CORRIGENDUM

'MHD Rankine-Hugoniot equations applied to earth's bow shock', by J. D. Mihalov, C. P. Sonett and J. H. Wolfe. J. Plasma Physics, vol. 3, 1969, p. 449.

One correction to column 2, table 2, page 455, has already been given (J. Plasma Physics, vol. 4, 1970, p. 643). In addition, the computed downstream convective velocities in columns 2, 3 and 4 of table 2 are given in a co-ordinate system moving at 29.8 km s⁻¹ in the direction opposite planetary motion (-T direction), not in a heliocentric system as stated. The measured T-component and magnitude of downstream velocity in column 1 of table 2 only must be read as -59 ± 14 and 169 ± 20 km s⁻¹, respectively, for a valid comparison with these computed results. However, the calculations have also assumed that the shock is moving at 29.8 km s⁻¹ in the -T direction with respect to Earth (i.e. shock velocity is zero in the heliocentric system). This describes a non-physical situation, which could only apply to one of a series of crossings of a bow shock with an oscillating location. The conclusions of the paper are unchanged if the shock is assumed stationary, and if measured, computed and biased results are all expressed in a heliocentric system.