



Gangadhar Singh Shiva Dashboard Assignment-

File created on: 2/6/25 10:00:21 AM PST

IOT Dataset description

The dataset contains 1,462 records with 7 columns related to weather data. The key attributes include:

humidity: Average humidity percentage.

wind_speed: Wind speed in some unit.

meanpressure: Mean atmospheric pressure.

date_numeric: A numerical representation of the date.

predictedTemp: The predicted temperature for the given date.

date: The actual date in YYYY-MM-DD format.

actual_meantemp: The recorded mean temperature.

It appears to be a time-series dataset, likely used for temperature prediction based on weather conditions.DatasetDescription

		Date / Week of Date																			
		2013					2014					2015					2016				
Predic..		Fe..	Ap..	Ju..	Au..	Oc..	Fe..	Ap..	Ju..	Au..	Oc..	Fe..	Ap..	Ju..	Au..	Oc..	Ja..	Ap..	Ju..	Au..	Oc..

The figure displays three stacked time-series plots sharing a common x-axis representing time, with labels for 'Quarter of Date / Week of Date' at the top and bottom. The top plot shows 'Value' on the y-axis (0 to 600) with red bars. The middle plot shows 'Predicted Temp' on the y-axis (0 to 200) with orange bars. The bottom plot shows a binary time series with blue bars. All three plots exhibit strong periodicity, with peaks and troughs occurring at regular intervals.

Figure 1 displays a multi-panel time series plot showing Humidity (Humi..) and Predicted values (Predi..) over time (Date) from 2013 to 2017. The plot is divided into two main sections: Humi.. (top) and Predi.. (bottom). The x-axis represents time, with labels for years (2013, 2014, 2015, 2016, 2017) and 'Week of Date'. The y-axis for Humi.. ranges from 0.5K to 1.0K, and for Predi.. from 200 to 300. The plot includes green lines for observed data, red lines for predicted values, and shaded areas for uncertainty. A legend on the right indicates the color coding for the data series.

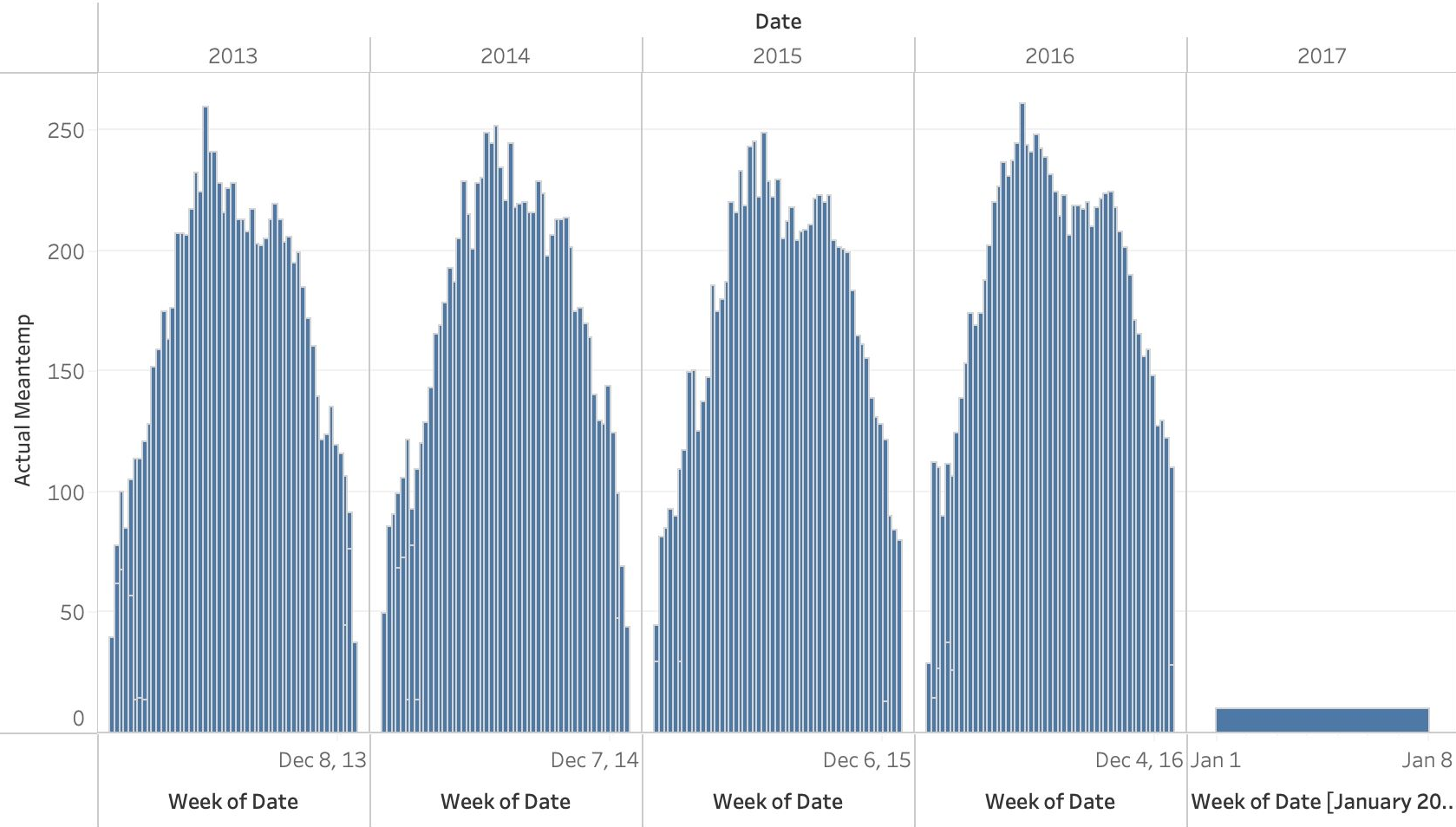
	Date				
	2013	2014	2015	2016	2017
Predic.					
	2013 2014	2014 2015	2015 2016	2016 2017	Jan 8
	Week of Date	Week of Date	Week of Date	Week of Date	Week of Date..

