

Parallel measurement combination strategy

M3~PMC94

Parallel measurement combination summary

Output time series

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Signal Name | Signal Height | Valid data [years] | Mean | Start Date | End Date | Date Last Calculated |
| PMC94 | 94m | 1.2314 | 7.3926 | 31/10/2010 00:00 | 12/02/2012 20:50 | 11/07/2022 11:21 |

Input time series to combine

|  |  |  |
| --- | --- | --- |
| Wind speed one | Wind speed two | Direction measurement |
| M3~ws94S~Mean | M3~ws94NW~Mean | M3~D94\_Recon |

Parallel measurement combination periods

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Start date | End date | Exclusion width one | Exclusion width two | Boom orientation one | Boom orientation two |
| 31/10/2010 00:00:00 | 28/04/2012 06:20:00 | 60 | 60 | 180 | 315 |

|  |  |
| --- | --- |
| Calculation settings |  |
| Pre-synthesise and splice wind speeds before directional splice | True |
| Force through origin | True |
| Iterate to site low speed cutoff | True |
| Ref low speed cut off | 3 |
| Direction bin count | 36 |
| Correlation fitting method | PCA |

Parallel measurement combination periods

Parallel measurement combination period 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Start date | End date | Exclusion width one | Exclusion width two | Boom orientation one | Boom orientation two |
| 31/10/2010 00:00:00 | 28/04/2012 06:20:00 | 60 | 60 | 180 | 315 |

Data was pre-synthesised and spliced between the two wind speed measurements to fill gaps due to missing records.

|  |  |  |
| --- | --- | --- |
|  | Number of records | Proportion of output |
| Speed series 1 and 2 both available | 64766 | 100.00% |
| Speed series 1 and 2 and direction all available | 64342 | 99.35% |
|  |  |  |
| Only speed series 1 used in output | 4940 | 7.63% |
| Only speed series 2 used in output | 11315 | 17.47% |
| Average of series 1 and 2 used in output | 48511 | 74.90% |
| Overall output | 64766 | 100.00% |

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| --- |
| Plot of speed ratios where both speeds are greater than plot low speed cut-off |
|  |