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Errata

A VARIANCE-COMPONENTS ANALYSIS FOR THE LONGITUDE-NETWORK ADJUSTMENT

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Due to technical problems a number of formulae and notation have been erroneously printed.

$$\left.\begin{aligned}&(a)\ \textit{Linear}:\ \mathbf{v}=\mathbf{A}\mathbf{x}+\mathbf{B}\mathbf{t}+\mathbf{f}\ ,\quad \mathbf{f}=\mathbf{l}_o+\mathbf{l}\\ &(b)\ \textit{Stochastic}:\mathbf{M}[\mathbf{v}]=\mathbf{0}\ ,\quad \mathbf{M}[\mathbf{v}\mathbf{v}^T]=\mathbf{K}=\sigma^2\mathbf{P}^{-1}=\sigma^2 diag\{P_i^{-1}\}\ .\end{aligned}\right\}\qquad(1)$$

where: $\mathbf{v}$ – vector of measurement corrections; $\mathbf{l}$ – vector of measurements; $\mathbf{l}_o$ – vector of approximate values of measured quantities; $\mathbf{x}$ – vector of ***basic parameters***; $\mathbf{t}$ – vector of ***additional parameters*** ; $\mathbf{A}$ and $\mathbf{B}$ – matrices of known coefficients; σ^2 – variance coefficient, (in calculations assumed $\sigma^2 = 1$); $\mathbf{K}$ – variance-covariance matrix of measurements and $\mathbf{P}$ – matrix of measurement weights.

$$\mathbf{v}=\mathbf{A}\mathbf{x}+\mathbf{B}\mathbf{t}+\mathbf{f}\ ,\qquad \mathbf{f}=\mathbf{l}_o-\mathbf{l}\qquad(3)$$

where we *study the influences of* $\mathbf{Bt}$ in the observations which can be described with the vector of additional parameters $\mathbf{t}$, whereas the vector of basic parameters $\mathbf{x}$ is the same in all the functional models.

first paragraph, firs line
The vector of basic parameters $\mathbf{x}$ is the

first paragraph, 8th line
respect to the term $\mathbf{Bt}$ *representing the effects of individual*

second paragraph, 3rd line
the vector $\mathbf{t}$ has 8 components: variation with time of latitude

threerd paragraph, 7th line
night (23 observing nights). Therefore, the $\mathbf{t}$ vector

fourth paragraph, 2nd line
Model FM1 the $\mathbf{t}$ vector is extended with additional