CTD轉檔說明

技術員 江秉峘
邵煥傑

新海研3號貴儀中心

Marine Exploration Instrument Center
New Ocean Researcher 3 (NOR3)

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轉檔軟體

- 原廠連接：Link
- 下拉頁面，選擇**SBE Data Processing**，下載並安裝

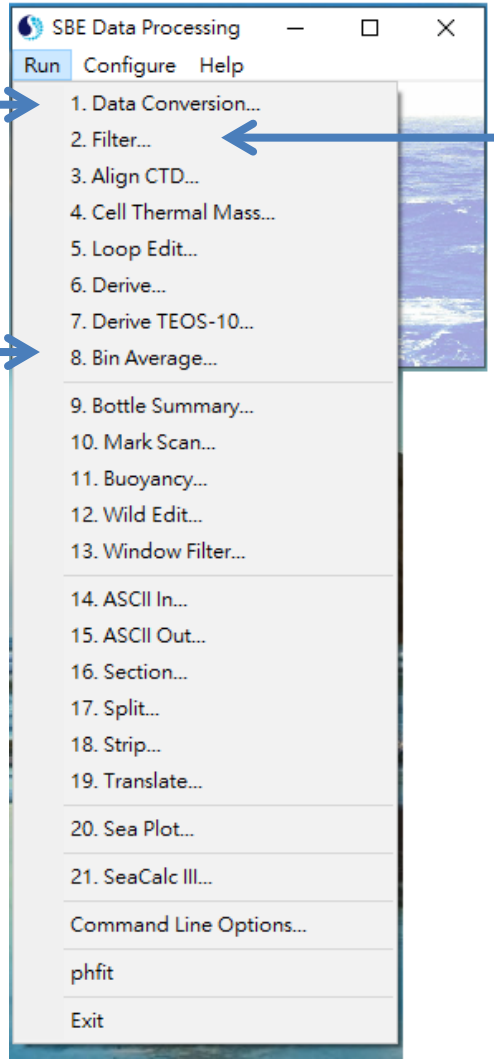
All Software

Title	Version	Date	Manual	Windows	MacOS
SeatermV2	2.8.0	2018-12-04		SeatermV2.8.0-b40.exe	
Seasoft V2	2.4.0	2018-12-04		SeasoftV2.4.0-b40.exe	
UCI	2.0.3	2019-11-19		UCI-2.0.3-b838-x86	UCI-2.0.3-835-macos-x86_64
SeaFETCom	2.0.3	2017-09-28		SeaFETCom-2.0.3-b115-x86.exe	SeaFETCom-2.0.3-120-macos-x86_64.pkg
Deployment Endurance Calculator	1.7.1	2017-07-26		DeploymentEnduranceCalcV1.7.1-b19.exe	
Seasave V7	7.26.7	2017-07-26		SeasaveV7.26.7-b19.exe	
SBE Data Processing	7.26.7	2017-07-26		SBEDataProcessing_Win32_V7.26.7-b19.exe	
Cycle Host	1.08	2016-05-12		CycleHost1.08_installer.exe.zip	
ProSoft	7.7.19	2016-04-12		ProSoft7.7.19-b2_Setup.exe	

