SSDB and submitting data for your IODP proposal

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What is SSDB (ssdb.iodp.org)

- The Site Survey Data Bank is the tool through which proponents submit data in support of their IODP proposals
- SSDB also serves as a data resource for the community

Who is this session for?

- This presentation will focus on proponents submitting data for the Nov 1 data deadline

Topics

- Resources
- How to use SSDB and what's new
- Best practices
- Question and Answer

Resources

(available from ssdb.iodp.org/documents/proponent-info.php)

IODP Site Characterization Data Guidelines (PDF)

- Details of the types of site survey data **usually** required by the Science Evaluation Panel to judge if the scientific objectives of the site can be achieved.

How to Submit Data to SSDB

- Step-by-step instructions for using the SSDBproponent tool to upload files and submit your data package in SSDB

Standard IODP Confidentiality Policy

- How data confidentiality is managed in IODP

Finding and Using Analog Data

- How to access analog data from before the digital SSDB

Recommended SEGY Headers

For Single-Channel Seismic (SCS) or Multi-Channel Seismic (MCS) reflection data in SEGY format. **Note that if the header location does not follow the recommendation, proponents must provide a similar table in a separate document describing the location of all headers in their SEGY file**

Property	Bytes
Trace sequence number	1-4
Shot point (SP) number	17-20
Common Depth Point (CDP) number	21-24
Scalar to be applied to coordinates	71-72
(for SCS) Navigation coordinate (x) for SP	73-76
(for SCS) Navigation coordinate (y) for SP	77-80
Coordinate units	89-90
Record length (samples/trace)	115-116
Sample rate	117-118
(for MCS) Navigation coordinate (x) for CDP	181-184
(for MCS) Navigation coordinate (y) for CDP	185-188

Recommended Formats

Digital Seismic	SEGY with byte locations and EBSDIC header information
Echosounder or subbottom profiler	SEGY with byte locations and EBSDIC header information, KEB
Images (Graphics)	JPEG, TIFF, PDF, Portable Network Graphic (PNG) **No GeoTiffs**
Documents	PDF, Plain Text (ASCII)
Tables	PDF, Plain Text (ASCII)
Video	MPEG, Quicktime movie (MOV)
Digital Maps	NetCDF (GMT) GRD, Fledermaus SD or Scene
Logging Data	LAS, Plain Text (ASCII), in delimited columns
Navigation	Plain Text (ASCII), in delimited columns, UKOOA (data in decimal degrees)
Velocity	Plain Text (ASCII), in delimited columns and semblance plots (JPEG or PDF)

