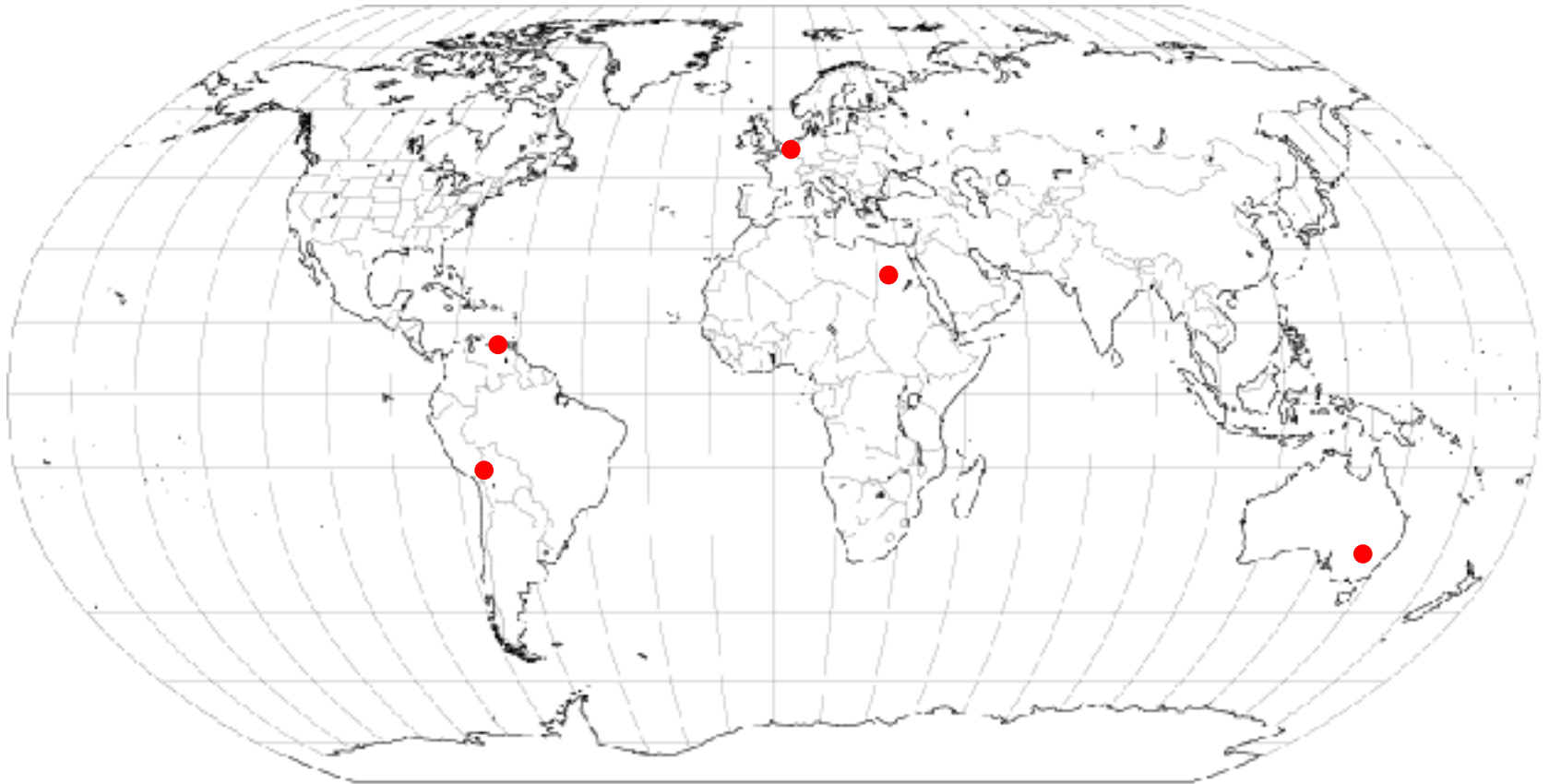
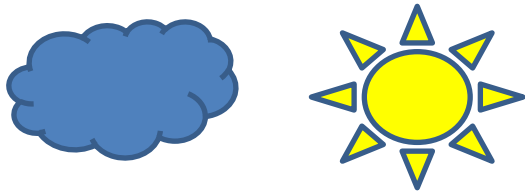