程式介紹

Data Conversion
初次轉檔，將CTD原始資料(.hex)轉換成Excel可以讀取的.cnv格式

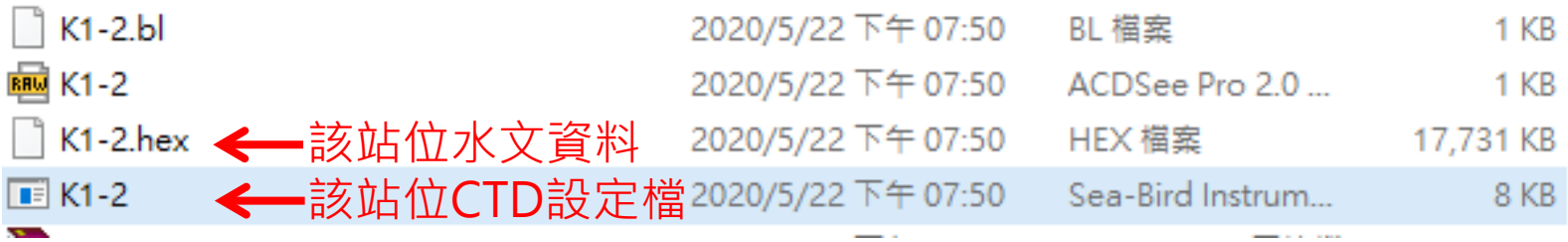
Bin Average
可將已轉檔的CTD資料(.cnv)進行每米或每秒平均



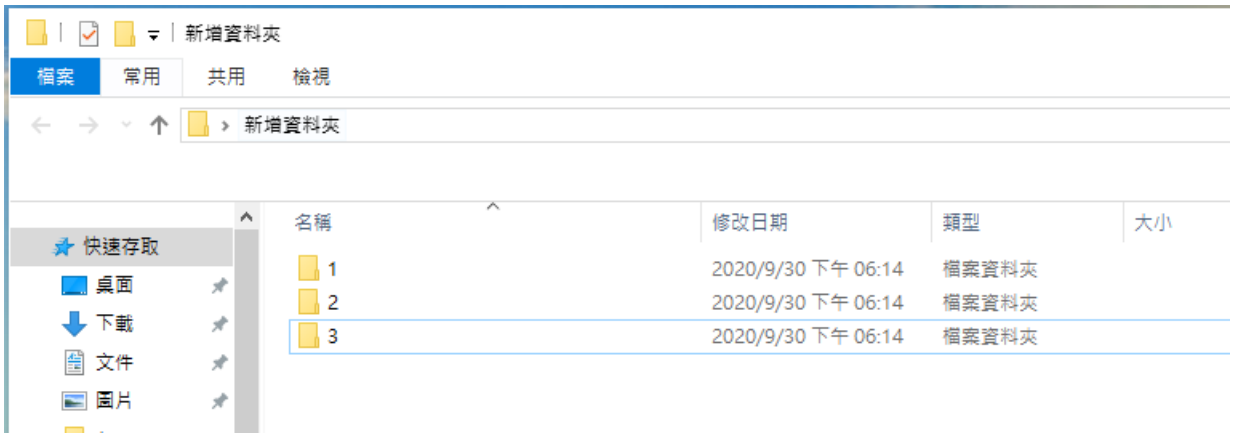
Filter
過濾轉出來的CTD資料(.cnv)，程式會自動將突發事件或電子訊號跳動的資料刪除
*若確定該站CTD資料沒異常，此步驟可跳過

轉檔前置作業

- 確認是否有拿到正確的檔案



- 先建立三個資料夾(避免後續轉檔時覆蓋到上一步驟轉完的檔案)



