



Corrigendum to “Improved spectrum estimation from digitized time series on a logarithmic frequency axis” [Measurement 39 (2006) 120–129]

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The authors regret that Eq. (18) was incorrect. Our software that was used to produce all spectral estimates in the article, however, was correct.

The correct equation and description read as follows:

(2) Determine the frequency resolution $r'(j)$ according to Eq. (15). Then compute

$$r''(j) = \begin{cases} r'(j), & r'(j) \geq r_{\text{avg}} \\ \sqrt{r_{\text{avg}} \cdot r'(j)}, & r'(j) < r_{\text{avg}} \end{cases} \quad \text{and} \quad \sqrt{r_{\text{avg}} \cdot r'(j)} > r_{\text{min}} \\ r_{\text{min}}, & \text{else} \end{cases} \quad (18)$$

For $r'(j) \geq r_{\text{avg}}$, we can obtain both the desired spacing on the logarithmic axis and reach or exceed the desired number of averages. If $r'(j) < r_{\text{avg}}$ the desired number of averages cannot be reached and instead of $r'(j)$ the heuristic compromise $\sqrt{r_{\text{avg}} \cdot r'(j)}$ between an equally spaced logarithmic frequency axis and the desired number of averages is used provided this compromise is bigger than r_{min} . Otherwise, the minimum number of averages cannot be achieved, and we have no choice but to use r_{min} as frequency resolution.

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