

## Corrigendum to

## "Downward auroral currents from the reconnection Hall-region", published in Ann. Geophys., 29, 679–685, 2011

**R. A. Treumann**<sup>1,2,\*</sup>, **R. Nakamura**<sup>3</sup>, and **W. Baumjohann**<sup>3</sup>

<sup>1</sup>Department of Geophysics and Environmental Sciences, Munich University, Munich, Germany
<sup>2</sup>Department of Physics and Astronomy, Dartmouth College, Hanover NH 03755, USA
<sup>3</sup>Space Research Institute, Austrian Academy of Sciences, Graz, Austria
\*visiting: International Space Science Institute, Bern, Switzerland

There is an obvious sign error in the argument of Eqs. (4)– (6) which should be read  $\lambda_i - y$ , and the plus signs on the right in Fig. 4 (at x > 0) should be changed into minus signs. Clearly, the quadrupolar symmetry of the Hall field in the reconnection source region causes a dipolar symmetry in the electromotive force  $\mathcal{E}_{\rm H}$ . The order of positive/negative  $\mathcal{E}_{\rm H}$ depends on the sign of **V**. For having it like in Fig. 4, **V** is directed outward. It is thus identified with expansion of the plasma from the X-point.



*Correspondence to:* R. A. Treumann (treumannr@gmail.com)