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Weather Tables Rothamsted; Woburn; Broom's Barn; Saxmundham

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ROTHAMSTED WEATHER 1980-81

Latitude 51° 48' 30" N; Longitude 0° 21' 10" W; Altitude 128 m

	1980			1981												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
TEMPERATURE (°C)																
Mean screen maximum	12.3	8.3	7.5	6.9	5.7	10.3	11.2	15.1	16.9	20.1	21.6	19.1	11.7	10.1	2.7	12.6
Difference from average	-1.1	-0.6	+1.0	+1.2	-0.7	+1.3	-0.9	-0.8	-2.0	-0.5	+1.2	+1.4	-1.6	+1.2	-3.8	-0.3
Mean screen minimum	4.7	3.1	1.4	1.1	-0.8	5.1	3.3	6.7	8.8	10.6	11.0	9.6	4.6	3.6	-3.3	5.0
Difference from average	-1.2	+0.4	+0.4	+1.0	-1.2	+3.8	+0.1	+0.5	-0.4	-0.5	+0.1	+0.5	-1.3	+0.9	-4.3	-0.1
Soil at 10 cm	7.9	5.3	3.6	3.2	2.1	6.4	7.1	10.6	14.0	16.2	16.1	13.7	7.6	6.0	1.3	8.7
Dew point	6.5	3.6	2.9	1.5	0.3	5.9	3.9	7.9	9.1	12.0	12.7	11.4	5.7	5.0	-1.5	6.1
No. of days with ground frost	11	18	22	20	22	8	12	5	1	0	1	0	15	18	29	131
RADIATION																
Sunshine (h per month)	129	68	58	61	74	53	126	117	148	137	206	149	109	56	49	1285
Difference from average	+26	+6	+13	+10	+7	-62	-24	-77	-54	-54	+27	+5	+6	-6	+4	-218
Mean daily radiation (MJ m ⁻² day ⁻¹)	6.7	3.1	2.1	2.6	4.4	5.7	12.0	13.0	16.1	14.9	14.4	10.7	6.1	2.8	2.0	8.7
WIND (km day⁻¹)																
Wind run at 2 m	219	323	314	257	247	305	261	183	209	155	127	167	222	226	215	215
WATER (mm per month)																
Rainfall (5 inch walled gauge)	97	45	41	41	18	118	51	82	33	62	42	93	72	45	55	712
Difference from average	+37	-26	-27	-22	-34	+68	+4	+30	-23	+9	-20	+35	+11	-26	-12	+20
Rain days	18	18	17	19	9	27	10	20	11	12	8	16	20	16	16	184
Drainage through 50 cm bare undisturbed soil	60	27	35	31	4	91	25	43	10	12	21	40	46	31	78	432
Open water (tank) evaporation	38	12	8	7	14	24	57	50	87	95	101	76	35	18	2	566
Potential evaporation	20	8	3	8	11	25	52	65	85	84	73	47	21	6	0	477

NOTES ON THE TABLE

1. Except for potential evaporation, all quantities are measured.
2. Drainage and evaporation are measured in inches.
3. Long period averages are for different periods: air temperatures 1878-1980; sunshine 1892-1980; rain 1948-80.

WOBURN WEATHER 1980-81

Latitude 52° 1' 5" N; Longitude 0° 35' 35" W; Altitude 89 m

	1980			1981												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
TEMPERATURE (°C)																
Mean screen maximum	12.8	8.6	8.1	7.3	5.9	10.8	11.6	15.8	17.7	20.8	21.7	19.5	12.0	10.5	2.9	13.0
Difference from average	-1.1	-0.7	+1.3	+1.4	-0.5	+1.4	-0.8	-0.2	-1.6	-0.1	+1.0	+1.4	-1.9	+1.2	-3.9	-0.2
Mean screen minimum	4.9	3.4	2.0	1.3	-0.7	5.2	3.0	6.7	8.9	10.9	10.7	9.8	4.8	3.7	-3.3	5.1
Difference from average	-1.3	+0.2	+0.7	+0.9	-1.1	+3.8	-0.5	+0.6	-0.2	-0.2	-0.2	+0.6	-1.4	+0.5	-4.6	-0.1
Soil at 10 cm	8.2	5.6	4.0	3.6	2.4	6.5	7.1	11.3	14.7	16.9	16.3	13.7	7.8	6.2	1.6	9.0
Dew point	6.6	4.0	2.9	2.1	0.3	6.0	3.8	8.0	9.0	11.8	12.6	11.6	5.9	4.8	-1.8	6.2
No. of days with ground frost	11	15	18	20	23	8	11	3	2	0	0	0	7	14	25	113
RADIATION																
Sunshine (h per month)	126	53	55	49	67	56	111	123	148	145	184	144	99	41	37	1204
Difference from average	+25	-8	+11	-1	+3	-58	-29	-61	-49	-34	+14	+9	-2	-20	-7	-235
Mean daily radiation (MJ m ⁻² day ⁻¹)				2.5	4.4	6.7	11.3	14.3	16.8	15.8	14.4	10.9	6.3	3.1	2.2	9.1
WIND (km day⁻¹)																
Wind run at 2 m	217	281	327	243	214	298	207	197	219	180	118	198	239	257	159	211
WATER (mm per month)																
Rainfall (5 inch gauge)	81	50	30	31	16	103	71	63	34	44	53	71	79	34	47	646
Difference from average	+28	-12	-25	-23	-25	+58	+26	+9	-17	-10	-10	+20	+25	-29	-7	+17
Rain days	18	18	14	14	7	26	8	20	10	13	9	16	22	12	16	173

