GSA Data Repository 2019376

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APPENDIX 1. DATA ACQUISITION AND MANIPULATION

The GMRT synthesizes a series of terrestrial and submarine elevation datasets including shipbased swath multibeam bathymetry data (e.g., data from NOAA NGDC 3 arc sec Coastal Relief Model, Center for Ocean Mapping, Monterey Bay Aquarium Research Institute), and a series of subaerial datasets (e.g., USGS's National Elevation Dataset, Nasa's ASTER global DEM) (Ryan et al., 2009). For the submarine, the synthesis concatenates elevation data from both gridded multi-resolution digital elevation models and ship-based multibeam sonar data whose native resolution is typically 100 m in the deep sea. While bathymetry data are typically processed at 100-m resolution, maximum resolution varies where better quality data are available given certain areas of greater multibeam coverage and/or where more advanced sonar instrumentation was deployed (Ryan et al., 2009; https://www.gmrt.org/about/index.php). In an attempt to merge these datasets while preserving higher resolution DEMs, the GMRT subsamples these highresolution datasets and supersamples lower resolution datasets with a cell spacing of 61 m. The GMRT does this via a tile set that contains weighted grid nodes whereby higher resolution data are weighted higher, and replace lower-resolution nodes (Ryan et al., 2009). Submarine canyon locations were selected in regions where multibeam data were available, which biases our selection to the US Atlantic margin, US Pacific margin, European Atlantic margin, and part of the Mediterranean Sea. One location, offshore Nova Scotia, is the only exception in regard to resolution, where five of our submarine canyon selections have only partial multibeam coverage towards the upper reaches of the drainage basins. However, we believe given that the large

majority of the basins contain multibeam coverage that the approximate area measurements necessary to estimate steepness and concavity parameters are still within reason. Moreover, removing these analyses from our t-test samples still produces the same results discussed in the main text. Thus, we opted to report these canyons in our analysis even though they do not have full multibeam coverage as their analyses are likely reasonable and these canyons may be of interest to the readers. High latitude regions were also purposefully not selected to avoid any potential effects of recent ice sheets or glaciation. For terrestrial catchments, we selected a diversity of drainages including detachment-limited bedrock systems in mountainous terrains and alluvial, transport-limited systems in low topographic landscapes to reinforce that concavity measurements do indeed fall within a narrow range of values as demonstrated by others (Whipple and Tucker, 1999 and references therein). We also avoided areas of high elevation that could have been recently subject to glaciation and any regions where active faulting could place the system into disequilibrium. Divides were delineated automatically for the case of subaerial watersheds by preventing closed depressions and tracking flow from outlets draining to the edges of each dataset to the internal divides. However, the upper extremities of submarine canyons do not always abut adjacent submarine canyons, and so manual demarcation of the upper watershed extent is necessary. To do this, we manually mapped the location at which canyon heads intersected the continental shelf, and clipped the bathymetry of each canyon to this extent. Furthermore, where drainage divides are not readily apparent, channel edges were also manually clipped (Figs. S1–S2). Subaerial drainages were sampled at roughly the same size of the average submarine canyon drainage area (ca. $3,000 \text{ km}^2$) to avoid scaling anomalies.

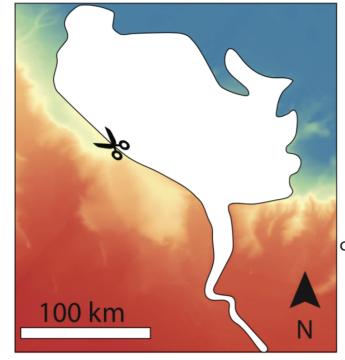
