

Rindean Quarries Pty Ltd

Air Quality and Meteorological Monitoring Monthly Summary

SEPTEMBER 2023

SITE INFORMATION	
EPL Number:	20548
EPA Website Link:	ViewPOEOLicence.aspx (nsw.gov.au)
Licensee:	Rindean Quarries Pty Ltd
Premises:	620 Wisemans Ferry Road, SOMERSBY NSW 2250
EPL Monitoring Points:	Points 8, 9 and 10
Sampling Period:	SEPTEMBER 2023
Obtained Date:	11/10/2023
Publication Date:	11/10/2023

1. Continuous PM₁₀ (EPL ID #9 and #10)

Table 1: Continuous PM₁₀ Monitoring Results (24hr Averages) – September 2023

DATE	PM ₁₀ 24hr Average (µg/m ³)	
	EPA ID# 9 (Zone 1)	EPA ID# 10 (Zone 2)
1/09/2023	10.3	11.7
2/09/2023	8.7	8.9
3/09/2023	6.9	8.3
4/09/2023	13.8	18.7
5/09/2023	7.5	9.6
6/09/2023	13.9	13.9
7/09/2023	22.0	22.6
8/09/2023	3.5	4.6
9/09/2023	6.6	8.3
10/09/2023	9.6	9.3
11/09/2023	17.7	24.5
12/09/2023	24.7	29.3
13/09/2023	16.7	23.2
14/09/2023	25.4	24.0
15/09/2023	32.7	26.8
16/09/2023	40.6	12.7
17/09/2023	8.9	9.7
18/09/2023	18.7	17.2
19/09/2023	16.4	16.5
20/09/2023	20.3	21.0
21/09/2023	15.7	25.8
22/09/2023	16.4	7.2
23/09/2023	7.0	7.4
24/09/2023	5.4	5.7
25/09/2023	10.0	11.8
26/09/2023	16.4	17.1
27/09/2023	15.5	20.5
28/09/2023	8.7	8.3
29/09/2023	12.4	10.5
30/09/2023	15.3	15.1

Note: Validated data. Blank cells in table indicate insufficient valid data to provide a 24hr average PM₁₀ result.

