My Latex automated Report

Generated from my notebook.ipynb

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Contents

1 Initialisation

1.1 import packages

1.2 definition of functions

1.2.1 function tp display beatiful tables

2 import data

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

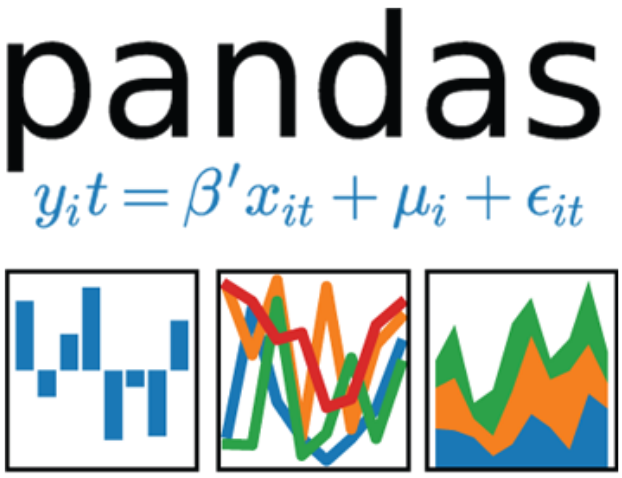
the data will be dealing with the weather data of the berlin tempelhof weatherstation on monthly basis.

[4]:

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

[5]:

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

[8]:

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

data

[9]:

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

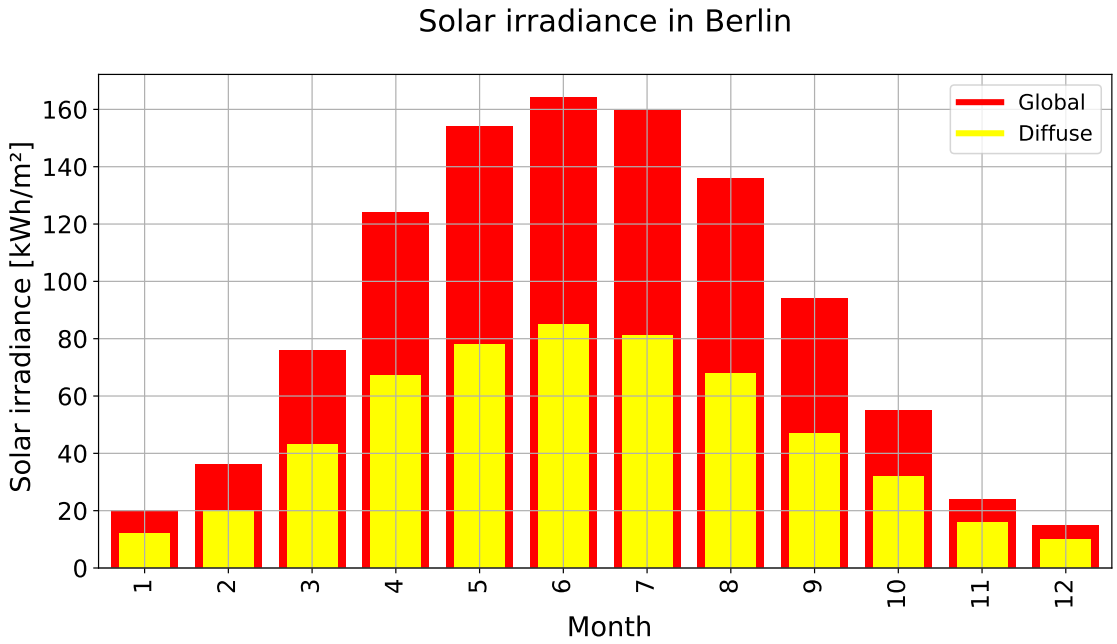
This is an example of wide table with random float rounded to 3 position after comma

[10]:

