

ESP32 Sensor Data Dashboard

Last Refresh Data
3 Jan 2026, 14:45:35

Select date range ▾

Willkommen!

Current Value Overview

Temperature (°C)

29.3

Humidity (%)

58.88

Pressure (atm)

0.9986

Distance (cm)

3.27

Latest Forecast Overview

Temperature (°C)

27.83

Humidity (%)

83.25

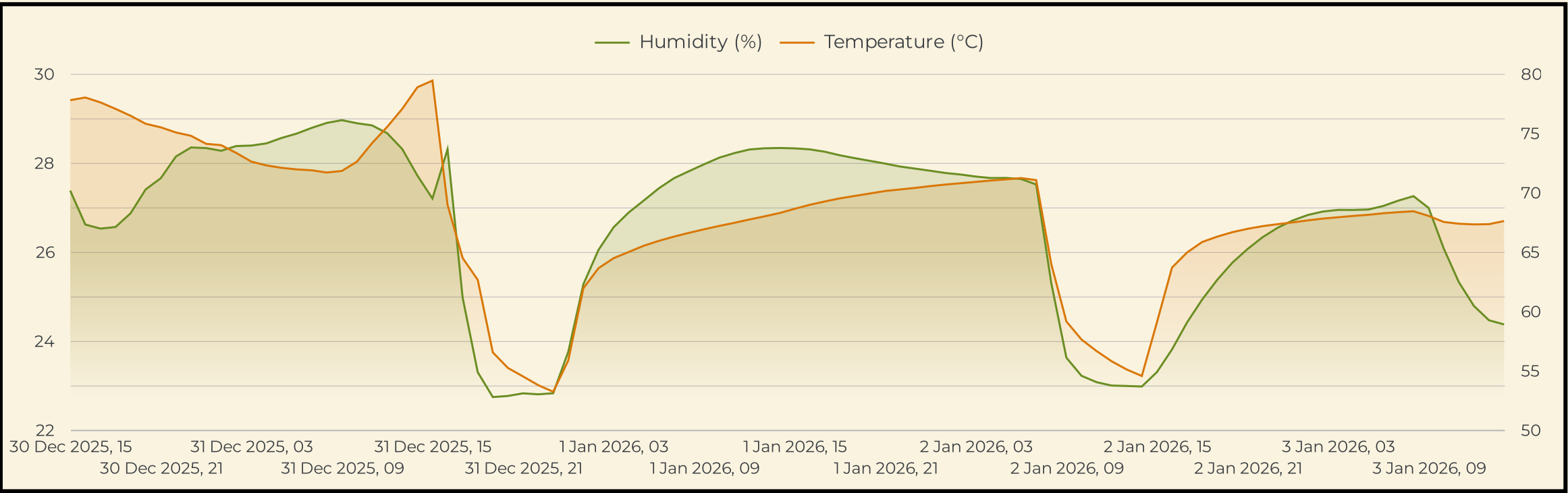
Pressure (atm)

1.01

Distance (cm)

2.95

Humidity (%) and Temperature (°C) Dual Line Chart



Navigation Button

Temperature (°C)

Humidity (%)

Pressure (atm)

Distance (cm)

AI Summary

ESP32 Sensor Data Dashboard

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Temperature (°C) Data Scorecard

