**Data availability statement**

The data used to support and conclude the findings of this research are available from the corresponding authors upon request. Meanwhile vital information has been included within supplementary information file.

Raw data has not been included in the supplementary data but can be obtained from authors upon request.

**Appendix 25:** Wind Speed and Weibull Probabilities

|  |  |  |  |
| --- | --- | --- | --- |
| **Class** | **V(m/s)** | **f(v), Wei** | **f(v), Rei** |
| 0.0-0.9 | 0.45 | 0.0838 | 0.0826 |
| 1.0-1.9 | 1.45 | 0.2231 | 0.2228 |
| 2.0-2.9 | 2.45 | 0.2604 | 0.2614 |
| 3.0-3.9 | 3.45 | 0.2110 | 0.2120 |
| 4.0-4.9 | 4.45 | 0.1303 | 0.1306 |
| 5.0-5.9 | 5.45 | 0.0636 | 0.0634 |
| 6.0-6.9 | 6.45 | 0.0250 | 0.0246 |
| 7.0-7.9 | 7.45 | 0.0080 | 0.0078 |
| 8.0-8.9 | 8.45 | 0.00021 | 0.0020 |
| 9.0-9.9 | 9.45 | 0.0004 | 0.00042 |

**Appendix 26:** Wind speed and weibull cumulative probabilities

|  |  |  |  |
| --- | --- | --- | --- |
| **Class** | **V(m/s)** | **f(v) cumulative Weibull** | **F(v) cumulative Rayleigh** |
| 0.0-0.9 | 0.45 | 0.0824799 | 0.07286 |
| 1.0-1.9 | 1.45 | 0.2839726 | 0.26988 |
| 2.0-2.9 | 2.45 | 0.5098928 | 0.502226 |
| 3.0-3.9 | 3.45 | 0.691258 | 0.692114 |
| 4.0-4.9 | 4.45 | 0.8055232 | 0.81032 |
| 5.0-5.9 | 5.45 | 0.864123 | 0.868412 |
| 6.0-6.9 | 6.45 | 0.889052 | 0.891361 |
| 7.0-7.9 | 7.45 | 0.8979497 | 0.898714 |
| 8.0-8.9 | 8.45 | 0.9006344 | 0.900638 |
| 9.0-9.9 | 9.45 | 0.9013229 | 0.901051 |

**APPENDIX 27:** AVERAGES OF MONTHLY WIND DIRECTION

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Y/M | JAN | FEB | MAR | APL | MAY | JUN | JLY | AUG | SEP | OCT | NOV | DEC |
| 2004 | 94 | 111 | 104 | 109 | 119 | 98 | 115 | 117 | 110 | 96 | 92 | 112 |
| 2005 | 113 | 116 | 107 | 110 | 99 | 110 | 110 | 108 | 114 | 102 | 101 | 106 |
| 2006 | 116 | 98 | 115 | 108 | 111 | 102 | 106 | 109 | 107 | 103 | 84 | 87 |
| 2007 | 108 | 115 | 116 | 96 | 103 | 97 | 94 | 90 | 85 | 89 | 91 | 97 |
| 2008 | 92 | 109 | 99 | 92 | 96 | 89 | 96 | 104 | 86 | 72 | 77 | 100 |
| 2009 | 90 | 90 | 99 | 88 | 79 | 90 | 93 | 103 | 88 | 76 | 82 | 72 |
| 2010 | 81 | 85 | 60 | 80 | 75 | 80 | 82 | 92 | 99 | 72 | 96 | 67 |
| 2011 | 76 | 89 | 78 | 78 | 68 | 65 | 79 | 76 | 88 | 65 | 45 | 60 |
| 2012 | 85 | 93 | 89 | 55 | 60 | 71 | 62 | 69 | 67 | 67 | 59 | 51 |
| 2013 | 52 | 69 | X | X | 70 | 60 | 65 | 76 | X | X | X | X |

