Ceilometer Basics

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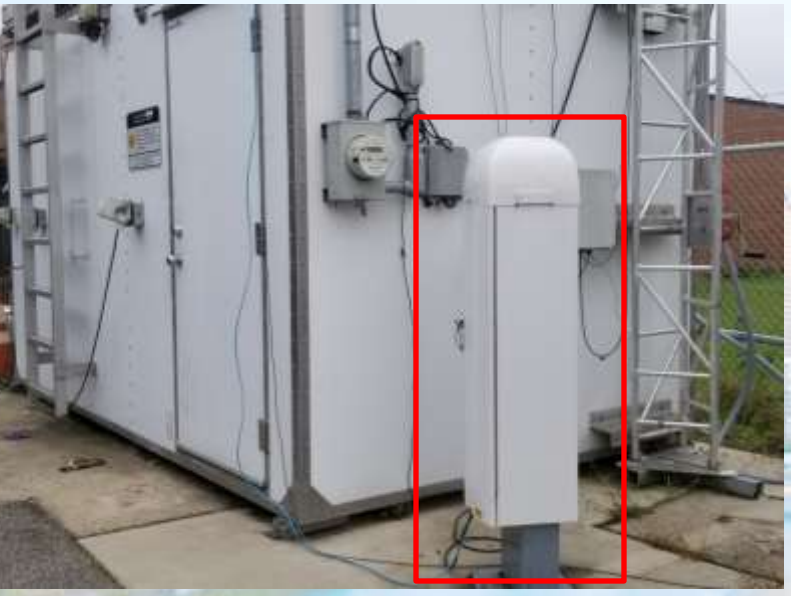
Introduction



