

WEATHER FREQUENCY ANALYSIS FOR
Sample, Derbyshire
AUTUMN

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ON: 08/09/2004

If you require further information, or need assistance in interpreting the content of this report, please contact the author.

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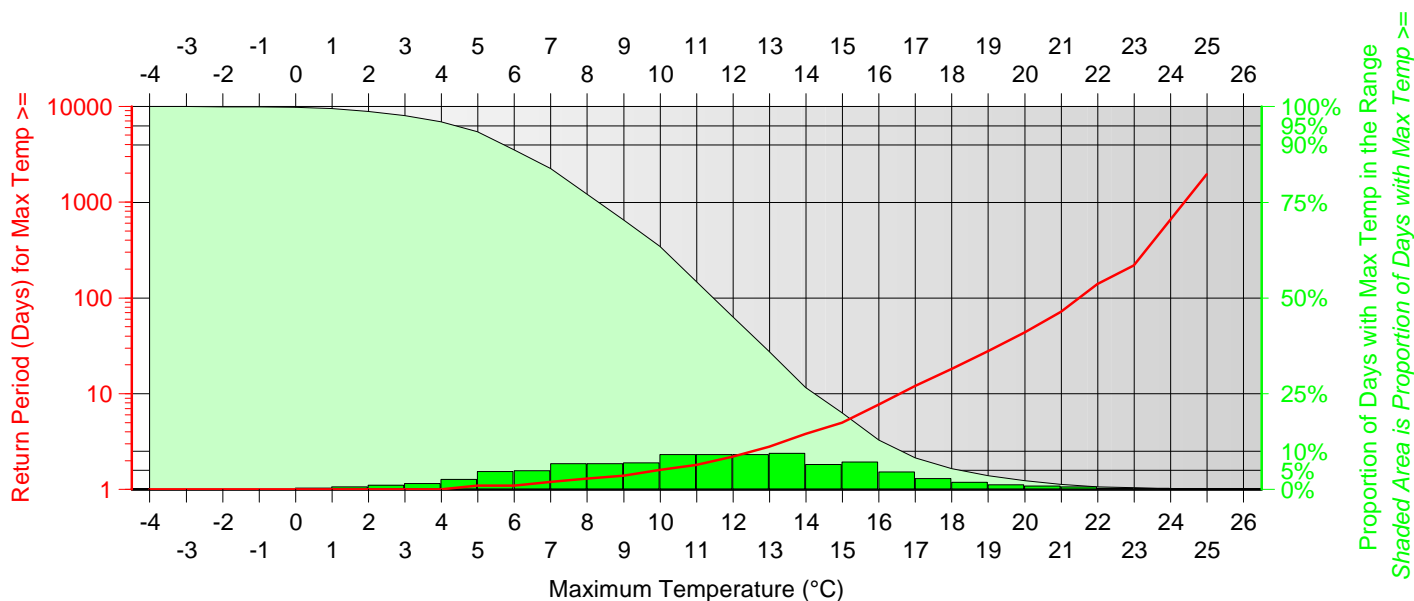
Daily Maximum Temperatures for Sample, Derbyshire September-November 1960-2004

