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Indications for a circular symmetry in the 3-dimensional structure of column sprites

E. Vadislavsky (1), **Y. Yair** (2), C. Ehrlich (1), C. Price (3), R. Yaniv (3), M. Ganot (3), N. Reicher (3) and B. Ziv (2)

(1) Institute for Earth Sciences, Hebrew University of Jerusalem, Jerusalem, Israel, (2) Department of Life and Natural Sciences, The Open University of Israel, Ra'anana, 43107, Israel, (3) Department of Geophysics and Planetary Sciences, Tel-Aviv University, Tel-Aviv, 69978, Israel, yoavya@openu.ac.il / Tel: +972-9-7780626 / Phone: +972-9-7781341

Based on optical observations during the sprite campaigns conducted in Israel during the winters of 2006/7 and 2007/8, we show that in some cases the elements of columniform sprites are arranged in a circular form directly above, or a little offset, to the vertical direction from the location of the parent lightning. In many events, the angle of observation leads to a visible (misleading) distortion of the circular arrangement, and the columns appear to be arranged in an elliptical arrangements or as a straight row. The typical sizes and dimensions of the 3-dimensional spatial circular arrangement of column sprites will be described. A possible mechanism involving the EMP of the parent flash and the subsequent quasi-electrostatic field between the thundercloud and the ionosphere is suggested.