The authors have addressed carefully all the comments and suggestions of both reviewers. Additional statistical tests were conducted, and a more careful phrasing was used for those findings with only limited statistical robustness.
Therefore I would be happy to see the paper published after some very minor revision with regard to the following points:

L245:
For the detection of dynamical temperature trends, an additional statistical procedure (Benjamini-Hochberg procedure) was applied which accounts for the false discovery rate. The authors only very briefly touch upon this in the text („this mainly affects the dynamical spring trends“). However, the corresponding figure in the Supplement shows that using this test, no grid points show any significant trends any longer. This should be stated more explicitly.

Im am not an expert in those statistical tests, but as far as I understand the applied procedure aims to strike a balance between the often too conservative Bonferroni Correction and a standard uncorrected p-value. In terms of applying it too gridded data, I often wonder whether such an additional test is still too conservative as the spatial coherent pattern of statistically significant grid points generally point to a systematic trend rather than significant trends arising just by chance.

L430:
I think the authors should more explicitly state the implications of the fact that the SF pattern is detected at 500hPa only. In my opinion, that is reasonable choice, but it should be briefly mentioned that air mass characteristics may also depend on the lower-tropospheric circulation.

L505:
Due to the inserted clause, this sentence could be difficult to understand. I would suggest to rephrase it like this:
„The observed warming trend may be partially related to an increased occurrence of Southerly Flow days like the 29 June 2019 event, although the trend in their frequency is not yet statistically significant.“

L103: missing space between „to20°“