

Dashwood Meteorological Station: AWATERE VALLEY																	
	Monthly Air Temp																
	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Mean Maximum	23.2	22.9	20.8	25.8	24.3	22	24	22.7	23.3	24.9	22.8	24.2	23.3	24.9	23.7	23.5	23.5
Jan	21.8	23.2	23.6	26.9	23.9	24	25.4	20.7	22.9	22.4	25.1	22.8	22.1	23.1	21.9	23.4	23.3
Feb	21.7	20	20.2	23.7	23.8	21.2	21.9	22.5	21.5	21	21.3	20.3	23.3	21.9	20.5	22.9	21.7
March	18	19.6	18.3	19.6	19.3	19.5	20	18.5	17	17.2	18.3	19.9	17.6	18	17.5	20.6	18.7
April	16.2	16.1	16.8	16.8	14.5	17	18.1	16.8	11.4	15.7	15.9	15.6	17.9	14.1	12.1	15.6	15.7
May	12.7	13	13.4	14	14.5	12.2	14.7	14.8	10.5	14.6	12.5	12.2	12.2	14.1	10	13	13.0
June	12.1	11.8	12.8	14	13.5	12.8	12.1	12.5	12.3	12.1	13.4	13.1	11.6	12.3	10.6	12.2	12.5
July	13.4	13.4	13.3	13.2	16.9	13.9	14.9	14	12.9	12.4	15.1	13.5	13.6	12.2	14.6	14	13.8
Aug	15.6	17.3	13.4	17.3	14	17.4	17	17	15.5	15	16.6	17.3	15.5	15.6	15.4	15.9	16.0
Sep	16.7	18.6	18.9	18.2	19.3	18.5	18.2	17.5	16.6	16.9	17.1	17.6	17.4	17.7	15.8	16.9	17.6
Oct	19.4	19.2	22.8	18.7	19.5		18.5	19.2	19.1	20.2	21	20	19.9	19.6	19.6	21.2	19.9
Nov	23.9	22.1	23.5	22.7	20.5	25.9	21.9	21.3	24.1	20.5	23.7	20.1	21.3	21.6	22.2		22.4
Dec	17.9	18.1	18.2	19.2	18.7	18.6	18.6	18.1	17.3	17.7	18.6	18.1	18.0	17.9	17.0		18.1
Mean																	
Monthly Air Temp																	
95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean	
Jan	12.1	13.2	10.3	13.9	13.9	11.8	12.1	10.7	13.9	11.9	12.1	11.9	12.8	10.8	12.6	12.1	
Feb	12	13	12.3	15.6	12.4	11.4	9.3	11	12.1	13.6	11.8	11	11.7	11.5	11.8	12.0	
March	11.4	9.4	9.8	14.1	13.1	9.4	10.8	10.6	9.9	10.8	9.2	12	11.2	8	10.1	10.5	
April	9.5	8.9	7.1	9.1	8.6	9.3	8	6	6.4	6.6	10.6	7	8.3	7	9.1	8.0	
May	6.3	4.3	6.8	6.1	6.8	6.1	7	4.8	6.4	7.4	7	6.5	7.6	2.8	6.7	6.0	
June	2.5	2.7	3.7	3.8	3	4.5	1.9	4.3	5.6	4.9	2.4	2.7	2.8	3	4.7	3.3	
July	1.6	2.9	2.4	5.1	3.1	5.2	1.7	2.5	1.5	1.9	3.6	3.9	2.1	1.7	2.4	2.9	
Aug	2.9	2.5	4.3	3.6	3.2	3.9	4.9	2.9	3.2	2.8	4.3	3.4	3	5.5	5.5	3.7	
Sep	6.1	7.4	4.6	5.9	5.4	6.4	5.1	5.7	6.6	5.1	5.6	6.6	5.5	6.4	4.3	7.1	
Oct	7.2	8.7	7.4	9.5	9	7.2	8	4.5	6.5	7.3	6.2	7.6	6.5	6.3	4.9	6.3	
Nov	7.9	7.4	9.3	8.2		8.5	9.7	7.5	7.3	9.2	8.3	9.5	7.2	9.4	8.3	8.4	
Dec	13.4	10.2	11.9	11.7	9.3	13.9	12	11	11.1	8.2	13.1	8.3	11.8	10.9	11.1	11.2	
Mean	7.7	7.6	7.5	8.9	8.0	8.1	7.6	6.8	7.2	7.4	7.8	7.7	7.6	7.3	6.3	7.6	

Dashwood Meteorological Station: AWATERE VALLEY																	
	Mean monthly air temperature																
	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan	17.7	18.1	15.6	19.9	19.1	16.9	17.2	17.4	17.0	19.4	17.4	18.2	17.6	18.9	17.2	18.1	17.8
