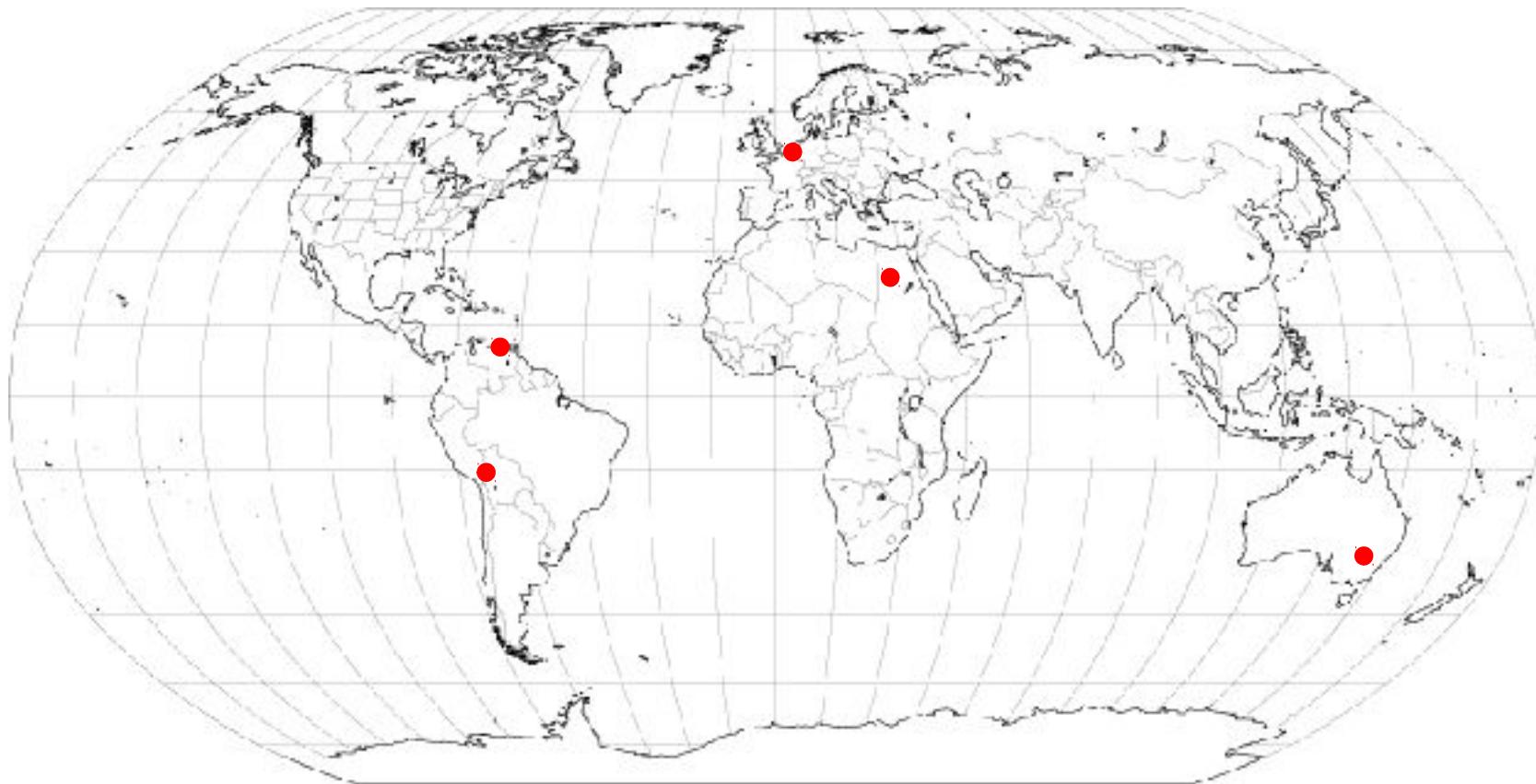
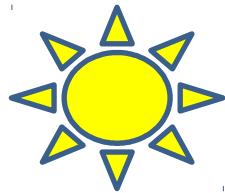
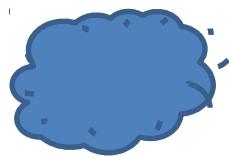


# Design a museum store

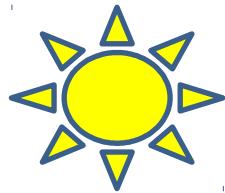
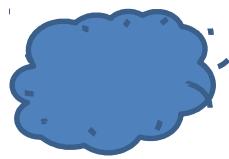


# Design a museum store

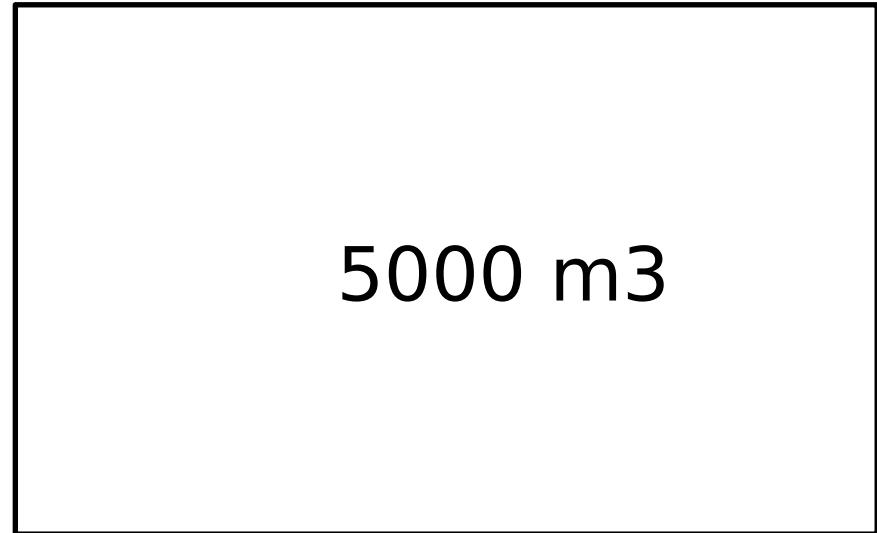


Outside T and  
RH

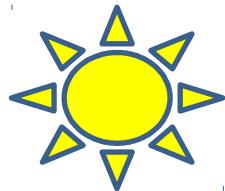
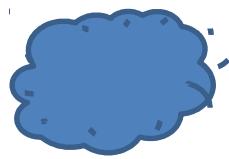
# Design a museum store



