My Latex automated Report

Generated from my notebook.ipynb

Mathieu Provost

December 13, 2019

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

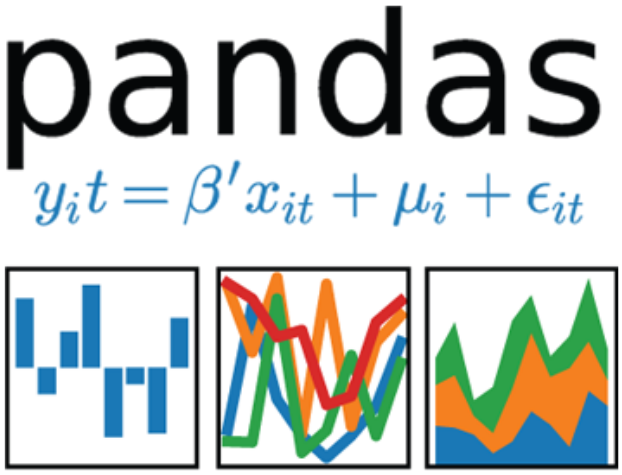
the data will be dealing with the weather data of the berlin tempelhof weatherstation on monthly basis.

[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

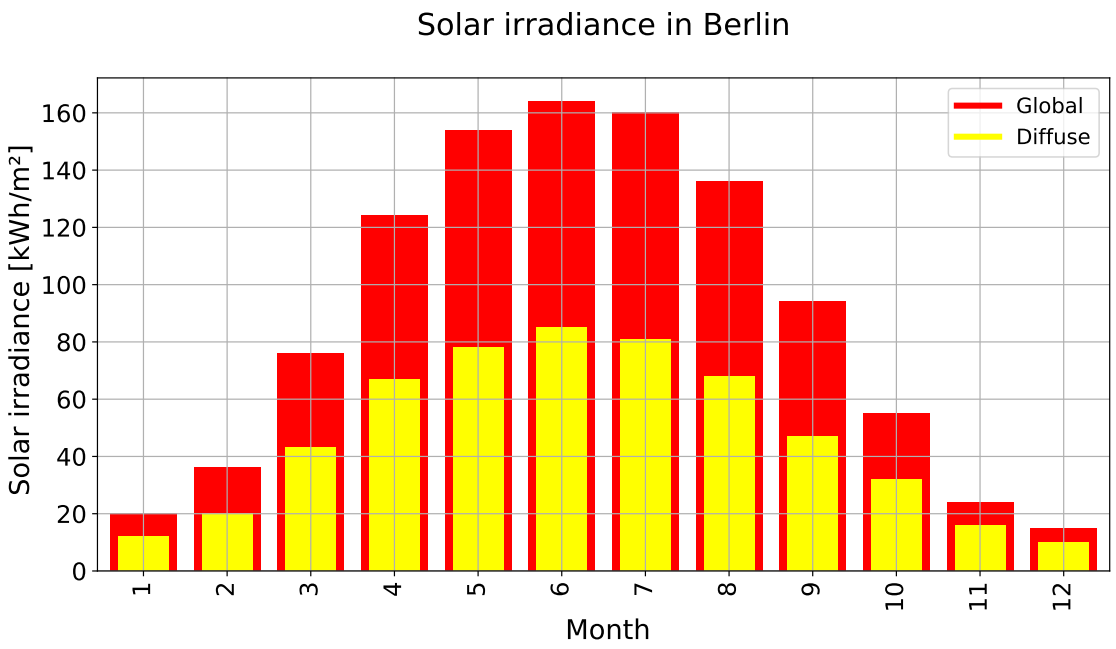
`This is an example of wide table with random float rounded to 3 position after comma`

[10]:

