

## ***Interactive comment on “RainForest: A random forest algorithm for quantitative precipitation estimation over Switzerland” by Daniel Wolfensberger et al.***

### **Anonymous Referee #1**

Received and published: 9 November 2020

The work deal with quantitative precipitation estimations (QPEs) in complex horography. Both weather radar based estimations and ground measurements suffer from several limitations. Hence, combining both source of observations is mandatory but challenging. The present study proposes a new technique based on training on random forest regression to learn QPE from large database. One advantage of this algorithm is the relative lo cost in term of computation, making it appealing for real time applications. The algorithm 's evaluation is carried out by the authors assessing errors and bias. Moreover, six cases. characterized by different precipitation types (stratiform, convective). The work is scientifically interesting, clearly exposed with strictness. An attractive aspect of the paper is its look towards an operational application for real time

C1

QPE. Only minor revisions are needed:

pag. 1 line 3 relations -> relationships pag. 3 line 8 However -> However, pag. 3 line 21 Finally -> Finally, pag. 3 line 27 Thus -> Thus,

Figure 5 (b) it is unclear, several labels overlap.

About "minute" the authors should choose between x-minute or x minutes . In the text expressions like "5 minute" or "10 minute" are frequent.

---

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2020-284, 2020.

C2