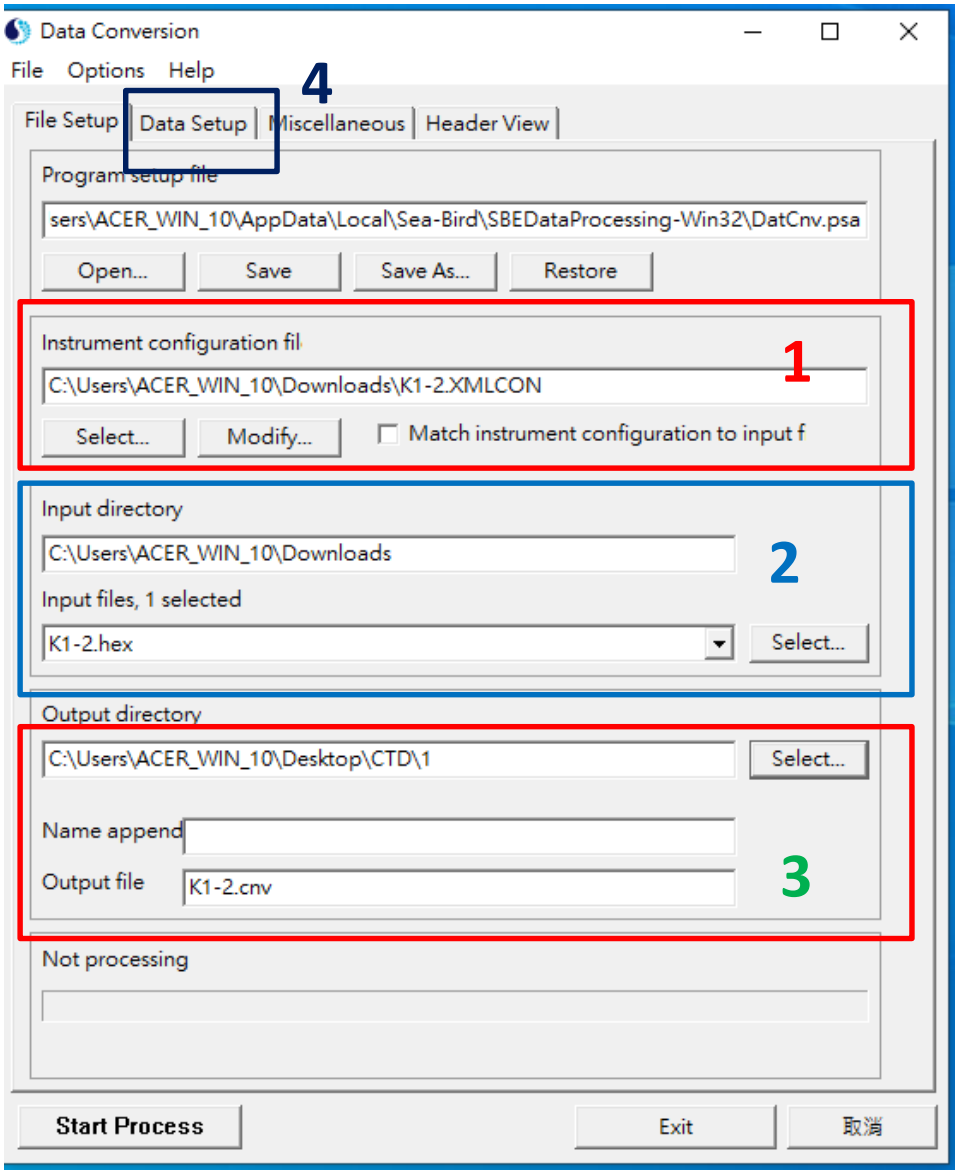
Data Conversion

1.選擇CTD設定檔(.xmlcon)
同一個航次可以選同一個設定檔即可，除非有換探針

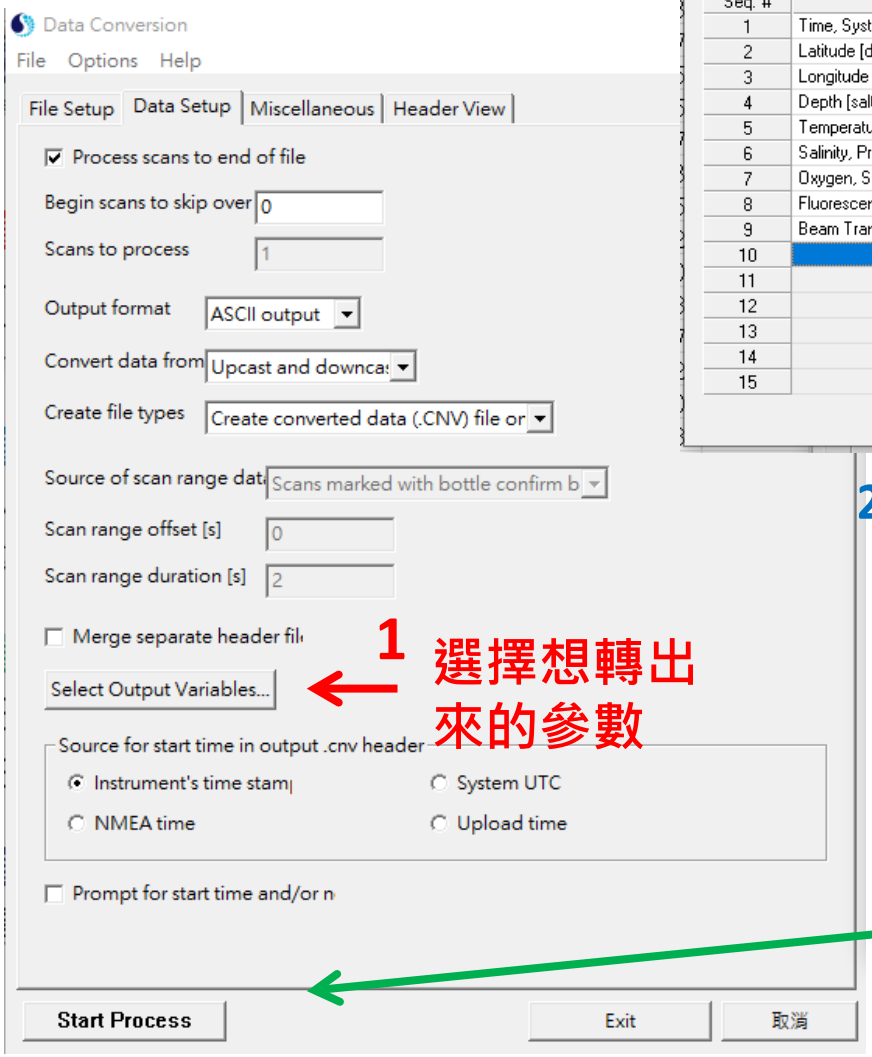
2.選擇水文資料(.hex)
可以一次處理很多不同站位的資料，本次僅示範一筆

