

ERRATA

The article "Reverse-time migration and Green's theorem: Part I - The evolution of concepts, and setting the stage for the new RTM method", by A.B. Weglein, R.H. Stolt and J.D. Mayhan (Volume 20, No. 1, February 2011, pages 73-90) contains the following errata:

On page 75, eq. (1) is meant as follows:

$$D(t, z_{ms}=0) = R_1 \delta(t - 2t_1) + R_2' \delta(t - 2t_2) \quad . \quad (1)$$

On page 75, eq. (2) is meant as follows:

$$D(\omega, z_{ms}=0) = R_1 e^{2i\omega t_1} + R_2' e^{2i\omega t_2} \quad . \quad (2)$$

On page 76, eq. (5) is meant as follows:

$$D_1(\omega, z) = R_1 e^{2i\omega t_1} e^{-2i(\omega/c_0)z} \quad . \quad (5)$$

On page 80, t^+ used beginning with eq. (14) should be defined as $t^+ = t + \epsilon$, where ϵ is a small positive quantity.

On page 82, the sentence following eq. (25) should read "The solution for $P(\mathbf{r}, t)$ in (14) . . ."

On page 85, the line before eq. (38) should read "However, as $|\mathbf{r}| \rightarrow \infty$, with $G_0 = G_0^-$, . . ."

On page 88, the sentence before Fig. 4 should read ". . . at $z' = a$, where the wave was previously . . ."

On page 89, eq. (45) is meant as follows:

$$G_0^{-D} = -[e^{-ik|z-z'|}/2ik] - [-e^{-ik|z_1-z'|} /2ik] \quad , \quad (45)$$

On page 89, the second line following eq. (47) should read "The uncollapsed migration is $M(x_m, y_m, z_m, x_h, y_h, z_h=0; t=0)$. . ."

The article "Reverse-time migration and Green's theorem: Part II - A new and consistent theory that progresses and corrects current RTM concepts and methods", by A.B. Weglein, R.H. Stolt and J.D. Mayhan (Volume 20, No. 2, May 2011, pages 135-159) contains the following errata:

On page 139, eq. (5) is meant as follows:

$$[(d^2/dz'^2) + k^2]P(z',\omega) = 0 \quad , \quad \text{for } a < z' < b \quad (5)$$

On page 139, eq. (6) is meant as follows:

$$P(z',\omega) = Ae^{ikz'} + Be^{-ikz'} \quad , \quad \text{for } a < z' < b \quad (6)$$

On page 140, the third and fourth equations from the bottom of the page are meant as follows:

$$0 = A_1 e^{ikb} + B_1 e^{-ikb} + (1/2ik) e^{ik \overbrace{|z-b|}^{b-z}}$$

$$0 = A_1 e^{ikb} ik + B_1 e^{-ikb} (-ik) + (1/2ik) e^{ik \overbrace{|z-b|}^{b-z}} ik \underbrace{\text{sgn}(z-b)}_{-1} (-1)$$

On page 141, the first line in eq. (15) is meant as follows:

$$G_0(z,b,\omega) = -(1/2ik)(e^{-ik(z-b)} - e^{ik \overbrace{|z-b|}^{b-z}})$$

On page 141, the last line should read ". . . boundary conditions on part of the surface S (in our 1D case only at b)."

On page 143, eq. (24) is meant as follows:

$$T = 2c_0/(c_0 + c_1) \quad . \quad (24)$$

On page 147, the second sentence following eq. (48) should read "We assume $X_m(x')$ and $Z_n(z')$ are orthonormal and complete and $\mu^2 \equiv k^2 - \lambda^2 \geq 0$."

On page 149, eq. (62) is meant as follows:

$$\{\nabla'^2 + \omega^2/c^2(x', y', z')\}G_0(x', y', z', x, y, z, \omega)$$

$$= \delta(x - x')\delta(y - y')\delta(z - z') \quad . \quad (62)$$