# Design a museum store

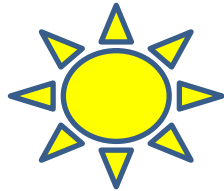


# Design a museum store

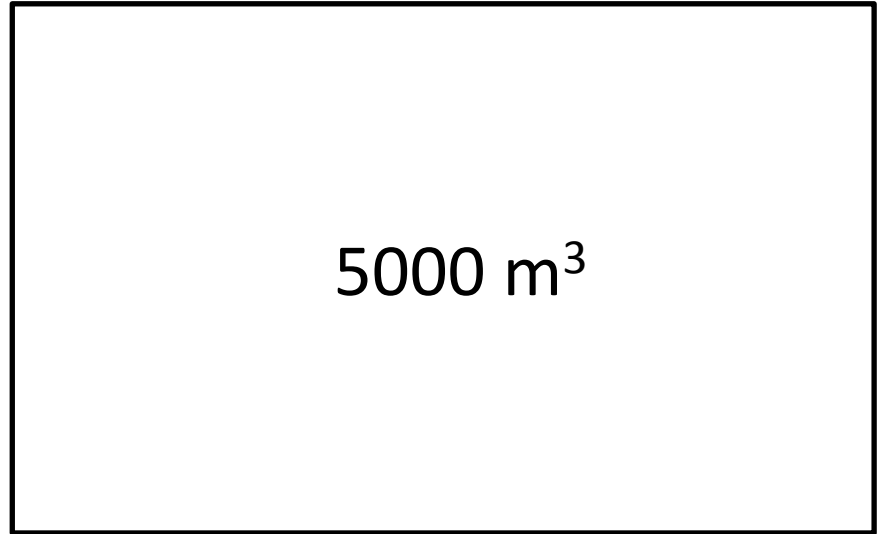


Outside T and RH

# Design a museum store

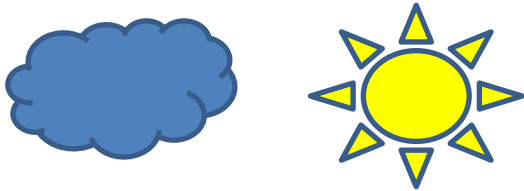


Outside T and RH

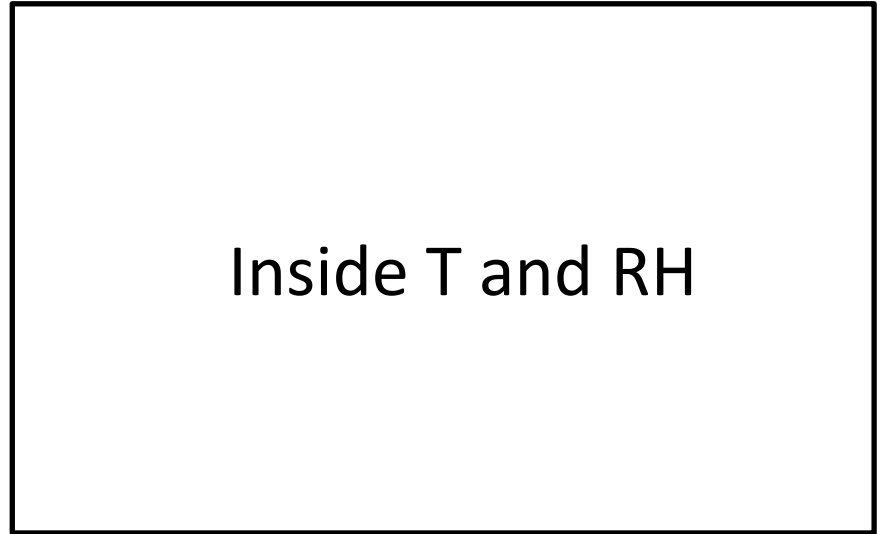


5000 m<sup>3</sup>

# Design a museum store

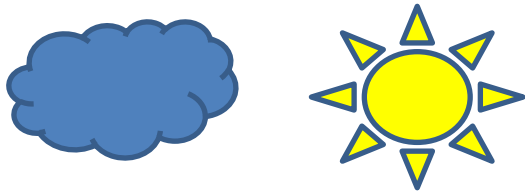


Outside T and RH



Inside T and RH

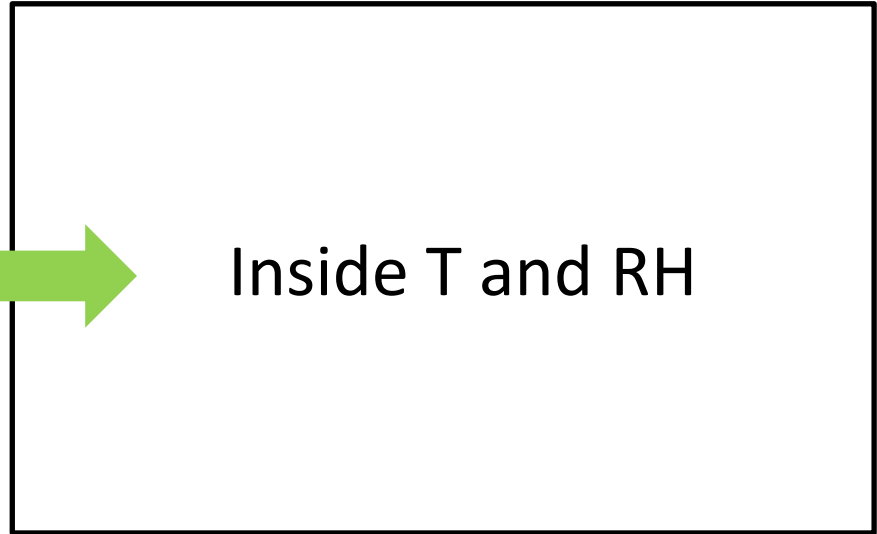
# Design a museum store



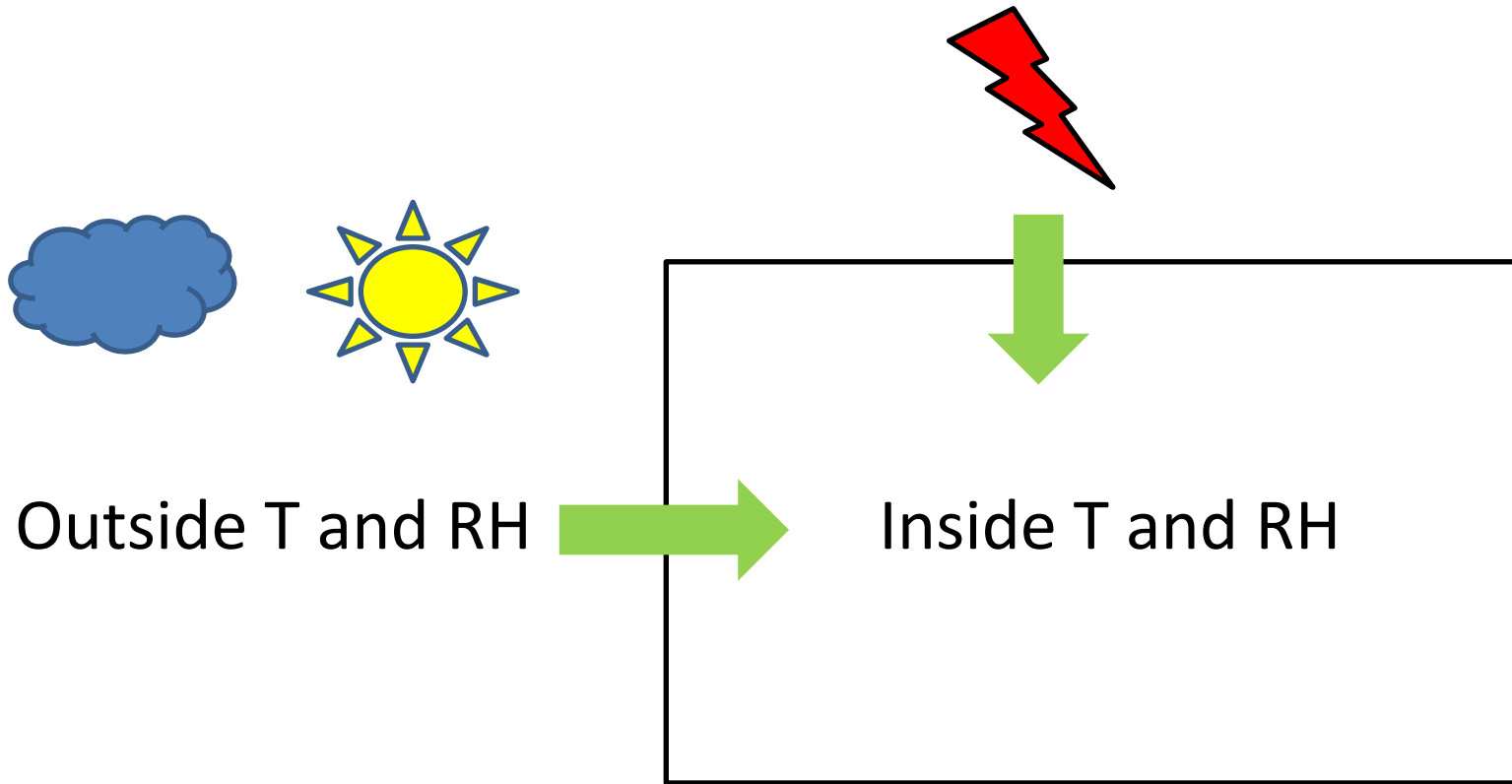
Outside T and RH



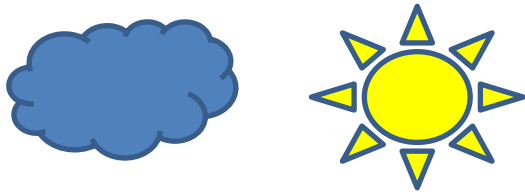
Inside T and RH



# Design a museum store



# Design a museum store

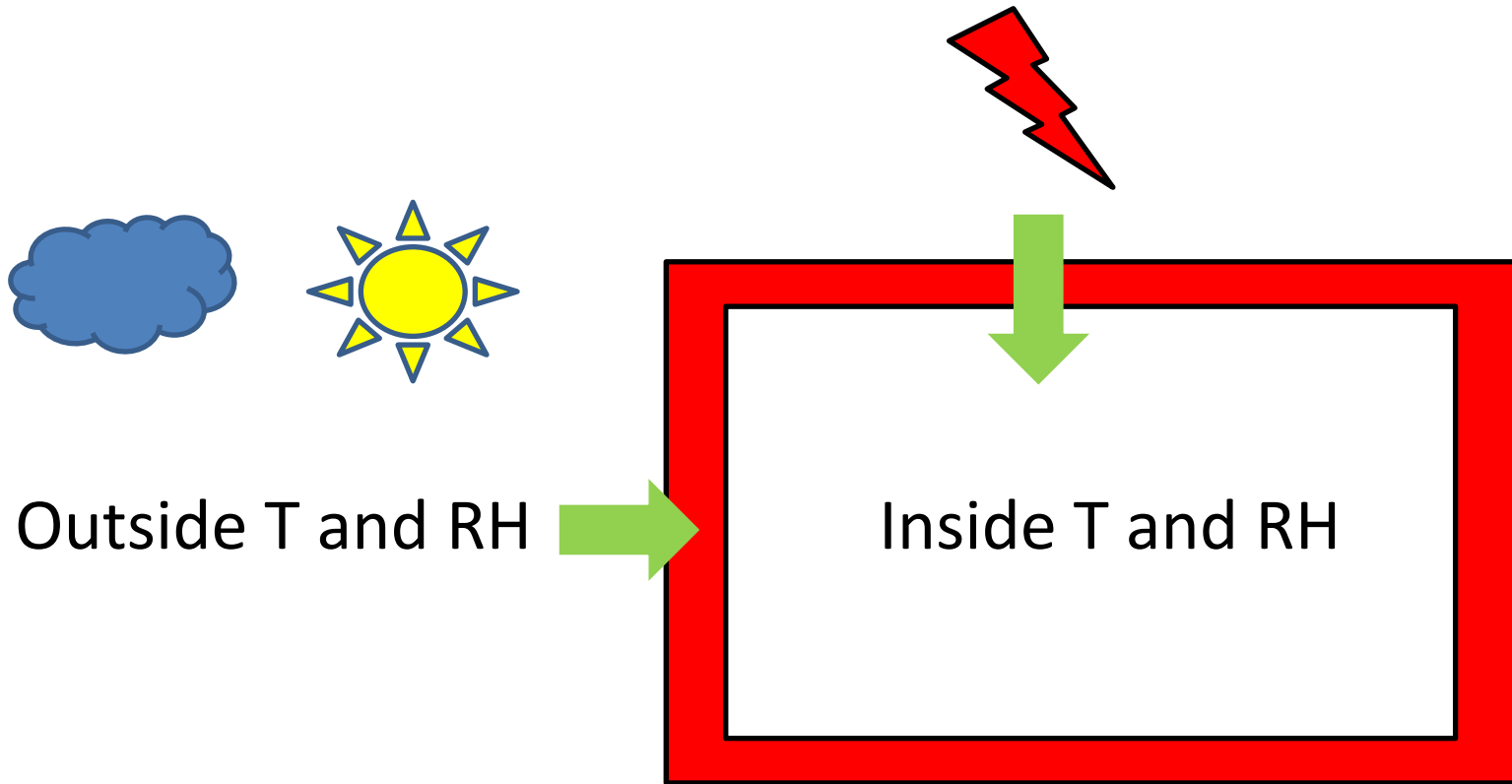


Outside T and RH



Inside 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	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								2				
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

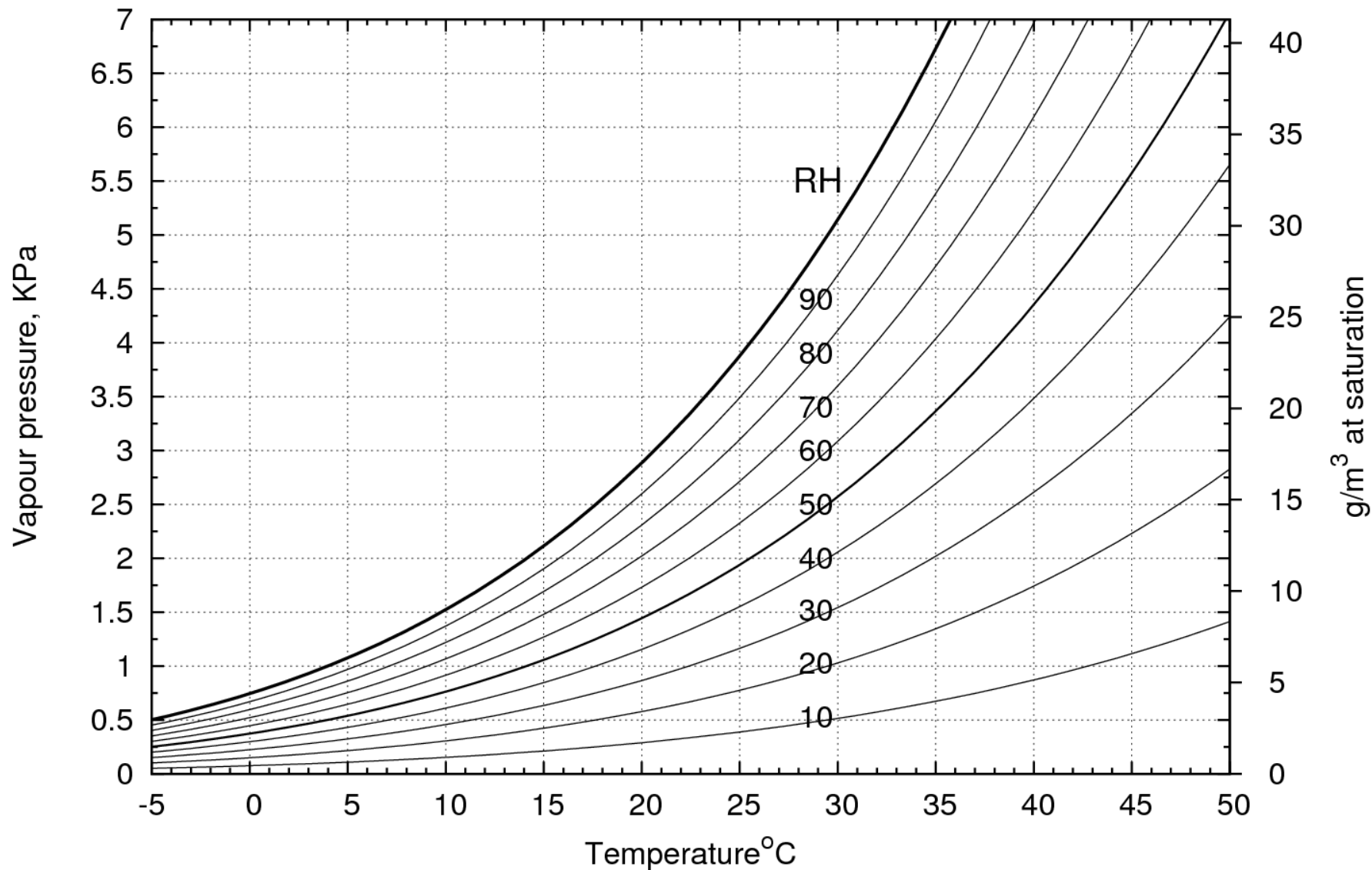
- Monthly Statistics for Relative Humidity %

