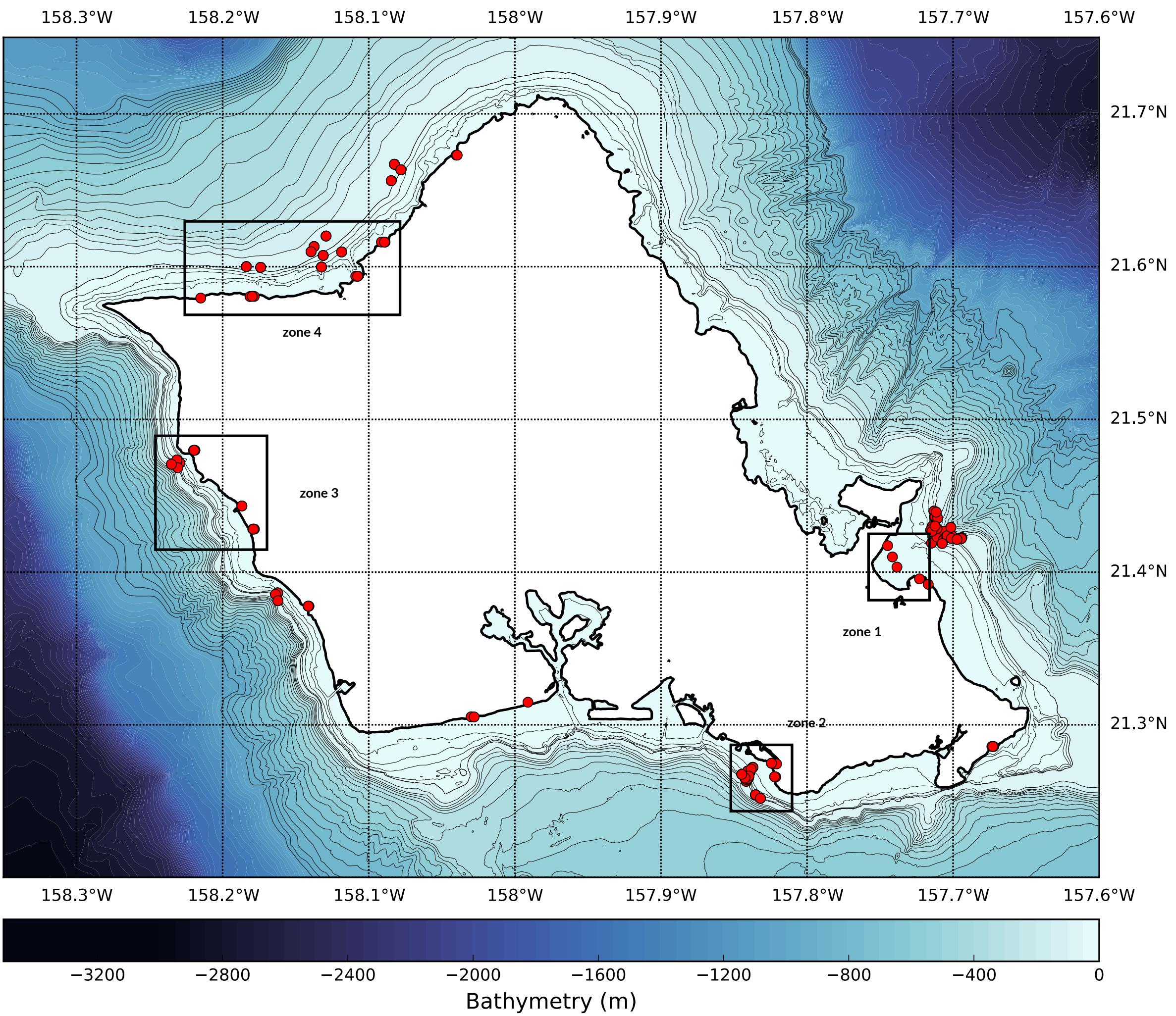


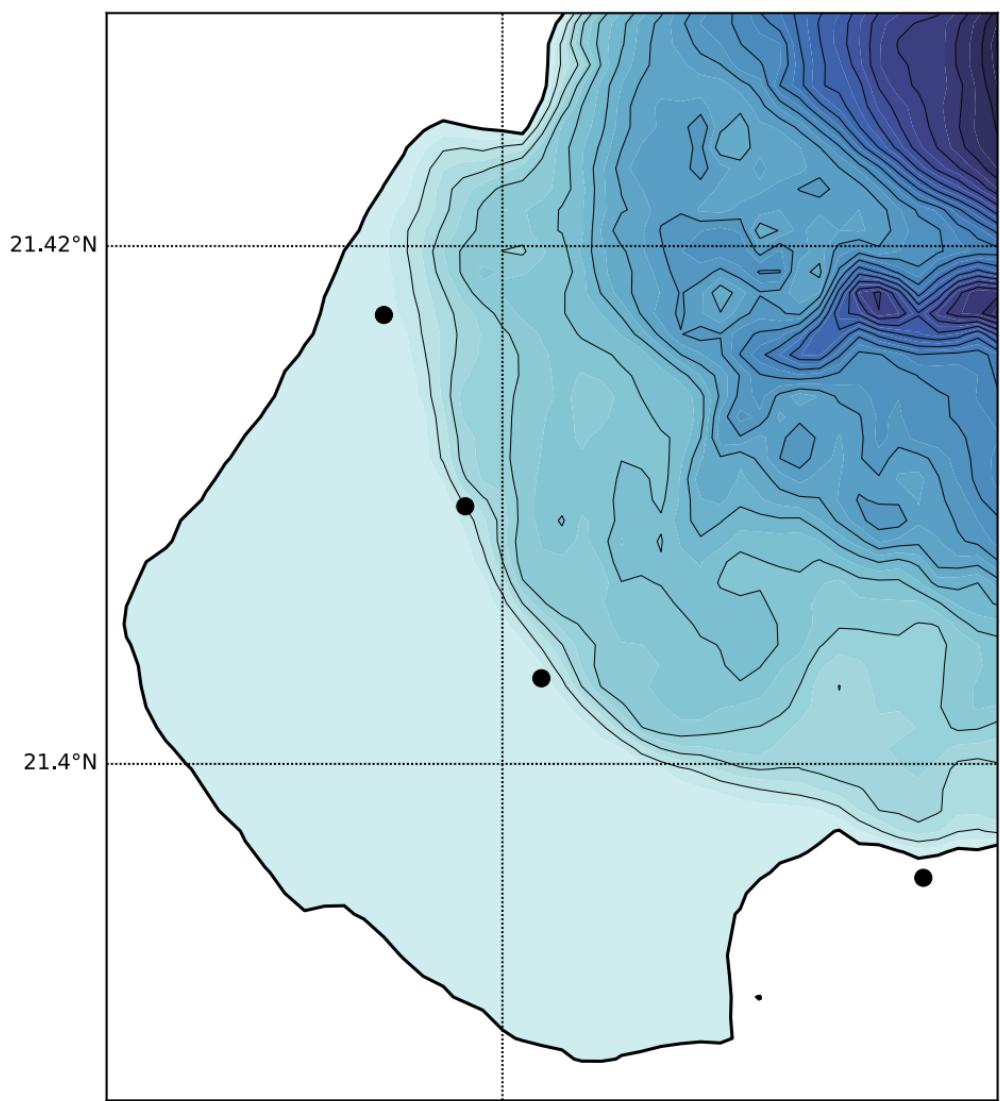
Better physics for coastal dynamics

**Scholarship
of Geosciences**

