

ERRATUM:“CONVECTIVE NATURE OF SUNSPOT PENUMBRAL FILAMENTS: DISCOVERY OF DOWNFLOWS IN THE DEEP PHOTOSPHERE” (2011, ApJ, 734, L18)

JAYANT JOSHI^{1,2}, A. PIETARILA^{1,3}, J. HIRZBERGER¹, S. K. SOLANKI^{1,4}, R. AZNAR CUADRADO¹, AND L. MERENDA¹

¹Max-Planck-Institut für Sonnensystemforschung, Max-Planck-Str. 2, 37191 Katlenburg-Lindau, Germany; joshi@mps.mpg.de

²Institut für Geophysik und Extraterrestrische Physik, Technische Universität Braunschweig, Braunschweig, Germany

³National Solar Observatory, 950 North Cherry Avenue, Tucson, AZ 85719, USA

⁴School of Space Research, Kyung Hee University, Yongin, Gyeonggi Do 446-701, Republic of Korea

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In our published Letter, including in the title, we stated that we have *discovered* downflows in the body of the studied penumbra. Downflows in penumbrae have been discovered previously (e.g., Schlichenmaier & Schmidt 1999; Márquez et al. 2006; Sánchez Almeida et al. 2007; Franz & Schlichenmaier 2009). Rather, our published Letter has (together with Scharmer et al. 2011) provided the first direct evidence of overturning convection in a penumbra. Below we highlight those sentences in the published Letter which erroneously claim discovery of the downflow as well as present their corrected versions:

- Original sentence*: “We report here the discovery of clear redshifts in the C I 5380 Å line at multiple locations in sunspot penumbral filaments.” (fourth line in the Abstract)
Correct sentence: “We report here the observation of clear redshifts in the C I 5380 Å line at multiple locations in sunspot penumbral filaments.”
- Original sentence*: “Direct observational evidence for this scenario is, however, so far missing, because downflows have not been measured in the body of a penumbra. . .” (Section 1, paragraph 1, 17th line)
Correct sentence: “Direct observational evidence for this scenario is, however, so far missing, although the twisting filaments provide indirect support.”
- Original sentence*: “In particular, downflows at the sides of penumbral filaments have not been reported.” (Section 1, paragraph 1, last line)
Correct sentence: Original sentence should be removed completely.
- Original sentence*: “We have provided the first direct measurements of downflows (reaching 2.0 km s⁻¹) in the body of a penumbra.” (Section 4, first line)
Correct sentence: “We have provided the first direct measurements of downflows reaching 2.0 km s⁻¹ in the body of a penumbra.”
- Original sentence*: “In summary, we report the discovery of downflows at the edges of bright penumbral filaments in the deep photospheric layers.” (Section 4, last paragraph)
Correct sentence: “In summary, we report the observation of downflows at the edges of bright penumbral filaments in the deep photospheric layers.”

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