My Latex automated Report

Generated from my notebook.ipynb

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2 import data

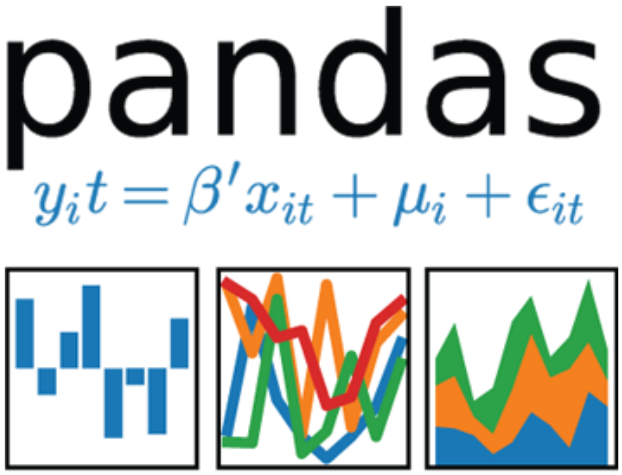
The data for this example are generated with the demo version of meteonorm 7

the data will be dealing with the weather data of the berlin tempelhof weatherstation on monthly basis.

Symbol	Unit	Description
G Gh	kWh/m²	Global solar irradiance monthly averages
G Dh	kWh/m²	Diffuse solar irradiance monthly averages
Ta	°C	Air temperature
Td	°C	Dew point
FF	m/s	wind speed

3 Text and Images

3.1 markdown image and text



here above image is a markdown image and the present text is a markdown text

3.2 Code images and text

```
 The here above images are generated from the concatenation of 2 images using
nb_setup.images_hconcat and this text was written using the print statement
```

4 Example of a table

4.1 table small

`Monthly weather data from Berlin`

`units`

index	month	G Gh	G Dh	Ta	Td	FF
0	nan	kWh/m²	kWh/m²	°C	°C	m/s

`data`

index	G Gh	G Dh	Ta	Td	FF
1.0	20.0	12.0	1.0	-2.0	4.0
2.0	36.0	20.0	2.0	-1.0	4.0
3.0	76.0	43.0	4.0	0.0	5.0
4.0	124.0	67.0	10.0	3.0	3.0
5.0	154.0	78.0	15.0	8.0	5.0
6.0	164.0	85.0	17.0	11.0	4.0
7.0	160.0	81.0	19.0	13.0	4.0
8.0	136.0	68.0	19.0	13.0	4.0
9.0	94.0	47.0	14.0	10.0	4.0
10.0	55.0	32.0	10.0	7.0	4.0
11.0	24.0	16.0	5.0	3.0	4.0
12.0	15.0	10.0	1.0	-1.0	6.0

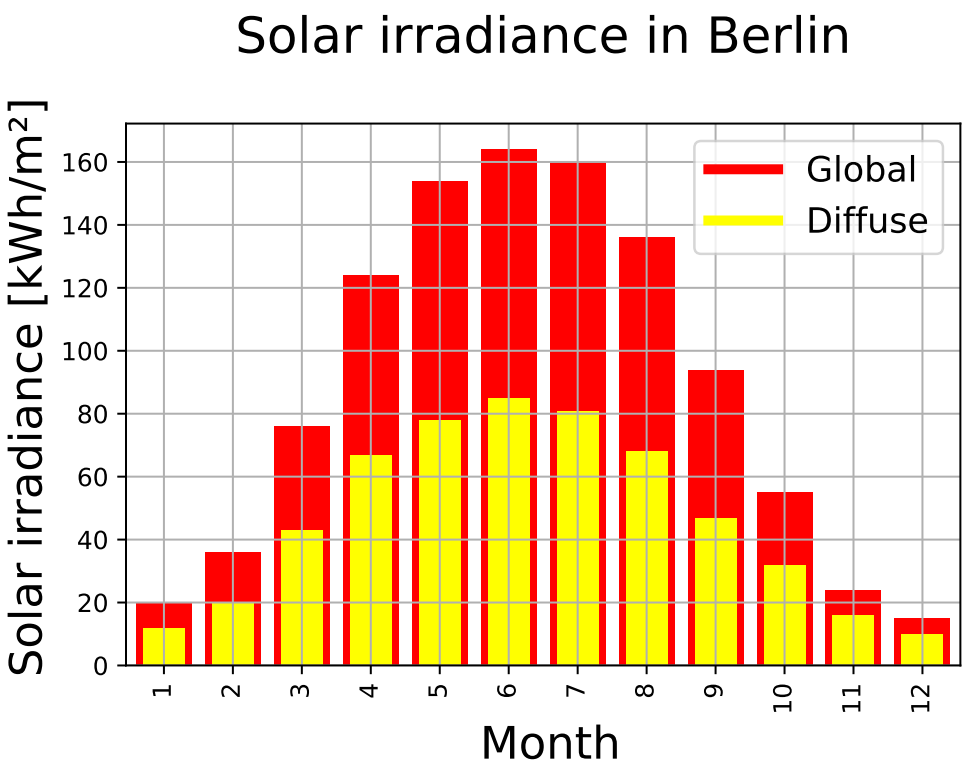
4.2 Table wide

This is an example of wide table with random float rounded to 3 position after comma

