**Appendix S1.** Scores allocated to three categories based on personnel field observation, each weighted according to how DHM perceived a variable to influence observability. Conditions were optimal with a clear sky (score 1 = 100), cool temperatures (score 2 = 100) and calm wind conditions (score 3 = 100). For other weather conditions, observability was reduced and we chose the scores according to our subjective judgement of how much it affected our ability to detect birds. For example, observability was similarly reduced in strong winds as in hot weather, etc. We then averaged the three scores to get a single value for observability.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **score 1** | **score 2** | | **score 3** | | **sky** | | **temp** | | **wind** | | **% observability** | |
| 100 | 100 | | 100 | | clear | | cool | | calm | | 100 | |
| 100 | 100 | | 80 | | clear | | cool | | moderate | | 93.33 | |
| 100 | 100 | | 60 | | clear | | cold | | strong | | 86.67 | |
| 100 | 50 | | 80 | | clear | | cold | | moderate | | 76.67 | |
| 100 | 50 | | 60 | | clear | | cold | | strong | | 70 | |
| 100 | 60 | | 100 | | clear | | hot | | calm | | 86.67 | |
| 100 | 60 | | 80 | | clear | | hot | | moderate | | 80 | |
| 100 | 60 | | 60 | | clear | | hot | | strong | | 73.33 | |
| 70 | 100 | | 100 | | cloudy | | cool | | calm | | 90 | |
| 70 | 50 | | 80 | | cloudy | | cold | | moderate | | 66.67 | |
| 70 | 50 | | 60 | | cloudy | | cold | | strong | | 60 | |
| 70 | 100 | | 80 | | cloudy | | cool | | moderate | | 83.33 | |
| 70 | 100 | | 60 | | cloudy | | cool | | strong | | 76.67 | |
| 70 | 70 | | 100 | | cloudy | | warm | | calm | | 80 | |
| 50 | 100 | | 100 | | misty | | cool | | calm | | 83.33 | |
| 50 | 100 | | 80 | | misty | | cool | | moderate | | 76.67 | |
| 50 | 100 | | 60 | | misty | | cool | | strong | | 70 | |
| 80 | 50 | | 80 | | partly cloudy | | cold | | moderate | | 70 | |
| 80 | 50 | | 60 | | partly cloudy | | cold | | strong | | 63.33 | |
| 80 | 100 | | 100 | | partly cloudy | | cool | | calm | | 93.33 | |
| 80 | 100 | | 80 | | partly cloudy | | cool | | moderate | | 86.67 | |
| 80 | 100 | | 60 | | partly cloudy | | cool | | strong | | 80 | |
| 80 | 60 | | 100 | | partly cloudy | | hot | | calm | | 80 | |
| 80 | 60 | | 80 | | partly cloudy | | hot | | moderate | | 73.33 | |
| 80 | 60 | | 60 | | partly cloudy | | hot | | strong | | 66.67 | |
| 80 | 70 | | 100 | | partly cloudy | | warm | | calm | | 83.33 | |
|  | | |  | |  | |  | |  | |  | |  | |