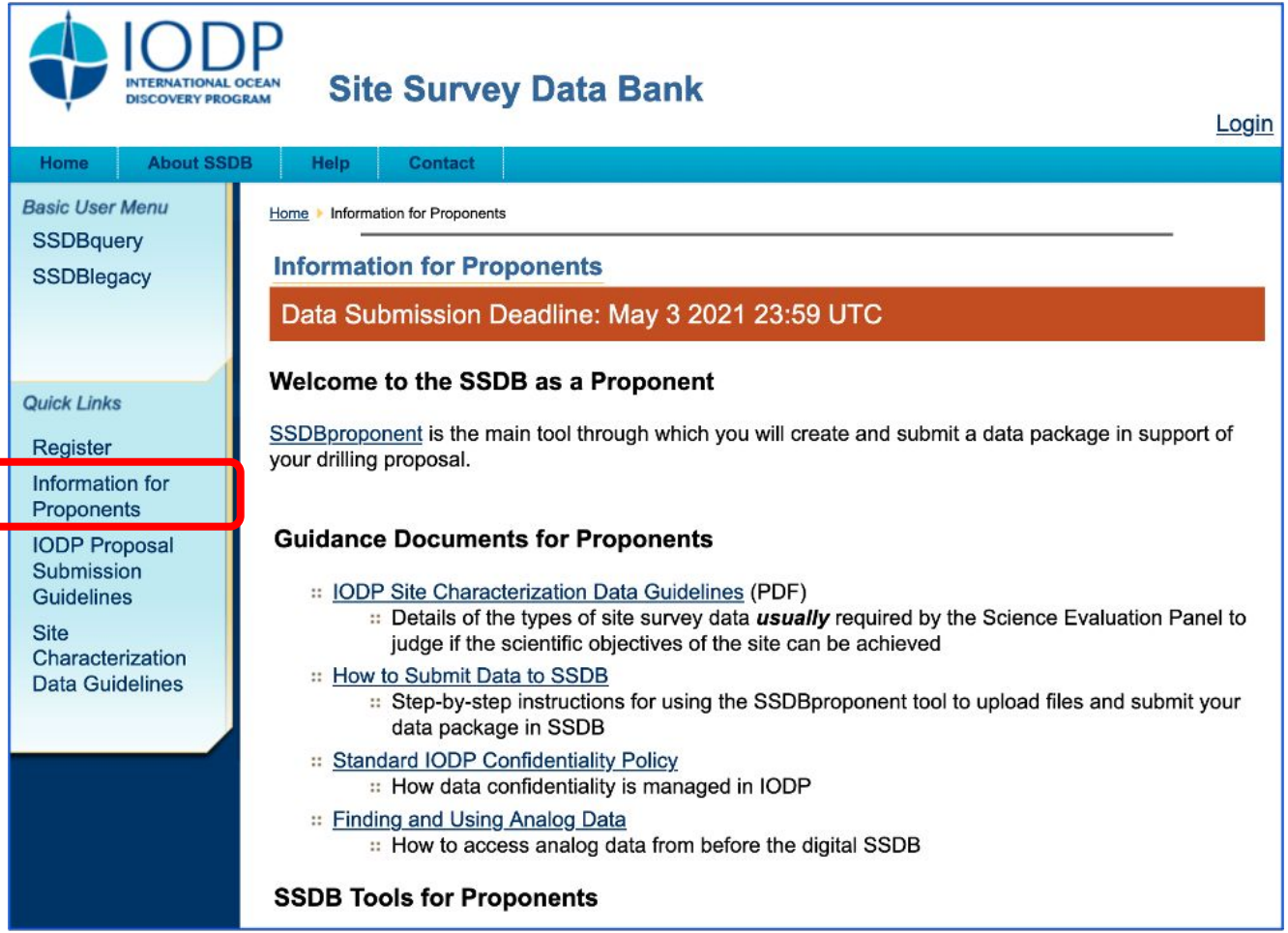
Expected Metadata

Metadata Field	Description
Site Names	The drill site(s) to which the file relates
Type	Is the file data, map, photo/video, or document/other
Format	e.g. plain text, PDF, SEGY, etc.
Data Owner	Who created/has intellectual ownership? Must include a given and family name, and ideally an institution. Only ascii characters allowed, no symbols/diacritics.
Description	Must include all additional information needed to understand the file. Up to 4000 characters, ascii only, no symbols/diacritics.
Access Control	Do you need to place a proprietary hold on this file, or is it available for public release? If the data requires a Non Disclosure Agreement, contact us before uploading the data.
Reason for Hold	If a Hold is requested, a justification must be provided
Start Time	When did the data collection period begin (leave as default if unknown)
End Time	When did the data collection period end (leave as default if unknown)
Georeferencing	The latitude/longitude bounds of the file, in decimal degrees, WGS84 referencing system. Georeferencing must match the file (e.g. most SEGY files should use a line, maps should use a bounding box).
Related Activity	IODP Proposal number, Expedition number, Drill Hole, or Cruise name of any related activity
Method	The method through which the data were collected. This will be a drop-down list that varies by data type.
Archive DOI/Persistent URL	If the file is archived in a recognized data repository, please provide the DOI, a persistent URL, or other globally unique identifier.

Expected Metadata, additional for SEGY

Metadata Field	Description
Seismic Line Name	The name or identifier of the seismic line
UTM Zone	UTM Zone, if SEGY is georeferenced in UTM. E.g. 31J
Horizontal Units	e.g., CDP, Shot point
Vertical Units	e.g., two way travel time, meters

ssdb.iodp.org



Tools on SSDB

Tool	Function
My Account	Maintain updated contact information, and request access to specific proposals.
SSDBproponent	Upload data files and related descriptive information (metadata) from your computer to the SSDB. View and edit your uploaded files and metadata, and then create and submit a data package in support of your proposal.
SSDBlegacy	Search physical objects, digital data, and site and proposal information that were submitted before ~2005.
SSDBquery	Public-facing tool to locate and download files using a text search interface, and view results using Google Earth.
Drilled Holes	Map of all drilled boreholes during DSDP, ODP, and IODP, with links to publications. Requires Google Earth.