12:16 PM

Wednesday 08 September 2004

Class	Max Temp in the Range	-- Within the Class --		----- >= the Class -----		----- < the Class -----		Notes
		No. of Days	Proportion of All Days	Proportion of All Days	Return Period (days)	Proportion of All Days	Return Period (days)	
1	-4--3.1°C	0	0.00%	100.00%	1.0	0.00%		
2	-3--2.1°C	1	0.03%	100.00%	1.0	0.00%		Lowest Max Temp = -2.4°C.
3	-2--1.1°C	3	0.08%	99.97%	1.0	0.03%	3,937.0	
4	-1--0.1°C	2	0.05%	99.90%	1.0	0.10%	985.2	Temp failed to rise above freezing on 0.15% of all days.
5	0-0.9°C	13	0.33%	99.85%	1.0	0.15%	657.0	
6	1-1.9°C	28	0.71%	99.52%	1.0	0.48%	207.6	
7	2-2.9°C	45	1.14%	98.81%	1.0	1.19%	83.9	
8	3-3.9°C	63	1.60%	97.67%	1.0	2.33%	42.9	
9	4-4.9°C	105	2.66%	96.07%	1.0	3.93%	25.4	
10	5-5.9°C	185	4.69%	93.41%	1.1	6.59%	15.2	
11	6-6.9°C	192	4.87%	88.72%	1.1	11.28%	8.9	
12	7-7.9°C	265	6.72%	83.85%	1.2	16.15%	6.2	
13	8-8.9°C	265	6.72%	77.13%	1.3	22.87%	4.4	Max Temp < 8.3°C on ¼ of all days (lower quartile).
14	9-9.9°C	274	6.95%	70.41%	1.4	29.59%	3.4	
15	10-10.9°C	362	9.18%	63.46%	1.6	36.54%	2.7	
16	11-11.9°C	360	9.13%	54.28%	1.8	45.72%	2.2	Max Temp >= 11.5°C on ½ of all days (median). Average Max Temp = 11.3°C.
17	12-12.9°C	360	9.13%	45.16%	2.2	54.84%	1.8	
18	13-13.9°C	371	9.41%	36.03%	2.8	63.97%	1.6	Max Temp most often in the range 13-13.9°C (mode).
19	14-14.9°C	257	6.52%	26.62%	3.8	73.38%	1.4	Max Temp >= 14.2°C on ¼ of all days (upper quartile).
20	15-15.9°C	284	7.20%	20.11%	5.0	79.89%	1.3	
21	16-16.9°C	182	4.61%	12.91%	7.7	87.09%	1.1	
22	17-17.9°C	112	2.84%	8.29%	12.1	91.71%	1.1	
23	18-18.9°C	74	1.88%	5.45%	18.3	94.55%	1.1	
24	19-19.9°C	51	1.29%	3.58%	28.0	96.43%	1.0	
25	20-20.9°C	35	0.89%	2.28%	43.8	97.72%	1.0	
26	21-21.9°C	27	0.68%	1.39%	71.7	98.61%	1.0	
27	22-22.9°C	10	0.25%	0.71%	140.9	99.29%	1.0	
28	23-23.9°C	12	0.30%	0.46%	219.2	99.54%	1.0	
29	24-24.9°C	4	0.10%	0.15%	657.5	99.85%	1.0	
30	25-25.9°C	2	0.05%	0.05%	1,972.4	99.95%	1.0	Highest Max Temp = 25.1°C.
31	>=26°C	0	0.00%	0.00%		100.00%	1.0	