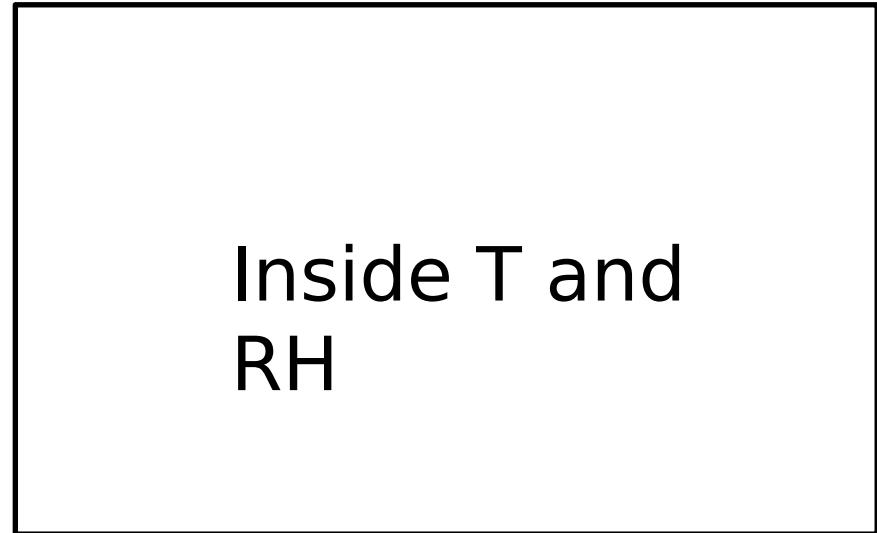
Outside T and  
RH



# Design a museum store

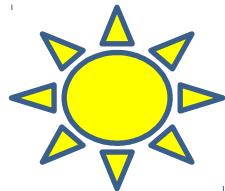


Outside T and  
RH



Inside T and  
RH

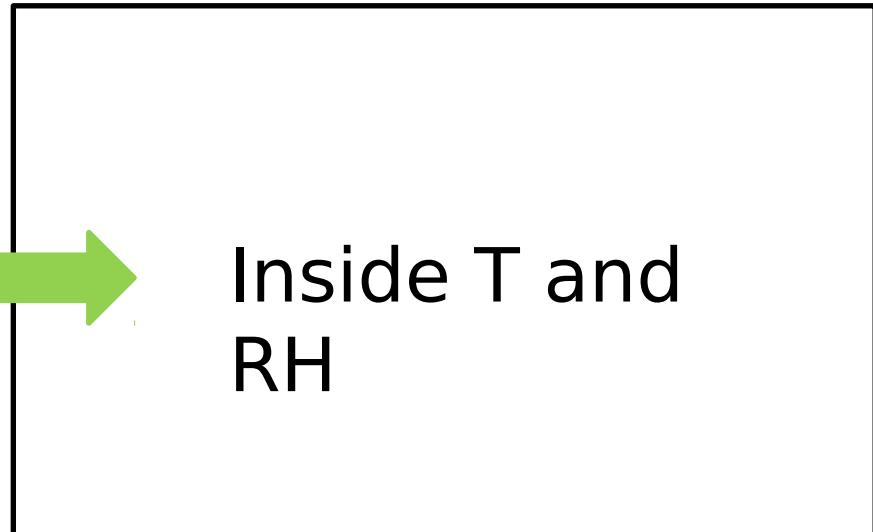
# Design a museum store



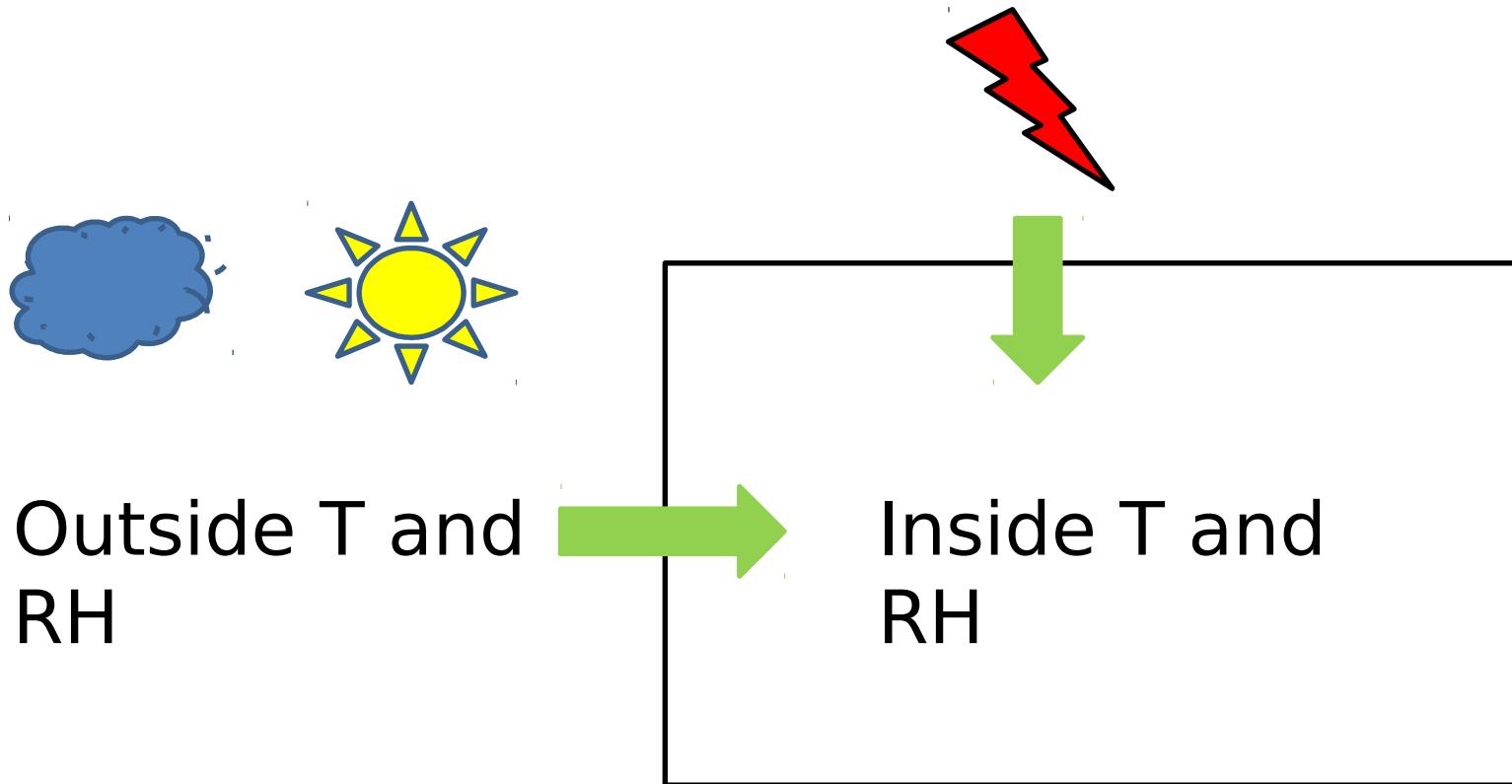
Outside T and  
RH



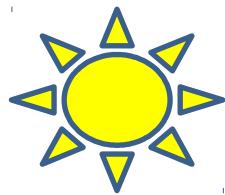
Inside T and  
RH



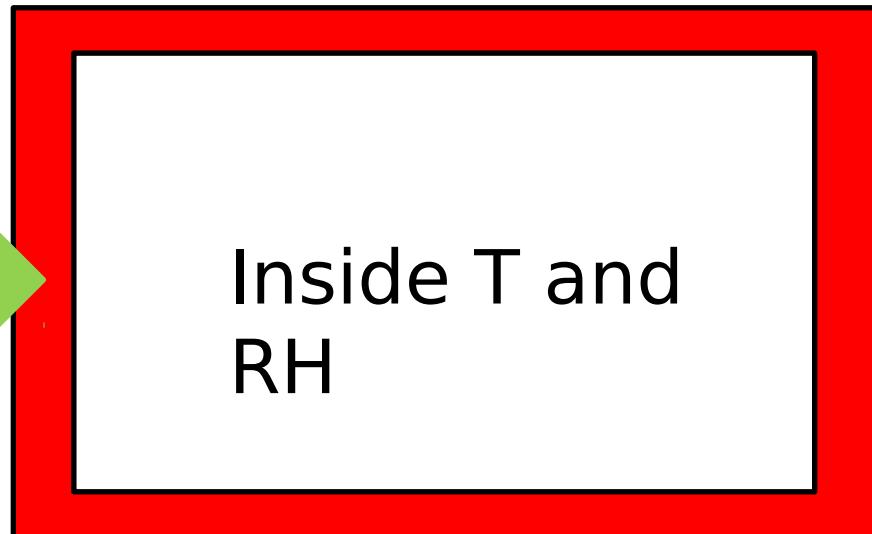
# Design a museum store



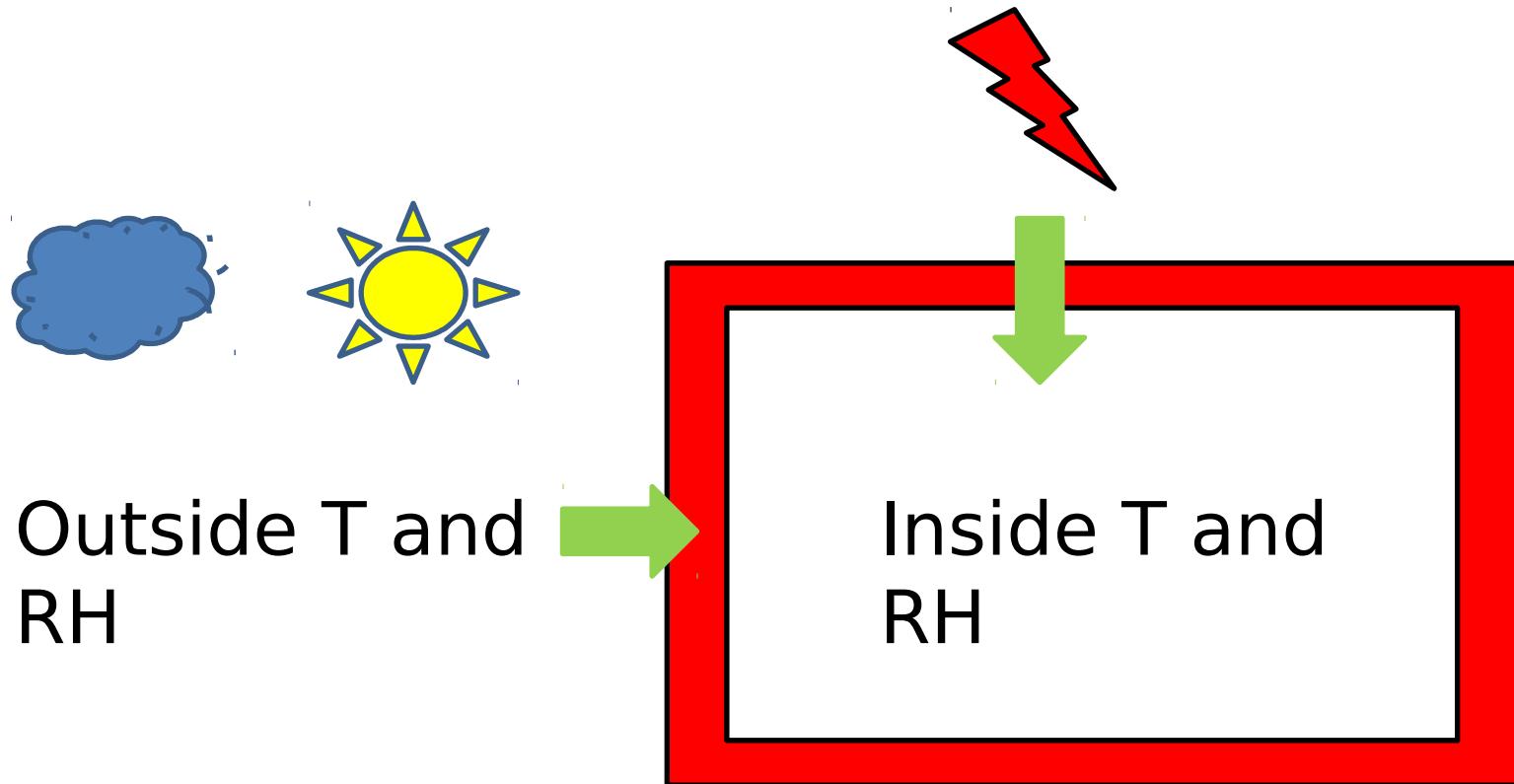
# Design a museum store



Outside T and  
RH



# Design a museum store



- Monthly Statistics for Dry Bulb temperatures °C

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum Day:Hour	10.6 19:13	10.4 19:18	15.8 13:16	22.7 4:15	26.6 17:14	27.9 26:15	31.6 11:15	34.9 10:16	24.9 24:16	25.7 4:14	18.0 8:15	14.2 13:01
Minimum Day:Hour	-4.0 1:06	-9.1 13:08	-0.4 3:06	-1.0 24:06	1.4 7:06	8.8 8:03	11.6 28:06	8.2 25:04	7.0 23:07	-2.4 30:07	-7.6 15:05	-2.8 2:08
Daily Avg	3.1	3.2	6.4	8.9	12.9	15.6	18.4	17.4	14.5	10.9	6.6	4.9

- Maximum Dry Bulb temperature of 34.9°C on Aug 10

- Minimum Dry Bulb temperature of -9.1°C on Feb 13

- Average Hourly Statistics for Dry Bulb temperatures °C

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0:01- 1:00	2.9	2.6	5.5	7.4	10.6	13.3	16.1	14.4	13.1	9.6	6.0	4.7
1:01- 2:00	2.7	2.6	5.2	7.2	9.8	12.8	15.7	13.9	13.0	9.4	5.5	4.5
2:01- 3:00	2.6	2.4	5.0	6.9	9.5	12.6	15.3	13.6	12.8	9.2	5.3	4.4
3:01- 4:00	2.5	2.4	4.8	6.6	9.1	12.6	15.0	13.2	12.5	9.0	5.0	4.3
4:01- 5:00	2.5	2.3	4.6	6.3	9.0	12.4	14.8	13.0	12.3	8.7	4.8	4.2
5:01- 6:00	2.5	1.9	4.4	6.2	9.2	12.7	14.9	13.0	12.2	8.7	4.8	4.1
6:01- 7:00	2.5	1.7	4.3	6.5	10.2	13.5	15.7	13.9	12.2	8.7	4.6	4.0
7:01- 8:00	2.3	1.8	4.5	7.2	11.4	14.5	16.6	15.5	12.8	8.8	4.6	3.9
8:01- 9:00	2.4	2.0	5.1	8.2	12.6	15.6	17.7	16.9	13.8	9.6	5.0	4.0
9:01-10:00	2.6	2.5	5.9	8.9	13.7	16.6	18.8	18.2	14.9	10.8	5.8	4.1
10:01-11:00	3.1	3.0	6.7	9.9	14.4	17.0	19.7	19.4	15.7	11.9	7.1	4.6
11:01-12:00	3.5	3.8	7.4	10.5	15.2	17.6	20.6	20.4	16.4	12.9	8.0	5.0
12:01-13:00	3.7	4.2	8.1	10.9	15.6	18.0	21.2	21.1	16.8	13.6	8.9	5.5
13:01-14:00	3.9	4.5	8.5	11.3	16.1	18.6	21.6	21.7	17.2	14.1	9.4	5.9
14:01-15:00	3.9	4.8	8.9	11.6	16.5	18.4	22.0	21.9	17.2	14.2	9.5	6.0
15:01-16:00	3.9	4.7	8.8	11.5	16.5	18.5	22.2	21.9	17.4	14.0	9.2	6.0
16:01-17:00	3.6	4.6	8.7	11.5	16.4	18.4	22.0	21.6	16.9	13.3	8.4	5.8
17:01-18:00	3.5	4.3	8.4	11.3	16.2	18.2	21.5	21.1	16.3	12.3	7.7	5.6
18:01-19:00	3.4	4.0	7.8	10.7	15.5	17.4	21.0	20.2	15.4	11.5	7.1	5.6
19:01-20:00	3.3	3.6	7.2	9.8	14.5	16.7	19.9	18.9	14.4	11.1	6.7	5.5
20:01-21:00	3.1	3.7	6.8	9.0	13.3	15.6	18.6	17.6	13.9	10.7	6.5	5.4
21:01-22:00	3.1	3.4	6.4	8.4	12.3	14.6	17.7	16.5	13.6	10.3	6.2	5.2
22:01-23:00	3.1	3.3	6.0	8.0	11.6	14.1	17.0	15.5	13.3	10.0	6.0	5.1
23:01-24:00	3.1	3.0	5.6	7.7	11.1	13.7	16.5	14.9	13.2	9.8	5.9	5.0
Max Hour	14	15	15	15	15	14	16	15	16	15	15	16
Min Hour	8	7	7	6	5	5	5	6	6	7	8	8

- Monthly Statistics for Extreme temperatures °C

#Days	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max >= 32												
Max <= 0	2	1										2
Min <= 0	11	10	2	2						5	8	8
Min <=-18												

- Monthly Statistics for Dew Point temperatures °C

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum	9.1	9.8	10.1	10.9	18.3	20.1	20.7	19.5	19.1	16.5	13.5	12.9
Day:Hour	19:15	19:23	14:15	3:10	16:17	27:16	11:20	10:15	24:18	3:16	2:15	12:24
Minimum	-7.5	-9.7	-2.4	-4.5	-0.3	5.0	10.0	6.0	3.0	-3.3	-12.5	-5.7
Day:Hour	1:06	12:09	13:06	23:23	7:14	4:15	9:11	28:13	7:16	30:08	14:17	2:14
Daily Avg	0.7	1.1	3.8	4.7	8.6	10.7	14.1	12.4	11.0	7.4	4.0	2.9

