General Comments:

The new version of the manuscript has improved and considers all of my comments to the previous version. Aims, procedures and results are now described much clearer. I only have a few minor (mainly technical) comments listed below.

Specific/technical Comments:

1. p. 2, l. 19–20:

"The authors also set the t altitudes limits ..."

should probably be e.g.:

"The authors also consider altitudes limits ..."

2. p.4, l. 18:

"To this application we used two different kind of data sets. The 2-D values ..."

should be (with ":" instead of "."):

"To this application we used two different kind of data sets: The 2-D values ..."

3. p. 5, l. 10: "refer to as" \rightarrow "referred to as"

- 4. p. 8, l. 11 : "grows" \rightarrow "grow"
- 5. p. 8, l. 14:

"... this quantity have to be additive ..." \rightarrow "... this quantity has to be additive ..."

6. p. 8, l. 18-19:

"We should consider that at any time the pressure value of each level is constant but it does not necessarily happen the same with the geopotential height."

This sentence is a bit unclear, suggested modification:

"We should consider that at any time the pressure value of each level is constant but this is not necessarily the case for geopotential height."

7. p. 10, l. 9:

"Several authors had been reported problems ..." \rightarrow "Several authors reported problems ..."