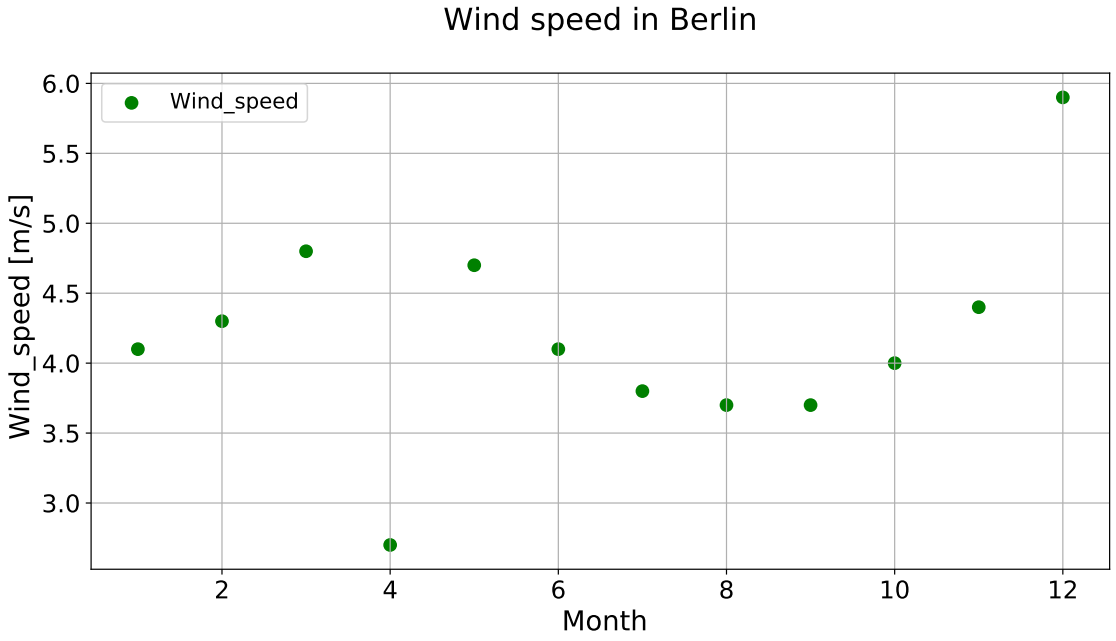
index	col 1	col 2	col 3	col 4	col 5	col 6	col 7	col 8	col 9	col 10	col 11	col 12	col 13	col 14	col 15
0.0	22.13	126.357	121.338	140.988	17.297	46.321	191.485	99.441	43.404	64.752	11.203	81.156	115.234	215.885	125.297
1.0	80.851	10.645	161.81	39.433	177.936	89.558	143.776	245.223	245.777	151.958	171.13	107.12	3.301	52.233	222.192
2.0	7.424	71.21	121.887	243.524	7.277	55.925	141.491	114.558	56.789	121.355	177.977	209.882	159.752	97.372	73.141
3.0	146.749	183.522	185.01	186.273	227.613	139.861	230.989	93.239	5.898	216.711	241.928	188.969	193.022	201.26	96.269
4.0	84.513	8.344	185.365	215.644	9.888	127.562	166.841	165.427	243.336	38.14	60.107	48.791	19.041	160.996	52.729
5.0	43.905	68.156	95.403	178.96	14.047	165.766	135.64	94.159	17.44	33.784	171.333	241.972	1.778	223.06	235.898
6.0	123.448	222.75	121.748	95.708	76.009	38.108	19.621	231.616	204.51	49.157	114.24	235.535	152.284	228.662	113.879
7.0	20.913	167.147	113.361	96.834	211.438	151.559	224.837	51.902	80.18	7.778	155.125	21.49	180.385	51.592	17.85
8.0	95.496	35.598	75.777	48.972	55.32	124.962	188.027	207.373	114.492	51.907	35.166	6.842	163.947	112.18	135.851
9.0	42.955	16.915	29.292	173.299	246.011	222.639	151.852	205.424	129.598	179.34	161.978	2.287	2.162	151.836	27.732
10.0	49.623	82.559	242.436	251.403	126.745	67.305	11.133	28.598	40.871	138.603	231.965	35.689	194.367	245.637	88.832
11.0	151.448	195.16	60.13	20.496	75.458	251.055	199.282	229.737	68.651	237.257	80.108	6.697	71.454	178.385	13.406
12.0	98.006	178.573	159.586	102.797	64.182	212.093	153.302	232.12	87.092	139.52	102.198	197.749	129.076	163.741	112.614
13.0	211.283	65.082	137.298	78.784	208.412	121.67	203.515	163.663	209.221	233.217	168.432	119.992	152.879	198.18	84.95
14.0	166.594	225.014	3.679	143.271	36.935	119.41	249.227	41.342	147.692	8.512	16.68	176.936	5.159	200.606	39.425
15.0	202.557	223.021	54.446	193.02	196.486	90.723	195.349	155.368	95.348	42.493	224.538	95.168	197.42	193.481	39.565
16.0	39.874	128.69	210.501	204.125	138.336	76.23	125.437	199.31	4.754	232.628	122.701	120.897	194.125	139.439	116.019
17.0	208.849	175.01	209.839	227.181	129.479	40.732	29.426	187.157	161.647	120.97	183.295	191.458	99.476	152.167	160.421
18.0	17.746	121.917	151.145	224.787	114.346	145.707	73.559	201.857	87.068	65.914	67.569	213.628	119.47	164.516	32.067
19.0	5.163	182.177	207.219	228.323	113.865	124.977	50.845	203.647	50.885	34.326	234.824	199.617	125.495	80.671	10.963