	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

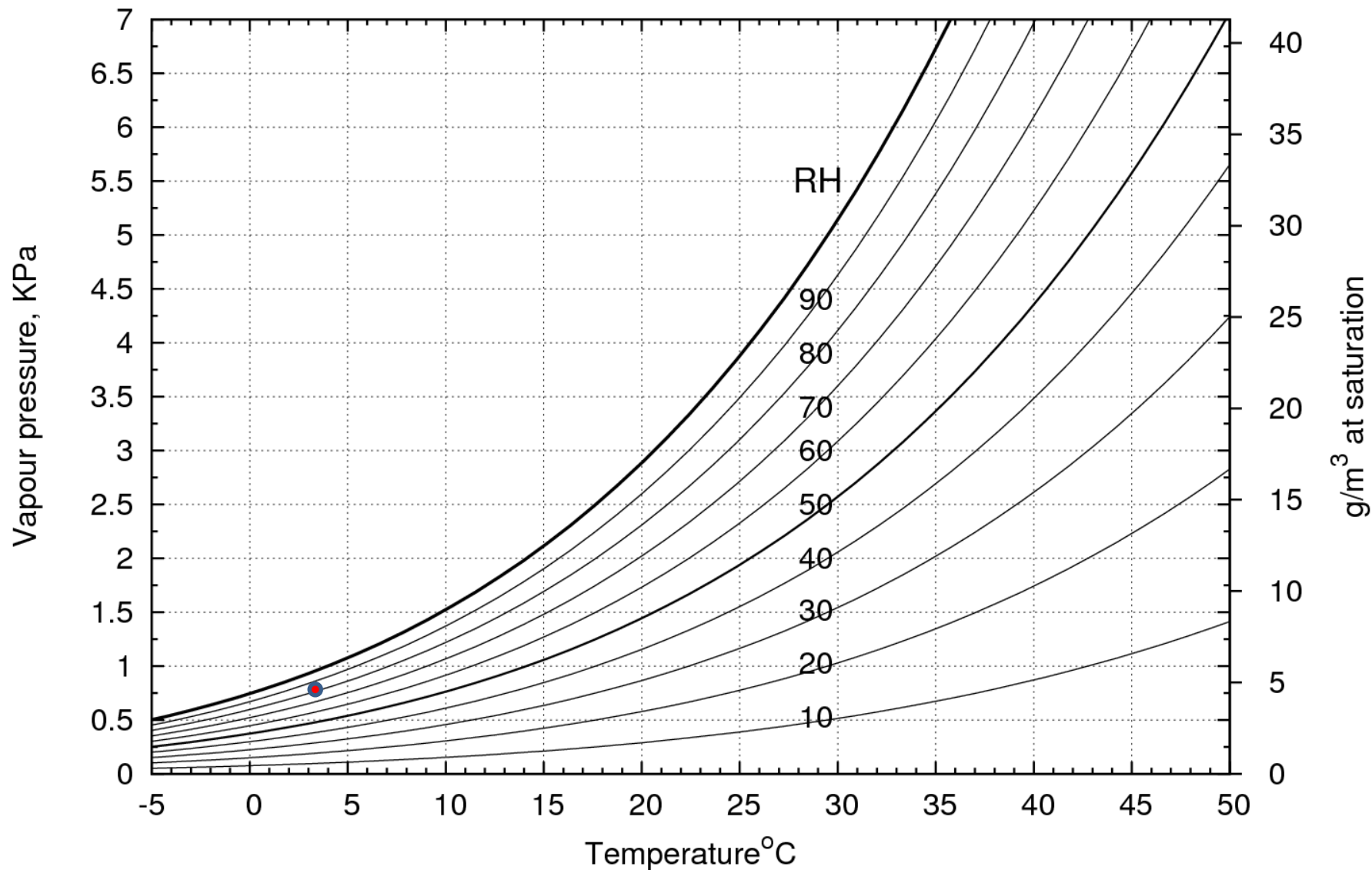
- Average Hourly Relative Humidity %

	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

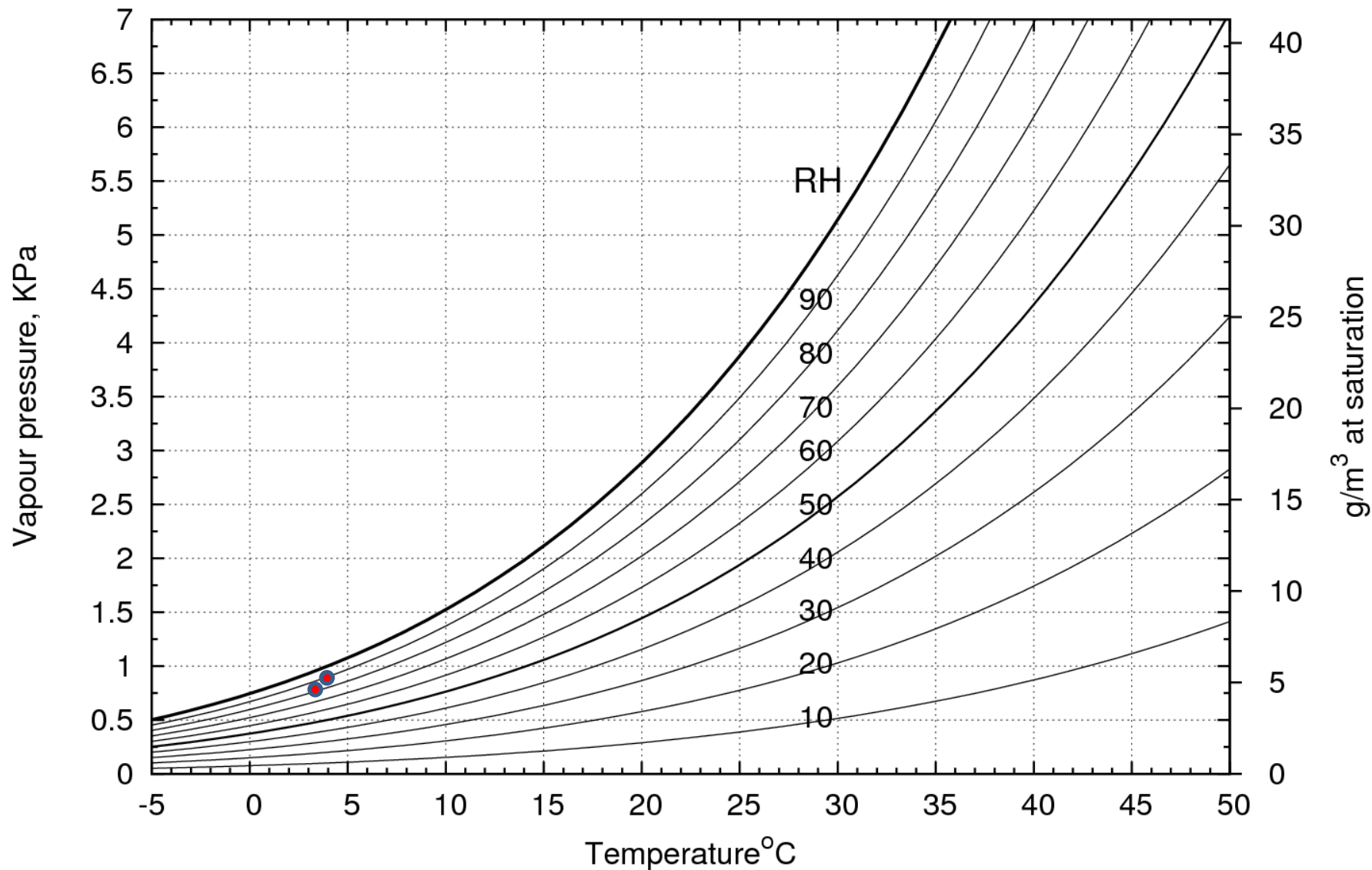
Vapour pressure diagram for water, with constant RH curves



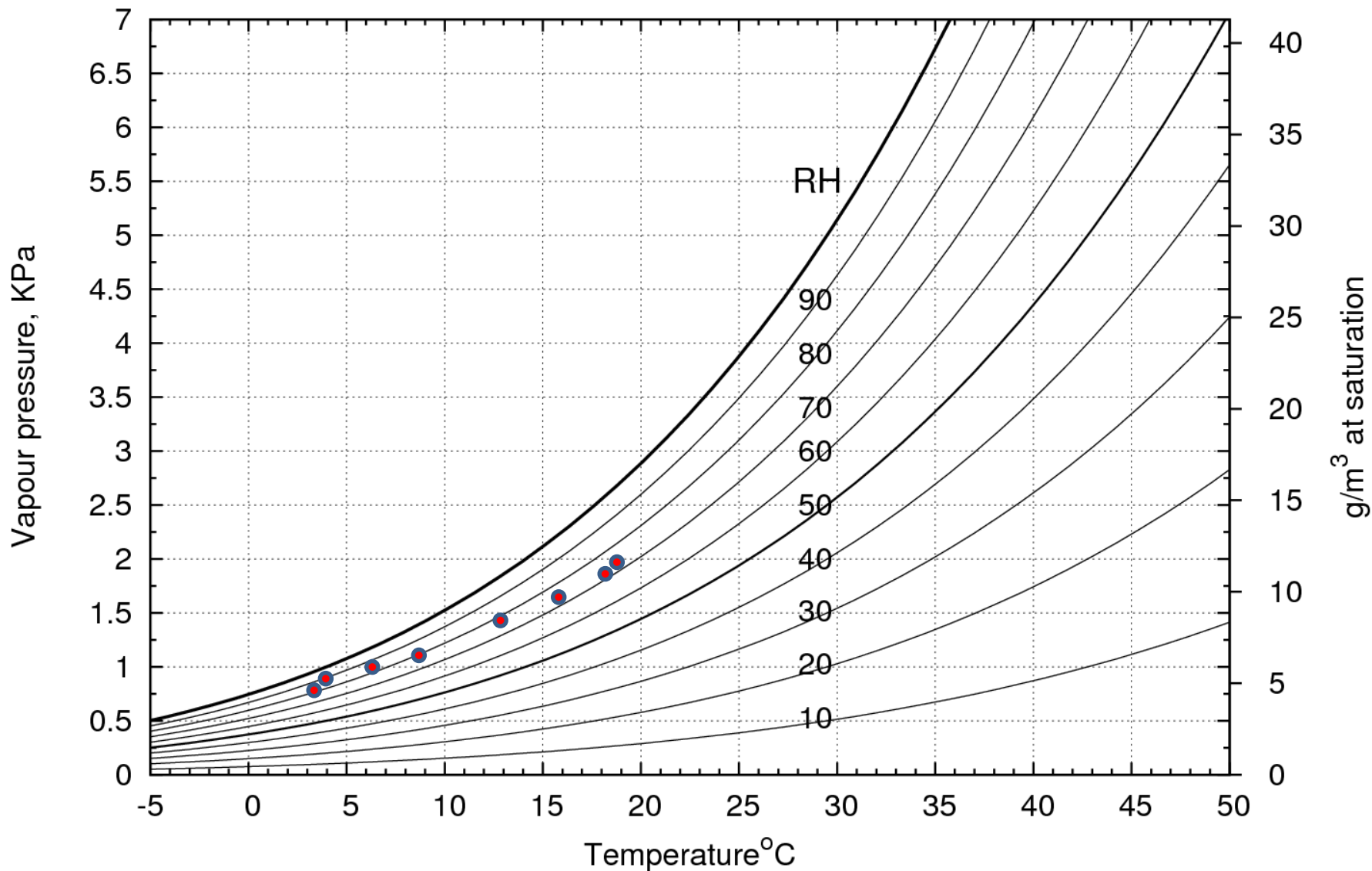
Vapour pressure diagram for water, with constant RH curves



