

ZP11 Weekly Notes  
November 18, 2014

**JOURNAL ARTICLE ACCEPTED FOR PUBLICATION (email to:**

**[william.koshak@nasa.gov](mailto:william.koshak@nasa.gov) 256-961-7963):** A journal article with title, "Climatological Diurnal Variation of negative CG Lightning Peak Current over the Continental United States", authors T. Chronis (Univ. of Alabama Huntsville), R. Said (Vaisala, Inc.), K. Cummins (Univ. of Arizona), W. Koshak (NASA/MSFC/ZP11), E. McCaul (Universities Space Research Association), E. Williams (Massachusetts Institute of Technology), G. Stano ((ENSCO, Inc.), and M. Grant (Univ. of Witwatersrand, Johannesburg South Africa) has been accepted for publication in the *Journal of Geophysical Research - Atmospheres*. The article uncovers a peculiar diurnal variation in the peak current of cloud-to-ground lightning, and provides some speculation as to the cause.

**PAPER ACCEPTED IN BULLETIN OF THE AMERICAN METEOROLOGICAL**

**SOCIETY (email: [timothy.j.lang@nasa.gov](mailto:timothy.j.lang@nasa.gov) / 256-961-7861):** Timothy Lang (ZP11) is a co-author on an article recently accepted for publication in *Bulletin of the American Meteorological Society*. Titled "The Deep Convective Clouds and Chemistry (DC3) Field Campaign," the paper describes the DC3 experiment that occurred in the summer of 2012, and also presents some preliminary results. As described in the paper, the DC3 field experiment observed the chemical composition of the inflow and outflow regions of thunderstorms in northeast Colorado, Texas/Oklahoma, and northern Alabama. These measurements were compared with those made of the kinematic, microphysical, and electrical evolution of the same storms. Multiple NASA facilities were involved in the field campaign, including the DC-8 aircraft and the MSFC Lightning Mapping Array in northern Alabama. Dr. Lang continues to analyze the DC3 dataset, including observations of electrified pyrocumulus clouds as well as data from storms that produced sprites.