APPENDIX 2. COMPARISON OF SUBMARINE DRAINAGE CLASSIFICATIONS

In addition to comparing submarine drainages to subaerial systems, we considered several classifications of submarine catchments to compare with each other. These categories include connectivity with the continental shelf (i.e., shelf indenting vs. slope bound), sinuosity (i.e., sinuous vs. straight channels), and margin type (i.e., passive vs. active). One postulation is that perhaps straighter, elongate canyons that have not reached onto the shelf could represent a more nascent stage canyon that is less developed than their more sinuous, shelf-indenting counterparts (Farre et al., 1983). These class types are provided in our supplemental table (Table S1). We used a set of unpaired, two tail, unequal variance t-tests to test whether or not these categories are unique from one another. In the case of shelf connectivity, there is no significant difference between concavity measurements (p = 0.702). To test if sinuosity may highlight different submarine canyon types, we measured the sinuosity (channel length/down-valley length) of each submarine canyon from our dataset (mean sinuosity index = 1.18; $1\sigma = 0.15$) and then compared concavity distributions of low- and high-sinuosity canyons to one another using a two-tailed, unpaired t-test. We found that, when comparing concavity distributions between low (<1.10) and high (≥ 1.10) sinuosity drainages, there is no statistical distinction between the groups (p = (0.29). Furthermore, even when comparing concavity distributions between very low sinuosity (<1.05) and very sinuous (>1.30) canyons, there remains no statistical distinction between the two (p = 0.33). Thus, while it may be tempting to categorize submarine canyons based on these distinctions, we were not able to statistically discriminate the two in both the case of shelf connectivity and sinuosity in this dataset. Finally, we tested if there are any significant differences in concavity measurements between passive (n = 24) and active margin (n = 5)submarine drainages. When comparing combined concavities there is no statistical differentiation from each other (p = 0.18). However, when only comparing mainstem concavities to each other, the resultant p-value is lower (p = 0.025), as the mean concavity of active margin mainstems (0.08) is markedly less than the average passive margin concavity (0.34). This might suggest that active margins may have less concave profiles relative to passive margin mainstems. Since our dataset only contains a few active margin examples, we hesitate to claim this is a true distinction and future work would require further analysis of active margin submarine catchments to discern a conclusive relationship. In general, the lack of distinguishing geomorphic categories in the submarine may highlight that, similar to terrestrial channel networks, submarine drainages may also be restricted to a narrow range of concavities, which are, on balance, smaller than subaerial systems.

Table S1. Description of drainage basins analyzed, results from all analyses, and averaged concavity and steepness values for both subaerial and submarine systems. θ_{ms} = mainstem concavity; θ_{tr} = tributary concavity; $^{ms}k_s$ = mainstem steepness; $^{tr}k_s$ = tributary steepness

Figure S1. Example of workflow for processing submarine canyon networks. Shelf edges were clipped for each submarine drainage. In cases where drainage divides are not apparently, channel margins were also clipped manually. A flow-routing algorithm then calculates mainstem and tributary lengths, areas, and an optimization algorithm calculates best-fit k_s and θ values.

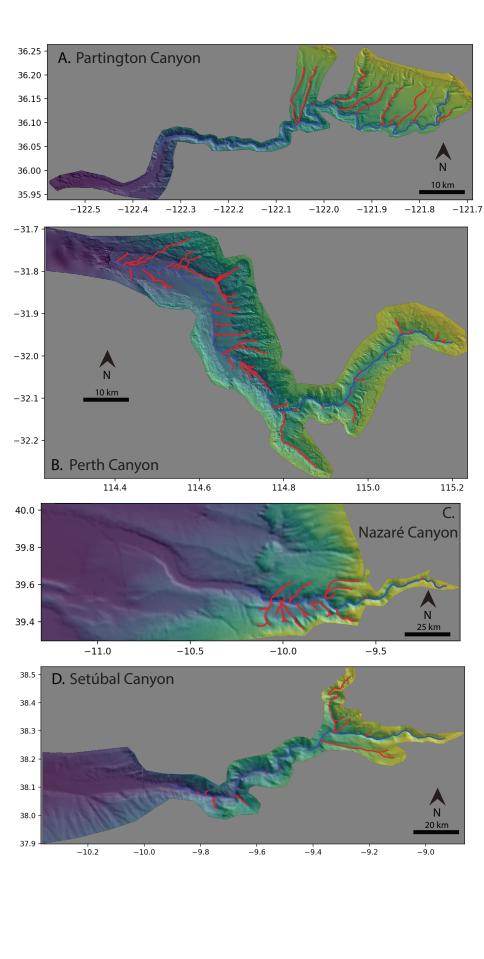
Figure S2. Examples of different submarine drainages that were analyzed. Canyons are named are location information is available in Table S1. The blue line indicates the canyon mainstem, while the red lines are the tributaries.

