

renewable energy renewable energy



Launching a long-term reference initiative

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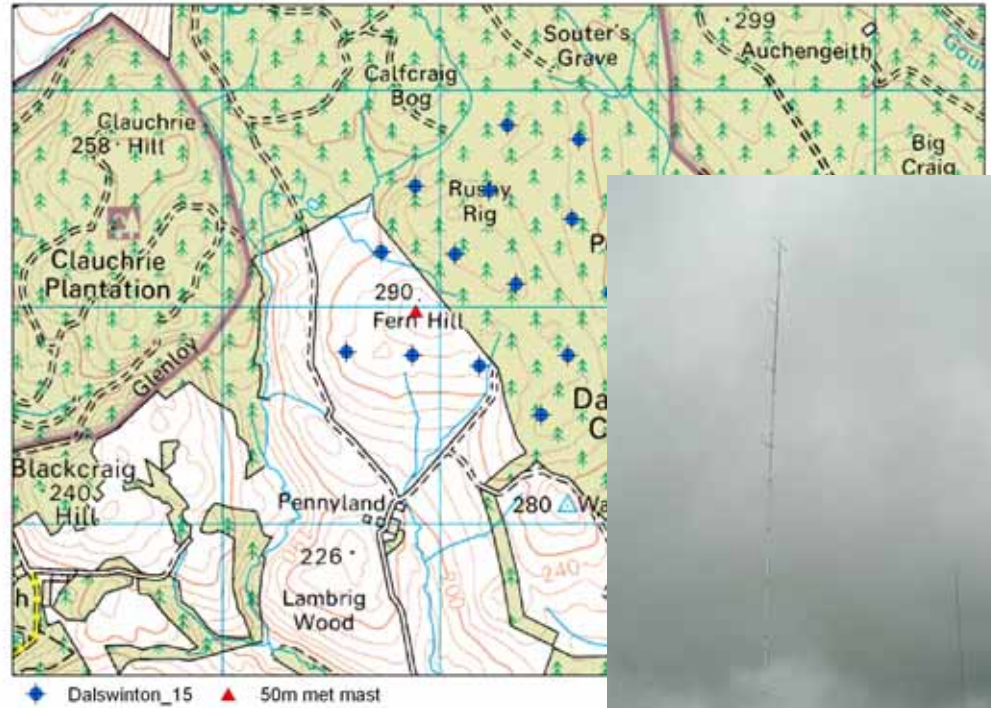
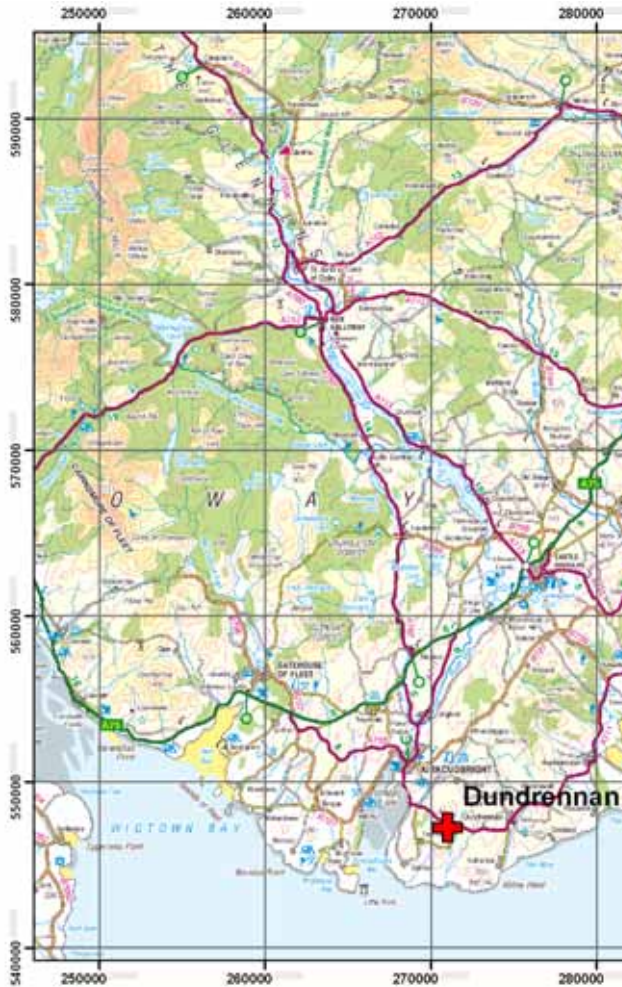
Airtricity
The National Programme

