

Data Entry Form Content

The following section present and describe the fields in the data entry form.

The screenshot displays the 'eSPACE Attribution Form' window. At the top, there are input fields for 'Length (m):' and 'Width (m):'. Below this, the form is organized into three vertical columns: 'Upper Intertidal', 'Supratidal' (with a blue italicized link '[No Supratidal](#)'), and 'Backshore' (with a blue italicized link '[No Backshore](#)'). Each column contains a series of dropdown menus for 'Form', 'Slope', 'Height', 'Substrate 1', 'Substrate 2', 'Substrate 3', 'SCAT Class', and 'eSPACE Class'. Below these dropdowns are text areas for 'Comments'. At the bottom of the form, there are three sections: 'LI/MI' with dropdowns for 'MI SCAT Class' and 'LI SCAT Class'; 'Access' with dropdowns for 'Type', 'Direct Alongshore?', and 'Direct Backshore?'; and 'General Characteristics' with dropdowns for 'Fetch' and 'Exposure'. A 'Confidence' section includes a dropdown and a text input field. A large 'General Comments' text area is located below these sections. At the very bottom, there are 'OK', 'Cancel', and 'No Errors' buttons.

eSPACE data entry form.

Length

The length of the segment (automated).

Width

The width of a shoreline segment is the estimate of the representative across-shore dimension (in meters) of the segment. The width corresponds to the average (representative of the entire segment) across-shore distance of the SI zone and the entire intertidal zone (UI, MI, LI) combined. Interpreters should use the video (for narrow shorelines) and the 50k toporama product (for wide shorelines not fully visible on the video) to determine the combined width of the SI and intertidal zones. Combined with the automated segment length measure, this provides an estimate of the potential area that would be affected by an environmental emergency.

The average across-shore width of the segment is rounded to intervals of:

- 5 m for shores ≤ 25 m wide (e.g., 5, 10, 15, 20, 25);
- 25 m for shores 25 m to 500 m wide (e.g., 50, 75, 100, ..., 475, 500);
- 250 m for shores ≥ 500 m wide (e.g., 750, 1000, 1250, ...).

The maximum allowable width in the Data Entry Form is 9999 meters.

Form (UI, SI, Bs)

The form refers to the coastal character or geomorphological form of the zone. The choice of form should be consistent with the choice of shoreline type. For example, a mixed and coarse sediment beach shoreline should typically have "Beach" as the form. However, additional entries allow the interpreter to be more precise, if appropriate (such as spit, tombolo, barrier beach, islet, etc.).

From the drop-down menu, the interpreter selects the most appropriate form for each zone (UI, SI and Bs) from one of the following:

- Bank: shoreline/sloping ground along the edge of a river, creek or stream. Appropriate for all river bank shorelines (sand, mud/clay, boulder, mixed sediment, pebble/cobble, vegetated).
- Barrier Beach: ridge or offshore bar that runs roughly parallel to the shore, from which it may be separated by a lagoon.
- Beach: gently sloping zone of unconsolidated material, typically with a slightly concave profile, extending landward from the low-water line to the place where there is a definite change in material or physiographic form (such as a cliff) or to the line of permanent vegetation (usually the effective limit of the highest storm waves). Appropriate for all beach shorelines (boulder, mixed sediment, pebble/cobble, sand).
- Berm: level space, shelf or raised barrier separating two areas or slopes. Fluvial environment only.
- Braided: channel type that consisting of a network of small channels separated by small and often temporary braid bars. The sediment is

commonly coarse, which requires fast flow and steep gradients for the sediment to be transported.