Feb	16.9	18.1	18.0	21.3	18.2	17.7	18.8	15.0	16.9	17.3	19.3	17.3	16.6	17.4	16.7	17.6	17.7
March	16.6	14.7	15.0	18.9	18.5	15.3	16.3	16.5	15.7	14.9	16.1	14.7	17.6	16.5	14.2	16.5	16.1
April	13.8	14.3	12.7	14.4		14.4	14.0	12.3	11.7	11.9	12.2	15.2	12.3	13.1	12.3	14.9	13.3
May	11.3	10.2	11.8	11.5		11.6	12.6	10.8	11.4	11.6	11.4	11	12.7	8.5	7.5	11.2	11.0
June	7.6	7.9	8.6	8.9	8.8	8.4	8.3	9.5	10.5	9.8	7.4	7.4	7.5	8.5	5	8.8	8.3
July	6.9	7.4	7.6	9.6	8.3	9.0	6.9	7.5	6.9	7	9	8.4	7.7	7.2	6.2	7.3	7.7
Aug	8.2	8.0	8.8	8.4	10.1	8.9	9.9	8.5	8.0	7.6	9.7	8.5	8.5	7.6	10.1	9.8	8.8
Sep	10.9	12.4	9.0	11.6	9.7	11.9	11.1	11.4	11.1	10	11.1	11.9	10.5	11	9.9	11.5	10.9
Oct	12.0	13.7	13.2	13.9	14.2	12.9	13.3	11.0	11.6	12.1	11.6	12.6	12	12	10.4	11.6	12.4
Nov	13.7	13.3	16.1	13.5	9.8	17.0	14.1	13.4	13.2	14.7	14.7	14.7	13.6	14.5	14	14.8	14.1
Dec	18.7	16.2	17.7	17.2	14.9	19.9	17.0	16.1	17.6	14.4	18.4	14.2	16.6	16.3	16.7		16.8
Mean	12.8	12.8	12.8	14.1	13.1	13.7	13.3	12.4	12.6	12.6	13.2	12.8	12.8	12.6	11.7		12.9
Maximum Monthly Air Temp																	
95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean	
30.6	28.6	32.9	32.9	34.5	28.1	33.7	28.3	29.6	30.6	29	33.5	32.6	32.5	31.4	31.3	31.3	
27.3	31	31.8	34.5	29.8	33	35.4	25.1	31.3	29.7	31	30.3	31.2	28.8	31.2	28	30.6	
25.7	27.8	31.8	28.8	28.6	28.8	29.7	27.2	27.2	26.1	27.7	27.4	29.7	28.2	26.1	28.2	28.1	
23.6	24.3	25.5	24.4		25.4	25.2	24	21.8	24	23.3	24.2	24	24.6	22.9	25.1	24.2	
20.9	22.6	21.7	23.1	22.7	19.9	24.4	22.8	21.2	21.2	20.7	18.8	22.8	17.4	18.9	21.8	21.3	
18	16.4	18.5	19.5	19.1	16.2	18.4	19.3	21	18.8	17.3	17.6	17.7	19.9	16.2	18.4	18.3	
15	16.7	16.4	17.9	18.5	16.7	17	18.1	16.5	16.8	18.2	17.1	17.9	17.3	16	16.5	17.0	
19.4	17.9	19.3	17.4	19.2	18.3	19	20	16.1	19.6	19.3	20.5	17.6	17	18.1	17.9	18.5	
22.2	23.3	19.2	22.9	20.3	23.2	22.6	22.3	21.7	21	21.6	21.7	19.1	21.5	20.3	20.2	21.4	
23	25.2	25.1	22.3	24.4	22.9	23.3	22.5	22.7	28.2	24.1	26.7	24.2	26.1	22.3	21.9	24.1	
27.7	27.8	31.8	25	27.2		26.6	27	28.9	26.1	30.2	25	31.8	27	24.8	29.9	27.8	
31.5	29.2	29.3	33.0	25.1	33.9	26.7	27.1	30.2	25.9	30.7	31.4	28	29.6	29.4		29.4	
23.7	24.2	25.3	25.1	24.5	24.2	25.2	23.6	24.0	24.0	24.4	24.5	24.7	24.2	23.1		24.3	

Dashwood Meteorological Station: AWATERE VALLEY																	
Minimum Monthly Air Temp	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
	Jan	1.9	8.2	5.1	5.2	8.6	3.2	3.2	4.1	2.3	8.3	5.7	5.5	2.3	7.1	3.1	7.6
Feb	6.5	3.9	3.6	9.8	4.9	4.7	6.3	2.6	2.2	3.7	6.1	5.3	5.8	6.1	2.3	5.3	4.9
