

Erratum to: Curvilinear coordinate transformations for relative motion

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Pg. 258. The equation for \hat{S} should be

$$\hat{S} = \hat{W} \times \hat{R}$$

Pg. 260. Equation 6 should not have an initial minus sign. The \hat{P} term should have a minus sign, and the \hat{Q} symbol should be within the parentheses.

$$\vec{v}_{chf_{PQW2}} = \sqrt{\frac{\mu}{p_{chf}}} \left(-\sin(v_2)\hat{P} + (e_{chf} + \cos(v_2))\hat{Q} \right)$$

Pg. 260. Equation 10 should have a cosine in the middle term denominator:

$$\frac{\vec{v}_{dep_{SEZ}}(e)}{\left| \vec{r}_{dep_{RSW1}} \right| \cos(\Delta\phi_{dep})} r_{chf2} - \vec{v}_{chf_{RSW1}}(s)$$

Pg. 262. Unnumbered equation before equation 15 should not have the arcsine in the first line.

$$\Delta\phi_{dep} = \left(\frac{z}{r_{chf2}} \right)$$

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Pg. 262 Unnumbered equation before equation 17.

- The first line should have a minus sign in the front and should use r_{chf2} for consistency;

$$-\frac{\dot{z} \vec{r}_{depSEZ}(z)}{r_{chf2} \hat{r}_{depSEZ}(z)}$$

- In the second line, the r_{chf2} should be moved from within the first parenthesis term, to the last term;

$$\left(\dot{y} + \vec{v}_{chfRSW1}(s) \right) \frac{\vec{r}_{depSEZ}(z) \cos(\Delta\phi_{dep})}{\hat{r}_{depSEZ}(z) r_{chf2}}$$