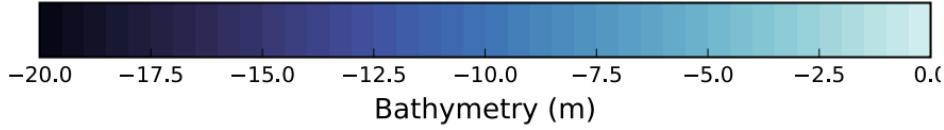
sedimenttranspor

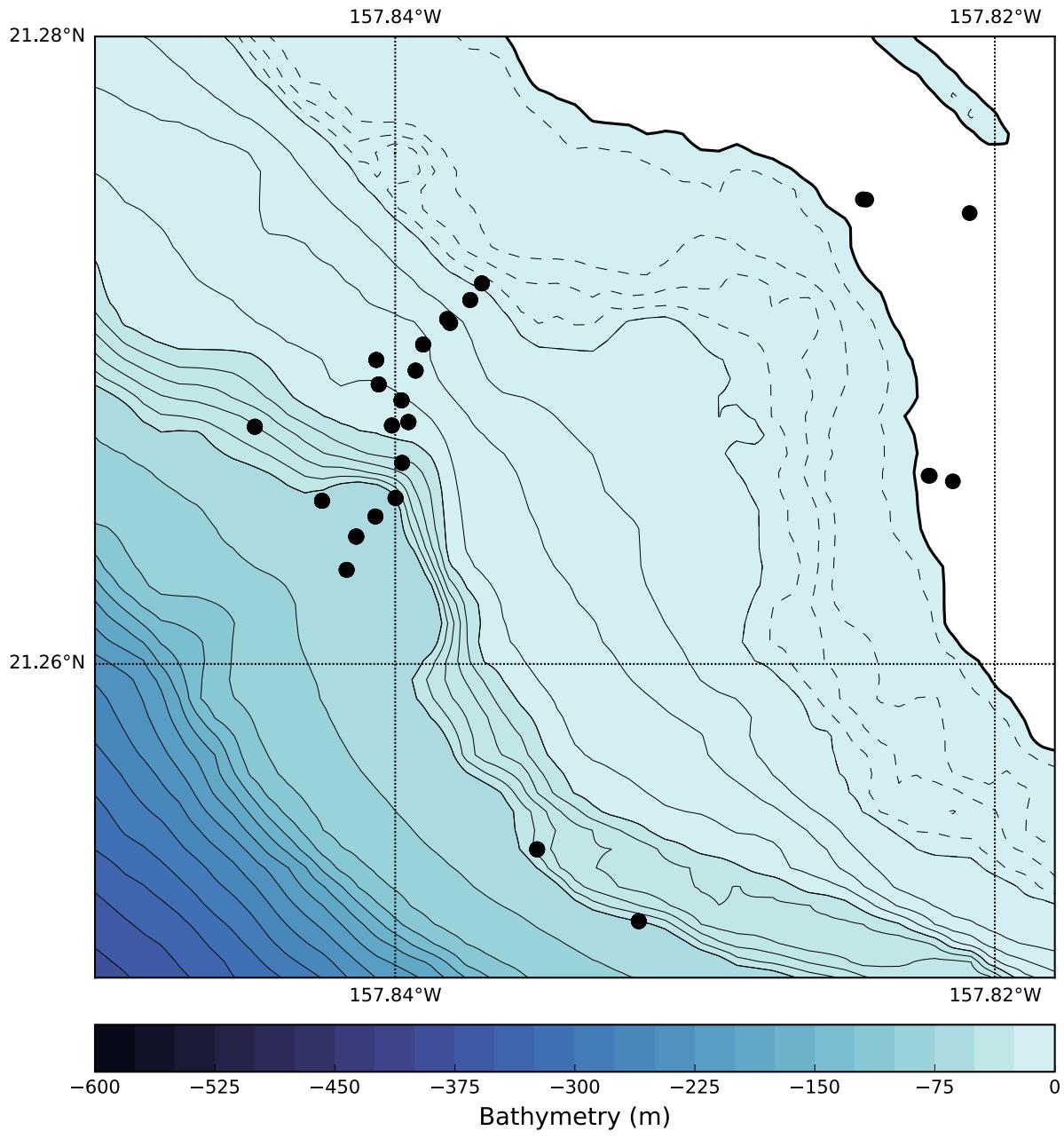


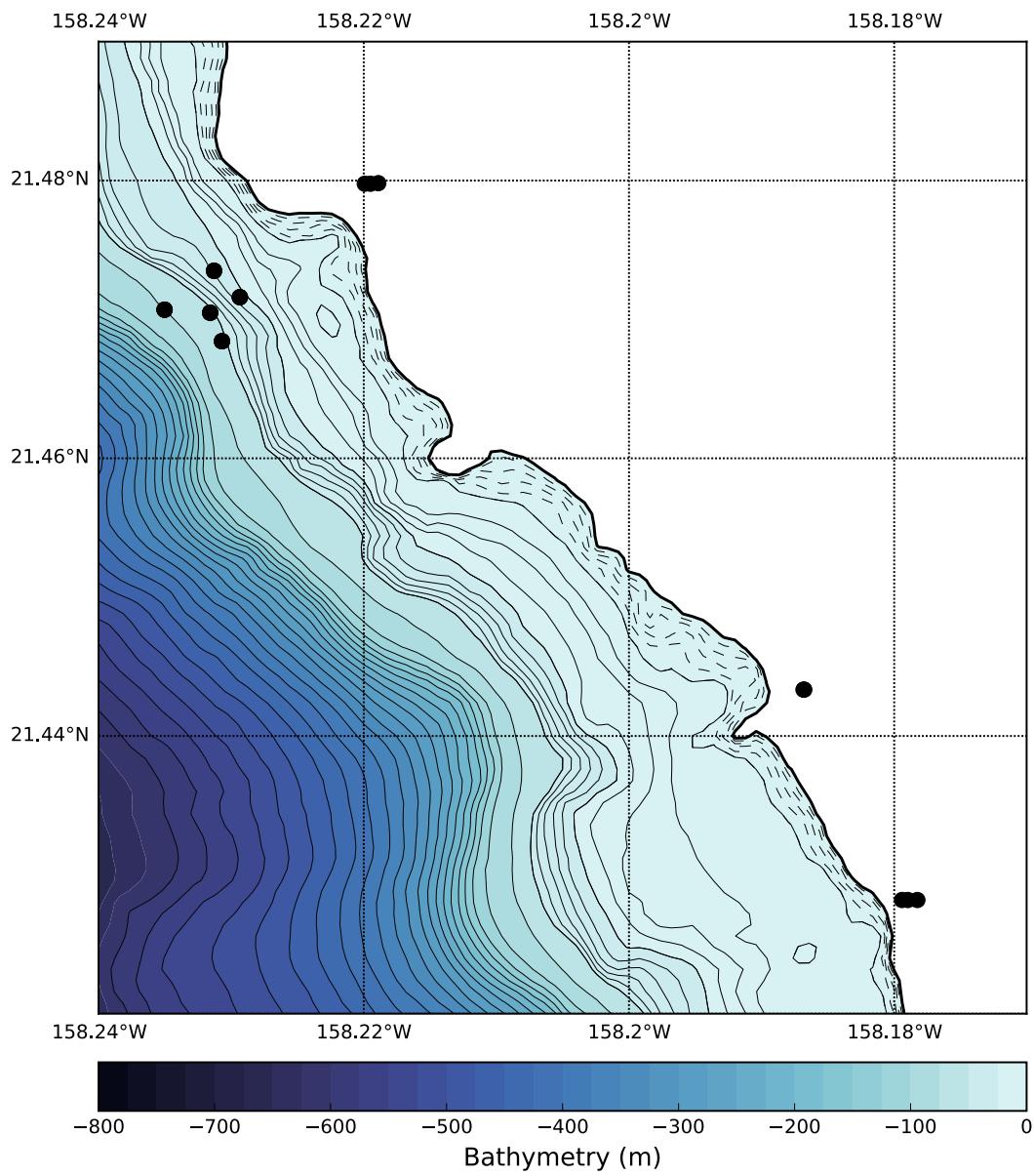
157.74°W