March	2.8	2.8	3.7	5.3	6	3.7	3.3	2.9	4.6	2	4.3	3.7	3.5	5.7	0.7	1.6	3.5
April	0.2	1.8	0	2.7	2.2	2.2	2.3	-2.4	0.4	1	-0.9	3.8	1.9	-0.6	-0.2	0.1	0.8
May	-1.3	-1.4	1.3	-1.4	-0.4	0.5	-3.2	-2.6	-0.7	0.8	-1.2	1.1	0.9	-1.8	-3.3	0.3	-0.8
June	-2.5	-4	-2	-2.5	-3.7	0.1	-2.4	-2.5	-1.8	-2.8	-3.7	-1.5	-3.6	-4.2	-4.7	-2.2	-2.8
July	-3.1	-2.9	-1.5	-0.8	-2.8	1.4	-4.5	-3.5	-4.5	-2.7	-4.2	-1.6	-2.9	-3.1	-2.6	-3.8	-2.7
Aug	-2.6	-2.7	-3.3	-2.1	-2.2	-0.2	0	-4.1	-2.1	-3.7	-1.3	-3.3	-1.6	-3.3	-2	-0.7	-2.2
Sep	-1.2	-0.1	-1.4	0.2	-1.7	0.9	-1	-1.1	-0.7	-1	-1	-0.5	-2.4	-2.1	-3.6	-1.8	-1.2
Oct	-1.1	0.7	-0.4	0.8	0.5	0.5	-1.5	-3.6	-1.8	-1.2	-1.8	-1.1	-2.1	0.7	-0.5	0.8	-0.7
Nov	-1.2	-0.6	1.2	0.9	1.2	3	-0.3	-2	-0.1	1	1.7	-1.3	1.5	-0.2	1.2	0.3	0.4
Dec	4.7	2.3	2.2	3.7	2.8	7.5	5.1	1.7	2.7	0.4	4.5	1.2	4.6	2.9	3.6		3.3
Mean	0.3	0.7	0.7	1.8	1.2	2.3	0.6	-0.9	0.0	0.5	0.7	0.9	0.7	0.6	0.5		0.7
Average Daily Range in Air Temp																	
95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean	
Jan	11.1	9.7	10.5	11.9	10.4	10.2	13.7	10.6	12.6	11.0	10.9	12.1	11.4	12.1	12.9	10.9	11.4
Feb	9.8	10.2	11.3	11.3	11.5	12.6	13.3	11.4	11.9	10.3	11.5	11.0	11.1	11.4	10.4	11.6	11.3
March	10.3	10.6	10.4	9.6	10.7	11.8	11.1	11.9	11.6	12.1	10.5	11.1	11.3	10.7	12.5	12.8	11.1
April	8.5	10.7	11.2	10.5	10.7	10.2	12.0	12.5	10.6	10.6	12.1	9.3	10.6	9.7	10.5	11.5	10.6
May	9.9	11.8	10.0	10.7	7.7	10.9	11.1	12.0	5.0	8.3	8.9	9.1	10.3	11.3	9.3	8.9	9.8
June	10.2	10.3	9.7	10.2	11.5	7.7	12.8	10.5	4.9	9.7	10.1	9.5	9.4	11.1	10.1	8.3	9.8
July	10.5	8.9	10.4	8.9	10.4	7.6	10.4	10.0	10.8	10.2	8.9	9.5	7.7	10.2	8.9	9.8	9.6
Aug	10.5	10.9	9.0	9.6	13.7	10.0	10.0	11.1	9.7	9.6	10.8	10.0	10.2	9.2	9.1	8.5	10.3
Sep	9.5	9.9	8.8	11.4	8.6	11.0	11.9	11.3	8.9	9.9	11.0	10.7	10.0	9.2	11.1	8.8	10.2
Oct	9.5	9.9	11.5	8.7	10.3	11.3	10.2	13.0	10.1	9.6	10.9	10.0	10.9	11.4	10.9	10.6	10.5
Nov	11.5	11.8	13.5	10.5	19.5		8.8	11.7	11.8	11.0	12.7	10.5	12.7	10.2	11.3	12.8	12.0
Dec	10.5	11.9	11.6	11.0	11.2	12.0	9.9	10.3	13.0	12.3	10.6	11.8	9.5	10.7	11.1		11.2
Mean	10.2	10.6	10.7	10.4	10.7	10.4	11.0	11.4	10.1	10.4	10.7	10.4	10.4	10.6	10.7		10.6

Dashwood Meteorological Station; AWATERE VALLEY																	
Rainfall (mm)	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan	119.8	26.4	60.6	5	50.6	53	3	71.6	28.4	13.4	44.6	56.4	29.4	7	7	32	38.0
Feb	72.8	35.6	26.8	31	15.4	14	6.2	33.2	36.4	83.2	21.4	37.4	6.6	13.8	98	5.2	33.6
March	50.4	61.6	32.8	35.4	57.8	36.8	10	16.2	29.8	12.8	71.4	11.8	8.8	21.4	1.8	10	29.3
April	144	39.8	27.6	33.2		58.8	10.8	12.4	10.4	47.4	17	49	43.6	111.6	31.2	2.2	42.6