- Maximum Dew Point temperature of 20.7°C on Jul 11

- Minimum Dew Point temperature of -12.5°C on Nov 14

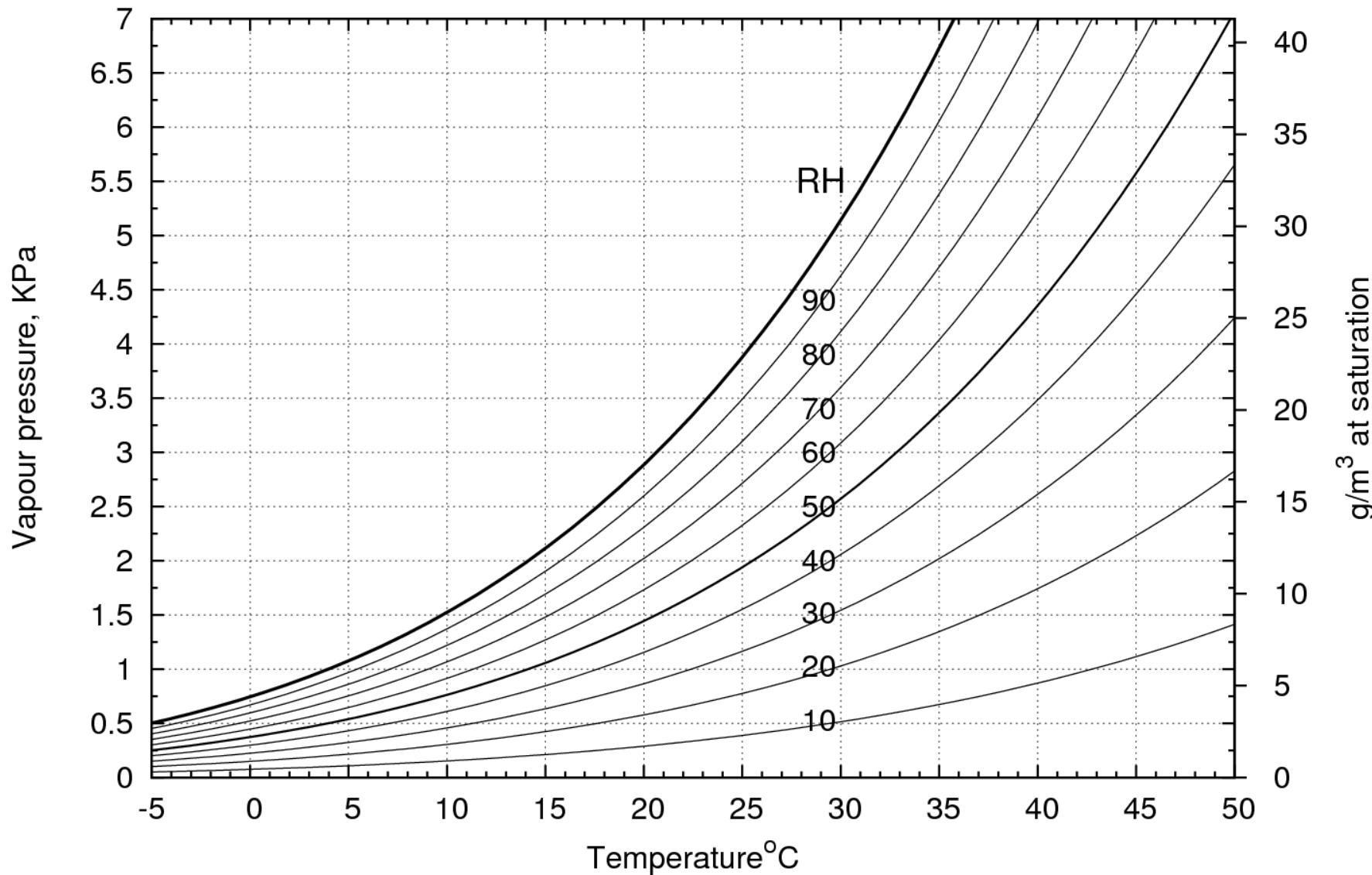
- Monthly Statistics for Relative Humidity %

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum	100	100	100	99	100	100	98	100	100	100	100	100
Day:Hour	6:02	7:12	9:11	18:07	1:05	6:07	1:22	1:05	14:20	22:04	2:04	5:05
Minimum	60	35	46	39	38	26	37	31	34	40	32	48
Day:Hour	14:23	14:15	13:16	19:12	26:20	1:15	29:15	10:17	8:14	27:14	14:14	17:19
Daily Avg	85	86	84	76	77	75	77	75	81	80	84	87

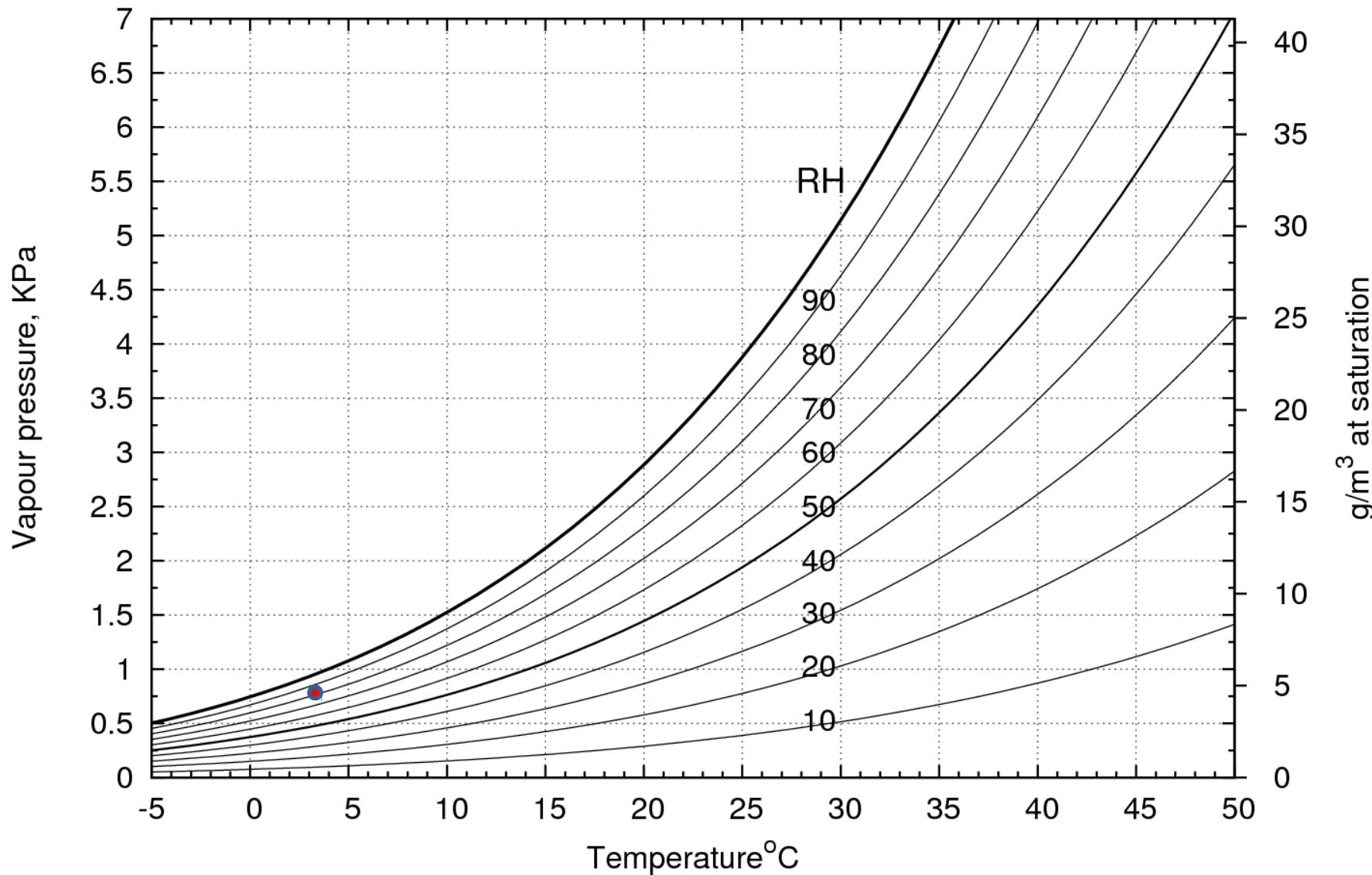
- Average Hourly Relative Humidity %

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0:01- 1:00	85	88	87	81	86	85	86	87	88	88	88	89
1:01- 2:00	86	88	88	81	88	87	87	89	88	89	90	89
2:01- 3:00	85	88	88	83	90	87	89	90	88	89	89	88
3:01- 4:00	85	89	89	84	91	87	89	91	89	90	88	88
4:01- 5:00	86	88	88	86	91	88	90	92	89	90	88	87
5:01- 6:00	86	91	90	86	90	87	89	92	88	89	89	88
6:01- 7:00	87	93	90	86	88	85	87	91	88	89	90	89
7:01- 8:00	88	92	89	83	83	80	84	85	87	88	89	89

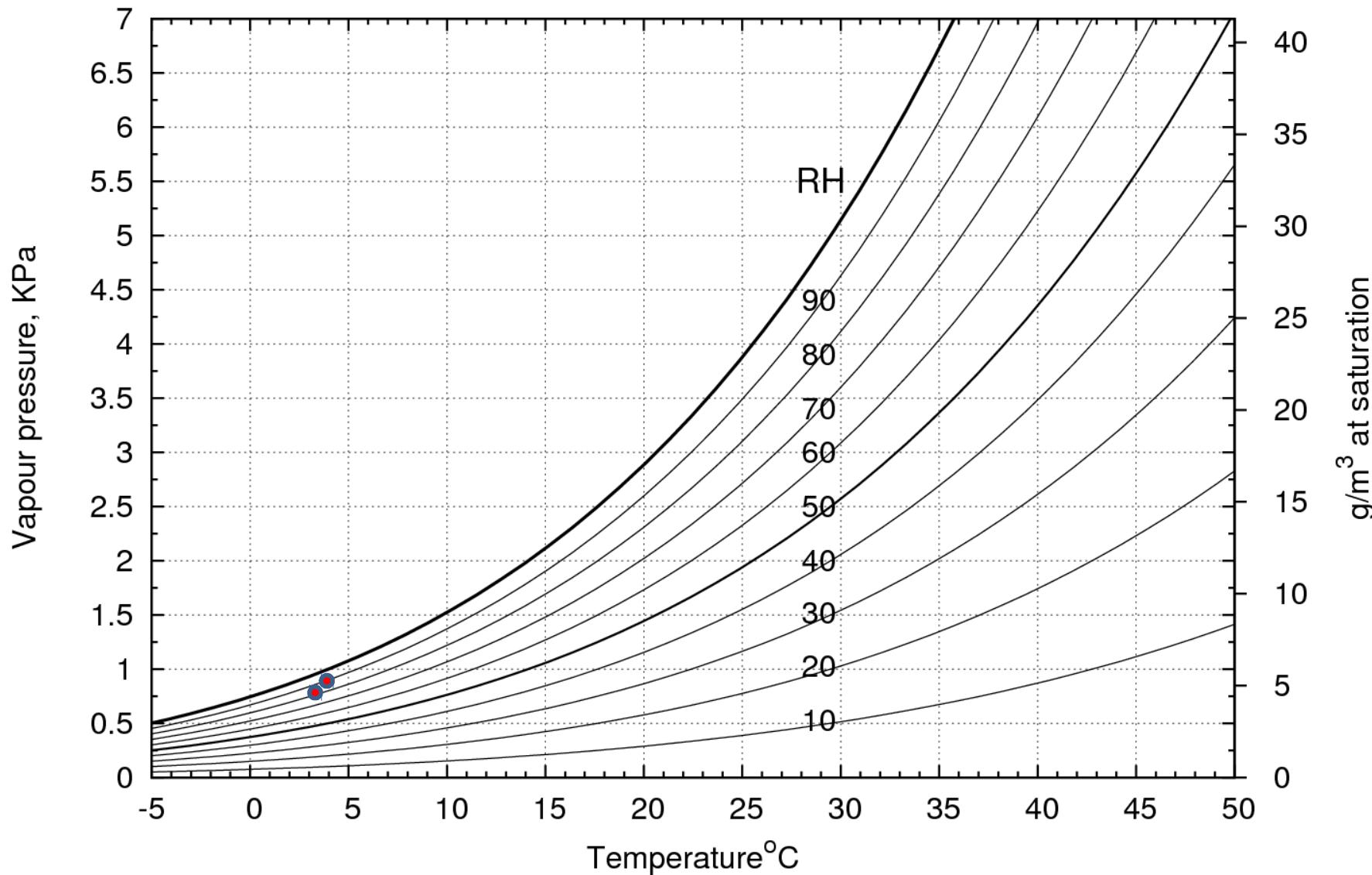
# Vapour pressure diagram for water, with constant RH curves