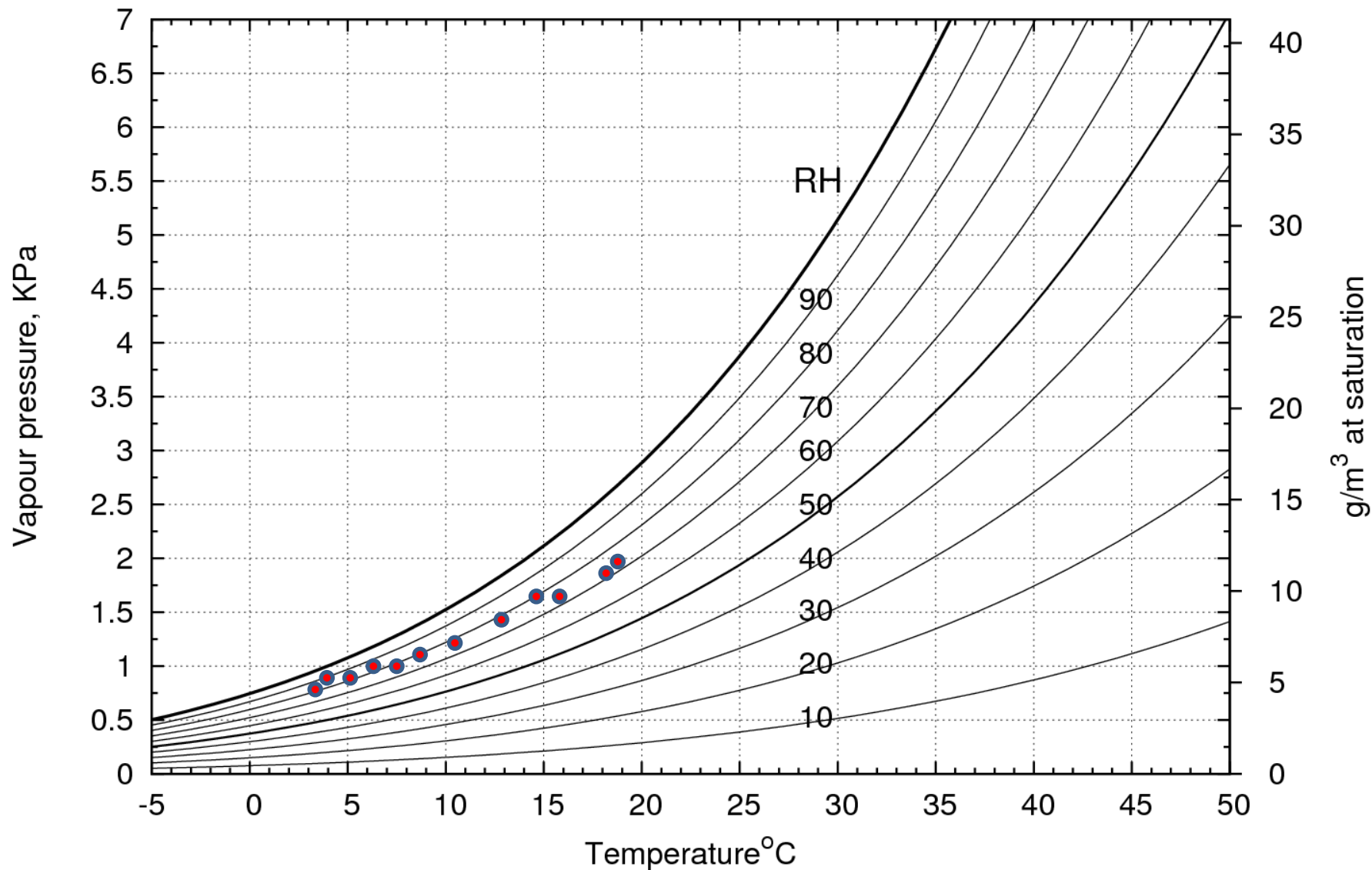
Vapour pressure diagram for water, with constant RH curves



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								2				
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

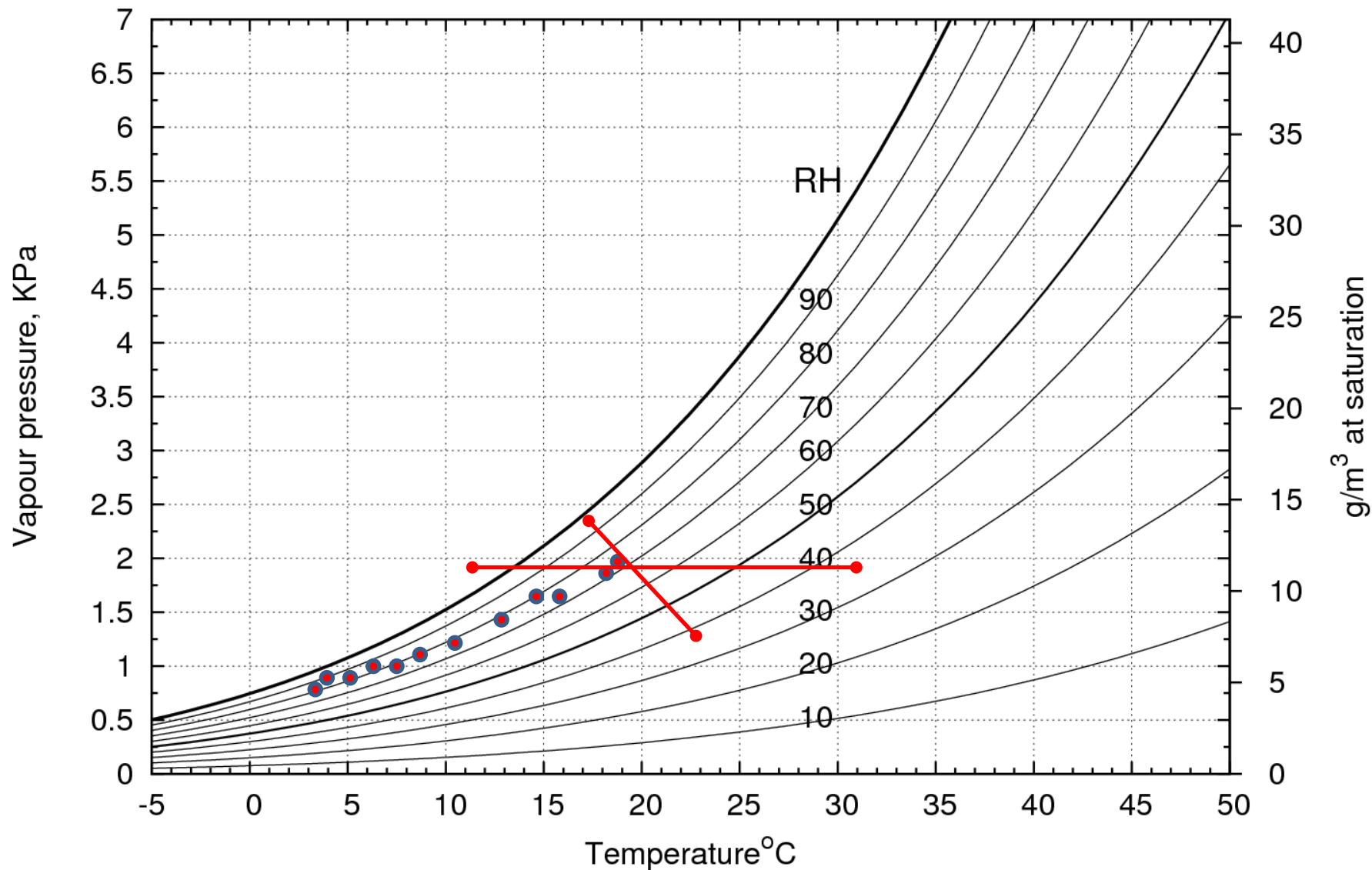
- Monthly Statistics for Relative Humidity %