3,944 days sampled



Daily Minimum Temperatures for Sample, Derbyshire

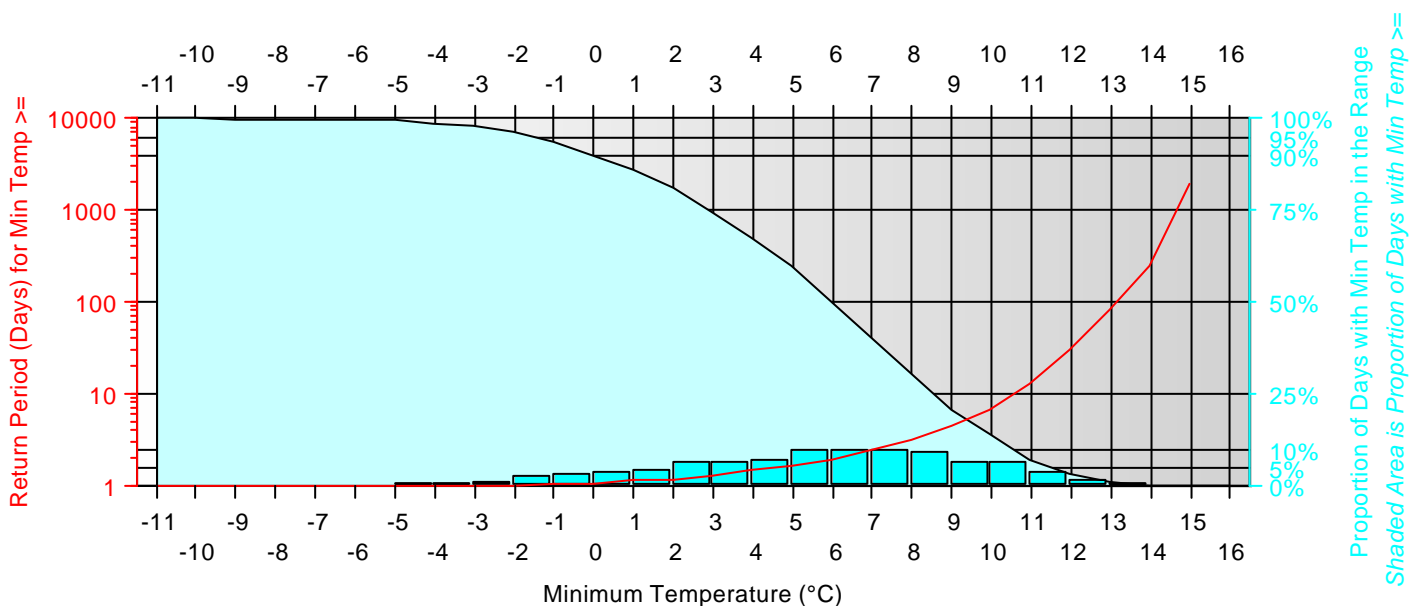
September-November 1960-2004

12:16 PM

Wednesday 08 September 2004

Class	Min Temp in the	-- Within the Class -- No. of Days	Proportion of All Days	----- >= the Class ----- Proportion of All Days	Return Period (days)	----- < the Class ----- Proportion of All Days	Return Period (days)	Notes
1	-11--10.1°C	0	0.00%	100.00%	1.0	0.00%		
2	-10--9.1°C	1	0.03%	100.00%	1.0	0.00%		Lowest Min Temp = -9.3°C.
3	-9--8.1°C	0	0.00%	99.97%	1.0	0.03%	3,937.0	
4	-8--7.1°C	3	0.08%	99.97%	1.0	0.03%	3,937.0	
5	-7--6.1°C	9	0.23%	99.90%	1.0	0.10%	985.2	
6	-6--5.1°C	8	0.20%	99.67%	1.0	0.33%	303.3	
7	-5--4.1°C	26	0.66%	99.47%	1.0	0.53%	187.8	
8	-4--3.1°C	37	0.94%	98.81%	1.0	1.19%	83.9	
9	-3--2.1°C	61	1.55%	97.87%	1.0	2.13%	46.9	
10	-2--1.1°C	110	2.79%	96.32%	1.0	3.68%	27.2	
11	-1--0.1°C	131	3.32%	93.53%	1.1	6.47%	15.5	Frosts on 9.79% of all days.
12	0-0.9°C	163	4.13%	90.21%	1.1	9.79%	10.2	
13	1-1.9°C	180	4.57%	86.08%	1.2	13.92%	7.2	
14	2-2.9°C	277	7.03%	81.51%	1.2	18.49%	5.4	Min Temp < 2.9°C on ¼ of all days (lower quartile).
15	3-3.9°C	273	6.92%	74.49%	1.3	25.51%	3.9	
16	4-4.9°C	287	7.28%	67.56%	1.5	32.44%	3.1	Min Temp >= 4°C on 67.56% of all days.
17	5-5.9°C	388	9.84%	60.28%	1.7	39.72%	2.5	Average Min Temp = 5.5°C.
18	6-6.9°C	387	9.81%	50.44%	2.0	49.56%	2.0	Min Temp >= 6°C on ½ of all days (median).
19	7-7.9°C	398	10.09%	40.63%	2.5	59.37%	1.7	Min Temp most often in the range 7-7.9°C (mode).
20	8-8.9°C	370	9.38%	30.54%	3.3	69.46%	1.4	Min Temp >= 8.6°C on ¼ of all days (upper quartile).
21	9-9.9°C	272	6.90%	21.15%	4.7	78.85%	1.3	
22	10-10.9°C	268	6.80%	14.25%	7.0	85.75%	1.2	
23	11-11.9°C	165	4.18%	7.46%	13.4	92.54%	1.1	
24	12-12.9°C	83	2.11%	3.27%	30.6	96.73%	1.0	
25	13-13.9°C	30	0.76%	1.17%	85.7	98.83%	1.0	
26	14-14.9°C	14	0.36%	0.41%	246.5	99.59%	1.0	
27	15-15.9°C	2	0.05%	0.05%	1,972.4	99.95%	1.0	Highest Min Temp = 15.6°C.
28	>=16°C	0	0.00%	0.00%		100.00%	1.0	