Figure 1: Continuous 24hr Averages – September 2023

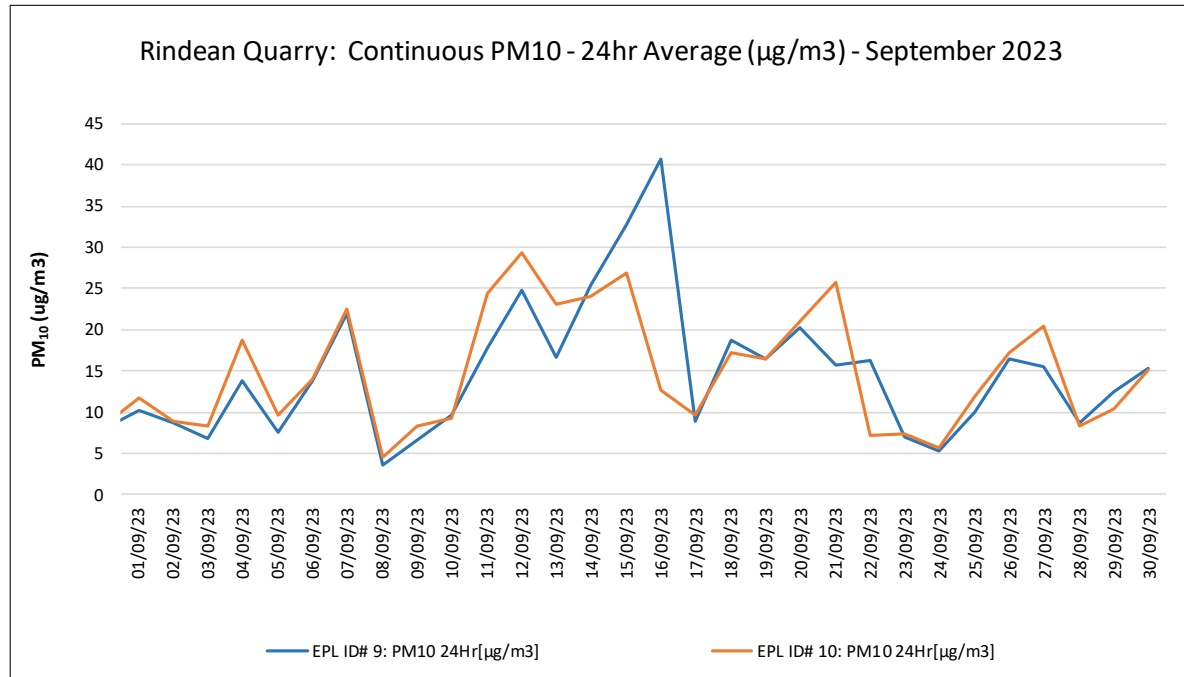


Table 2: PM₁₀ 24hr Average Monthly Summary Results – September 2023

EPL 20548 Sampling Point	Location ID	Pollutant	Unit	Monitoring Frequency Required by Licence	No. of times measured during month	Min Value (µg/m ³)	Mean Value (µg/m ³)	Max Value (µg/m ³)
9	Zone 1	PM ₁₀	µg/m ³	Continuous	Continuous	3.5	14.9	40.6
10	Zone 2	PM ₁₀	µg/m ³	Continuous	Continuous	4.6	15.0	29.3