**APPINDEX 28:** AVERAGES OF DAILY WIND DIRECTION

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| DAY | MONTH | | | | | | | | | | | |
| J | F | M | A | M | J | J | A | S | O | N | D |
| 1 | 81 | 90 | 100 | 90 | 78 | 103 | 95 | 84 | 114 | 88 | 74 | 77 |
| 2 | 92 | 84 | 95 | 85 | 80 | 94 | 82 | 75 | 101 | 99 | 75 | 75 |
| 3 | 84 | 93 | 107 | 88 | 79 | 83 | 84 | 90 | 96 | 76 | 79 | 85 |
| 4 | 90 | 89 | 95 | 101 | 92 | 86 | 95 | 75 | 103 | 75 | 84 | 92 |
| 5 | 104 | 81 | 101 | 97 | 77 | 98 | 83 | 94 | 87 | 93 | 75 | 71 |
| 6 | 92 | 98 | 80 | 101 | 71 | 90 | 73 | 91 | 96 | 93 | 68 | 93 |
| 7 | 106 | 112 | 93 | 98 | 74 | 84 | 85 | 86 | 88 | 91 | 94 | 82 |
| 8 | 95 | 108 | 103 | 83 | 87 | 78 | 98 | 111 | 89 | 87 | 74 | 94 |
| 9 | 88 | 108 | 114 | 92 | 84 | 83 | 101 | 112 | 87 | 89 | 77 | 92 |
| 10 | 102 | 101 | 102 | 87 | 82 | 76 | 87 | 88 | 75 | 71 | 84 | 85 |
| 11 | 101 | 117 | 85 | 108 | 88 | 86 | 100 | 101 | 80 | 92 | 89 | 76 |
| 12 | 98 | 103 | 115 | 99 | 94 | 67 | 88 | 108 | 75 | 93 | 91 | 78 |
| 13 | 88 | 101 | 90 | 94 | 98 | 81 | 95 | 105 | 90 | 72 | 84 | 93 |
| 14 | 92 | 95 | 106 | 79 | 87 | 82 | 91 | 102 | 110 | 83 | 84 | 71 |
| 15 | 78 | 89 | 94 | 95 | 91 | 75 | 99 | 111 | 100 | 94 | 84 | 85 |
| 16 | 80 | 93 | 94 | 90 | 99 | 89 | 97 | 94 | 99 | 97 | 72 | 78 |
| 17 | 91 | 88 | 115 | 92 | 96 | 96 | 111 | 94 | 91 | 84 | 79 | 77 |
| 18 | 87 | 105 | 112 | 96 | 103 | 79 | 88 | 82 | 136 | 71 | 81 | 74 |
| 19 | 95 | 102 | 95 | 94 | 93 | 93 | 97 | 92 | 108 | 74 | 73 | 77 |
| 20 | 81 | 102 | 77 | 91 | 94 | 100 | 85 | 97 | 97 | 76 | 86 | 75 |
| 21 | 82 | 104 | 81 | 103 | 99 | 111 | 83 | 105 | 97 | 77 | 86 | 89 |
| 22 | 106 | 96 | 96 | 89 | 78 | 92 | 96 | 90 | 86 | 68 | 80 | 108 |
| 23 | 101 | 102 | 113 | 78 | 80 | 78 | 84 | 97 | 93 | 75 | 75 | 94 |
| 24 | 97 | 96 | 90 | 90 | 81 | 93 | 90 | 90 | 90 | 77 | 93 | 78 |
| 25 | 76 | 84 | 89 | 83 | 88 | 85 | 76 | 99 | 85 | 67 | 85 | 77 |
| 26 | 89 | 90 | 80 | 79 | 91 | 82 | 93 | 81 | 84 | 73 | 75 | 96 |
| 27 | 87 | 105 | 94 | 85 | 92 | 107 | 83 | 88 | 104 | 84 | 81 | 95 |
| 28 | 89 | 102 | 109 | 85 | 103 | 66 | 76 | 85 | 97 | 82 | 73 | 74 |
| 29 | 95 | 74 | 86 | 84 | 92 | 68 | 94 | 104 | 86 | 83 | 82 | 78 |
| 30 | 91 |  | 87 | 79 | 87 | 87 | 105 | 100 | 77 | 74 | 88 | 74 |
| 31 | 85 |  | 90 |  | 85 |  | 81 | 96 |  | 81 |  | 96 |