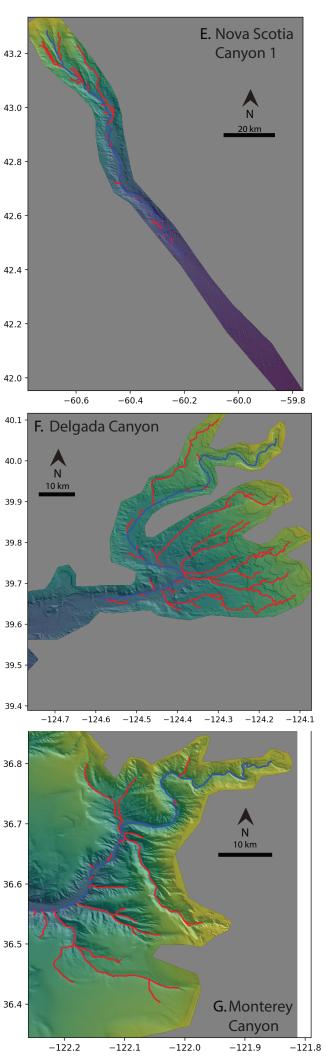


Manually clip shelf edge and/or channel edges when necessary

Calculate flow routing

DOBBS FIGURE S1





DOBBS FIGURE S2

				TAC	SUBAI	ROM CHI ANALYS	5					
	lor:	ation			SUBAI							
lame	Latitude	Longitude	Туре	Area	θ _{ms}	R ²	θ _{tr}	R^2	^{ms} k _s	R ²	tr k s	R ²
	(°)	(°)	лн -	(km ²)	oms	K	° _{tr}	K	ĸs	K	K S	K
happapeela creek	30.662	-90.636	Alluvial	7.1E+02	0.17	1.00	0.34	0.97	5.83	0.97	3.77	0.96
mite River	30.703	-90.850	Alluvial	3.2E+03	0.18	1.00	0.29	0.98	7.22	0.94	4.83	0.96
omite River	30.688	-91.068	Alluvial	5.5E+02	0.20	1.00	0.38	0.98	5.03	0.97	3.69	0.97
hoctawhatchee River	30.948	-85.844	Alluvial	7.8E+03	0.43	0.99	0.34	0.89	5.83	0.99	4.83	0.96
ataula Creek	31.728	-85.086	Alluvial	1.6E+03	0.46	0.99	0.37	0.97	4.70	0.99	4.88	0.98
ttle Cornie Bayou	32.718	-92.541	Alluvial	6.4E+02	0.46	1.00	0.32	0.97	3.42	1.00	3.65	0.97
ayou D'Arbonne	32.732	-92.517	Alluvial	3.0E+03	0.40	0.98	0.41	0.93	3.62	0.97	3.85	0.99
ornie Bayou	32.885	-92.610	Alluvial	1.8E+03	0.44	0.99	0.25	0.95	3.48	0.99	3.06	0.97
ad Axe River	43.522	-91.205	Alluvial	7.9E+02	0.75	0.97	0.76	0.92	10.92	0.94	14.39	0.98
beira de Lavre	38.816	-8.662	Alluvial	9.7E+02	0.48	0.99	0.61	0.92	8.76	0.99	9.35	0.99
oqek 1	43.981	85.441	Bedrock	2.0E+03	0.33	0.99	0.53	0.91	262.09	0.98	187.75	0.96
oqek 2	44.023	84.975	Bedrock	1.6E+03	0.45	0.99	0.53	0.89	181.35	0.99	162.10	0.95
g Creek	36.859	-119.282	Bedrock	8.0E+03	0.55	0.96	0.27	0.82	199.55	0.95	233.81	0.77
orth Fork Feather River	39.625	-121.496	Bedrock	7.2E+03	0.28	0.94	0.50	0.46	103.99	0.92	77.06	0.69
itte Creek	39.706	-121.772	Bedrock	7.8E+01	0.46	0.95	0.51	0.94	100.50	0.95	69.47	0.94
oqek 3	43.877	86.239	Bedrock	8.1E+02	0.20	0.98	0.52	0.89	202.78	0.94	184.63	0.96
outh Santiam River	44.413	-122.680	Bedrock	2.7E+03	0.69	0.98	0.61	0.88	50.50	0.95	55.89	0.98
luarte River	23.130	-105.682	Bedrock	4.8E+03	0.67	0.95	0.48	0.80	130.88	0.89	147.50	0.95
mazula 1	24.699	-106.555	Bedrock	1.5E+04	0.48	0.96	0.43	0.59	147.73	0.96	141.47	0.80
o Piaxtla	23.970	-106.264	Bedrock	4.8E+03	0.53	0.89	0.44	0.54	134.94	0.88	155.59	0.55
mazula 2	24.636	-106.386	Bedrock	8.6E+03	0.40	0.97	0.30	0.45	158.93	0.96	130.61	0.77
n Ignacio	24.116	-106.341	Bedrock	1.7E+03	0.56	0.94	0.49	0.77	147.33	0.93	174.57	0.88
rth Santiam River	44.787	-122.805	Bedrock	2.8E+03	0.55	0.99	0.78	0.81	82.00	0.98	65.31	0.96
	AVERAGE			3.5E+03	0.44	0.97	0.46	0.84	85.28	0.96	80.09	0.91
					SUBM		-	2	ms,	2	tr.	2
ne	Latitude (°)	Longitude (°)	Туре	Area (km ²)	θ_{ms}	R ²	Θ_{tr}	R ²	^{ms} k _s	R ²	^{tr} k _s	R ²
					0.45	0.00	0.07	0.05	2.02			0.00
th Canyon	-31.776	114.398	Shelf indenting	2.1E+03	0.15	0.98	-0.27	0.85	3.03	0.96	3.30	0.86
Vicente Canyon												
•	36.308	-9.925	Shelf indenting	2.3E+03	0.24	1.00	0.11	0.89	3.70	1.00	3.46	0.91
túbal Canyon	38.109	-9.903	Shelf indenting	1.5E+03	0.10	1.00	0.30	0.78	3.50	0.99	3.81	0.93
túbal Canyon p Breton Canyon	38.109 44.174	-9.903 -3.597	Shelf indenting Shelf indenting	1.5E+03 7.2E+03	0.10 0.23	1.00 1.00	0.30 0.17	0.78 0.72	3.50 1.74	0.99 1.00	3.81 7.21	0.93 0.91
túbal Canyon p Breton Canyon rtimão Canyon	38.109 44.174 36.414	-9.903 -3.597 -8.571	Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02	0.10 0.23 0.32	1.00 1.00 0.98	0.30 0.17 0.15	0.78 0.72 0.92	3.50 1.74 3.70	0.99 1.00 0.98	3.81 7.21 3.08	0.93 0.91 0.97
túbal Canyon p Breton Canyon ortimão Canyon elgada Canyon	38.109 44.174 36.414 39.664	-9.903 -3.597 -8.571 -124.594	Shelf indenting Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03	0.10 0.23 0.32 0.21	1.00 1.00 0.98 1.00	0.30 0.17 0.15 0.11	0.78 0.72 0.92 0.92	3.50 1.74 3.70 2.04	0.99 1.00 0.98 1.00	3.81 7.21 3.08 2.69	0.93 0.91 0.97 0.98
