

# Authors response to referee comments: MLAir (v1.0) - a tool to enable fast and flexible machine learning on air data time series

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## 1 General statement

We have incorporated Reviewer #1's comments into the text and also went through the entire manuscript again. Now, we hope for publication. Line numbers given in this document always refer to the revised version *gmd-2020-332-manuscript-version3.pdf*. All changes are highlighted in blue in the track-changes file. There is no distinction between changes made to answer a reviewer comment or by ourselves in this version.

## 2 Answer to Anonymous Referee #1

"I find that the changes made by the authors in this revision address the concerns I raised in my previous review. There continue to be a few issues with language, some of which I have highlighted below. I recommend that the authors pass through the manuscript once more with an eye towards readability. Once these minor changes have been made, this manuscript should be ready to be accepted at GMD."

### Minor Comments

1. "Line 86: This is an iterative procedure, a single iteration is called epoch -> This optimisation is an iterative procedure and each iteration is called an epoch"  
Done
- 15 2. "Line 104: As underlying coding language python (Python Software Foundation, 2018, release 3.6.8) was used for two major reasons -> python (Python Software Foundation, 2018, release 3.6.8) was used as the underlying coding language python for two major reasons"  
Done
- 20 3. "Line 109: Secondly, python is currently the language in the ML community to Secondly, python is currently the language of choice in the ML community"  
Done

4. "Line 122: and introduces labels in form of dimensions *to* and introduces labels in the form of dimensions"  
Done
- 25 5. "Line 151: all local paths for the experiment itself but also for data are created *to* all local paths for the experiment and data are created"  
Done
6. "Line 161: Right after, the actual training starts *to* The actual training starts subsequently"  
Done
- 30 7. "Line 162: If performance improved compared to previous cycles *to* If performance improves as compared to previous cycles"  
Done
8. "Line 163: In this way, the final model is the best training model according to validation performance. *to* Needs to be reworded"  
We have rewritten the sentence.
- 35 9. "Line 186: data retrieval, preparation and provision of a single data origin *to* Not sure what "single data origin" means here"  
We have made the sentence more generic, as the statement "single data origin" was only misleading at this point.
10. "Line 224: we expand the number of precedent time steps *to* we increase the number of observations? Not entire sure what is the best way to reword this. But precedent time steps is awkward."  
40 The sentence is rephrased now and the word "precedent" is replaced by "previous".
11. "Line 261-62: Even if the batch data could be used further, they serve rather as auxiliary files. *to* Could you elaborate this further? I'm unclear what this means."  
We have deleted this sentence from the manuscript because we ourselves are not aware of any meaningful use for it and this note is therefore dispensable.
- 45 12. "Line 353: MLAir offers a high number *to* MLAir offers a large number"  
Done
13. "Line 400: feature the parameter upsamling *to* feature the parameter upsampling"  
Done
14. "Line 433: temporal resolution of the data is set with sampling: What datatype is required here? int/float/datetime?"  
50 We have added the datatype.

### **3 Additional Changes**

In addition to the minor comments of Referee #1, we followed the recommendation and went through the entire manuscript again intensively. We have worked on improving the language and clarifying statements in several places. We do not list these changes in detail here, but refer to the track-changes file.