Current Value

26.69

Max Value

29.85

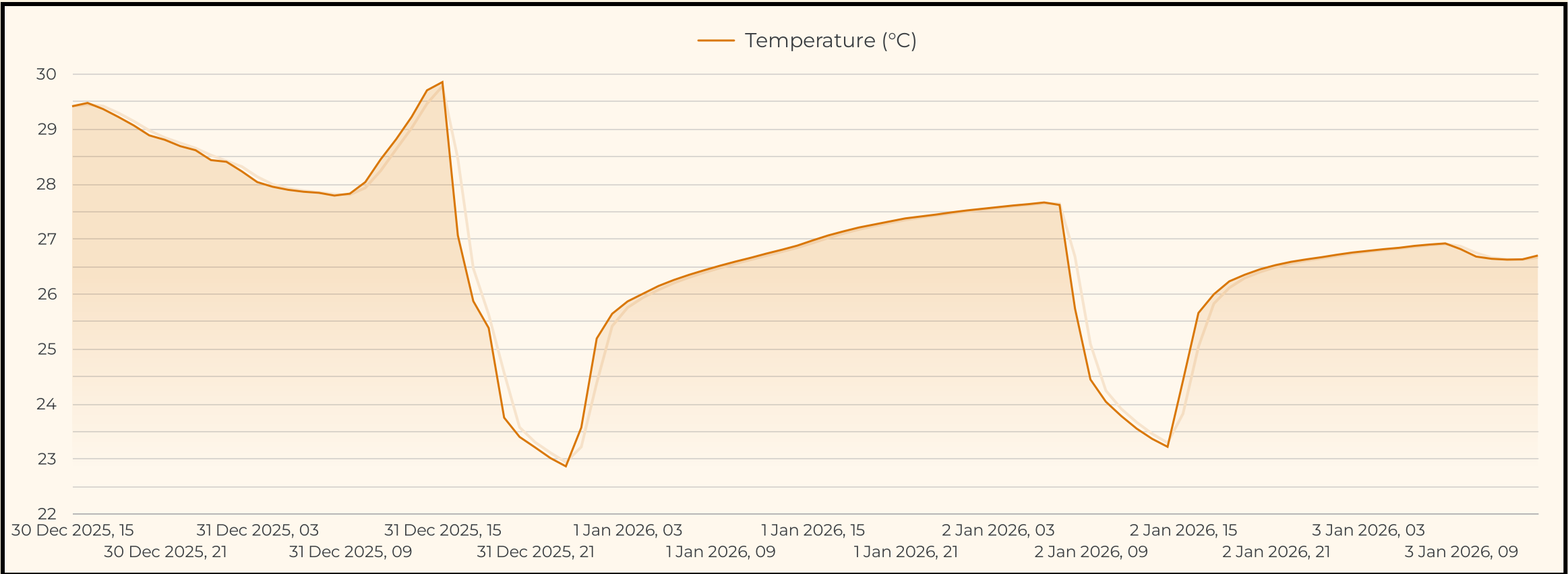
Min Value

22.83

Daily Average

26.79

Temperature (°C) Time Series



Latest Temperature (°C) Forecast Data Scorecard

Data Forecast

27.83

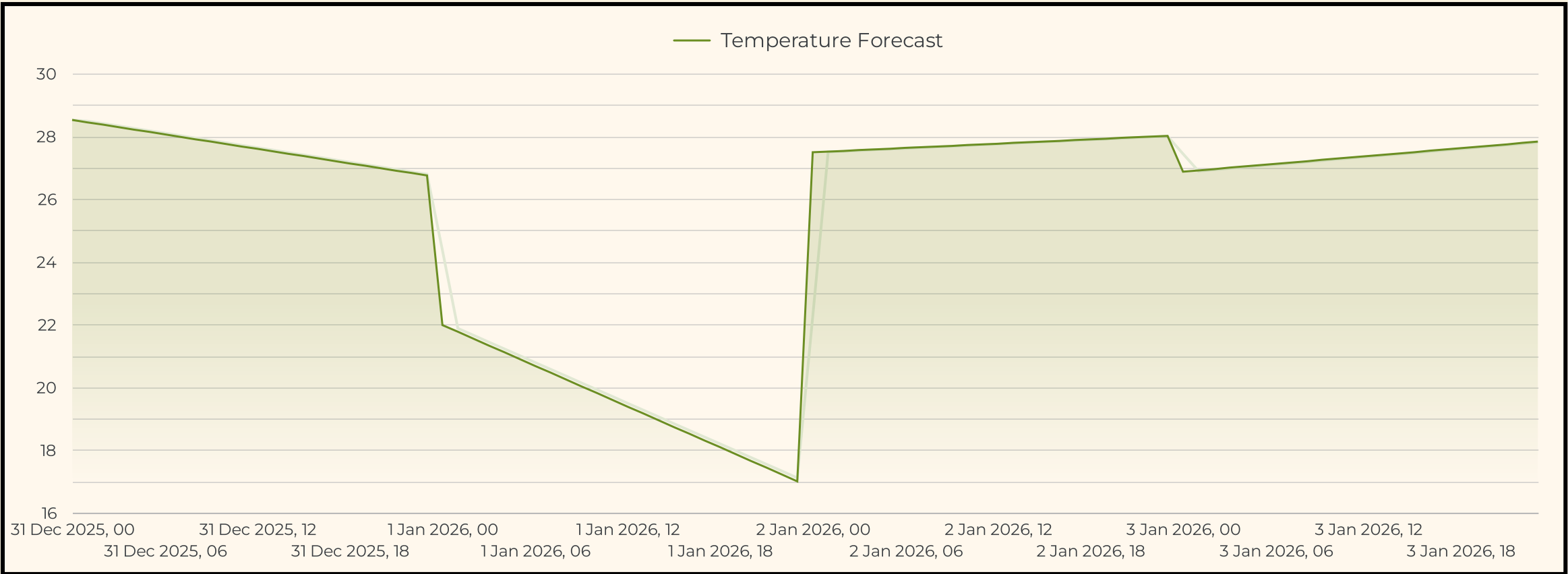
Upper Bound

30.61

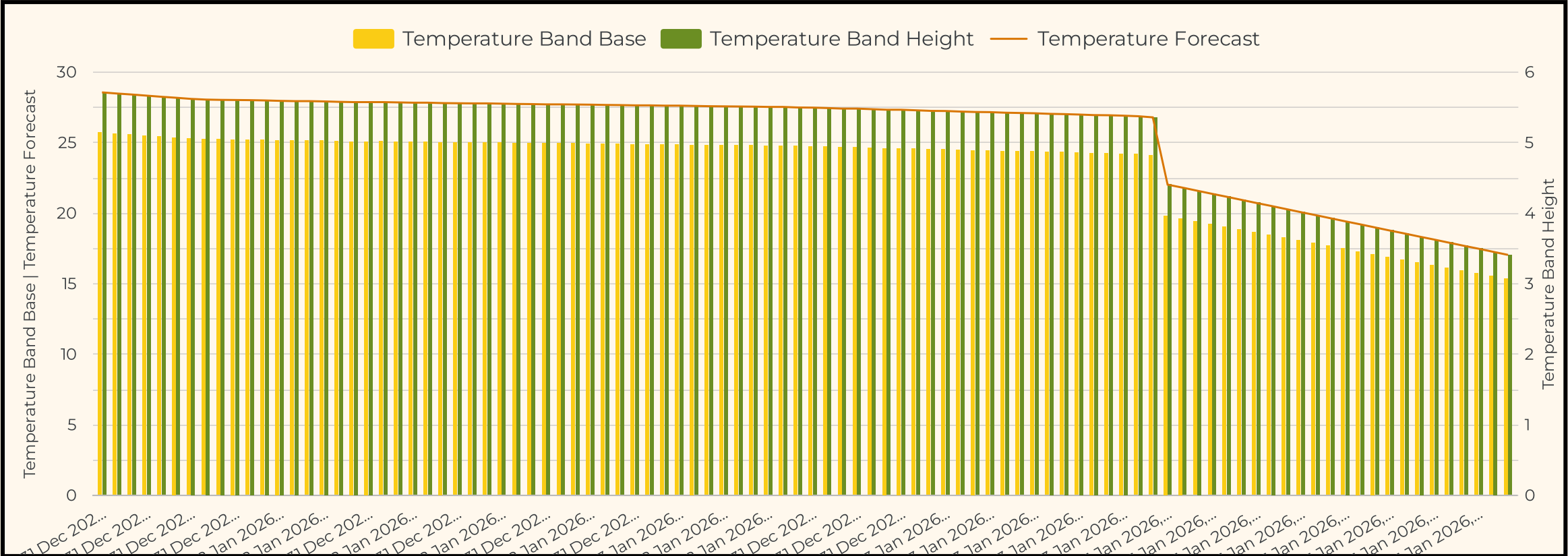
Lower Bound

25.04

Temperature (°C) Forecast Time Series



Temperature (°C) Forecast Confidence Interval Bands



Home

Humidity (%)

Pressure (atm)

Distance (cm)

