



# Main Bearing Monitoring

How VSB took action in the main bearing with minimum impact

Reading Time: 3 Minutes

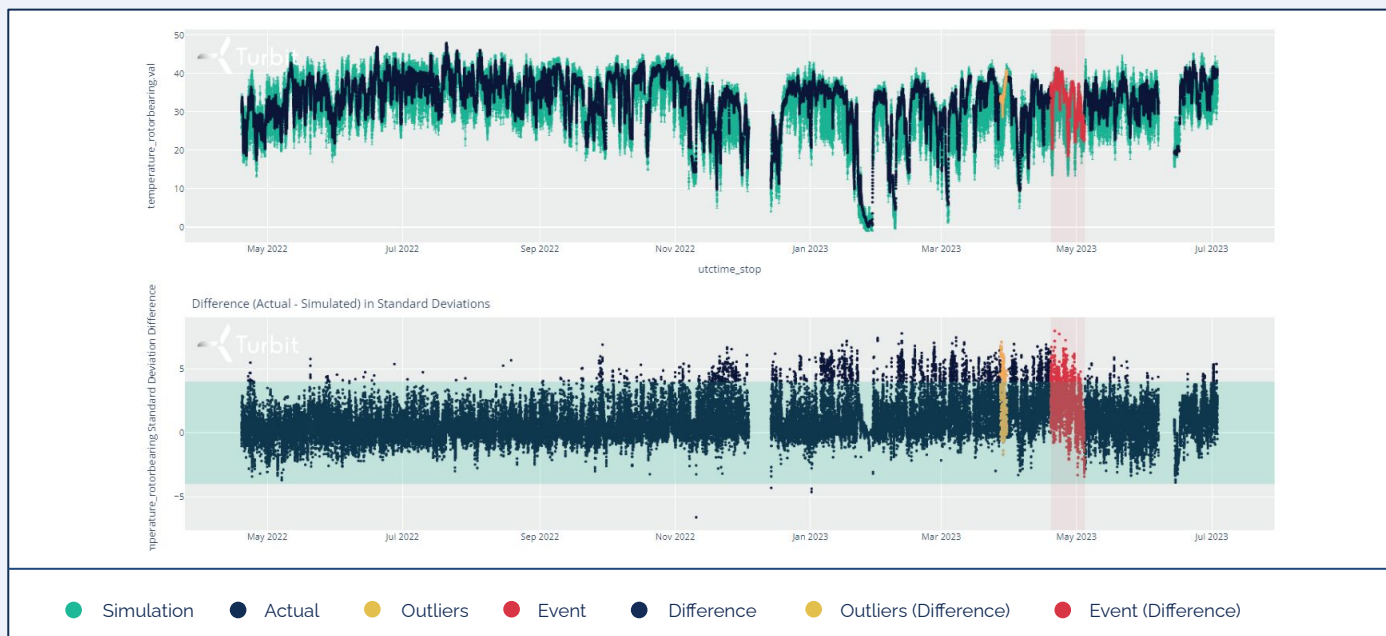
**”** *Through the Turbit software we were able to implement new processes and routines to improve the performance of the wind farms.*

Eric Schacht - VSB

In this customer success story, we showcase the remarkable achievements of VSB and OEM, addressing a critical issue in the main bearing within one month.

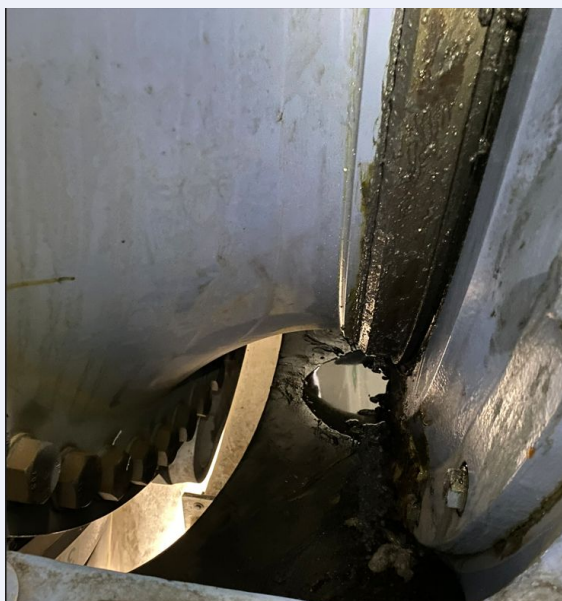
## 1. Analyzing the issue

Upon detecting a change in the normal behavior of the wind turbine in April 2023, Turbit's monitoring system promptly identified an anomaly. Through our analysis, a consistent upward trend in the main bearing temperatures was observed, especially noticeable since spring/summer 2022. This trend raised concerns as it indicated a potential damage in the main bearing.



## 2. Collaborative Approach

Recognizing the importance of collaboration, discussions were initiated. VSB informed Turbit about a recent inspection where black grease was discovered in the turbine main bearing without a clear explanation. This physical evidence, coupled with the temperature trends, indicated an underlying technical issue that required immediate attention. Simultaneously, VSB communicated the issue to the original equipment manufacturer (OEM) responsible for the wind turbine.



### 3. Engagement with the OEM

With the physical evidence and temperature data in hand, the collaboration with the OEM was satisfactory. Within a week, the OEM responded, expressing their commitment to resolving the issue promptly. They devised a plan to retrieve a sample of the grease for thorough analysis and to grease the main bearing as soon as possible

### 4. Solution implementation

The greasing operation performed on May 3rd proved instrumental in mitigating the issue. The subsequent decrease in temperatures confirmed the positive impact of the greasing procedure. Additionally, to ensure continuous lubrication, the OEM installed additional grease pumpings in the wind turbine.



Since the implementation of the solution, the wind turbine has been operating within expected temperature ranges. This achievement is a testament to the collaborative efforts between VSB and the OEM. Nevertheless, monitoring continues to identify any potential damage caused by prolonged exposure to higher temperatures than optimal.

Through constructive collaboration, the overheating issue was successfully addressed. Turbit's data-driven analysis, combined with the expertise of VSB, allowed for efficient problem-solving.

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