3,943 days sampled



Daily Sunshine Totals for Sample, Derbyshire

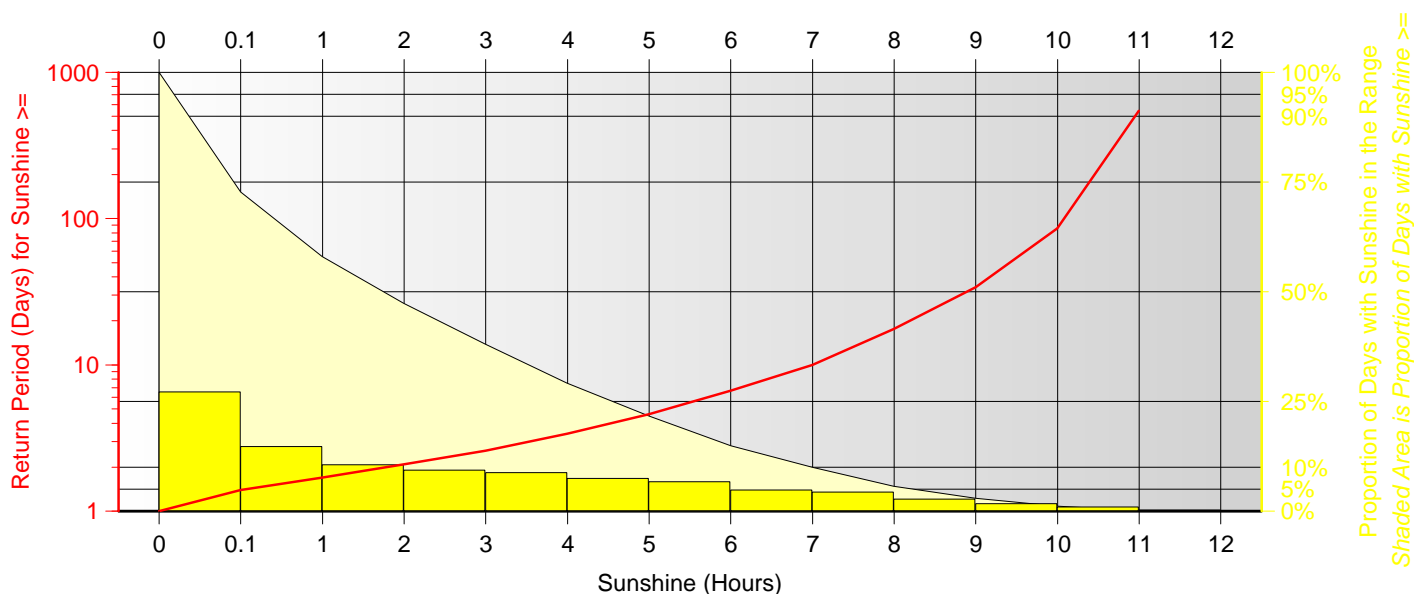
September-November 1960-2004

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Wednesday 08 September 2004

Class	Sunshine in the Range	-- Within the Class --		----- >= the Class -----		----- < the Class -----		Notes
		No. of Days	Proportion of All Days	Proportion of All Days	Return Period (days)	Proportion of All Days	Return Period (days)	
1	Zero	445	27.20%	100.00%	1.0	0.00%		27.2% of all days entirely without sunshine. Sunshine is most often Zero (mode).
2	0.1-0.9 hours	241	14.73%	72.80%	1.4	27.20%	3.7	
3	1-1.9 hours	174	10.64%	58.07%	1.7	41.93%	2.4	Sunshine >= 1.8 hours on ½ of all days (median).
4	2-2.9 hours	154	9.41%	47.43%	2.1	52.57%	1.9	Average daily Sunshine = 2.6 hours.
5	3-3.9 hours	145	8.86%	38.02%	2.6	61.98%	1.6	
6	4-4.9 hours	122	7.46%	29.16%	3.4	70.84%	1.4	Sunshine >= 4.6 hours on ¼ of all days (upper quartile).
7	5-5.9 hours	111	6.78%	21.70%	4.6	78.30%	1.3	
8	6-6.9 hours	80	4.89%	14.91%	6.7	85.09%	1.2	
9	7-7.9 hours	71	4.34%	10.02%	10.0	89.98%	1.1	
10	8-8.9 hours	45	2.75%	5.68%	17.6	94.32%	1.1	
11	9-9.9 hours	29	1.77%	2.93%	34.1	97.07%	1.0	
12	10-10.9 hours	16	0.98%	1.16%	86.1	98.84%	1.0	Sunshine >= 10 hours on 1.16% of all days.
13	11-11.9 hours	3	0.18%	0.18%	545.6	99.82%	1.0	Highest daily Sunshine = 11.7 hours.
14	>=12 hours	0	0.00%	0.00%		100.00%	1.0	