AI Summary

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Humidity (%) Data Scorecard

Current Value

58.88%

Max Value

76.09%

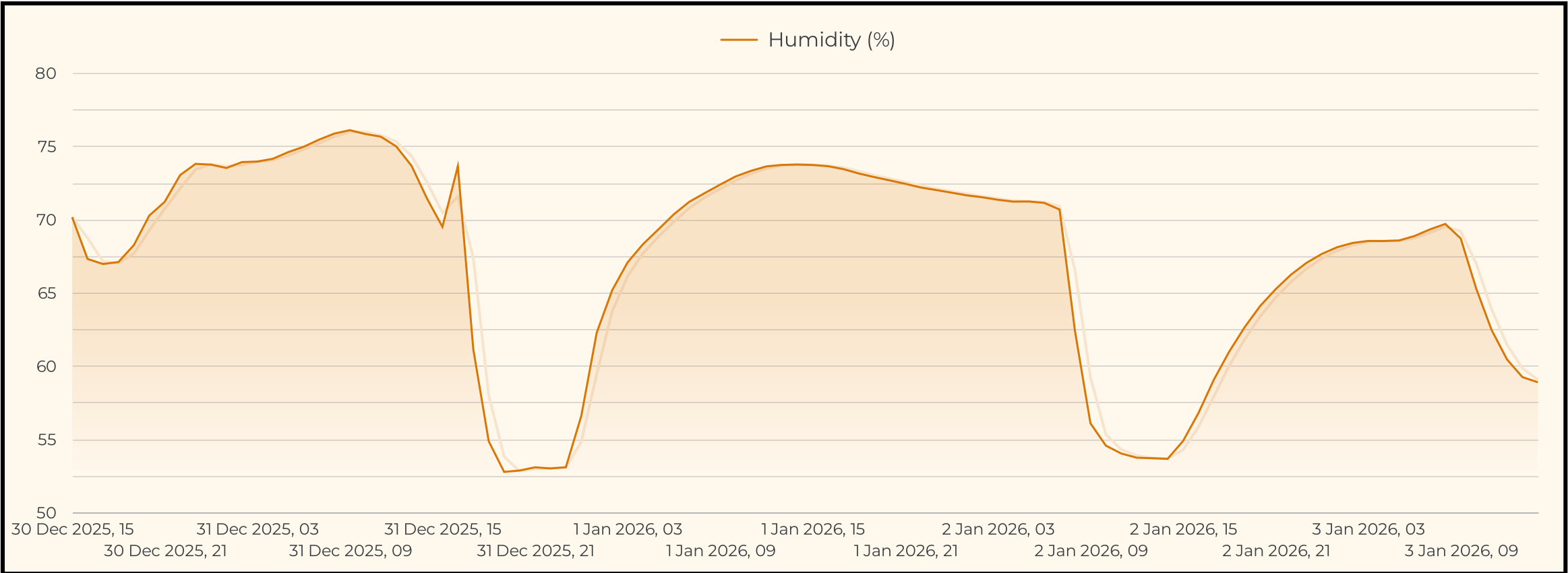
Min Value

52.74%

Daily Average

67.50%

Humidity (%) Time Series



Latest Humidity (%) Forecast Data Scorecard