túbal Canyon op Breton Canyon ortimão Canyon elgada Canyon oyo Canyon	38.109 44.174 36.414 39.664 39.371	-9.903 -3.597 -8.571 -124.594 -124.616	Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03	0.10 0.23 0.32 0.21 0.15	1.00 1.00 0.98 1.00 0.99	0.30 0.17 0.15 0.11 0.61	0.78 0.72 0.92 0.92 0.70	3.50 1.74 3.70 2.04 2.93	0.99 1.00 0.98 1.00 0.99	3.81 7.21 3.08 2.69 3.12	0.93 0.91 0.97 0.98 0.93
túbal Canyon p Breton Canyon rtimão Canyon Igada Canyon oyo Canyon onterey Canyon	38.109 44.174 36.414 39.664 39.371 36.344	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918	Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03	0.10 0.23 0.32 0.21 0.15 0.17	1.00 1.00 0.98 1.00 0.99 0.99	0.30 0.17 0.15 0.11 0.61 0.02	0.78 0.72 0.92 0.92 0.70 0.88	3.50 1.74 3.70 2.04 2.93 3.02	0.99 1.00 0.98 1.00 0.99 0.98	3.81 7.21 3.08 2.69 3.12 5.61	0.93 0.91 0.97 0.98 0.93 0.81
túbal Canyon p Breton Canyon rtimão Canyon elgada Canyon oyo Canyon onterey Canyon caze-Duthiers Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105	Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03	0.10 0.23 0.32 0.21 0.15 0.17 0.43	1.00 1.00 0.98 1.00 0.99 0.99 1.00	0.30 0.17 0.15 0.11 0.61 0.02 0.18	0.78 0.72 0.92 0.70 0.88 0.80	3.50 1.74 3.70 2.04 2.93 3.02 1.60	0.99 1.00 0.98 1.00 0.99 0.98 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83	0.93 0.91 0.97 0.98 0.93 0.81 0.73
túbal Canyon p Breton Canyon rtimão Canyon elgada Canyon oyo Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781	Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02	0.10 0.23 0.21 0.15 0.17 0.43 0.48	1.00 1.00 0.98 1.00 0.99 0.99 1.00 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47	0.78 0.72 0.92 0.70 0.88 0.80 0.91	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98
túbal Canyon p Breton Canyon prtimão Canyon elgada Canyon oyo Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon arseille Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306	Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.98 0.97 0.96	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86
túbal Canyon p Breton Canyon rtimão Canyon Igada Canyon oyo Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon arseille Canyon te Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257	Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41 0.15	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.98 0.97 0.96 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97
túbal Canyon p Breton Canyon rtimão Canyon Igada Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon arseille Canyon te Canyon zaré Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221	Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03	0.10 0.23 0.21 0.15 0.17 0.43 0.48 0.41 0.15 0.16	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.98 0.97 0.96 0.98 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97 0.82
túbal Canyon p Breton Canyon rtimão Canyon Jgada Canyon yogo Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon arseille Canyon zaré Canyon rtington Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349	Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 0.98	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.98 0.97 0.96 0.98 0.98 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.98 0.97 0.82 0.99
uúbal Canyon o Breton Canyon trimão Canyon Igada Canyon yo Canyon noterey Canyon taze-Duthiers Canyon tit Rhône Canyon reseille Canyon zaré Canyon zaré Canyon Il Creek Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126	Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 0.98 1.00	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.86 0.99	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97
túbal Canyon o Breton Canyon trimão Canyon Igada Canyon yo Canyon noterey Canyon taze-Duthiers Canyon tit Rhône Canyon tit Rhône Canyon zaré Canyon zaré Canyon Il Creek Canyon oles d'Olonne Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559	Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+02	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 0.98 1.00 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.86 0.99 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97 0.77