Weather Analysis

		Date				
		2013	2014	2015	2016	2017
Predic..						
		2013	2014	2015	2016	2017
		2013	2014	2015	2016	2017
		Week of Date	Week of Date	Week of Date	Week of Date	Week of Date..



Temp as Low or High (Less than 15 Low)



The plot of sum of Actual Meantemp for Date Week broken down by Date Year. Details are shown for Calculation2. The data is filtered on Calculation1, which keeps HIGH and Low.

Description of “Temp as Low or High ”

The plot of sum of Actual Meantemp for Date Week broken down by Date Year. Details are shown for Calculation2. The data is filtered on Calculation1, which keeps HIGH and Low.

Marks

The mark type is Bar.
Stacked marks is on.

Shelves

Rows: Actual Meantemp
Columns: Year of Date, Week of Date
Filters: Calculation1
Level of detail: Calculation2

Dimensions

Calculation1 has 2 members on this sheet
Members: HIGH; Low
The formula is
if [Actual Meantemp] < 15 THEN “Low”
ELSE
“HIGH”
END
Calculation2 has 2 members on this sheet
Members: HIGH; LOW
The formula is
if [Actual Meantemp] < 15 THEN “LOW”
ELSE “HIGH”
END
Date Week ranges from December 30, 2012 to January 1, 2017 on this sheet.
Date Year has 5 members on this sheet
Members: 2013; 2014; 2015; 2016; 2017