Data Forecast

83.25

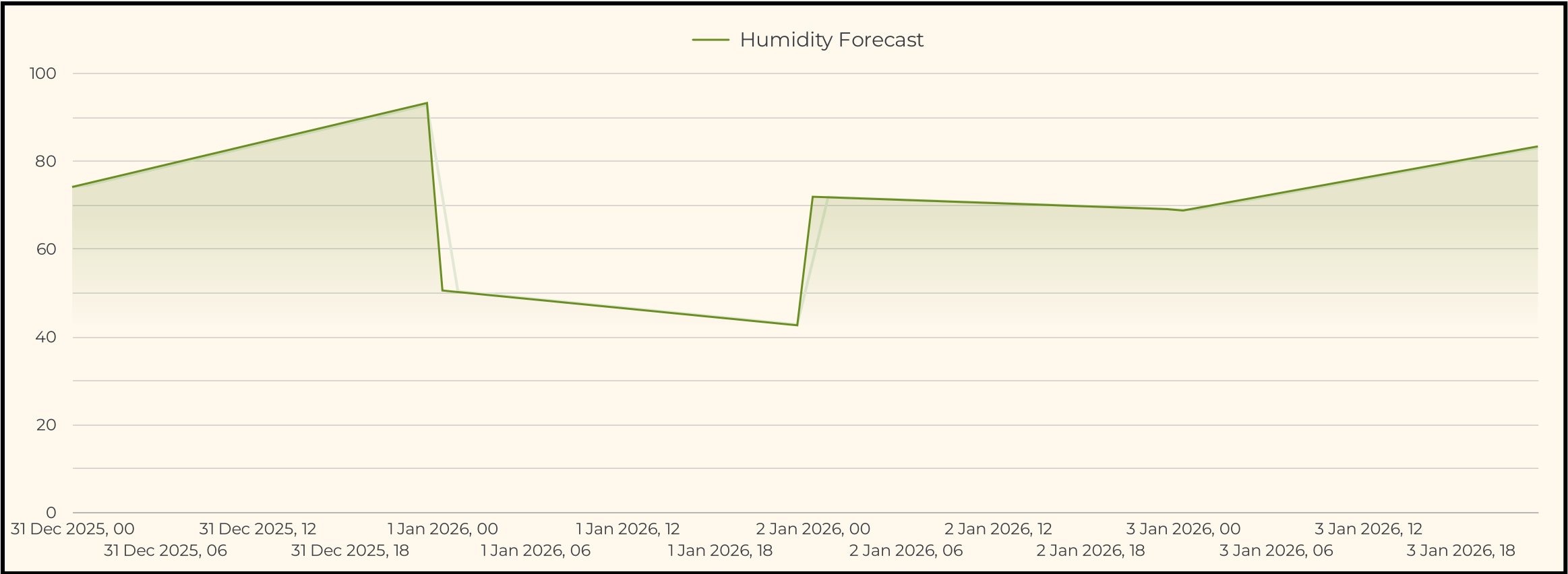
Upper Bound

91.58

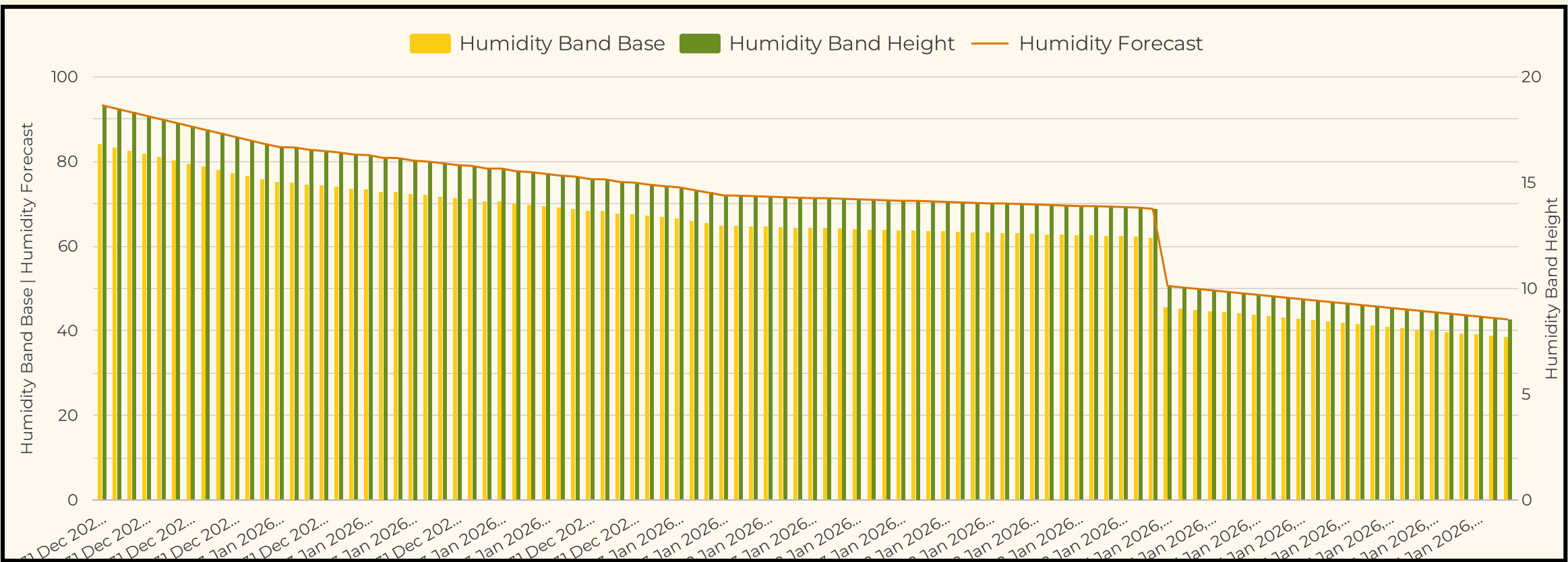
Lower Bound

74.93

Humidity (%) Forecast Time Series



Humidity (%) Forecast Confidence Interval Bands



Home

Temperature (°C)

