

Supplementary data Table B. Detrital zircon fission track data for sections from the southern Coastal Range. Age components in Ma with 1 sigma error. Proportion of grains for each component provided as a percentage of the total number of grains measured. Age components resolved using mixture modelling algorithms of Radialplotter (Vermeesch, 2009).

Sample	Long. (°)	Lat. (°)	No. grains	Grain age distribution (Ma)		Age dispersion $P\chi^2$ RE%	Age dispersion	Depositional Age (Ma)	Age components (Ma) $\pm 1\sigma$			
				Min	Max				<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
SC3	23.137	121.388	42	1.7	310.1	0.0	106	1.47-1.3	4.0 \pm 0.5 (14%)	68 \pm 5 (30%)	156 \pm 10 (56%)	
SC4	23.136	121.378	36	1.3	291.6	0.0	113	1.9-1.6	6.3 \pm 0.6 (33%)	82 \pm 7 (46%)	188 \pm 32 (21%)	
MW1	22.975	121.307	74	2.4	459.1	0.0	89	1.3-1.1	6.5 \pm 0.6 (9%)	70 \pm 4 (39%)	151 \pm 10 (42%)	309 \pm 38 (10%)
MW4	22.996	121.290	65	53.2	376.5	0.00	38	1.9-1.6	81 \pm 7 (18%)	161 \pm 11 (68%)	295 \pm 49 (14%)	
MW5	22.999	121.282	77	73.0	607.4	0.00	40	1.7-1.2	92 \pm 8 (17%)	171 \pm 9 (70%)	441 \pm 47 (13%)	