3.選擇轉檔後資料輸出位置
放在已經建立好的資料夾1，避免被其他轉好的檔案覆蓋

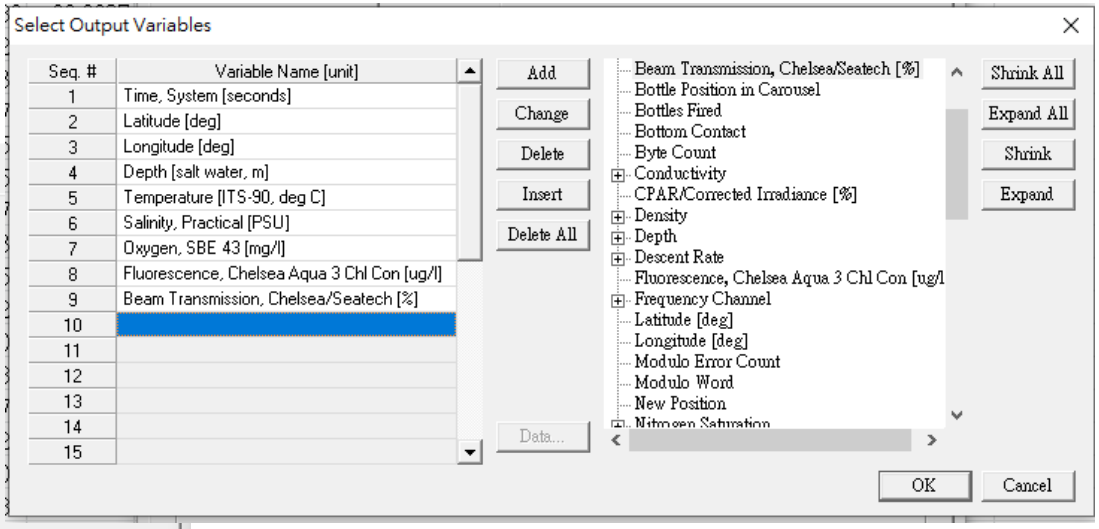
4.選擇要輸出的資料內容
詳情見下一頁



Data Conversion



1 選擇想轉出來的參數

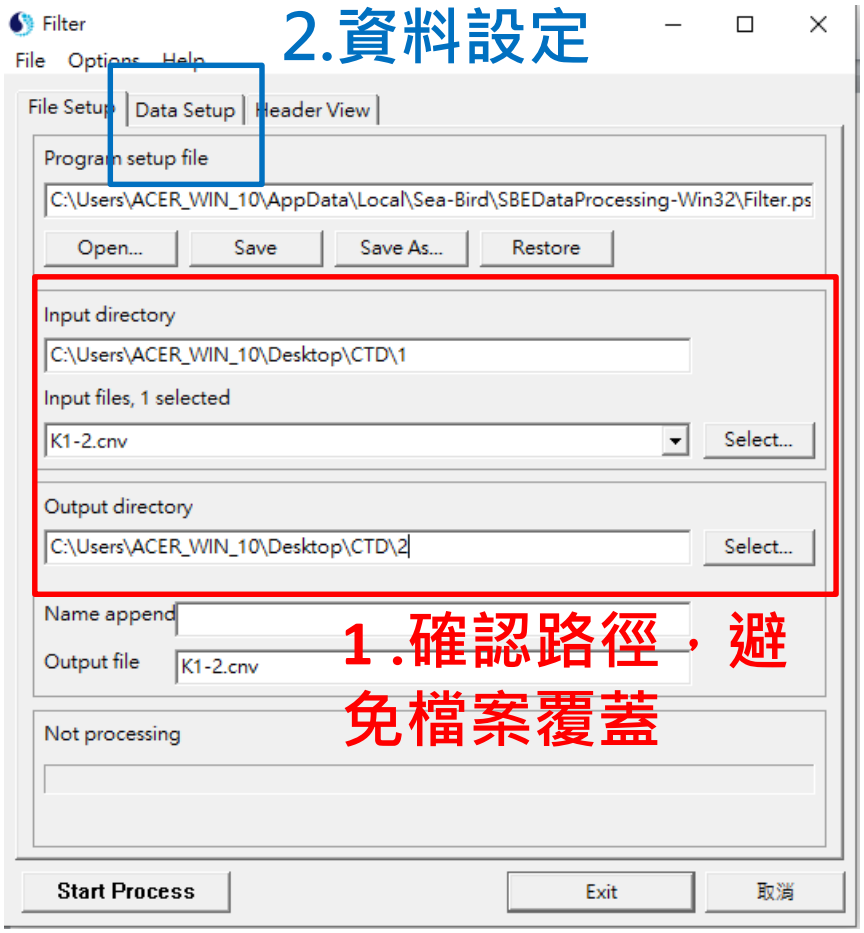