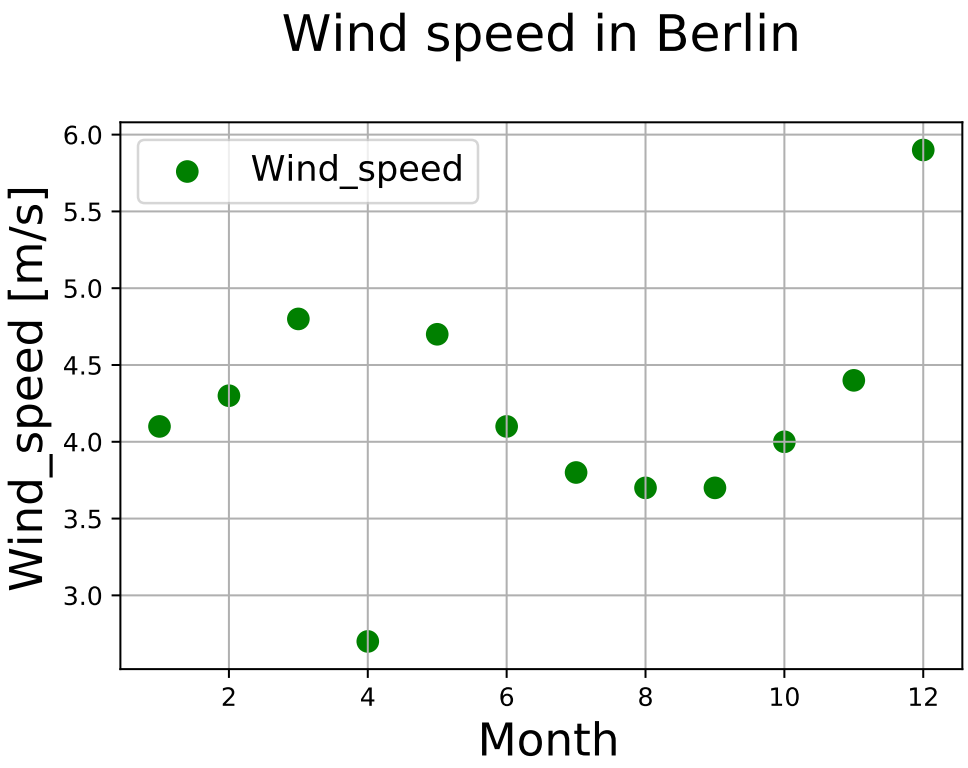
index	col 1	col 2	col 3	col 4	col 5	col 6	col 7	col 8	col 9	col 10	col 11	col 12	col 13	col 14	col 15
0.0	193.468	217.747	74.088	216.577	223.108	154.414	173.719	202.266	111.807	29.414	62.86	177.139	153.392	60.018	227.563
1.0	153.298	159.262	33.865	249.128	126.76	120.847	203.907	193.997	227.914	227.2	135.358	29.597	155.952	34.09	132.166
2.0	53.769	242.73	83.46	197.067	115.015	184.914	184.83	2.474	14.771	110.793	167.814	146.565	8.199	63.969	171.777
3.0	234.505	178.021	66.233	116.85	55.357	55.444	131.67	94.915	176.811	79.357	241.689	153.596	178.773	133.784	99.016
4.0	79.537	186.396	143.15	10.168	121.453	98.313	90.624	33.97	92.087	157.032	205.538	65.146	237.744	98.346	66.781
5.0	101.462	160.45	34.021	95.413	231.483	240.933	32.725	61.201	130.401	135.786	46.631	202.238	105.153	55.804	240.981
6.0	69.489	92.852	147.785	124.974	13.94	181.156	102.173	67.36	175.679	51.077	135.84	34.657	19.303	92.653	116.911
7.0	149.337	22.286	76.755	130.718	79.24	225.759	143.208	199.84	248.894	109.025	232.583	168.047	64.048	251.549	186.632
8.0	97.572	189.406	128.158	88.069	211.657	142.413	198.715	7.407	132.209	236.648	22.204	164.57	186.894	9.507	245.202
9.0	55.245	12.943	147.295	128.275	191.164	75.151	40.836	4.836	119.614	32.968	247.663	234.789	179.396	5.869	204.703
10.0	63.098	249.849	118.128	130.882	211.026	248.031	146.11	50.196	73.65	237.862	201.408	125.862	95.575	36.835	56.259
11.0	146.691	83.741	14.205	30.411	49.943	70.856	197.979	176.394	138.764	195.93	127.384	39.268	72.596	226.21	74.309
12.0	164.649	128.292	249.654	9.711	5.539	177.306	78.033	225.886	95.844	151.259	227.275	60.048	134.5	86.698	139.855
13.0	140.557	136.554	239.475	143.523	11.472	214.933	191.01	119.808	221.605	207.275	164.863	90.29	163.025	205.352	107.36
14.0	90.686	126.058	89.596	2.622	5.41	103.273	175.919	221.609	32.41	135.247	92.534	189.594	94.016	251.382	189.963
15.0	71.751	228.602	17.317	81.921	44.116	20.637	118.625	248.983	187.092	144.087	88.019	123.241	117.35	225.751	188.825
16.0	130.668	98.465	132.048	83.604	93.253	175.352	228.378	195.237	214.696	101.121	215.758	2.126	79.65	118.217	55.12
17.0	18.262	130.785	103.477	209.121	220.066	244.711	91.019	67.011	187.222	240.023	242.547	50.16	145.151	53.479	69.963
18.0	227.288	119.244	186.453	214.862	99.751	130.582	119.512	77.435	218.425	137.012	181.867	1.054	124.389	81.17	121.551
19.0	229.901	9.2	214.849	13.161	57.355	74.507	123.327	64.978	58.823	122.74	163.181	229.753	66.37	139.493	23.32

