

Annual Review 2024

Attachment K: 2024 Meteorological Data



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1. Meteorological Monitoring Data

1.1 2024 Summary of Meteorological Conditions

Table 1-1 - Summary of Meteorological Conditions

Date	Rainfall (mm)	Rainfall Cumulative (mm)	Temperature Min (°C)^	Temperature Max (°C)^	Prevailing Wind Directions
Jan-24	115	115	38.9	10.5	North East
Feb-24	51	166	38.0	13.3	North East
Mar-24	26.7	192.7	37.0	5.5	North East
Apr-24	69.5	262.2	30.3	1.3	North East
May-24	57.7	319.9	22.7	-1.8	North East
Jun-24	74	393.9	19.6	-3.7	South West
Jul-24	62.4	456.3	19.2	-3.6	South West
Aug-24	50.8	507.1	28.2	-3.1	North East
Sep-24	37.1	544.2	27.5	-2.6	South West
Oct-24	67.2	611.4	28.9	2.3	South West
Nov-24	122	733.4	19.0	5.8	North East
Dec-24	73.1	806.5	35.7	5.1	South West

Notes: ^15 minute capture period for data used.

Table 1-2 – Historical Monthly Rainfall Data (mm)

Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Average
Jan	105	111	45.4	15.2	143	37.6	35.7	109.6	61.9	115	77.9
Feb	45.6	1.4	31.6	56.8	3.8	148.8	137	18.2	20.9	51	51.5
Mar	52.8	9.8	102	49	87.8	151.5	148	133.3	53.2	26.7	87.5
Apr	43	9	17	18	0	138.8	5	95.6	46.7	69.5	41.5
May	49.4	70.6	25.8	14.2	15.8	22.5	12.8	55.3	3.7	57.7	30.0
Jun	50.6	85.4	9.8	25.6	9	28.8	72	13.4	30.7	74	36.1
Jul	35.4	75.6	1.6	9.2	4	83.7	73.2	135.8	21.4	62.4	48.9
Aug	43.8	37	24.2	36.6	6	35.5	28.3	96.8	24.7	50.8	37.0
Sep	7.4	151	4.8	42.2	25.2	66.7	45	95.3	16.6	37.1	50.5
Oct	72.8	61	47	56.4	9.4	181.7	40.1	198.7	11.2	67.2	75.4
Nov	64.4	53.2	118	54.2	17.2	18.3	204	69	79.1	122	75.3
Dec	64.4	29.6	70.8	78.4	4	176.8	71.7	69.3	45.7	73.1	67.9
Total	635	694	498	456	325	1091	873	1090	416	807	675.3

Figure 1-1 Longterm Annual Rainfall (mm/yr)

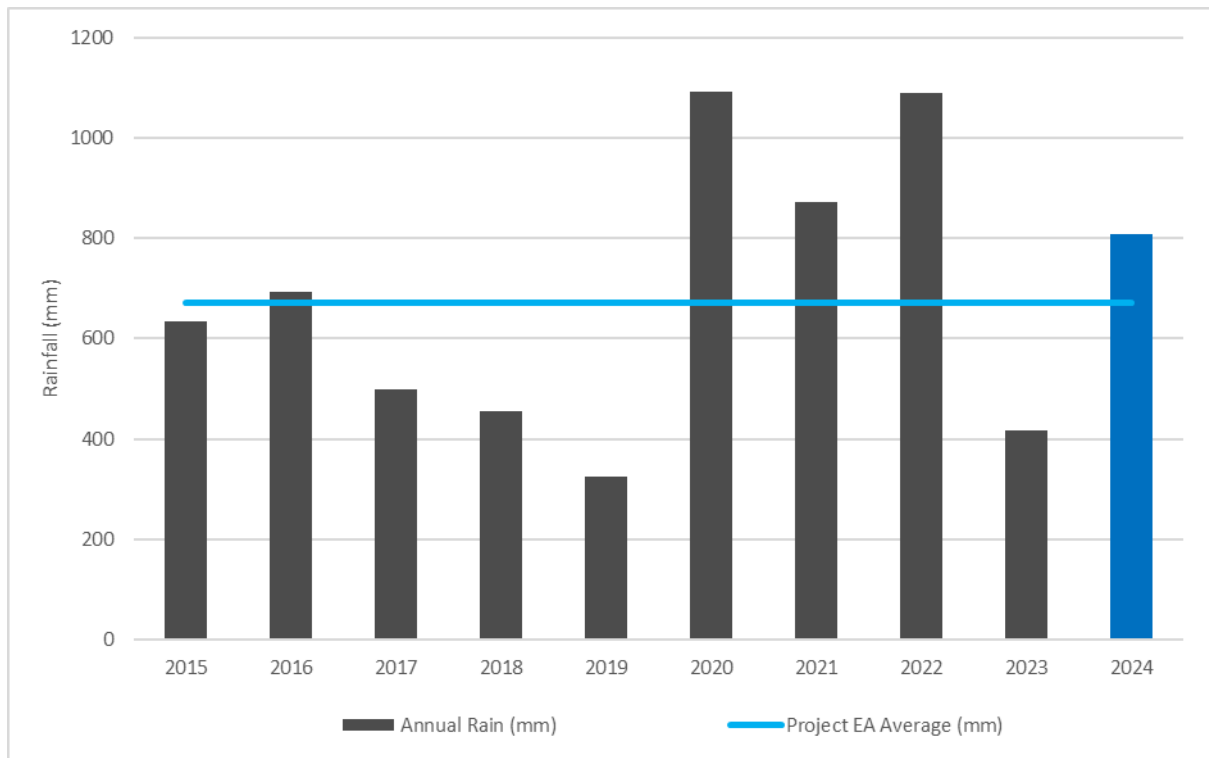
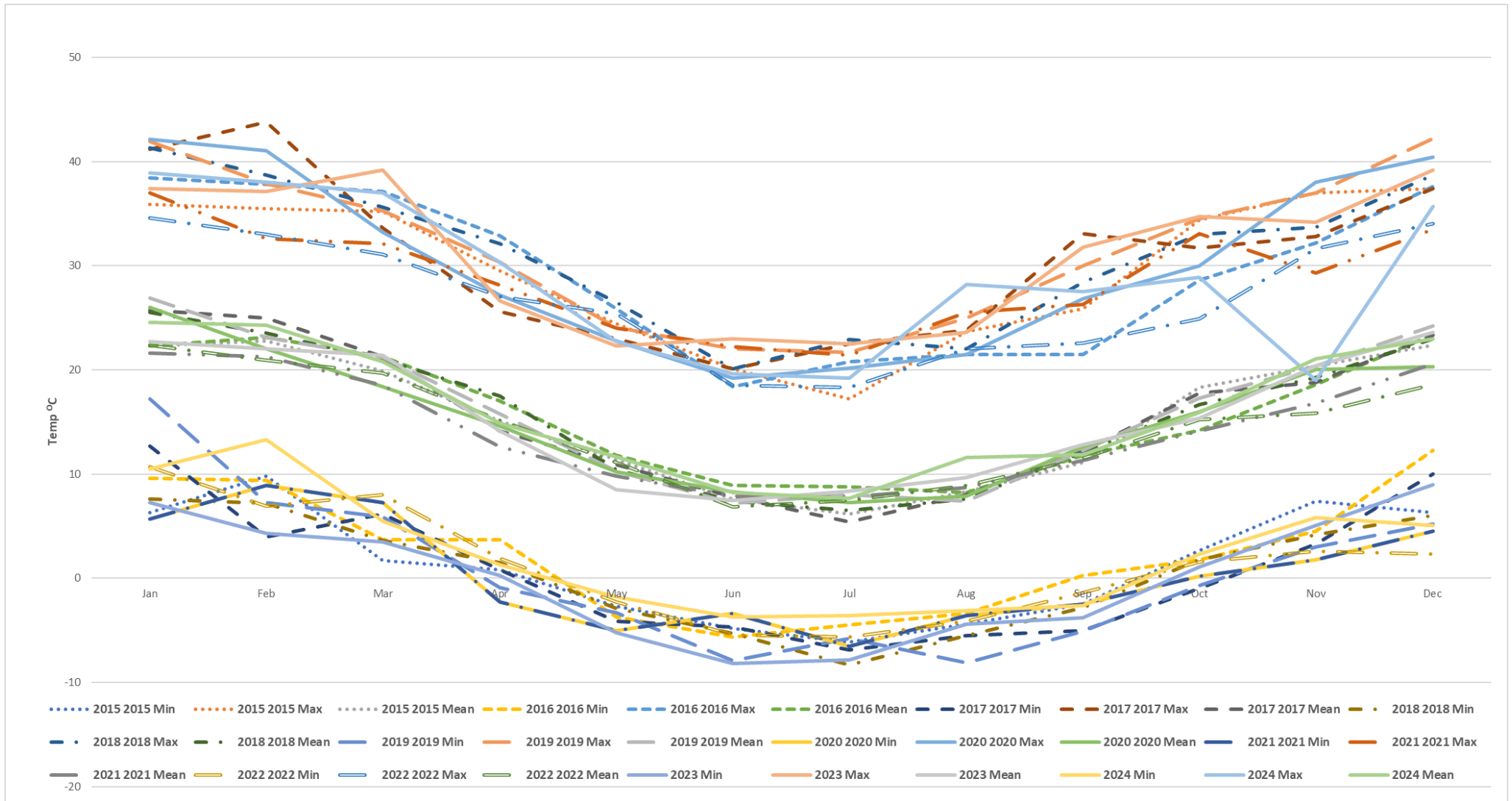


Table 1-3 Historical Temperature Data (Degrees °C)

	2015			2016			2017			2018			2019		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Jan	6.3	35.9	22.3	9.6	38.4	22.3	12.7	41.2	25.7	7.6	41.3	25.5	17.2	41.9	26.9
Feb	9.8	35.5	22.8	9.4	37.8	23.1	4.0	43.8	25.0	7.2	38.7	23.5	7.3	37.9	23.1
Mar	1.7	35.2	19.9	3.7	37.1	21.3	6.2	33.6	21.3	3.6	35.6	21.0	5.9	35.3	21.2
Apr	0.8	29.5	15.1	3.7	32.9	17.0	0.8	25.6	14.1	1.5	32.1	17.5	-0.9	30.3	15.8
May	-2.7	24.4	11.4	-3.7	25.9	11.8	-4.1	23.0	10.9	-2.9	26.5	10.4	-3.3	24.1	10.3
Jun	-4.8	20.1	7.6	-5.6	18.4	8.9	-4.7	20.1	7.8	-5.3	20.1	7.4	-7.9	22.0	7.2
Jul	-6.1	17.2	6.2	-4.5	20.8	8.8	-6.9	22.5	5.4	-8.3	22.9	6.5	-5.8	21.7	8.0
Aug	-4.4	23.7	8.3	-3.4	21.5	8.2	-5.5	23.8	8.0	-5.5	22.0	7.6	-8.1	25.0	7.4
Sep	-2.5	25.9	11.1	0.3	21.5	11.8	-5.0	33.1	12.2	-2.8	28.4	12.1	-5.1	30.0	12.3
Oct	2.7	34.4	18.3	1.8	28.6	14.2	-1.0	31.7	17.8	1.8	33.0	16.7	-0.7	34.5	17.3
Nov	7.4	37.0	20.4	4.5	32.2	18.6	3.3	32.8	18.8	4.2	33.7	19.3	3.0	37.0	20.4
Dec	6.3	37.4	22.4	12.3	37.6	23.4	10.0	37.4	23.3	6.0	38.7	23.0	5.2	42.2	24.2
	2020			2021			2022			2023			2024		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Min	Min
Jan	5.7	42.1	26.0	5.7	37.0	21.6	10.7	34.6	22.4	7.3	37.4	22.7	10.5	38.9	24.55
Feb	8.9	41	22.0	8.9	32.6	21.3	6.9	33.0	20.9	4.3	37.1	22.0	13.3	38	24.32
Mar	7.3	33.2	18.4	7.3	32.1	18.5	8.0	31.1	19.7	3.5	39.2	21.4	5.5	37	20.8
Apr	-2.3	27.2	14.6	-2.3	28.1	12.6	1.9	27.0	15.2	0.3	26.6	14.1	1.3	30.3	14.86
May	-5	22.8	10.2	-5.0	24.0	9.8	-2.3	25.4	11.1	-5.2	22.3	8.5	-1.8	22.7	11.67
Jun	-3.4	19.2	8.3	-3.4	22.2	7.9	-5.4	18.5	6.8	-8.2	23.0	7.5	-3.7	19.6	8.23
Jul	-6.5	20.2	7.3	-6.5	21.4	7.8	-5.6	18.3	7.5	-7.8	22.5	8.4	-3.6	19.2	7.68
Aug	-3.6	21.5	7.9	-3.6	25.5	8.7	-4.1	22.0	8.9	-4.4	23.6	9.7	-3.1	28.2	11.59
Sep	-2.5	26.8	12.6	-2.5	26.3	11.3	-1.4	22.6	11.5	-3.8	31.8	12.8	-2.6	27.5	11.87
Oct	0.2	30	16.0	0.2	33.1	14.1	1.6	24.9	15.2	1.1	34.7	15.4	2.3	28.9	15.9
Nov	1.8	38	20.0	1.8	29.3	16.8	2.6	31.6	15.8	5.1	34.2	20.4	5.8	19	21.04
Dec	4.5	40.4	20.3	4.5	33.5	20.6	2.3	34.0	18.6	9.0	39.2	23.6	5.1	35.7	22.99