Statistical analysis for Ikobe Station wind speeds

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Class |  |  |  |  |  |  |
| 0-0.5 | 0.3 | 126 | 37.8 | -1.4 | 1.96 | 246.96 |
| 0.6-1.0 | 0.8 | 209 | 167.2 | -0.9 | 0.81 | 169.29 |
| 1.1-1.5 | 1.3 | 311 | 404.3 | -0.4 | 0.16 | 49.76 |
| 1.6-2.0 | 1.8 | 293 | 527.4 | 0.1 | 0.01 | 29.3 |
| 2.1-2.5 | 2.3 | 212 | 487.6 | 0.6 | 0.36 | 76.32 |
| 2.6-3.0 | 2.8 | 128 | 358.4 | 1.1 | 1.21 | 154.88 |
| 3.1-3.5 | 3.3 | 55 | 181.5 | 1.6 | 256 | 140.8 |
| 3.6-4.0 | 3.8 | 31 | 117.8 | 2.1 | 4.41 | 136.71 |
| 4.1-4.5 | 4.3 | 14 | 60.2 | 2.6 | 6.76 | 94.64 |
| 4.6-5.0 | 4.8 | 13 | 62.4 | 3.1 | 9.61 | 124.93 |
| 5.1-5.5 | 5.3 | 4 | 21.2 | 3.6 | 12.96 | 51.84 |
| 5.6-6.0 | 5.8 | 0 | 0 | 4.1 | 16.81 | 0 |
| 6.1-6.5 | 6.3 | 1 | 6.3 | 4.6 | 21.16 | 21.16 |
| 6.6-7.0 | 6.8 | 0 | 0 | 5.1 | 26.01 | 0 |
| 7.1-7.5 | 7.3 | 0 | 0 | 5.6 | 31.36 | 0 |
| 7.6-8.0 | 7.8 | 0 | 0 | 6.1 | 37.21 | 0 |
| 8.1-8.5 | 8.3 | 0 | 0 | 6.6 | 43.56 | 0 |
|  | 1397 | | 2432.1 |  |  | 1296.59 |

41 0.9634

Statistical analysis for Kisii Station wind speeds

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Class |  |  |  |  |  |  |
| 0-0.5 | 0.3 | 53 | 15.9 | -2.4 | 5.76 | 305.28 |
| o.6-1.0 | 0.8 | 94 | 75.2 | -1.9 | 3.61 | 339.34 |
| 1.1-1.5 | 1.3 | 150 | 195 | -1.4 | 1.96 | 294 |
| 1.6-2.0 | 1.8 | 226 | 406.8 | -0.9 | 0.81 | 183.06 |
| 2.1-2.5 | 2.3 | 239 | 549.7 | -0.4 | 0.16 | 38.24 |
| 2.6-3.0 | 2.8 | 163 | 456.4 | 0.1 | 0.01 | 1.63 |
| 3.1-3.5 | 3.3 | 138 | 455.4 | 0.6 | 0.36 | 49.68 |
| 3.6-4.0 | 3.8 | 98 | 372.4 | 1.1 | 1.21 | 118.58 |
| 4.1-4.5 | 4.3 | 79 | 339.7 | 1.6 | 2.56 | 202.24 |
| 4.6-5.0 | 4.8 | 67 | 321.6 | 2.1 | 4.41 | 295.47 |
| 5.1-5.5 | 5.3 | 41 | 217.3 | 2.6 | 6.76 | 277.16 |
| 5.6-6.0 | 5.8 | 19 | 110.2 | 3.1 | 9.61 | 182.59 |
| 6.1-6.5 | 6.3 | 17 | 107.1 | 3.6 | 12.96 | 220.32 |
| 6.6-7.0 | 6.8 | 7 | 47.6 | 4.1 | 16.81 | 117.67 |
| 7.1-7.5 | 7.3 | 4 | 29.2 | 4.6 | 21.16 | 84.64 |
| 7.6-8.0 | 7.8 | 1 | 7.8 | 5.1 | 26.01 | 26.01 |
| 8.1-8.5 | 8.3 | 1 | 8.3 | 5.6 | 31.36 | 31.36 |
| AVERAGE | | 1397 | 3715.5 |  |  | 2767.27 |

Statistical analysis for Nyamecheo Station wind speeds

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Class |  |  |  |  |  |  |
| 0-0.5 | 0.3 | 398 | 119.4 | -1.1 | 1.21 | 481.58 |
| o.6-1.0 | 0.8 | 259 | 207.2 | -0.6 | 0.36 | 93.24 |
| 1.1-1.5 | 1.3 | 202 | 262.6 | -0.1 | 0.01 | 2.02 |
| 1.6-2.0 | 1.8 | 166 | 298.8 | 0.4 | 0.16 | 26.56 |
| 2.1-2.5 | 2.3 | 148 | 340.4 | 0.9 | 0.81 | 119.88 |
| 2.6-3.0 | 2.8 | 96 | 268.8 | 1.4 | 1.96 | 188.16 |
| 3.1-3.5 | 3.3 | 62 | 204.6 | 1.9 | 3.61 | 223.82 |
| 3.6-4.0 | 3.8 | 24 | 91.2 | 2.4 | 5.76 | 138.24 |
| 4.1-4.5 | 4.3 | 14 | 60.2 | 2.9 | 8.41 | 117.74 |
| 4.6-5.0 | 4.8 | 16 | 76.8 | 3.4 | 11.56 | 184.96 |
| 5.1-5.5 | 5.3 | 9 | 47.7 | 3.9 | 15.21 | 136.89 |
| 5.6-6.0 | 5.8 | 2 | 11.6 | 4.4 | 19.36 | 38.72 |
| 6.1-6.5 | 6.3 | 0 | 0 | 4.9 | 24.01 | 0 |
| 6.6-7.0 | 6.8 | 0 | 0 | 5.4 | 29.16 | 0 |
| 7.1-7.5 | 7.3 | 1 | 7.3 | 5.9 | 34.81 | 34.81 |
| 7.6-8.0 | 7.8 | 0 | 0 | 6.4 | 40.96 | 0 |
| 8.1-8.5 | 8.3 | 0 | 0 | 6.9 | 47.61 | 0 |
|  |  | 1397 | 1996.6 |  |  | 1786.62 |