Pressure (atm)

Distance (cm)

AI Summary

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Last Refresh Data
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Pressure (atm) Data Scorecard

Current Value

0.9986

Max Value

1

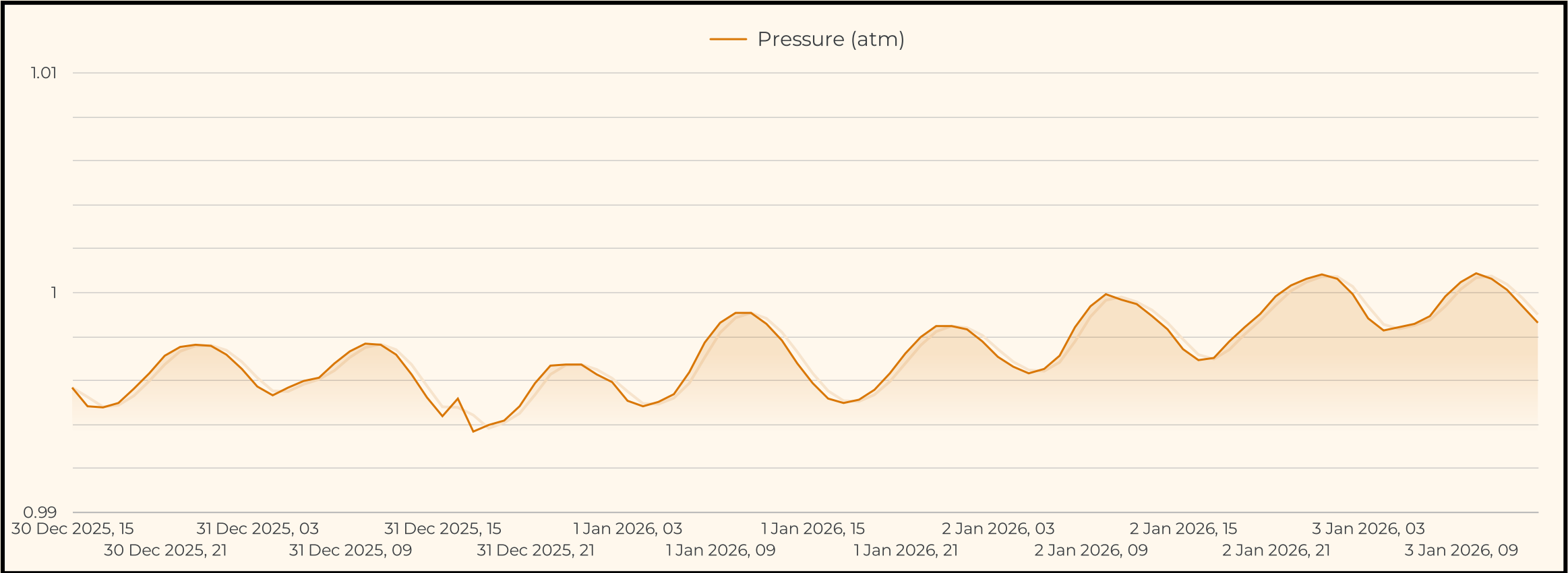
Min Value

0.99

Daily Average

1

Pressure (atm) Time Series



Latest Pressure (atm) Forecast Data Scorecard