Figure 1-2 Temperature Data 2015-2024



1.2 2024 Meterological Data

Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
1/01/2024	23.3	16.3	31.5	16.8	12.8	23.4	69.4	40.3	100	5.6	0.5	12.5	49	0	313.5	1136.2	7
2/01/2024	25.4	18.1	33.1	17.3	11.1	25.1	66.5	32.4	100	1.5	0.1	8.1	61	0	325	1151.4	6.1
3/01/2024	24.2	18	34.3	16.3	11.6	27.2	76.4	31.2	100	0.8	0.4	10.7	36	1.5	284	1177.9	5.2
4/01/2024	22.6	15.6	35.1	16.5	5.2	26	83.2	29.4	100	0.4	0.1	12.4	113	18.5	220.1	1216.1	4
5/01/2024	20.7	17.8	24.6	16.1	11.1	19	81.9	62.7	100	7.5	2.5	11.7	55	0	187.9	1150.4	3.9
6/01/2024	21.3	16.2	27.4	15.1	12.7	20.1	65.7	45.1	92.4	5.9	1.2	13.2	51	0	302.6	1258.5	6.1
7/01/2024	23.4	15.9	30.9	16.8	12.7	23.4	65.1	42.5	100	2.5	0.3	6.6	40	0	278.2	1222.6	5.5
8/01/2024	21.1	18.6	24	17	2	23.4	95.9	61.1	100	1.5	0	12.7	354	17	61.7	536.8	1.8
9/01/2024	23.5	18.3	31.8	18.5	1.7	25.4	86.9	41.8	100	0.6	0	6.2	347	4.6	273.1	1148.6	4.8
10/01/2024	24.2	19.6	32	16.2	10.2	25.6	87.9	50.9	100	2.1	0.2	7.7	33	1	241.4	1156.1	4.9
11/01/2024	25.7	18.4	32.5	18.1	11.6	27.4	76.3	39	100	2.5	0.1	11.2	58	0	296	1162	6
12/01/2024	25.7	20.3	31.8	17.5	12.6	23.1	68.1	36.6	100	2.8	1	7.9	62	0	310.7	1193.5	6.3
13/01/2024	26.5	16.7	34.2	18.5	11.7	25	63	29.2	100	0.8	0.2	5.4	354	0	282.7	1199.1	5.2
14/01/2024	23.9	20.2	27.8	16	12.2	19.7	68.3	50	91.4	3.5	1.1	9.3	77	0	248.1	1133	5.1
15/01/2024	21.2	18.5	26.4	15.3	11.1	20.2	79.5	56.4	100	7.2	0.7	14	69	0	186.9	1061.5	4.4
16/01/2024	21.4	18	27	15	3.2	22.1	81.5	57.1	100	5.8	0.8	13.6	59	0.8	205.6	1134.6	4.4
17/01/2024	21.2	19.3	28.2	16.3	6.1	24.5	97	62.1	100	0.8	0.2	10.8	30	58.4	115.8	1034.8	2.4
18/01/2024	22.4	14.5	27.7	15.9	12.3	21.4	79.4	31.7	100	2.9	0.2	9.5	242	0	268.4	1221.3	5.3
19/01/2024	21.1	10.5	32.2	16.3	10.2	23	59.7	15.3	100	1.7	0	5.1	241	0	370.1	1142.5	6.5
20/01/2024	23.8	15.3	33.9	16.7	11	25.4	64.7	17.8	100	2.3	0	9.2	3	0	316.2	1191.4	6.6
21/01/2024	25.5	13.5	36.5	19.3	10.2	27.7	63.9	20.3	100	2.9	0.1	9.8	235	0	346.8	1066.5	7.7
22/01/2024	23	13.8	31.3	15.9	10.3	22.7	68.3	37.5	100	2.6	0	10.2	57	0	358.1	1076.4	6.5
23/01/2024	22.9	17.5	29.6	16.2	12	21	66.5	38.5	100	5.1	0.8	11.4	62	0	342.6	1159.9	6.8
24/01/2024	24.4	12.8	35.2	17.1	6.2	27.3	65.2	26.6	100	1.4	0	6.4	228	0	341.9	1047.7	6.2
25/01/2024	27.8	17.8	38.9	20.3	11.5	28.4	63.5	27.7	100	1.7	0.2	6.1	252	0	251.3	1034.3	5.8
26/01/2024	28.8	18.3	36.8	21.8	12	28.1	57.2	29.4	100	3	0.3	10.5	247	0	254.6	1155.5	6.5
27/01/2024	24.6	20.3	33.2	16.7	12.2	25.9	78.6	35	100	2	0.2	6.5	57	0	232.7	1131.1	5.1
28/01/2024	23.2	14.2	31	16.3	11.3	23.4	74	39.6	100	2.8	0.3	7.3	47	0	342.5	1087	6.3
29/01/2024	28	19.2	37.8	17.6	11.5	25.8	63.5	30	100	3.5	0.3	10.5	18	0	300.9	1044.3	7.5
30/01/2024	28.5	23.6	34.3	21.1	16.7	26.2	65.9	40.6	100	2.6	0.1	7.3	45	0	273.6	1217.3	6
31/01/2024	25.1	20.2	34	18.2	12.8	25.5	83.7	41.8	100	1.7	0.2	11.8	46	13.2	222.7	1237	4.8
1/02/2024	25.5	19.8	33.8	17.8	12.4	25.5	77.6	33.4	100	0.4	0.2	6.2	25	0	299.3	1129.5	5.1
2/02/2024	26	15.6	35.6	19.1	10.1	26.1	54.5	11.6	100	2.5	0.3	6.8	230	0	355.4	1065.4	7.5
3/02/2024	26.4	18.9	36.6	18.3	11.7	26.8	59.8	23.2	92.9	3.4	0.3	8	31	0	345.2	1058	8

Ulan Complex
Attachment K: 2024 Meteorological Data

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Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
4/02/2024	28.6	19.4	38	20.9	11.8	28.4	58.9	25.9	100	2.5	0	7.9	349	0	267.4	1166	6.5
5/02/2024	29.4	22.4	35.4	22.6	16.2	26.7	57.9	32.7	99.7	2.2	0.1	7.4	354	0	165.4	918.9	4.6
6/02/2024	23	17.1	29	20.4	12.9	26.8	95.7	57.7	100	0.6	0.1	12.1	45	33.8	76.1	621.9	1.9
7/02/2024	17	15.1	18.8	13.2	6.9	17.9	100	100	100	6	1.2	13.3	49	1.5	62.1	248.1	0.8
8/02/2024	19.1	16.8	22.1	15	12.1	19.3	81.5	60.6	100	8.5	3	11.6	62	0	135.2	895.2	3.3
9/02/2024	20.8	13.7	29.1	16.2	12.8	21.8	73.7	44.3	100	4.5	0	10.7	47	0	261.9	1108.7	5.5
10/02/2024	20.3	14.9	25.2	17.2	13.4	20.4	74	52.2	100	4.7	2.5	11.1	86	0	203.4	1071.9	4.1
11/02/2024	21	17.1	26.5	14.9	11.8	18.3	75.4	55.8	92.2	7.2	1.5	10.6	61	0	224.2	1106.7	4.9
12/02/2024	24.2	16.5	33.3	16.7	12.5	22.8	68.8	34.1	100	4.5	0.2	8.1	39	0	301.6	1080.6	7
13/02/2024	24.3	14.7	33.6	17.5	12.1	24.8	67.2	29.4	100	0.9	0.1	6.5	262	0	303.5	1137.1	5.2
14/02/2024	25.3	16.3	33.9	18.2	12.9	25.4	64.8	33.7	100	1.2	0.2	7.8	291	0	270.4	1127.4	5.1
15/02/2024	22.2	19.2	28.3	14.2	11.4	20.1	85.7	56.2	100	3.7	1.1	9.3	51	0	173.5	1131.7	3.9
16/02/2024	24.5	20.1	32.8	16.5	11.9	24.4	77.3	34.9	100	2.1	0.2	8.2	50	0.8	271.6	1050.2	5.5
17/02/2024	24.9	17.2	33.3	17.5	11.7	22.8	74.5	36.3	100	0.5	0	7.1	83	0	266.4	1098.8	4.5
18/02/2024	22.5	15.3	33.6	16.4	3.3	23.2	84.7	32.9	100	0.9	0	10.3	246	3	224.8	1148.7	4.2
19/02/2024	21.1	14.1	30	16	-6	22.5	77.9	43.4	100	3.1	0.1	11.9	72	0	252.2	1132	5.1
20/02/2024	20.3	14.4	27.2	15.4	5.7	19.9	83.7	50	100	5.4	0.2	15.8	71	2	254	1257.9	5
21/02/2024	23.4	18.9	30.8	15.2	11.1	22.3	74.7	40	100	2	0	7.9	68	0	251.5	1163.1	4.9
22/02/2024	24.5	15.8	34.2	16.8	9.7	24.5	73.4	31.9	100	0.8	0.2	7.4	254	0	270.2	1057.2	4.7
23/02/2024	25.5	15.7	36.1	18.2	10.2	27.4	67.3	29	100	2.7	0.1	10.3	242	0.5	271.7	1090.8	6.3
24/02/2024	22.3	18.6	25	14.9	11.5	17.7	75.4	59.7	100	3.5	0.6	11.2	59	0	153.6	769.3	3.2
25/02/2024	22.6	17.1	32.1	15.9	10.1	22.5	70.7	36	100	3.3	0	10.1	25	0	273.5	1012.4	5.8
26/02/2024	24.7	13.3	34.9	17.4	11.6	25.5	63.5	21	100	0.9	0	7.1	253	0	300.6	1061.9	5
27/02/2024	24.1	20.7	31	16.2	12.5	23	74.3	45.2	98.7	3.3	0.7	7.6	54	0	254	1102.6	5.3
28/02/2024	26.2	20.6	34.4	17.8	12.6	24.8	73	38.5	100	3.1	0.2	9.6	24	0	201.9	1058.4	5.1
29/02/2024	27.4	19.5	37.1	20.8	7.6	28	69.4	32	100	3.5	0	10.6	242	9.4	256.1	943.6	6.6
1/03/2024	27.1	19.3	37	17.8	12.8	25.8	71.2	28.4	100	0.8	0.1	4.3	242	0	233.6	1044.3	4.4
2/03/2024	23.3	19.3	31.1	16.2	12.2	23.6	88.2	45.8	100	0.9	0	9.4	240	0.3	108.3	602.7	2.5
3/03/2024	22.4	11.9	30.5	15.8	10.1	21.7	71.2	20.7	100	1	0.2	9.7	253	0	260.8	1033.2	4.3
4/03/2024	17.7	7.5	26.8	15.7	9.4	18	77.7	47.5	100	3.2	0.1	10.7	43	0	265.7	1137.3	4.5
5/03/2024	20.9	14.7	29.8	14.6	11	20.7	69.5	40.2	100	5.1	0.6	10.7	38	0	241.1	1030.2	5.6
6/03/2024	23.1	12.7	32.7	16.5	9	24.4	70.8	33	100	0.5	0	6.9	280	0	255.7	1042.8	4
7/03/2024	23.6	16.7	33.5	16.5	11.7	24.9	72.8	32.9	100	0.9	0.3	11	72	0.5	215.2	1038.1	4
8/03/2024	24.1	18.4	30.6	16.1	11.2	21.6	64.7	30.7	100	2.9	1.1	8.2	55	0	272.3	1058.3	5.5
9/03/2024	22.9	13.3	30	15.7	8.6	21.1	63.8	28.2	100	3.3	1.3	6.4	50	0	280.4	972	5.6
10/03/2024	23	12.6	30.2	16	11.3	21.6	65.5	32.1	100	2.8	0.4	6.9	66	0	292.7	957	5.5
11/03/2024	22.4	12.6	30.8	15.8	10	22	67.8	29	100	2.5	0	7.8	49	0	275.2	952.5	5.3
12/03/2024	21.9	9.2	34.9	17.9	12.1	25.8	61.7	18.6	100	0.8	0.2	5.9	336	0	286.6	944.5	4.5

