

## Specific comments

P1 Title	I am not sure if this title really reflects the content of the study
P1 L9	Consider ‘best-performing methods’
P1 L20-21	Please check the use of ‘flood’ vs ‘flooding’
P2 L5	The concept of reanalysis should be introduced Give the one hand if you use ‘on the other hand’
P2 L8	Introduce downscaling
P2 L21	Check language: is ‘both ... did not’ correct?
P2 bottom	The research questions seem a little unspecific to me. For instance: What is ‘suitable’? What is ‘historical’ here? The limitations regarding what: resolution, dynamics, winter versus summer representation, ...?
P3 L2	And other occurrences: Check use of ‘correction towards ...’
P3 L5	Flood events, or rather heavy precipitation events?
P3 L11-12	Eight chapters are not very common, I think. Maybe the discussion and the conclusion sections could be merged, as more specific discussion is already done in the respective results sections
P4 L8	Is ‘homogeneous’ the correct term here? Move paragraph to introduction?
P4 L24	Consider moving some of this to the introduction
P4 L24	Indicate that you downscaled the full period (in what temporal resolution of the output?), if this is the case.
P4 L26	If you mention statistical downscaling, you might also need to mention why you do not do statistical downscaling here.
P5 Fig 1	I wonder why you choose such a large domain (full EURO-CORDEX) if you only look at the marked catchments. I cannot imagine it is to avoid marginal effects.
P5 L11	However, this was at a 7-km grid, a convection-permitting resolution.
P6 L23	The calibration process is not fully clear to me, please extend the explanation. E.g., is it a moving plus/minus 15-day period?
P6 L29	What does ‘suitable’ mean here? You might want to introduce the criteria here and then introduce the corresponding quantitative performance measures later.
P7 L2	Spatially aggregated time series? The information that the assessed variable is mean annual precipitation is not very clear to me in the current phrasing.
P7 L15	‘cRMSD’ here, but ‘RMSE’ further below? See also my major comments regarding the Taylor diagram and the metrics.
P7 L19	The reference to Table S3 is missing.
P7 L25	LS and LOCI have a worsening effect in many cases and metrics. How do you interpret this?
P7 L31	Why mean annual precipitation, since you aim to analyze extreme precipitation?
P7 L34	How much is the ‘overestimation’ in absolute terms? From visual inspection, it seems to be tremendous!

P8 Fig 2	The differences seem very small here, indeed. See also my major comments. I think you would need to make the diagrams for the other catchments available as well in the supplementary material. The legend does not tell what precipitation variable is analyzed. See also my comment on non-parametric measures.
P8 L6	Check the use of ‘improvements towards’, also other instances
P8 L5ff	You do not test the effects of this scaling in a (case) analysis: Does it hold?
P8 L17	Check ‘top ten of the five ...’
P8 L18ff	I recommend sticking with standard maximum precipitation variables (e.g. percentiles or 5-day-maxima or indices) as stated in the major comments.
P9 Table 1	Legend: ‘printed in bold’
P9 L10	You mention timing and dynamical processes also in the introduction. However, these analyses seem very unbalanced compared to the spatial representation. It might be illustrative to know how many of the top ten events (I’d prefer block maxima) miss the peak precipitation, or are temporally shifted.
P10 L4	Floods? Or rather heavy precipitation events?
P11 Table 2	It seems that summer floods become more relevant going east? What about the temporal evolution – is the dataset becoming better in more recent times? This might be worth an illustration. However, I’d prefer an analysis of annual maxima, as stated in the general remarks.
P11 L2	Could you show these gaps?
P11 L10	Do you refer to these 40 % when arguing that ‘most’ cases are improved in the discussion and conclusions (P17 L9, and P16 L5)? I would not agree in this case.
P12 L25ff	I’d appreciate some absolute numbers in parenthesis when you state ‘overestimation’ or ‘underestimation’, please check also other instances.
P13 Fig 5ff	I’d expect that a standard Rx5day would already lead to less good results.
P13 L3	The better performance from the coarser dataset is unexpected and requires an explanation.
P14 L9	As above, I’d appreciate absolute numbers when stating an ‘increase’ or ‘lower difference’ or similar
P15 L17	I do not understand the logic of ‘Therefore’ here.
P15 L20	Check use of ‘spring floods could benefit’
P16 L2	And other occasions: Check ‘Although, ...’ versus ‘Although ....., ...’. It has different meanings to me.
P16 L13	Significantly closer?
P16 L30	The last two chapters are short in comparison. You might consider merging them.
P17ff	I highly appreciate the Appendices. Note that I did not check the formulae in detail.
P19 L24	Check JPG
Suppl. P4 Table S5	Table S5 has a legend that seems identical to the one of Table 2. However, there are substantial differences in the table itself. Please explain.