	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

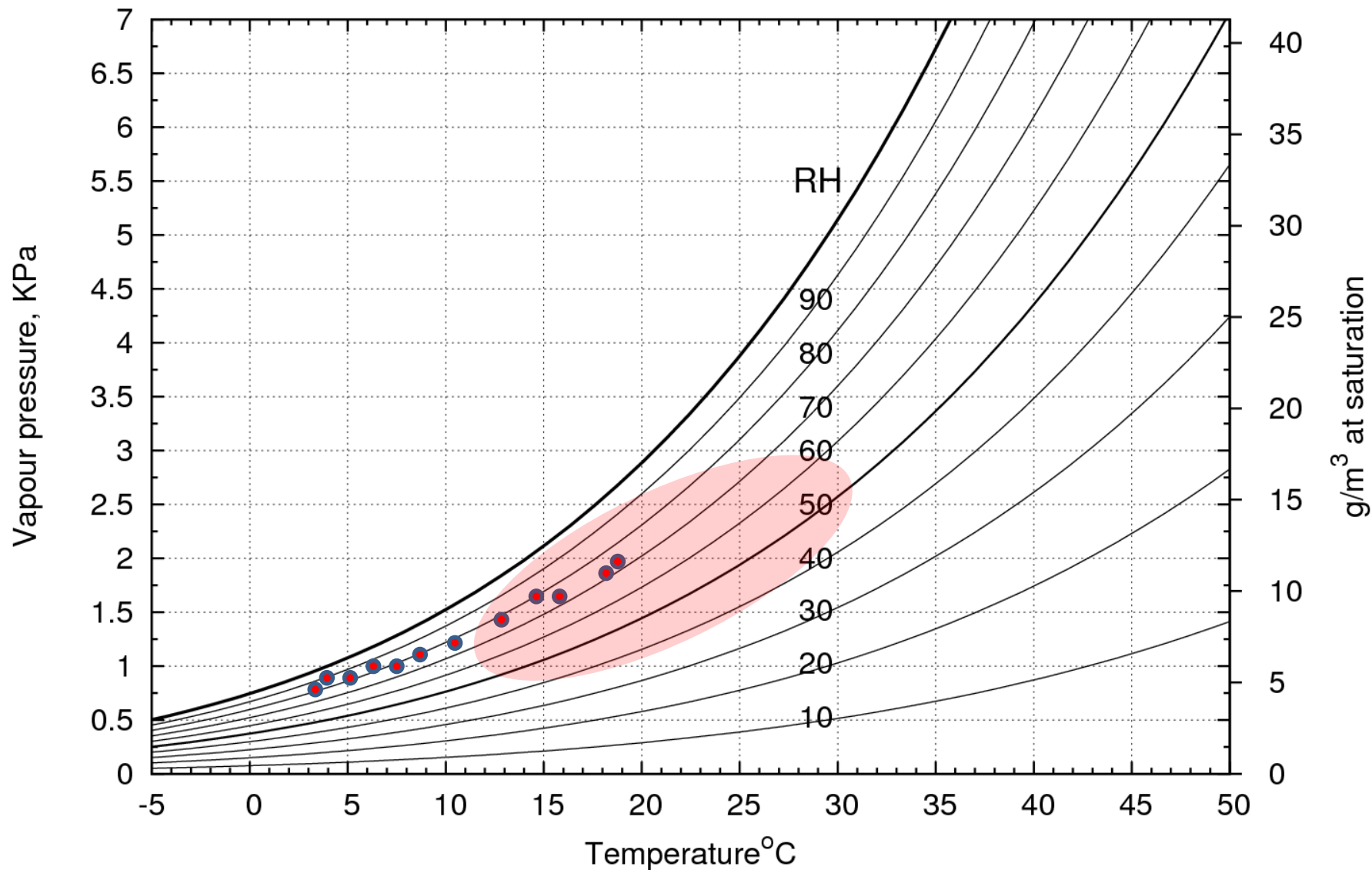
- Average Hourly Relative Humidity %

	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

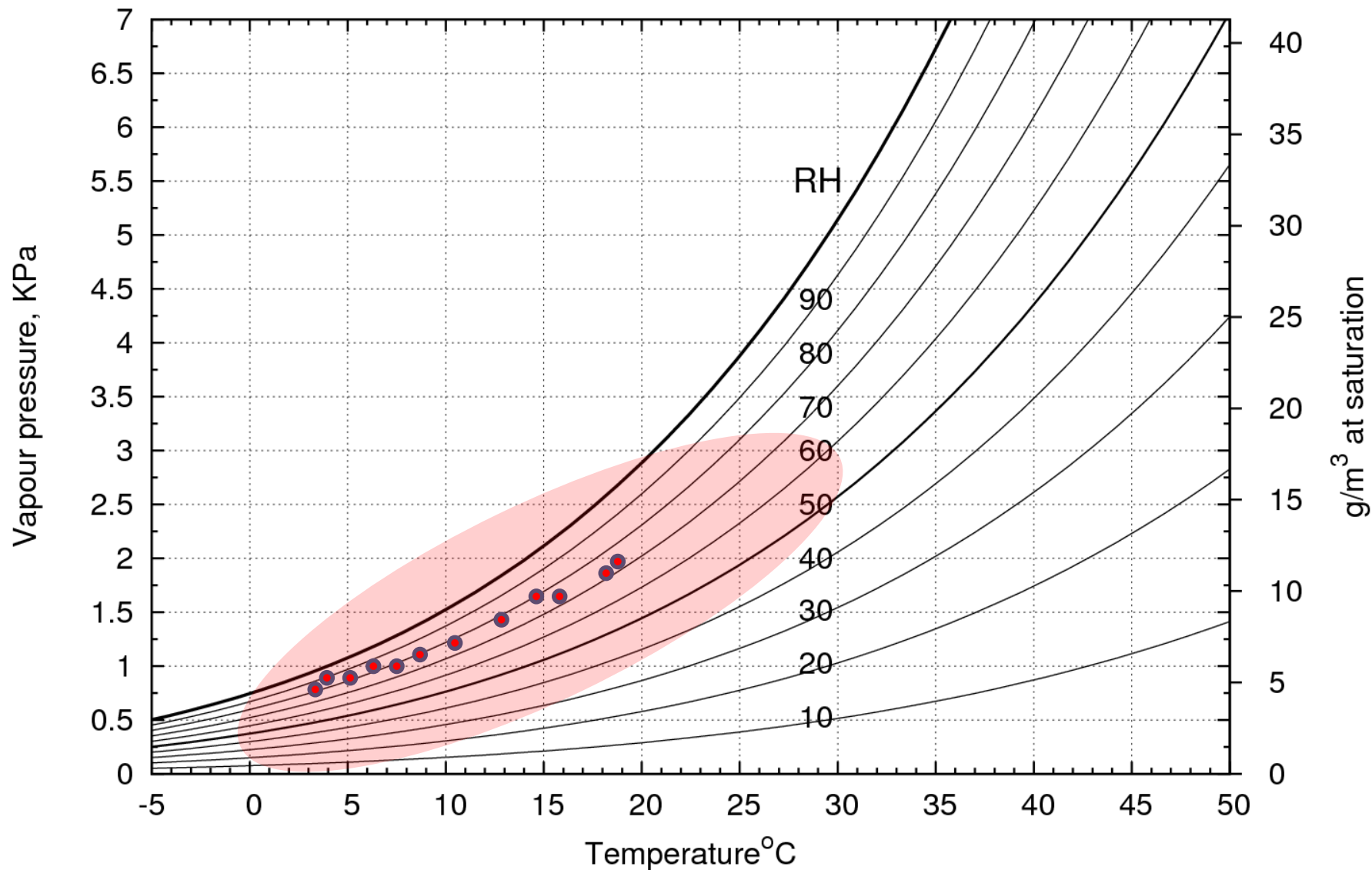
Vapour pressure diagram for water, with constant RH curves



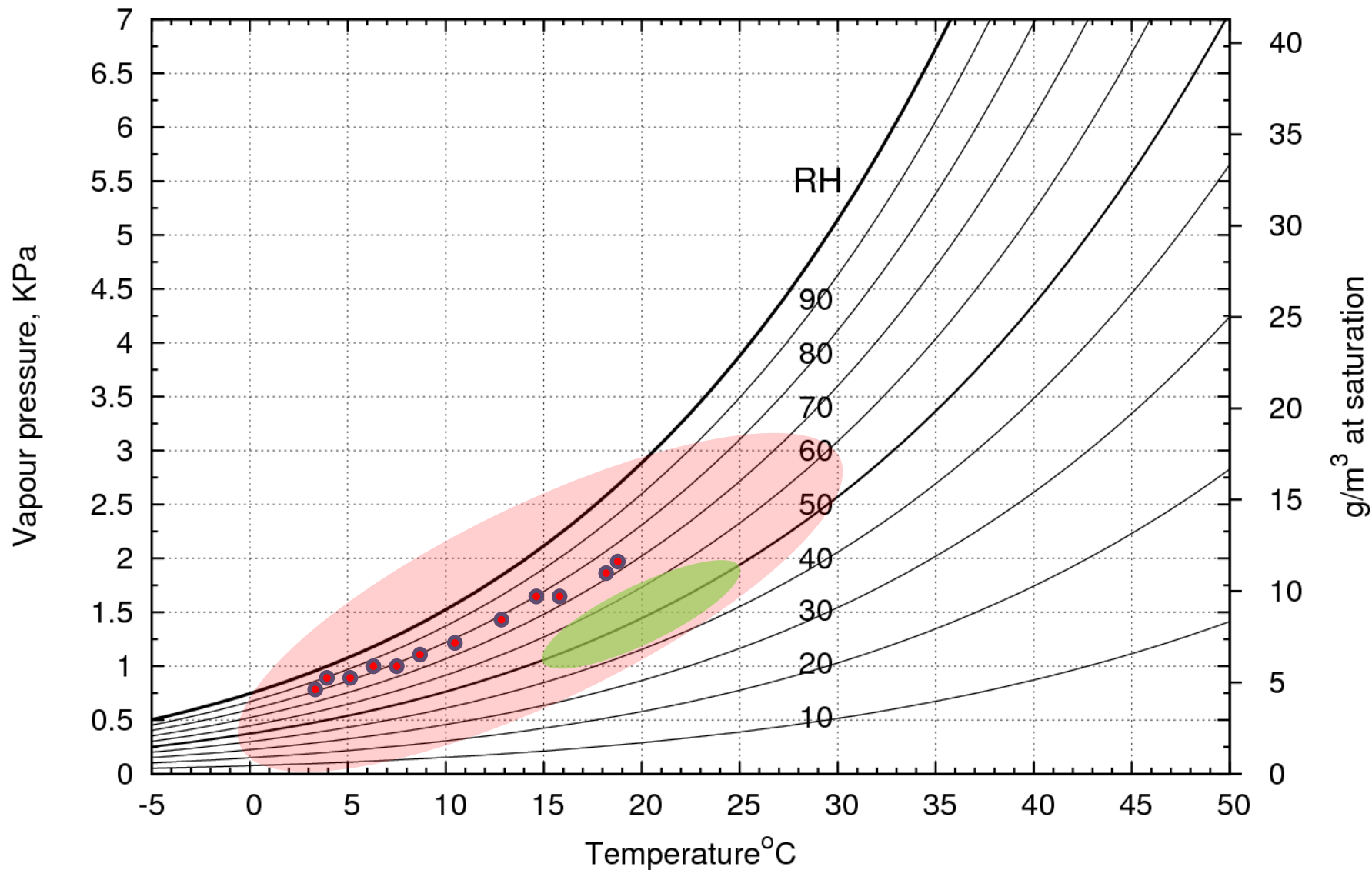
Vapour pressure diagram for water, with constant RH curves