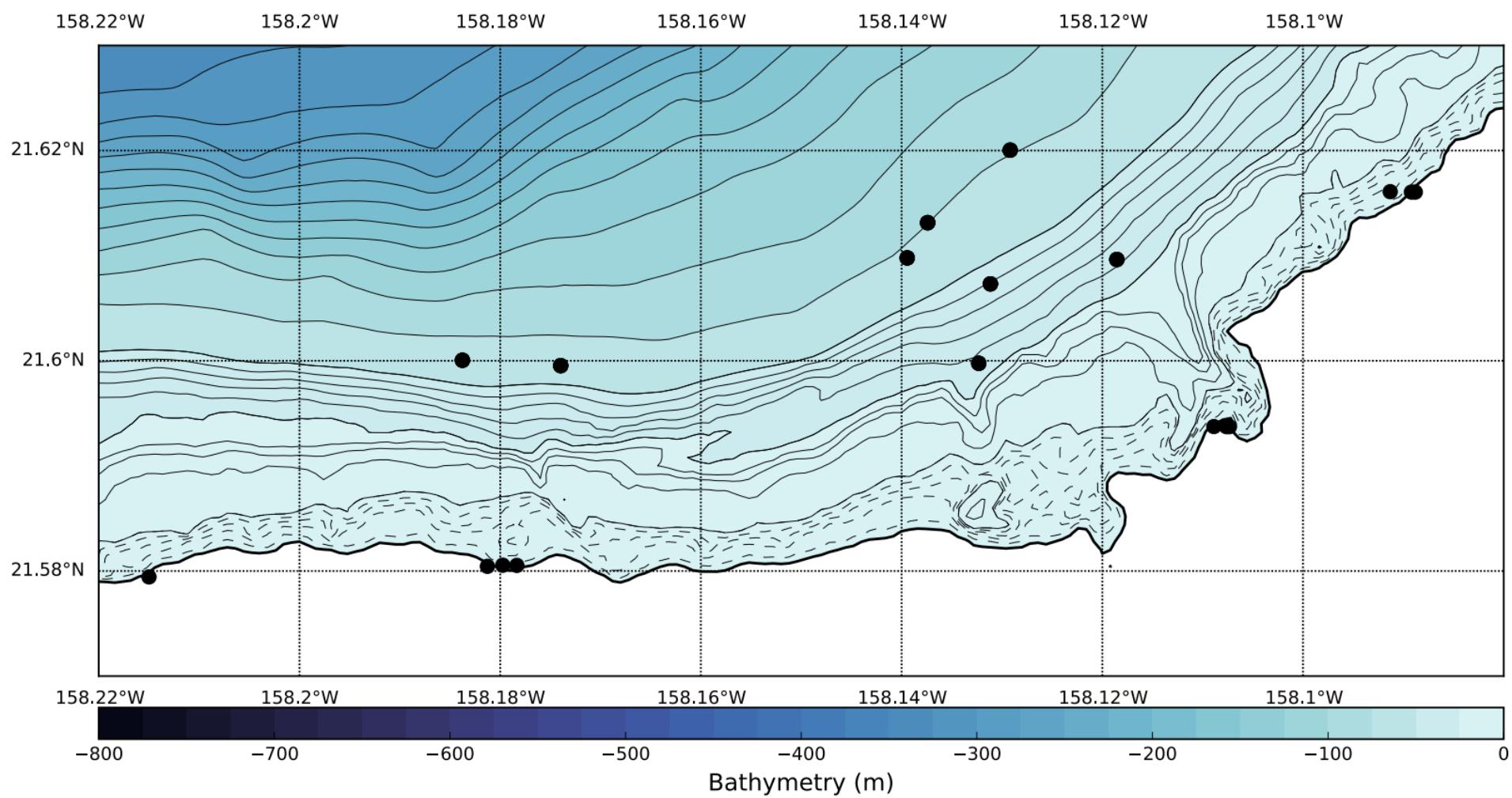


157.74°W









ree-fronted caribou set aside its date

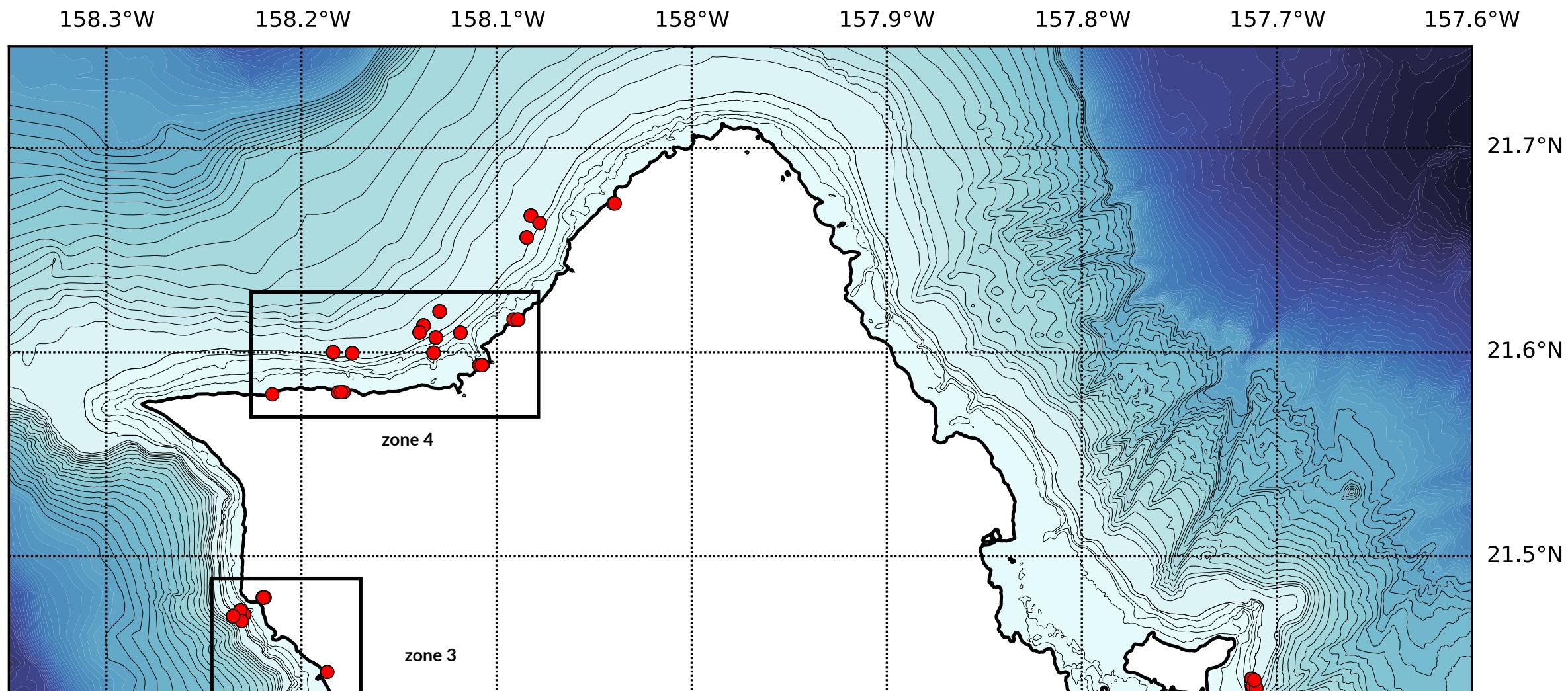
	mean grain diameter (mm)	minimum grain diameter (mm)	maximum grain diameter (mm)	number of samples
zone 1	0.2	0.02	0.67	96
zone 2	0.33	0.09	1.53	102
zone 3	0.45	0.20	1.38	28
zone 4	0.43	0.13	1.07	44

	mean grain diameter (mm)	fall velocity siliciclastic	drag coefficient siliciclastic	fall velocity carbonate	drag coefficient carbonate
zone 1	0.2	0.0159	8.03	0.0162	5.649
zone 2	0.33	0.0314	3.406	0.0357	1.941
zone 3	0.45	0.0446	2.306	0.5252	1.221
zone 4	0.43	0.0425	2.426	0.0498	1.296