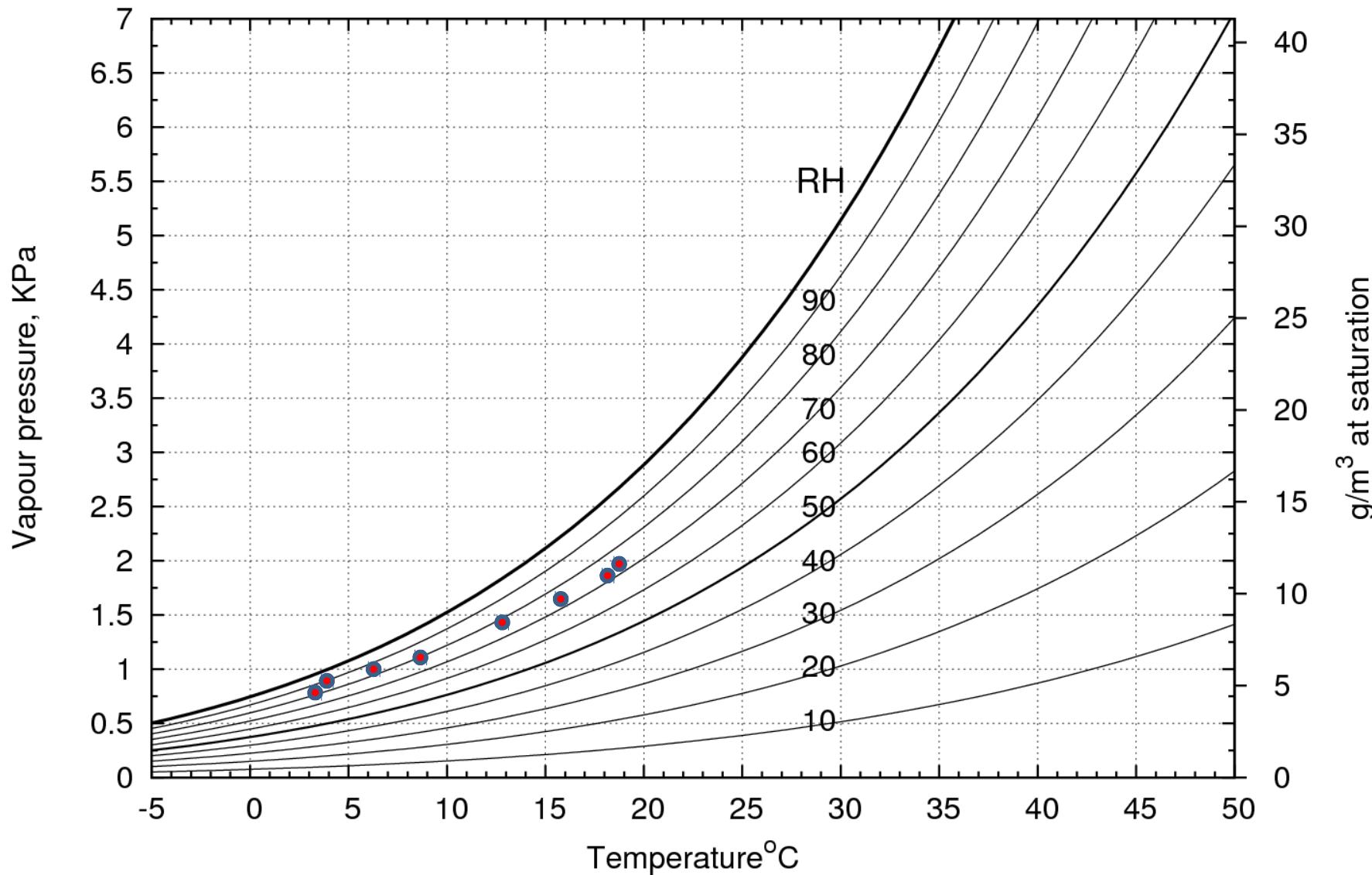
# Vapour pressure diagram for water, with constant RH curves



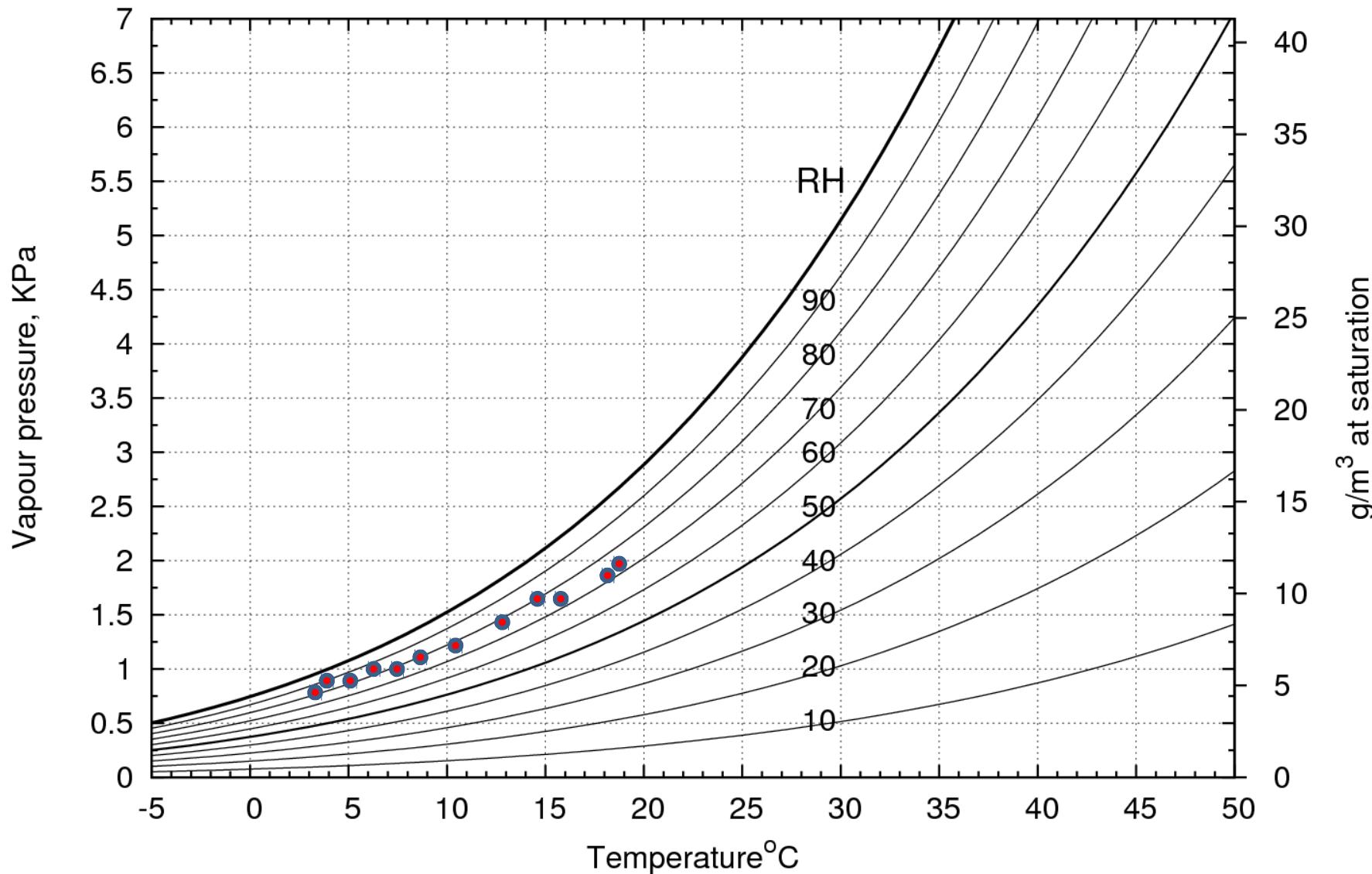
# Vapour pressure diagram for water, with constant RH curves



# Vapour pressure diagram for water, with constant RH curves



# Vapour pressure diagram for water, with constant RH curves



- Monthly Statistics for Dry Bulb temperatures °C

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum	10.6	10.4	15.8	22.7	26.6	27.9	31.6	34.9	24.9	25.7	18.0	14.2
Day:Hour	19:13	19:18	13:16	4:15	17:14	26:15	11:15	10:16	24:16	4:14	8:15	13:01
Minimum	-4.0	-9.1	-0.4	-1.0	1.4	8.8	11.6	8.2	7.0	-2.4	-7.6	-2.8
Day:Hour	1:06	13:08	3:06	24:06	7:06	8:03	28:06	25:04	23:07	30:07	15:05	2:08
Daily Avg	3.1	3.2	6.4	8.9	12.9	15.6	18.4	17.4	14.5	10.9	6.6	4.9

- Maximum Dry Bulb temperature of 34.9°C on Aug 10

- Minimum Dry Bulb temperature of -9.1°C on Feb 13

- Average Hourly Statistics for Dry Bulb temperatures °C

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0:01- 1:00	2.9	2.6	5.5	7.4	10.6	13.3	16.1	14.4	13.1	9.6	6.0	4.7
1:01- 2:00	2.7	2.6	5.2	7.2	9.8	12.8	15.7	13.9	13.0	9.4	5.5	4.5
2:01- 3:00	2.6	2.4	5.0	6.9	9.5	12.6	15.3	13.6	12.8	9.2	5.3	4.4
3:01- 4:00	2.5	2.4	4.8	6.6	9.1	12.6	15.0	13.2	12.5	9.0	5.0	4.3
4:01- 5:00	2.5	2.3	4.6	6.3	9.0	12.4	14.8	13.0	12.3	8.7	4.8	4.2
5:01- 6:00	2.5	1.9	4.4	6.2	9.2	12.7	14.9	13.0	12.2	8.7	4.8	4.1
6:01- 7:00	2.5	1.7	4.3	6.5	10.2	13.5	15.7	13.9	12.2	8.7	4.6	4.0
7:01- 8:00	2.3	1.8	4.5	7.2	11.4	14.5	16.6	15.5	12.8	8.8	4.6	3.9
8:01- 9:00	2.4	2.0	5.1	8.2	12.6	15.6	17.7	16.9	13.8	9.6	5.0	4.0
9:01-10:00	2.6	2.5	5.9	8.9	13.7	16.6	18.8	18.2	14.9	10.8	5.8	4.1
10:01-11:00	3.1	3.0	6.7	9.9	14.4	17.0	19.7	19.4	15.7	11.9	7.1	4.6
11:01-12:00	3.5	3.8	7.4	10.5	15.2	17.6	20.6	20.4	16.4	12.9	8.0	5.0
12:01-13:00	3.7	4.2	8.1	10.9	15.6	18.0	21.2	21.1	16.8	13.6	8.9	5.5
13:01-14:00	3.9	4.5	8.5	11.3	16.1	18.6	21.6	21.7	17.2	14.1	9.4	5.9
14:01-15:00	3.9	4.8	8.9	11.6	16.5	18.4	22.0	21.9	17.2	14.2	9.5	6.0
15:01-16:00	3.9	4.7	8.8	11.5	16.5	18.5	22.2	21.9	17.4	14.0	9.2	6.0
16:01-17:00	3.6	4.6	8.7	11.5	16.4	18.4	22.0	21.6	16.9	13.3	8.4	5.8
17:01-18:00	3.5	4.3	8.4	11.3	16.2	18.2	21.5	21.1	16.3	12.3	7.7	5.6
18:01-19:00	3.4	4.0	7.8	10.7	15.5	17.4	21.0	20.2	15.4	11.5	7.1	5.6
19:01-20:00	3.3	3.6	7.2	9.8	14.5	16.7	19.9	18.9	14.4	11.1	6.7	5.5
20:01-21:00	3.1	3.7	6.8	9.0	13.3	15.6	18.6	17.6	13.9	10.7	6.5	5.4
21:01-22:00	3.1	3.4	6.4	8.4	12.3	14.6	17.7	16.5	13.6	10.3	6.2	5.2
22:01-23:00	3.1	3.3	6.0	8.0	11.6	14.1	17.0	15.5	13.3	10.0	6.0	5.1
23:01-24:00	3.1	3.0	5.6	7.7	11.1	13.7	16.5	14.9	13.2	9.8	5.9	5.0
Max Hour	14	15	15	15	15	14	16	15	16	15	15	16
Min Hour	8	7	7	6	5	5	5	6	6	7	8	8

- Monthly Statistics for Extreme temperatures °C

#Days	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max >= 32												
Max <= 0	2	1										2
Min <= 0	11	10	2	2						5	8	8
Min <=-18												