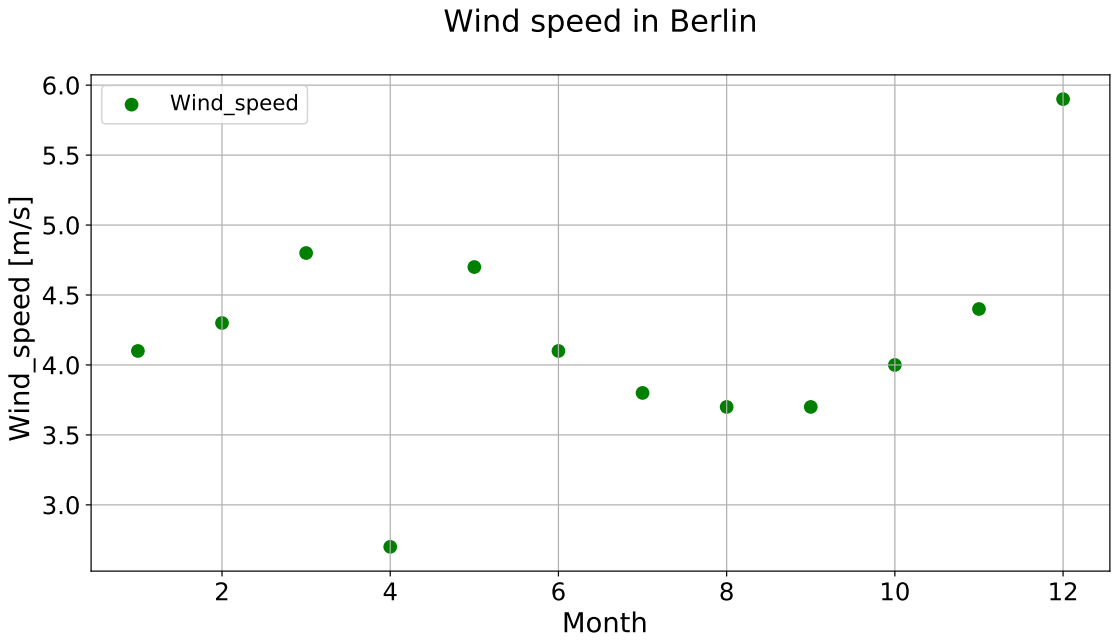
index	col 1	col 2	col 3	col 4	col 5	col 6	col 7	col 8	col 9	col 10	col 11	col 12	col 13	col 14	col 15
0.0	0.215	36.515	89.899	215.034	228.526	238.107	99.938	150.126	233.258	117.271	128.034	164.931	169.521	167.264	68.092
1.0	243.853	159.206	70.151	29.714	33.418	157.225	191.029	6.201	8.167	172.989	218.23	30.93	35.751	198.934	235.209
2.0	239.653	172.05	15.692	204.575	141.058	190.091	213.0	16.011	76.971	59.571	174.957	199.69	11.301	37.041	99.191
3.0	140.702	196.518	105.69	106.111	30.875	142.414	140.151	110.107	34.534	186.015	66.385	115.059	104.244	162.372	236.336
4.0	56.171	148.973	248.285	121.286	140.967	74.283	125.742	129.724	19.87	243.832	119.971	112.607	104.796	175.846	224.139
5.0	114.294	166.664	247.102	14.216	134.196	105.539	223.246	138.475	224.595	70.29	46.18	167.316	213.599	22.015	210.306
6.0	253.068	180.55	147.437	221.161	108.775	200.428	251.04	175.821	100.649	125.615	59.312	80.982	67.987	4.959	16.466
7.0	169.192	168.892	220.154	174.896	1.259	110.88	175.239	253.874	13.42	164.377	157.054	64.004	11.572	91.094	46.923
8.0	227.486	191.67	196.11	26.432	247.839	116.226	160.558	85.62	241.272	224.607	172.186	58.933	127.033	169.79	69.368
9.0	86.981	174.805	171.467	138.519	187.65	157.909	182.073	173.922	126.582	137.143	37.444	248.7	75.671	59.376	99.347
10.0	112.471	149.713	163.99	19.598	164.238	196.113	197.545	81.842	51.388	121.139	6.362	216.93	13.087	75.519	40.254
11.0	126.954	75.675	50.843	9.776	6.343	140.983	84.445	48.851	132.327	69.446	24.338	120.088	199.778	35.892	121.165
12.0	15.949	54.167	112.818	13.407	135.708	56.497	74.177	14.18	159.989	196.693	229.525	239.729	24.303	29.53	177.415
13.0	248.467	99.491	55.102	126.115	13.925	146.214	61.603	108.893	164.285	142.72	98.485	134.261	251.141	65.141	133.807
14.0	87.029	92.894	14.809	225.048	146.884	215.466	102.197	191.361	60.982	161.262	103.522	102.572	253.742	164.478	113.751
15.0	201.782	92.914	238.588	75.222	96.907	28.973	188.566	235.772	27.932	234.225	145.225	78.316	93.348	188.042	249.128
16.0	144.331	195.405	23.985	123.549	166.804	248.496	153.5	73.062	70.78	58.805	111.027	61.543	45.284	98.939	157.024
17.0	111.287	3.331	123.532	56.367	149.619	107.608	156.035	101.52	139.215	149.306	93.33	57.703	119.309	149.293	69.424
18.0	101.066	220.132	18.886	225.289	30.135	9.577	155.097	123.727	162.266	107.182	63.557	144.622	237.123	80.158	181.394
19.0	195.077	252.269	118.295	244.021	28.571	202.007	166.29	219.161	7.645	252.89	81.93	11.189	152.885	198.09	74.311