09 41923

Weibull and Rayleigh probability for Ikobe wind speeds

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Class | Mid point | F(v) Wei | F(v) Rei | CUM WEIBULL | CUM RAYLEIGH |
| 0.0-1.0 | 0.5 | 0.2336 | 0.2429 | 0.2336 | 0.2429 |
| 1.1-2.0 | 1.5 | 0.4051 | 0.4339 | 0.6387 | 0.6768 |
| 2.1-3.0 | 2.5 | 0.2515 | 0.2565 | 0.8902 | 0.9333 |
| 3.1-4.0 | 3.5 | 0.0860 | 0.0759 | 0.9762 | 0.9892 |
| 4.1-5.0 | 4.5 | 0.0180 | 0.0123 | 0.9942 | 0.9993 |
| 5.1-6.0 | 5.5 | 0.0024 | 0.0011 | 0.9966 | 0.99941 |
| 6.1-7.0 | 6.5 | 0.00021096 | 0.00005928 | 0.99681096 | 0.99946928 |
| 7.1-8.0 | 7.5 | 0.00001234 | 0.0000018182 | 0.9968233 | 0.9994710982 |
| 8.1-9.0 | 8.5 | 0.000000487 | 0.0000000326 | 0.996823787 | 0.9994711308 |
| 9.1-10.0 | 9.5 | 0.0000000131 | 0.0000000003437 | 0.9968238001 | 0.9994743 |

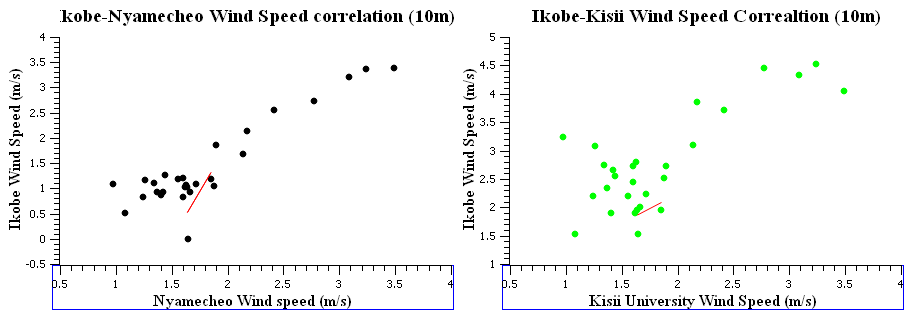
Weibull and Rayleigh probability for KSU wind speeds

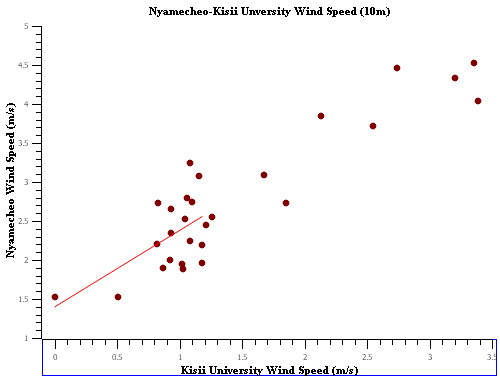
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| class | Mid point | F(v) weibull | F(v) Rei | CUM WEIBULL | CUM RAYLEIGH |
| 0.0-1.0 | 0.5 | 0.1109 | 0.1080 | 0.1109 | 0.1080 |
| 1.1-2.0 | 1.5 | 0.2602 | 0.2595 | 0.3711 | 0.3675 |
| 2.1-3.0 | 2.5 | 0.2756 | 0.2774 | 0.6467 | 0.6449 |
| 3.1-4.0 | 3.5 | 0.1980 | 0.1995 | 0.8447 | 0.8444 |
| 4.1-5.0 | 4.5 | 0.1054 | 0.1055 | 0.9501 | 0.9499 |
| 5.1-6.0 | 5.5 | 0.0431 | 0.0425 | 0.9932 | 0.9924 |
| 6.1-7.0 | 6.5 | 0.0137 | 0.0132 | 0.9972 | 0.99853 |
| 7.1-8.0 | 7.5 | 0.0035 | 0.0032 | 0.9997 | 0.99885 |
| 8.1-9.0 | 8.5 | 0.000688 | 0.0006193 | 0.99996 | 0.999538 |
| 9.1-10.0 | 9.5 | 0.0001094 | 0.0000938 | 0.99997094 | 0.9996318 |