Background

- Most of us have considered long-term adjustments
- This is a headache for most of us
- We are better off than most



Typical long-term adjustment

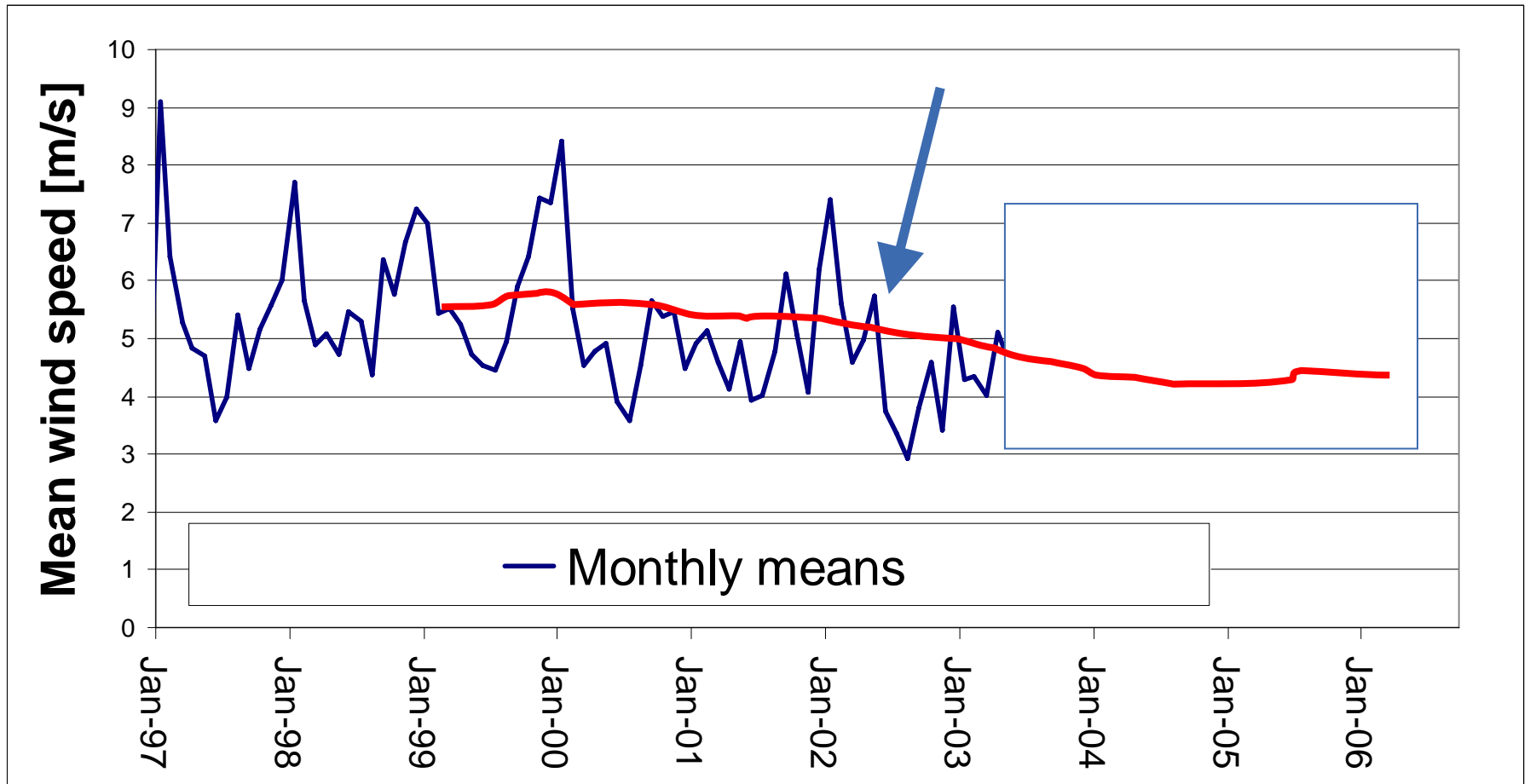


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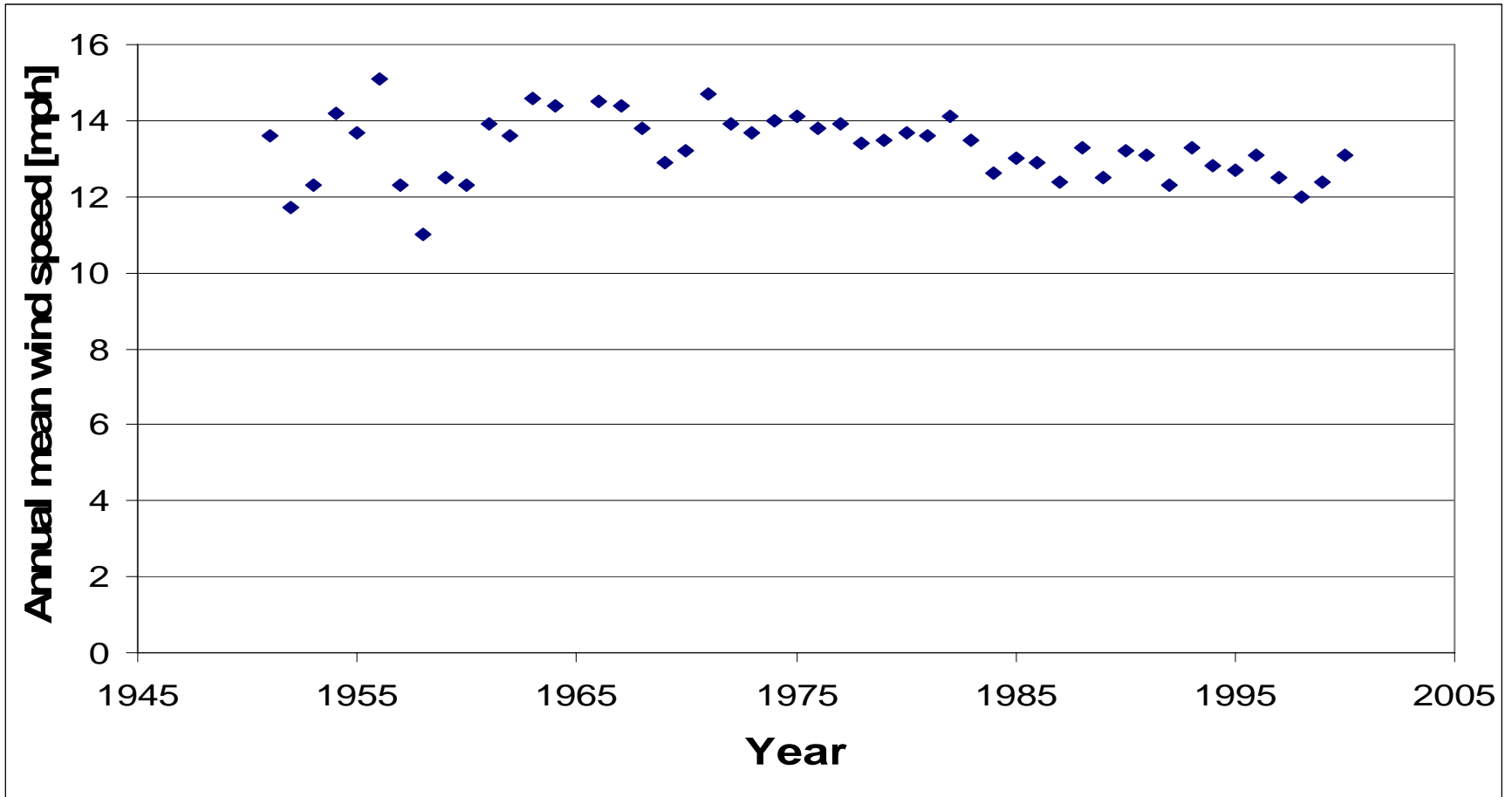
Significant Risks

- Long-term consistency
- Correlation not perfect
 - Effects at least all turbines on site
 - Many years to be sure
 - Nothing that can be done about it

Long-term consistency



Long-term consistency



Mitigation

- Check and triple check
- Be wary of large adjustments
- Diversify – don't rely on any one source of reference
 - Measure on site longer
 - Establish own network of references
 - Collaborate as an industry to set up a network of references - several for each site