1,636 days sampled



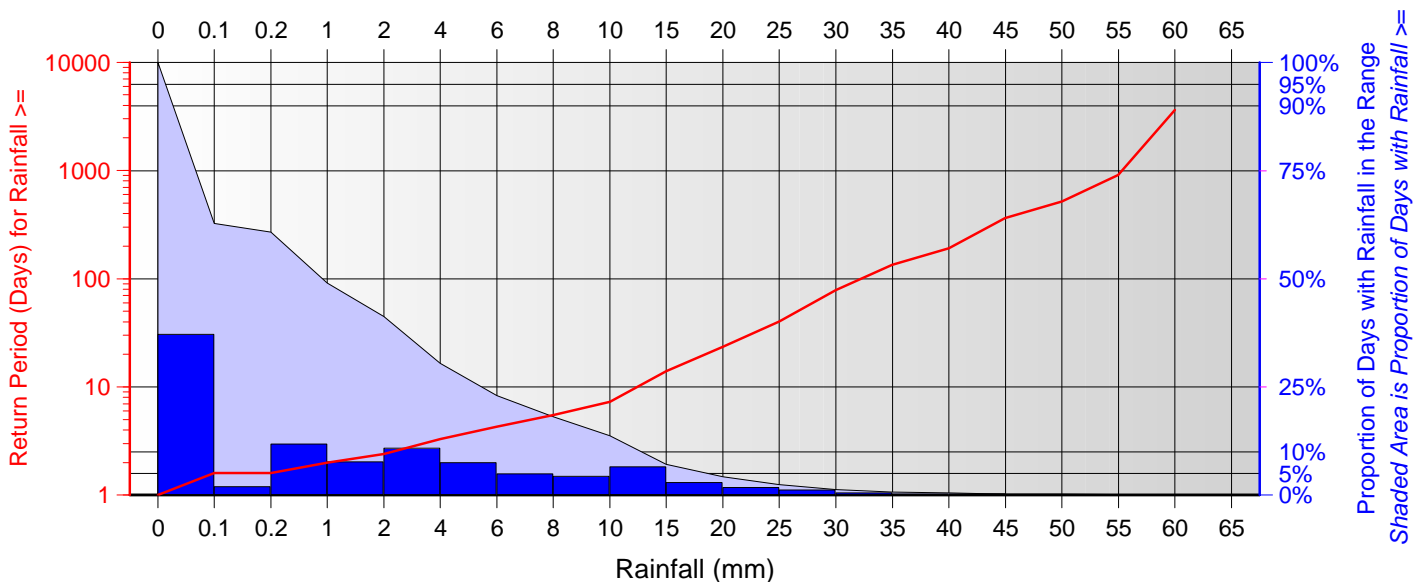
Daily Rainfall Totals for Sample, Derbyshire September-November 1960-2004

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Wednesday 08 September 2004

Class	Rainfall in the Range	-- Within the Class --		----- >= the Class -----		----- < the Class -----		Notes
		No. of Days	Proportion of All Days	Proportion of All Days	Return Period (days)	Proportion of All Days	Return Period (days)	
1	Zero	1354	37.20%	100.00%	1.0	0.00%		37.2% of all days entirely dry. Rainfall is most often Zero (mode).
2	Trace	71	1.95%	62.80%	1.6	37.20%	2.7	
3	0.2-0.9 mm	429	11.79%	60.85%	1.6	39.15%	2.6	60.85% of all days had rain. Rainfall >= 0.9 mm on ½ of all days (median).
4	1-1.9 mm	282	7.75%	49.07%	2.0	50.93%	2.0	49.07% of all days were wet.
5	2-3.9 mm	394	10.82%	41.32%	2.4	58.68%	1.7	
6	4-5.9 mm	272	7.47%	30.49%	3.3	69.51%	1.4	Average daily Rainfall = 4 mm. Rainfall >= 5.5 mm on ¼ of all days (upper quartile).
7	6-7.9 mm	178	4.89%	23.02%	4.3	76.98%	1.3	
8	8-9.9 mm	160	4.40%	18.13%	5.5	81.87%	1.2	
9	10-14.9 mm	240	6.59%	13.74%	7.3	86.26%	1.2	Rainfall >= 10 mm on 13.74% of all days.
10	15-19.9 mm	105	2.88%	7.14%	14.0	92.86%	1.1	
11	20-24.9 mm	65	1.79%	4.26%	23.5	95.74%	1.0	
12	25-29.9 mm	44	1.21%	2.47%	40.4	97.53%	1.0	
13	30-34.9 mm	19	0.52%	1.26%	79.1	98.74%	1.0	
14	35-39.9 mm	8	0.22%	0.74%	134.8	99.26%	1.0	
15	40-44.9 mm	9	0.25%	0.52%	191.6	99.48%	1.0	
16	45-49.9 mm	3	0.08%	0.27%	364.0	99.73%	1.0	
17	50-54.9 mm	3	0.08%	0.19%	520.0	99.81%	1.0	
18	55-59.9 mm	3	0.08%	0.11%	910.7	99.89%	1.0	
19	60-64.9 mm	1	0.03%	0.03%	3,649.6	99.97%	1.0	Highest daily Rainfall = 61.6 mm.
20	>=65 mm	0	0.00%	0.00%		100.00%	1.0	