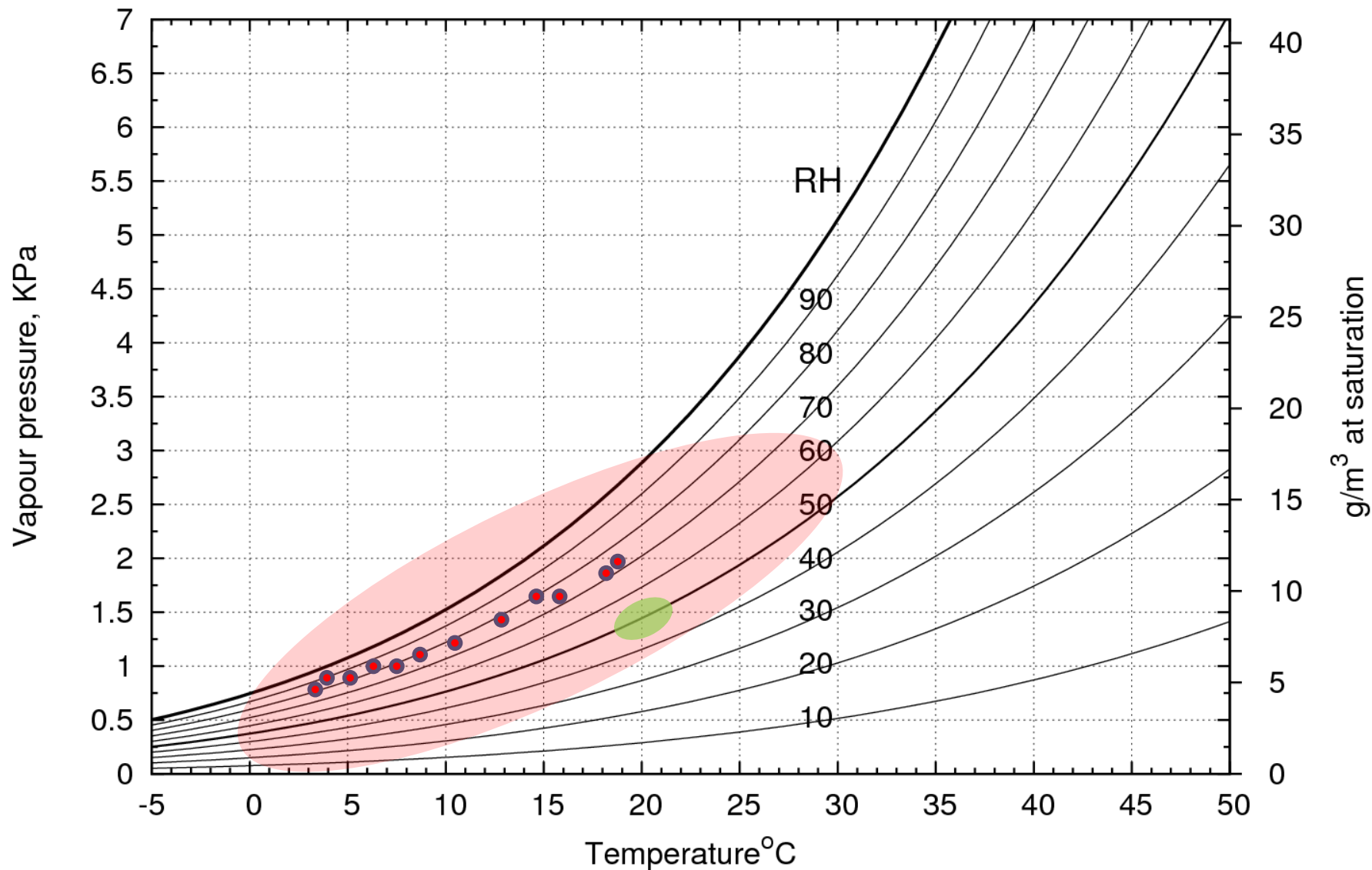
Vapour pressure diagram for water, with constant RH curves



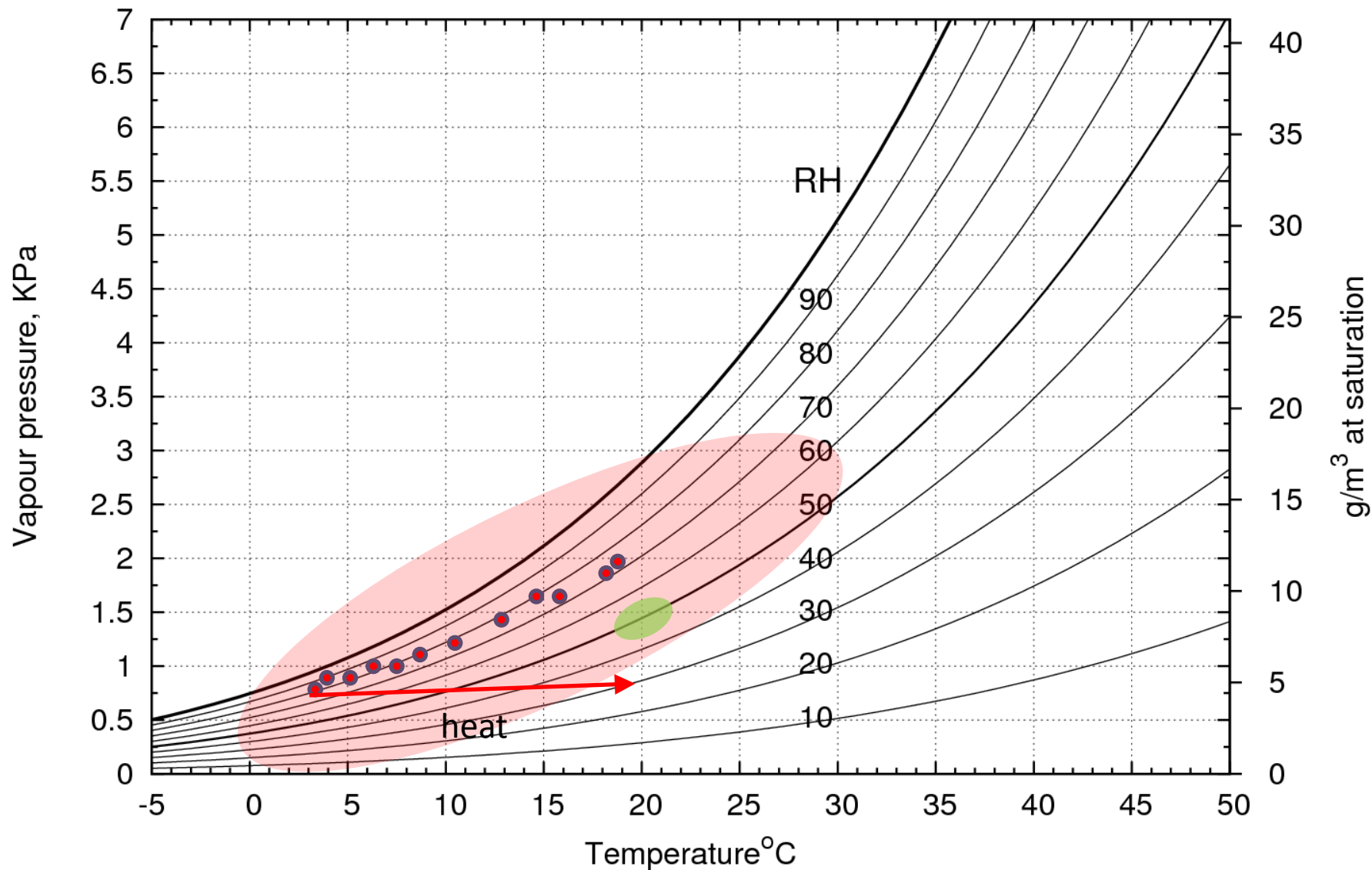
Vapour pressure diagram for water, with constant RH curves



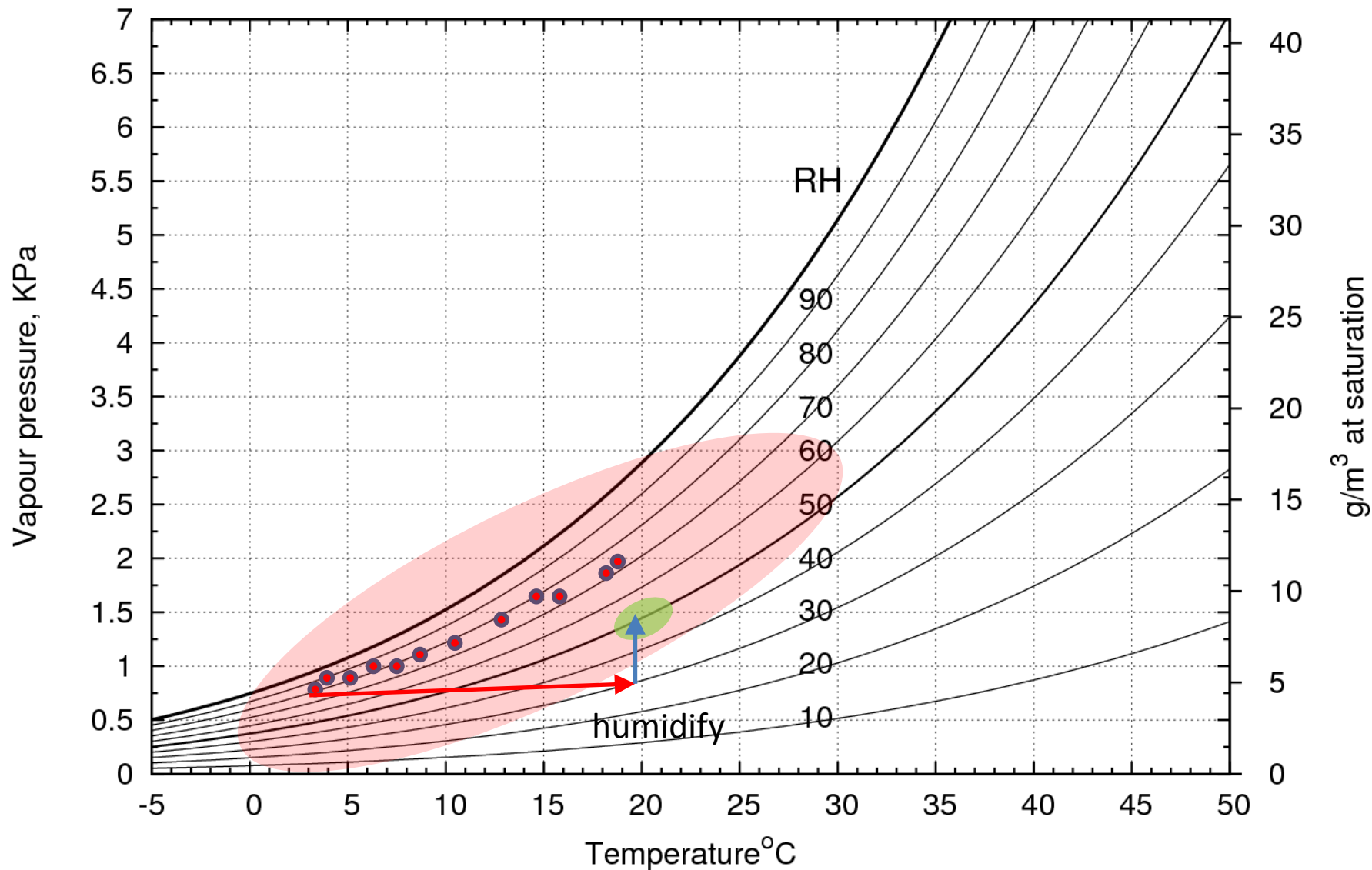
Vapour pressure diagram for water, with constant RH curves



