

# Cybershake v21p1

Small region at the north of the South Island.

Final fault list: Entire South Island (AlpineF2K pending)

"Scientific" Improvements

	Functionality	To be included in this version	Might be included	Not this version
<b>Velocity Model</b>				
	Basin Modeling	verified USER basins		
	Velocity Model variations			
<b>Tectonics</b>				
	Subduction			Adjust 3 cm/s PGV threshold for VMs
<b>Source Generation</b>				
	SRF roughness			Testing with ruptures above surface to be done
<b>LF</b>				
	100m simulation realisations			
<b>Sim Methodology</b>				
	Sim methodology improvements	Using gmsim_v20.4.1		
<b>Stations</b>				
<b>Vs30</b>				
	vs30 improvements			Use combination vs30 model / general updates to model
<b>Realisations</b>				
	Additional Realisation Parameters (e.g. Magnitude)	<p>Mw - Stress drop perturbation based on Leonard sigma and correlated together</p> <p>slip/rake/rise time perturbations come from the seed we pass to genslip</p> <p>Shypo / Dhypo unchanged from last version</p> <p>VM perturbations introduced</p>		Latest improvements from the perturbation workflow
<b>Fault Sources</b>				<a href="https://uceqeng.slack.com/archives/C0GBS5GQ3/p1575857561203300">https://uceqeng.slack.com/archives/C0GBS5GQ3/p1575857561203300</a> GNS ERF changes