laser

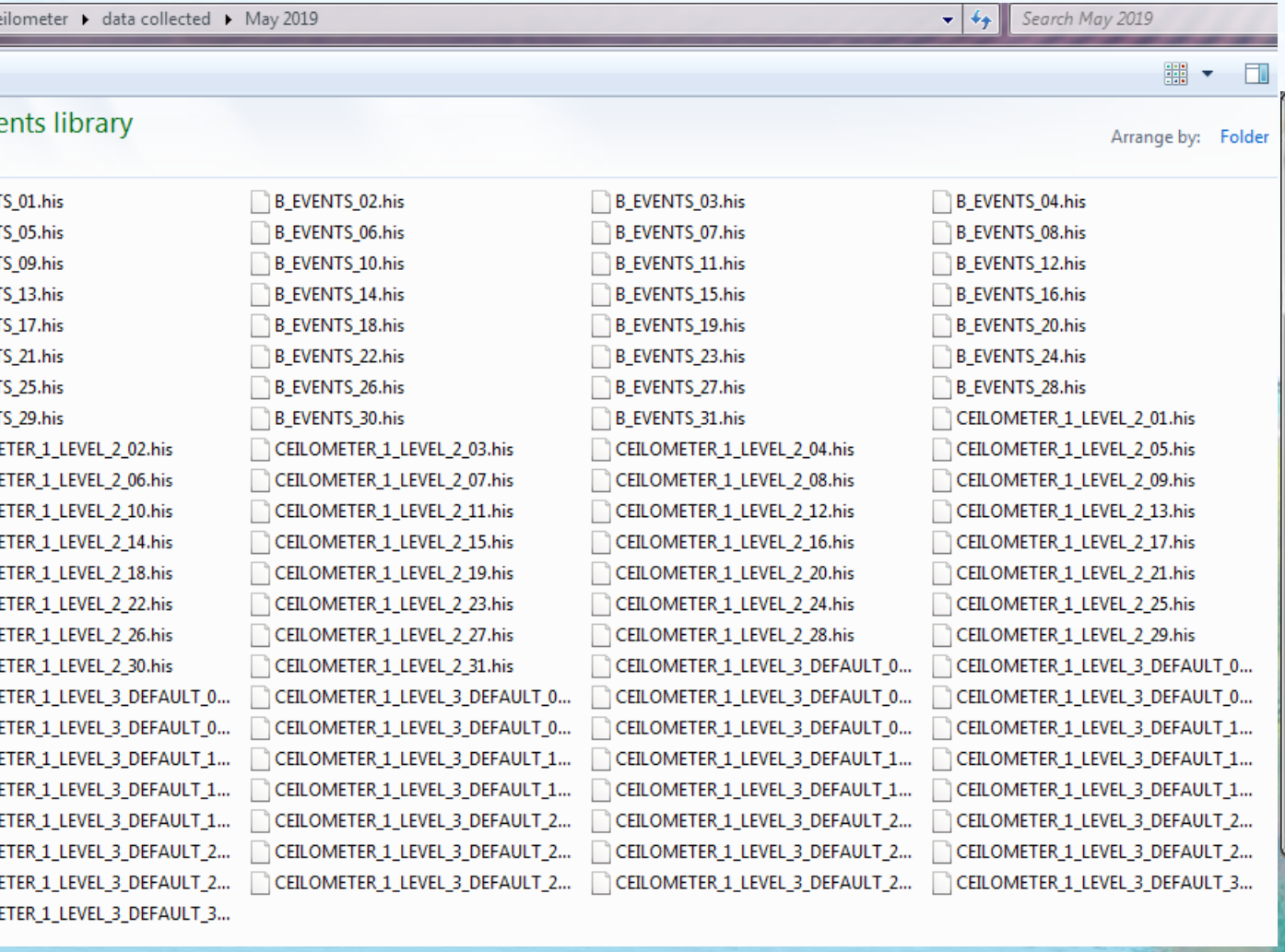
Basic calculation

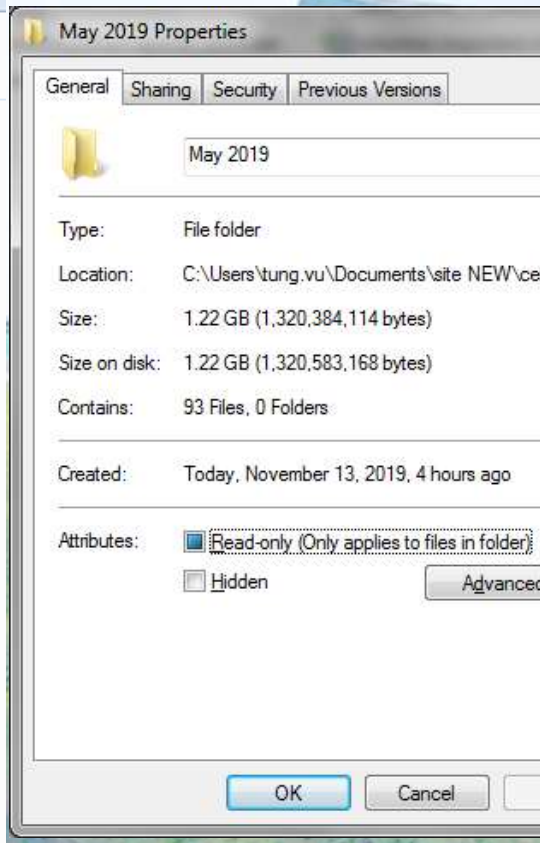
Height= ct/2

Data collection

BL View prog
(Windows 10

Data collected





Data collected

A	B	C	D	E	F	G	H	I	J	K	L	M
ory file												
ATEDATE	UNIXTIME	CEILOMETER	PERIOD	SAMPLE_COUNT	BL_HEIGHT_1	BL_HEIGHT_2	BL_HEIGHT_3	BL_INDEX_1	BL_INDEX_2	BL_INDEX_3	MEAN_LAYER_HEIGHT	MEAN_LAYER_INDEX
1/2019 0:00	1556668800	AMS	16	52	400	1870	-999	2	2	-999	470	1
1/2019 0:00	1556668816	AMS	16	52	400	1870	-999	2	2	-999	470	1
1/2019 0:00	1556668832	AMS	16	52	400	1870	-999	2	2	-999	470	1
1/2019 0:00	1556668848	AMS	16	52	400	1870	-999	2	2	-999	470	1
1/2019 0:01	1556668864	AMS	16	52	400	1870	-999	2	2	-999	470	1
1/2019 0:01	1556668880	AMS	16	52	400	1870	-999	1	2	-999	470	1
1/2019 0:01	1556668896	AMS	16	52	400	1870	-999	1	2	-999	470	1
1/2019 0:01	1556668912	AMS	16	52	400	1870	-999	1	2	-999	470	1
1/2019 0:02	1556668928	AMS	16	52	400	1870	-999	1	2	-999	470	1
1/2019 0:02	1556668944	AMS	16	52	400	1870	-999	1	2	-999	470	1
1/2019 0:02	1556668960	AMS	16	52	400	1870	-999	1	2	-999	470	1
1/2019 0:02	1556668976	AMS	16	52	480	1870	-999	3	2	-999	470	1
1/2019 0:03	1556668992	AMS	16	52	480	1870	-999	3	2	-999	470	1
1/2019 0:03	1556669008	AMS	16	52	480	850	1850	3	1	2	470	1
1/2019 0:03	1556669024	AMS	16	52	490	850	1850	3	1	2	470	1
1/2019 0:04	1556669040	AMS	16	52	500	850	1850	3	1	2	470	1
1/2019 0:04	1556669056	AMS	16	52	500	850	1830	3	1	1	470	1
1/2019 0:04	1556669072	AMS	16	52	510	850	1830	3	1	1	470	1
1/2019 0:04	1556669088	AMS	16	52	510	860	1830	3	1	1	470	1
1/2019 0:05	1556669104	AMS	16	52	510	860	1830	3	1	1	470	1
1/2019 0:05	1556669120	AMS	16	52	520	1820	-999	3	1	-999	470	1
1/2019 0:05	1556669136	AMS	16	52	520	1820	-999	3	1	-999	470	1
1/2019 0:05	1556669152	AMS	16	52	520	1820	-999	3	1	-999	470	1
1/2019 0:06	1556669168	AMS	16	52	520	1800	-999	3	1	-999	470	1
1/2019 0:06	1556669184	AMS	16	52	520	1800	-999	3	1	-999	470	1
1/2019 0:06	1556669200	AMS	16	52	510	1790	-999	3	1	-999	470	1
1/2019 0:06	1556669216	AMS	16	52	510	1790	-999	3	1	-999	470	1