Vapour pressure diagram for water, with constant RH curves

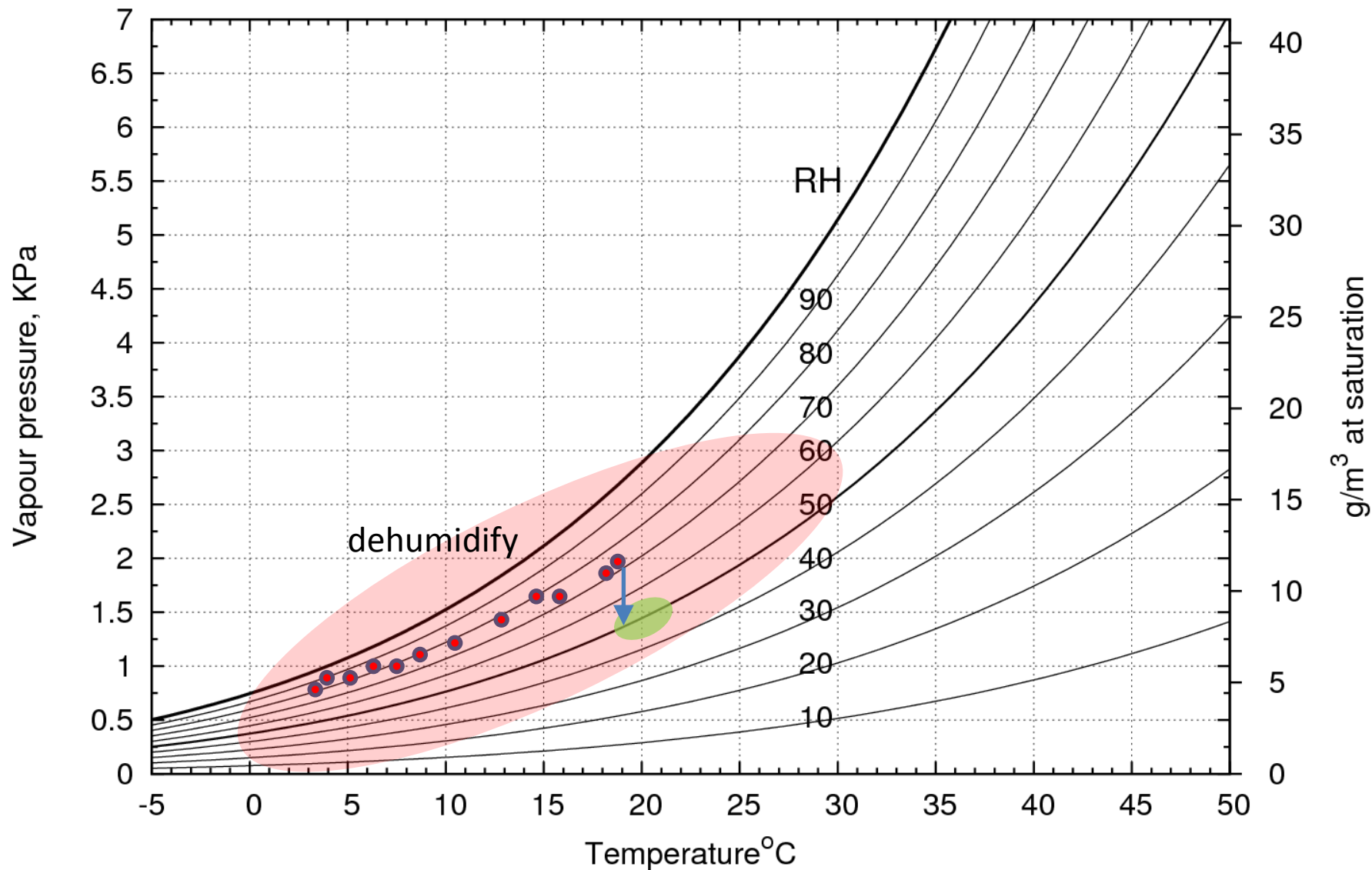


Vapour pressure diagram for water, with constant RH curves



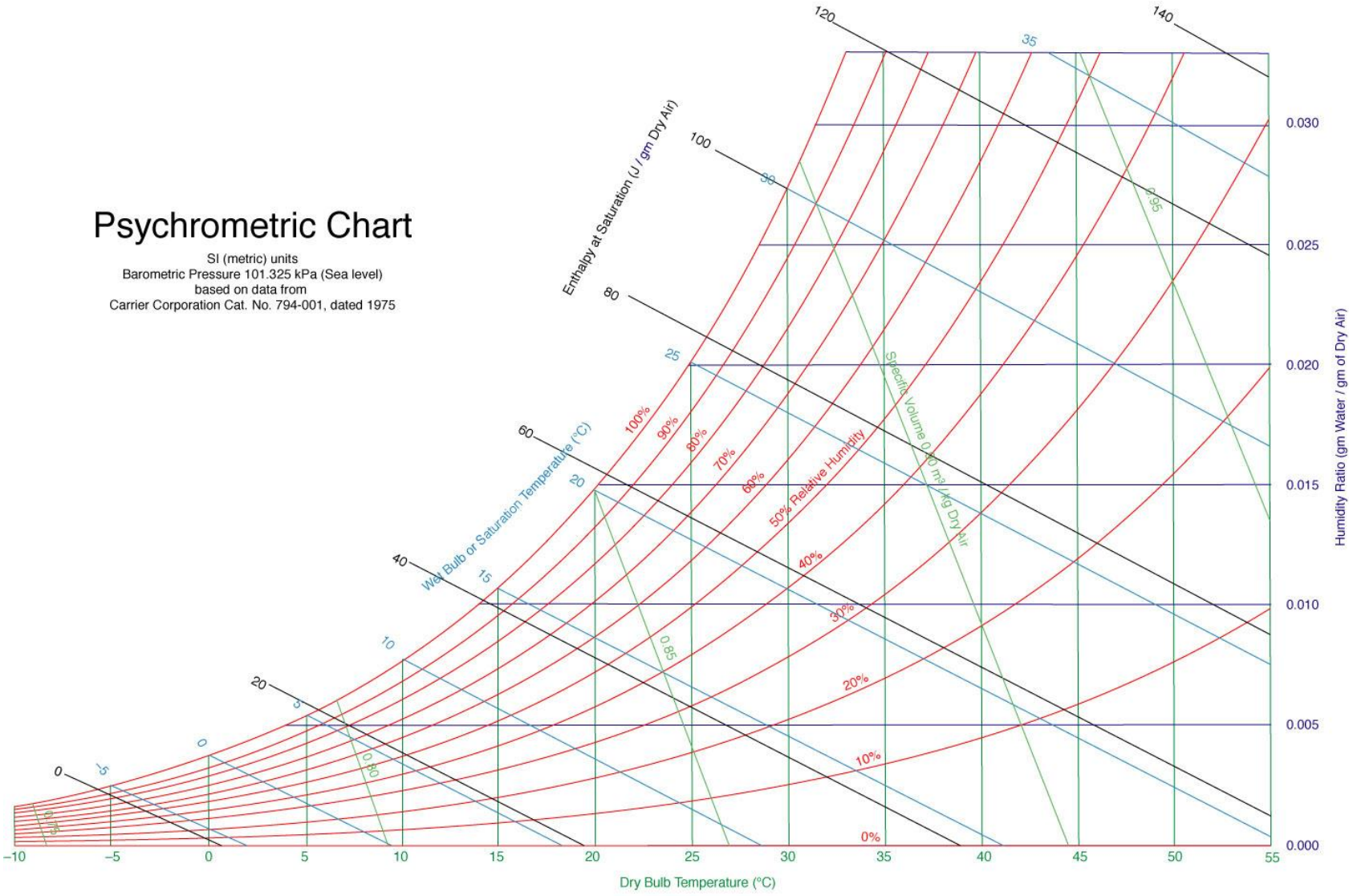


Vapour pressure diagram for water, with constant RH curves



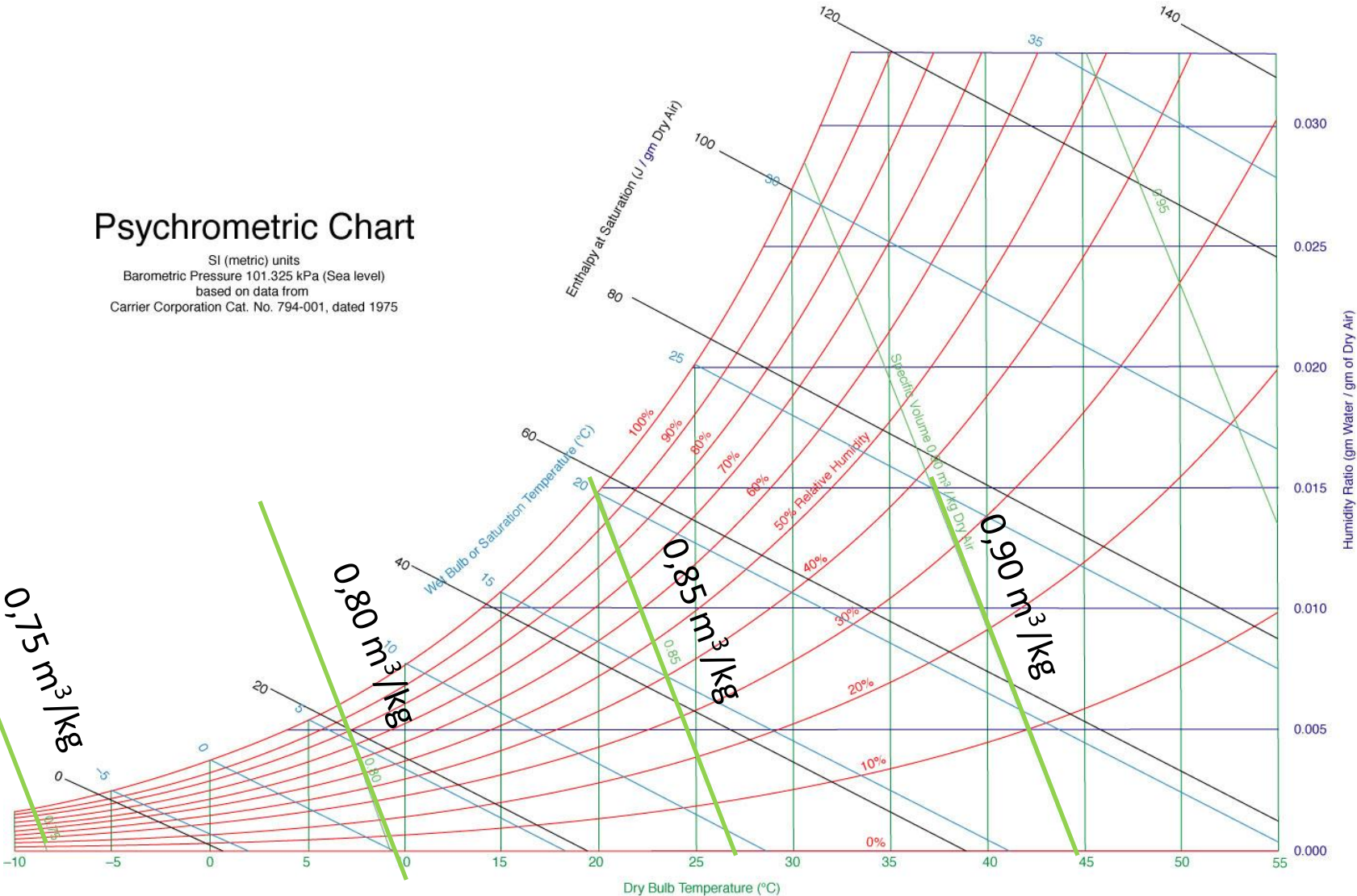
# Psychrometric Chart

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