- Monthly Statistics for Dew Point temperatures °C

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum	9.1	9.8	10.1	10.9	18.3	20.1	20.7	19.5	19.1	16.5	13.5	12.9
Day:Hour	19:15	19:23	14:15	3:10	16:17	27:16	11:20	10:15	24:18	3:16	2:15	12:24
Minimum	-7.5	-9.7	-2.4	-4.5	-0.3	5.0	10.0	6.0	3.0	-3.3	-12.5	-5.7
Day:Hour	1:06	12:09	13:06	23:23	7:14	4:15	9:11	28:13	7:16	30:08	14:17	2:14
Daily Avg	0.7	1.1	3.8	4.7	8.6	10.7	14.1	12.4	11.0	7.4	4.0	2.9

- Maximum Dew Point temperature of 20.7°C on Jul 11

- Minimum Dew Point temperature of -12.5°C on Nov 14

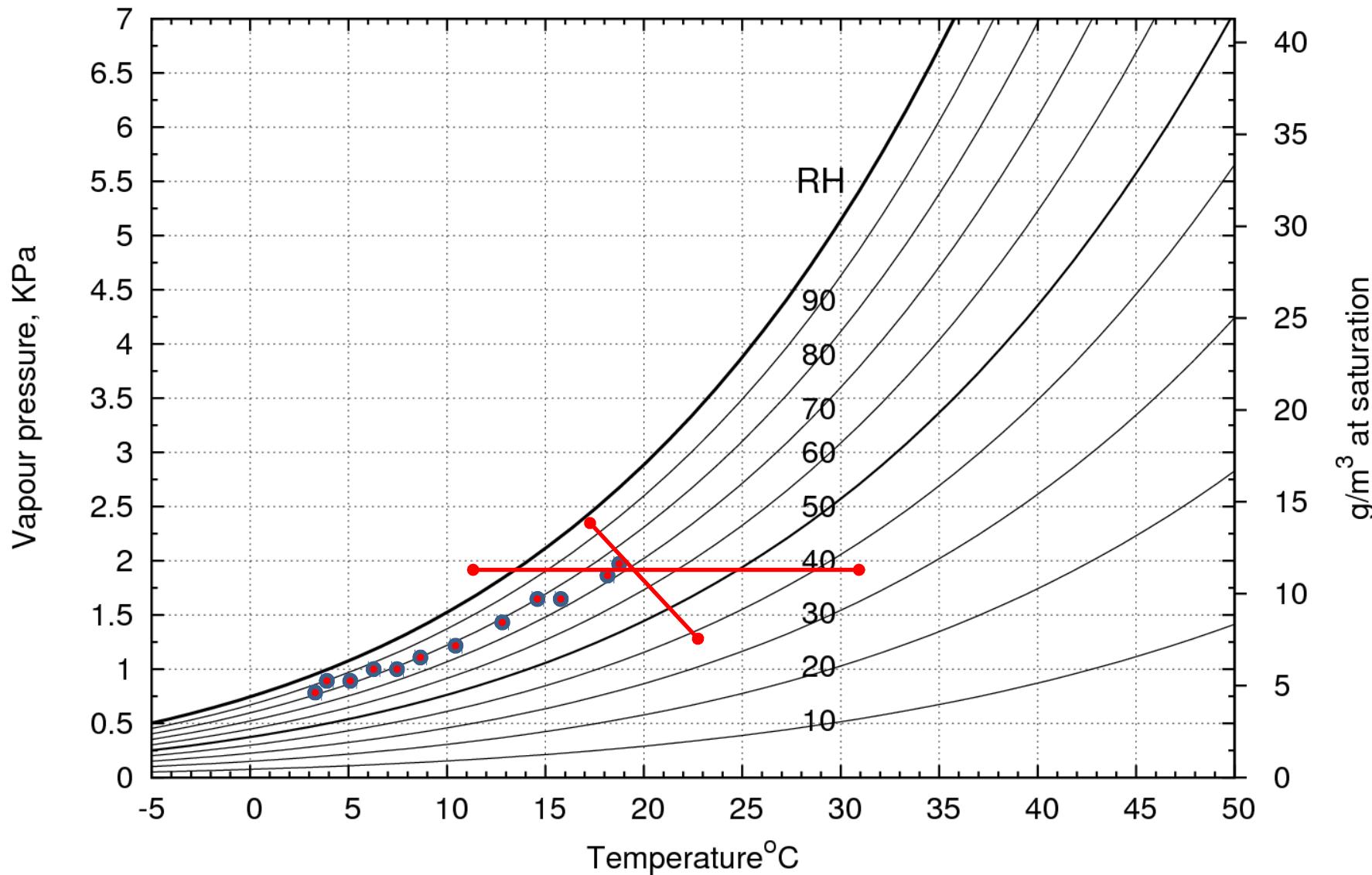
- Monthly Statistics for Relative Humidity %

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum	100	100	100	99	100	100	98	100	100	100	100	100
Day:Hour	6:02	7:12	9:11	18:07	1:05	6:07	1:22	1:05	14:20	22:04	2:04	5:05
Minimum	60	35	46	39	38	26	37	31	34	40	32	48
Day:Hour	14:23	14:15	13:16	19:12	26:20	1:15	29:15	10:17	8:14	27:14	14:14	17:19
Daily Avg	86	86	84	76	77	75	77	76	81	80	84	87

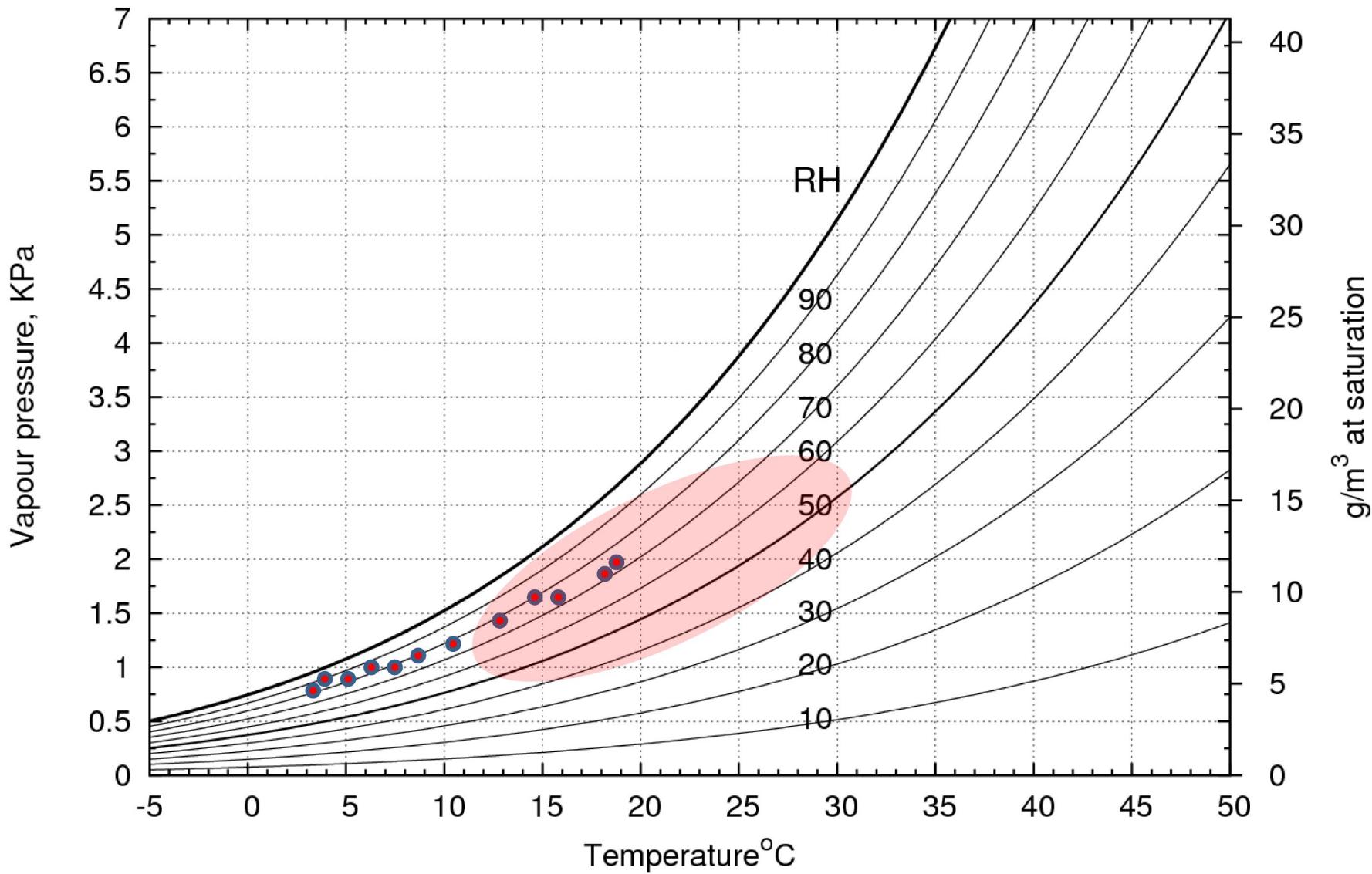
- Average Hourly Relative Humidity %

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0:01- 1:00	85	88	87	81	86	85	86	87	88	88	88	89
1:01- 2:00	86	88	88	81	88	87	87	89	88	89	90	89
2:01- 3:00	85	88	88	83	90	87	89	90	88	89	89	88
3:01- 4:00	85	89	89	84	91	87	89	91	89	90	88	88
4:01- 5:00	86	88	88	86	91	88	90	92	89	90	88	87
5:01- 6:00	86	91	90	86	90	87	89	92	88	89	89	88
6:01- 7:00	87	93	90	86	88	85	87	91	88	89	90	89
7:01- 8:00	88	92	89	83	83	80	84	85	87	88	89	89

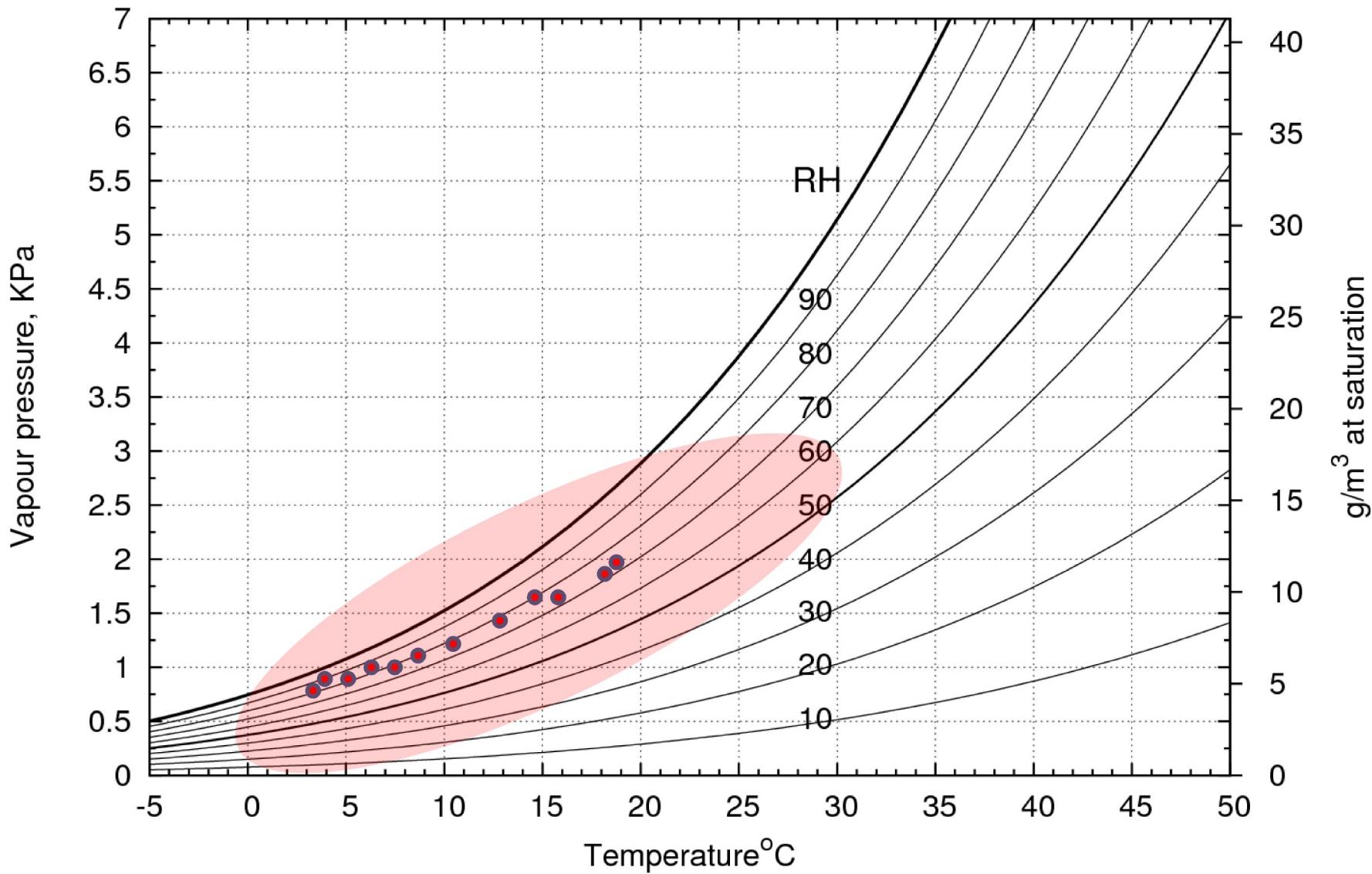
# Vapour pressure diagram for water, with constant RH curves