2 建議需要轉檔出來基本參數有：**時間、經緯度、深度、溫度、鹽度、溶氧、螢光、穿透度**

3 確認無誤後開始轉檔

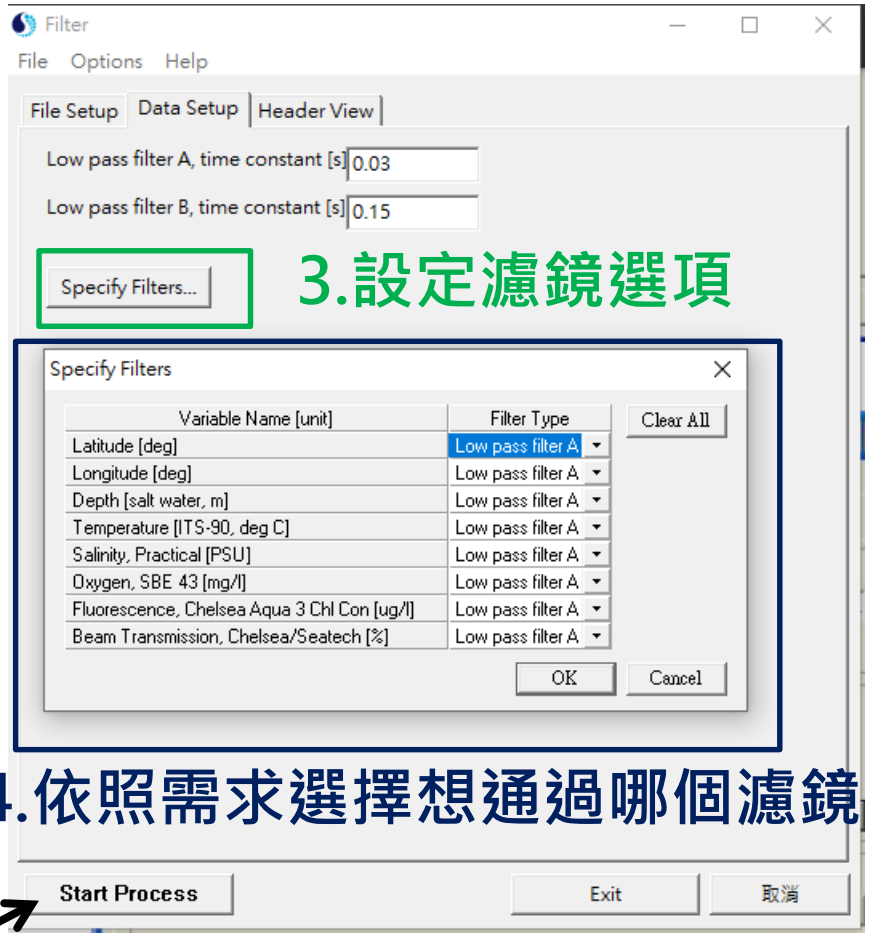
Filter

*若確認本次CTD資料無異常資料，可跳過本步驟



2.資料設定

1.確認路徑，避免檔案覆蓋



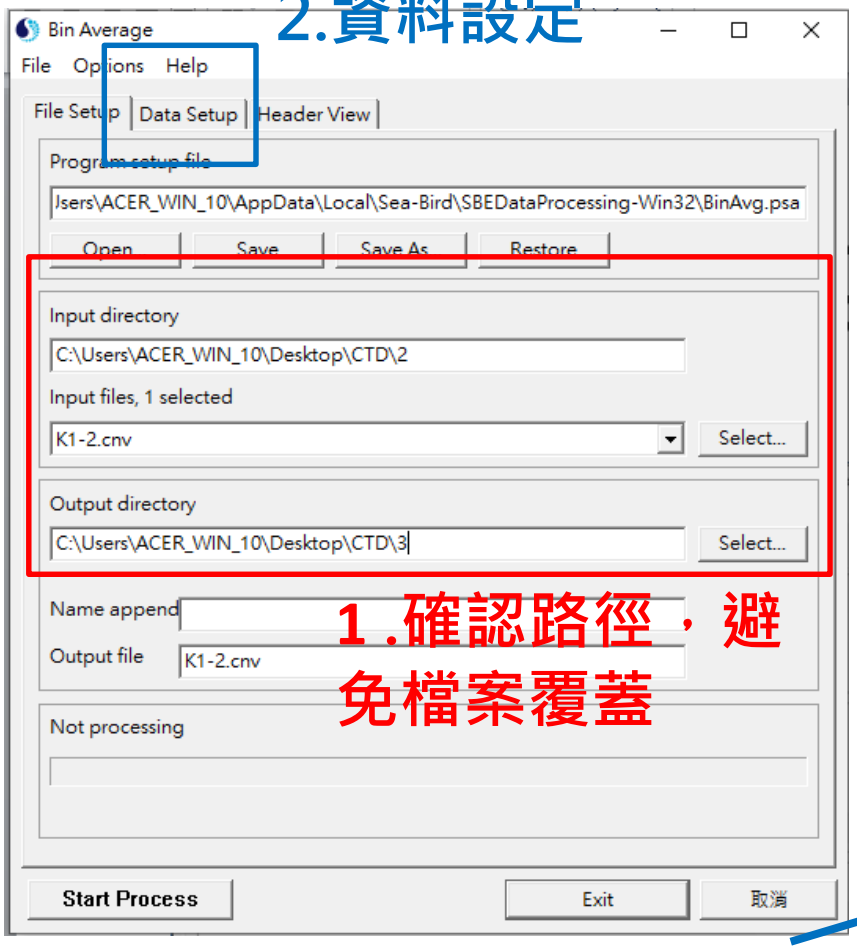