- Canyon: deep ravine between cliffs often carved from the landscape by a river.
- Cliff/Hill: Cliff: sloped face $>35^\circ$ and in some areas erosion can create notches, caves, sea-arches and sea-stacks. (Owens, 2010) Hill: strongly sloped landform that extends above the surrounding terrain. Appropriate for bedrock cliff/vertical, sediment cliff, ice-poor and ice-rich tundra cliff shorelines.
- Delta: forms at the mouth of a river where it flows into the ocean. Deltas are formed from the deposition and accumulation of the sediments carried by the river as the flow leaves the mouth of the river (confined) into the ocean (open).
- Dune: hill of sand built by wind or wave transport.
- Flat/Lowland: an extensive expanse of land nearly absent of local topography/relief. Appropriate for marsh, swamp, peatland, all tidal flats (mixed and coarse sediment, mud, sand) and inundated low-lying tundra shorelines.
- Flood Plain Valley: flat or nearly flat land adjacent to a stream or river that stretches from the banks of its channel to the base of the enclosing valley walls. The flood plain experiences flooding during periods of high discharge, such as the spring melt. Flood plain valleys are typical of meandering rivers.
- Ice Push: when pack ice is pushed on to the shore, it striates, planes and gouges and, after melting, leaves deposits in the form of mounds or ridges called ice-push ridges.
- Islet: a very small island.
- Lagoon: body of shallow water separated from the sea by a bar or barrier.
- Man-Made: anthropogenic structures or materials. Appropriate for man-made solid and man-made permeable shorelines.
- Meander: bend in a sinuous (meandering) river.
- Platform: near horizontal bedrock with an overall slope $<5^\circ$ (Owens, 2010). Appropriate for bedrock platform shorelines
- Raised Beach Ridges: old beaches raised above the shoreline by a relative fall in the sea level.
- Ramp: inclined bedrock slope in the range of $>5^\circ$ to $<35^\circ$ (Owens, 2010). Appropriate for bedrock sloping/ramp shorelines.
- River Inlet/Channel: physical confines of a river, including the river bed and banks.
- Sloped: inclined terrain. Appropriate for sloped tundra, shrubland, forest, herbaceous, etc shorelines.
- Spit: a small point or narrow embankment of land, commonly consisting of sand or gravel, deposited by longshore transport and having one end attached to the mainland and the other terminating in open water; a finger-like extension of the beach. (Jackson, 1997)

- Tombolo: a sand or gravel bar that connects an island with the mainland or with another island (Jackson, 1997).

Slope (UI, SI and Bs)

The slope is defined as the across-shore rate of change in elevation for a given zone and is estimated from the videography.

From the drop-down menu, the interpreter selects the segment's representative slope for each zone from one of the following:

- Weak: < 5 degrees, nearly flat
- Moderate: 5 - 35 degrees, walkable incline
- Strong or Vertical: > 35 degrees, incline difficult or not walkable
- Terraced: Combination of slopes or step-like cliff(s)/ramp(s) and platform(s) within the same zone

Height (UI, SI, Bs):

The height value indicates the height of a zone above the previous zone (e.g., when there is a cliff separating the SI and the backshore, the interpreter specifies the height of this cliff in the backshore "height" field). A value is entered into this field only when a strong/vertical (e.g., cliff or micro-cliff) or terraced slope is present. It is **not** used to represent the overall change in elevation within a zone.



Side profile of a shoreline with a cliff separating the Bs and SI zones and a micro-cliff separating the SI and UI zones.

If a micro-cliff is present, the interpreter adds a comment in the Comments field of the appropriate zone. Note: a micro-cliff is less than 2 meters in height and is composed of unconsolidated materials such as sand or pebbles (not bedrock).

From the drop-down menu, the interpreter selects one of the following:

- N/A
- < 1m
- 1 - 5m
- > 5m

Substrate (UI, SI, Bs).

Primary substrates/land cover observed within each zone (UI, SI and Bs). From the drop-down menus, the interpreter selects up to three substrate types. The substrate types are recorded in order of decreasing predominance and should reflect on the range of grain sizes present.

The substrate is not limited to soil such as mud. It also includes vegetation and man-made materials. If the feature is man-made, the interpreter selects the most appropriate substrate type/material that makes up the feature (e.g., riprap composed of boulders, wooden wharf composed of wood, roads composed of asphalt or gravel (granules).