Ulan Complex
Attachment K: 2024 Meteorological Data

Annual Review 2024

Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
13/03/2024	22.4	8.8	33.6	16.6	7	24.2	57.7	14	100	1.2	0	4.9	47	0	266.8	1107.5	4.6
14/03/2024	23.4	11.4	34.2	17.6	9.1	25.3	61.9	23.5	100	1.4	0	7.8	243	0	255	905.9	4.7
15/03/2024	20.6	17	23.9	14.5	10.4	18.1	67.3	47	92.5	7.3	1.6	11.5	63	0	172.3	788.6	4.4
16/03/2024	18	16.2	22.1	14.3	11.1	18.7	74.9	52	100	6.6	0.4	14.2	62	1	81.1	542.1	3
17/03/2024	18.8	15	25.9	13.6	7.4	20.2	91.9	55.2	100	2.2	0.4	11.1	46	4.3	147.3	1165.7	2.9
18/03/2024	19.9	16.6	26	14.6	4.2	18.7	93.4	59.6	100	1.8	0.1	7.4	58	10.7	146.1	965.7	2.7
19/03/2024	22.7	16.1	31.2	15	10.6	22.8	80.5	38.8	100	1.8	0	4.8	21	0	230.2	941.9	4.3
20/03/2024	19.3	14.9	23	13.2	7.4	22.4	99.9	95.5	100	1.2	0.3	11	258	9.9	65.5	597	1.2
21/03/2024	17.4	14	22	12.4	9.5	16.4	69.5	43.6	100	8.4	0.4	14.2	56	0	278.3	932.9	4.8
22/03/2024	17	8.4	25.8	13	10.3	16.6	77.7	40.6	100	5.8	0.4	10.5	34	0	236.2	945.6	4.9
23/03/2024	16.1	9	23.2	12.9	5.3	15.8	88.9	51.2	100	2.4	0	5.6	17	0	107.8	736.5	2.5
24/03/2024	19.2	11.4	27.4	14.1	5.6	18.3	77.3	33.2	100	2.2	0.2	5.7	358	0	209.8	1008.1	3.9
25/03/2024	17.1	7.4	28.4	11.7	4.2	19.4	66	19.6	100	1.9	0.4	5.2	233	0	265.9	895.7	4.4
26/03/2024	17.8	5.5	30.3	16.8	9.9	21.1	61.6	19.1	100	0.7	0	4.5	230	0	260.8	875.1	3.5
27/03/2024	18.5	8.2	27.4	14.3	8.8	18.7	73.7	31	100	1.5	0.2	8.5	52	0	240.2	883.8	3.7
28/03/2024	21.4	15.8	28.2	13.9	10.2	19	76.5	35.5	100	3.3	0.8	10.8	43	0	219.7	906	4.4
29/03/2024	20.5	11.8	27.9	15.1	10.4	19.4	77.1	38.8	100	3.9	0.3	9.8	34	0	185.7	963.1	4.3
30/03/2024	19.2	8.5	30.5	15.1	-0.9	21.4	71.2	22.9	100	0.5	0	4.1	36	0	244.4	852.6	3.2
31/03/2024	19	8.3	28.3	14.7	6.1	19.4	70.7	30.7	100	1.6	0	6.9	61	0	220.9	892.8	3.7
1/04/2024	19.7	9.4	30.3	15.4	6.9	21.1	68.3	25.2	100	2.1	0	7.2	41	0	240	825.8	4.4
2/04/2024	17.3	11.1	23.7	15.1	9.4	20.1	88.9	59.4	100	2.4	1.2	10.1	305	10.2	94.2	818.1	2.1
3/04/2024	15.4	5.7	25.4	11.7	6.1	16.1	76.6	32.6	100	1.6	0.1	10.7	252	0.3	239.2	864	3.4
4/04/2024	17.4	15.3	19.8	15.2	11.2	16.7	97.6	85.9	100	6.5	1.2	10.8	64	4.8	39.5	249.5	1.1
5/04/2024	15.7	13.8	17.9	13.9	3.7	17.5	100	100	100	3.9	0.1	15.3	74	31	28.8	199	0.6
6/04/2024	16.7	12.3	24	13.2	0.8	20.4	92.6	50.7	100	1.8	0	8.2	330	1.8	161.9	909.2	2.7
7/04/2024	15.9	9.3	23.9	12.5	7.5	17.3	88.4	47.9	100	2.9	0	11.6	258	0.3	189.3	973.9	3.2
8/04/2024	15.5	8.9	24.3	12.2	-5	15.7	82.8	38.6	100	2.1	0	9.2	263	0	217.1	914.4	3.3
9/04/2024	12.9	7.6	20.5	11.4	-1.5	15	82	39.6	100	0.3	0.1	9.7	275	1.5	163.5	972.6	1.9
10/04/2024	12.1	3.7	20.5	9.6	6.9	15.2	71.4	29.4	100	1.6	0.2	7.3	240	0	237.3	830	2.9
11/04/2024	12.1	2.7	23.6	9.4	2.7	13.8	78.4	36.7	100	1.7	0	9	357	0	230.1	807.7	3.1
12/04/2024	13.8	5.2	24.9	11	-4	16.9	82.4	34.8	100	0.7	0	9.4	40	0	205.5	809.5	2.5
13/04/2024	14.6	5.7	26.1	11.7	6.1	17	76.4	27.2	100	0.4	0	3.9	299	0	186.1	898.3	2.2
14/04/2024	14	5.4	26.4	12.4	5.6	16.7	80.2	28.7	100	0.7	0	9	333	0	190.3	855.5	2.4
15/04/2024	14.9	4.8	27.2	12.6	2.8	18	76.9	37.7	100	0.7	0	5.2	247	0	156.4	831.5	2.2
16/04/2024	15.4	7	26.1	13.2	7.3	17.1	74.9	28.4	100	1.3	0.1	5.7	248	0	214.7	768.4	3
17/04/2024	15.1	6.5	25.8	13.1	0.1	17.9	89.8	47.3	100	0.9	0.1	9.2	294	3.3	144.6	814.2	2.1
18/04/2024	14.8	5.7	22.3	12	5.4	16.5	82.2	38.5	100	2.7	0	11	240	0	169.2	773.4	2.9
19/04/2024	10.8	2.5	17.3	10.1	3	14.4	85.5	50.6	100	1.8	0	5.6	257	0.5	114.4	827.5	1.8

Ulan Complex
Attachment K: 2024 Meteorological Data

Annual Review 2024

Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
20/04/2024	13.7	11	16.7	11.7	9	15.4	98	81.8	100	3.5	0	9.3	67	2.3	64.7	315.7	1.2
21/04/2024	13.8	6.5	21.5	12.2	7	15.6	84.4	48.3	100	7.4	0.5	10.3	65	0	146.4	714.2	3.5
22/04/2024	12.5	4	22	11.5	4.1	16.5	86.3	47	100	5	0	10.6	66	0.3	164.9	809.1	3.2
23/04/2024	13.5	5.6	25.7	11.3	5.4	15.7	83.2	36.1	100	0.6	0	4.6	311	0	192.8	756.8	2.2
24/04/2024	15.5	7.2	24.1	14.8	11	17.4	70.8	40.5	100	2.3	0.7	11.8	269	0	139	762.5	2.6
25/04/2024	12.4	6.1	21.1	14.2	9.1	16.1	71.7	39.7	100	1.9	0	9.7	24	0	151.8	761.8	2.3
26/04/2024	10.8	1.3	20.4	11.7	1.9	15	79.7	39.1	100	5.3	0	11.2	75	0	191.8	814	3.4
27/04/2024	11.3	1.9	21.9	9.2	2.6	15.2	84.2	44.9	100	3.5	0	10.7	44	0	199.1	747.1	3
28/04/2024	12.5	3.9	24	9.2	0.3	14.9	85	35.5	100	1.2	0.1	9.7	342	0	167.7	758.9	2.2
29/04/2024	13.2	4	24.3	11.1	4.3	20.2	85.9	41.6	100	0.8	0	9.1	242	1.3	130.4	826.2	1.8
30/04/2024	13.2	9.2	16.9	12.8	5.2	15.7	100	100	100	0.4	0	7.7	100	11.9	45	319.8	0.8
1/05/2024	13.2	10	17.1	11.6	2.8	14.1	94.8	70.5	100	4	0.3	12.1	63	0.5	77.4	474.3	1.5
2/05/2024	12.4	7.1	17.9	10.3	6.8	14.6	90.4	61.5	100	5.5	0	12.4	54	0	99.5	578.5	2
3/05/2024	12.9	5.6	18.7	10.7	5.2	15.2	88.9	54.8	100	5.6	0	14.1	53	0	158.1	894.6	2.5
4/05/2024	12.9	11.6	14	12.2	4	14.2	100	100	100	3.3	0.2	14.1	50	22.4	29.8	212.9	0.5
5/05/2024	12.8	7.7	18.6	11.4	7.8	12.1	96.6	73.4	100	3.8	0.4	9	58	0.3	110.4	768.8	1.6
6/05/2024	13.8	7.6	18.6	10.3	7.5	15.3	91.4	68.9	100	6.8	0.6	10.8	64	0	85.2	678.8	1.9
7/05/2024	12.8	6.1	18.3	11	8.1	15.2	85.6	53.4	100	8.6	0	14.4	60	0	135.4	722.2	2.8
8/05/2024	11.6	4.2	19.7	10.4	4	14.7	90.7	53	100	4.5	0	12.1	66	0	139.4	793.3	2.4
9/05/2024	14.2	7.5	20.5	12.1	8.4	15.8	93.9	61.4	100	5.5	0	13.5	56	0	108.2	731.2	2.2
10/05/2024	15.4	13.5	18.8	11.2	9.9	15.9	88.3	63.2	100	8.7	6.1	11.5	48	0	86.7	866.7	2.2
11/05/2024	14	12.9	16.9	12.9	5.5	15.5	100	100	100	3	0.3	10.6	55	13	50.7	510.1	0.6
12/05/2024	13.3	7.6	19.7	8.9	3.5	13.4	94.5	63.8	100	0.8	0	4.9	350	0.3	94.2	743	1.2
13/05/2024	12.1	5.6	21.1	9.3	1.5	14.5	92.9	63.7	100	0.2	0	8.9	310	0.3	141.9	840.4	1.3
14/05/2024	11.3	3.4	21.9	9.5	3.7	15.5	84.1	34.7	100	1.8	0	4.6	253	0	174.8	665.3	2.2
15/05/2024	10.4	2.2	22.7	8.5	2.2	14.1	90.3	42.8	100	0.3	0	9.2	111	0	154.8	730.5	1.3
16/05/2024	10.8	2.9	21.2	9.4	3.1	14.1	89	49.7	100	2	0	10.4	48	0	154.5	717.7	2
17/05/2024	11.3	5	20.8	9.3	5	15.7	89.2	50.3	100	1.2	0.1	12	240	0	153.9	641.1	1.6
18/05/2024	7.9	0.5	15.8	7	0.4	12.1	85.6	42.1	100	2	0	9.9	79	1	124.2	740	1.6
19/05/2024	6.8	-1.1	16.1	5.4	-1.5	13.6	73.9	33.3	100	1.6	0.2	10.7	250	0.3	173.4	656.7	1.7
20/05/2024	8.4	-1.8	18.5	6.1	-1.8	11.6	75.9	34.9	100	0.1	0	8	344	0	169.9	645.2	1
21/05/2024	8.5	0.1	18.5	7	0.3	12.8	85.1	51	100	4.2	0	9.4	29	0	142.6	642.6	2.2
22/05/2024	8.6	2.2	18.3	6.7	2.1	12.7	88.4	44.3	100	1.7	0.1	4.8	233	0	156.7	646.3	1.7
23/05/2024	7.4	-1.6	19	5.7	-1.3	10.5	84.9	41.6	100	1.1	0	8.6	35	0	164.9	635.1	1.5
24/05/2024	7.6	-0.9	21.4	7.2	-0.7	12.6	87.7	40.1	100	0.3	0	1.4	248	0	144.7	667.6	1.1
25/05/2024	9.2	1.9	19	6.9	2.2	13.4	95.3	61.8	100	1.4	0	9.1	55	0	103.2	705.3	1.3
26/05/2024	10.6	3	19.2	9.8	3.2	13.8	90	46.4	100	0.8	0.1	4	63	0	106.3	610.4	1.2
27/05/2024	7.7	0.9	19	6	0.9	13.3	84.9	32.9	100	0.5	0.2	10.1	225	0	161.1	618	1.2