May	70.6	23.2	27.6	33		49.6	26.6	19.2	34	48	127	38.2	51.6	7.8	38	173.8	51.2
June	99	52.4	58.2	52	45	47	42.8	109.8	64.6	38.8	18	53.4	35.8	23	44	184.6	60.5
July	158.6	111	42.6	130.6	119.6	39.6	39.4	17	13	60.4	74.8	37.2	42.2	132	30.4	61.2	69.4
Aug	107.6	47	28.2	37.2	25.6	54.8	28.2	22	32.4	39.4	12.6	53.2	33.6	144.8	61.4	81.4	50.6
Sep	86.4	43.6	38.6	35.2	13.2	50.6	4	31	71.2	74.6	20.4	7.4	23.2	42.4	52	97.8	43.2
Oct	46.4	47.8	23.8	102.4	34.7	30.2	124.6	24	60.2	59	38.2	66	64	47.8	85	31	55.3
Nov	45.8	36	8.2	52.2	139.6	13.4	105.8	34.8	50.4	48.6	19.4	62.4	11.4	30.2	35.8	14.6	44.3
Dec	40.2	75.4	22.2	40.8	30.8	7.2	45.4	57.4	13.2	43	40.8	14	82	54	25.4		39.5
<b>Total</b>	<b>1042</b>	<b>599.8</b>	<b>397.2</b>	<b>588</b>	<b>532.3</b>	<b>455</b>	<b>446.8</b>	<b>448.6</b>	<b>444</b>	<b>568.6</b>	<b>505.6</b>	<b>486.4</b>	<b>432.2</b>	<b>635.8</b>	<b>510</b>	<b>693.8</b>	<b>541.6</b>

**Dashwood Meteorological Station; AWATERE VALLEY**

Total number of Ground Frosts = number of times grass temp was <= -1.0°C																	
	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan								0	0	0	0	0	1	0	0	0	0.1
Feb								0	0	0	0	0	0	0	0	0	0.0
March								0	0	1	0	2	0	0	2	1	0.7
April								2	6	3	5	1	3	1	4	3	3.1
May								12	11	3	3	6	3	11	11	7	7.4
June								14	8	13	13	15	15	15	19	9	13.4
July								19	18	18	8	14	10	15	16	18	15.1
Aug								19	15	16	8	14	14	10	9	5	12.2
Sep								10	5	9	3	5	1	1	10	1	5.9
Oct								12	6	3	2	4	5	1	2	0	3.9
Nov								5	2	1	3	1	1	1	1	1	1.8
Dec								1	0	2	0	1	0	0	0	0	0.5
Total								94	71	69	45	63	61	55	74		65.4

Total number of Air Frosts = number of times air temp was < 0.0°C																	
	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
April		0	0	1	0	0	0	3	0	0	1	0	0	1	1	0	0.5
May		1	0	2	0	7	7	5	1	0	2	0	0	5	8	0	2.3
June		7	10	6	9	12	7	5	3	6	9	5	7	9	18	2	7.7
July		11	6	9	2	7	10	9	13	12	7	6	6	11	13	8	8.7
Aug		7	7	7	8	10	0	8	7	8	4	7	6	8	3	1	6.1
Sep		4	1	3	0	2	3	1	2	4	3	1	7	1	7	1	2.7
Oct		2	0	1	0	0	2	6	3	2	1	3	2	0	2	0	1.6
Nov		1	1	0	0	1	1	2	1	0	0	1	0	1	0	0	0.5
Dec		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total		33	26	27	21	31	30	39	30	32	27	23	28	36	52		29.5

Dashwood Meteorological Station; AWATERE VALLEY												
Average monthly minimum grass temperature												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan			11.9	9.4	12.6	10.2	10.3	10.7	11	8.8	12.6	10.8
Feb			8.0	8.8	10.6	11.7	9.3	9.2	10.2	10.6	10	9.8
March			8.3	7.7	5.9	8.8	6.1	9.7	9.9	6.2	7.7	7.8