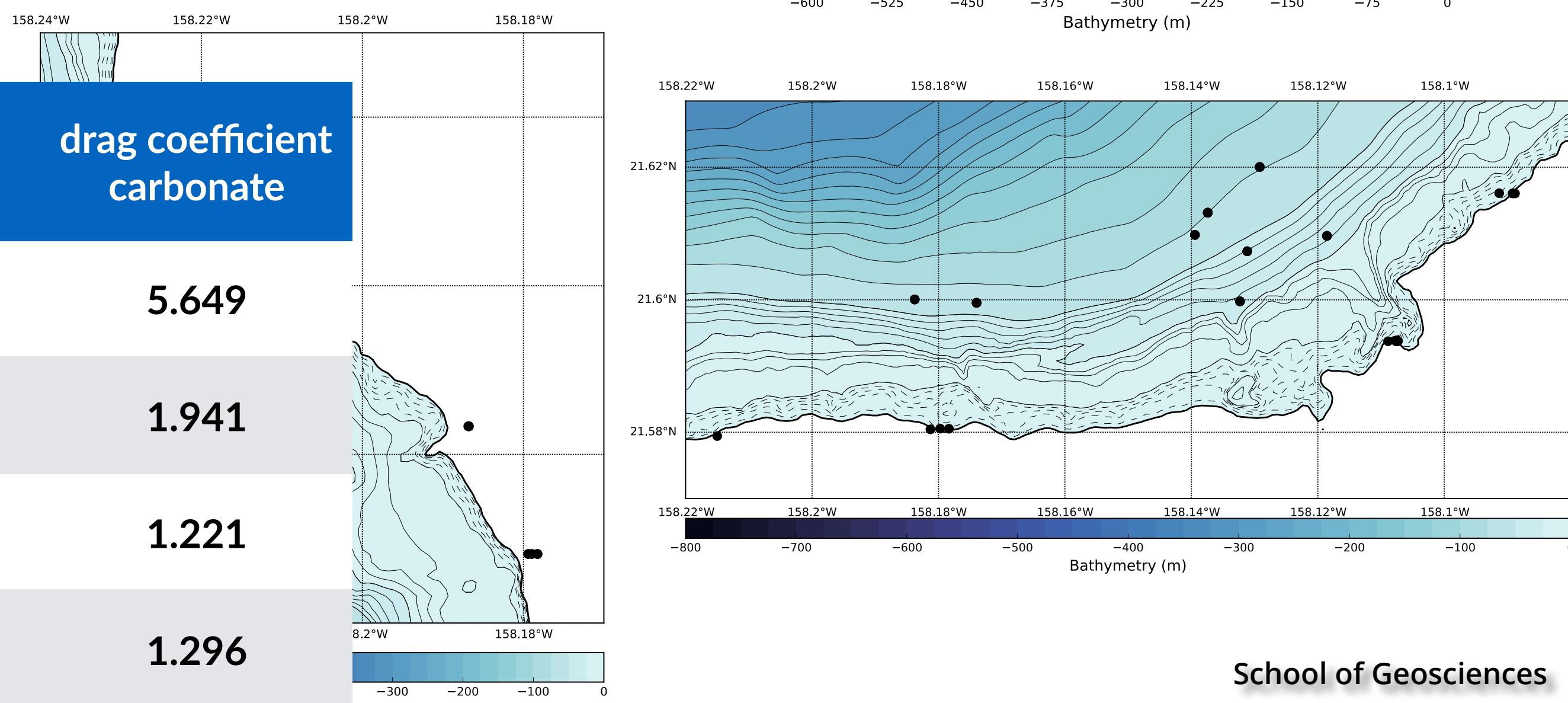
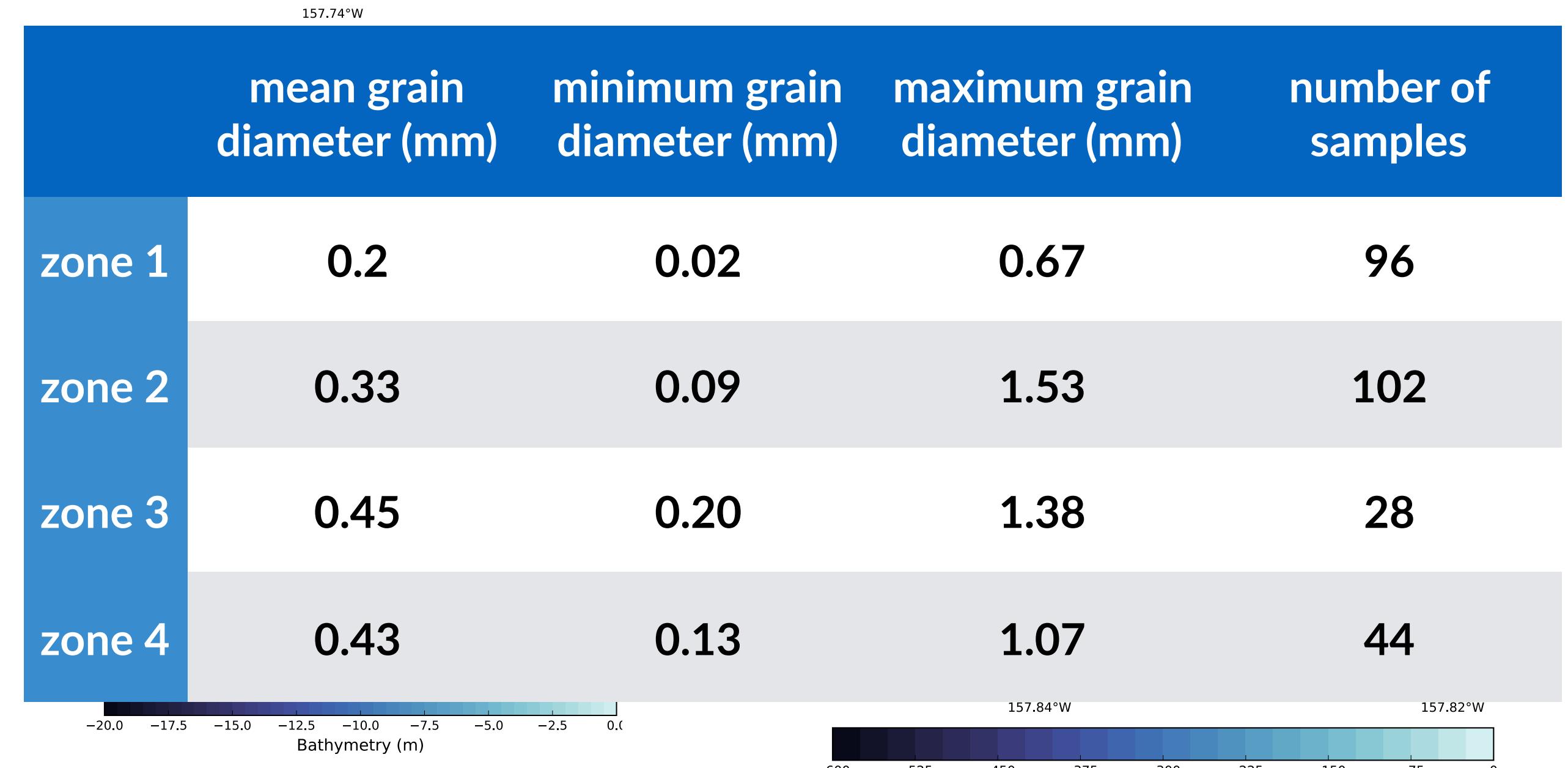
Better physics for coastal dynamics

Sediment transport

USGS reef-front carbonate sediment deposits dataset



	mean grain diameter (mm)	fall velocity siliciclastic	drag coefficient siliciclastic	fall velocity carbonate	drag coefficient carbonate
zone 1	0.2	0.0159	8.03	0.0162	5.649
zone 2	0.33	0.0314	3.406	0.0357	1.941
zone 3	0.45	0.0446	2.306	0.5252	1.221
zone 4	0.43	0.0425	2.426	0.0498	1.296



Better physics for coastal dynamics

Rouse Number

$$P = \frac{w_s}{\kappa u_*}$$

Mode of Transport	Rouse Number
Bed load	>2.5
Suspended load: 50% Suspended	>1.2, <2.5
Suspended load: 100% Suspended	>0.8, <1.2
Wash load	<0.8