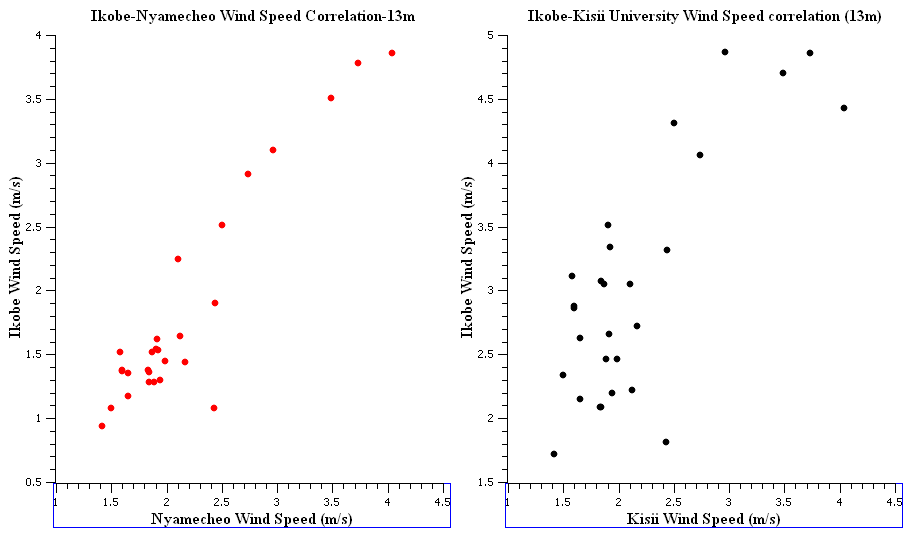
Weibull and Rayleigh probabilities for Ikobe wind speeds

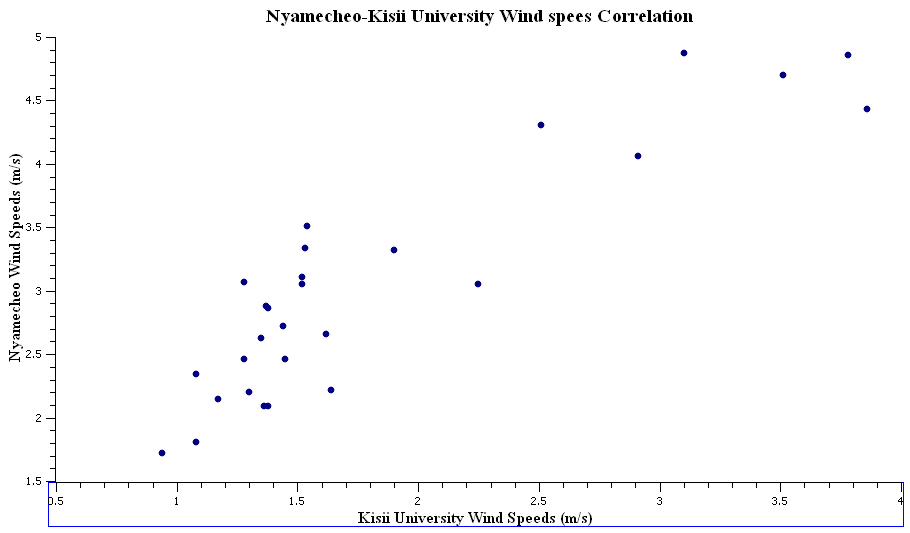
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Class | Mid Point | F(v) | F(v) Ray | CUM WEIBULL | CUM RAYLEIGH |
| 0.0-1.0 | 0.5 | 0.2162 | 0.3494 | 0.2162 | 0.3494 |
| 1.1-2.0 | 1.5 | 0.3065 | 0.4856 | 0.5227 | 0.835 |
| 2.1-3.0 | 2.5 | 0.2084 | 0.1738 | 0.7311 | 0.9888 |
| 3.1-4.0 | 3.5 | 0.1074 | 0.0242 | 0.8385 | 0.9988 |
| 4.1-5.0 | 4.5 | 0.0469 | 0.0014 | 0.8854 | 0.9998 |
| 5.1-6.0 | 5.5 | 0.0182 | 0.0000375 | 0.9036 | 0.9998375 |
| 6.1-7.0 | 6.5 | 0.0065 | 0.0000004382 | 0.9101 | 0.9998379382 |
| 7.1-8.0 | 7.5 | 0.0021 | 0.000000002319 | 0.9122 | 0.99998379475586 |
| 8.1-9.0 | 8.5 | 0.000654 | 0.000000000005586 | 0.912854 | 0.99998379475592 |
| 9.1-10.0 | 9.5 | 0.0001905 | 0.000000000000006149 | 0.9130445 | 0.99998379475598149 |