3.設定濾鏡選項

4.依照需求選擇想通過哪個濾鏡

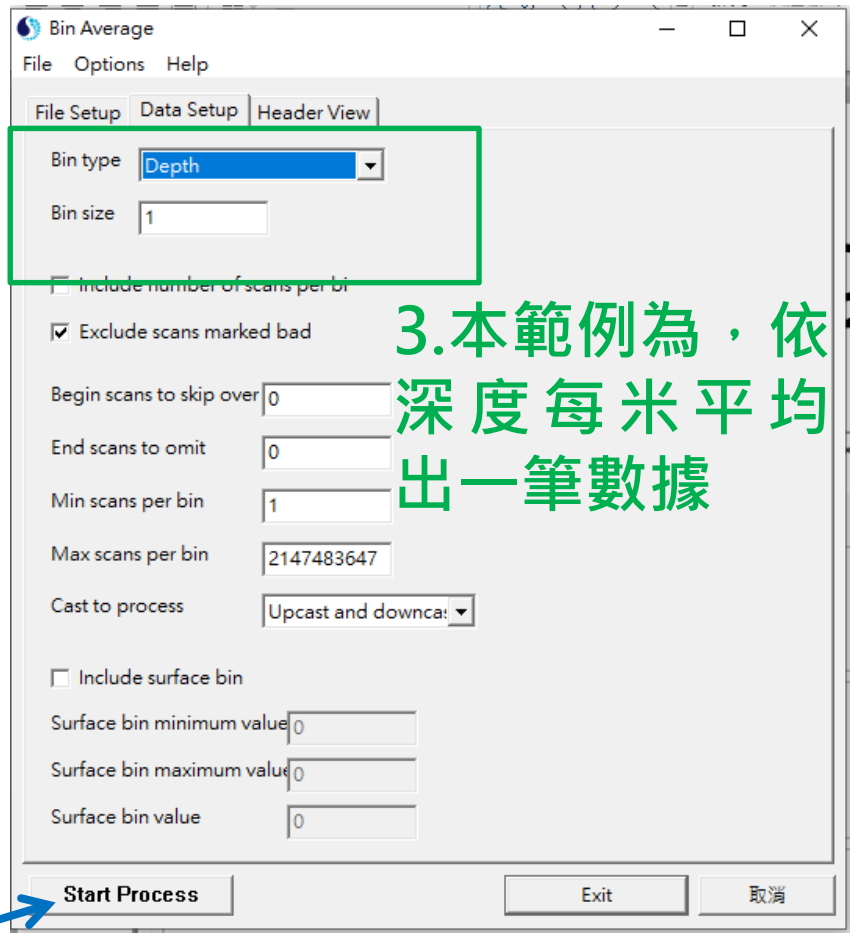
5.開始轉檔

Bin Average

2.資料設定



1.確認路徑，避免檔案覆蓋

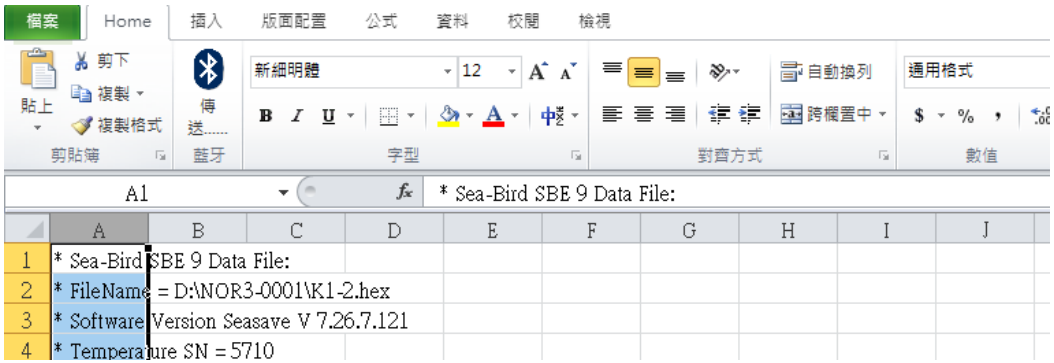


3.本範例為，依深度每米平均出一筆數據