5 Example of chart

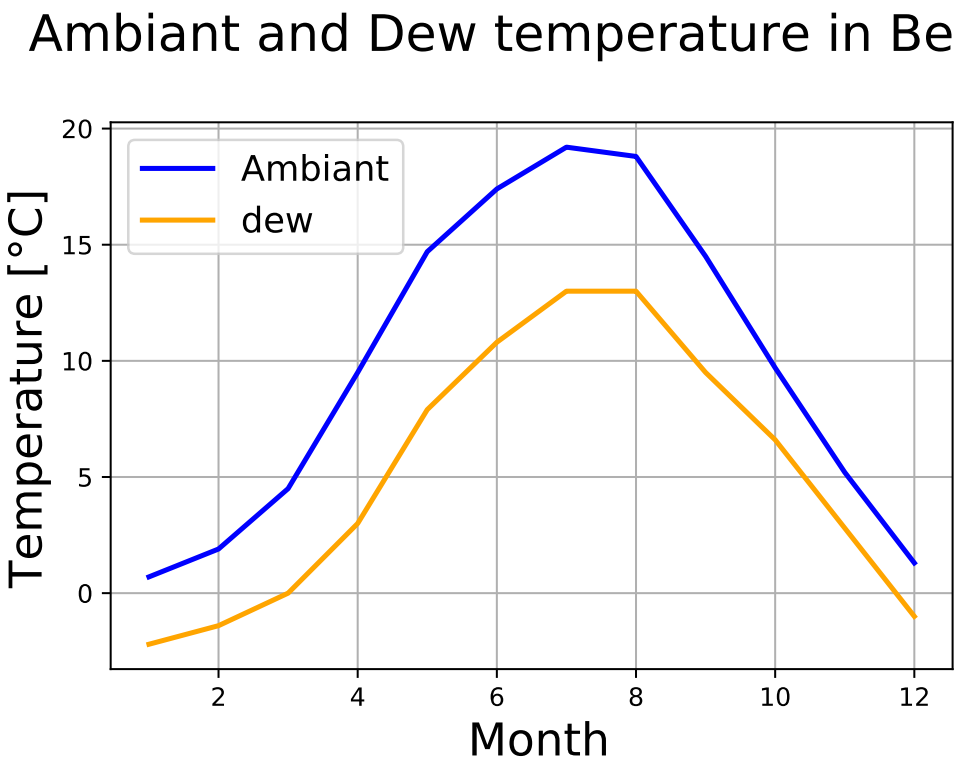
5.1 chart bar



5.2 chart scatter



5.3 chart line



6 Example of matematic formulas

example 1:

$$y = ax + b$$

with: - $ y $: Ordonate - $ x $: Abscissa - $ a $: Slope - $ b $: Initial value

example 2:

$$\sum_{i=1}^{\infty} i = \frac{n(n+1)}{2}$$

example 3:

$$\int_{0}^{\infty} \sqrt{x} e^{-x} dx = \frac{1}{2}\sqrt{\pi}$$

7 Generation of the template

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Overwriting my_template.tplx
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