Airtricity long-term references



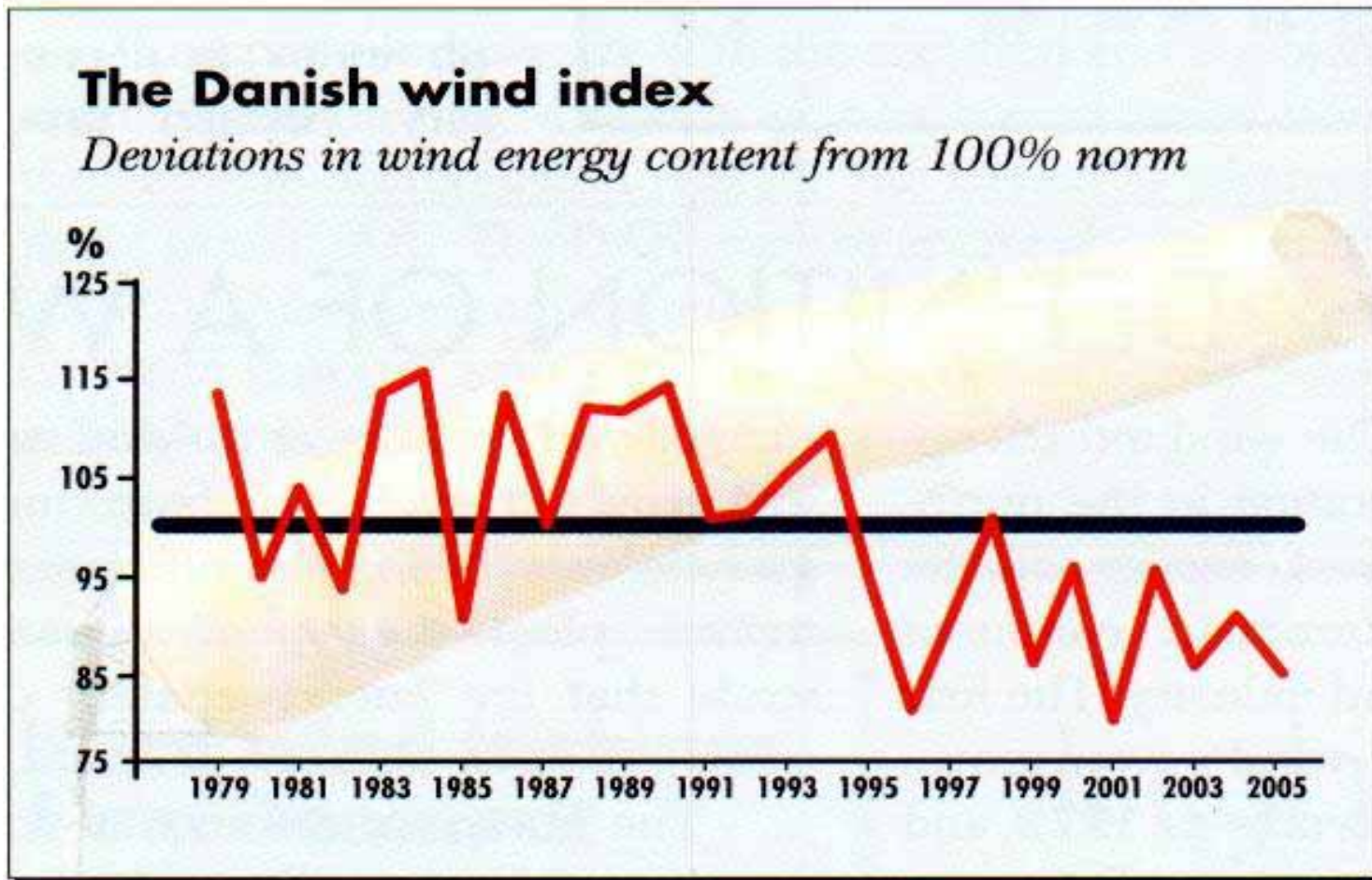
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Collaboration

- Common challenge
- Opportunity to spread risk

Propose that we collaborate and share certain wind / production data in some format

Other examples



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Data requirements

- Historically consistent
- And consistent going forward
 - Maintained
 - No change in exposure
- Wind data or production / availability data



Why not?

| | |
|---------------------------------------|---|
| Others will know my site's wind speed | <ul style="list-style-type: none">• Make anonymous• Through an independent 3rd party |
| What do I get out of it? | <ul style="list-style-type: none">• Has anyone fully closed off this risk?• Diversify risk• Restrict distribution to contributors |
| It is not my data | <ul style="list-style-type: none">• Sponsor dialogue |

Technical challenges

- Keeping consistency
- Maintaining measurements
- Maximising data coverage

THIS IS WHAT
WE DO

Conclusions

- Opportunity to produce better long-term estimates
- None of us want
 - Under performing wind farms
 - Lingering risk
- Airtricity are prepared to contribute
- Interested in collaborating or supporting?

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