

## Corrigendum to

# “Time-varying magnetotail magnetic flux calculation: a test of the method” published in Ann. Geophys., 27, 1583–1591, 2009

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1. The solar wind dynamic pressure  $Pd$  was calculated as

$$Pd = 1.94 \times 10^{-6} n_{SW} V_{SW}^2 \text{ (assuming 4\% -helium content, e.g. Tsyganenko, 2002). (p. 1584)}$$

However, in the CCMC simulations there is no helium, and so  $Pd = 1.67 \times 10^{-6} n_{SW} V_{SW}^2$ , which slightly changes the result.

2. There is a misprint in Eq. (4) (p. 1585): instead of

$$\sin^2 \alpha = A \exp(CX) \quad (4)$$

it should be

$$\sin^2 \alpha = A^2 \exp(CX) \quad (4)$$

3. Taking into account all corrections, the final result is:

SPR algorithm gives better results, than PR96, and vice versa in the neutral sheet, which is probably due to one-dimensional pressure balance violation.

M. A. S. would like to apologize for her inaccuracy.

	$X = -15 R_E$	$X = -25 R_E$
Tail lobes	$F_{SPR} = 0.91 F_D + 0.26$ , $cc = 0.99$	$F_{SPR} = 0.99 F_D + 0.19$ , $cc = 0.94$
beta=0.1	$F_{PR96} = 0.70 F_D + 0.35$ , $cc = 0.96$	$F_{PR96} = 0.66 F_D + 0.29$ , $cc = 0.94$
beta=0.5	$F_{SPR} = 0.88 F_D + 0.19$ , $cc = 0.79$	
beta=1	$F_{SPR} = 0.83 F_D + 0.21$ , $cc = 0.70$	
neutral sheet	$F_{SPR} = 0.86 F_D + 0.18$ , $cc = 0.70$	
	$F_{SPR} = 0.71 F_D + 0.20$ , $cc = 0.67$	
	$F_{PR96} = 0.84 F_D + 0.24$ , $cc = 0.75$	

The main conclusion of the work conserves: correspondence of  $F_{SPR}$  with  $F_D$  is good in the lobes and spoils when approaching the neutral sheet, though the regression equation is rather stable. In the tail lobes the



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