túbal Canyon p Breton Canyon rtimão Canyon Igada Canyon oyo Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon arseille Canyon te Canyon zaré Canyon rtington Canyon II Creek Canyon bles d'Olonne Canyon rcupine Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237	Shelf indenting Shelf indenting	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.8E+02 7.9E+03	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 0.98 1.00 0.98 1.00 0.99 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.92 0.94 0.95	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.99 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.98 0.97 0.82 0.99 0.97 0.77 0.86
túbal Canyon p Breton Canyon rtimão Canyon Igada Canyon yo Canyon ponterey Canyon caze-Duthiers Canyon tit Rhône Canyon arseille Canyon te Canyon zaré Canyon II Creek Canyon II Creek Canyon rcupine Canyon nittard Canyon	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207	Shelf indenting Shelf indenting Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 3.3E+02 4.6E+02 6.5E+02 3.0E+02 1.1E+03 9.9E+02 7.9E+03 2.2E+04	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51	1.00 1.00 0.98 1.00 0.99 1.00 0.99 1.00 0.97 1.00 0.98 1.00 0.98 1.00 0.99 0.99 0.97	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97 0.77 0.86 0.91
túbal Canyon o Breton Canyon trimão Canyon Igada Canyon yo Canyon yo Canyon yorterey Canyon tarze-Duthiers Canyon tir Rhône Canyon tirseille Canyon te Canyon ca Canyon Il Creek Canyon Il Creek Canyon close d'Olonne Canyon nittard Canyon titard Canyon cay 1	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740	Shelf indenting Shelf indenting Slope bound Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+02 1.1E+03 9.9E+02 7.9E+03 2.2E+04 1.8E+03	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 1.00 0.98 1.00 0.99 0.99 0.97 0.96	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49	0.99 1.00 0.98 1.00 0.99 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.99 0.96 0.92 0.92	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.94
túbal Canyon o Breton Canyon trimão Canyon Igada Canyon yoo Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon tit Rhône Canyon te Canyon zaré Canyon trington Canyon Il Creek Canyon oles d'Olonne Canyon rittard Canyon cay 1 cay 2	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023 47.173	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946	Shelf indenting Shelf indenting Slope bound Slope bound Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+03 2.2E+04 1.8E+03 1.8E+03	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.52	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 1.00 0.98 1.00 0.98 1.00 0.99 0.97 0.97 0.96 0.95	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.91 0.94 0.90
túbal Canyon p Breton Canyon rtimão Canyon Jagada Canyon ono Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon tit Rhône Canyon te Canyon zaré Canyon rtington Canyon Il Creek Canyon bles d'Olonne Canyon rcupine Canyon hittard Canyon scay 1 scay 2	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023 47.173 46.850	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946 -6.134	Shelf indenting Shelf indenting Slope bound Slope bound Slope bound Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.8E+02 7.9E+03 2.2E+04 1.8E+03 1.3E+03 1.8E+03	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.52 0.70	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 0.98 1.00 0.98 1.00 0.99 0.99 0.97 0.96 0.95 1.00	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89 0.85	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.92 0.92 0.92 0.92	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.94 0.90 0.93