2. Meteorological (EPL ID #8)

Table 3: Monthly Meteorological Data Summary – September 2023

Date	Temp 2m Min	Temp 2m Ave	Temp 2m Max	10m Temp Min	10m Temp Ave	10m Temp Max	Humidity Min	Humidity Ave	Humidity Max	Wind Speed Min	Wind Speed Ave	Wind Speed Max	Rain (mm)	Solar Rad Min	Solar Rad Ave	Solar Rad Max	Delta Temp Min	Delta Temp Ave	Delta Temp Max	Sigma Theta Min	Sigma Theta Ave	Sigma Theta Max
1/09/2023	7.5	11.4	16.4	8.2	11.7	15.6	50.0	82.8	100.0	0.1	1.3	5.0	0.0	0.0	99.7	645.9	-1.3	-0.3	1.3	3.8	34.4	84.3
2/09/2023	6.2	10.9	16.5	7.1	11.2	15.9	52.0	86.4	99.9	0.1	1.2	3.0	0.0	0.0	142.3	687.0	-1.3	-0.3	1.8	4.8	30.7	94.2
3/09/2023	7.9	12.4	18.3	9.0	12.6	17.2	49.6	86.7	100.0	0.3	1.2	3.7	0.0	0.0	144.9	738.9	-1.4	-0.2	1.6	5.8	24.8	94.6
4/09/2023	8.4	14.4	18.8	9.5	14.6	17.9	89.2	98.1	100.0	0.2	1.8	5.2	0.0	0.0	166.0	743.5	-2.2	-0.2	1.5	4.1	30.6	86.1
5/09/2023	9.9	17.0	23.9	11.6	17.5	23.5	13.3	45.9	99.9	0.1	1.1	4.3	0.0	0.0	186.5	707.0	-3.3	-0.4	1.6	7.8	45.6	94.4
6/09/2023	8.3	14.0	20.2	10.0	14.3	19.2	27.6	50.5	79.6	0.3	2.2	6.6	0.0	0.0	183.9	690.3	-2.2	-0.3	1.6	5.7	24.2	74.7
7/09/2023	7.8	17.6	24.2	9.0	17.9	23.8	37.8	67.5	100.0	0.2	1.5	4.4	0.0	0.0	161.7	669.5	-2.4	-0.3	1.3	3.5	31.5	76.3
8/09/2023	7.9	14.1	21.0	8.8	14.3	21.2	23.3	73.2	100.0	0.1	1.9	5.8	5.4	0.0	57.8	632.8	-1.3	-0.2	2.2	37.9	56.6	97.0
9/09/2023	6.0	10.6	18.5	6.6	10.9	17.3	18.0	49.4	68.9	0.1	1.3	5.0	0.0	0.0	187.4	692.1	-2.8	-0.3	2.1	9.6	41.8	86.1
10/09/2023	3.7	10.4	17.7	4.7	10.8	16.7	24.2	54.8	99.9	0.3	1.2	4.1	0.0	0.0	180.7	694.0	-1.9	-0.4	1.9	5.2	30.0	100.5
11/09/2023	6.0	11.5	18.2	7.3	12.1	17.5	38.3	76.5	100.0	0.2	1.3	3.0	0.0	0.0	155.7	683.5	-2.2	-0.5	1.6	2.4	25.1	101.1
12/09/2023	7.5	13.1	20.3	8.9	13.4	19.2	35.2	85.2	100.0	0.2	1.4	4.2	0.0	0.0	154.5	786.2	-1.8	-0.3	1.6	4.0	28.9	94.1
13/09/2023	9.0	15.4	22.9	10.1	15.5	21.6	30.0	79.3	99.9	0.2	1.4	4.0	0.0	0.0	193.3	741.8	-1.7	-0.1	2.0	3.2	30.9	95.8
14/09/2023	9.5	16.4	24.5	11.3	16.7	23.3	26.6	62.4	100.0	0.1	1.7	4.1	0.0	0.0	191.5	724.8	-2.2	-0.3	2.2	4.3	25.7	85.8