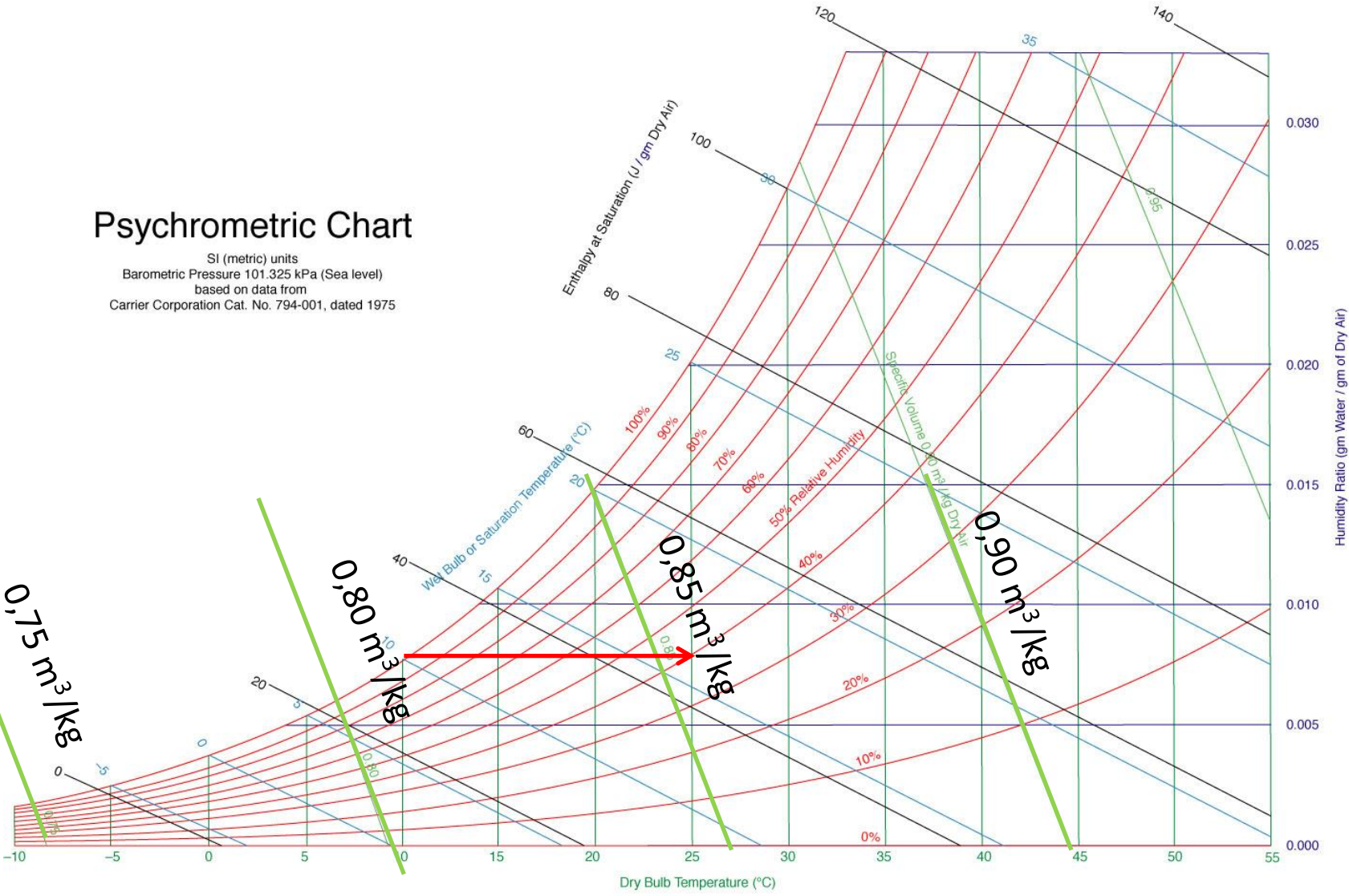
# Psychrometric Chart

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



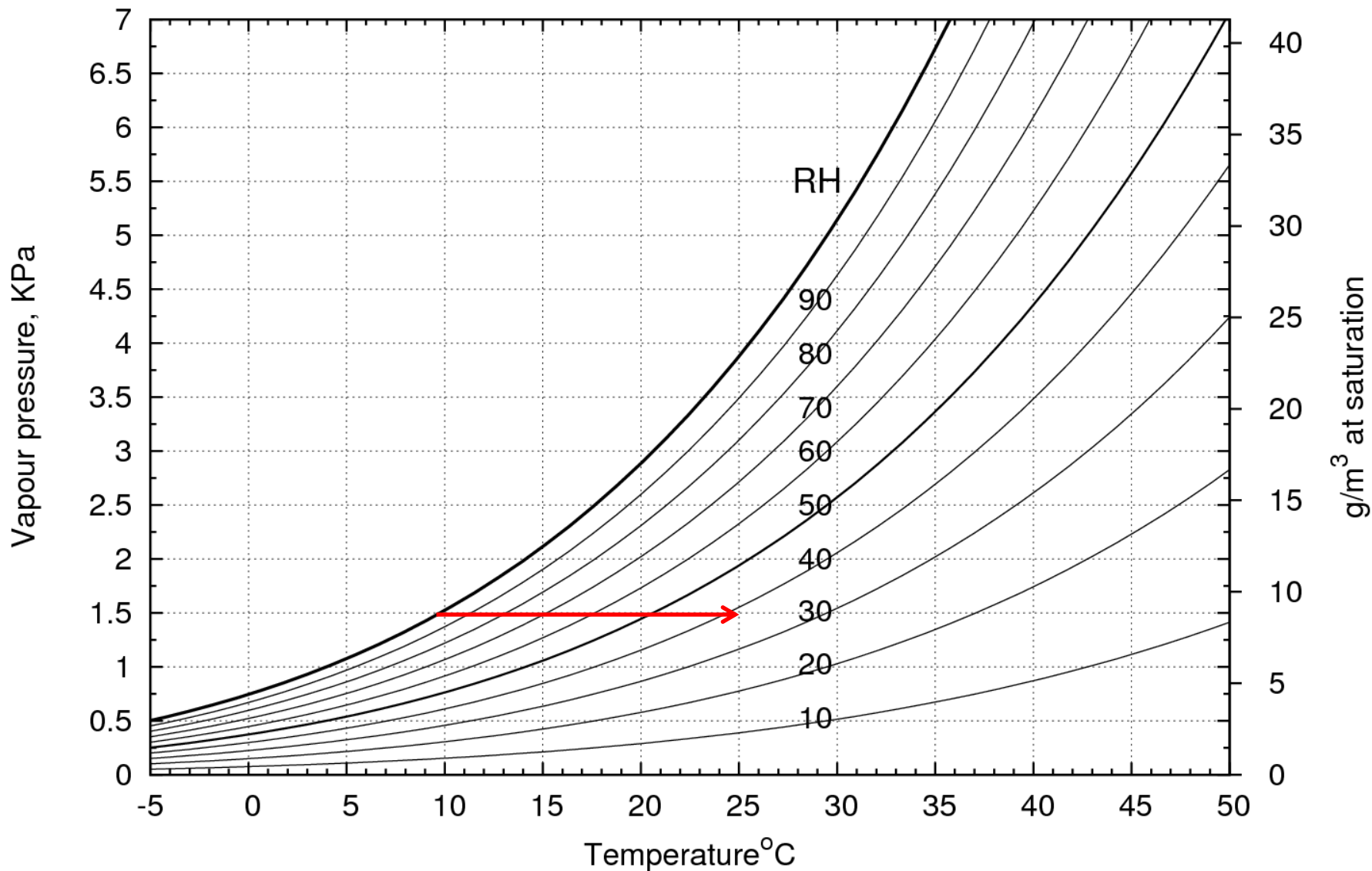
# Psychrometric Chart

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 = 9,7 g/m<sup>3</sup>
- End: 8 g/kg / 0,84 m<sup>3</sup>/kg = 9,3 g/m<sup>3</sup>

Vapour pressure diagram for water, with constant RH curves