túbal Canyon p Breton Canyon rtimão Canyon elgada Canyon onterey Canyon caze-Duthiers Canyon tit Rhône Canyon azaeille Canyon te Canyon zaré Canyon rtington Canyon ill Creek Canyon bles d'Olonne Canyon rcupine Canyon hittard Canyon secay 1 secay 2 secay 3 eland Trough 1	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023 47.173 46.850 54.310	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.740 -6.946 -6.134 -12.518	Shelf indenting Shelf indenting Slope bound Slope bound Slope bound Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+02 7.9E+03 2.2E+04 1.3E+03 1.3E+03 1.8E+03 1.8E+03	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.52 0.70 0.11	1.00 1.00 0.98 1.00 0.99 0.99 1.00 0.99 0.97 1.00 0.98 0.98 1.00 0.99 0.99 0.99 0.99 0.97 0.96 0.95 1.00 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38 0.21 0.38 0.03	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89 0.85 0.94	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42 3.85	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.96 0.98 0.98 0.98 0.99 0.98 0.99 0.98 0.92 0.92 0.92 0.92 0.92 0.92	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11 5.13	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.94 0.90 0.93 0.93 0.96
tubal Canyon ap Breton Canyon partimão Canyon elgada Canyon oyo Canyon onterey Canyon caze-Duthiers Canyon etit Rhône Canyon etit Rhône Canyon etit Rhône Canyon azaré Canyon azaré Canyon ill Creek Canyon bles d'Olonne Canyon orcupine Canyon hittard Canyon scay 1 scay 2 scay 3 eland Trough 1 eland Trough 2	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023 47.173 46.850 54.310 54.406	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946 -6.134 -12.518 -12.107	Shelf indenting Shelf indenting Slope bound Slope bound Slope bound Slope bound Slope bound Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+02 7.9E+03 2.2E+04 1.8E+03 1.3E+03 1.8E+03 1.8E+03 1.1E+03 5.7E+02	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.52 0.70 0.11 0.07	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 1.00 0.98 1.00 0.99 0.99 0.97 0.96 0.97 0.95 1.00 0.99 0.99 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38 0.03 0.03 0.13	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89 0.85 0.94 0.93	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42 3.85 4.93	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.99 0.98 0.99 0.98 0.99 0.92 0.82 0.92 0.92 0.92 0.98 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11 5.13 6.98	0.93 0.91 0.97 0.98 0.81 0.73 0.98 0.98 0.97 0.82 0.97 0.77 0.86 0.97 0.77 0.86 0.91 0.94 0.90 0.93 0.96 0.99
etúbal Canyon ap Breton Canyon ortimão Canyon elgada Canyon oyo Canyon lonterey Canyon caze-Duthiers Canyon etit Rhône Canyon larseille Canyon atriseille Canyon atrington Canyon atrington Canyon atrington Canyon bles d'Olonne Canyon orcupine Canyon scay 1 scay 2 scay 3 eland Trough 1 eland Trough 3	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023 47.173 46.850 54.310 54.406 54.486	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946 -6.134 -12.518 -12.107 -11.895	Shelf indenting Shelf out Shelf indenting Shelf indenting Shelf indenting Shelf indenting Shelf indenting Slope bound Slope bound Slope bound Slope bound Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+02 7.9E+03 2.2E+04 1.8E+03 1.3E+03 1.1E+03 5.7E+02 1.3E+03	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.52 0.70 0.11 0.07 0.26	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 1.00 0.98 1.00 0.98 1.00 0.99 0.97 0.96 0.97 0.96 0.97 0.95 1.00 0.99 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.99 0.04	0.30 0.17 0.15 0.11 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38 0.03 0.03 0.03 0.13 0.42	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89 0.85 0.94 0.93 0.93	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42 3.85 4.93 4.38	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11 5.13 6.98 4.05	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.94 0.94 0.90 0.93 0.96 0.99 0.97