From the drop-down menus, the interpreter selects from the following:

- Asphalt: black man-made material primarily used for road surfaces.
- Bare/Barren: exposed soil, dead or burned vegetation.
- Bedrock: exposed native consolidated rock.
- Boulder: detached rock mass larger than cobble (Bates and Jackson, 1980).
- Bryophyte: mosses, liverworts, hornworts. Small, non-vascular land plants, that grow closely packed together in mats or cushions on rocks, soil, and the trunks and leaves of forest trees (Glime, 2007).
- Cobble: rock fragment larger than a pebble and smaller than a boulder, being somewhat rounded or otherwise modified in the course of transport (Bates and Jackson, 1980).
- Concrete: grey man-made material composed of cement, aggregates and water commonly used in masonry.
- Debris: garbage such as bottles, cans and styrofoam that has washed up on shore.
- Granule: rock fragment larger than a very coarse sand grain and smaller than a pebble.
- Herbaceous: plants that have leaves and stems that die down to soil level at the end of the growing season. They have no persistent woody components above ground. They include graminoids (grasses, sedges, rushes) and forbs.
- Lichen: composite organism consisting of a symbiotic organism composed of a fungus with a photosynthetic partner, usually either green algae or cyanobacteria.
- Mud/Silt/Clay: a mixture of water and silt or clay-sized earth material with the consistency ranging from semi-fluid to soft plastic; a wet, soft, soil or earthy mass, mire or sludge; an unconsolidated sediment consisting of clay and/or silt, together with other dimensions (sand), mixed with water, without connotation as to composition. (Bates and Jackson, 1980)
- Organic/Peat/Soil: Organic: organic debris such as leaf or woody debris. Peat: a type of soil that contains a high amount of dead organic matter, mainly plants not fully decomposed that have

accumulated over thousands of years. Soil: natural layered body of primarily mineral constituents that influences/has been influenced by plant roots.

- Pebble: rock fragment larger than a granule and smaller than cobble, being somewhat rounded or otherwise modified by abrasion in the course of transport. (Bates and Jackson, 1980)
- Sand: rock fragment or detrital particle smaller than a granule and larger than a coarse silt grain. (Bates and Jackson, 1980)
- Shrub-(C, D or M)¹: perennial woody plant distinguished from trees by its multiple stems and usually shorter height. When both coniferous shrubs and deciduous shrubs are present in comparative proportions, the substrate is considered to be mixed shrubs.
- Snow/Ice: Snow: unconsolidated ice crystals accumulated through precipitation. Typically, opaque white in colour. Ice: water frozen into a solid state. Consolidated. Colour ranges from transparent/clear to opaque bluish-white.
- Steel: man-made alloy of iron and carbon commonly used for infrastructure.
- Tree-(C, D or M)⁴: perennial woody plant distinguished from shrubs by its single stem. When both coniferous trees and deciduous trees are present in comparative proportions, the substrate is considered to be mixed trees.
- Water: pools, channels, or standing water in wetlands as well as water bodies.
- Wood: driftwood or man-made structures made of wood.

Note: When describing the Bs, the interpreter should consider no more than 1 km away from the S/Bs limit. This rule applies to **all** Bs fields.

The across-shore zones can be characterized with more than one substrate. For instance:

1. The UI zone is characterized with a thin vegetated fringe (marsh) in the upper part of the UI zone **and** a mud flat in the lower part of the UI zone. In this case, the primary substrate is "Mud/Silt/Clay", the secondary substrate is "Herbaceous" and the tertiary substrate is "N/A".
2. A mixed and coarse sediment flat with sediments ranging from sand to boulders, with sand predominating. In this case, the primary substrate is "Sand", the secondary substrate may be "Pebbles" and the tertiary substrate is "Boulder" (representing the range of grain sizes present).
3. The Bs zone is dominated by exposed bedrock alternating with patches of coniferous forest. In this case the primary substrate is "bedrock", the secondary substrate is "Tree-C" and the tertiary substrate is "N/A".

¹ -C, -D, and -M refer to coniferous, deciduous and mixed, respectively.

Note that a change in colour and/or texture is helpful to discriminate between the vegetation types on the videos:

- Herbaceous vegetation appears in various green tones and has a smooth (uniform) texture.
- Shrubs appear in light green tones and have a rounded shape.
- Trees appear in dark green tones and have a medium to rough texture depending on the density.

SCAT Class (LI, MI, UI, SI)

Dominant shoreline type of the LI, MI, UI and SI zones for SCAT purposes. The primary parameter that defines the shoreline type is the substrate/material, such as sand, mud or herbaceous vegetation that is present in the zone. The secondary parameter is the form. The presence or absence of sediments as well as vegetation are key factors to be considered while selecting the shoreline and backshore type (Owens, 2010).