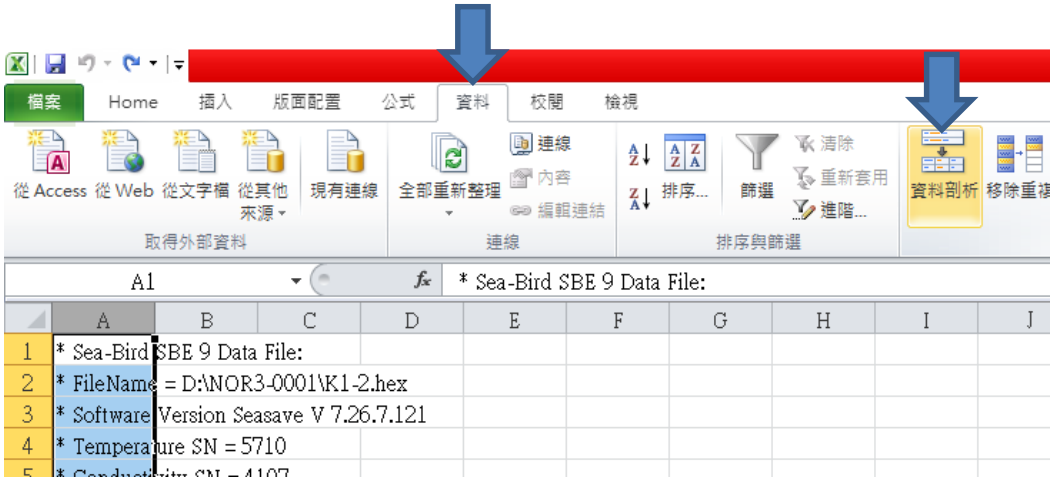
4.開始轉檔

Excel 資料處理

1.用Excel開啟轉好的檔案(.cnv)，發現所有的資料跑到第一行



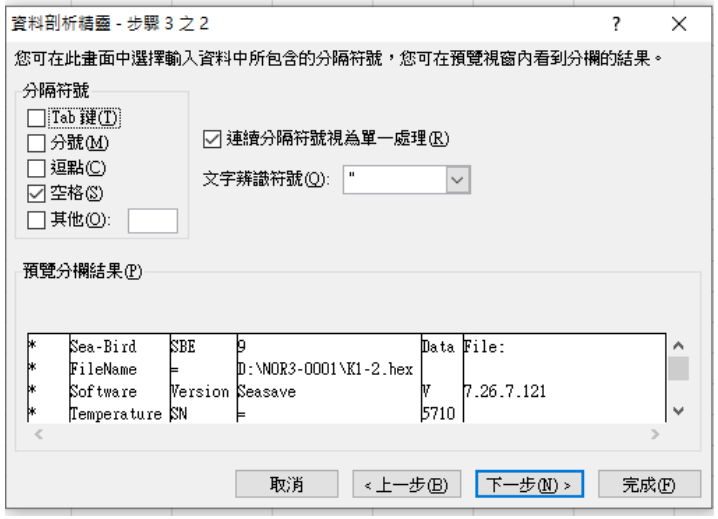
2.將第一行全選，並在”**資料**”，選取“**資料剖析**”



