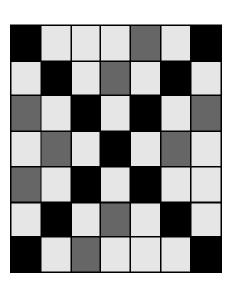
Division into classes can be misleading

• indeling middelste kaart: [1] [2 3] [4 5] [6]

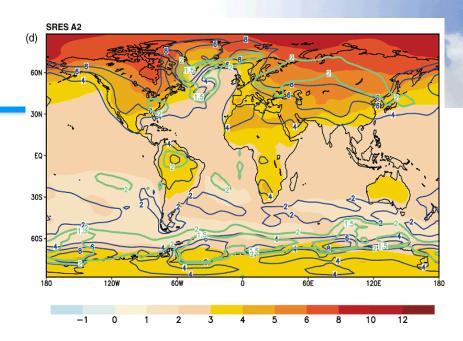
• indeling rechtse kaart: [12][34][56]

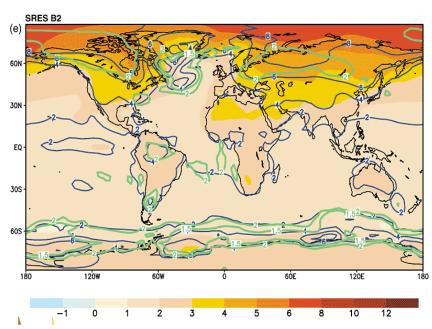
5	2	1	2	3 2 6	2	9
	5	2	2 3	2	2	2
2 3	2 5 2	2 5	1		2	6 2 3 2 2
2	3	1	6	2	3	2
3	1	6	1	2 5 2	2 5	1
1	6	2	3 2	2	5	2
6	2	3	2	1	1	5



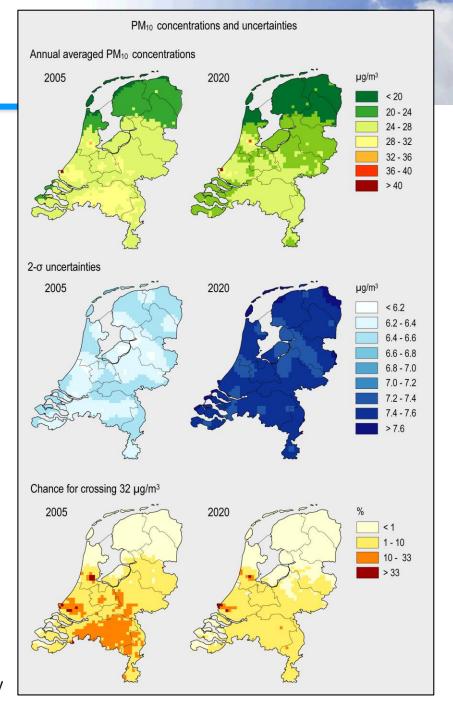


Don't try to communicate everything in one figure





One good practice example



Some guiding conclusions

- Uncertainty in maps is just as important as uncertainty in numbers or time series
- Metadata is of essential importance
- There are several fundamental ways to represent uncertainty in maps. Choice depends on the application
- Preferably don't plot uncertainty in the map showing the mean