Data Forecast

1.01

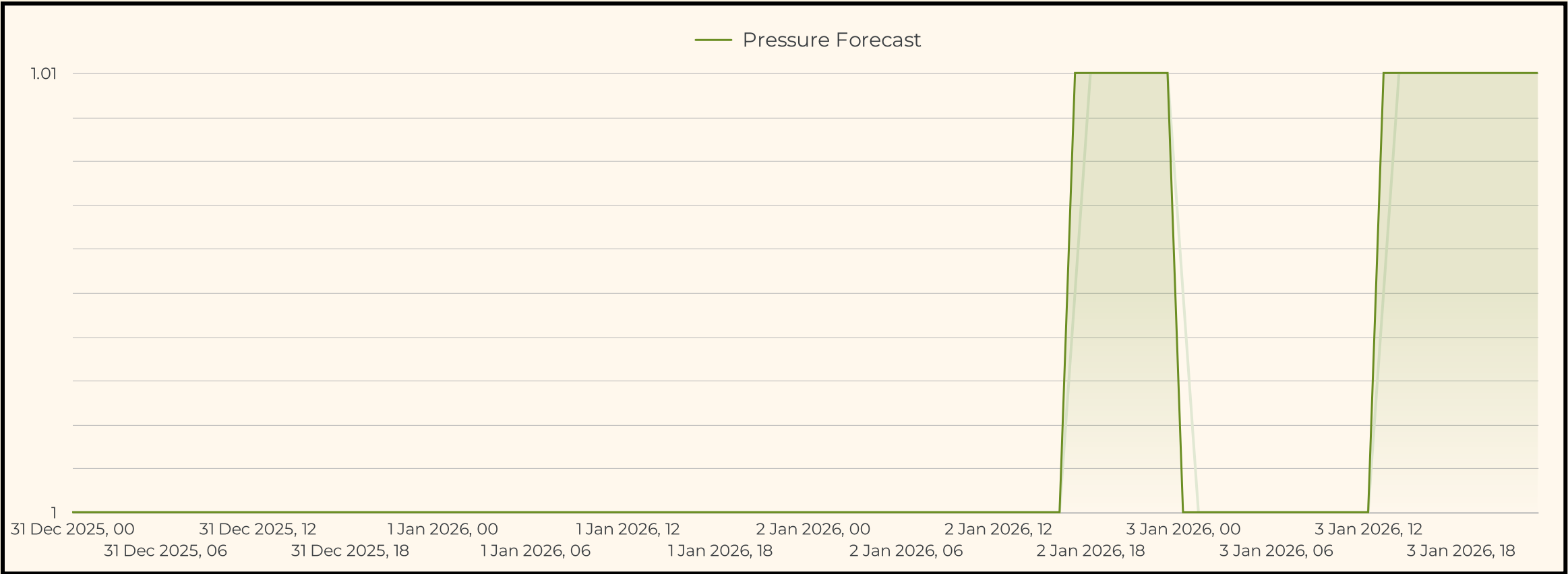
Upper Bound

1.11

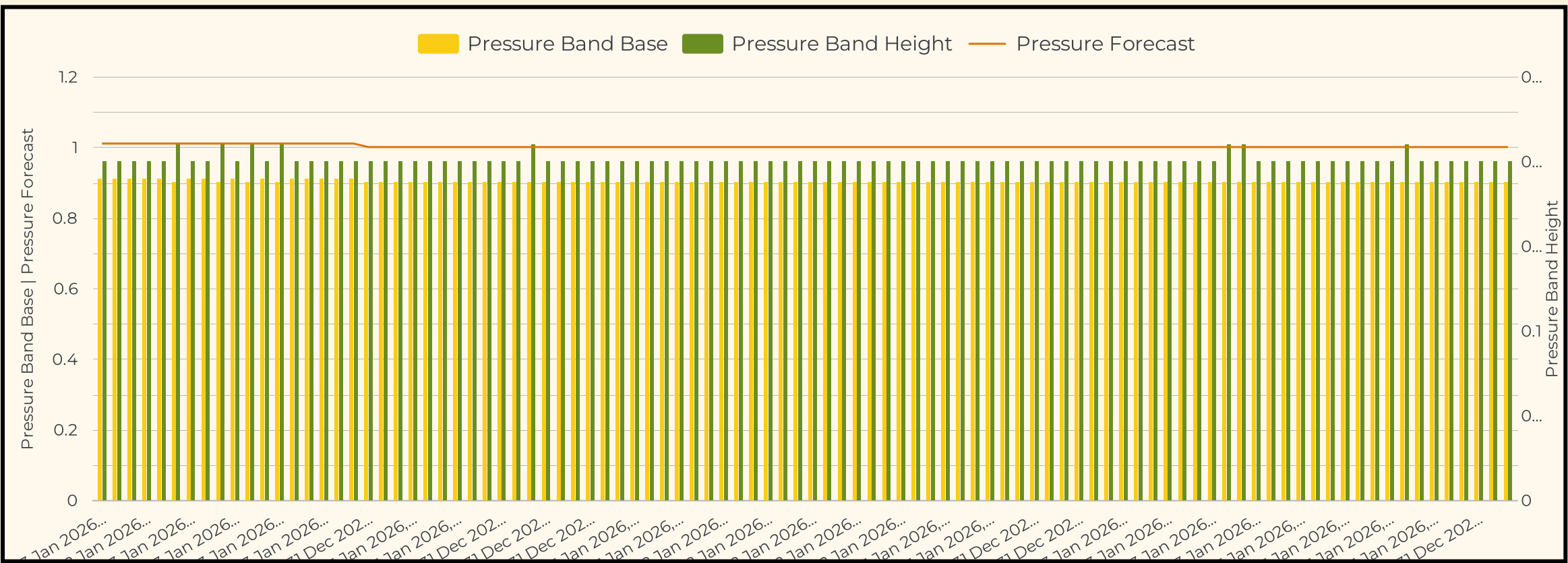
Lower Bound

0.91

Pressure (atm) Forecast Time Series



Pressure (atm) Forecast Confidence Interval Bands



Home

Temperature (°C)

Humidity (%)

Distance (cm)

AI Summary

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Distance (cm) Data Scorecard