Ulan Complex
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Annual Review 2024

Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
28/05/2024	7.7	-1.7	21.1	6.3	-1.6	12.6	84.8	41.1	100	0.3	0	1.5	157	0	158.2	610.2	1.1
29/05/2024	8.8	-0.4	22.5	7.8	-0.2	15.7	84.6	37.3	100	0.7	0	3.2	293	0	154.8	613.1	1.4
30/05/2024	10	-0.6	21.7	7.2	-0.2	15.4	85.1	46.3	100	2.1	0	8.2	347	0	131.6	661.6	1.9
31/05/2024	14.2	8.7	17.1	13.8	10.5	16.1	96.3	77.9	100	2	0	10.7	307	19.6	20.3	140.3	0.8
1/06/2024	12.4	9.7	14.4	11.4	0.1	14.2	100	100	100	1.2	0	9.9	67	39.4	32.3	517.2	0.6
2/06/2024	9.5	4.3	12.2	9	0.6	11.3	100	100	100	1.8	0	7.5	243	5.8	40	229.4	0.5
3/06/2024	7.3	1.2	12.6	6.8	1.4	10.5	91.8	58.8	100	2.6	0	10.5	238	0	124.6	665.4	1.2
4/06/2024	6.2	1.1	11.2	5.9	0.9	9.4	97.6	80.2	100	1.6	0.1	5.7	243	0	77.2	624.5	0.7
5/06/2024	8.6	4.4	11.5	-7.1	-53.1	10.8	98.3	83.6	100	2.3	0	4.4	237	0	60	251.2	0.7
6/06/2024	7.8	1.2	15.8	6.1	1.1	10.2	94.8	64.6	100	0.9	0	7.3	26	0	93.3	733	0.9
7/06/2024	9.2	6.4	11.1	8.7	2.9	10.7	100	100	100	2.4	0.1	11.1	240	5.3	39.1	304.1	0.5
8/06/2024	10.5	8.2	13.6	9.9	8.4	12	99.7	93.9	100	3.8	2.2	11.9	241	0	80.2	670.4	0.7
9/06/2024	9	4.9	13	7.5	-0.5	10.9	99.4	89.8	100	4.4	0.1	12.6	233	0	68.1	653.4	0.7
10/06/2024	6.6	0.6	15.3	4.4	-2.7	10.2	92.5	56.2	100	1.4	0	11.2	235	0	139.9	625.4	1.2
11/06/2024	8.7	0.2	16.2	4.2	0	11	84.7	47.5	100	1.8	0	11.1	265	0	122.1	628.7	1.4
12/06/2024	10.2	2.3	14.8	7.3	1.8	10.8	83.6	49.4	100	2.5	0.1	10.9	265	0	141.3	660.6	1.5
13/06/2024	6.3	-3.1	14.9	2.9	-3.2	6	86.3	46.1	100	0.6	0	9.8	51	0	138.3	664.1	0.9
14/06/2024	9.4	6	13.5	5.2	2.2	9.5	95.9	81.6	100	1.4	0	9.7	29	0.3	60	436.9	0.7
15/06/2024	9.5	7.8	12.6	8.4	2.6	10.9	99.9	96.6	100	0.5	0	9.2	87	7.9	58.9	496.5	0.6
16/06/2024	8.7	4.3	14.3	7.4	0.4	11.6	84.3	47.3	100	2.1	0	10	233	0	149.8	690.5	1.4
17/06/2024	7.1	1.3	14.8	6.6	1.9	12.5	87.3	52.9	100	2.9	0	10.1	236	0	141.9	583.2	1.5
18/06/2024	5.9	-1.2	14.2	5.2	-0.9	11.9	88.2	51.3	100	1.4	0	11.4	243	0	147.9	591.8	1.1
19/06/2024	3.8	-2.7	13	2.5	-10.8	10.9	88.2	36.7	100	1.2	0	10.3	238	0	145.7	606	1.1
20/06/2024	7.8	0.2	16.2	7.1	0	10.7	84.7	46.2	100	0.5	0	2.6	216	0	100.6	534.1	0.8
21/06/2024	8.9	3.1	14.3	8.4	2.7	12.2	91.5	46.7	100	1.6	0.1	9.7	240	2.8	109.7	757.4	1.2
22/06/2024	6.9	-0.8	14.6	5.7	-0.4	11.5	89.7	54.8	100	1.9	0	9.6	64	0	116.4	627.4	1.2
23/06/2024	6.6	-0.5	15.1	5.1	-0.3	11.7	93	64.6	100	1.8	0	8.7	69	0	105.6	663.9	1.1
24/06/2024	5.7	0.2	16.6	3.1	-0.1	12	91.5	45.8	100	1	0	8.4	227	0.3	127.3	661.4	1.1
25/06/2024	5.7	-2.9	18.1	4.1	-10.1	12.7	88.8	43.1	100	1.6	0	9.3	16	0	130.5	654.9	1.5
26/06/2024	7.7	-0.1	19.6	7.9	0.2	16.7	86.5	40.8	100	3.5	0	13.1	243	0	135.3	589	2.3
27/06/2024	4.9	-2.9	15.4	4.6	-2.1	13	85	41.2	100	1.2	0	5.9	250	0.3	157.6	609.2	1.2
28/06/2024	4.7	-3.6	17.3	3.7	-3.2	12.5	83.4	35.8	100	2.1	0	9.3	23	0	158.9	606.3	1.7
29/06/2024	8	-3.7	19.2	5.2	-3.9	14.4	91.4	62.6	100	2.5	0	10.8	328	0	136.4	611.4	1.5
30/06/2024	12.3	5.6	16.8	10.9	5.5	16.8	100	100	100	3.2	0.1	11.3	255	11.9	47.9	422.7	0.5
1/07/2024	8.5	2.1	14.1	7.3	2.5	11.1	88.7	56.9	100	3	0	11.2	59	0.3	150.4	721.7	1.4
2/07/2024	7.2	1.4	13	6.2	1.3	11.1	97.5	77.3	100	1.3	0.1	10.2	84	0	71.6	480.1	0.8
3/07/2024	6.8	0.5	14.2	6.6	1	12	91.4	59.4	100	3.2	0	12.3	71	0	111.3	745.8	1.4
4/07/2024	7.3	0	15.7	6.7	0	11.3	84.5	43.8	100	3.4	0	12.2	80	0	141.1	687.6	1.9

Ulan Complex
Attachment K: 2024 Meteorological Data

Annual Review 2024

Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
5/07/2024	8.7	2.1	14.2	7.5	3.1	12.1	99.6	85.4	100	4.2	0	13	71	0.5	89.8	766.8	0.9
6/07/2024	7.2	0.2	15	7	0.7	12.2	90.8	54.9	100	2.9	0	11	69	0	111.1	643.1	1.5
7/07/2024	7.2	-1.3	14.5	6.4	-1.5	12.3	99.6	87.5	100	2.6	0	12.7	61	0	72	519.6	0.7
8/07/2024	10.9	10.2	11.9	10.2	3.4	11.6	100	100	100	2.1	0.6	6.9	49	17.8	26	131.3	0.5
9/07/2024	10.6	5.4	15.3	10.3	-9.8	13.2	94.9	59.4	100	2.1	0	11.5	246	1	116.7	649.8	1.3
10/07/2024	9.2	3.8	13.1	8.9	4.3	11.7	100	96.8	100	2.7	0	9.5	242	0	60.9	433.1	0.6
11/07/2024	7.2	2	14.1	6.4	1.9	11.7	96.3	72.2	100	1.2	0.1	5.5	237	0	102.3	631.6	0.9
12/07/2024	8.2	1.8	15.1	7	1.5	13	92.2	47.9	100	1.5	0	10.6	241	0	129.4	784.6	1.3
13/07/2024	7.8	1.4	14.2	7.2	2.4	11.9	94.5	70.8	100	3.2	0.2	9.9	237	0	138.4	615.5	1.2
14/07/2024	6.9	1.7	10.2	6.4	2.5	8.9	93.8	70.1	100	2.8	0.1	6.6	240	0.3	77.3	560	1
15/07/2024	5.6	0.3	8.9	5	0.7	7.5	98	80.9	100	2.8	0	7.5	247	0.5	85.7	596.2	0.8
16/07/2024	6.4	5	8.2	5.7	3.2	7.2	99.4	88.3	100	5	2.6	9.5	257	1	61.5	592.8	0.6
17/07/2024	8.5	5.6	11.6	7.7	3	10.2	99.1	80.3	100	3.3	1.8	9.6	246	0.3	86.4	670.3	0.9
18/07/2024	7.2	1.4	11.3	6.6	1.9	9.6	97.6	73.9	100	3.2	0.1	7.2	242	0	88	775	1
19/07/2024	7.1	2.6	12.4	6.4	2.2	10.3	79.3	50.8	100	3.4	0.1	11.2	242	0	159	648	1.6
20/07/2024	9.2	2.5	12.2	8.1	-0.6	10.5	74.2	43.2	100	5.4	0	12.4	252	1	116.2	697.9	2
21/07/2024	7.4	1.5	12.2	6.6	1.9	10.3	80.2	53.2	100	3.7	0.2	9	239	0	162.3	643.7	1.6
22/07/2024	5.6	-1.7	15.4	5.3	-1.8	13	90.3	50.7	100	1.6	0	8.5	241	0	163	688.2	1.5
23/07/2024	5.4	-2.1	16	4.3	-1.9	13.2	87.6	40.6	100	0.4	0	9.6	320	0	170.9	644.8	1.1
24/07/2024	6.1	-3	18.8	4.8	-2.8	11.8	84.4	36.4	100	1.2	0	6.4	323	0.3	168.4	663.4	1.6
25/07/2024	10.1	-0.8	19.2	7.9	-0.8	14.9	84.2	52.9	100	2.4	0	14.9	329	1	123.3	722.4	1.8
26/07/2024	12	5.2	19.1	9.5	-0.8	13.4	88.7	47.6	100	2.3	0.1	10.7	281	7.1	159	652	2
27/07/2024	9.5	5.7	13.8	8.3	-2.6	13.4	100	100	100	1.7	0.1	9.8	216	31	35	440.9	0.5
28/07/2024	6.7	4.3	9.5	5.4	-0.4	7.8	87.5	56.6	100	4.8	1.1	11.2	235	0	163.8	781.9	1.6
29/07/2024	5.1	-1.1	11.6	4.1	-0.9	9.7	82	41.4	100	1.8	0.1	6.2	235	0	184.5	689.7	1.5
30/07/2024	4.4	-3.6	15.8	2.7	-3.8	9.2	83.3	41.8	100	1.2	0	8.3	35	0	181.3	684.9	1.6
31/07/2024	4.9	-2.8	15.5	3.3	-2.8	11.1	84.3	44.8	100	1.6	0.1	9.1	68	0.3	168.6	783.2	1.6
1/08/2024	5.1	-3.1	15.9	4.4	-2.9	12.4	85.4	46	100	1.9	0	10.8	84	0	171.5	699.2	1.7
2/08/2024	5.3	-3	15.3	4.4	-3.2	12.3	89.7	55.7	100	1.9	0	8.9	45	0	157	743.7	1.5
3/08/2024	5.2	-2.4	17	3.6	-2.5	12.9	88.7	40.6	100	0.3	0	6.6	343	0.3	185.4	724.5	1.3
4/08/2024	6.6	-2	15.9	5	-2.1	12.6	86.9	47	100	3.4	0	9.7	35	0	102.5	471.2	2
5/08/2024	8.8	4	14.9	7.9	3.5	11.2	95.8	67.9	100	0.2	0	2.7	272	2.8	61.5	445.5	0.8
6/08/2024	8	1.1	14.7	7.6	0.7	12.6	93.4	51.8	100	1.5	0	9.1	241	3	165.9	704	1.6
7/08/2024	6.2	-1.6	18.3	3.1	-4.4	10.2	83	29.3	100	0.7	0	6.2	262	0	194	717.9	1.7
8/08/2024	7.1	-1.9	18.5	3.6	-2.3	7.3	92.9	53.3	100	0.1	0	2.9	305	0	159.8	706.1	1.3
9/08/2024	10.1	3.3	18	8.5	3.3	12.3	91.2	57.1	100	0.8	0	10.3	68	0	112.9	731.6	1.3
10/08/2024	11.1	4.7	20.2	8.7	-5.1	16.3	93.1	46.6	100	1.7	0	9	52	2.8	149.7	704.9	2
11/08/2024	12.4	7.7	18.1	10.4	8.2	14.6	93.9	57	100	5.1	0	10.3	60	0	140.1	809.8	2.3