April			5.0	3	4	3.8	7.9	4.4	6.7	5.8	6.6	5.2
May			1.2	3.5	4.4	4.4	3.3	5	0.6	1.3	4.6	3.1
June			-0.1	2.3	1.3	-0.1	-0.6	-0.4	0.7	-0.9	2.2	0.5
July			-1.7	-2.1	-1.6	2.5	0	1.2	-0.4	-0.2	-0.7	-0.3
Aug			-1.2	0.2	-0.8	1.7	0.1	0.4	1.2	2.9	3.3	0.9
Sep			2.4	3.8	1.9	3.8	3	2.8	4.6	2	5.1	3.3
Oct			1.1	4	5.4	4.6	5.9	4.1	4.6	3.2	5.7	4.3
Nov			5.1	5.3	6.8	5.3	8.2	4.3	7.5	6.3	6.2	6.1
Dec			8.8	9.7	6.5	11.7	6.6	8.8	9.1	9.2		8.8
Mean			4.1	4.6	4.8	5.7	5.0	5.0	5.5	4.6		5.0
Minimum monthly grass temp												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan			5.2	-0.6	6.8	3.9	1.1	-1.2	4.9	0.5	4.8	2.8
Feb			1.5	-1	0.3	2.5	1.7	2.1	3.3	0.2	2.6	1.5
March			2.7	1.5	-2.3	1.3	-1.3	0.2	3.1	-1.5	-1.4	0.3
April			-4.9	-3.9	-3.3	-4.3	-1.3	-2	-3.6	-2.5	-3.3	-3.2
May			-7.9	-4.8	-2.2	-5	-3.5	-2.8	-4.6	-5.5	-2.9	-4.4
June			-9.2	-6.2	-2.8	-7.6	-6.9	-7.9	-6.8	-7	-5.7	-6.7
July			-9.3	-9.3	-7.1	-6.8	-5.8	-8	-6.8	-5.4	-7.2	-7.3
Aug			-8.9	-5.8	-8	-3.3	-6.6	-5	-6	-4.4	-4.4	-5.8
Sep			-5.1	-5.3	-6.9	-2	-3.5	-6.6	-2.6	-6.7	-3.9	-4.7
Oct			-6.6	-5.9	-4.1	-2.5	-3.9	-4.6	-1.3	-2	0.6	-3.4
Nov			-5.4	-2	-1.7	-2.6	-4.4	-1.3	-2.2	-1.4	-3.1	-2.7
Dec			-2.8	1.9	-2.3	1.1	-1.1	0.9	-0.2	0.5		-0.3
Mean			-4.2	-3.5	-2.8	-2.1	-3.0	-3.0	-1.9	-2.9		-2.9

Dashwood Meteorological Station; AWATERE VALLEY													
Average monthly 10cm soil temperature at 9am													
	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan	18.4			18.8	20.4	22.9	18.9	21.3	19.8	21.5	19.5	19.2	20.1
Feb	18.5			17.2	19.4	18	21.2	19.9	20.3	19.2	17.9	19.1	19.1
March	16.4			16.9	17.5	15.9	17.3	16.8	19	17.3	15.1	16	16.8
April	13.5			12.9	11.6	12.6	11.3	14.1	13.1	12.6	12.6	13.5	12.8
May	10			10.3	9.8	11.1	9.6	9.4	10.6	7.3	7.2	10.2	9.6
June	6.4			8.0	7.5	9.6	6.3	5.1	6	5.9	4.8	6.9	6.7
July	7.2			6.4	4.4	6.2	7	5.2	6.1	5.5	4.9	4.9	5.8
Aug	7.4			6.7	7.4	6.5	6.8	7.2	7.1	8.3	7.2	7.8	7.1
Sep	10.6			9.3	9.8	9.3	8.5	9.6	10	9.7	10	8.4	9.5
Oct	16			13.0	12.1	11.9	12.1	13.1	12.4	12.6	10.5	11.4	12.5
Nov				14.9	15.1	15	16.5	17.6	17	15.1	15.2	16.2	16.0
Dec				18.1	18.7	20.1	16.9	20.7	18.6	17.6	18.2		18.6
Mean	12.4			12.4	12.8	12.8	13.1	13.2	13.3	12.7	11.8		12.9
Average monthly 30cm soil temp at 9am													
	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan				18.9	20.7	22.9	19.5	19.6	19.3	21.6	19.9	19.7	20.2
Feb				18.1	20.2	19.7	21.6	19.7	20	20.5	19	20	19.9
March				17.5	18.6	17.6	19	17.5	19	18.7	16.9	17.9	18.1
April				14.2	14	14.2	14.1	15.5	15.3	15.2	14.6	15.4	14.7
May				11.6	11.8	12.5	11.6	12	12.6	10.7	10.1	12.7	11.7
