# Erratum to: Explicit Strong Stability Preserving Multistage Two-Derivative Time-Stepping Schemes 

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The authors regret that typographical errors appeared in the order conditions, Table 1 in the original publication. These errors included a mistaken factor of 2 on one of the terms in one of the fifth-order conditions, and an omitted equation. The corrected Table 1 of order conditions is provided here.

Table 1 Order conditions for multistage multiderivative methods of the form (6) as in [3]

| $p=1$ | $b^{T} e=1$ |
| :--- | :--- |
| $p=2$ | $b^{T} c+\hat{b}^{T} e=\frac{1}{2}$ |
| $p=3$ | $b^{T} c^{2}+2 \hat{b}^{T} c=\frac{1}{3}$ |
|  | $b^{T} A c+b^{T} \hat{c}+\hat{b}^{T} c=\frac{1}{6}$ |
| $p=4$ | $b^{T} c^{3}+3 \hat{b}^{T} c^{2}=\frac{1}{4}$ |
|  | $b^{T} c A c+b^{T} c \hat{c}+\hat{b}^{T} c^{2}+\hat{b}^{T} A c+\hat{b}^{T} \hat{c}=\frac{1}{8}$ |
|  | $b^{T} A c^{2}+2 b^{T} \hat{A} c+\hat{b}^{T} c^{2}=\frac{1}{12}$ |
|  | $b^{T} A^{2} c+b^{T} A \hat{c}+b^{T} \hat{A} c+\hat{b}^{T} A c+\hat{b}^{T} \hat{c}=\frac{1}{24}$ |

$p=1$
$p=2$
$p=3$
$p=4$

$$
\begin{aligned}
& b^{T} e=1 \\
& b^{T} c+\hat{b}^{T} e=\frac{1}{2} \\
& b^{T} c^{2}+2 \hat{b}^{T} c=\frac{1}{3} \\
& b^{T} A c+b^{T} \hat{c}+\hat{b}^{T} c=\frac{1}{6} \\
& b^{T} c^{3}+3 \hat{b}^{T} c^{2}=\frac{1}{4} \\
& b^{T} c A c+b^{T} c \hat{c}+\hat{b}^{T} c^{2}+\hat{b}^{T} A c+\hat{b}^{T} \hat{c}=\frac{1}{8} \\
& b^{T} A c^{2}+2 b^{T} \hat{A} c+\hat{b}^{T} c^{2}=\frac{1}{12} \\
& b^{T} A^{2} c+b^{T} A \hat{c}+b^{T} \hat{A} c+\hat{b}^{T} A c+\hat{b}^{T} \hat{c}=\frac{1}{24}
\end{aligned}
$$

[^0]Table 1 continued

$$
\begin{array}{ll}
p=5 & b^{T} c^{4}+4 \hat{b}^{T} c^{3}=\frac{1}{5} \\
& b^{T} c^{2} A c+b^{T} c^{2} \hat{c}+\hat{b}^{T} c^{3}+2 \hat{b}^{T} c A c+2 \hat{b}^{T} c \hat{c}=\frac{1}{10} \\
& b^{T} c A c^{2}+2 b^{T} c \hat{A} c+\hat{b}^{T} c^{3}+\hat{b}^{T} A c^{2}+2 \hat{b}^{T} \hat{A} c=\frac{1}{15} \\
& b^{T} c A^{2} c+b^{T} c A \hat{c}+b^{T} c \hat{A} c+\hat{b}^{T} c A c+\hat{b}^{T} c \hat{c}+\hat{b}^{T} A^{2} c+\hat{b}^{T} A \hat{c}+\hat{b}^{T} \hat{A} c=\frac{1}{30} \\
& b^{T}(A c)(A c)+2 b^{T} \hat{c} A c+b^{T} \hat{c}^{2}+2 \hat{b}^{T} c A c+2 \hat{b}^{T} c \hat{c}=\frac{1}{20} \\
& b^{T} A c^{3}+3 b^{T} \hat{A} c^{2}+\hat{b}^{T} c^{3}=\frac{1}{20} \\
& b^{T} A(c A c)+b^{T} A\left((\hat{c})+b^{T} \hat{A} c^{2}+b^{T} \hat{A} A c+b^{T} \hat{A} \hat{c}+\hat{b}^{T} c A c+\hat{b}^{T} c \hat{c}=\frac{1}{40}\right. \\
& b^{T} A^{2} c^{2}+2 b^{T} A \hat{A} c+b^{T} \hat{A} c^{2}+\hat{b}^{T} A c^{2}+2 \hat{b}^{T} \hat{A} c=\frac{1}{60} \\
& b^{T} A^{3} c+b^{T} A^{2} \hat{c}+b^{T} A \hat{A} c+b^{T} \hat{A} A c+b^{T} \hat{A} \hat{c}+\hat{b}^{T} A^{2} c+\hat{b}^{T} A \hat{c}+\hat{b}^{T} \hat{A} c=\frac{1}{120}
\end{array}
$$


[^0]:    The online version of the original article can be found under doi:10.1007/s10915-016-0164-2.
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