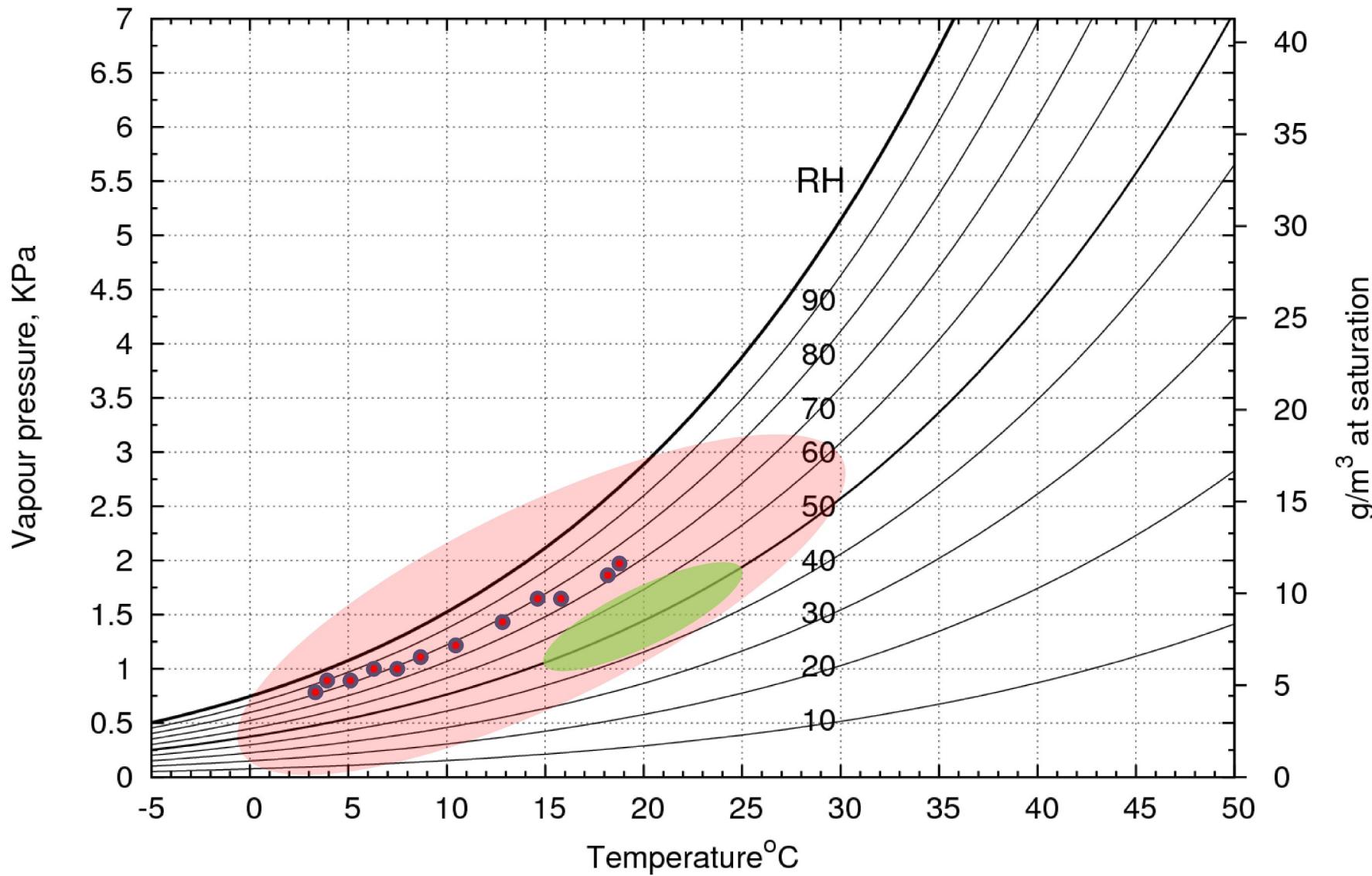
# Vapour pressure diagram for water, with constant RH curves



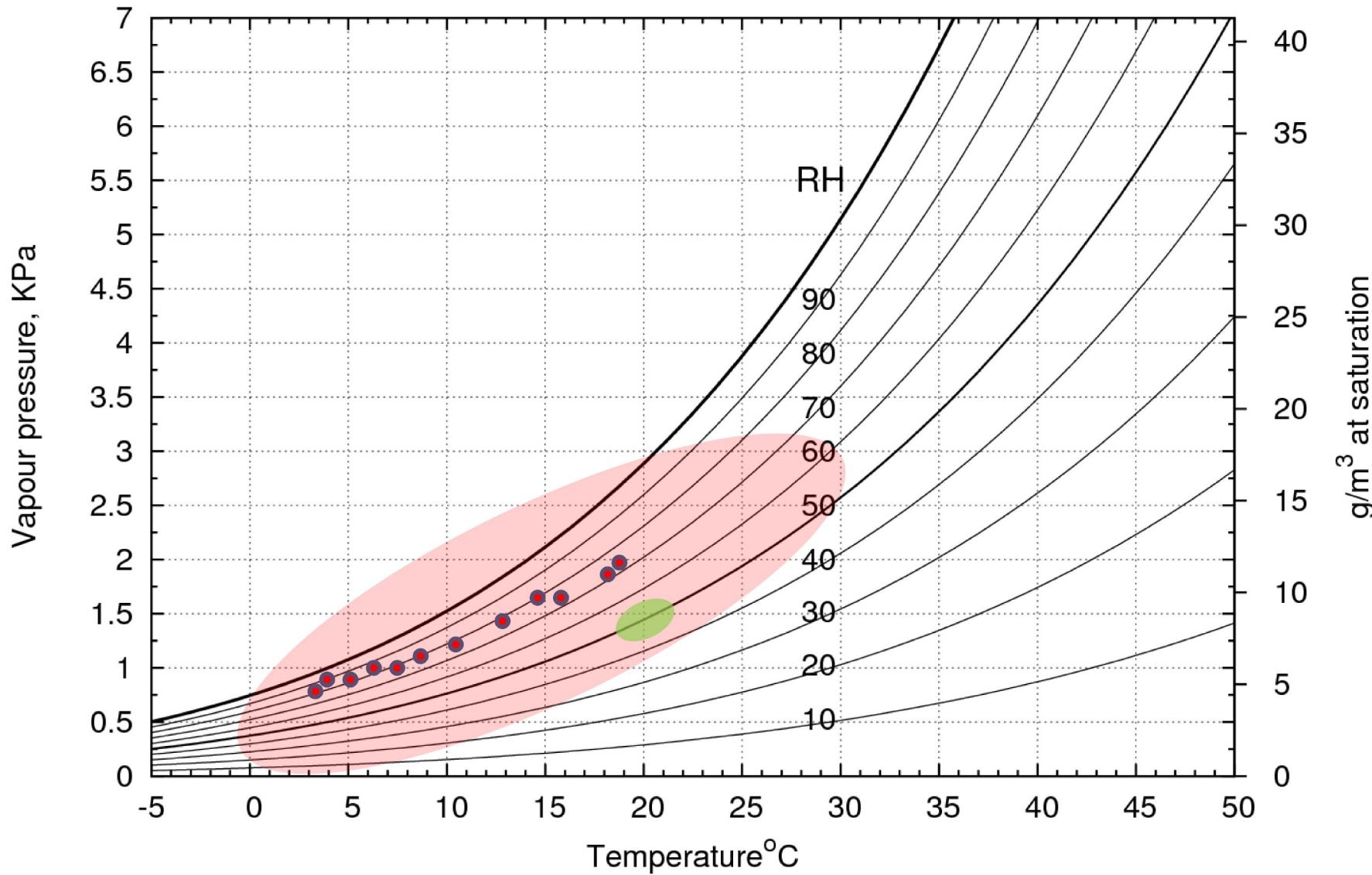
# Vapour pressure diagram for water, with constant RH curves



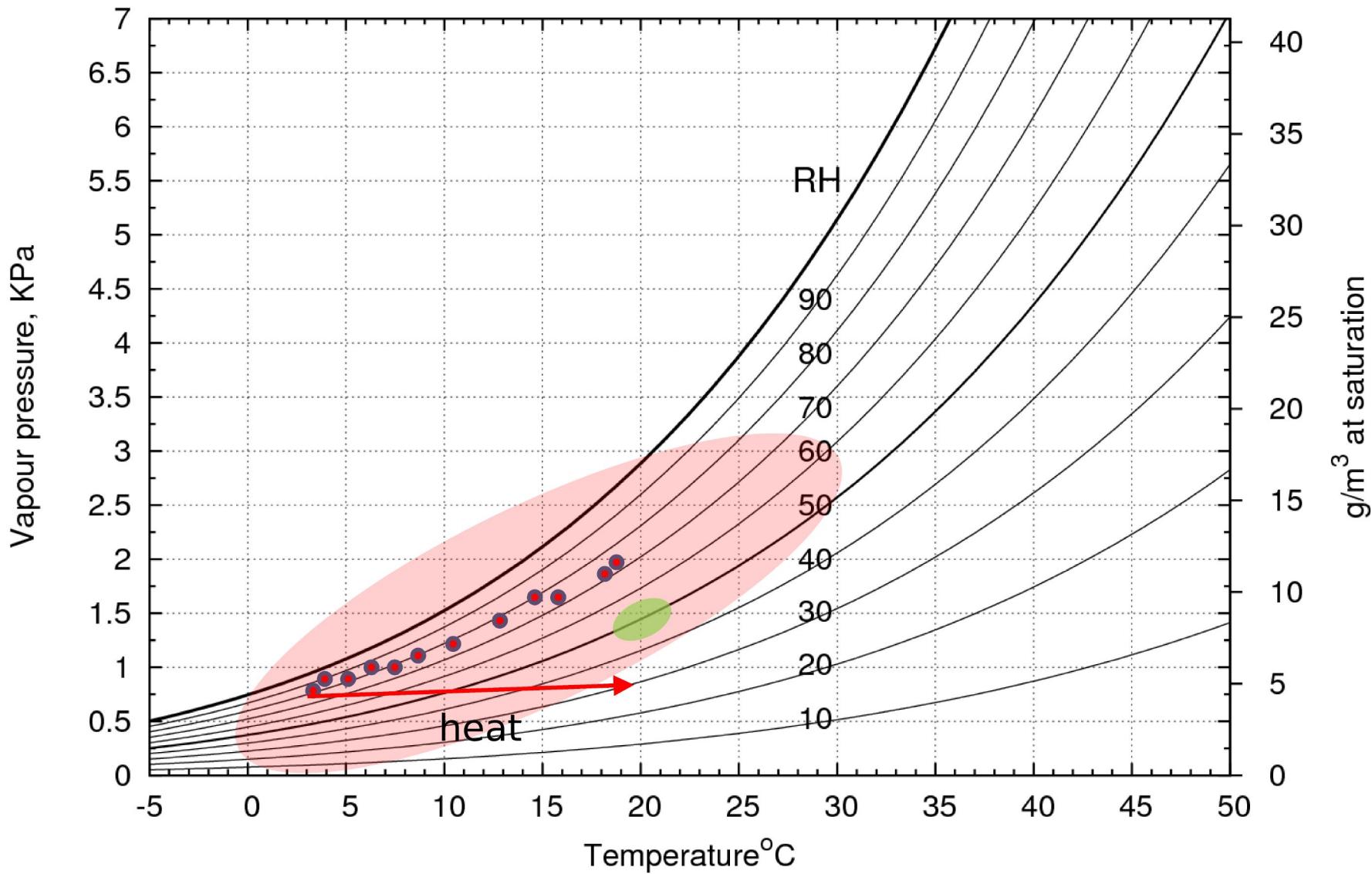
# Vapour pressure diagram for water, with constant RH curves