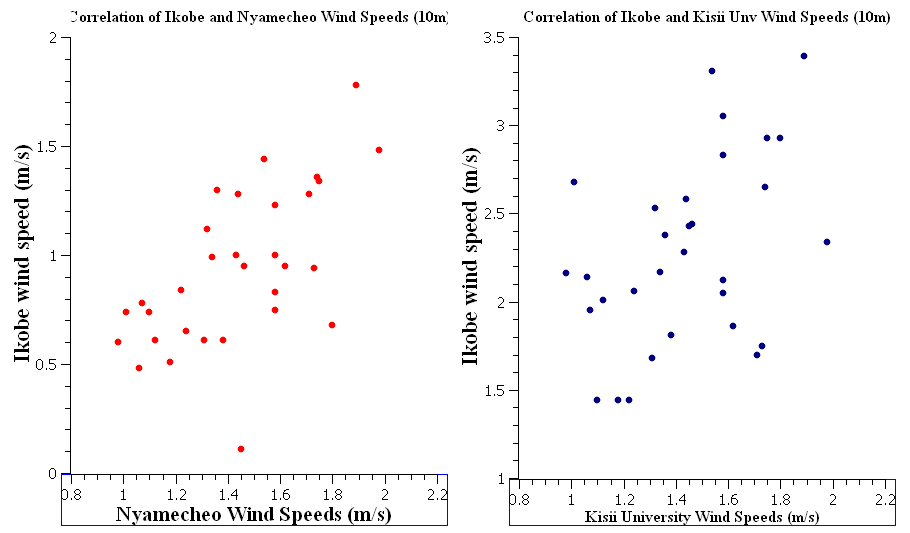
**Correlation diagrams**

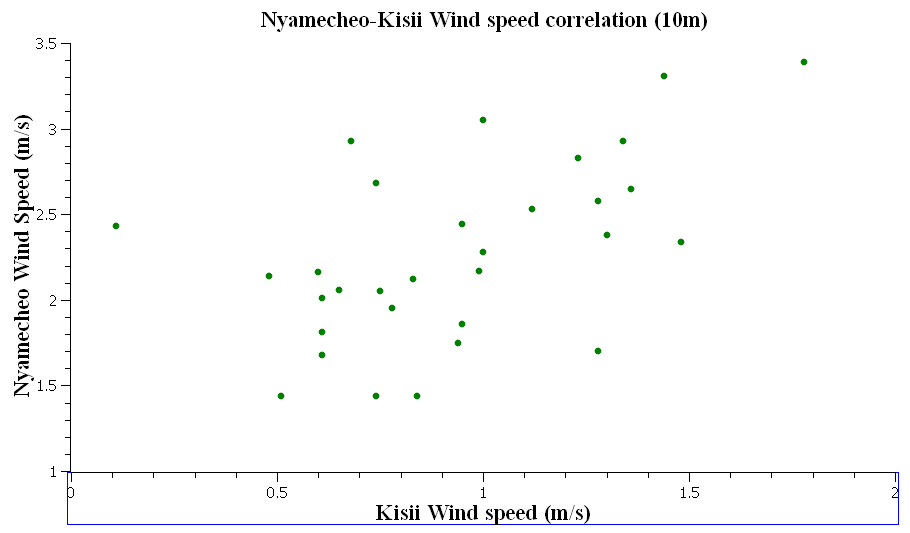
Ikobe-Nyamecheo/Ikobe-Kisii wind speed correlation at 10m

