Lab 1 - Report

Jonathan Reimertz & Viktor Gustafsson 2020-05-05

Assignment 1

Maximum and minimum temperatures measured for each year in the period of 1950-2014, ordered by maximum temperature. The table below is showing the top 20 results.

Year	Max temperature [°C]	Min temperature [°C]
1975	36,1	-37,0
1992	35,4	-36,1
1994	34,7	-40,5
2010	34,4	-41,7
2014	34,4	-42,5
1989	33,9	-38,2
1982	33,8	-42,2
1968	33,7	-42,0
1966	33,5	-49,4
1983	33,3	-38,2
2002	33,3	-42,2
1970	33,2	-39,6
1986	33,2	-44,2
2000	33,0	-37,6
1956	33,0	-45,0
1959	32,8	-43,6
1991	32,7	-39,3
2006	32,7	-40,6
1988	32,6	-39,9
2011	32,5	-42,0

Number of readings which are higher than 10 degrees, for each month in the period of 1950-2014.

2a - Total number of readings

Counts each reading every day of the month which is higher than 10 degrees. The table below is showing the top 20 results, sorted by year and month.

Year	Month	Count
2014	12	5
2014	11	8498
2014	10	43359
2014	9	87131
2014	8	125006
2014	7	147910
2014	6	102865
2014	5	58340
2014	4	20408
2014	3	4396
2014	2	35
2013	12	24
2013	11	1833
2013	10	38937
2013	9	83042
2013	8	128920
2013	7	134297
2013	6	123133
2013	5	83128
2013	4	7549

2b - Number of distinct readings

Each station may only be counted once each month. The table below is showing the top 20 results, sorted by year and month.

Year	Month	Count
2014	12	3
2014	11	160
2014	10	272
2014	9	296
2014	8	296
2014	7	297
2014	6	298
2014	5	296
2014	4	254
2014	3	170
2014	2	16
2013	12	13
2013	11	123
2013	10	271
2013	9	299
2013	8	300
2013	7	301
2013	6	302
2013	5	301
2013	4	209

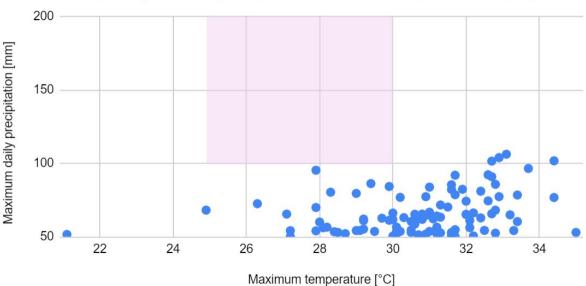
Average monthly temperature for each available station in Sweden in the period of 1950-2014. The table below is showing the top 20 results, sorted by year, station and month.

Year	Month	Station number	Average monthly temperature [°C]
2014	1	52230	1,8
2014	2	52230	3,1
2014	3	52230	5,3
2014	4	52230	8,9
2014	5	52230	12,8
2014	6	52230	16,8
2014	7	52230	20,2
2014	8	52230	17,8
2014	9	52230	15,3
2014	10	52230	12,9
2014	11	52230	8,5
2014	12	52230	3,9
2014	1	52240	1,8
2014	2	52240	3,2
2014	3	52240	5,3
2014	4	52240	8,7
2014	5	52240	12,2
2014	6	52240	16,1
2014	7	52240	20,3
2014	8	52240	17,8

There are no stations with maximum measured temperatures between 25 and 30 degrees and maximum measured daily precipitation between 100 and 200 mm.

By reducing the constraints and increasing the intervals the following graph is apprehended. In the graph below it is visible that there are no data points in the area of study.

Maximum precipitation [mm] vs Maximum temperature [°C]



Average monthly precipitation for the Östergötland region in the period of 1993-2016. The table below is showing the top 20 results, sorted by year and month.

Year	Month	Average precipitation [mm]
2016	7	0,0
2016	6	47,7
2016	5	29,3
2016	4	26,9
2016	3	20,0
2016	2	21,6
2016	1	22,3
2015	12	28,9
2015	11	63,9
2015	10	2,3
2015	9	101,3
2015	8	27,0
2015	7	119,1
2015	6	78,7
2015	5	93,2
2015	4	15,3
2015	3	42,6
2015	2	24,8
2015	1	59,1
2014	12	35,5