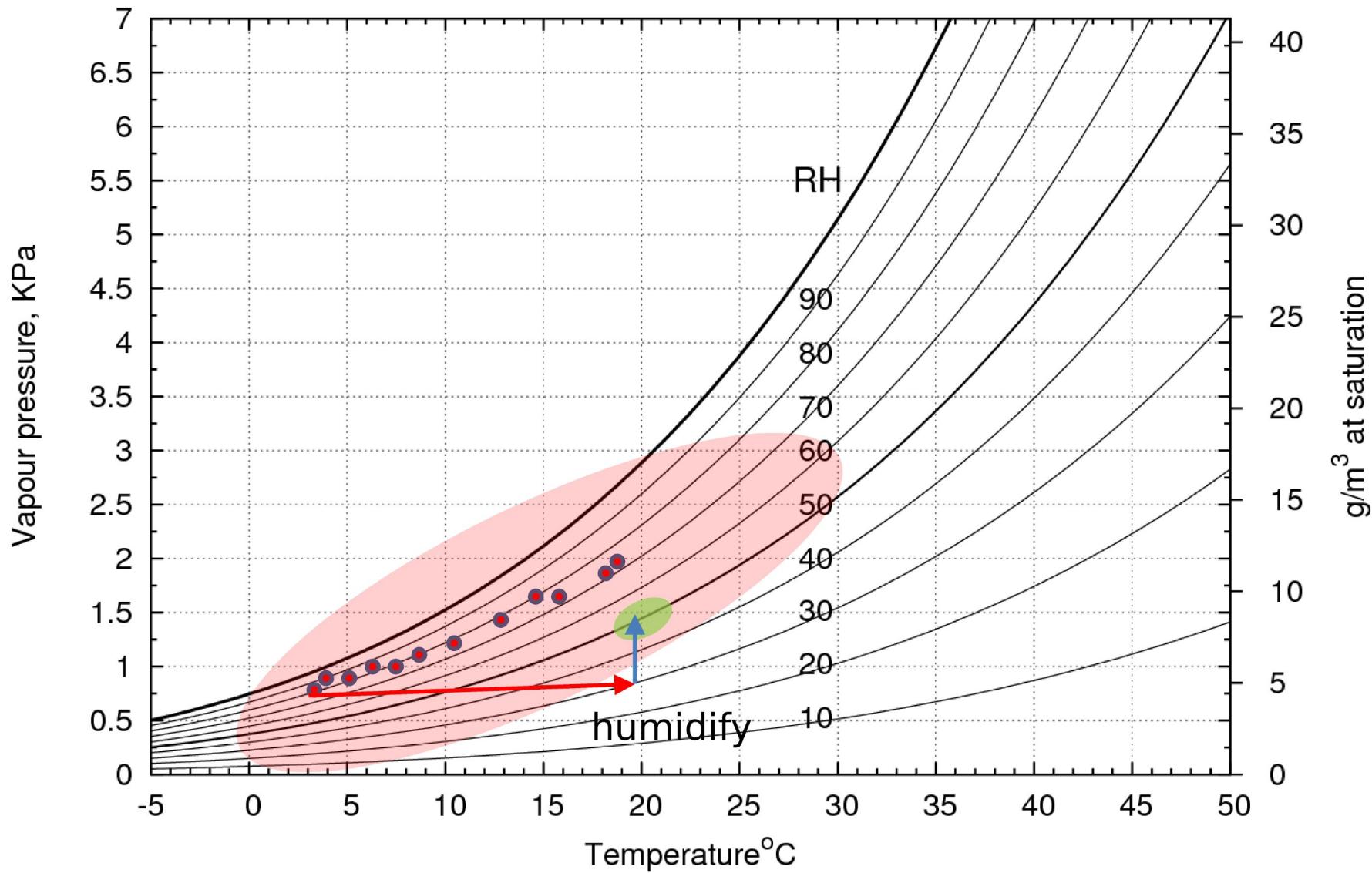
## Vapour pressure diagram for water, with constant RH curves



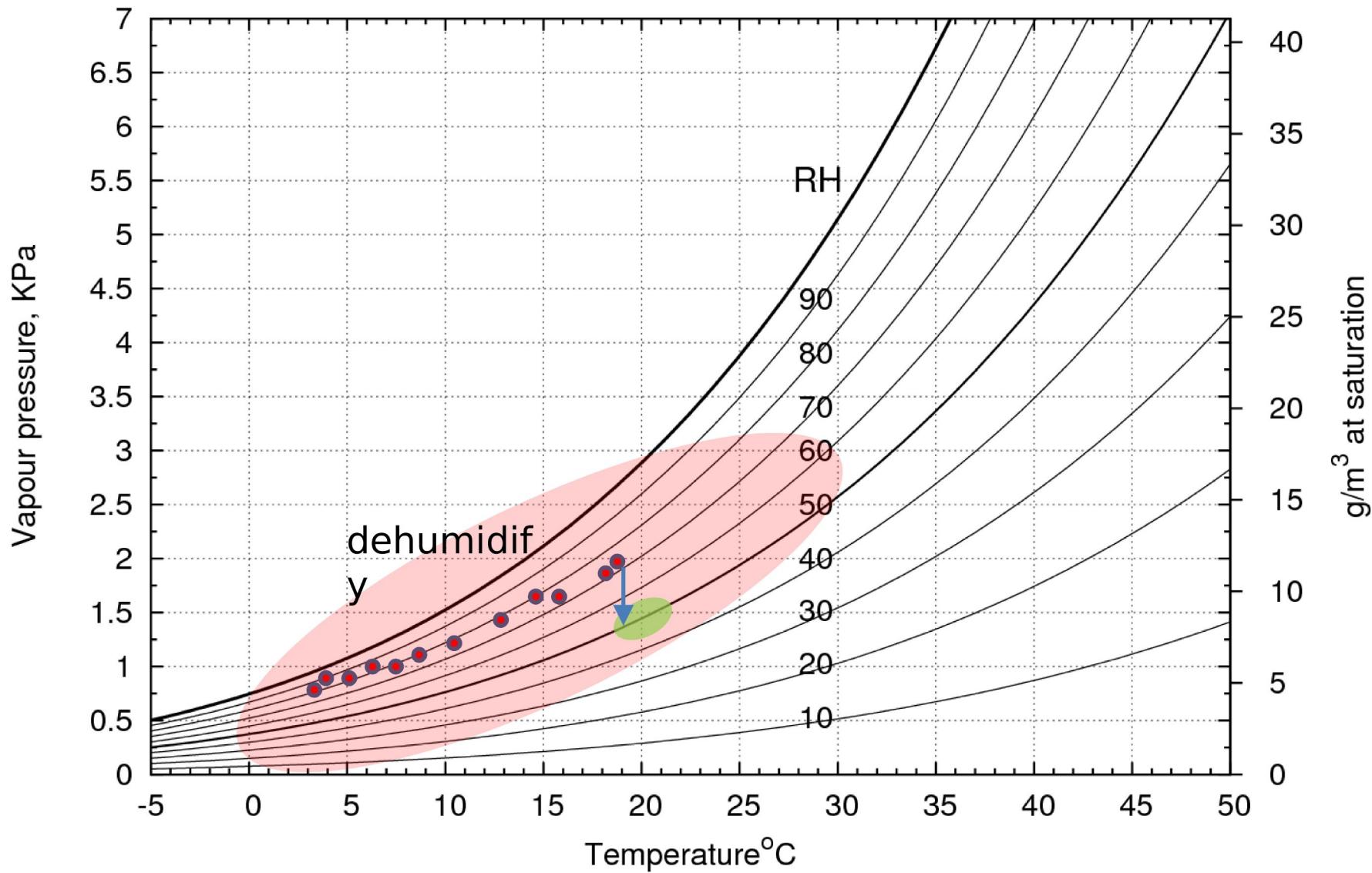
# Vapour pressure diagram for water, with constant RH curves



