

Author's response to Referee #2

Referee's comment: *It is written in a clear way, and I recommend publication upon a few minor edits.*

Page 3: Line 14: relaxation time Bott (2008) → relaxation time, Bott (2008).

Page 3: Line 17: heats → heat

Page 3: Line 18: heats → heat

Page 4: Line 24: heats → heat, appear in → appear on

Page 4: Line 25: these latent heats → the latent heat

Page 5: Line 5:(Piriou et al., 2007), ... Also → (Piriou et al., 2007). Also

Page 5: Line 7: rain condensation → rain evaporation (?)

Page 5: Line 8: all kinds of transfers → all kind of transfers

Page 5: Line 11: It would be helpful to define j on this line before it is used, e.g $k=0$ denotes the dry air component, and j denotes the the conversion process.

Page 5: Line 11: heat capacities → heat capacity

Page 5: Line 15: if you define j further up, remove in the conversion process j from this line.

Page 8: Section 3. It would be clearer if you changed the word current to previous or something alike everywhere in this section. The first time I read through the section I thought it explained the new interface in the current study, which was confusing.

Page 10: Line 2: Meteorologic → Meteorological

The authors agree with most of these comments. The manuscript is adopted accordingly.