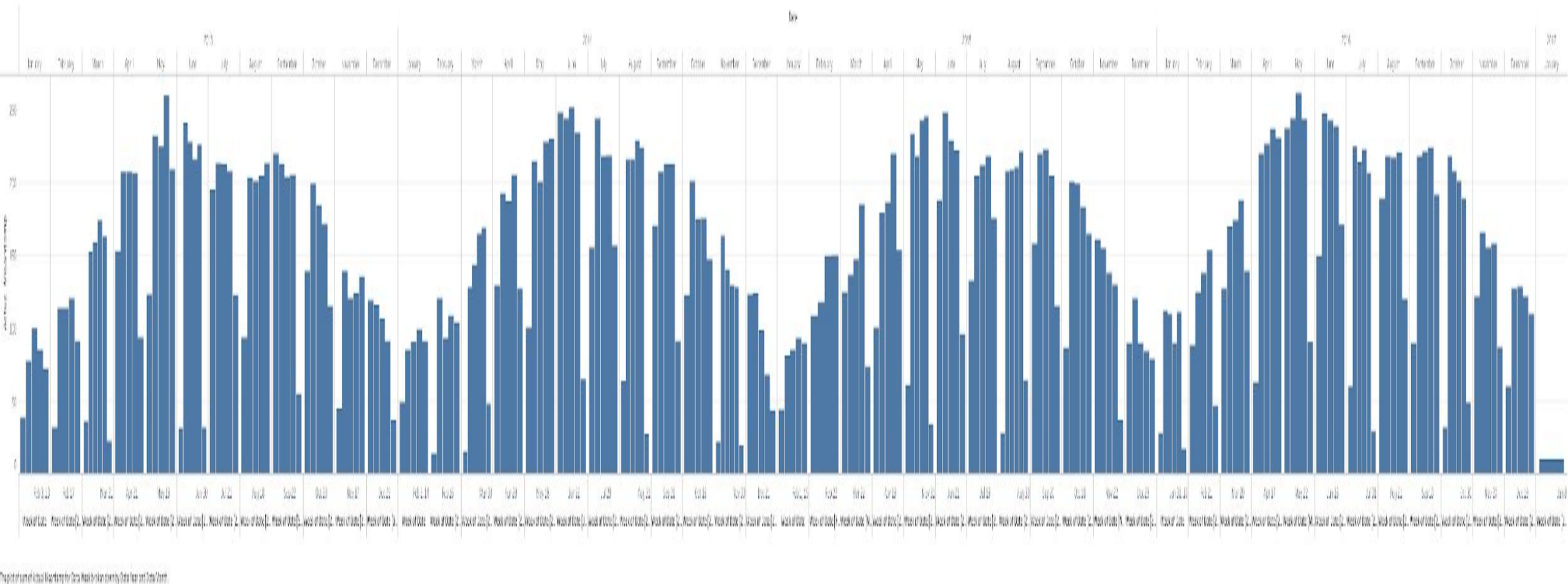
Measures

Sum of Actual Meantemp ranges from 10.0 to 260.6 on this sheet.
1 logical table used to determine value:
predicted_temperatures_2025-02-05_22-39-21.csv

Data Source Details

Data Source: predictDescriptionTempasLowerHigh

Temperature Per Month Bar Plot



Description of "Temperature Per Month Bar Plot"

The plot of sum of Actual Meantemp for Date Week broken down by Date Year and Date Month.

Marks

The mark type is Bar.
Stacked marks is on.

Shelves

Rows: Actual Meantemp
Columns: Year of Date, Month of Date, Week of Date

Dimensions

Date Month has 12 members on this sheet
Members: April; August; March; November; September; ...
Date Week ranges from December 30, 2012 to January 1, 2017 on this sheet.
Date Year has 5 members on this sheet
Members: 2013; 2014; 2015; 2016; 2017

Measures

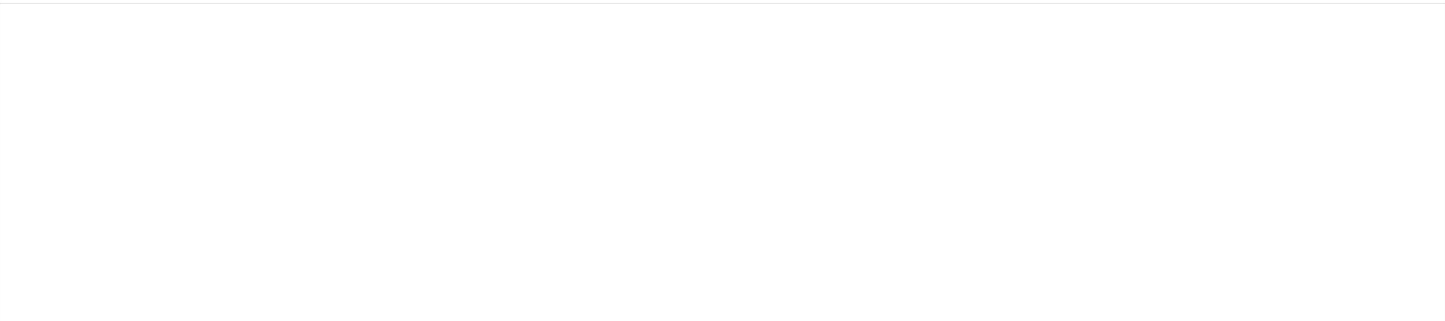
Sum of Actual Meantemp ranges from 10.0 to 260.6 on this sheet.
1 logical table used to determine value:
predicted_temperatures_2025-02-05_22-39-21.csv