5 Example of chart

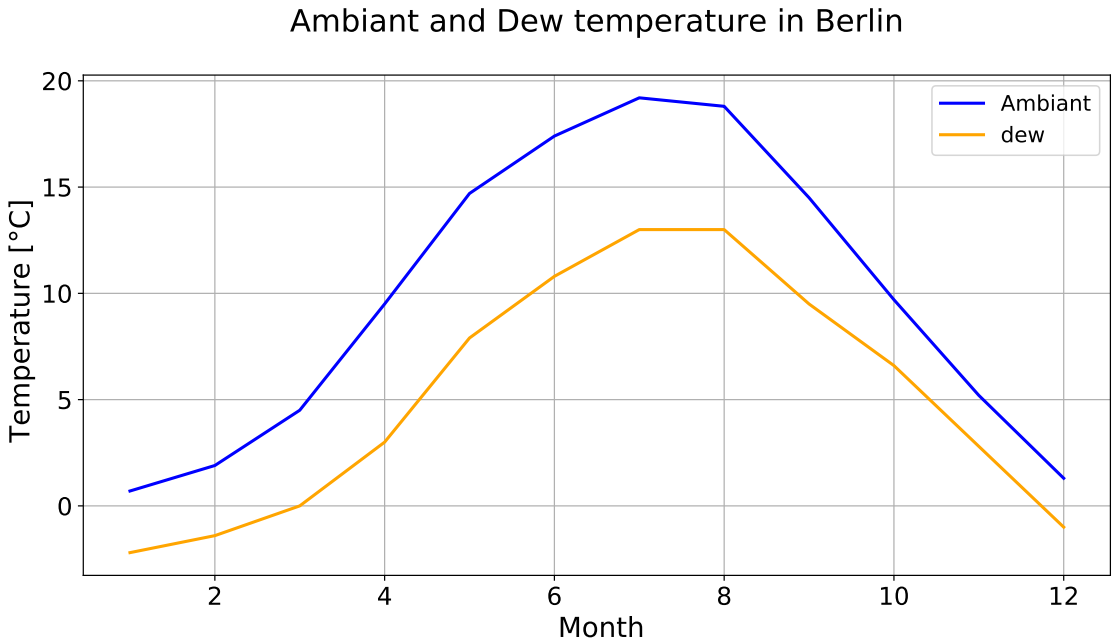
5.1 chart bar



5.2 chart scatter



5.3 chart line



6 Generation of the template

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Overwriting my_template.tplx
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