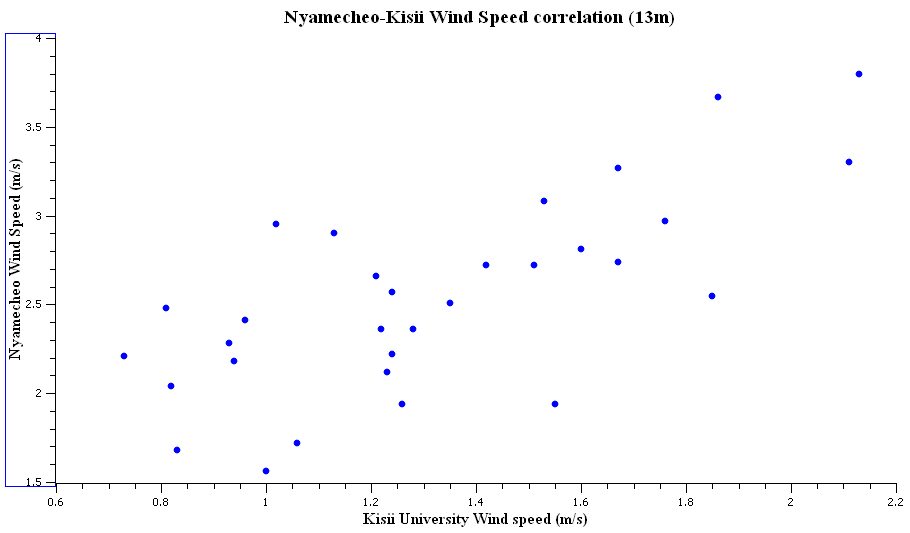
Nyamecheo-Kisii wind speed correlation at 10m

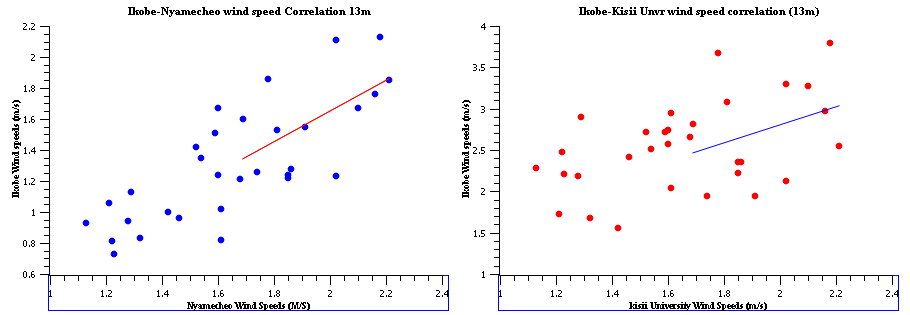
 Ikobe-Nyamecheo/Ikobe-Kisii wind speed correlation at 13m

Nyamecheo-Kisii wind speed correlation at 13m

 Ikobe-Nyamecheo/Ikobe-Kisii wind speed correlation at 10m

 Nyamecheo-Kisii wind speed correlation at 10m

 Nyamecheo-Kisii wind speed correlation at 13m

Ikobe-Nyamecheo/Ikobe-Kisii wind speed correlation at 13m.

Directional analysis for 2004-2014

|  |  |  |  |
| --- | --- | --- | --- |
| DIRECTION | RANGE | FRREQUENCY | % |
| N |  | 78 | 2.23 |
| NNE |  | 260 | 7.53 |
| NE |  | 512 | 14.83 |
| ENE |  | 864 | 25.02 |
| E |  | 938 | 27.16 |
| ESE |  | 546 | 15.81 |
| SE |  | 196 | 5.68 |
| SSE |  | 48 | 1.39 |
| S |  | 10 | 0.29 |
| SSW |  | 1 | 0.029 |
| SW |  | 0 | 0 |
| WSW |  | 0 | 0 |
| W |  | 0 | 0 |
| WNW |  | 0 | 0 |
| NW |  | 0 | 0 |
| NNW |  | 0 | 0 |
|  |  | 3453 | 100 |

Directional analysis for IKOBE (10M)

|  |  |  |  |
| --- | --- | --- | --- |
| DIRECTION | RANGE | FRREQUENCY | % |
| N |  | 605 | 8.94 |
| NNE |  | 567 | 8.38 |
| NE |  | 477 | 7.05 |
| ENE |  | 551 | 8.14 |
| E |  | 860 | 12.71 |
| ESE |  | 436 | 6.44 |
| SE |  | 792 | 11.71 |
| SSE |  | 519 | 7.67 |
| S |  | 488 | 7.21 |
| SSW |  | 273 | 4.03 |
| SW |  | 164 | 2.42 |
| WSW |  | 473 | 7.00 |
| W |  | 179 | 2.65 |
| WNW |  | 147 | 2.17 |
| NW |  | 132 | 1.95 |
| NNW |  | 103 | 1.52 |
|  |  | 6766 | 100 |