From the drop-down menu, the interpreter selects the primary shoreline type for each zone from one of the following SCAT shoreline types:

SCAT Class	LI/MI	UI/SI
Bedrock Cliff/Vertical		
Bedrock Platform		
Bedrock Sloping/Ramp		
Boulder Beach or Bank		
Driftwood		
Eelgrass		x
Fine-Grained Scarred or Ridged Shore		
Glacier Ice		
Ice-Poor Tundra Cliff		
Ice-Rich Tundra Cliff		
Ice Shelf		
Intertidal Boulder Barricade		x
Inundated Low-Lying Tundra		
Man-Made Permeable		
Man-Made Solid		
Marsh		
Mixed and Coarse Sediment Tidal Flat		
Mixed Sediment Beach or Bank		
Mud/Clay Bank		
Mud Tidal Flat		
Peat Shoreline		

Pebble/Cobble Beach or Bank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sand Beach or Bank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sand Tidal Flat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sediment Cliff	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Snow/Ice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vegetated Bank	x	<input checked="" type="checkbox"/>

The choice of UI SCAT Class should be consistent with the primary substrate for the UI zone. For example, a sand beach should have sand as the primary substrate.

If the SI shoreline type happens to be one of the additional Backshore types listed in the eSPACE Class field, the interpreter should select "N/A" as the SI SCAT Class.

eSPACE Class (SI, Bs)

Dominant shoreline and backshore type of the SI and Bs zones suitable for eSPACE Earth Observation analysis. Note: The SI eSPACE Class will not necessarily always be the same as the SI SCAT Class field because the available SCAT Class entries do not always properly reflect the shoreline type, especially with regards to some vegetated "backshore" land cover types sometimes encountered in the SI zone (e.g., Shrubland).

For the SI zone, the interpreter selects the primary shoreline type from the drop-down menu. For the Bs zone, the interpreter selects the primary and secondary backshore types present within the segment. The available eSPACE classes are:

eSPACE Class	SI	Bs
Bedrock Cliff/Vertical	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bedrock Platform	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bedrock Sloping/Ramp	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boulder Beach or Bank	<input checked="" type="checkbox"/>	x
Bryoids	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cut Block	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Driftwood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fine-Grained Scarred or Ridged Shore	<input checked="" type="checkbox"/>	x
Forest	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Glacier Ice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Herbaceous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ice-Poor Tundra Cliff	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ice-Rich Tundra Cliff	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Ice Shelf	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ice-Wedge Polygons	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Inundated Low-Lying Tundra	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Man-Made Permeable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Man-Made Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marsh	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mixed and Coarse Sediment Tidal Flat	<input checked="" type="checkbox"/>	x
Mixed Sediment Beach or Bank	<input checked="" type="checkbox"/>	x
Mud/Clay Bank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mud Tidal Flat	<input checked="" type="checkbox"/>	x
Natural Barren Surface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Peatland	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Peat Shoreline	<input checked="" type="checkbox"/>	x
Pebble/Cobble Beach or Bank	<input checked="" type="checkbox"/>	x
Post-Fire Regeneration Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sand Beach or Bank	<input checked="" type="checkbox"/>	x
Sand Tidal Flat	<input checked="" type="checkbox"/>	x
Sediment Cliff/Dune/Talus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Shrubland	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Snow/Ice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Swamp	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tundra	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water bodies	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The choice of SI eSPACE Class and Bs eSPACE Class 1 should be consistent with the primary substrate of the respective across-shore zone. For example, if "Bryoids" is selected for the Bs eSPACE 1 Class, then "Bryophytes" or "Lichen" should be selected as the primary substrate. An error message appears if the primary substrate is inconsistent with the choice of shoreline/backshore class for the associated across-shore zone. See **Error! Reference source not found.** for a list of acceptable primary substrates for associated shoreline/backshore classes.

If the SI shoreline type happens to be one of the additional Backshore types listed in the eSPACE class field, the interpreter should select N/A as the SI SCAT Class and specify the appropriate SI eSPACE Class. Otherwise, the SI SCAT and eSPACE classes should match.

In contrast, Bs eSPACE Classes 1 and 2 are complementary in nature. The interpreter selects the two (if applicable) main backshore types present within a segment, in order of predominance. If a secondary backshore type is not present within a given segment, the interpreter selects "N/A" for Bs eSPACE Class 2.