June				9	9.5	9.6	8.7	8.2	8.8	8.4	7.3	8.9	8.6
July				8	7	7.7	8.6	7.5	7.8	7.6	6.9	7.3	7.7
Aug				6.8	8.6	8.5	8.1	8.1	9	9.1	8.8	9.3	8.7
Sep				9.5	10.7	10.4	9.5	10.8	10.6	10.9	10.1	10.4	10.5
Oct				11.9	13.6	12.2	12.6	12.9	12.4	12.9	11.3	12.4	12.4
Nov				13.9	15.3	15	15.4	16.4	16.5	15.2	14.7	15.9	15.4
Dec				18	18.4	20	17.3	18.2	17.5	17.8	17.7		18.2
Mean				13.7	13.5	14.1	14.1	13.8	14.2	14.1	13.1		13.9

Dashwood Meteorological Station; AWATERE VALLEY												
Solar Energy (mj/m2)												Mean
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	95-09
Jan	587.9		634.7	745.9	714.6	676.3	726	706.7	752.8	776.6	732.6	705.4
Feb	532.2		550.6	612.1	490.8	580.1	597.1	541.3	607.5	477.4	586.6	557.6
March	483.5		494.9	538.9	522.9	477.8	471.1	518.3	504.5	452.1	568.1	503.2
April	294.4		285	327.4	320.8	343.6	323.3	325	309.9	295.3	376.9	320.2
May	215.2		217.1	247.2	225.6	212.4	227.6	253.8	259.6	228.5	210	229.7
June	152.7		154.8	195.1	170.9	170.6	169.2	180.2	203.7	182.2	163.4	174.3
July	186.9		193.9	228.4	219.7	183.3	201.2	168.6	182.7	194.2	217.9	197.7
Aug	264.8	280.9	292.1	289.8	297.6	315.1	289.4	314.3	281.8	302.9	293.9	293.0
Sep	353.7	395.7	414.6	416.4	381.6	392.6	423.4	356.9	389.4	407	422.3	395.8
Oct	589	483.8	615.3	560.8	489.3	552.5	549.9	636.1	552.5	587.3	632.2	568.1
Nov		539.3	655.1	676.9	733	669.9	663.9	709.6	697.7	631.5	747.5	672.4
Dec		654.5	723.7	803.2	689.7	662.9	720.1		704.1	784.5		717.8
Total	3660	2354	5232	5642	5257	5237	5362	4711	5446	5320		4822.1

Dashwood Meteorological Station; AWATERE VALLEY																				
	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010	95-99	PrTaylor	Penman
	135.9	132.6	131.8	152	147.2	126.7	143	125.9	163.5	168.7	141.5	189.1	151.6	165.4	169.2	148.8	139.9	139.9	Mean	Mean
Jan	135.9	132.6	131.8	152	147.2	126.7	143	125.9	163.5	168.7	141.5	189.1	151.6	165.4	169.2	148.8	139.9	139.9	154.4	154.4
Feb	90.1	120.6	108.3	125	116.8	138	112	100.2	112.6	132.2	152.5	127.3	117.6	137	104.5	127.6	112.2	112.2	123.4	123.4
March	96.6	90.3	85.8	100.6	95.4	114.6	106	145	109	123.1	111.9	122.6	153.5	126.4	116.9	145.5	93.7	93.7	122.9	122.9
April	39.7	57.1	57.7	64.5	56.3	79.5	66.1	73.7	73.5	68.2	77.2	90	70.2	66.7	80.7	109.8	55.1	55.1	74.6	74.6
May	34.5	37.6	35.6	32.3	43.6	61.7	45.1	75	69.7	54.3	57.7	49.2	78.6	50.8	51.2	52.7	36.7	36.7	59.3	59.3
June	22.1	26.3	26.3	20.2	23.8	41.7	34.1	54.1	62.1	53	41.6	43.1	44.2	53.6	32.5	35.5	23.7	23.7	46.0	46.0
July	30.1	22.6	31.0	24.9	23.9	41	32.5	44.8	51.9	44	43.8	53.7	41.7	39.9	40.4	42.5	26.5	26.5	43.4	43.4
