DATUMS AND MAP PROJECTIONS SECOND EDITION, 2008 IMPRINT

Corrigenda

(May 2010)

Cumulative list of all corrections to be applied to the 2008 imprint. The first version of this document was released in September 2009; the corrections given here for pages 27, 69 and 106 are additions since then.



863.7.2Last sentence, reference to section
2.6Replace with reference to section 2.5.2.1064.4.4Equation 4.10Replace with:
 $\Delta \varphi_P = \Delta \varphi_A + (\Delta \varphi_B - \Delta \varphi_A)m + (\Delta \varphi_C - \Delta \varphi_A)m$

Page	Section	Item	Correction
106	4.4.4	Equation 4.11	Replace by: $\Delta \lambda_{F} = \Delta \lambda_{A} + (\Delta \lambda_{B} - \Delta \lambda_{A})m + (\Delta \lambda_{C} - \Delta \lambda_{A})n + (\Delta \lambda_{C} - \Delta \lambda_{A})m + (\Delta \lambda_{C} -$
106	4.4.4	Equation 4.13	Replace with: $n = \frac{\varphi_F - \varphi_A}{\varphi_C - \varphi_A}$
119	4.5.6	Equation 4.48	Replace with: $\varepsilon = \frac{D}{2} \left(\frac{2 \sec \varphi_{MAX}}{\sec \varphi_{MAX} + \sec \varphi_{MIN}} - 1 \right)$
125	4.6.2	Equation 4.50 and explanatory notes to the bottom of page 125 (text up to and including " the offset value respectively").	Replace by: for the forward transformation:
			$X_{2} = \{ [m * (X_{1} * U_{1})] + (\Delta A_{1>2} * U_{A}) \} / U_{2}$ for the reverse transformation: $X_{1} = \{ m * [(X_{2} * U_{2}) + (-\Delta A_{1>2} * U_{A})] \} / U_{1}$
			where
			X_1 and X_2 are heights or depths as appropriate and $\Delta A_{1>2}$ is the offset for the forward transformation from source system 1 to target system 2. $\Delta A_{1>2}$ is the value of the origin of the source system 1 in the target system 2
			m is a direction multiplier ($m = 1$ if both systems are height or depth; $m = -1$ if one system is height and the other system is depth); and
			U_1 , U_2 , and U_A are unit conversion ratios to metres for systems 1 and 2 and the offset value.
179	Appendix A	Comment against geoid-ellipsoid separation.	Replace with reference to section 2.3.4.2.
192	Appendix E	Equation E.39	Replace with:
			$\mathbf{X}_{\mathrm{T}} = \mathbf{a}_{0} + \mathbf{a}_{1}\mathbf{X}_{\mathrm{S}} + \mathbf{a}_{2}\mathbf{Y}_{\mathrm{S}}$
192	Appendix E	Equation E.40	Replace with:

Page Section Item

Correction

 $\mathbf{Y}_{\mathrm{T}} = \mathbf{b}_{0} + \mathbf{b}_{1}\mathbf{X}_{\mathrm{S}} + \mathbf{b}_{2}\mathbf{Y}_{\mathrm{S}}$