Current Value

3.27

Max Value

59.45

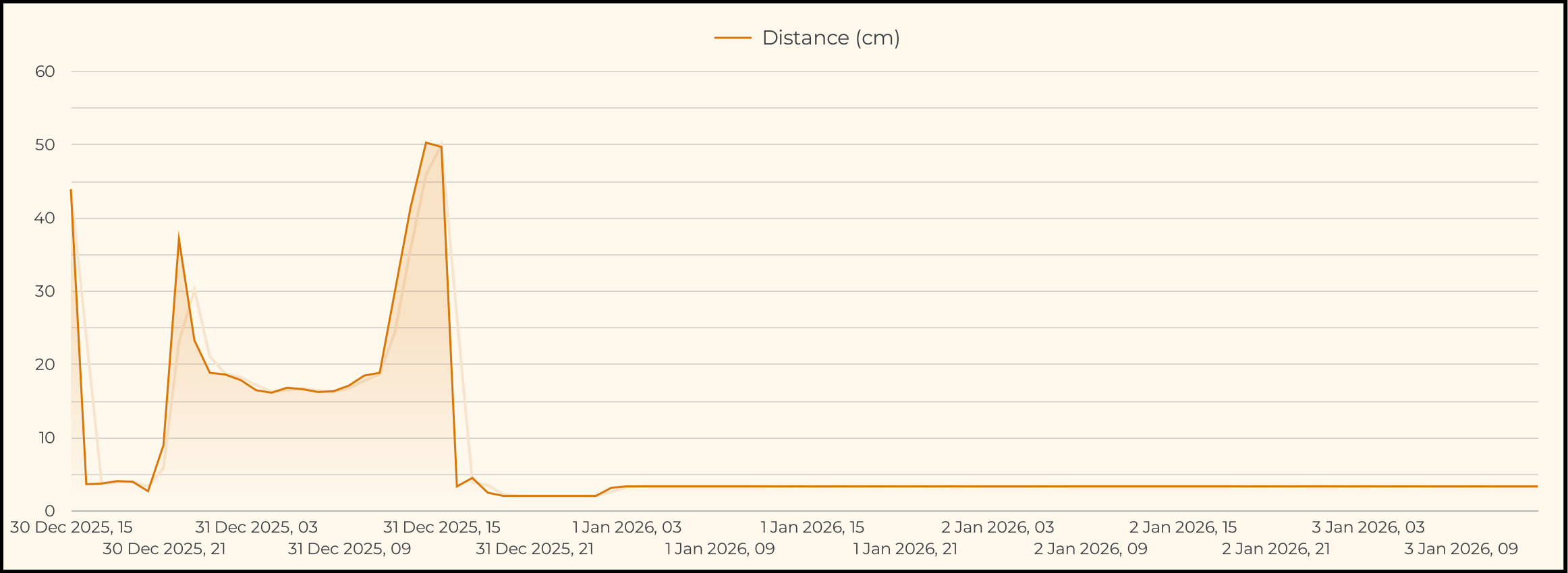
Min Value

1.98

Daily Average

7.66

Distance (cm) Time Series



Latest Distance (cm) Forecast Data Scorecard

Data Forecast

2.95

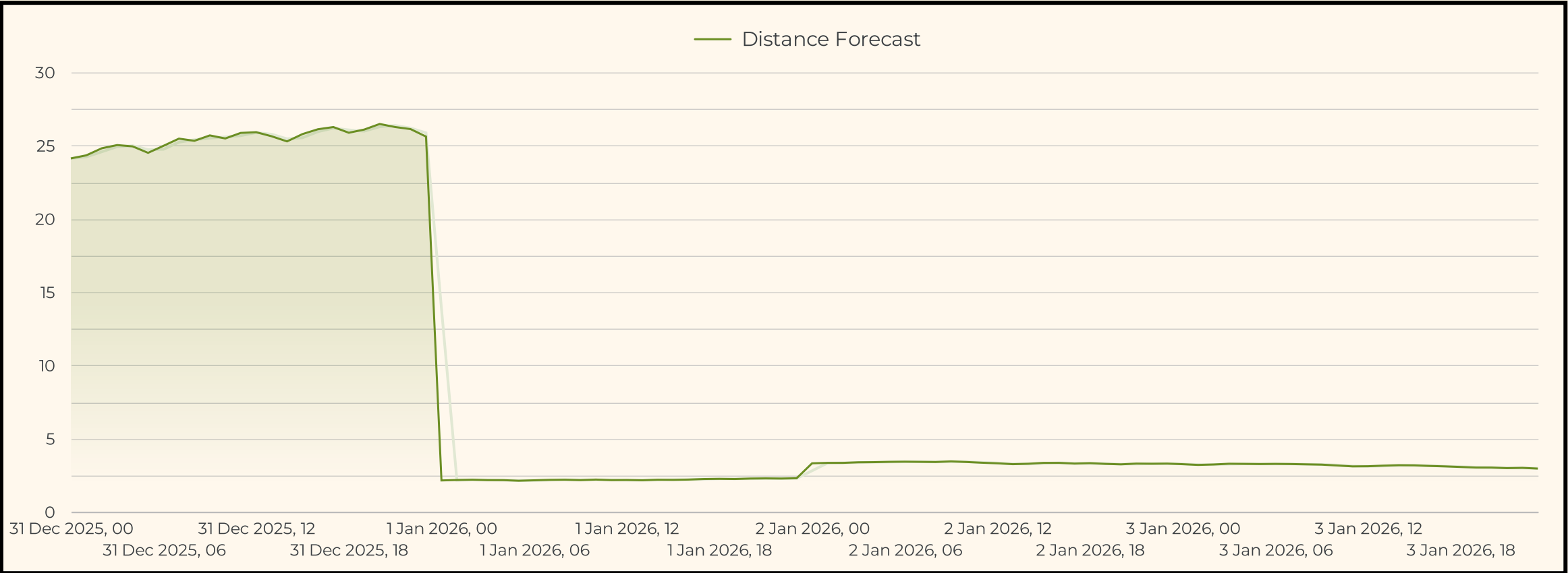
Upper Bound

3.24

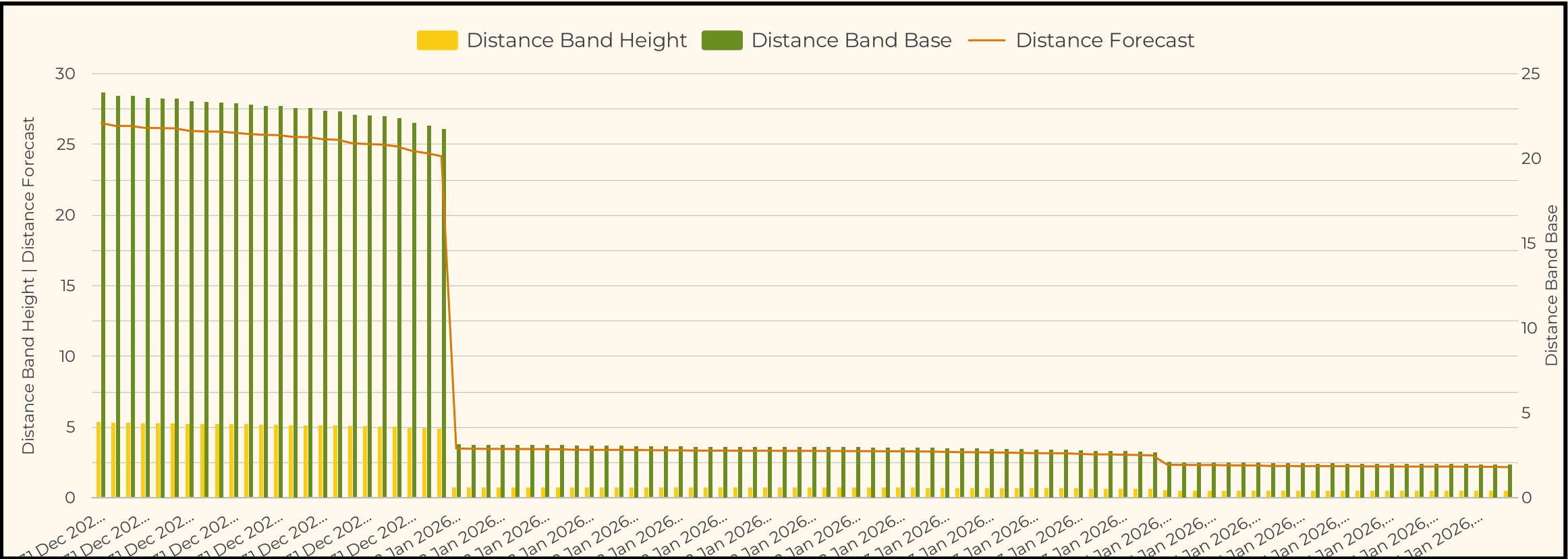
Lower Bound

2.65

Distance (cm) Forecast Time Series



Distance (cm) Forecast Confidence Interval Bands



Home

Temperature (°C)

Humidity (%)

Pressure (atm)

AI Summary

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Gemini AI Real Time Data Analysis

Here's an analysis of the sensor data:

| Sensor Type | Combined Summary |

| :----- | :----- |

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| ****Timestamps**** | 3 days of data (Dec 30 15:05 to Jan 2 15:51 SGT), recorded consistently ~30-minute intervals, providing regular, high-frequency environmental sampling. |

| ****Temperature**** | Diurnal cycles (27.78-29.85°C) precede a sharp Dec 31 drop from 29.85°C to 22.83°C. Recovery with overnight dips suggests active localized cooling or environmental system activation. |

| ****Humidity**** | Humidity inversely correlates with temperature (52.74-76.09%). A significant Dec 31 drop (69.16% to 52.74%) mirrors temperature, strongly implying a drying event, likely environmental controls. |

| ****Pressure**** | Minimal pressure fluctuation (0.9936-0.9999) with gentle diurnal patterns. Stability suggests localized temperature/humidity changes, not broad atmospheric shifts. |

| ****Distance**** | Initially dynamic (2.71-59.45), distance sharply dropped from 51.1 to 1.98 on Dec 31, coinciding with environmental shifts. It then stabilized at ~3.28, indicating an object moved close and remained fixed. |

Gemini AI Trend Analysis