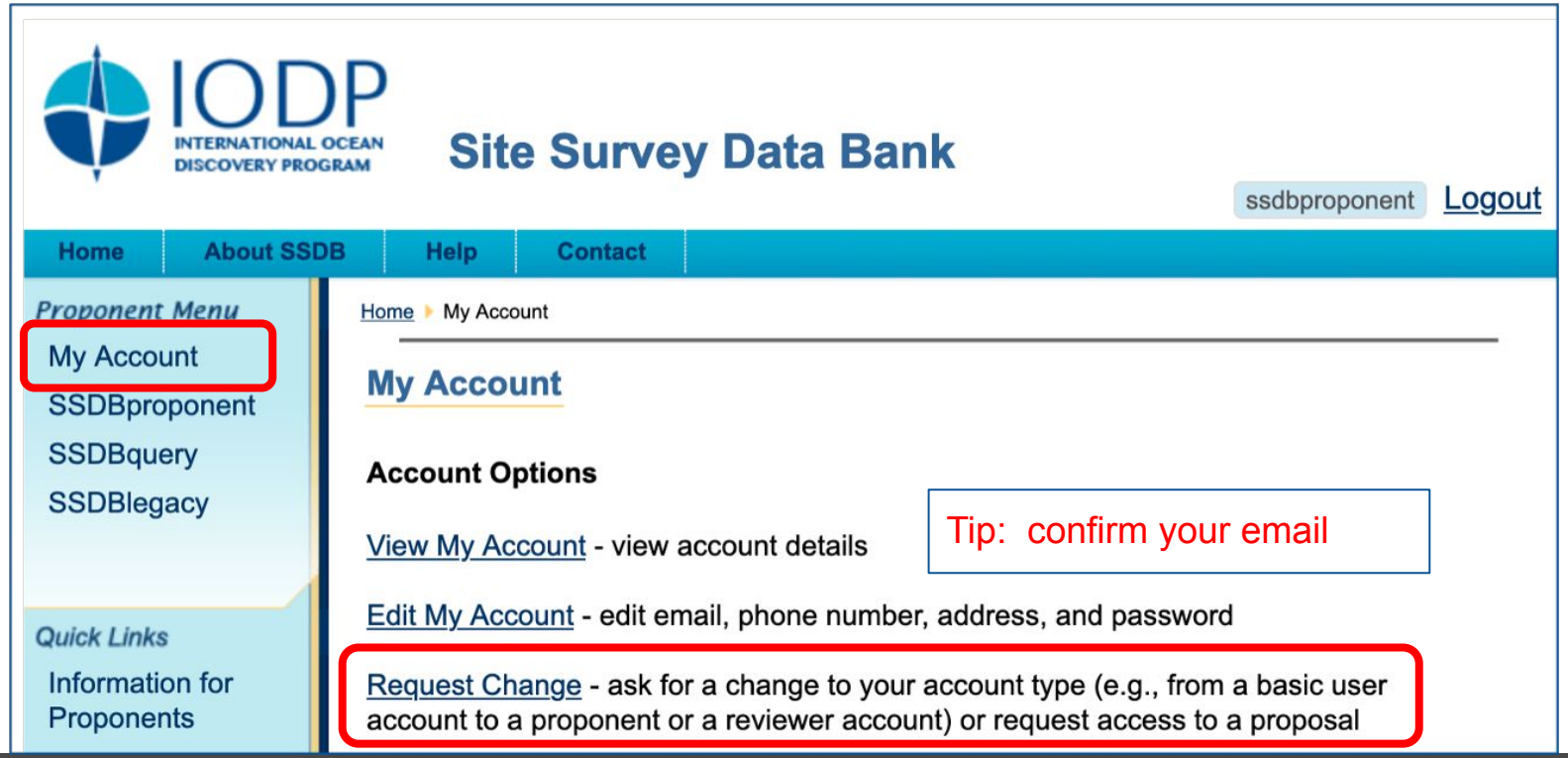
Getting Started: Check your account and access

