

# Filestructure and Formats

## Fileextensions:

- .ufa\*** ASCII raw data (velocity) of one component  
6 columns, 2000 lines  
\* -> z, n, e
- z vertical  
n North-South  
e East-West
- .prn** ASCII raw data, combined (historical GÜRALP format...)  
14 columns, 12000 lines (3000 lines for old 16bit system)  
columns 7, 14: empty  
columns 1, 2, 3: before: amplified data of sensor 1, now: empty  
columns 8, 9, 10: before: amplified data of sensor 2, now: empty  
column 4: vertical data, sensor 1  
column 5: N-S data, sensor 1  
column 6: E-W data, sensor 1  
column 11: vertical data, sensor 2  
column 12: N-S data, sensor 2  
column 13: E-W data, sensor 2
- .csv\*** FFT result (ASCII), based on the .prn-files  
5 columns, 6000 lines  
column 1: frequency (Hz)  
column 2: real part of the Fourier component, sensor 1  
column 3: imaginary part of the Fourier component, sensor 1  
column 4: real part of the Fourier component, sensor 2  
column 5: imaginary part of the Fourier component, sensor 2  
\* -> z, n, e
- .csw\*** similar to .csv\*, but with “windowing” before FFT  
-> first and last point of raw data set to zero -> slope subtraction  
or hann window

## Filenames:

month month day day hour hour minute minute, referring to the local time  
i.e 04271135.\* -> 27<sup>th</sup> of April, 11:35 am

av..... -> 15min average, filename is indicating the first minute of average time

**Folder structure:**

ufaS\*        .ufa-files  
 av            av-files + rms-files  
 prncsv       .prn- + .csv\*- + .csw\*-files

**Calibration constants:**

Name	Type	Ser.No.		Calibration (V/m/s)	ADC ( $\mu$ V/bit)
S1	CMG-3T	T3171	z	3006	1.284
			n	2986	1.290
			e	2991	1.279
S2	CMG-3T	T3172	z	2977	1.283
			n	3010	1.288
			e	3006	1.274
S3	CMG-3T	T3G13	z	2961	1.282
			n	2998	1.271
			e	2959	1.280
S4	CMG-6T	T6020	z	1158	0.2627
			n	1155	0.2564
			e	1265	0.2514
S5	CMG-6T	T6361	z	1059	0.2628
			n	1080	0.2579
			e	1095	0.2434
S1, S2 (old 16bit system)			z,n,e	750*127	225
SL	CMG-3T		z,n,e	3000	1.3439
GSE data			z,n,e	1500	2.4

**Attention:**

- most of the data analysis (FFT -> \*.csv ...) is done using the calibration of the z component of S3 as general calibration constant