An executive summary of sensor data from December 30, 2025, to January 02, 2026, reveals distinct environmental shifts. Temperature fluctuated within typical diurnal cycles, ranging from a minimum of 22.83°C to a maximum of 29.85°C. Notably, two sharp temperature drops occurred on Wednesday evening and Friday afternoon, mirrored by inverse shifts in humidity, which reached a high of 76.09% and a low of 52.74%. Pressure remained relatively stable, hovering between 0.9936 and 0.9999 with minor daily variations, showing no significant anomalies.

The "Distance" sensor exhibited the most pronounced trend change. After initial erratic readings, peaking at 59.45 units, it stabilized dramatically to a consistently low range (1.98-3.28 units) for the final two days of observation. This abrupt shift from variability to extreme stability suggests a significant change in the monitored object's position or the immediate environment.

Gemini AI Predictive Insight

For the 24-hour period beginning Wednesday, December 31, 2025, in Singapore, expect a day of gradually cooling temperatures and significantly rising humidity. Starting around 28.5°C, temperatures will steadily decline to approximately 26.8°C by late evening. Humidity, however, will surge from 74% to over 93%, indicating increasingly muggy conditions and a heightened potential for precipitation, especially as the day progresses. Atmospheric pressure is forecast to remain stable, suggesting no major weather system movements. 'Distance' (likely visibility) will see minor fluctuations, generally remaining between 24 and 26 units, pointing to consistent ambient conditions.

A critical environmental shift is projected immediately following this 24-hour window. Overnight into January 1st, temperatures are set to dramatically drop to around 21°C and continue falling, paired with a sharp decrease in humidity to below 50% and a substantial reduction in 'distance' to just 2 units, signaling a sudden, significant change in weather.

Home

Temperature (°C)

Humidity (%)

Pressure (atm)

Distance (cm)