Excel 資料處理

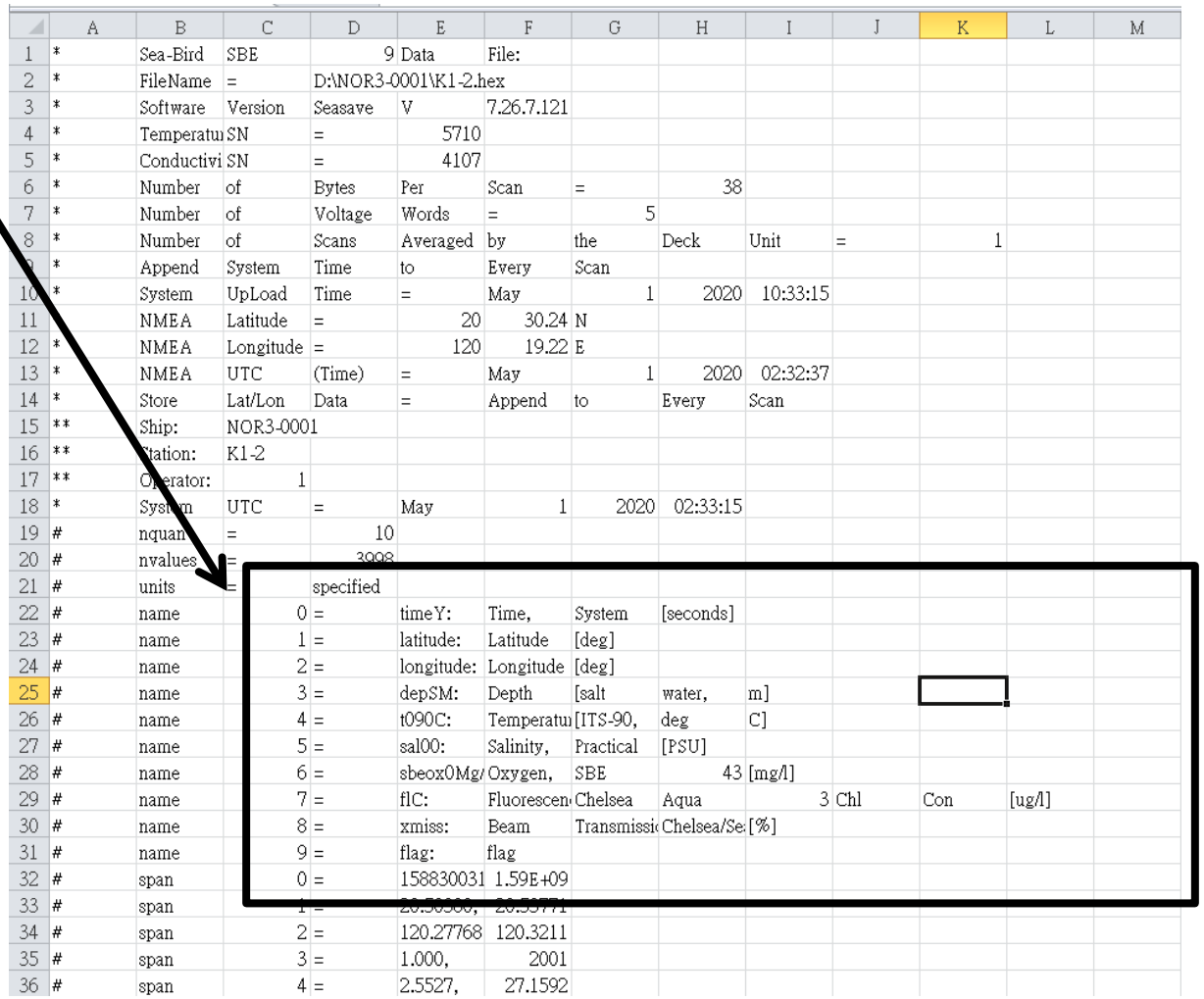
3.選擇以”**分隔符號**“剖析資料，並選擇下一步

4.分隔符號選擇”**空格**“，並選擇完成



Excel 資料處理

5.資料剖析後的結果，方框中的訊息可對應到下面所解出來資料的參數以及單位。



	A	B	C	D	E	F	G	H	I	J	K	L	M
1	*	Sea-Bird	SBE	9	Data	File:							
2	*	FileName	=	D:\NOR3-0001\K1-2.hex									
3	*	Software	Version	Seasave	V	7.26.7.121							
4	*	Temperatu	SN	=	5710								
5	*	Conductivi	SN	=	4107								
6	*	Number	of	Bytes	Per	Scan	=	38					
7	*	Number	of	Voltage	Words	=	5						
8	*	Number	of	Scans	Averaged	by	the	Deck	Unit	=	1		
9	*	Append	System	Time	to	Every	Scan						
10	*	System	UpLoad	Time	=	May	1	2020	10:33:15				
11		NMEA	Latitude	=	20	30.24	N						
12	*	NMEA	Longitude	=	120	19.22	E						
13	*	NMEA	UTC	(Time)	=	May	1	2020	02:32:37				
14	*	Store	Lat/Lon	Data	=	Append	to	Every	Scan				
15	**	Ship:	NOR3-0001										
16	**	Station:	K1-2										
17	**	Operator:	1										
18	*	System	UTC	=	May	1	2020	02:33:15					
19	#	nquan	=	10									
20	#	nvalues	=	3998									
21	#	units	=	specified									
22	#	name	0	=	timeY:	Time,	System	[seconds]					
23	#	name	1	=	latitude:	Latitude	[deg]						
24	#	name	2	=	longitude:	Longitude	[deg]						
25	#	name	3	=	depSM:	Depth	[salt	water,	m]				
26	#	name	4	=	t090C:	Temperatu	[ITS-90,	deg	C]				
27	#	name	5	=	sal00:	Salinity,	Practical	[PSU]					
28	#	name	6	=	sbeox0Mg/	Oxygen,	SBE	43	[mg/l]				
29	#	name	7	=	flC:	Fluorescen	Chelsea	Aqua	3	Chl	Con	[ug/l]	
30	#	name	8	=	xmiss:	Beam	Transmissi	Chelsea/Se	[%]				
31	#	name	9	=	flag:	flag							
32	#	span	0	=	158830031	1.59E+09							
33	#	span	1	=	20.56366,	20.55771							
34	#	span	2	=	120.27768	120.3211							
35	#	span	3	=	1.000,	2001							
36	#	span	4	=	2.5527,	27.1592							

Excel 資料處理

6.如圖，上步驟方框中的訊息可對應到下面所解出來資料的參數以及單位

	A	B	C	D	E	F	G	H	I	J	K
238	#	binavg_									
239	#	binavg	=	2.15F							
240	#	binav	=	no,	min	=	0.000,	max	=	0.000,	value	=
241	#	file	=	as							
242	*END*										
243		1.59E+09	20.5038	120.3211	4	27.1592	36.8097	5.1901	0.0089	96.4751	0.00E+00	
244		1.59E+09	20.50437	120.3197	5	26.7787	31.7232	4.5982	0.0114	96.3204	0.00E+00	
245		1.59E+09	20.50433	120.3198	6	26.917	34.0205	5.0952	0.0083	96.3567	0.00E+00	
246		1.59E+09	20.50436	120.3197	7	26.9493	34.0824	5.2774	0.0119	96.365	0.00E+00	
247		1.59E+09	20.50436	120.3197	8	26.845	31.8876	5.1219	0.0127	96.3526	0.00E+00	
248		1.59E+09	20.50436	120.3197	9	26.788	34.2306	6.1931	0.0117	96.2975	0.00E+00	
249		1.59E+09	20.50438	120.3197	10	26.8742	34.118	5.1423	0.0189	96.3077	0.00E+00	
250		1.59E+09	20.50439	120.3197	11	26.9079	34.09	4.8312	0.0175	96.2651	0.00E+00	
251		1.59E+09	20.5044	120.3197	12	26.9015	34.0911	4.6603	0.02	96.2895	0.00E+00	
252		1.59E+09	20.5044	120.3196	13	26.902	34.0857	4.7756	0.0192	96.2866	0.00E+00	
253		1.59E+09	20.5044	120.3196	14	26.8978	34.0838	4.8206	0.0263	96.2887	0.00E+00	
254		1.59E+09	20.50442	120.3196	15	26.8999	34.0846	4.6524	0.0253	96.296	0.00E+00	

0 = timeY: Time, System [seconds]
1 = latitude: Latitude [deg]
2 = longitude: Longitude [deg]
3 = depSM: Depth [salt water, m]

- 轉檔過程中如有任何疑問，歡迎聯繫
新海3貴儀中心化學技術員江秉崧
chemtech@nsysunor3.com ，
或致電07-5252000#5008。

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