# Vapour pressure diagram for water, with constant RH curves

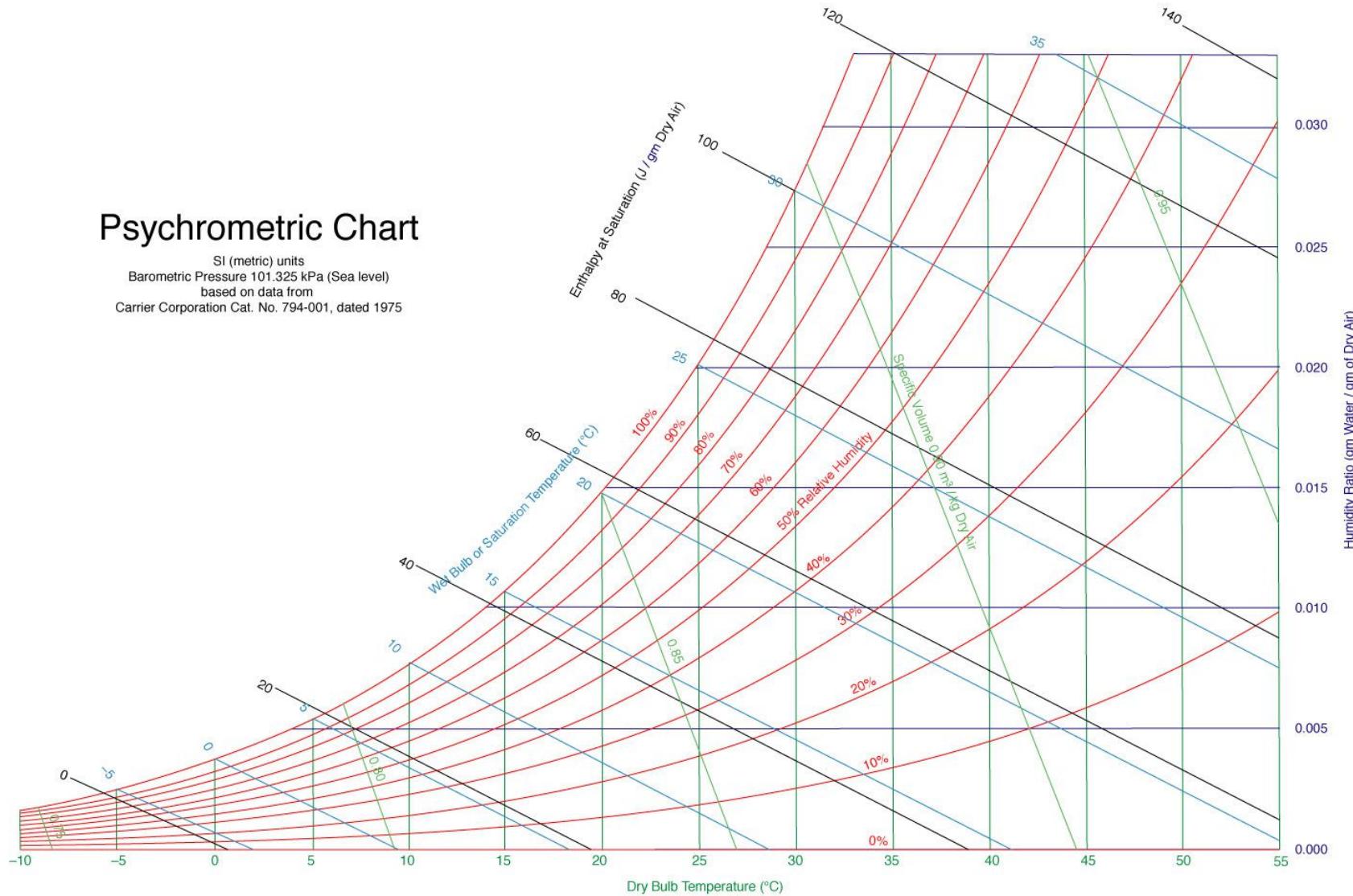


# Vapour pressure diagram for water, with constant RH curves



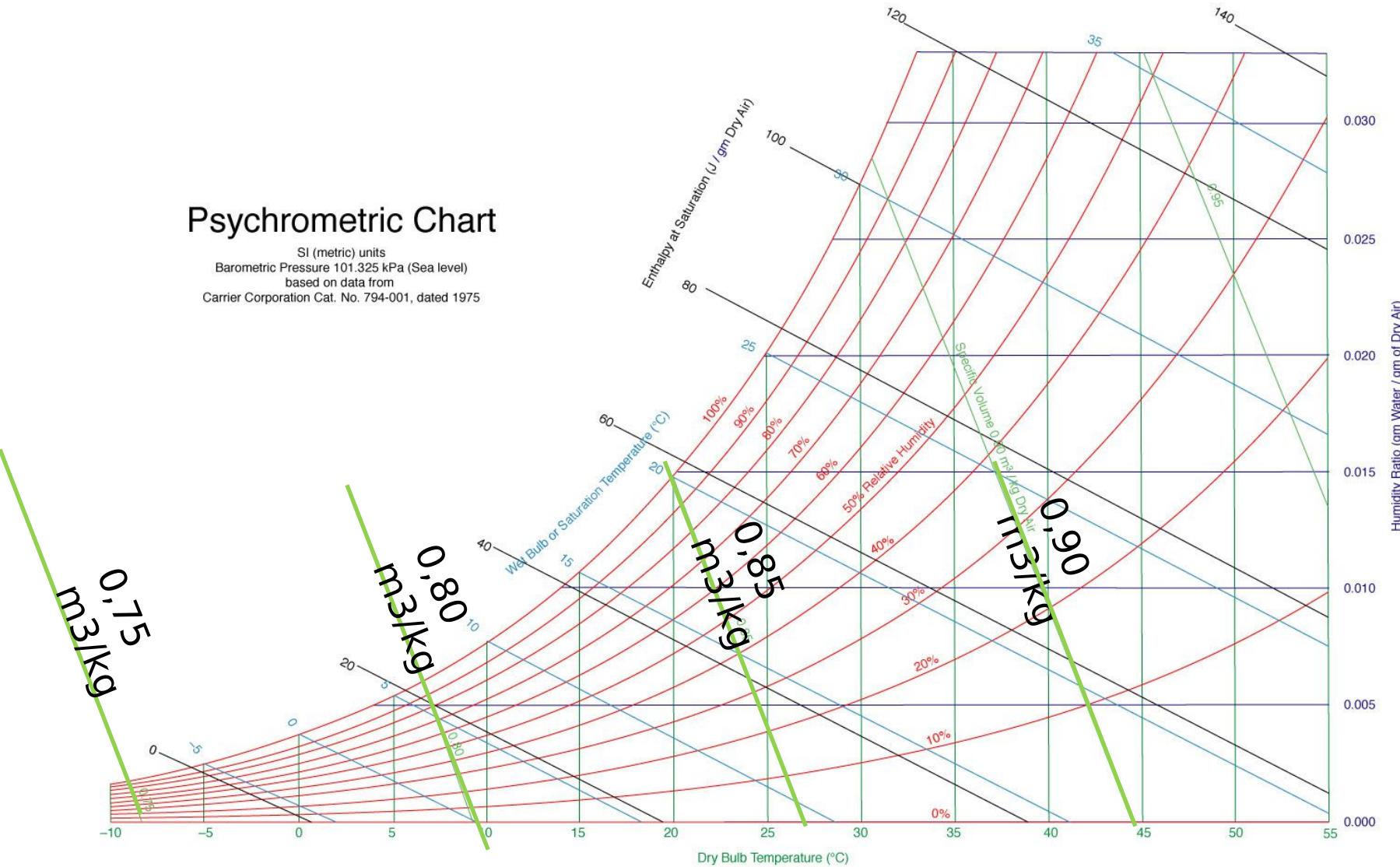
# Psychrometric Chart

SI (metric) units  
 Barometric Pressure 101.325 kPa (Sea level)  
 based on data from  
 Carrier Corporation Cat. No. 794-001, dated 1975



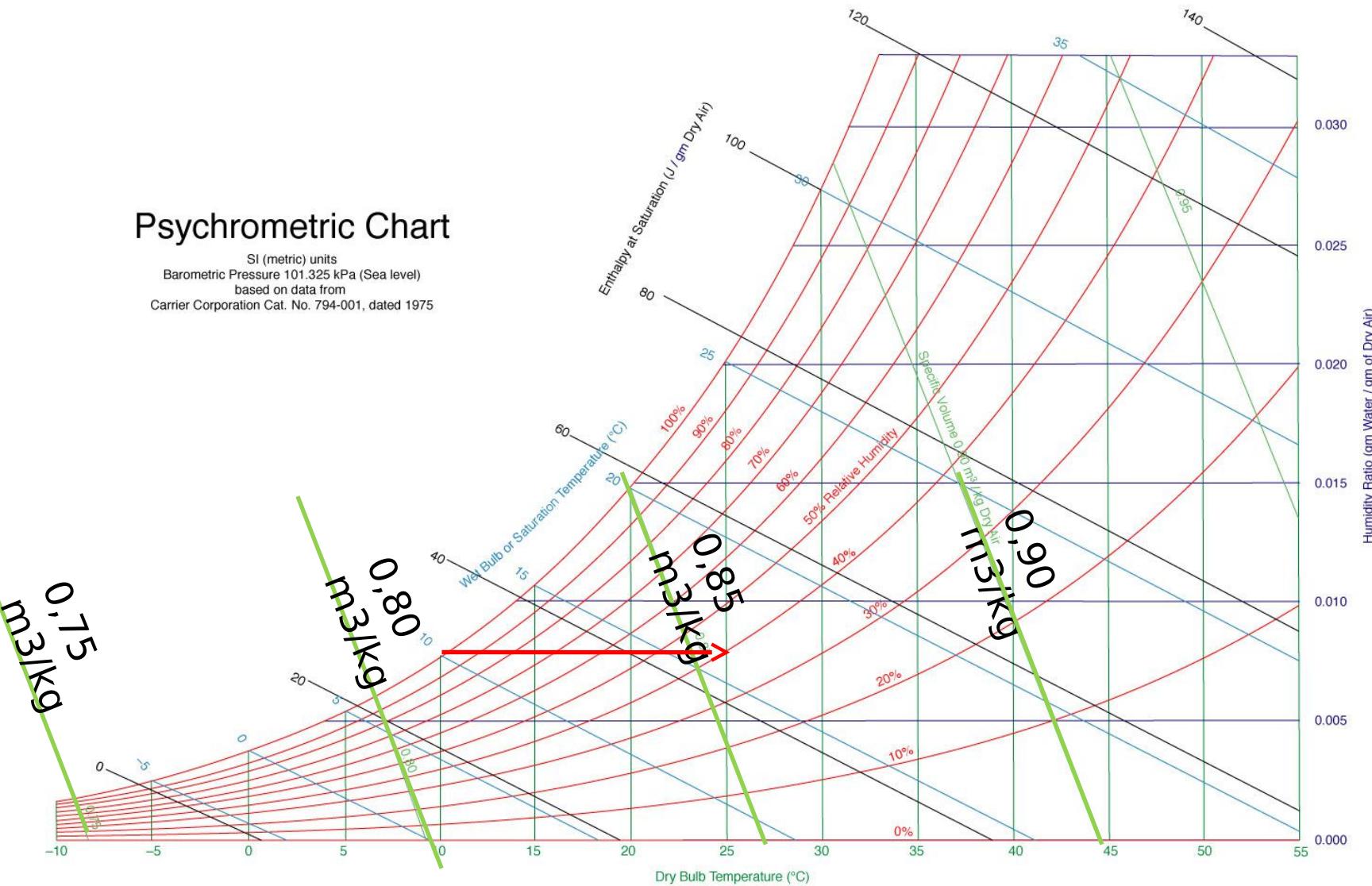
# Psychrometric Chart

SI (metric) units  
 Barometric Pressure 101.325 kPa (Sea level)  
 based on data from  
 Carrier Corporation Cat. No. 794-001, dated 1975

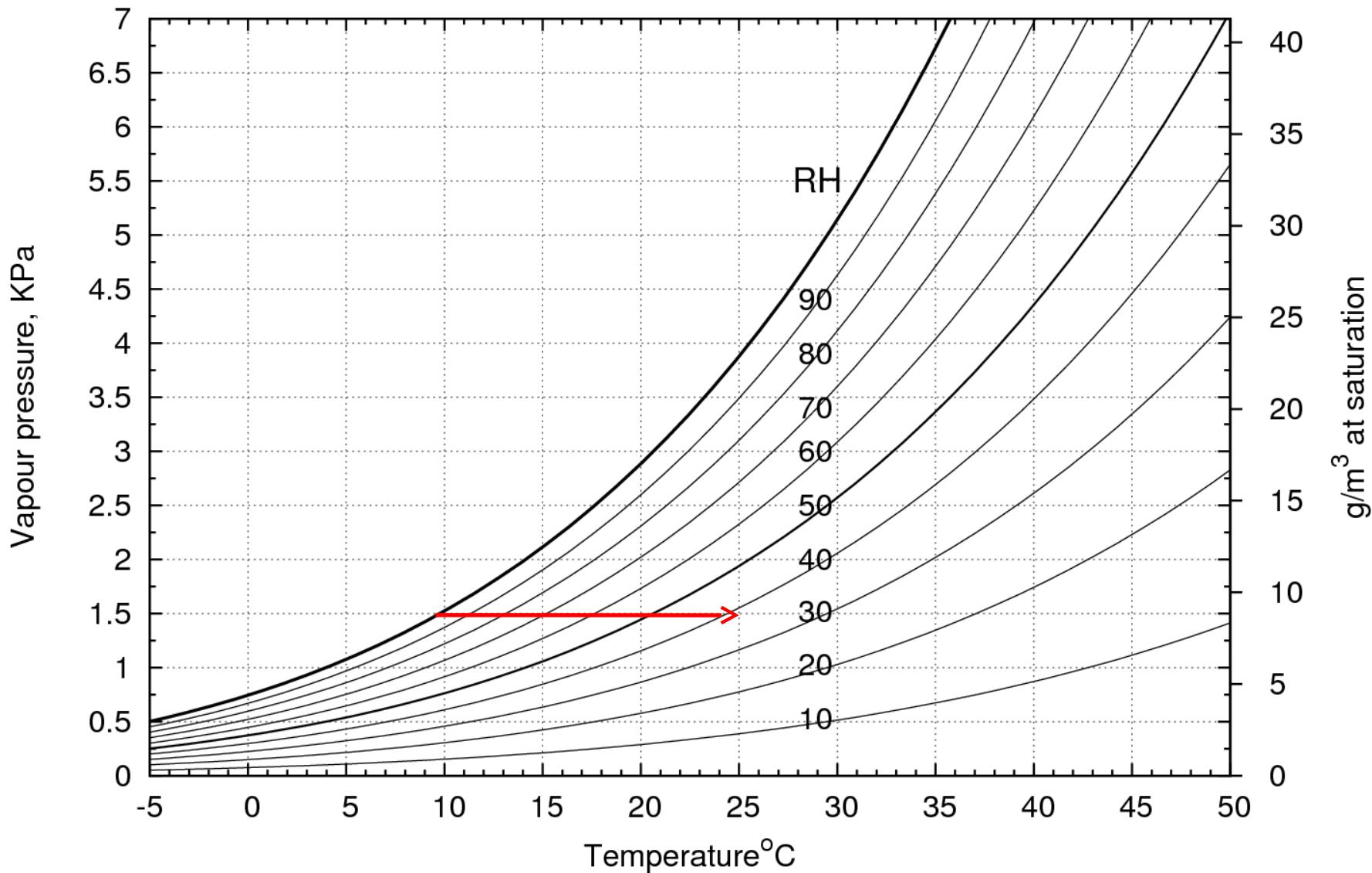


## Psychrometric Chart

SI (metric) units  
Barometric Pressure 101.325 kPa (Sea level)  
based on data from  
Carrier Corporation Cat. No. 794-001, dated 1975



# Vapour pressure diagram for water, with constant RH curves



# The influence of air density

- Start: 10°C 100 %RH 0,82 m<sup>3</sup>/kg  
8 g/kg
- End: 25°C 40 %RH 0,86 m<sup>3</sup>/kg  
8 g/kg
- Start: 8 g/kg / 0,82 m<sup>3</sup>/kg = 9,76 g/m<sup>3</sup>
- End: 8 g/kg / 0,86 m<sup>3</sup>/kg = 9,30 g/m<sup>3</sup>

# Vapour pressure diagram for water, with constant RH curves