Registration is a 2-step process

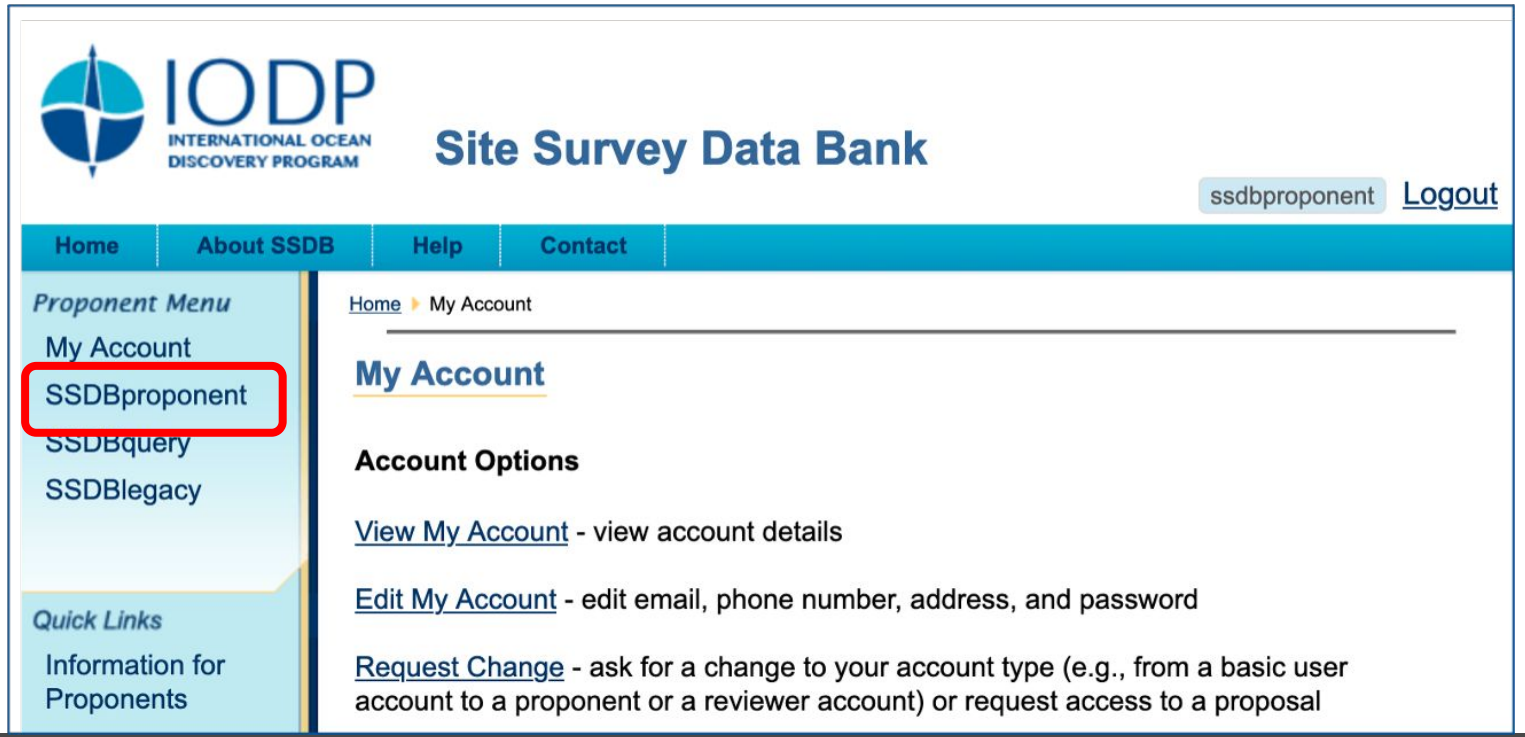
1) Register for a basic account

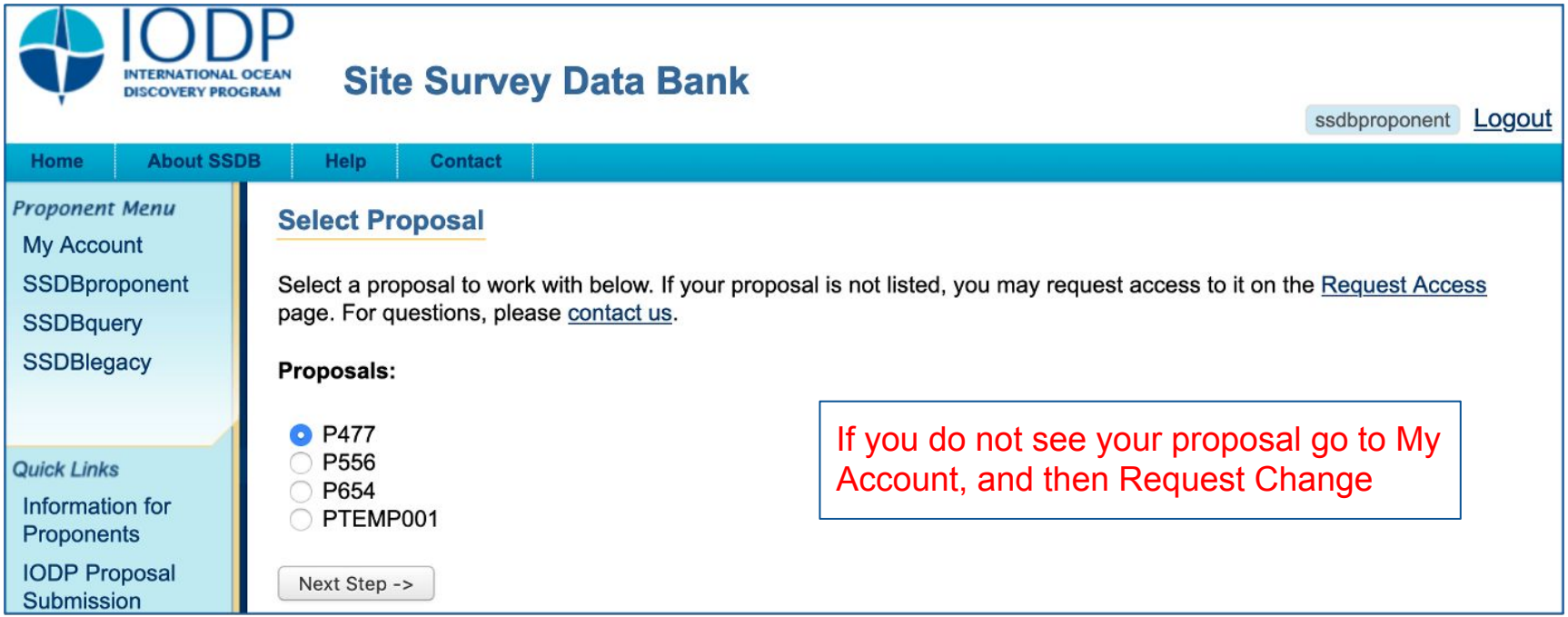
2) Request an upgrade to a proponent for a specific proposal

Getting Started: Check your account and access



Using SSDBproponent




IODP
INTERNATIONAL OCEAN DISCOVERY PROGRAM
Site Survey Data Bank
ssdbproponent
Logout
Home
About SSDB
Help
Contact
Proponent Menu
My Account
SSDBproponent
SSDBquery
SSDBlegacy
Quick Links
Information for Proponents
IODP Proposal Submission
Select Proposal
Select a proposal to work with below. If your proposal is not listed, you may request access to it on the Request Access page. For questions, please contact us.
Proposals:
P477
P556
P654
PTEMP001
Next Step ->
If you do not see your proposal go to My Account, and then Request Change

Questions?

(Live Demo of SSDB Package Creation)

Steps in Submitting a Data Package

1. Move data from previous submissions
2. Upload new files
3. Create/edit seismic associations (now required, if SEGY included)
4. Submit package

Questions?

Avoiding Common Problems

- Include all files that are still relevant in your current package
- Include a separate navigation file for each SEGY
- Avoid nonstandard SEGY headers, or give a header description
- Ensure Shot Points/CDPs/CMPs are consistent
- Provide complete metadata
    - Include a name, not just an institution, in the Data Owner field
- Don’t include ReadMe or other texty files. Files should be self-describing - use the Description metadata field
- Don’t use the back button

Avoiding Common Problems: Georeferencing

- Use decimal degrees lat/lon in metadata and within files: -90 to 90 lat and -180 to 180 lon, WGS84 georeferencing
- Double check lat/lons, especially the sign
- Use appropriate geospatial referencing (e.g., line for SEGY data, bounding box for maps). Overly large boxes will be returned for revision.

Tip: Make a metadata spreadsheet

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
		Site Names	Type	Format	Data Owner	Description	Access Control	Reason for Hold	Start Time	End Time	Start Lat	Start Lon	End Lat	End Lon	Method	Archive DOI/ Persistent URL	
1	Filename1																
2	Filename2																
3	Filename3																

After Submission

During November, files will receive non-scientific quality control

If an issue is found, time is tight for correction/replacement

Please ensure you / your data lead is available to respond

Questions?

Please raise your hand in Zoom or type your question into the chat box

For later questions:

science@iodp.org: for proposal and content-related questions

gdc@ucsd.edu: for technical system questions