5 Example of chart

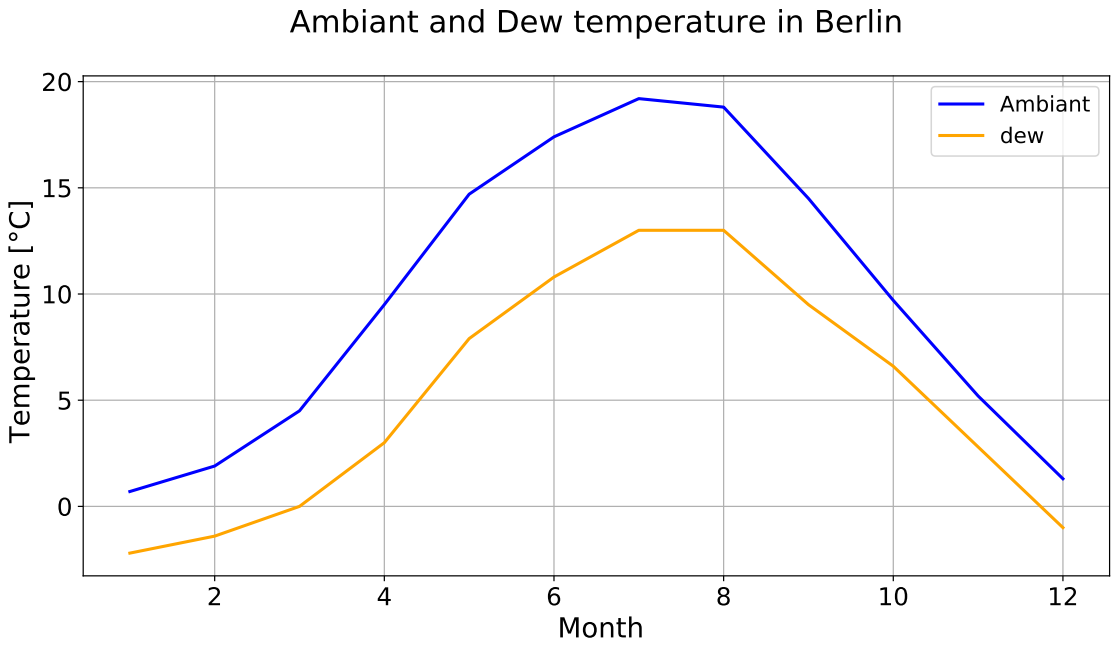
5.1 chart bar



5.2 chart scatter



5.3 chart line



6 Generation of the template

```
Overwriting my_template.tplx
```