The interpreter should also ensure that the secondary or tertiary substrates are consistent with the choice of Bs eSPACE 2 class. For example, a segment's backshore is dominated by shrubby and herbaceous tundra interspersed with small water bodies. In this case, Bs eSPACE Class 1 would be "Tundra" and Bs eSPACE Class 2 would be "Water Bodies". The associated primary backshore substrate would be "Shrubs", the secondary substrate would be "Herbaceous" and the tertiary substrate would be "Water".

Comments (UI, SI, Bs)

The interpreter should add any relevant comments regarding the UI, SI or Bs zones for SCAT purposes, as well as for remote sensing needs.

Note: The UI,SI and Bs comment boxes can contain up to 400 characters

- If not uniform, describe the distribution of vegetation/substrates within the zone. For example:
 - o herbaceous patches on sand flat
 - o upper part of UI zone is marsh (~ 15 meters wide), lower part of UI zone is mud flat
 - o small peat shoreline section at start of segment
 - o segment is mostly inundated low-lying tundra, but there are a several driftwood deposits
 - o segment alternates between bedrock outcrops and small pocket sand beaches
- Indicate if a microcliff is present
- Indicate the presence of a sand bar
- If the form is man-made, the interpreter specifies in the Comments field of the appropriate zone the type/specific nature of the man-made feature or structure observed (e.g., riprap, seawall, wharf, etc.).
- Add a note if ice scour is present

Access – Type

This indicates the mode(s) of transportation the SCAT team would use to travel to (arrive at) the segment.

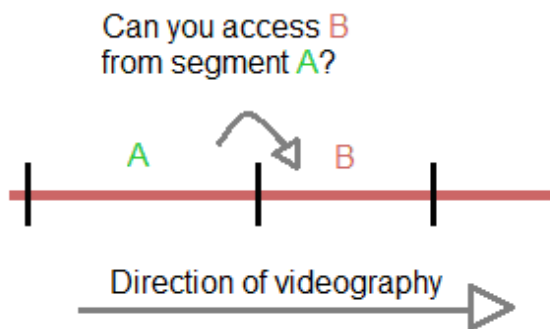
From the drop-down check box menu, the interpreter selects from the following options:

- Boat
- Foot
- Helicopter
- Machinery
- Passenger Vehicle
- Seaplane

The most common access is by helicopter and boat. The interpreter selects these entries if both access types are possible. Helicopter is the favoured access type because it is the fastest, most manoeuvrable and can be used virtually anywhere (weather and availability permitting). Helicopters are assumed to have floats. If boat access is not possible, the interpreter should provide an explanation in the General Comments field. Note: Boat access to a segment is not possible if there is an intertidal boulder barricade or if there are wide intertidal flats (too shallow) present. Seaplane access may be specified, but is also limited by the presence of intertidal boulder barricades and length of open water for landing/takeoff. Note: Foot, machinery and passenger vehicle access are uncommon, unless a segment is located in close proximity to a populated area (roads or trails present).

Access - Direct Alongshore

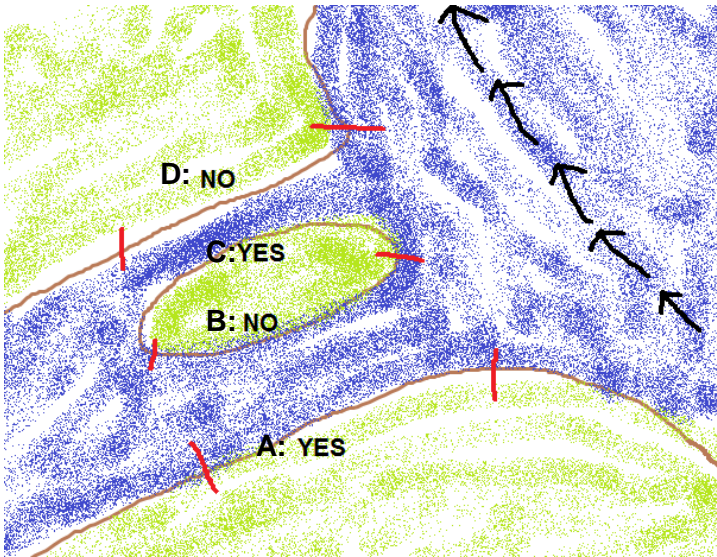
This indicates whether the UI zone of a given segment can be accessed **by foot** by traversing through the UI, SI or MI of the previous segment (Lamarche *et al.* 2007) (where 'previous segment' refers to the previous shoreline segment in the videography) (**Error! Reference source not found.**).



