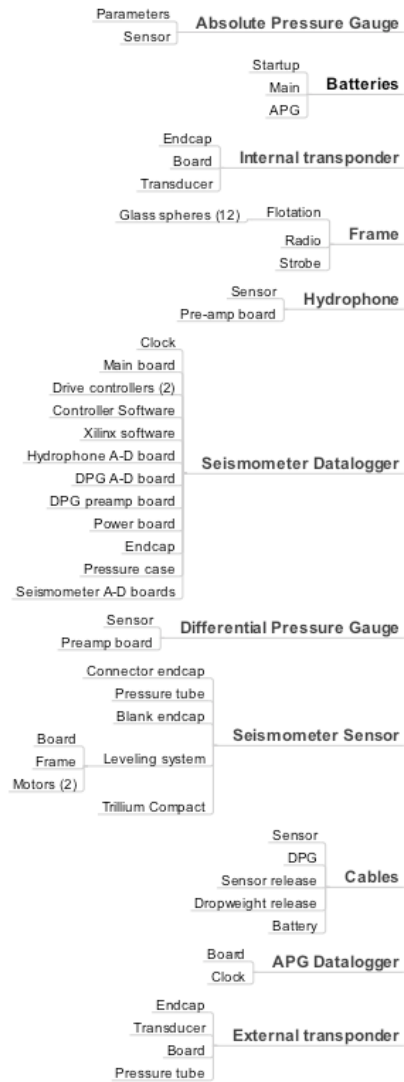


LDEO database for tracking inventory, histories and tests - current and future plans

Andrew Barclay

The problem: how does a small group (~ 5 people) efficiently collect, organize and exploit deployment and testing information for modular instruments.





Instrument Configuration

Deployment Info

- Experiment
- Site
- Depth
- Deploy date
- Recovery date

- Project
- Date
- Cost

Purchasing Info

- Test description
- Test date
- Test result

Testing Records

Information

Uses

LDEO IIC Tracking/Logging

Inventory control and accountability

Hypothesis testing/
Data mining

Certification and reporting

Instrument/Component Histories

Coordinated testing

Targeted testing

Database system requirements

- Doesn't become a rampaging monster.
- Flexible enough to suit our needs.
- Appropriate level of granularity
- Focused effort on schema, not mechanics
- Why not commercial ?

Schema

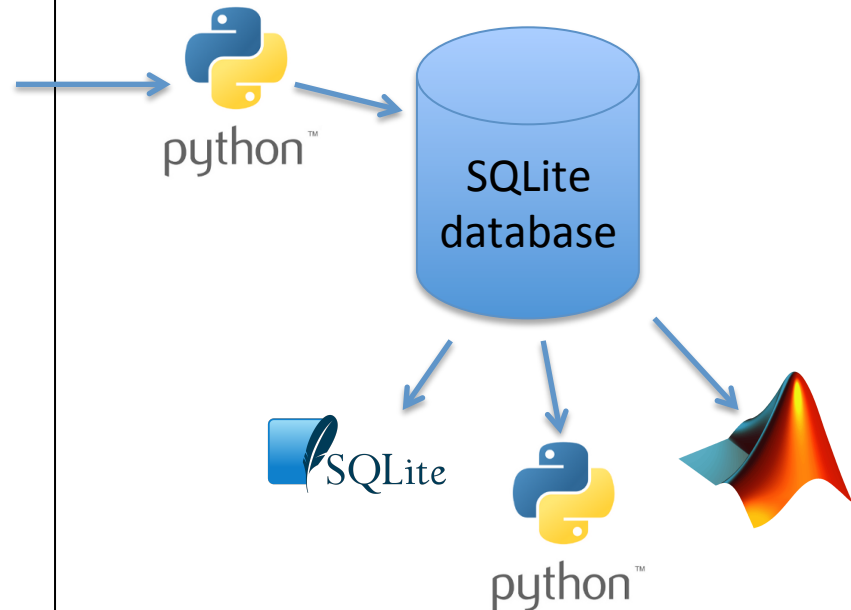
- SQL-based relational database
- 40 tables
- 3 general table types:

Table type	Time-dependent ?	Example
State	No	release transponder codes
Event	Yes	TESTED, LOST, BROKEN
Configuration	Yes, but slowly changing	Datalogger configuration at a given date

