

Table 1: Best model parameters derived from the condition that the whole outer wedge is at critical state in horizontal compression and for the taper angle at the location of the normal splay fault to be at critical state in horizontal extension. There are only three independent parameters ( $\lambda$ ,  $\phi_{int}$  and  $\phi_b^{eff}$ )

Critical state	$\lambda_{int}$	$\mu_{int}$	$\phi_{int}$ ( $^{\circ}$ )	$\mu_b^{eff}$	$\phi_b^{eff}$ ( $^{\circ}$ )	$\mu_b$ if $\lambda_b = \lambda$	$\phi_b$ ( $^{\circ}$ ) if $\lambda_b = \lambda$
compression	0.8	0.8	38.75	0.13	7.5	0.66	33.3
extension	0.8	0.8	38.75	0.003	0.2	0.04	2.3