



*Supplement of*

**Constraints on long-term cliff retreat and intertidal weathering at weak rock coasts using cosmogenic  $^{10}\text{Be}$ , nearshore topography and numerical modelling**

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## Supplement

**Table S1:  $^{10}\text{Be}$  sample and concentration data for Seven Sisters.**

Sample ID	AMS ID (LLNL)*	Mass of quartz dissolved (g)	Mass of carrier added (g)**	Measured $^{10}\text{Be}/^9\text{Be}$ ratio (x $10^{-14}$ )	$\pm 1\sigma$ AMS analytical uncertainty $^{10}\text{Be}/^9\text{Be}$ ratio (x $10^{-14}$ )
SS01	BE38204	55.560	1.0024	2.321	0.096
SS02	BE38205	45.414	1.0017	1.725	0.079
SS03	BE38206	46.611	1.0021	1.923	0.087
SS04	BE38207	48.014	1.0015	1.797	0.087
SS05	BE38208	43.622	1.0017	1.439	0.064
SS06	BE38209	50.023	1.0001	2.351	0.098
SS07	BE38210	52.324	0.9996	1.451	0.068
SS08	BE38211	44.555	1.0000	1.273	0.070
SS09	BE38212	51.031	0.9997	1.297	0.059
CFG1416A		-	1.0036	0.255	0.031
CFG1416B		-	1.0013	0.261	0.047

\**Laurence Livermore National Lab (LLNL).* \*\**Carrier concentration 204  $\mu\text{g Be g}^{-1}$ .*

**Table S2:  $^{10}\text{Be}$  sample and concentration data for St Margaret's**

Sample ID	AMS ID (ANSTO)*	Mass of quartz dissolved (g)	Mass of carrier added (g)*	Measured $^{10}\text{Be}/^9\text{Be}$ ratio (x $10^{-14}$ )	$\pm 1\sigma$ AMS analytical uncertainty $^{10}\text{Be}/^9\text{Be}$ ratio (x $10^{-14}$ )
SM01	XBE0549	35.019	0.3362	2.525	0.103
SM02	XBE0550	35.052	0.3362	1.922	0.094
SM03	XBE0551	35.084	0.3363	1.435	0.074
SM04	XBE0552	35.028	0.3363	1.763	0.080
SM05	XBE0553	35.079	0.3365	0.684	0.048
SM06	XBE0554	35.105	0.3369	1.106	0.054
SM07	XBE0555	35.127	0.3370	1.246	0.063
SM08	XBE0556	35.263	0.3362	1.487	0.067
SM09	XBE0557	35.088	0.3367	1.565	0.069
SM10	XBE0558	35.036	0.3370	1.617	0.074
SM11	XBE0559	35.167	0.3370	1.398	0.070
SM12-1	XBE0562	35.010	0.3357	1.207	0.059
SM12-2	XBE0563	35.113	0.3375	1.476	0.061
SM13	XBE0564	35.082	0.3369	1.060	0.051
SM14	XBE0565	35.131	0.3365	1.721	0.067
SM15	XBE0566	35.375	0.3374	1.683	0.068
BLK101218	XBE0548	-	0.3375	0.419	0.033
BLK1090119	XBE0560	-	0.3358	0.112	0.017
BLK2090119	XBE0561	-	0.3390	0.305	0.029

\**Australian Nuclear Science and Technology Organization (ANSTO).* \*\**Carrier concentration 759.44  $\mu\text{g Be g}^{-1}$ .*