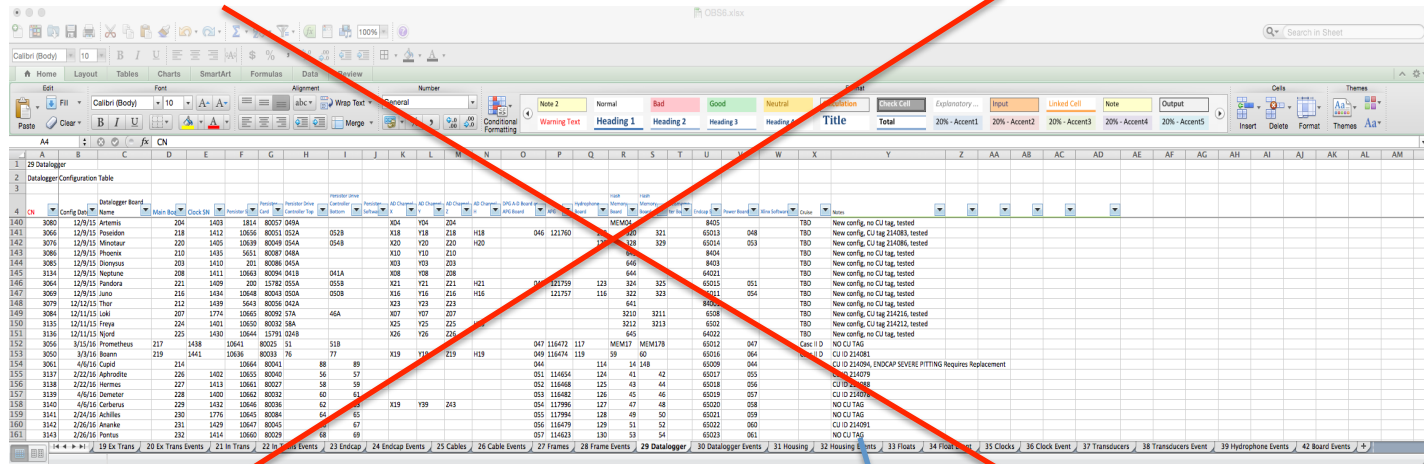
Implementation

The screenshot shows a Microsoft Excel spreadsheet with a data table. The table has columns labeled A through AM. The data includes various fields such as 'Name', 'Date', 'Latitude', 'Longitude', 'Depth', 'Deploy Date', 'Deploy Ship', 'Recover Date', 'Recover Ship', 'Deploy CN', and 'Notes'. The data is organized into rows, with some rows highlighted in yellow and others in white. The spreadsheet is titled 'CIBSE.xlsx' and has a search bar at the top right.

DEPLOYMENTS,	1
EXPERIMENT,	TEXT, 1, KEY
SITE,	TEXT, 2, KEY
LATDEG_DROP,	INT, 3
LATMIN_DROP,	REAL, 5
LONDEG_DROP,	INT, 6
LONMIN_DROP,	REAL, 8
DEPTH_DROP,	REAL, 9
LATDEG_SURV,	INT, 10
LATMIN_SURV,	REAL, 12
LONDEG_SURV,	INT, 13
LONMIN_SURV,	REAL, 15
DEPTH_SURV,	REAL, 16
DEPLOYDATE,	DATE, 17
DEPLOYSHIP,	TEXT, 19
RECOVERDATE,	DATE, 20
RECOVERSHIP,	TEXT, 22
DEPLOY_CN,	INT, 23
NOTES,	TEXT, 24

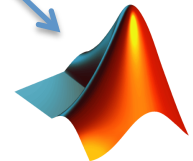
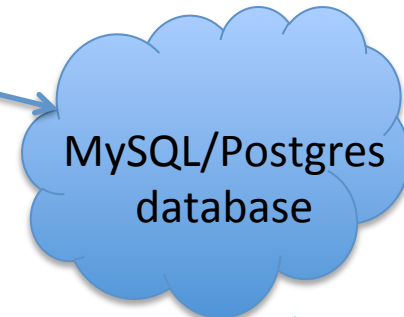


Future



The image shows a screenshot of an Excel spreadsheet, likely a data management tool for oceanographic data. It features a complex layout with multiple tabs, a large data table, and various formulas. A large red 'X' is drawn over the entire spreadsheet, indicating that this method is outdated or deprecated.

DEPLOYMENTS,	1
EXPERIMENT,	TEXT, 1, KEY
SITE,	TEXT, 2, KEY
LATDEG_DROP,	INT, 3
LATMIN_DROP,	REAL, 5
LONDEG_DROP,	INT, 6
LONMIN_DROP,	REAL, 8
DEPTH_DROP,	REAL, 9
LATDEG_SURV,	INT, 10
LATMIN_SURV,	REAL, 12
LONDEG_SURV,	INT, 13
LONMIN_SURV,	REAL, 15
DEPTH_SURV,	REAL, 16
DEPLOYDATE,	DATE, 17
DEPLOYSHIP,	TEXT, 19
RECOVERDATE,	DATE, 20
RECOVERSHIP,	TEXT, 22
DEPLOY_CN,	INT, 23
NOTES,	TEXT, 24



Reporting example: APG history

APG S/N: 115434

=====

Purchased: 2010-03-31 00:00:00 on account: GG002567

Event: 2016-01-11 00:00:00 Located NULL

Event: 2016-02-16 00:00:00 Retired Broken

APG S/N 117993

=====

Purchased: 2010-03-31 00:00:00 on account: GG002567

Event: 2015-11-15 00:00:00 Located NULL

Event: 2015-12-01 00:00:00 Debubbled NULL

Event: 2015-12-15 00:00:00 Test:huddle Pass

('Cascadia Y2', 'FS13B', 2332.0, '2012-09-12', '2013-07-03'): 293

('Cascadia Y3', 'J34C', 2580.0, '2013-09-06', '2014-06-24'): 291

('Cascadia Y4', 'M17D', '749.0', '2014-09-12', '2015-10-08'): 392