Thank you very much for your review. We provide below some answers to the reviewer's remarks.

Q1: *Introduction: The explanation is too less. May be the authors can provide more explanation.*

1.1: Needs to be improved.

1.3: Needs to be improved.

> **A1**: We thank the reviewer for this comment. We believe that a 3-page introduction is a rather classical size for research articles. The reviewer's comment not being very specific, we lack of elements to understand what is wrong in the introduction and we cannot improve it.

Q2: *1.4: Needs more explanation on the importance of R in the hydrological sector. Currently, what are the model/calibration packages available in the R environment?*

> **A2**: Several works we cited did emphasize the importance of R for hydrology. See e.g. Slater et al. (2019) for the complete hydrological workflow and Astagneau et al. (2021) for the specific case of hydrological modelling. We do not aim to do better than these recent papers containing a review of tools and applications of R in hydrology, but we will try to improve the explanations about why R is important for hydrologists.
>
> Regarding the calibration tools available in R, we refer again to Astagneau et al. (2021), section 5.1.1, paragraph « Parameter estimation », which lists several tools enabling calibration, either in hydrological modelling R packages or in more general R packages.

Q3: *1.5: Needs more explanation on why this package is important?*

> **A3**: We believe that the fact that barely no other options exist in R can already highlight the importance of this package. In addition, airGRteaching relies on the widely-used GR models (see e.g. Perrin et al., 2003, which present one of these models, and was cited 965 times according to Scopus), and on the airGR package, which gained lots of interest over the past few years (see Coron et al., 2017, which presents the airGR package, and was cited 128 times, or the https://hydrogr.github.io/airGR/page_publications.html airGR webpage, which lists all known uses of or references to airGR). We will therefore try to emphasize the importance of the airGRteaching package.

Q4: *Section 3.2.2: What is the optimization function used for calibrating the model? Needs more explanation here.*

> **A4**: We provide here the same answer as we provided to Reviewer 1.
>
> We recognize that we did not detail too much the calibration algorithm in the manuscript. The main reason for that is that this algorithm does not belong to airGRteaching, but to airGR, and

this algorithm was described into further details in Coron et al. (2017), section 2.3.
Two distinct steps are included in the procedure:

1. a systematic inspection of the parameters space is performed to determine the most likely zone of convergence. This is done either by direct grid-screening or by constrained sampling
   based on empirical parameter databases;
2. a steepest descent local search procedure is carried out to find an estimate of the optimum
   parameter set.

   We will present these two steps in the revised version of the manuscript.

References :

Coron, L., Thirel, G., Delaigue, O., Perrin, C., Andréassian, V., 2017: The Suite of Lumped GR Hydrological Models in an R package, *Environmental Modelling & Software*, 94, 166-171. doi: 10.1016/j.envsoft.2017.05.002.

Perrin, C., Michel, C., Andréassian, V., 2003. Improvement of a parsimonious model for streamflow simulation. *Journal of Hydrology*, 279 : 275-289. doi: 10.1016/S0022-1694(03)00225-7.