Directional analysis for IKOBE (13M)

|  |  |  |  |
| --- | --- | --- | --- |
| DIRECTION | RANGE | FRREQUENCY | % |
| N |  | 148 | 2.11 |
| NNE |  | 604 | 8.63 |
| NE |  | 564 | 8.06 |
| ENE |  | 777 | 11.10 |
| E |  | 960 | 13.71 |
| ESE |  | 573 | 8.18 |
| SE |  | 671 | 9.58 |
| SSE |  | 711 | 10.16 |
| S |  | 432 | 6.17 |
| SSW |  | 266 | 3.80 |
| SW |  | 151 | 2.16 |
| WSW |  | 438 | 6.26 |
| W |  | 284 | 4.06 |
| WNW |  | 235 | 3.36 |
| NW |  | 129 | 1.84 |
| NNW |  | 58 | 0.82 |
|  |  | 7001 | 100 |

Directional analysis for Nyamecheo (10M)

|  |  |  |  |
| --- | --- | --- | --- |
| DIRECTION | RANGE | FRREQUENCY | % |
| N |  | 299 | 4.55 |
| NNE |  | 482 | 7.33 |
| NE |  | 451 | 6.86 |
| ENE |  | 594 | 9.04 |
| E |  | 967 | 14.71 |
| ESE |  | 256 | 3.90 |
| SE |  | 351 | 5.34 |
| SSE |  | 395 | 6.01 |
| S |  | 449 | 6.83 |
| SSW |  | 513 | 7.81 |
| SW |  | 421 | 6.41 |
| WSW |  | 807 | 12.28 |
| W |  | 166 | 2.53 |
| WNW |  | 144 | 2.19 |
| NW |  | 157 | 2.39 |
| NNW |  | 120 | 1.83 |
|  |  | 6572 | 100 |

Directional analysis for Nyamecheo (13M)

|  |  |  |  |
| --- | --- | --- | --- |
| DIRECTION | RANGE | FRREQUENCY | % |
| N |  | 711 | 10.13 |
| NNE |  | 211 | 3.01 |
| NE |  | 367 | 5.23 |
| ENE |  | 802 | 11.43 |
| E |  | 1524 | 21.72 |
| ESE |  | 511 | 7.28 |
| SE |  | 373 | 5.32 |
| SSE |  | 356 | 5.07 |
| S |  | 247 | 3.52 |
| SSW |  | 248 | 3.53 |
| SW |  | 235 | 3.35 |
| WSW |  | 738 | 10.52 |
| W |  | 230 | 3.28 |
| WNW |  | 65 | 0.93 |
| NW |  | 135 | 1.92 |
| NNW |  | 225 | 3.21 |
|  |  | 6978 | 100 |

Directional analysis for Kisii University (10M)

|  |  |  |  |
| --- | --- | --- | --- |
| DIRECTION | RANGE | FRREQUENCY | % |
| N |  | 236 | 3.36 |
| NNE |  | 184 | 2.62 |
| NE |  | 118 | 1.68 |
| ENE |  | 200 | 2.85 |
| E |  | 1687 | 24.02 |
| ESE |  | 1150 | 16.37 |
| SE |  | 1341 | 19.10 |
| SSE |  | 529 | 7.53 |
| S |  | 205 | 2.92 |
| SSW |  | 182 | 2.59 |
| SW |  | 81 | 1.15 |
| WSW |  | 220 | 3.13 |
| W |  | 158 | 2.25 |
| WNW |  | 279 | 3.97 |
| NW |  | 282 | 4.01 |
| NNW |  | 172 | 2.45 |
|  |  | 7024 | 100 |

Directional analysis for Kisii University (13M)

|  |  |  |  |
| --- | --- | --- | --- |
| DIRECTION | RANGE | FRREQUENCY | % |
| N |  | 245 | 3.49 |
| NNE |  | 172 | 2.45 |
| NE |  | 132 | 1.88 |
| ENE |  | 221 | 3.15 |
| E |  | 1833 | 26.13 |
| ESE |  | 1092 | 15.56 |
| SE |  | 1149 | 16.38 |
| SSE |  | 404 | 5.76 |
| S |  | 163 | 2.32 |
| SSW |  | 142 | 2.02 |
| SW |  | 119 | 1.70 |
| WSW |  | 278 | 3.96 |
| W |  | 210 | 2.99 |
| WNW |  | 315 | 4.49 |
| NW |  | 363 | 5.17 |
| NNW |  | 178 | 2.54 |
|  |  | 7016 | 100 |

**ACURITE weather stations at Ikobe secondary**

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**ACURITE weather stations at NYAMECHEO secondary**

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**ACURITE display boards at St. Alexander Nyamecheo secondary school**

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