Aug	42.9	45.9	44.8	40.2	41	49.1	63.1	60.2	51	55.8	64.1	62.8	58.9	48.8	60.5	48.3	43.0	43.0	57.4	57.4
Sep	59.1	68.8	63.3	70.9	58.1	73.1	73.8	93.5	83.6	75.5	77	93.4	72.4	66.5	76.7	81.3	64.0	64.0	78.6	78.6
Oct	86.5	100.6	106.7	88	96.6	119.9	85.2	114.5	89.5	84	90.6	111.2	121.7	104	84.3	91.6	95.7	95.7	100.5	100.5
Nov	112.7	124.4	151.0	117.4	105.8	113.2	85.8	121	126.4	125.9	147.7	131.6	124.4	120.2	117	129.6	122.3	122.3	121.3	121.3
Dec	142	161.6	148.9	146.3	120.4	165.2	124.7	142.3	187.2	135.2	161.3	143.2	136.5	141.2	158.1		143.8	143.8	149.5	149.5
Total	892.2	988.4	991.2	982.3	928.9	1124	970.8	1150	1180	1120	1167	1217	1171	1121	1092		956.6	956.6	1131.3	1131.3
Values in italics have been substituted from Blenheim as Awatere data missing																				

Dashwood Meteorological Station; AWATERE VALLEY												
Average Monthly Soil Moisture 0-200mm												
99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan	11.4	21.8	8.6	7.8	16.8	10.1	7.4	7.9	NA	9.5	11.5	
Feb	9.3	21.0	8.3	10.1	9.3	11	6.1	5.7	NA	7.3	10.1	
March	9.6	15.3	7.7	11.9	9.2	6.3	5.6	5.6	NA	8.5	8.9	
April	16.4	13.9	9.4	12.4	16.8	7.6	6.4	14.9	NA	7.1	12.2	
May	20.4	26.5	8.4	14.8	22.3	15.5	18.3	21	NA	15.8	18.4	
June	27.7	36.4	15.8	18	28	21.9	15.7	14.1	NA	42.5	22.2	
July	29.3	37.2	20.8	22	32.2	25.2	24.1	20	NA	39.1	26.4	
Aug	29.7	32.8	17.4	25.4	28.2	25.5	25.4	43.3	NA	39.4	28.5	
Sep	33.5	25.4	20	25.2	16.4	18.5	16.6	40.7	NA	37.7	24.5	
Oct	15.2	26.6	21.8	25.8	14.1	15.1	17.7	NA	31.6	23.3	20.6	
Nov	10.5	31.6	10.0	11.7	17.3	9.4	13	9.4	NA	18.8	14.3	
Dec		20.6	12.8	9.1	12.6	9.4	8.2	12.6	NA	14.4	12.5	
Mean	19.4	26.3	22.4	13.3	16.9	17.7	14.8	13.8			17.5	
Average monthly Soil Moisture 200-400mm												
99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan	14.4	22.8	13.9	11.1	19.9	12.8	12	12.9	NA	14.1	15.0	
Feb	12.7	23.4	13.7	12.6	11.7	14.1	11.3	10.5	NA	12.4	13.8	
March	13.4	19.1	12.3	14.8	12.4	10.5	10.6	10.4	NA	14	12.9	
April	20.6	17.2	14.3	15.9	20.2	11.4	11.3	18.9	NA	12.4	16.2	
May	22.2	30.3	14.3	16.9	25	16.7	22.8	24.1	NA	22.2	21.5	
June	28.5	38.4	22.5	19.1	30.9	22.7	19.7	18.4	NA	44.3	25.0	
July	30.7	39.3	24.9	22.9	34.3	26.8	26	22.2	NA	41.7	28.4	
Aug	30.5	33.4	20.3	28.5	30.5	27.4	28.5	46.2	NA	41.2	30.7	
Sep	34.9	27.7	21.5	27.5	19.6	21.7	21	43.6	NA	40.1	27.2	
Oct	16.9	29	19.5	24.7	29	16.5	17.7	20.5	NA	34.2	27.3	23.5
Nov	12.8	33.5	14.5	13.3	17.7	12.2	16.2	14.3	NA	22.6	16.5	17.4
Dec		22.1	18.5	11.8	15.2	11.7	12.7	16.4	NA	17.5	15.7	
Mean	21.6	28.2	25.3	17.3	19.3	20.4	17.6	17.9			20.6	





