

Confidence Assessment Scoring System

Confidence field	Confidence group	Confidence question	Comments
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Remote sensing data collection

RemoteTechnique	How good is the remote sensing?	Were the techniques used appropriate for the ground type?	<p>An assessment of whether the remote technique(s) used to produce this map were appropriate to the environment they were used to survey. If necessary, adjust your assessment to account for technique(s) which, although appropriate, were used in deep water and consequently have a significantly reduced resolution (i.e size of footprint):</p> <p>3 = technique(s) highly appropriate 2 = technique(s) moderately appropriate 1 = technique(s) inappropriate</p>
RemoteCoverage	How good is the remote sensing?	Was the ground covered appropriately?	<p>An assessment of the coverage of the remote sensing data including consideration of heterogeneity of the seabed: (See Coverage x Heterogeneity matrix below)</p> <p>Coverage scores – use these to determine coverage then combine with heterogeneity assessment to derive final scores</p> <p>3 = good coverage; 100% (or greater) coverage or AGDS track spacing <50m 2 = moderate coverage; swath approx 50% coverage or AGDS track spacing <100m 1 = poor coverage; large gaps between swaths or AGDS track spacing >100m</p> <p>Final scores</p> <p>3 = good coverage OR moderate coverage + low heterogeneity 2 = moderate coverage + moderate heterogeneity OR poor coverage + low heterogeneity 1 = moderate coverage + high heterogeneity OR poor coverage +</p>

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			moderate or high heterogeneity
RemotePositioning	How good is the remote sensing?	How were the positions determined for the remote data?	An indication of the positioning method used for the remote data: 3 = differential GPS 2 = GPS (not differential) or other non-satellite 'electronic' navigation system 1 = chart based navigation, or dead-reckoning
RemoteStdsApplied	How good is the remote sensing?	Were standards applied to the collection of the remote data?	An assessment of whether standards have been applied to the collection of the remote data. This field gives an indication of whether some data quality control has been carried out: 3 = remote data collected to approved standards 2 = remote data collected to 'internal' standards 1 = no standards applied to the collection of the remote data
RemoteVintage	How good is the remote sensing?	How recent are the remote data?	An indication of the age of the remote data: 3 = < 5yrs old. 2 = 5 to 10 yrs old. 1 = > 10 years old

Ground-truth data collection

BGTTechnique	How good is the ground-truthing?	Were the techniques used appropriate for the habitats encountered?	An assessment of whether the ground-truthing techniques used to produce this map were appropriate to the environment they were used to survey. Use scores for soft or hard substrata as appropriate to the area surveyed. Soft substrata predominate (i.e. those having infauna and epifauna) 3 = infauna AND epifauna sampled AND observed (video/stills, direct human observation) 2= infauna AND epifauna sampled, but NOT observed (video/stills, direct human observation) 1 = infauna OR epifauna sampled, but not both. No observation. Hard substrata predominate (i.e. those with no infauna) 3 = sampling included direct human observation (shore survey or
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			<p>diver survey) 2 = sampling included video or stills but NO direct human observation 1 = benthic sampling only (e.g. grabs, trawls)</p>
PGTTechnique	How good is the ground-truthing?	How appropriate were the sampling techniques to determining the geophysical nature of the seabed?	<p>An assessment of whether the combination of geophysical sampling techniques was appropriate to the environment they were used to survey. Use scores for soft or hard substrata as appropriate to the area surveyed.</p> <p>Soft substrata predominate (gravel, sand, mud) 3 = full geophysical analysis: granulometry and/or geophysical testing (e.g. penetrometry, shear strength) 2 = sediments described following visual inspection of grab or core samples (e.g. slightly shelly, muddy sand) 1 = sediments described on the basis of remote observation (by camera).</p> <p>Hard substrata predominate (rock outcrops, boulders, cobbles) 3 = sampling included in-situ, direct human observation (shore survey or diver survey) 2 = sampling included video or photographic observation, but NO in-situ, direct human observation 1 = samples obtained only by rock dredge (or similar)</p>
GTPositioning	How good is the ground-truthing?	How were the positions determined for the ground-truth data?	<p>An indication of the positioning method used for the ground-truth data: 3 = differential GPS 2 = GPS (not differential) or other non-satellite 'electronic' navigation system 1 = chart based navigation, or dead-reckoning</p>
GTDensity	How good is the ground-truthing?	Was the density of sampling adequate?	<p>An assessment of what proportion of the polygons or classes (groups of polygons with the same 'habitat' attribute) actually contain ground-truth data: 3 = Every class in the map classification was sampled at least 3 times 2 = Every class in the map classification was sampled 1 = Not all classes in the map classification were sampled (some</p>

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			classes have no ground-truth data)
GTStdsApplied	How good is the ground-truthing?	Were standards applied to the collection of the ground-truth data?	An assessment of whether standards have been applied to the collection of the ground-truth data. This field gives an indication of whether some data quality control has been carried out: 3 = ground-truth samples collected to approved standards 2 = ground-truth samples collected to 'internal' standards 1 = no standards applied to the collection of ground-truth samples
GTVintage	How good is the ground-truthing?	How recent are the ground-truth data?	An indication of the age of the ground-truth data: 3 = < 5yrs old 2 = 5 to 10 yrs old 1 = > 10 years old

Data interpretation

GTInterpretation	How good is the interpretation?	How were the ground-truthing data interpreted?	An indication of the confidence in the interpretation of the ground-truthing data. Score a maximum of 1 if physical ground-truth data but no biological ground-truth data were collected: 3 = Evidence of expert interpretation; full descriptions and taxon list provided for each habitat class 2 = Evidence of expert interpretation, but no detailed description or taxon list supplied for each habitat class 1 = No evidence of expert interpretation; limited descriptions available
RemoteInterpretation	How good is the interpretation?	Were the remote data appropriately interpreted?	An indication of the confidence in the interpretation of the remotely sensed data: 3 = Appropriate technique used and documentation provided 2 = Appropriate technique used but no documentation provided 1 = Inappropriate technique used Note that interpretation techniques can range from 'by eye' digitising of side scan by experts to statistical classification techniques.

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<p>DetailLevel</p>	<p>How good is the interpretation?</p>	<p>What level of information is contained?</p>	<p>The level of detail to which the 'habitat' classes in the map have been classified: 3 = Classes defined on the basis of detailed biological analysis 2 = Classes defined on the basis of major characterising species or lifeforms 1 = Classes defined on the basis of physical information, or broad biological zones</p>
<p>MapAccuracy</p>	<p>How good is the interpretation?</p>	<p>How accurate is the map at representing reality?</p>	<p>A test of the accuracy of the map: 3 = high accuracy, proven by external accuracy assessment 2 = high accuracy, proven by internal accuracy assessment 1 = low accuracy, proved by either external or internal assessment OR no accuracy assessment made</p>

Notes

Remote Coverage

The score for 'RemoteCoverage' should take account of both coverage **and** heterogeneity and this can be simply achieved in a *coverage x heterogeneity* matrix, as illustrated below:

		Heterogeneity		
		Low	Moderate	High
Coverage	Poor	2	1	1
	Moderate	3	2	1
	Good	3	3	3