

# Corrigendum

**Panning, M. & Nolet, G., 2008. Surface wave tomography for azimuthal anisotropy in a strongly reduced parameter space (Geophys. J. Int., 174, 629–648)**

The published version of Panning & Nolet (2008) had an error in the last term of Table 1, which listed the non-zero interaction coefficients for surface waves due to perturbations to an anisotropic model defined by  $\delta\lambda$ ,  $\delta\mu$ ,  $\epsilon$ ,  $\delta$  and  $\gamma$ . The values for  $\Omega_\gamma^{(5)}$  were inadvertently duplicated for  $\Omega_\gamma^{(6)}$ . The full table is reproduced here.

The supplementary material included a Fortran 90 subroutine calculating the various  $\Omega$  terms, which was correct and can be used as published.

**Table 1.** Non-zero interaction coefficients for surface waves for perturbations to  $\delta\lambda$ ,  $\delta\mu$ ,  $\epsilon$ ,  $\delta$  and  $\gamma$ .

Rayleigh → Rayleigh	$\Omega_{\delta\lambda}:$ $\dot{U}''\dot{U}' - r^{-1}(v'\dot{U}''V' + v''V''\dot{U}') + v''v'r^{-2}V''V'$ $\Omega_{\delta\mu}:$ $2\dot{U}''\dot{U}' + \cos\eta r^{-1}(v'\dot{V}''U' + v''U''\dot{V}') + \cos\eta\dot{V}''\dot{V}'$ $+ v''v'r^{-2}[\cos\eta U''U' + 2\cos^2\eta V''V']$ $\sin\eta[v'r^{-1}\dot{W}''U' + \dot{W}''\dot{V}' + 2v''v'r^{-2}\cos\eta W''V']$ $- \sin\eta[v''r^{-1}U''\dot{W}' + \dot{V}''\dot{W}' + 2v''v'r^{-2}\cos\eta V''W']$ $\cos\eta\dot{W}''\dot{W}' + v''v'r^{-2}\cos(2\eta)W''W'$
Rayleigh → Love	$\Omega_\epsilon = 2\rho\alpha^2(\Omega_\epsilon^{(1)} + \Omega_\epsilon^{(2)} + \Omega_\epsilon^{(3)})$
Love → Rayleigh	For $\Omega_\epsilon^{(1)}$ :
Love → Love	$s_r^2\dot{A}''\dot{A}' + is_rr^{-1}[s_\theta''v''A''\dot{A}' - s_\theta'v'\dot{A}''A']$ $+ v''v'r^{-2}s_\theta''s_\theta''A''A'$ $-is_r^2s_\phi''\dot{A}'\dot{W}'' + sr^{-1}[s_\theta''s_\phi''v''\dot{A}'W'' - s_\theta's_\phi''v'A'\dot{W}'']$ $-iv''v'r^{-2}s_\theta''s_\theta'v''\dot{A}'W''$ $is_r^2s_\phi''\dot{W}'\dot{A}'' + sr's_\phi'r^{-1}[s_\theta''v''W'\dot{A}'' - s_\theta''v''\dot{W}'A'']$ $+iv''v'r^{-2}s_\theta's_\phi's_\theta'v''W'A''$ $s_r^2s_\phi''\dot{W}'\dot{W}'' + is_rs_\phi's_\phi'r^{-1}[s_\theta''v''\dot{W}'W'' - s_\theta'v'W'\dot{W}'']$ $+v''v'r^{-2}s_\phi's_\phi''s_\theta's_\theta'W'W''$
Rayleigh → Rayleigh	For $\Omega_\epsilon^{(2)}$ :
Love → Rayleigh	$-(\dot{U}'' - v''r^{-1}V'')(sr\dot{A}' - iv'r^{-1}s_\theta'A')$ $-(\dot{U}'' - v''r^{-1}V'')(is_\phi's_r\dot{W}' + v'r^{-1}s_\theta's_\phi'W')$
Rayleigh → Love	For $\Omega_\epsilon^{(3)}$ :
Rayleigh → Rayleigh	$-(\dot{U}' - v'r^{-1}V')(sr\dot{A}'' + iv''r^{-1}s_\theta''A'')$ $-(\dot{U}' - v'r^{-1}V')(-is_\phi''s_r\dot{W}'' + v''r^{-1}s_\phi''s_\theta''W'')$
Rayleigh → Love	$\Omega_\delta = 2\rho\alpha^2(\Omega_\delta^{(1)} + \Omega_\delta^{(2)} + \Omega_\delta^{(3)})$ $\Omega_\delta^{(1)} = -\frac{1}{2}\Omega_\epsilon^{(2)}$ $\Omega_\delta^{(2)} = -\frac{1}{2}\Omega_\epsilon^{(3)}$ $\Omega_\delta^{(3)} = -\Omega_\epsilon^{(1)}$
$\Omega_\gamma = -2\rho\beta^2\sum_{i=1}^6\Omega_\gamma^{(i)}$	$\Omega_\gamma^{(1)} = 2\Omega_\epsilon^{(2)}$ $\Omega_\gamma^{(2)} = 2\Omega_\epsilon^{(3)}$