etúbal Canyon ap Breton Canyon ortimão Canyon elgada Canyon olonterey Canyon acaze-Duthiers Canyon etit Rône Canyon atrigton Canyon atrigton Canyon bill Creek Canyon atrigton Canyon bill Creek Canyon orcupine Canyon orcupine Canyon bill Scay 1 iscay 2 iscay 3 eland Trough 1 eland Trough 3 awson Canyon	$\begin{array}{c} 38.109\\ 44.174\\ 36.414\\ 39.664\\ 39.371\\ 36.344\\ 42.296\\ 42.525\\ 42.835\\ 42.519\\ 39.581\\ 36.023\\ 35.923\\ 46.030\\ 50.153\\ 47.943\\ 47.023\\ 47.173\\ 46.850\\ 54.310\\ 54.406\\ 54.486\\ 42.680\\ \end{array}$	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946 -6.134 -12.518 -12.518 -12.107 -11.895 -60.880	Shelf indenting Shelf indenting Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+02 7.9E+03 2.2E+04 1.8E+03 1.3E+03 1.3E+03 1.3E+03 1.3E+03 1.3E+03 1.3E+03 1.3E+03	0.10 0.23 0.32 0.21 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.51 0.83 0.52 0.70 0.11 0.07 0.26 0.54	1.00 1.00 0.98 1.00 0.99 1.00 0.99 0.97 1.00 0.98 1.00 0.98 1.00 0.98 1.00 0.99 0.97 0.96 0.95 1.00 0.99 0.97 0.96 0.95 1.00 0.99 0.97 0.96 0.95 1.00 0.99 0.97 0.96 0.95 1.00 0.99 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.99 0.97 0.96 0.97 0.96 0.99 0.97 0.96 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.97 0.96 0.99 0.90 0.99 0.90 0.04 1.00	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38 0.03 0.13 0.13 0.42 -0.01	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89 0.85 0.94 0.93 0.93 0.93	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42 3.85 4.93 4.38 3.34	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.99 0.99	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11 5.13 6.98 4.05 5.05	0.93 0.91 0.97 0.98 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.94 0.94 0.90 0.93 0.96 0.99 0.97 0.97 0.98
etúbal Canyon ap Breton Canyon ortimão Canyon elgada Canyon oyo Canyon lonterey Canyon acaze-Duthiers Canyon etit Rhône Canyon darseille Canyon darseille Canyon azaré Canyon aztrington Canyon till Creek Canyon ables d'Olonne Canyon orcupine Canyon yhitard Canyon sicay 1 iscay 2 iscay 3 eland Trough 1 eland Trough 1 eland Trough 3 awson Canyon ova Scotia 1	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023 47.173 46.850 54.310 54.406 54.486 42.680 42.597	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946 -6.134 -12.518 -12.107 -11.895 -60.880 -60.698	Shelf indenting Shelf indenting Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+03 2.2E+04 1.8E+03 1.8E+03 1.8E+03 1.1E+03 5.7E+02 1.3E+03 1.1E+03 2.3E+03	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.51 0.83 0.52 0.70 0.11 0.07 0.26 0.54 0.35	1.00 1.00 0.98 1.00 0.99 0.99 1.00 0.99 0.97 1.00 0.98 1.00 0.98 1.00 0.98 1.00 0.99 0.97 0.96 0.95 1.00 0.99 0.99 0.99 0.99 0.99 0.97 0.96 0.95 1.00 0.99 0.99 0.99 0.99 0.99 0.99 0.97 0.96 0.97 0.96 0.97 0.96 0.97 0.99 0.97 0.99 0.99 0.97 0.99 0.90 0.99 0.90 0.99 0.90 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.04 1.00 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38 0.21 0.38 0.33 0.13 0.42 -0.01 0.09	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89 0.85 0.94 0.93 0.93 0.93 0.93 0.93 0.91	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42 3.85 4.93 4.38 3.34 3.34	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.99 0.98 0.96 0.92 0.82 0.92 0.82 0.92 0.92 0.92 0.92 0.92 0.99 0.99 0.9	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11 5.13 6.98 4.05 5.05 3.31	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.94 0.90 0.93 0.96 0.99 0.97 0.98 0.99 0.97 0.98
