

## Appendix 16.1 Meteorological Data

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### Prestwick Gannet Meteorological Data

Table 16.1.1 below summarises the raw data received from the historical weather station data for Prestwick Gannet and held by the Met Office (2020).

**Table 16.1.1 - Summary of Raw Meteorological Data for Prestwick Gannet Met Station from 1981 to 2010**

Month	Number of Days in Month	Average Sun Hours per Month	Average Sun Hours per Day
January	31	41.67	1.34
February	28	71.53	2.55
March	31	103.16	3.33
April	30	158.15	5.27
May	31	214.11	6.91
June	30	190.77	6.36
July	31	182.66	5.89
August	31	167.06	5.39
September	30	123.06	4.10
October	31	91.45	2.95
November	30	55.99	1.87
December	31	38.86	1.25

## Wind Parameters

Table 16.1.2 below outlines the wind parameters used within WindPro model for the Proposed Development. It adopts a 16 degree sector with 7,446 hours of wind per year (equivalent to the development being operational for 85 % of the year). Wind distribution data for the site is taken from Prestwick Gannet historical weather station data, the closest weather station to the Proposed Development.

**Table 16.1.2 - Wind Distribution at Prestwick Gannet**

Direction	Wind Distribution	Hours of Wind / Year
N	2.40 %	179
NNE	2.28 %	170
NE	6.90 %	514
ENE	5.83 %	434
E	8.51 %	633
ESE	5.21 %	388
SE	5.42 %	403
SSE	5.27 %	392
S	10.55 %	785
SSW	5.43 %	404
SW	8.99 %	669
WSW	12.35 %	920
W	8.90 %	662
WNW	5.02 %	374
NW	4.65 %	346
NNW	2.30 %	172

## References

UK Met Office (2020). Historic Station Data. Available at:

<https://www.metoffice.gov.uk/research/climate/maps-and-data/historic-station-data>

World Meteorological Organisation (2021) Open source World Meteorological Organisation

Synoptic data