



AudioBat®

by Biodiv-Wind

Real-Time Dynamic Detection vs. Preventive Curtailment

**Use Case**

**Date of issue : March 2026**



bpi**france**



 **GOVERNEMENT**  
*Liberté  
Égalité  
Fraternité*

**i-Nov**

## WIND TURBINE

Location

Britany, FRANCE

Wind Turbine status

In operation

# Wind Turbine

1 x Senvion MM92, 2.05 MW

Dimensions

Mast height: 80m / Rotor Diameter: 92,5 m



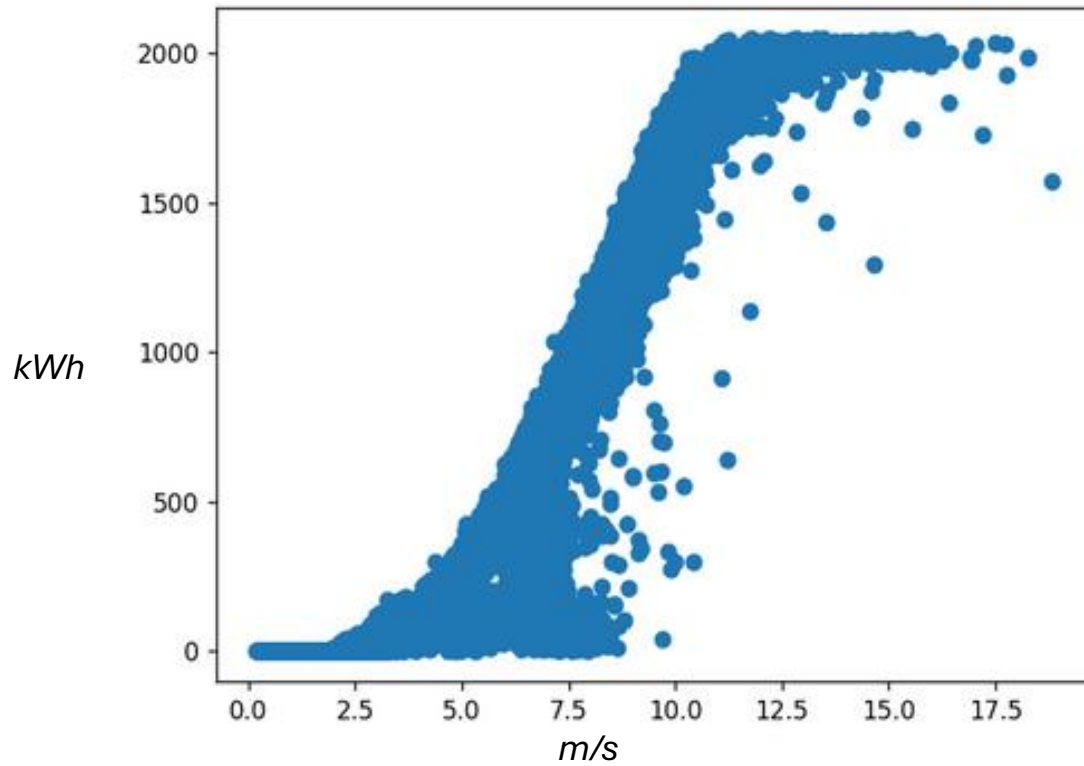
## PREVENTIVE CURTAILMENT

Period	7 months (Apr. 12th to Nov. 15th)
T°C	>8°C
Wind velocity	<7m/s
Rain	No rain
Time	1h before sunset & 1h after sunrise
Species	All bat species
Threshold	Weather condition
Stop duration	Depends on weather condition