Dashwood Meteorological Station; AWATERE VALLEY

Average Monthly Wind Speed (km/hr)		96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean
Jan	16.1	13.8	18.4	15.5	14.8	17.0	14.2	14.2	17.1	16.3	14.7	19	17.1	16.1	16.1	16.8	16.2
Feb	16.6	14.6	17.5	14.9	14.4	15.0	18.0	16.8	16.8	18.9	16.2	14.9	13.5	15.2	14.9	13.9	15.5
March	14	14.8	19.1	15.5	16.2	16.3	16.8	16.8	12.3	16.6	15.8	19	16.5	15.9	15.1	15.9	16.1
April	14.9	14.3	14.9	11.2	14.5	15.4	11.5	14	13	13	14.4	16.5	11	12.2	15.4	16.9	13.9
May	13.9	13.2	12.6	13.3	12.8	13.9	15.0	14.2	14.2	15.2	15.6	11.2	15.3	12.6	15.8	11.8	13.8
June	13.4	13.8	14.5	12.4	14.6	13.6	14.4	17.8	17.8	15.6	14.3	15.4	15.5	15.5	11.1	12.7	14.2
July	12.8	13.6	13.5	13.1	13.5	13.6	14.4	13.9	12	12	15	17.9	16.9	14.2	13.5	12	14.1
Aug	13.3	16.5	14.9	11.9	13.7	15.0	14.5	15.2	16.2	16.2	15	14.7	14	14.1	17	12.9	14.6
Sep	15.1	13.4	15.2	15.6	15.9	14.4	18.2	19.6	17.2	15.9	17.9	17.9	18.3	16.1	17	20.9	16.7
Oct	17.7	15.8	19.8	15.2		15.1	17.2	16.6	16.4	16.4	15.9	21.5	23	16.9	17.5	17.2	17.4
Nov	18	20.9	13.7	18.5		15.7	18.7	18.4	17.7	17.7	18.9	20.6	15.6	18.9	17.7	14.1	17.5
Dec	16.6	21.1	17.2	15.2		16.5	16.8	19.7	16.1	16.1	16.2	16.5	15.5	15.7	18.1		17.1
Mean	15.2	15.5	15.9	14.4	14.5	15.1	15.8	16.3	15.9	15.9	15.7	17.1	16.0	15.3	15.8		15.6
Maximum Monthly Wind Speed (km/hr)		96	97	98	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 <td>Mean</td>	Mean
Jan	70.9	83.2	105	74.4	91.7	97.1	97.1	60.4	70	70.6	73.6	75.7	81.4	66.8	114.2	73.6	80.1
Feb	79.4	74.4	78.4	69.5	84.4	78.8	78.8	67.9	74.6	83.6	76.2	79.6	74.2	75.2	71.9	58.8	74.5
March	88.4	92.6	101	87.5		85.4	85.4	87.7	74.6	83.3	74.9	75.2	62.3	74.6	67.3	76.6	82.3
April	86	80.2	124.6	54.6	91	108.8	67.5	67.5	57.3	62.8	69.9	72.3	60.7	61	63.3	70.4	74.8
May	76.7	97.2	93.7	84.1	95.9	82.6	90.3	90.3	70.4	77	64	53	68.4	51.5	84	53.4	76.7
June	80.9	78.8	86.9	66.7	98.2	75.1	75.1	96.7	74.5	88.8	71.1	82.6	89.1	73	58.9	56.8	78.7
July	67.2	88.9	66.1	75.5	92.9	83	74.9	74.9	72.8	62.2	73.7	67.7	66.2	66.4	79.6	58.8	73.5
Aug	84.7	80.2	78.7	79.9		76.7	73.7	73.7	59.9	90.9	70.4	65.7	69.9	74.7	78.4	63.2	76.6
Sep	83.5	67.2	71.4	76.4	81.1	71.8	71.3	71.3	82.5	70.6	74.6	80.7	87.8	82.9	73	91.6	78.2
Oct	101.8	76.1	112.9	107.3	133.2	69.5	73.1	73.1	71.5	105.7	78.1	82.5	96.6	74.9	75.8	70.2	87.9
Nov	97.1	102.2	71.4	95	74.2	74	76.6	80	80	69.7	83.9	84.4	69.6	89.2	78.3	65.6	80.9
Dec	78.5	97.2	85	118.9	91.4	65.4	85.3	85.3	80.2	85.2	75.2	82.5	82.2	70.6	69.2		83.4
Mean	82.9	84.9	89.6	82.5	93.4	80.7	77.1	77.1	72.4	79.2	73.8	75.2	75.7	71.7	76.2		80.1