Ulan Complex
Attachment K: 2024 Meteorological Data

Annual Review 2024

Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
12/08/2024	11.2	6.2	15.3	9.8	6.6	13.4	100	97.3	100	4.1	0	12.1	59	0.3	66.1	387.4	0.7
13/08/2024	14.5	11.4	19.2	12.6	9.8	15.4	99.3	88.1	100	4	0.4	9.9	62	1.8	115.3	797.3	1.3
14/08/2024	13.8	11.7	15.8	12.1	0.6	15.1	100	100	100	4.5	0.3	14.2	59	10.9	46	340.3	0.6
15/08/2024	14.2	12.1	17.7	10.3	8.7	11.2	100	100	100	7.7	5.2	8.8	56	0	57.4	396.8	0.5
16/08/2024	15.1	10.7	20.4	11.1	8.2	15.2	91.1	56.7	100	2.1	0	13.5	39	2.8	147.9	862.5	2.1
17/08/2024	11.8	7.7	15.4	10.4	-3.6	13.2	92.3	59.4	100	5	0.1	14.2	238	10.9	168.5	849	2.2
18/08/2024	10.9	6.3	16.6	9.3	5.2	13.3	91.7	60.4	100	1	0	10.7	311	0	142.9	964.5	1.6
19/08/2024	11.6	4.8	18.5	9.3	5.2	13.4	89.5	52.2	100	5.6	0	11.1	54	0	162.1	779	2.7
20/08/2024	14.4	9.8	21.5	11.6	6.4	15.3	90.4	54.4	100	6	3	10.4	34	0	180.9	800.4	3.1
21/08/2024	16.7	8.2	21.9	13.2	8.1	16.3	77.5	41.2	100	3.3	1.3	13.3	279	0	180.4	747	3
22/08/2024	12	5.2	19.5	11.8	2.2	16	84.6	38.4	100	1.8	0	12.1	258	0	180.5	832.9	2.4
23/08/2024	10.1	1.1	21	7.9	1.3	15.7	81.4	35.6	100	1	0	7.2	15	0	186.3	812	2.2
24/08/2024	13.6	5	23.3	11.3	3.3	17.2	88.2	45.4	100	1.4	0.1	9.2	294	1.5	147.8	821	2.2
25/08/2024	14.1	9	16.5	14.3	9.2	16.9	100	100	100	0.6	0.1	8.7	241	13.7	25.2	159.9	0.6
26/08/2024	13.9	5.5	19.5	11.2	4.6	16.4	81.3	37.2	100	3.2	0.2	10.5	245	0	229.7	808.1	3.1
27/08/2024	10.7	1.2	22.5	8.5	1.6	13.6	78.4	23.1	100	1.5	0	6.3	278	0	232.6	816.5	3
28/08/2024	13.8	2	23.7	11.1	1.8	17.3	70.5	27.1	100	4.6	0.9	12.7	250	0	219.5	801.5	4.4
29/08/2024	11.7	3.2	19.7	9.9	3.5	14	76.9	29.3	100	3.4	0	12.7	240	0	232.2	818.7	3.4
30/08/2024	15.5	1.8	28.2	10.7	1.8	19.7	66.7	24.8	100	2.2	0	10.2	275	0	225.7	790.3	4
31/08/2024	14.7	4.7	20.9	13.1	8.4	16.2	59.4	26.7	100	6	1.1	13	241	0	236.6	826.5	4.5
1/09/2024	12.4	2.9	23.1	10	3.2	17.2	74.4	29.2	100	1.9	0	12	258	0	231.4	805.7	3.3
2/09/2024	10.8	1.9	19.4	9.8	2.7	15.5	66.1	29.2	100	4.4	0	13.8	242	0	236	820.4	3.8
3/09/2024	9.1	0.1	19.6	6.9	0.1	12.3	71	25	100	0.9	0.1	7	195	0	243.8	857.5	2.6
4/09/2024	9	-2	21.9	7.1	-2	12.2	74	21.2	100	1.1	0	7.1	280	0	244.2	844.4	2.9
5/09/2024	11.7	0.6	23	9.3	0.6	14.1	80.6	39.3	100	2.6	0.1	13.6	299	0	237.2	821.5	3.4
6/09/2024	13.7	2.1	24.4	11.1	2.5	17	78.8	39.8	100	2.2	0	10.7	285	0	239.3	823	3.5
7/09/2024	16.7	6.1	27.5	13.1	7.3	19	77.5	33.2	100	1.6	0	6.6	275	0	222.2	835.8	3.5
8/09/2024	12.5	6.5	16.4	10.9	9.6	15.3	91.3	55.7	100	1.2	0.9	10.8	11	0.5	65.9	397.2	1.4
9/09/2024	11.1	3.6	19.7	9.4	3.4	14.4	82.3	40.5	100	0.7	0	10.9	6	0	205.3	880.1	2.4
10/09/2024	10.8	0.6	22.2	10	0.6	15.9	79.5	36.5	100	4	0	9.7	58	0	249.7	855.7	4
11/09/2024	13.4	1.4	24	9.4	1.4	15.9	83.5	37.1	100	1.4	0	9.5	277	0	204.8	906	3
12/09/2024	13.4	10.2	20.7	10.8	-1.1	13.6	95.9	54.9	100	0.5	0	8.6	130	15	124.3	919.9	1.8
13/09/2024	10.4	3	19.7	8.4	3.2	13.5	82.3	40.8	100	2.6	0.2	9.6	63	0	254.6	879	3.3
14/09/2024	10.3	1.9	19.5	8.9	1.9	14.5	82	30.8	100	0.6	0	11.8	300	0	252.6	881.8	2.7
15/09/2024	7.4	-0.6	15.5	6.6	-0.9	12.5	74.3	26.8	100	2	0.2	9	69	0	251.8	916	2.9
16/09/2024	7.8	-2.6	17.6	6.3	-2.8	13.9	63.8	26.1	100	2.7	0.4	10.5	243	0	276	926.6	3.5
17/09/2024	8.9	-1	19.3	6.7	-1	13.2	75.9	34.7	100	1.4	0	9.4	24	0	261.8	898	3
18/09/2024	9.2	-1.6	21.5	6.9	-1.5	15.6	73.5	22.7	100	2.5	0	11.4	244	0	277.5	921.3	4

