



## Correction to “Mapping the GPS multipath environment using the signal-to-noise ratio (SNR)”

Andria Bilich and Kristine M. Larson

Received 30 January 2008; published 29 March 2008.

**Citation:** Bilich, A., and K. M. Larson (2008), Correction to “Mapping the GPS multipath environment using the signal-to-noise ratio (SNR),” *Radio Sci.*, 43, RS2006, doi:10.1029/2008RS003839.

[1] In the paper “Mapping the GPS multipath environment using the signal-to-noise ratio (SNR)” by Andria Bilich and Kristine M. Larson (*Radio Science*, 42, RS6003, doi:10.1029/2007RS003652, 2007), the maximum possible phase error due to multipath was not properly characterized. The phase error will be maximized when the multipath phasor is at right angles to the composite phasor (not the direct phasor, as stated in the original article). Therefore, the maximum possible phase error due to multipath (in radians) should be written as:

$$\delta\phi_{\max} = \arcsin\left(\frac{A_m}{A_d}\right) \quad (6)$$

This revised equation replaces equation (6) in the original article. For multipath-to-direct ratios of 0.25 or

less, the difference between the original and revised equation (6) formulation is negligible. Thus, the patterns observed for maximum L1 error at MKEA (Figure 10a) are unchanged.

[2] As a point of clarification for section 3.2, the Morlet wavelet (a plane wave modulated by a Gaussian) is mathematically described as

$$\Psi_0(\eta) = \pi^{-1/4} e^{ik_0\eta} e^{-\eta^2/2}$$

for the nondimensional time parameter  $\eta$ . We should note that the Morlet wavelet used in this study assumed a nondimensional frequency of  $k_0 = 6$ , as recommended by *Torrence and Compo* [1998] to satisfy the admissibility condition.