## DYNAMIC CURTAILMENT

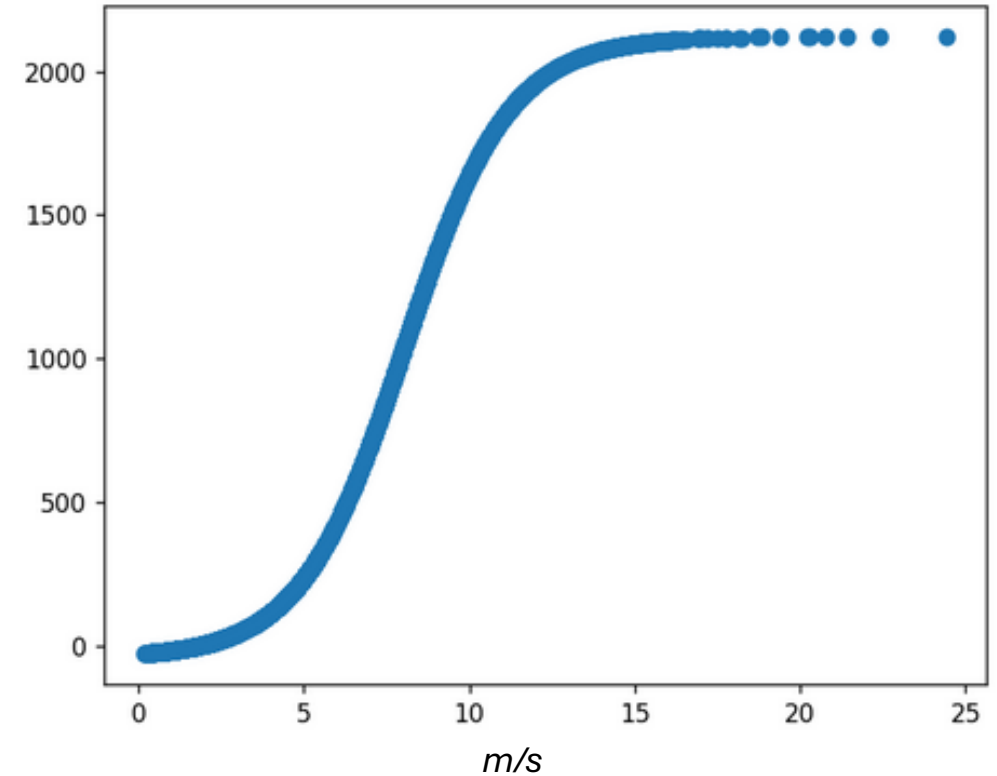
Period	7 months (Apr. 12th to Nov. 15th)
T°C	All T°C
Wind velocity	All wind velocity
Rain	With or without rain
Time	1h before sunset & 1h after sunrise
Species	All bat species
Threshold	Stop turbine for each bat acoustic detection
Stop duration	5 min curtailment + 5 min to restart turbine

**Study Period:** April 12, 2023 – November 15, 2023 (7 months, from dusk to dawn)



**Actual Production at night (SCADA records)**

→ kWh



**Reconstructed Maximal Power Curve:  
1,726,698 kWh**

Shutdown Duration due to preventive curtailment: 2 645 hours

Maximal production – Production loss  
= 1 235 516 kWh/Wind turbine

Bat activity coverage rate: 84%



Production Loss  
**28,4%**



491 182 kWh  
/Wind turbine

Financial Loss  
(50€/MWh)



24 559 €  
/Wind turbine

Shutdown Duration with dynamic curtailment: 280 hours

Maximal production – Production loss  
= 1 698 807 kWh/Wind turbine

Bat activity coverage rate: 100%



Production Loss  
**1,60%**



**27 891 kWh**  
**/Wind turbine**

Financial Loss  
(50€/MWh)



**1 395 €**  
**/Wind turbine**

On a single Wind turbine

### Preventive Bat Curtailment

Shutdown: 2 645 hours

Maximal production – Production loss : 1 235 516 kWh

Production LOSS = 28,40%\*\*

**Financial  
LOSS  
(50€/MWh)  
24 559 €**

Bat activity coverage rate: **84%**

### AudioBat Dynamic Curtailment

Shutdown: 280 hours

Maximal production – Production loss : 1 698 807 kWh

Production LOSS = 1,60%\*\*

**Financial  
LOSS  
(50€/MWh)  
1 395 €**

Bat activity coverage rate: **100%**

## Interested in maximizing wind farm production while protecting biodiversity?

Our team will be happy to provide you with more information about the performance of the AudioBat system and how it can be tailored to your site.

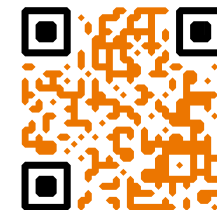
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 [www.biodiv-wind.com](http://www.biodiv-wind.com)

**Smart monitoring. Real-time protection.  
No compromise between energy production and conservation !**



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