etúbal Canyon ap Breton Canyon optimão Canyon elgada Canyon oyo Canyon lonterey Canyon acaze-Duthiers Canyon etit Rhône Canyon etit Rhône Canyon etit Canyon azaré Canyon azaré Canyon dill Creek Canyon bibles d'Olonne Canyon orcupine Canyon y Chittard Canyon scay 1 scay 2 scay 3 eland Trough 1 eland Trough 2 eland	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.023 47.173 46.850 54.310 54.406 54.486 42.680 42.597 42.905	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946 -6.134 -12.518 -12.107 -11.895 -60.880 -60.698 -60.197	Shelf indenting Shelf indenting Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.8E+03 1.3E+03 1.3E+03 1.3E+03 1.1E+03 2.3E+03 2.3E+03 2.3E+03 2.3E+03 2.3E+03	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.51 0.83 0.52 0.70 0.11 0.07 0.26 0.54 0.35 0.32	1.00 1.00 0.98 1.00 0.99 0.99 1.00 0.99 0.97 1.00 0.98 0.98 1.00 0.99 0.99 0.97 0.96 0.95 1.00 0.99 0.99 0.99 0.99 0.99 0.99 0.91 0.90 0.92 0.92 0.93 0.94 1.00 0.99 0.99 0.91 0.92 0.92 0.93 0.93 0.94 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.97 0.96 0.95 0.99 0.04 1.00 0.99 0.04 1.00	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38 0.03 0.49 0.21 0.38 0.03 0.13 0.42 -0.01 0.09 0.25	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.92 0.94 0.95 0.83 0.91 0.89 0.85 0.91 0.89 0.85 0.94 0.93 0.93 0.93 0.91 0.89	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42 3.85 4.93 4.38 3.34 3.34 3.34 3.34	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.99 0.98 0.92 0.93 0.96 0.98 0.99 0.98 0.99 0.98 0.99 0.98 0.99 0.98 0.99 0.98 0.99 0.98 0.99 0.98 0.99 0.98 0.98 0.99 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.99 0.98 0.99 0.98 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.99 0.99 0.99 0.92 0.92 0.92 0.99 0.99 0.99 0.92 0.99 0.99 0.99 0.99 0.92 0.99 0.99 0.99 0.99 0.99 0.92 0.99	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11 5.13 6.98 4.05 5.05 3.31 4.67	0.93 0.91 0.97 0.98 0.81 0.73 0.98 0.86 0.97 0.82 0.99 0.97 0.77 0.86 0.91 0.94 0.90 0.93 0.96 0.99 0.97 0.93 0.96 0.99 0.97 0.98 0.95 0.95
tubal Canyon p Breton Canyon p Breton Canyon p Breton Canyon p Breton Canyon algada Canyon onterey Canyon caze-Duthiers Canyon caze-Duthiers Canyon tit Rhône Canyon arseille Canyon arseille Canyon te Canyon azaré Canyon ill Creek Canyon bles d'Olonne Canyon bles d'Olonne Canyon bittard Canyon scay 1 scay 2 scay 3 eland Trough 1 eland Trough 3 awson Canyon box Scotia 1	38.109 44.174 36.414 39.664 39.371 36.344 42.296 42.525 42.835 42.519 39.581 36.023 35.923 46.030 50.153 47.943 47.023 47.173 46.850 54.310 54.406 54.486 42.680 42.597	-9.903 -3.597 -8.571 -124.594 -124.616 -122.918 4.105 4.781 5.306 4.257 -10.221 -122.349 -122.126 -4.559 -13.237 -10.207 -6.740 -6.946 -6.134 -12.518 -12.107 -11.895 -60.880 -60.698	Shelf indenting Shelf indenting Slope bound Slope bound	1.5E+03 7.2E+03 9.6E+02 2.7E+03 1.2E+03 1.8E+03 3.3E+03 9.9E+02 4.6E+02 6.5E+02 3.0E+03 9.8E+02 1.1E+03 9.9E+03 2.2E+04 1.8E+03 1.8E+03 1.8E+03 1.1E+03 5.7E+02 1.3E+03 1.1E+03 2.3E+03	0.10 0.23 0.32 0.15 0.17 0.43 0.48 0.41 0.15 0.16 -0.32 0.15 0.03 0.43 0.51 0.83 0.51 0.83 0.52 0.70 0.11 0.07 0.26 0.54 0.35	1.00 1.00 0.98 1.00 0.99 0.99 1.00 0.99 0.97 1.00 0.98 1.00 0.98 1.00 0.98 1.00 0.99 0.97 0.96 0.95 1.00 0.99 0.95 1.00 0.99 0.99 0.04 1.00 0.99	0.30 0.17 0.15 0.11 0.61 0.02 0.18 0.47 0.31 0.38 0.12 0.14 0.38 -0.32 0.50 0.35 0.49 0.21 0.38 0.21 0.38 0.33 0.13 0.42 -0.01 0.09	0.78 0.72 0.92 0.70 0.88 0.80 0.91 0.95 0.92 0.80 0.56 0.92 0.94 0.95 0.83 0.91 0.89 0.85 0.91 0.93 0.93 0.93 0.93 0.91	3.50 1.74 3.70 2.04 2.93 3.02 1.60 1.94 3.99 3.40 3.69 2.72 2.09 7.74 1.17 2.68 3.49 6.99 5.42 3.85 4.93 4.38 3.34 3.34	0.99 1.00 0.98 1.00 0.99 0.98 0.98 0.97 0.96 0.98 0.98 0.98 0.98 0.99 0.98 0.96 0.92 0.82 0.92 0.82 0.92 0.92 0.92 0.92 0.92 0.99 0.99 0.9	3.81 7.21 3.08 2.69 3.12 5.61 2.83 4.54 4.63 4.96 8.79 3.42 1.58 8.57 1.65 5.94 9.01 9.78 2.11 5.13 6.98 4.05 5.05 3.31	0.93 0.91 0.97 0.98 0.93 0.81 0.73 0.98 0.97 0.97 0.97 0.97 0.94 0.90 0.93 0.90 0.93 0.96 0.99 0.97 0.98 0.99 0.97 0.98