15/09/2023	11.6	19.3	29.2	13.9	19.9	27.7	10.9	36.9	53.8	0.2	1.5	4.2	0.0	0.0	183.1	728.4	-2.7	-0.5	2.0	3.6	24.2	77.7
16/09/2023	15.0	22.6	32.6	17.4	23.5	31.3	11.4	25.8	39.3	0.1	1.2	4.7	0.0	0.0	203.4	759.3	-3.3	-0.9	1.8	5.7	34.4	81.7
17/09/2023	15.0	23.1	32.1	17.7	23.9	31.2	9.9	22.0	33.5	0.1	1.2	4.9	0.0	0.0	211.4	789.6	-4.1	-0.8	2.7	3.5	40.7	89.6
18/09/2023	15.8	24.8	34.1	18.6	25.6	33.6	8.5	21.0	46.8	0.2	1.4	3.4	0.0	0.0	210.0	780.3	-4.6	-0.8	1.8	2.4	34.8	99.5
19/09/2023	20.5	26.0	33.6	22.3	26.5	32.3	11.3	18.8	25.4	0.2	1.6	4.9	0.0	0.0	210.3	781.9	-3.2	-0.5	1.9	8.7	46.7	84.4
20/09/2023	17.8	26.1	33.2	17.6	26.2	32.2	10.5	20.3	99.9	0.1	2.1	9.4	0.0	0.0	208.9	775.6	-2.8	-0.2	2.0	23.4	52.2	93.4
21/09/2023	11.4	16.3	23.8	11.3	16.0	22.6	13.8	73.1	99.9	0.2	1.7	6.7	0.6	0.0	213.0	818.6	-0.8	0.3	3.0	8.9	43.1	99.8
22/09/2023	8.8	11.9	16.8	9.8	12.0	15.7	51.6	86.5	99.9	0.1	1.2	5.1	0.8	0.0	122.9	676.6	-2.1	-0.1	1.5	13.2	44.7	97.5
23/09/2023	7.0	12.3	17.7	8.4	12.6	16.5	48.9	78.2	99.9	0.2	1.4	3.1	0.0	0.0	114.1	730.9	-2.0	-0.4	1.6	3.3	22.7	64.0
24/09/2023	9.0	13.7	19.3	10.4	13.9	18.1	42.6	68.7	100.0	0.2	1.6	5.6	0.0	0.0	142.4	815.5	-1.7	-0.2	2.4	4.3	28.5	89.7
25/09/2023	10.0	17.3	25.3	11.6	17.2	23.6	26.2	64.9	100.0	0.2	1.5	4.0	0.0	0.0	218.6	824.9	-2.1	0.0	2.4	7.0	36.5	91.1
26/09/2023	11.9	16.3	21.6	13.4	16.5	20.4	42.1	77.0	100.0	0.2	1.6	5.4	7.8	0.0	143.7	761.4	-2.1	-0.1	1.6	5.0	29.2	90.4
27/09/2023	13.1	16.8	21.9	13.1	16.5	20.9	77.9	96.7	100.0	0.2	1.3	4.6	0.0	0.0	165.1	922.4	-0.4	0.3	1.8	8.4	28.4	96.3
28/09/2023	13.1	15.9	19.6	14.6	16.0	18.8	89.1	98.6	100.0	0.0	1.1	2.9	4.4	0.0	57.5	543.0	-1.7	-0.1	1.1	9.3	33.5	80.1
29/09/2023	12.4	19.0	28.5	14.1	19.2	27.6	23.0	76.7	100.0	0.1	1.5	4.0	0.2	0.0	225.8	845.3	-2.2	-0.1	2.2	3.1	25.1	80.6
30/09/2023	15.3	20.4	26.7	15.6	20.2	25.4	42.3	78.0	100.0	0.1	1.4	3.6	0.0	0.0	204.5	837.0	-1.1	0.2	1.8	9.3	28.7	87.5
Monthly	3.7	16.4	34.1	4.7	16.6	33.6	9	64.7	100	0.0	1.5	9.4	19.2	0.0	168.0	922.4	-4.6	-0.3	3.0	2.40	33.8	101.10