Ulan Complex
Attachment K: 2024 Meteorological Data

Annual Review 2024

Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
19/09/2024	11.4	-0.9	23	9	-0.1	15.9	59.1	14.2	100	3.8	0	12.5	241	0	271.3	905.3	5
20/09/2024	9.5	-1.1	19.2	6.4	-0.8	13.5	69.4	30	100	1.8	0	10.3	245	0	274.5	921.5	3.3
21/09/2024	9.6	-0.7	19.2	7.9	-0.5	15.9	73.3	33.5	100	4.3	0	11.6	232	0	272.6	917.2	4
22/09/2024	10.6	-0.7	21.1	7.9	-0.5	14.5	72.5	32.4	100	2	0	10	243	0	274.6	943.4	3.6
23/09/2024	12.5	0.9	24.2	9.6	1.3	15.4	70.3	23.1	100	1.4	0	9.9	249	0	271.8	908.8	3.7
24/09/2024	14.5	2.9	26.5	10.6	2.7	17	68.7	23.9	100	1.4	0	6.7	356	0	226.3	955.5	3.6
25/09/2024	18.2	9.5	25.7	12.1	8.6	16.5	69.8	36.5	100	1.9	0.7	6.8	355	0	116.8	901.4	2.8
26/09/2024	11.7	8.2	15.7	10.4	-1.2	15.2	100	100	100	1.3	0.1	9.7	69	13.2	35.5	247.8	0.7
27/09/2024	11.8	8.4	16.2	8.1	5.2	11.1	89.2	58.2	100	7.7	0.3	10.9	66	0	186.9	1061.4	2.8
28/09/2024	12	3	18.2	9.1	6.4	15.1	85.6	55.4	100	8.4	1.9	14.6	63	0	214.2	1137.9	3.3
29/09/2024	16.1	11.4	21.7	11.6	7.3	16.6	94.6	73.2	100	4.2	0.1	12.1	51	0.5	168.2	987.7	2.6
30/09/2024	16.3	10.5	21.9	12.6	6	15.7	79.3	30.8	100	0.8	0.2	10.5	43	7.9	264.7	1091.8	3.5
1/10/2024	14.2	6.2	22.7	10.4	2.1	15	79.5	28.3	100	2.2	0	9.3	358	0	263.3	1030.9	4
2/10/2024	13.8	5.2	21.7	10.8	5.5	16.8	85.7	41.3	100	5.6	0	14.2	54	0	210.4	1111.1	4.1
3/10/2024	15	7.4	21.5	10.9	8.1	16.2	75.4	37.8	100	6.5	0	12.4	45	0	289	957.3	4.9
4/10/2024	15	3.5	24.2	10.6	0.8	17	76.5	36.9	100	1.4	0	9.5	319	2.3	227.5	1114.5	3.4
5/10/2024	16.5	7.4	23.6	14	6.6	16.9	79.5	32.2	100	4.9	0.1	11.6	242	1.3	243.1	1040.4	4.8
6/10/2024	15	5.5	23.9	13	4.7	16.6	72.2	34.3	100	4.1	0.2	11.6	238	0	310.8	973.3	5.1
7/10/2024	15.6	4.8	26.5	12.7	1.6	19	70	23.6	100	2.6	0	7.3	234	0	295.4	993.5	5
8/10/2024	15	5.5	26.5	12.6	4.3	17.1	86.3	35.3	100	2.3	0.3	16.5	40	0	254.8	972.8	4.4
9/10/2024	13.3	11.3	21.3	9.1	6.5	13.2	92.2	65.8	100	9.3	0.8	14.3	61	0	133.8	965.3	2.9
10/10/2024	15.5	8.3	24.6	12	7.6	16.1	80.4	36.3	100	2.2	0.7	11.6	58	0	287.1	1089.9	4.4
11/10/2024	15.9	4.4	27.5	12.8	4.4	18.2	74.2	26.3	100	1	0	5.4	226	0	280.9	983.6	4.1
12/10/2024	13.6	6.3	18.7	11.8	7.5	14.5	94.2	76.1	100	5.9	1	12.1	66	0	155.4	835.8	2.2
13/10/2024	15.8	10.9	22.4	11	6.8	15.8	79.1	48.3	100	5.7	1.2	14.1	48	0	255.8	1091.5	4.4
14/10/2024	14.8	9.3	21.8	11.8	1.4	17.6	99.6	84.9	100	4.1	0.2	8.1	29	13.5	105.6	658.6	1.7
15/10/2024	14.4	12.1	18.4	7.5	-2.3	15.7	100	100	100	6.3	1.3	16.7	40	1.3	146.1	1103.9	1.4
16/10/2024	11.3	9.9	12.5	11	4.6	12.7	100	100	100	2.2	0.4	9.5	62	18.3	46.4	255.6	0.8
17/10/2024	16.1	11.5	23.9	10.8	7.5	14.7	95	62.1	100	2.2	0.3	8	48	0	197.3	1261.8	3.2
18/10/2024	18.3	14.8	26.3	15.3	8.6	22.8	96.8	0.6	100	1	0	11.7	320	30.2	120.7	964.1	2.9
19/10/2024	16.9	12.9	20.8	11.6	6.6	17.9	95.7	0.6	100	3.8	0.5	12.2	239	0	202.4	1188	4.8
20/10/2024	17.8	7.2	27	12.1	7.5	17.8	81.2	25.6	100	1.4	0	6.9	20	0	310.1	1032.2	4.7
21/10/2024	16.7	8.9	24.6	11.5	9.6	16.2	80.3	38.7	100	5.4	0.4	10.6	38	0	318.6	1039.9	5.5
22/10/2024	17.2	10.5	27.1	12	8.2	17.5	78.9	34.2	100	2	0.3	9.3	13	0	317.8	1033.2	5.1
23/10/2024	18.6	6.5	28.9	13.1	2.4	20.2	76.7	35.4	100	1.6	0.1	7	231	0	247.6	1070.9	4.3
24/10/2024	18.3	12.1	24.5	11.4	7	18.4	61.2	31.8	100	1.9	0.2	11.2	233	0.3	243.2	1207.5	4.2
25/10/2024	12.7	2.3	20.2	11.5	7.7	13.8	60	28.5	100	2.1	0.4	8.4	254	0	336	1079.1	4.4
26/10/2024	13.3	3.7	22.3	9.9	3.9	13.5	70.8	30.2	100	2.6	0	11.6	48	0	326.3	1063.7	4.8

Ulan Complex
Attachment K: 2024 Meteorological Data

Annual Review 2024

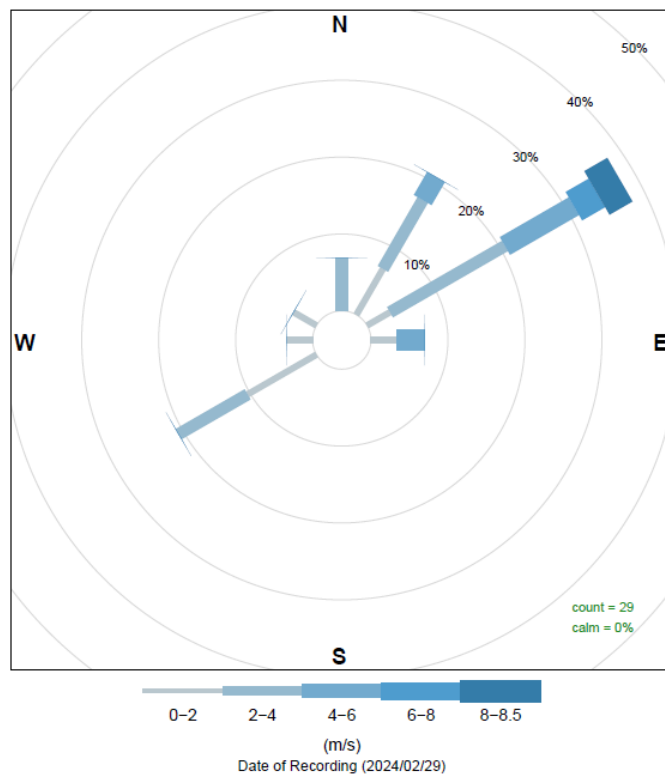
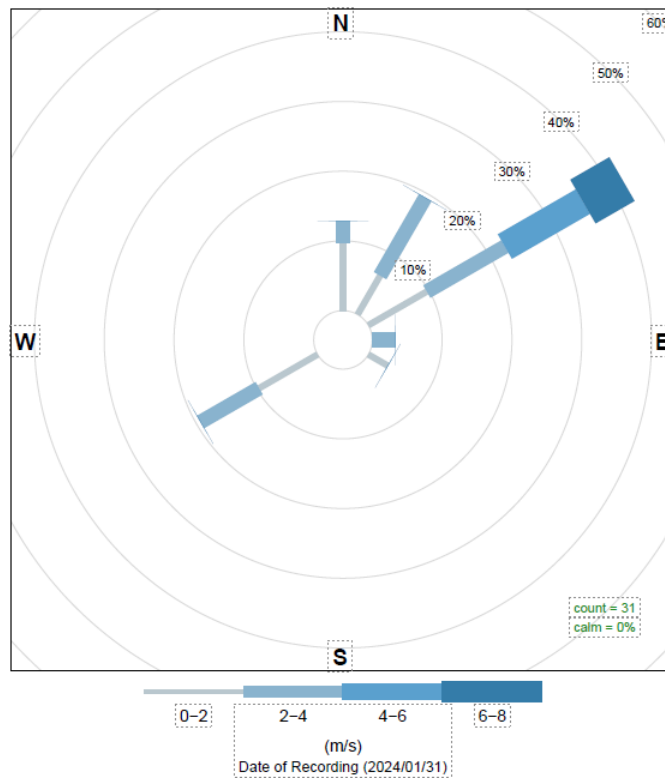
Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
27/10/2024	15	7.1	24.6	11.7	7.1	15.1	74.5	27.2	100	0.2	0	5.4	121	0	219.7	935.9	3
28/10/2024	17.2	3.3	28.3	13.3	3.9	19	61.1	19.9	100	1.5	0	8.8	248	0	322.4	1076.2	5.1
29/10/2024	18.5	13.1	27.2	12.2	9.3	17.6	79.5	33.4	100	3.7	0.2	10.2	13	0	300.5	1034.1	5.7
30/10/2024	18.9	8.5	28.5	13.3	9	18.8	71.9	26.8	100	1.1	0.1	8	245	0	330.5	1060.2	5
31/10/2024	18.3	4.8	28.9	13.6	5.8	18.8	57.8	20	100	2.7	0.1	8.2	227	0	292.1	1141.9	5.8
1/11/2024	18.6	7	27.5	12.4	2.9	17.2	68.6	23	100	0.8	0	8.7	312	0	343.5	1174.3	4.9
2/11/2024	19.3	9.9	27	13.7	9.9	18	79.3	41.2	100	4.8	1.8	11.5	46	0	292.6	1126.6	5.6
3/11/2024	22.1	10.9	31.8	15	8.6	21.9	68.1	23.9	100	2.8	0	9.4	321	0	276.1	1082.5	6
4/11/2024	23.3	13.8	30	16.4	9.2	21	64	34.9	100	2.2	0.5	9.7	277	0	146.8	936.4	3.8
5/11/2024	20.1	10.6	29.3	13.8	8.4	19.1	85.8	43.9	100	3	1.1	10.5	39	0	290.8	1036.9	5.4
6/11/2024	24.3	16.7	35.9	13.5	8.9	22.1	71.2	19.2	100	1	0	7	31	0	261.2	1194.4	5.1
7/11/2024	23.5	15	33.4	15	9.7	20.9	74.3	28.3	100	2.6	0.1	9.1	242	1.5	215.3	1018.7	5.4
8/11/2024	18.7	11	26.7	14.2	6.8	17.8	71.4	27.1	100	2.4	0	7.2	235	0.8	356.5	1094.1	5.8
9/11/2024	18.5	5.8	30	13.9	1.2	19.9	65.8	22.7	100	1.1	0	8.8	330	0	345.8	1073.8	5.3
10/11/2024	21.8	10.5	32.2	14	9.6	20.3	66.5	15.4	100	1.1	0	10.1	12	0	340.2	1084.5	5.6
11/11/2024	17.5	15.9	20	14	9.4	18.1	99.6	94.3	100	3.8	0.3	10.4	52	6.9	65.7	393.4	1.2
12/11/2024	19.1	15.5	24.4	13.7	9.8	16.7	96.4	69.4	100	3.2	1	9.7	64	0	213.4	1223	3.5
13/11/2024	18.9	12.3	29.3	14	8.9	20.3	90.6	37	100	1.7	0.2	7.2	13	1.5	236.8	1195.3	4.5
14/11/2024	19.3	10.4	30.7	12.3	-0.4	19	85.1	31.1	100	2.1	0.1	8.7	24	0.3	274.9	1095.6	5.3
15/11/2024	19.6	17.1	24.9	12.3	8.9	17.2	95.3	69.1	100	4.5	1.2	11.6	59	0	223.3	1230.6	3.8
16/11/2024	22.4	17.3	30.4	13.2	9.2	20.1	81.7	40.2	100	3.1	1.2	9.8	41	0	291.6	1101.2	5.8
17/11/2024	22.9	15.3	32	15.4	8.5	22.3	64.4	0.6	100	3.8	0.1	9	355	16.5	265.2	1135.7	7.4
18/11/2024	19.2	11.6	26.2	14.5	6.6	18.9	41.1	0.5	100	2.5	0.2	14.2	240	35.6	251.9	1201.9	5.4
19/11/2024	20.4	-39.8	26.7	20	-58.3	25.3	69.1	0.1	100	2.8	0	5.5	77	0	278.6	1146.1	6.8
20/11/2024	19.7	10.7	27.3	19.2	11.5	25.9	77.2	36.9	100	2.1	0.1	5	66	0	356.3	1165.5	5.7
21/11/2024	19.3	9.9	26.3	19	11.9	25.1	72.4	28.6	100	2.4	0.1	5.9	81	0	365.2	1108.9	5.9
22/11/2024	20.5	9.5	29.9	20.3	10.5	28.8	70	23.1	100	1.4	0	5.9	68	0	360.8	1096.1	5.8
23/11/2024	22.1	10.6	32.8	22.1	11.6	31.1	69.9	25.6	100	0.2	0	4.1	228	0	336.4	1070.5	5
24/11/2024	24.4	12.7	34.6	24.5	13.9	33.1	58.3	21.7	100	0.1	0.1	3.7	41	0	332.2	1080.9	5
25/11/2024	24.5	13.6	34.7	24.6	14.6	33.6	67.5	25.2	100	0.6	0	4.2	329	0	317	1110.5	5.3
26/11/2024	24.6	13.7	34.5	24.8	14.9	33.2	64	19.4	100	1.2	0.1	6	324	0	332.9	1116.7	6
27/11/2024	22.7	14.1	31.8	23	15.4	30.8	77.8	39.4	100	1.6	0.1	8.7	284	0	234.7	1142.9	4.7
28/11/2024	20.2	17.3	26.6	20.4	17.8	24.7	91.7	0.6	100	0.3	0	7.8	90	25.1	92.9	1141.4	2.1
29/11/2024	20.5	19	23	20.7	19.2	22.6	95.2	0.6	100	1.9	0.2	4.3	66	8.4	86.9	522.3	3.1
30/11/2024	19.3	18.3	20.4	19.9	18.8	21.1	16.8	0.6	100	1.8	0	4.3	53	25.4	40.1	205.4	2.4
1/12/2024	21.9	15.9	29.6	22.1	16.7	29.1	57.9	0.6	100	1.2	0	10.1	285	0	228.2	1163.2	4.6
2/12/2024	23.4	13	34	23.3	13.7	32.7	73	0.5	100	0.4	0.1	5	314	0	279.5	1212.4	4.5
3/12/2024	19.5	16.2	25.3	20.2	16.9	25.2	95.6	0.6	100	0.3	0	5.5	333	37.1	56.5	230.7	1.7

