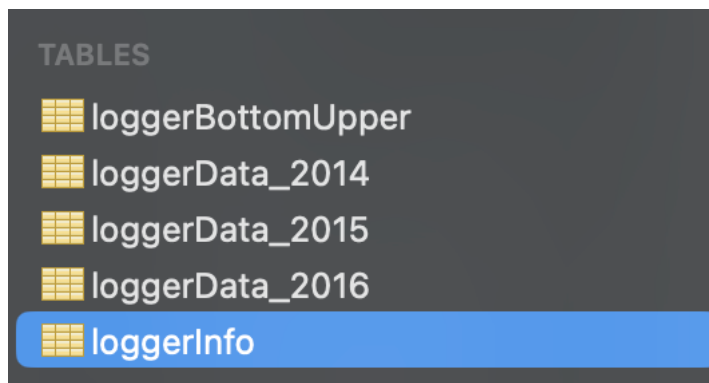How to prepare the DO database

The database named DO contains several tables:

loggerBottomUpper: not necessary. You can ignore it for now.

loggerData_{year}: contains logger data for 2014, the format is

id INT	Time DATETIME	DO FLOAT	Temp FLOAT	logger INT	
1	2014-06-23 11:30:00	8.71	24.1611	10384436	
2	2014-06-23 11:40:00	8.7	24.2222	10384436	
3	2014-06-23 11:50:00	8.68	24.3	10384436	
4	2014-06-23 12:00:00	8.67	24.3778	10384436	
5	2014-06-23 12:10:00	8.67	24.4778	10384436	
6	2014-06-23 12:20:00	8.64	24.5611	10384436	
7	2014-06-23 12:30:00	8.64	24.6389	10384436	
8	2014-06-23 12:40:00	8.62	24.7389	10384436	
9	2014-06-23 12:50:00	8.6	24.8222	10384436	
10	2014-06-23 13:00:00	8.59	24.9389	10384436	
11	2014-06-23 13:10:00	8.57	25.0222	10384436	
12	2014-06-23 13:20:00	8.55	25.1389	10384436	
13	2014-06-23 13:30:00	8.52	25.2611	10384436	
14	2014-06-23 13:40:00	8.51	25.3778	10384436	
15	2014-06-23 13:50:00	8.5	25.5	10384436	
16	2014-06-23 14:00:00	8.47	25.6222	10384436	

loggerInfo: contains the meta data of each logger in each year. The format is

idx BIGINT	loggerID DOUBLE	latitude DOUBLE	longitude DOUBLE	loggerPosition TEXT	available DOUBLE	bathymetry DOUBLE	year BIGINT	site VARCHAR	notedDepth FLOAT
61	10534123	41.565951	-82.383321	B	1	-13.5018005371094	2015	LRG001	NULL
62	10384452	42.09	-81.01	S5	0	NULL	2014		NULL
63	10523441	42.09	-81.01	S10	0	NULL	2014	NULL	NULL
64	10384444	41.944	-81.48	S5	0	NULL	2014	NULL	NULL
65	10384451	41.94383	-81.48	S10	0	NULL	2014	NULL	NULL
66	10534120	42.40717	-80.8785	B	1	-19.3913879394531	2016	CBG_83	-21.3
67	10384439	41.99432	-82.328	B	1	-17.6101989746094	2016	CBG_43	-18.7
68	10384450	42.1315	-82.1502	B	1	-19.6119079589844	2016	CBG_55	-21.3
69	10534125	42.5422	-80.8781	B	1	-16.4915008544922	2016	CBG_94	-18.3
70	10534123	41.59381	-81.7798	B	1	-16.8088073730469	2016	CBG_11	-18.3
71	10534122	42.0212	-80.69883	B	0	-18.8880004882812	2016	CBG_52	17.3
72	10534122	42.00178	-80.698	B	1	-16.7880096435547	2016	CBG_52	-17.3
73	10768638	42.27186	-80.69712	B	1	-20.0877990722656	2016	CBG_73	-21.3
74	10384449	41.8197	-81.19275	B	1	-13.8980865478516	2016	HER_01	-14.9
75	10534118	41.82308	-81.1809	B	1	-13.497802734375	2016	HER_02	-14.3
76	10528848	42.25485	-81.10285	B	1	-21.4	2016	ER31	-21.4
77	10523445	41.96735	-82.03876667	B	1	-21.5	2016	ER42	-21.5
78	10672495	41.97981667	-81.7545	B	1	-23.5	2016	ER73	-23.5
79	10523450	42.08138333	-81.01301667	B	1	-21.8	2016	ER32	-21.8
80	10523441	42.43253333	-81.20078333	B	1	-21.3	2016	ER30	-21.3
81	10528847	42.11865	-81.24685	B	1	-22.4	2016	ER78	-22.4
82	10523443	42.11275	-81.57393333	B	1	-23.5	2016	ER37	-23.5
83	10523438	41.9362	-81.47516667	B	1	-22.7	2016	ER36	-22.7
84	10523446	41.79035	-81.94201667	B	1	-21.7	2016	ER43	-21.7
85	10523436	42.28348333	-81.66855	B	1	-21.4	2016	ER38	-21.4
86	10672498	42.25485	-81.10285	B1.5	1	-20.9	2016	ER31	-20.9

The "bathymetry" depth is inferred from bathymetry data based on the logger's longitude and latitude. The "notedDepth" is the depth noted in the raw file

To add data, you need to
(1) input the logger meta such as ID, latitude, longitude, year in loggerInfo table
(2) create a new table named loggerInfo_{new_year}, same as existing tables.