3,640 days sampled



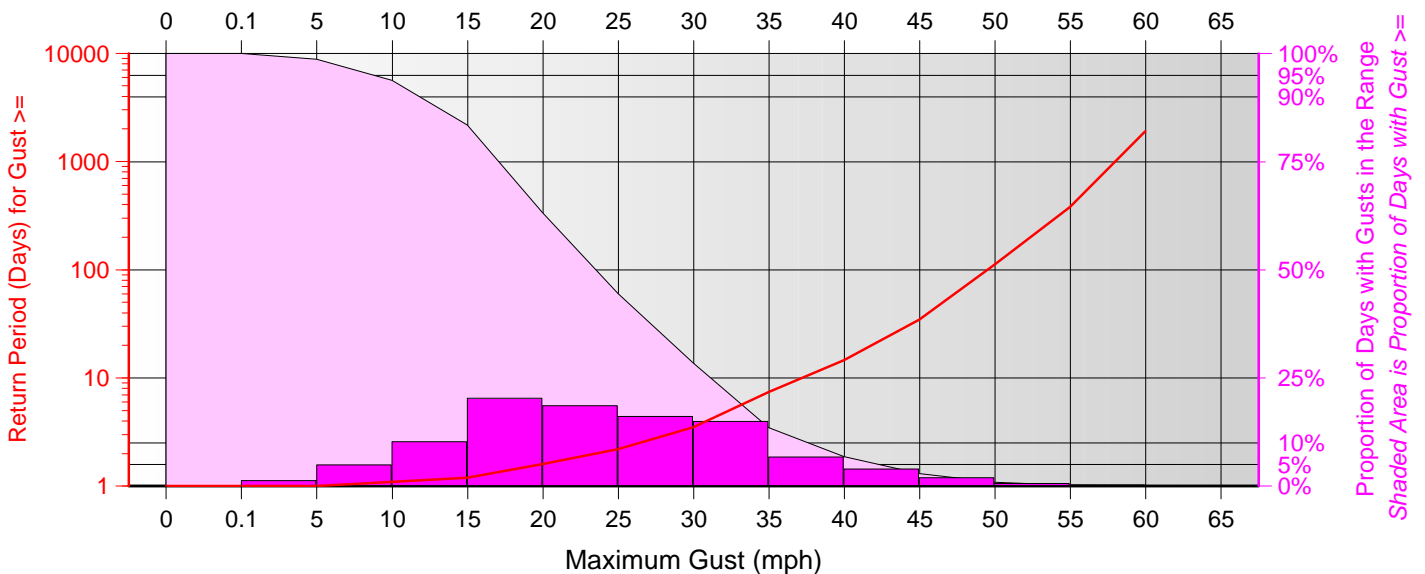
Maximum Daily Wind Gusts for Sample, Derbyshire September-November 1983-2004