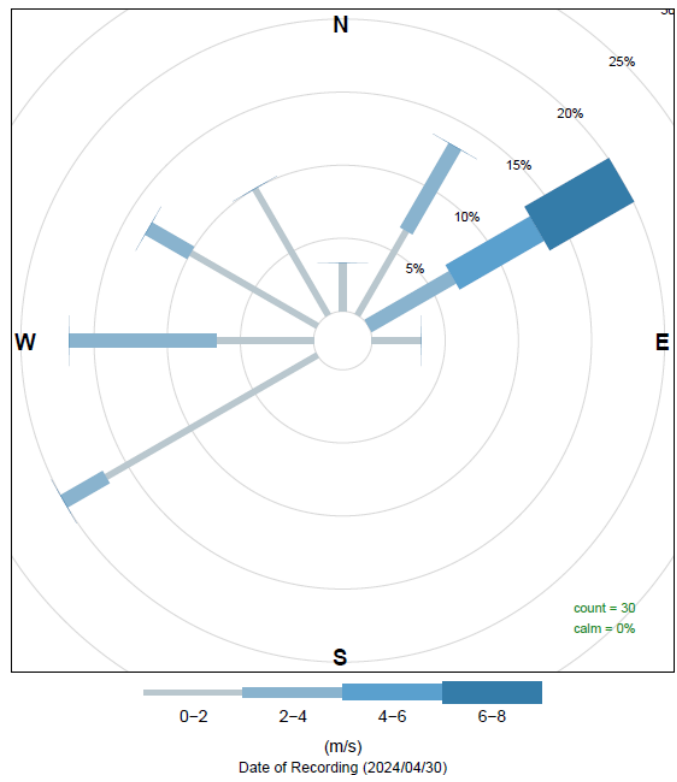
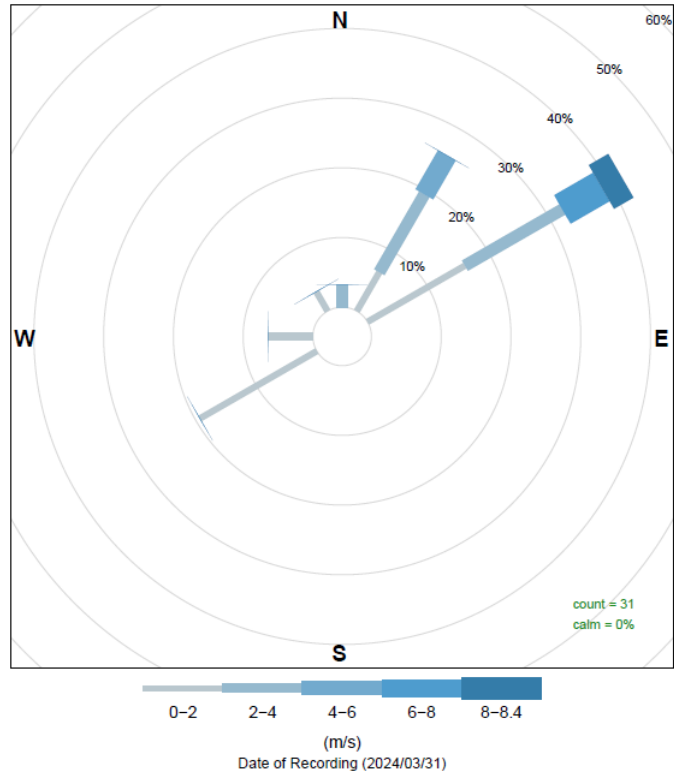
Ulan Complex
Attachment K: 2024 Meteorological Data

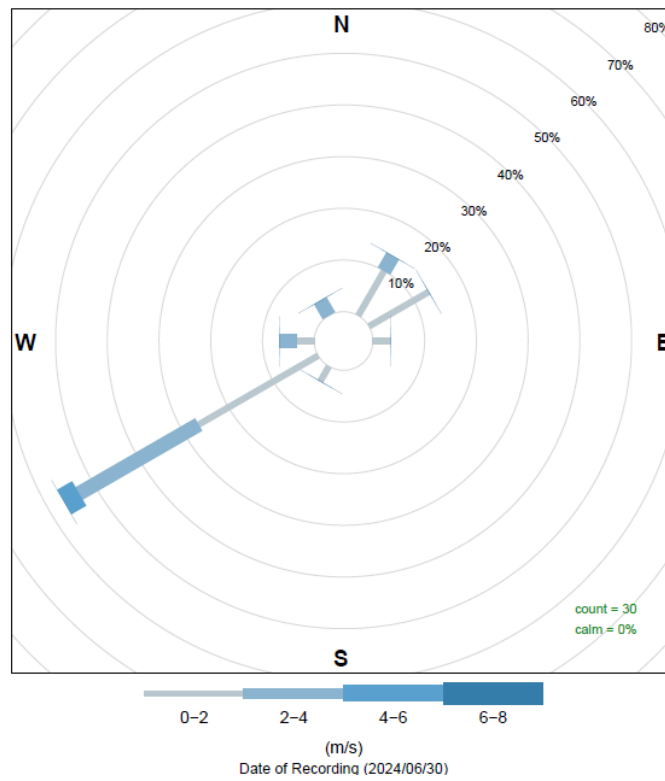
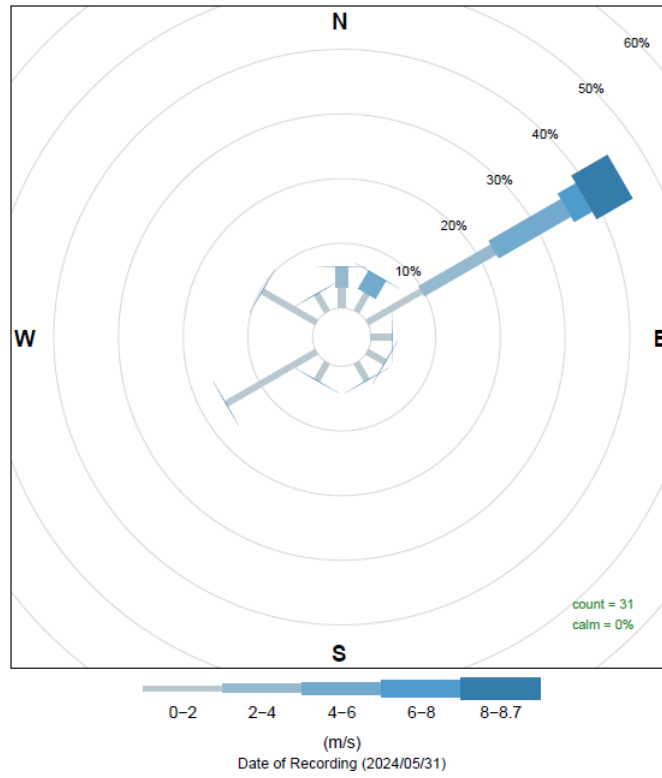
Annual Review 2024