Macro to process data

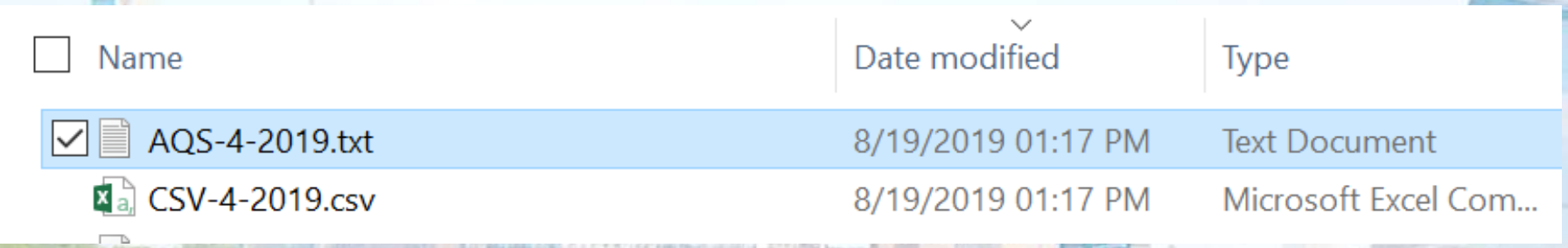
C:\Users\PAQS-Philly\Documents\NEW Ceilometer HIS file\History\2019\Apr\

meter	Value	Notes
	2019	Enter four digit year of data to be processed
th (Jan=1, etc.)	4	Enter month of data being processed (Jan=1, Dec = 12, etc.)
e Offset	-5	Enter time offset from GMT (ie., enter -5 for EST, -6 CST, -7 MST, and -8 PST)
Site ID Codes		
State	01	Enter site's AQS ID codes as strings (ie., put a ' in front of the number)
County	023	
Site	1000	
POC	01	
lo Folder	C:\Users\PAQS-Philly\Documents\NEW Ceilometer HIS file\Histo	Enter the location of the BLView data files to process. Include trailing "\"
ault File Name	CEILOMETER_1_LEVEL_3_DEFAULT_	Enter the BLView filename convention with out the hour or extension

Process Data

y Kevin Cavender

Macro outputs



	A	B	C	D
1	Date	Hour	Mixing Height	
2	3/31/2019	18	2160	
3	3/31/2019	19	430	
4	3/31/2019	20	420	
5	3/31/2019	21	-999	
6	3/31/2019	22	-999	
7	3/31/2019	23	-999	
8	4/1/2019	0	3990	
9	4/1/2019	1	3840	
10	4/1/2019	2	3910	

AQS-4-2019.txt - Notepad

File Edit Format View Help

```
RD|I|01|023|1000|61301|01|1|058|128|20190331|18:00|2160||1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190331|19:00|430||1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190331|20:00|420||1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190331|21:00||AI|1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190331|22:00||AI|1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190331|23:00||AI|1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190401|00:00|3990||1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190401|01:00|3840||1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190401|02:00|3910||1|||||||||||||
RD|I|01|023|1000|61301|01|1|058|128|20190401|03:00|1280||1|||||||||||||
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Questions?

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