NOTE ON THE TABLE

1. Long period averages are for the period 1930-80

BROOM'S BARN WEATHER 1980-81

Latitude 52° 16' N; Longitude 0° 34' E; Altitude 75 m

	1980			1981												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
TEMPERATURE (°C)																
Mean screen maximum	13.0	8.4	7.6	6.9	5.7	10.7	11.1	15.6	17.5	20.4	21.6	19.8	12.0	10.5	2.5	12.9
Difference from average	-1.5	-0.6	+0.8	+1.1	-0.6	+2.0	-0.5	-0.3	-1.6	-0.3	+0.6	+1.4	-2.3	+1.5	-4.3	-0.2
Mean screen minimum	5.7	3.6	2.1	1.6	0.1	5.3	3.8	7.4	9.4	11.5	12.0	11.2	5.3	4.4	-2.9	5.8
Difference from average	-1.7	+0.3	+0.2	+0.5	-0.9	+3.4	+0.1	+0.7	-0.2	0.0	+0.5	+1.3	-2.0	+1.1	-4.8	0.0
Soil at 10 cm	8.2	5.2	3.5	3.2	2.2	6.3	7.4	11.6	14.9	16.4	16.7	14.3	7.9	6.2	0.9	9.0
Dew point	6.8	3.8	3.3	2.2	0.1	6.3	4.2	8.6	9.2	12.5	12.3	11.6	5.7	4.7	-1.4	6.3
No. of days with ground frost	6	14	15	13	20	7	8	3	0	0	0	0	4	5	24	84
RADIATION																
Sunshine (h per month)	130	52	48	49	69	57	132	148	155	147	180	170	133	61	41	1342
Difference from average	+24	-20	+1	+2	+10	-53	-8	-49	-54	-34	+5	+21	+25	-10	-6	-151
Mean daily radiation (MJ m ⁻² day ⁻¹)	6.6	2.7	1.8	2.4	4.4	5.8	12.0	15.3	16.8	15.1	14.1	11.2	6.7	3.0	2.0	9.1
WIND (km day⁻¹)																
Wind run at 2 m	224	288	319	240	243	286	219	187	215	166	135	192	224	251	175	211
WATER (mm per month)																
Rainfall (5 inch gauge)	91	55	42	37	18	99	68	69	32	47	32	88	83	34	51	658
Difference from average	+49	-7	-15	-10	-18	+58	+26	+25	-21	+2	-21	+40	+38	-28	-5	+86
Rain days	14	19	20	18	12	23	12	20	8	11	6	14	21	14	15	174
Open water (tank) evaporation	45	—	—	—	—	29	59	80	103	100	112	104	41	19	—	647
Potential evaporation	21	8	4	5	15	26	53	83	92	89	79	57	22	12	-1	532

NOTES ON THE TABLE

1. Except for potential evaporation, all quantities are measured.
2. Long period averages are for different periods; air temperatures 1964-80; sunshine 1965-80.

SAXMUNDHAM WEATHER 1980-81

Latitude 52° 13' N; Longitude 1° 28' E; Altitude 37 m

	1980			1981												Year
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
TEMPERATURE (°C)																
Mean screen maximum	13.4	8.7	7.9	6.9	10.6	10.7	10.7	15.7	18.3	20.5	21.4	19.9	12.3	10.8	2.8	13.4
Difference from average	-0.5	-0.6	+0.4	+0.7	+3.9	+2.1	-0.2	+1.6	+1.8	+0.3	+0.7	+1.9	-1.4	+1.7	-4.8	+0.7
Mean screen minimum	6.1	4.4	2.5	2.5	0.6	5.3	4.4	7.3	9.6	11.5	11.6	11.0	5.4	4.7	-1.6	6.0
Difference from average	-1.5	+0.5	-0.3	+0.9	-1.2	+2.8	+0.6	+0.5	0.0	-0.3	-0.4	+0.9	-2.1	+0.8	-4.5	-0.2
Soil at 10 cm	10.0	6.2	4.7	4.8	2.7	7.5	9.7	13.8	16.7	18.7	18.1	15.5	10.0	7.8	2.3	10.6
Dew point	7.8	5.0	4.4	3.9	1.7	6.7	5.0	9.4	10.5	12.2	13.9	12.8	6.7	6.1	0.0	7.4
No of days with ground frost	22	17	25	13	21	10	9	4	0	0	0	0	9	11	21	98
RADIATION																
Mean daily radiation (MJ m ⁻² day ⁻¹)	5.5	1.9	0.9	2.1	4.1	5.3	10.8	14.3	13.4	15.4	13.6	10.2	5.7	2.4	1.8	8.3
WIND (km day⁻¹)																
Wind run at 2 m	269	362	341	275	274	336	262	212	191	154	137	243	261	270	238	238
WATER (mm per month)																
Rainfall (5 inch gauge)	98	54	59	54	26	103	87	61	48	69	12	86	80	51	79	756
Difference from average	+58	-20	+7	-5	-16	+60	+52	+28	+1	+20	-30	+22	+33	-14	+24	+176
Rain days	9	11	13	12	9	19	9	15	7	8	4	12	18	11	13	137
Open water (tank) evaporation	48	23	—	—	—	—	52	80	91	93	86	83	40	17	—	—

NOTES ON THE TABLE

1. All quantities are measured.
2. Temperatures were measured in °F.
3. 'Soil at 10 cm' and 'Dewpoint' are 0900 GMT.
4. Radiation was measured with a Kipp solarimeter.
5. Rain and evaporation were measured in inches.
6. 'Evaporation' is the mean of two open water tanks, 56 cm diameter, 30 cm deep and set 15 cm in the ground, installed on 17 March 1981. Water level is about 6 cm below the rim.
7. Long period averages are for the period 1971-80.