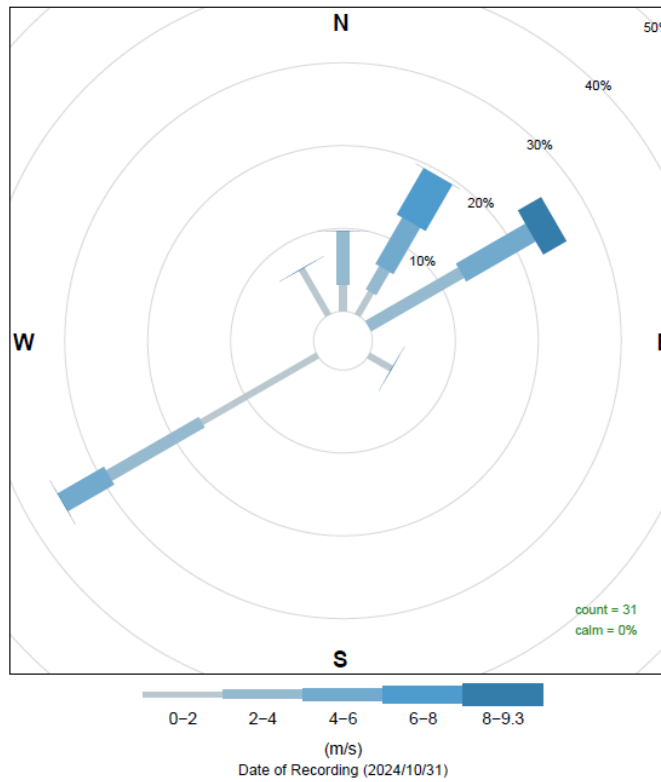
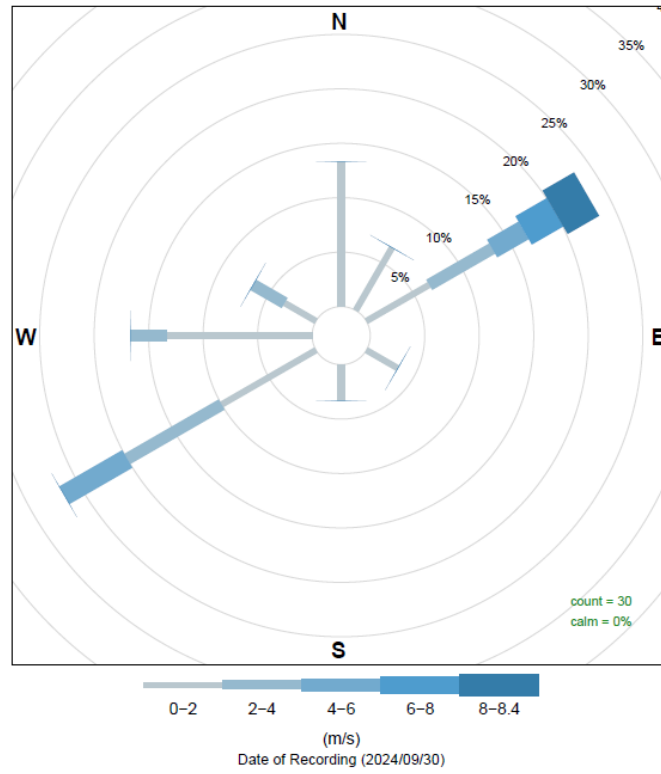
Date	Temp °C (Avg)	Temp °C (Min)	Temp °C (Max)	Temp 10m °C (Avg)	Temp 10m °C (Min)	Temp 10m °C (Max)	Humidity (Avg)	Humidity (Min)	Humidity (Max)	Wind Speed m/s (Avg)	Wind Speed m/s (Min)	Wind Speed m/s (Max)	Wind Dir (°)	Rain (mm)	Solar Rad (Avg)	Solar Rad (Max)	Evap (mm/24 hr)
4/12/2024	23.2	16.8	30.7	23	17.5	29	97.7	0.6	100	1.1	0	5.5	53	0.5	239.1	1197.4	4.7
5/12/2024	24.4	18.7	32.5	24	18.9	30.8	93.1	54.7	100	1.9	0.1	4	74	0	291.1	1079	5.5
6/12/2024	24.6	20.1	32.4	24.5	20.6	31.4	93.9	0.6	100	0.6	0	6	340	20.3	210.3	1234.2	4.1
7/12/2024	25.3	20.7	30.8	25.4	21	30.1	97.3	21.1	100	1.9	0.1	8.3	285	3	213.2	1051.2	4.9
8/12/2024	24.7	19.4	31.6	24.8	20.2	31	79.6	20.5	100	2.2	0.2	6.3	245	0.8	345.6	1183.8	6.7
9/12/2024	21.9	19.3	28	21.6	19.4	26.6	97.5	58.5	100	1.5	0.1	4	75	0	126.6	906.7	2.8
10/12/2024	23.9	17.4	30	23.6	18	29.3	70	25.7	100	0.5	0.1	5.3	210	0	369.3	1212.3	5.9
11/12/2024	21.8	14.6	29.4	21.8	15.8	28.4	73	29.6	100	0.1	0.1	5.6	273	0	368.9	1193.9	5.5
12/12/2024	21.2	10	31.7	21.3	10.9	30.1	64	18.3	100	1.3	0	4.7	250	0	380.5	1127.4	6.3
13/12/2024	22.8	11.2	32.4	22.9	12	31.6	65.1	24.1	100	1.5	0	5.4	249	0	372.5	1107.7	6.4
14/12/2024	24.3	13.6	34.8	24.3	14.3	33.6	75.6	24.4	100	0.2	0	3	236	0	338.3	1126.9	5.3
15/12/2024	27	16	35.6	27	17.3	34.6	67.5	26.3	100	0.7	0	4.8	225	0	355	1081.2	6.1
16/12/2024	27.7	20.8	35.7	27.5	21.2	34.7	67.4	22.7	100	2.7	0.3	5.6	70	0	365.7	1075.8	7.8
17/12/2024	26.9	16.4	35.3	27	17.5	34.3	71.2	34	100	1.6	0	5.8	252	0	362.4	1080.1	6.8
18/12/2024	20.4	15.6	27.4	20.3	15.9	28	87	51.3	100	3.6	1.4	7	90	0	129	993.5	3.5
19/12/2024	19.9	13.4	27.1	19.5	14	25.9	66.3	31.9	100	3	0.7	6.5	90	0	380.4	1116.3	6.5
20/12/2024	20.5	9.3	30.9	20.5	10.6	29.6	68.5	23	100	0.3	0	4.4	92	0	375.8	1103.9	5.4
21/12/2024	23.4	11.2	33.4	23.4	12	32.4	63.6	20.7	100	0.9	0.1	5.1	246	0	356.2	1092.5	5.9
22/12/2024	25.1	14.9	34.8	25.2	17.1	34	60.8	15.3	100	0.4	0.1	7.7	332	0	361.5	1059.4	5.8
23/12/2024	18.8	10.2	25.5	19.3	12	24.7	48.1	11.5	100	3.6	0.2	9	242	0	385.6	1153.2	6.9
24/12/2024	18.6	5.1	29.3	18.9	6.9	28.6	49.1	18.7	100	1.4	0	6.1	215	0	385.6	1126.9	6
25/12/2024	21.9	9.8	32.9	21.9	11.7	31.5	60.9	20.3	100	0.8	0	4.6	34	0	372.9	1133.2	6
26/12/2024	24.8	11.5	35	24.8	13	33.1	58.5	23.1	100	1.8	0.1	5.8	11	0	351.2	1157.2	6.7
27/12/2024	26.1	17	35	26.3	18.1	34.5	59.6	0.6	100	1.9	0.3	7.5	301	11.4	298.9	1143.1	6.6
28/12/2024	21.8	12.6	27.7	22	14.7	26.9	51.5	20.8	100	2.3	0.2	7.2	236	0	374.5	1277.4	6.4
29/12/2024	20.9	7.4	30.7	21	8.4	29.8	53.3	17.8	100	1	0.1	4.5	215	0	382.8	1128	5.9
30/12/2024	24.1	14.7	32.5	23.9	17.4	30.9	67.9	28.5	100	2.3	0.1	5.4	76	0	320.6	1122.1	6.3
31/12/2024	23.7	17.8	33	23.4	18.5	31.8	85.9	32.5	100	1.2	0.1	7.1	52	0	306.5	1145.8	5.7

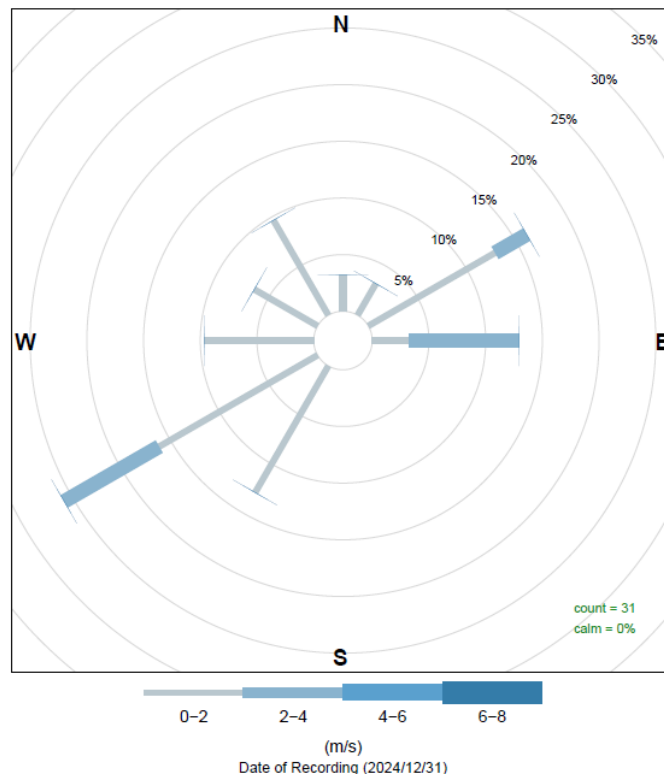
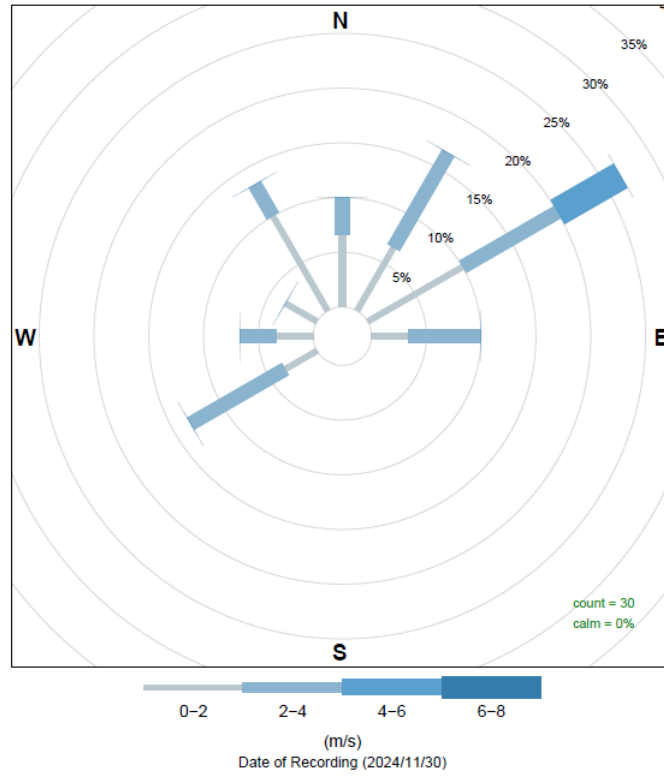
1.3 Monthly Windroses 2024











1.4 Location of Ulan Coal Mine’s Meteorological Station

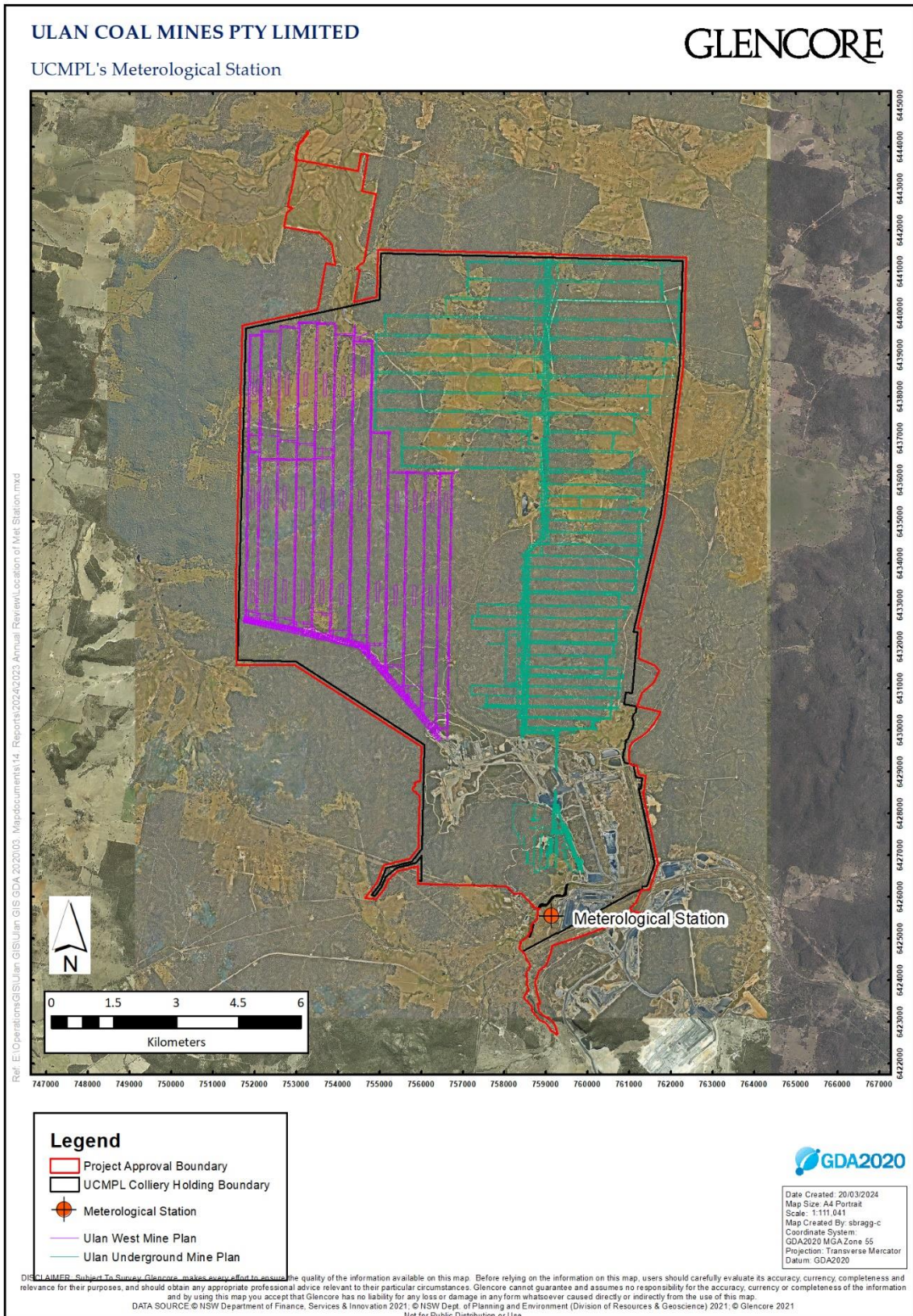


Figure 1-1 Location of UCMPL’s Meteorological Station

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