Interactive comment on “The temporal evolution of three-dimensional lightning parameters and their suitability for thunderstorm tracking and nowcasting” by V. K. Meyer et al.

V. K. Meyer et al.
vera.meyer@zamg.ac.at

Received and published: 20 March 2013

Many thanks for the careful considerations and comments.

- p. 2222, line 8-9: I totally agree. The high temporal and spatial resolution of the data allow for a cell tracking as close as one likes. The close track points promise to reflect the cell movement well so that further extrapolation of the observed path could benefit.

- p. 2222, line 16: In order to identify lightning regions, each lightning event (one pixel) is enlarged to a spot with diameter of 7 pixels, 3 pixels in each direction. In order that two lightning event spots touch each other – and therefore are identified as coherent region - the events have to be as close as 7 pixels. In other words, the method applies
a search radius of 7 pixels to look for neighboring events.

- Fig. 1b caption: “…with standard deviation...” Not the standard deviation is shown, which would be symmetric but the 25th and 75th percentile, which were found more suitable to illustrate the underlying distribution. Erroneously “standard deviation” has been survived in the text from previous drafts. It will be corrected in the final version.

- Fig. 2 caption: “The ĭňArial three cell entries are marked yellow...”: Correct. The first two cell entries are emphasized. The text will be corrected in the final version.

- Fig. 2 caption: “…indicated by green arrows...”: It will be corrected in the final version.

- Fig. 3: Please indicate the azimuth angle and the recording time of the RHI. It will be inserted in the final version.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 2217, 2013.