**Table 1.** (Continued.)

		For $\Omega_{\gamma}^{(3)}$ :
Rayleigh → Rayleigh		$s_r^2[\dot{U}''\dot{U}' + \cos\eta\dot{V}''\dot{V}'] - iv'r^{-1}s_r s'_\theta[\dot{U}''U' + \dot{V}''V'\cos\eta]$ + $iv''r^{-1}s_r s''_\theta[U''\dot{U}' + V''\dot{V}'\cos\eta]$ + $v''v'r^{-2}s_\theta's'_\theta[U''U' + V''V'\cos\eta]$
Rayleigh → Love		$\sin\eta[s_r^2\dot{W}''\dot{V}' - iv'r^{-1}s_r s'_\theta\dot{W}''V' + iv''r^{-1}s_r s''_\theta W''\dot{V}']$ + $v''v'r^{-2}s_\theta's''_\theta W''V']$
Love → Rayleigh		$-\sin\eta[s_r^2\dot{V}''\dot{W}' - iv'r^{-1}s_r s'_\theta\dot{V}''W' + iv''r^{-1}s_r s''_\theta V''\dot{W}']$ + $v''v'r^{-2}s_\theta's''_\theta V''W']$
Love → Love		$\cos\eta[s_r^2\dot{W}''\dot{W}' - iv'r^{-1}s_r s'_\theta\dot{W}''W' + iv''r^{-1}s_r s''_\theta W''\dot{W}']$ + $v''v'r^{-2}s_\theta's''_\theta W''W']$
		For $\Omega_{\gamma}^{(4)}$ :
Rayleigh → Rayleigh		$s_r^2[\dot{U}''\dot{U}' + v''v'r^{-2}\cos\eta U''U'] - is_r s'_\theta[\dot{U}''\dot{V}' + v''v'r^{-2}\cos\eta U''V']$ + $s'_\theta s''_\theta [\dot{V}''\dot{V}' + v''v'r^{-2}\cos\eta V''V']$ + $is_r s''_\theta [\dot{V}''\dot{U}' + v''v'r^{-2}\cos\eta V''U']$
Rayleigh → Love		$-s''_\phi s'_\theta [\dot{W}''\dot{V}' + v''v'r^{-2}\cos\eta W''V']$ - $is''_\phi s_r [\dot{W}''\dot{U}' + v''v'r^{-2}\cos\eta W''U']$
Love → Rayleigh		$is_r s'_\phi [\dot{U}''\dot{W}' + v''v'r^{-2}\cos\eta U''W']$ - $s''_\theta s'_\phi [\dot{V}''\dot{W}' + v''v'r^{-2}\cos\eta V''W']$
Love → Love		$s'_\phi s''_\phi [\dot{W}''\dot{W}' + v''v'r^{-2}\cos\eta W''W']$
		For $\Omega_{\gamma}^{(5)}$ :
Rayleigh → Rayleigh		$s_r^2[\dot{U}''\dot{U}' + v''r^{-1}\cos\eta U''\dot{V}']$ - $iv'r^{-1}s_r s'_\theta[\dot{U}''U' + v''r^{-1}\cos\eta U''V']$ + $is_r s''_\theta [\dot{V}''\dot{U}' + v''r^{-1}\cos\eta V''\dot{V}']$ + $v'r^{-1}s''_\theta s'_\theta [\dot{V}''U' + v''r^{-1}\cos\eta V''V']$
Rayleigh → Love		$-is''_\phi s_r \dot{W}''\dot{U}' - iv''r^{-1}s'_\phi s_r \cos\eta W''\dot{V}'$ - $v'r^{-1}s''_\phi s'_\theta (\dot{W}''U' + v''r^{-1}\cos\eta W''V')$
Love → Rayleigh		$-iv''r^{-1}s_r s''_\theta \sin\eta V''\dot{W}' + iv''v'r^{-2}s_r s'_\theta \sin\eta U''W'$ - $v''v'r^{-2}s'_\theta s''_\theta \sin\eta V''W' - v''r^{-1}s_r^2 \sin\eta U''\dot{W}'$
Love → Love		$iv''r^{-1}s'_\phi s_r \sin\eta W''\dot{W}' + v''v'r^{-2}s'_\theta s''_\phi \sin\eta W''W'$
		For $\Omega_{\gamma}^{(6)}$ :
Rayleigh → Rayleigh		$s_r \dot{U}''\dot{A}' + iv''r^{-1}s''_\theta U''\dot{A}' + v'r^{-1}s_r \cos\eta \dot{V}''A'$ + $iv''v'r^{-2}s''_\theta \cos\eta V''A'$
Rayleigh → Love		$v'r^{-1}s_r \sin\eta \dot{W}''A' + iv''v'r^{-2}s''_\theta \sin\eta W''A'$
Love → Rayleigh		$is'_\phi s_r \dot{U}''\dot{W}' - v''r^{-1}s'_\theta s'_\phi U''\dot{W}'$ + $iv'r^{-1}s_r s'_\phi \cos\eta \dot{V}''W' - s'_\phi s''_\theta v''v'r^{-2}\cos\eta V''W'$
Love → Love		$iv'r^{-1}s_r s'_\phi \sin\eta \dot{W}''W' - v''v'r^{-2}s''_\theta s'_\phi \sin\eta W''W'$

**REFERENCES**

- Panning, M. & Nolet, G., 2008. Surface wave tomography for azimuthal anisotropy in a strongly reduced parameter space, *Geophys. J. Int.*, **174**, 629–648.