Assess the alongshore access of B from A.

From the drop-down menu, the interpreter selects Yes or No.

There is no direct alongshore access if there is a steep cliff, river or wetland with high water table blocking a person's foot access from one segment to the next or if the segment itself is a cliff.



Example of alongshore access values for an island.

Access - Direct Backshore

This indicates whether the UI zone of a given segment can be easily accessed **by foot** from the backshore of the same segment (Lamarche *et al.* 2007).

From the drop-down menu, the interpreter selects Yes or No.

There is no direct backshore access if there is a steep cliff, dense coniferous forest or wetland with high water table blocking a person's foot access from the Bs to the UI.

Fetch

Fetch is the extent of the segment's exposure to waves (energy).

From the drop-down menu, the interpreter selects:

- Strong
- Medium
- Weak

The fetch is a function of the segment's distance to the nearest offshore obstacle and of the segment's angle of opening (e.g., closed bay vs peninsula).

Fetch strength

Distance to offshore obstacle	Angle of opening (facing water)			
	< 45°	45-120°	121-180°	>180°
<5km	Weak	Weak	Weak	Weak
5-10km	Weak	Medium	Medium	Medium
10-50km	Medium	Medium	Strong	Strong
>50km	Strong	Strong	Strong	Strong

For instance:

1. Segment in a closed bay with offshore obstacle at 10 km → **Weak** fetch
2. Segment with open water (no obstacle such as island or sand bar) for > 50 km offshore → **Strong** fetch
3. Segment with wide intertidal zone (2 km) with no offshore obstacle → **Strong** fetch (even though the intertidal zone is flat and shallow)
4. 180° open segment with obstacle 25 km offshore → **Medium** fetch

Exposure

Coastal processes which affect/influence a segment's intertidal zone or which could affect/endanger someone standing on the shoreline (e.g., rock slide).

From the drop-down check box menu, the interpreter selects the primary exposure process from the following options:

- Avalanche
- Erosion
- Landslide
- Rock Slide
- Sedimentation
- Sediment Transportation
- Stream

If no exposure process is discernable by the interpreter, "N/A" is selected. Sedimentation refers to the net accumulation of sediments whereas Sediment Transportation refers to the constant reworking of sediments without a net accumulation. For example, a sand beach is susceptible to sediment transportation whereas a tombolo is susceptible to sedimentation.

Confidence

Each segment is assigned a confidence level based on the interpreter's certainty or 'confidence' in the video interpretation and data entered into the form. There are two choices, low and high, representing low or high confidence respectively.

Low confidence level: Assigned when the interpreter hesitates on the limit of the three zones and/or is not certain of the data entered into the form. The segment needs to be reviewed by a second interpreter. A low confidence may also be given for a shoreline segment which is far away or difficult to see in the video.

High confidence level: Assigned when the interpreter feels there is no need for the segment to be reviewed.

If a low confidence level is assigned, the interpreter specifies the reason by checking the corresponding box(es) for the fields that need to be reviewed in the drop-down check box menu on the right of the Confidence field. The interpreter can also add an explanatory comment in the General Comments box:

- SCAT Class/eSPACE Class
- Substrate
- Access
- General Characteristics
- Form/Slope/Height
- Segment Boundaries

General Comments

The interpreter should add any additional relevant information regarding the segment for SCAT purposes, as well as for remote sensing needs.

Note: The general comments box can contain up to 400 characters.

- Indicate the presence of an offshore subtidal (submerged) bar (affects the fetch)
- Indicate if a new shoreline section has been digitized
- Indicate if a barrier beach/island appears breached on the video but is unbreached in the shoreline vector
- Indicate across-shore zone and specific reason for low confidence (e.g., segment too far/hard to see; SI substrate: either sand or mix sediment; UI class: not sure if tide infiltrates marsh;)
- Indicate reason if access by helicopter or boat is not possible (e.g., wide shallow intertidal flat prevents access by boat)