12:17 PM

Wednesday 08 September 2004

Class	Gusts in the Range	-- Within the Class --		----- >= the Class -----		----- < the Class -----		Notes
		No. of Days	Proportion of All Days	Proportion of All Days	Return Period (days)	Proportion of All Days	Return Period (days)	
1	Calm	0	0.00%	100.00%	1.0	0.00%		0% of all days entirely calm.
2	0.1-4.9 mph	24	1.26%	100.00%	1.0	0.00%		
3	5-9.9 mph	94	4.92%	98.74%	1.0	1.26%	79.5	
4	10-14.9 mph	197	10.32%	93.82%	1.1	6.18%	16.2	
5	15-19.9 mph	388	20.32%	83.50%	1.2	16.50%	6.1	Max Gust < 17.1 mph on ¼ of all days (lower quartile). Max Gust most often lies in the range 15-19.9 mph (mode).
6	20-24.9 mph	355	18.60%	63.17%	1.6	36.83%	2.7	Max Gust >= 23.5 mph on ½ of all days (median). Average Max Gust = 24.2 mph.
7	25-29.9 mph	307	16.08%	44.58%	2.2	55.42%	1.8	
8	30-34.9 mph	285	14.93%	28.50%	3.5	71.50%	1.4	Max Gust >= 31.2 mph on ¼ of all days (upper quartile).
9	35-39.9 mph	129	6.76%	13.57%	7.4	86.43%	1.2	Gale Force Gusts (>=39mph) on 8.16% of all days.
10	40-44.9 mph	75	3.93%	6.81%	14.7	93.19%	1.1	
11	45-49.9 mph	38	1.99%	2.88%	34.7	97.12%	1.0	Max Gust >= 47 mph on 2.08% of all days.
12	50-54.9 mph	12	0.63%	0.89%	112.3	99.11%	1.0	
13	55-59.9 mph	4	0.21%	0.26%	381.8	99.74%	1.0	
14	60-64.9 mph	1	0.05%	0.05%	1,912.0	99.95%	1.0	Highest Max Gust = 61.1 mph.
15	>=65 mph	0	0.00%	0.00%		100.00%	1.0	

1909 days sampled

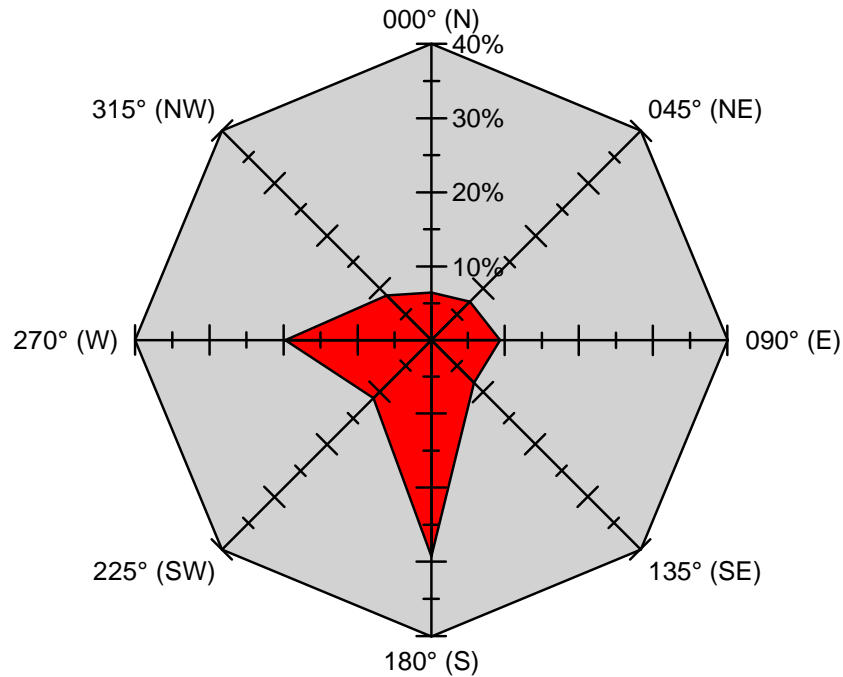


Wind Direction at the Time of Maximum Gust for Sample, Derbyshire September-November 1983-2004

12:17 PM

Wednesday 08 September 2004

Class	Direction Centred Around	Direction Name	--- Within the Class ---		Notes
			No. of Days	Proportion of All Days	
1	0.0°	N	109	6.44%	
2	45.0°	NE	125	7.39%	
3	90.0°	E	157	9.28%	
4	135.0°	SE	139	8.22%	
5	180.0°	S	494	29.20%	Wind is most often from the S (mode).
6	225.0°	SW	188	11.11%	
7	270.0°	W	334	19.74%	
8	315.0°	NW	146	8.63%	
1692 days sampled					



Weather for Sample, Derbyshire September-November 1983-2004

Weather	Proportion of All Days	Return Period (days)
Day with Thunder	0.78%	127.4
Day with Hail	0.94%	106.2
Day with Snow Falling	3.38%	29.6
Day with Snow Lying	0.69%	145.6