

# Lab 2 - Report

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## Assignment 1

Maximum and minimum temperatures, with corresponding stations, measured for each year in the period of 1950-2014. The tables below is showing the top 20 results for minimum and maximum temperatures each, sorted over temperature.

Year	Statation	Max Temperature
1975	86200	36.1
1992	63600	35.4
1994	117160	34.7
2010	75250	34.4
2014	96560	34.4
1989	63050	33.9
1982	94050	33.8
1968	137100	33.7
1966	151640	33.5
2002	78290	33.3
2002	78290	33.3
1983	98210	33.3
1970	103080	33.2
1986	76470	33.2
1956	145340	33.0
2000	62400	33.0
1959	65160	32.8
1991	137040	32.7

2006	75240	32.7
1988	102540	32.6

Year	Station	Min Temperature
1990	166870	-35.0
1990	147270	-35.0
1952	192830	-35.5
1974	166870	-35.6
1974	179950	-35.6
1954	113410	-36.0
1992	179960	-36.1
1975	157860	-37.0
1972	167860	-37.5
2000	169860	-37.6
1995	182910	-37.6
1957	159970	-37.8
1989	166870	-38.2
1983	191900	-38.2
1953	183760	-38.4
2009	179960	-38.5
1993	191900	-39.0
1984	123480	-39.2
1984	191900	-39.2
2008	179960	-39.3

## Assignment 2

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 value.

Year	Month	Count
2014	7	147681
2011	7	146656
2010	7	143419
2012	7	137477
2013	7	133657
2009	7	133008
2011	8	132734
2009	8	128349
2013	8	128235
2003	7	128133
2002	7	127956
2006	8	127622
2008	7	126973
2015	8	126260
2002	8	126073
2005	7	125294
2011	6	125193
2012	8	125037
2006	7	124794
2010	8	124417

## 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 value.

Year	Month	Count
1972	10	378
1973	5	377
1973	6	377
1973	9	376
1972	8	376
1972	6	375
1972	5	375
1972	9	375
1971	8	375
1971	6	374
1971	9	374
1972	7	374
1971	5	373
1973	8	373
1974	8	372
1974	6	372
1974	5	370
1973	7	370
1970	8	370
1974	9	370

## Assignment 3

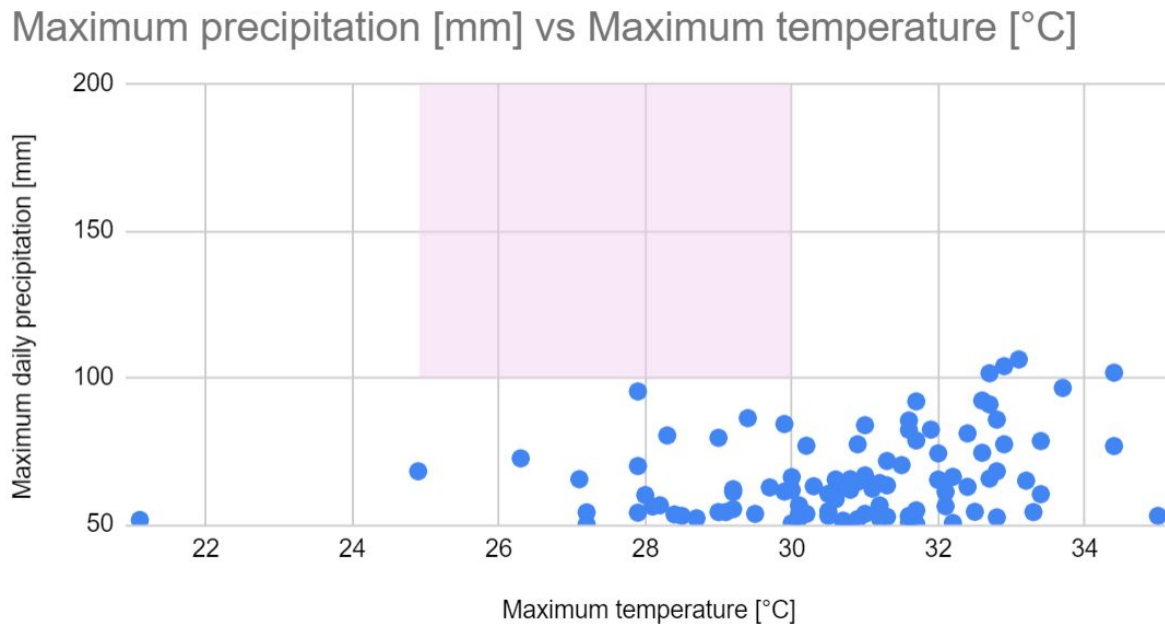
Average monthly temperature for each available station in Sweden in the period of 1950-2014. The table below is showing the top 20 results, sorted by average monthly temperature.

Year	Month	Station	Average Monthly Temp
2014	7	96000	26
1994	7	96550	23
1983	8	54550	23
1994	7	78140	23
1994	7	85280	23
1994	7	75120	23
1994	7	65450	23
1994	7	96000	23
1994	7	95160	23
1994	7	86200	23
2002	8	78140	23
1994	7	76000	23
1997	8	78140	23
1994	7	105260	23
1975	8	54550	23
2006	7	76530	23
1994	7	86330	23
2006	7	75120	23
1994	7	54300	22
2006	7	78140	22

## Assignment 4

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.



## Assignment 5

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	Avg Monthly Precipitation
2016	7	0
2016	6	48
2016	5	29
2016	4	27
2016	3	20
2016	2	22
2016	1	22
2015	12	29
2015	11	64
2015	10	2
2015	9	101
2015	8	27
2015	7	119
2015	6	79
2015	5	93
2015	4	15
2015	3	43
2015	2	25
2015	1	59
2014	12	35