Figure 2: Windrose – September 2023

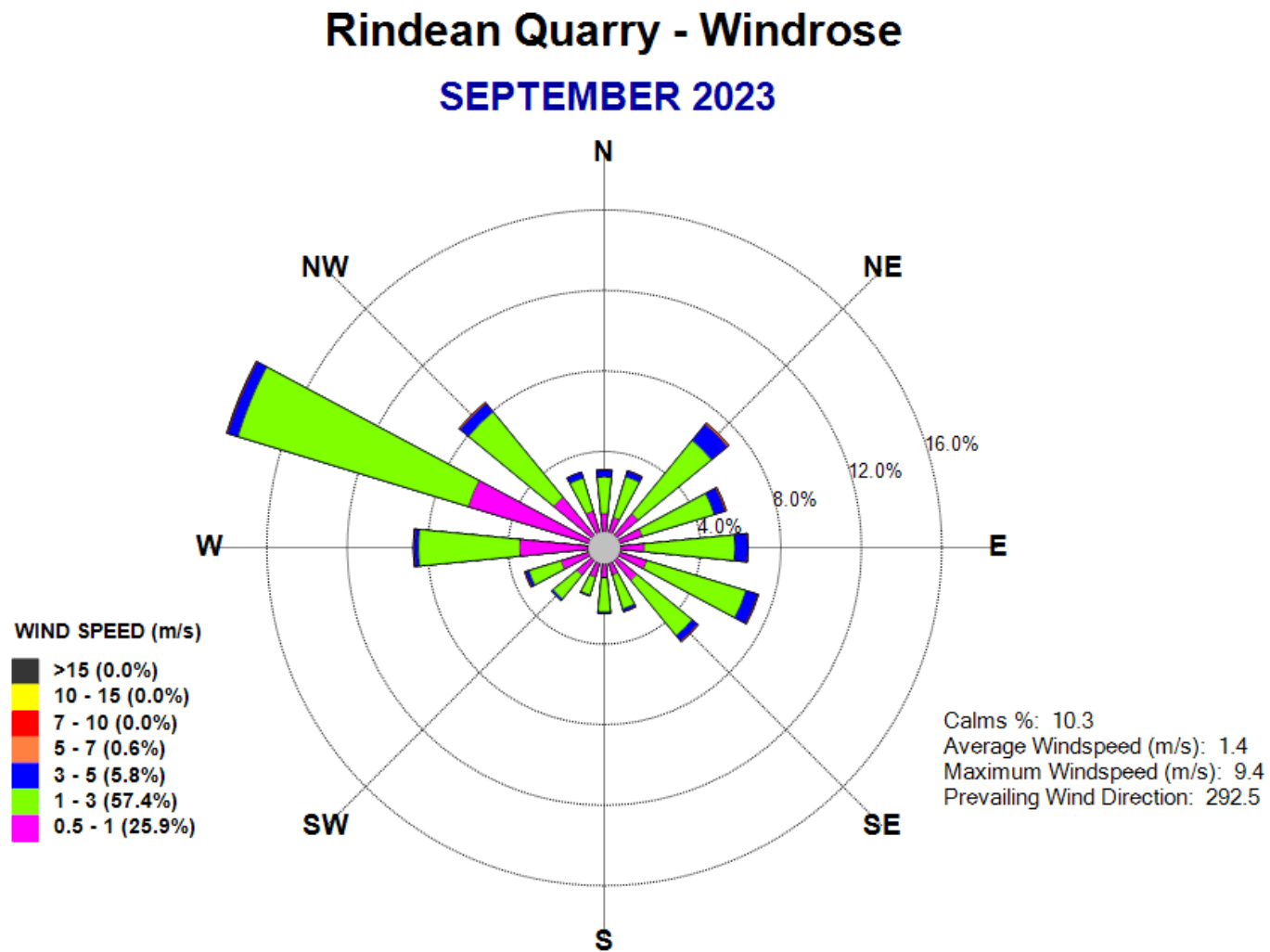


Figure 3-5: Daily (minimum, average, maximum) 2m & 10m Temperature and Delta Temperature

