

## Appendix A: Metadata Requirements for ECS Samples

The minimum acceptable sample metadata, to be completed at sea and returned to the Samples Repository with ECS samples is one fully completed line on the station data or core worksheet of a SESAR Dredge or Core spreadsheet for each core, dredge, or other geologic sample collected during the cruise.

Attribute (red=mandatory)	Definition
<b>IGSN</b>	International Geo Sample Number specific to the sample
<b>Name</b>	ECS name for a sample – e.g. HLY0805-DR1
<b>Other Name</b>	(Optional) other name used for a sample
<b>Current Archive</b>	ECS Samples Repository for shipboard use, to be modified by Samples Curator to the name of the institution to which a sample is loaned/temporarily resides, e.g. Stanford
<b>Original Archive</b>	ECS Samples Repository
<b>Sampling Method</b>	Controlled vocabulary, see worksheet LIST>Sampling. Method
<b>Sampling Method Description*</b>	* Mandatory only if not fully described by Sampling Method
<b>Description</b>	Preliminary visual description of the sample if shipboard entry, more detailed characterization if post-cruise
<b>Comment*</b>	* Mandatory only if necessary to adequately describe the sample, e.g. details of a partial recovery
<b>Latitude (start)</b>	Decimal Degrees, negative for South
<b>Longitude (start)</b>	Decimal Degrees, negative for West
<b>Latitude (end)*</b>	* Mandatory only for dredges or trawls, form as above
<b>Longitude (end)*</b>	* Mandatory only for dredges or trawls, form as above
<b>Elevation min [meters]</b>	Negative for depth below sea surface, e.g. -3600
<b>Elevation max [meters]</b>	Negative for depth below sea surface, e.g. -3100
<b>Feature Type</b>	e.g. submarine fault block. For recommended terms, see worksheet LIST>Primary location
<b>Feature ID</b>	Name of the feature, e.g. Alpha Ridge
<b>Location Description</b>	e.g. South central border with Nautilus Basin
<b>Locality</b>	Name of a locality
<b>Locality Description</b>	e.g. Near top of ridge with 30 degree slope above debris from slump at contact with abyssal plain
<b>Cruise or Field Program</b>	The official ECS-designated cruise name, e.g. HLY0805
<b>Platform Type</b>	e.g. Ship
<b>Platform ID</b>	The official Rolling-Deck-to-Repository (R2R) ship name [http://www.rvdata.us/]
<b>Platform Description</b>	Optional additional information about the ship
<b>Collector/Chief Scientist</b>	The ECS-designated Chief Scientist
<b>Collection Date: Start</b>	e.g. 31-Aug-08
<b>Classification (USGS)</b>	Geologic classification of material (igneous, metasandstone, etc.)
<b>Tension*</b>	*Mandatory only for dredges, number and range of tension spikes from winch while dredging
<b>Core Length*</b>	*Mandatory only for cores

The minimum metadata required for each subsample identified for distribution within a dredge or core, whether at sea or by the ECS Samples Repository, is illustrated in the table below. Preferred metadata includes all known fields in a SESAR sample level worksheet within a SESAR Dredge or Core spreadsheet, as appropriate.

<b>Attribute (red=mandatory)</b>	<b>Definition</b>
<b>IGSN</b>	International Geo Sample Number for the sample
<b>Name</b>	Personal or Institutional name – e.g. HLY0805-DR1-IRD
<b>Other Name</b>	(Optional) other name used for a sample
<b>Current Archive</b>	ECS Samples Repository for shipboard use, to be modified by Samples Curator to the name of the institution to which a sample is loaned/temporarily resides, e.g. Stanford
<b>Original Archive</b>	ECS Samples Repository
<b>Sampling Method*</b>	*dredges, Controlled vocabulary, see SESAR dredge spreadsheet
<b>Sample Type*</b>	*cores, Controlled vocabulary, see SESAR core spreadsheet
<b>Sampling Method Description*</b>	Detailed description if not fully described by Sampling Method
<b>Size*</b>	*dredges only, Length, weight, other dimension of sample
<b>Size Unit*</b>	*dredges only; e.g. meters, kilograms
<b>Top Depth in Section (cm)*</b>	*core samples only
<b>Bottom Depth in Section (cm)*</b>	* core samples only
<b>Core Section Name*</b>	* core samples only
<b>Material Type</b>	See worksheet “Material Type” e.g.
<b>Classification</b>	If applicable, see worksheet “Classification”
<b>Field Name</b>	
<b>Description</b>	
<b>Comment</b>	
<b>Age_Min</b>	
<b>Age_Max</b>	
<b>GOT</b>	
<b>GOC</b>	
<b>Parent Type</b>	The “Name” of the dredge, core, from which sample is taken
<b>Parent IGSN</b>	Pasted from the Station Data IGSN Field if at sea/preassigned