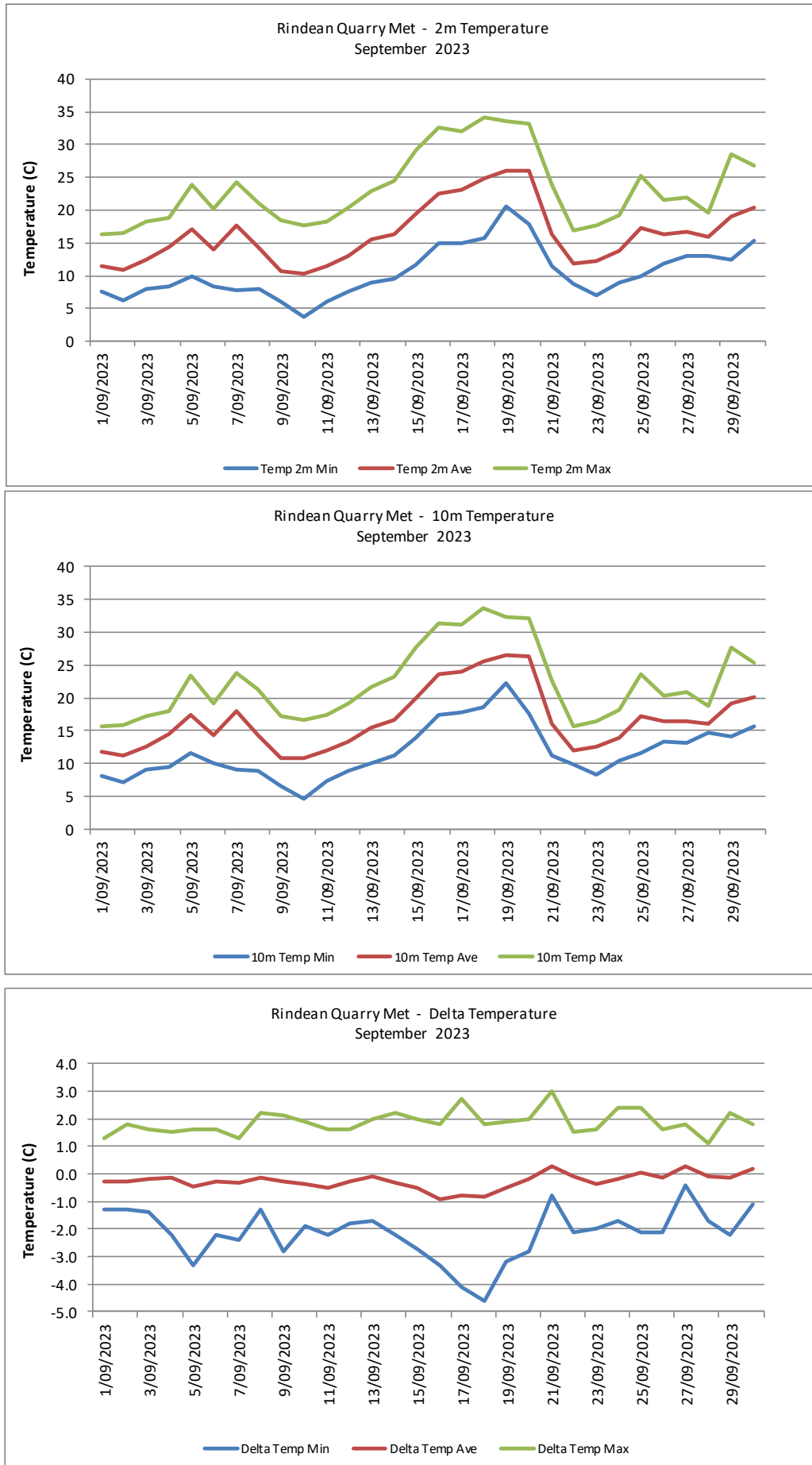


Figure 6-8: Daily (minimum, average, maximum) Wind Speed & Humidity and Rainfall

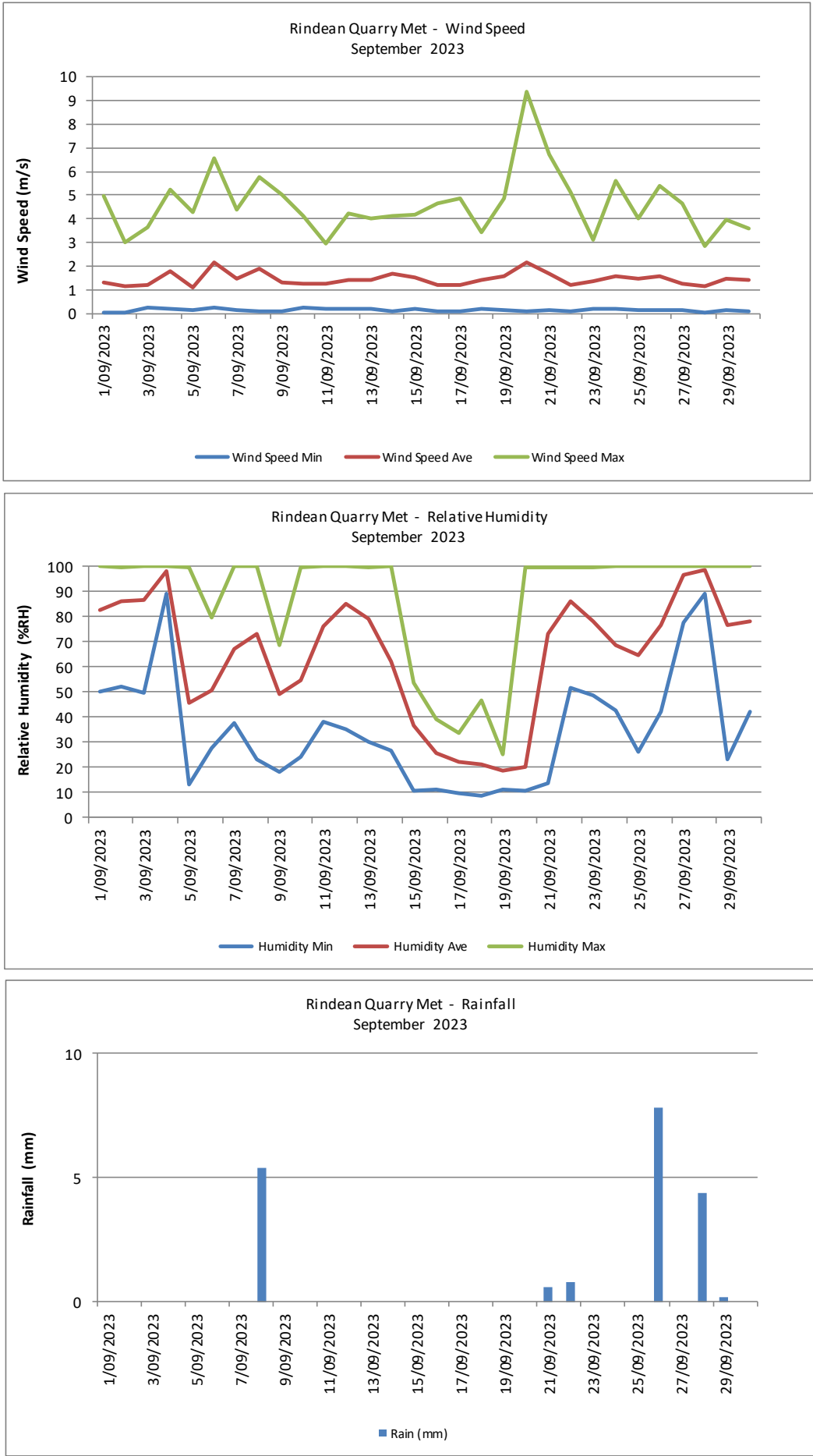


Figure 9-10: Daily (minimum, average, maximum) Solar Radiation and Sigma Theta