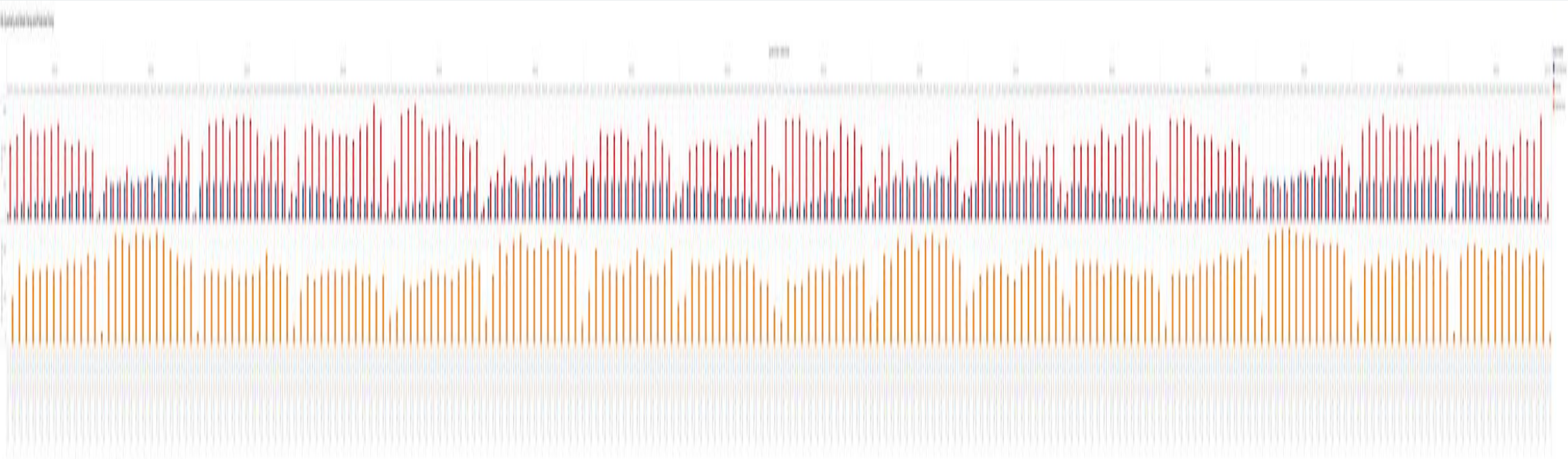
Data Source Details

Data Source: predicted_temperatures_2025-02-05_22-39-21
Type: Federated
Table: predicted_temperatures_2025-02-05_22-39-21#csv

1 Logical table:

predicted_temperatures_2025-02-05_22-39-21.csv





Source: [https://www.kaggle.com/datasets/competitions/2023-2024-f1-hackathon](#)

Description of “Quarterly and Week Temp and Predicted Temp”

Actual Meantemp, Humidity, Predicted Temp and Predicted Temp for each Week of Date broken down by Quarter of Date. Color shows details about Actual Meantemp, Humidity and Predicted Temp. The data is filtered on Action (YEAR(Date),MONTH(Date)), which keeps 49 members.

Measure Values Properties

Marks

The mark type is Bar.
Stacked marks is on.

Shelves

Rows: Measure Values, Predicted Temp
Columns: Quarter of Date, Week of Date, Measure Names
Filters: Measure Names, Action (YEAR(Date),MONTH(Date))
Color: Measure Names

Predicted Temp Properties

Marks

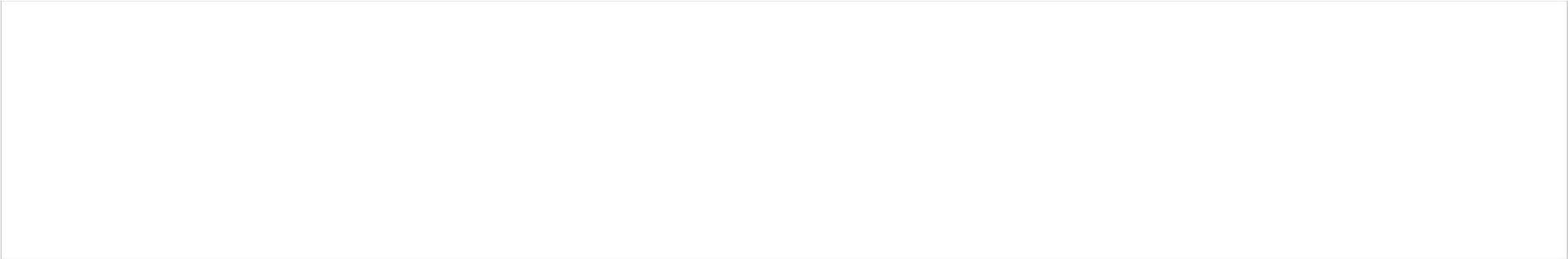
The mark type is Bar.
Stacked marks is on.

Shelves

Rows: Measure Values, Predicted Temp
Columns: Quarter of Date, Week of Date, Measure Names
Filters: Measure Names, Action (YEAR(Date),MONTH(Date))
Color: Measure Names

Dimensions

Measure Names has 3 members on this sheet
Members: Actual Meantemp; Humidity; Predicted Temp
Quarter of Date has 17 members on this sheet
Members: 2013 Q1; 2DescriptionQuarterlyandWeekTempandPredictedTemp



Temperature Dashboard

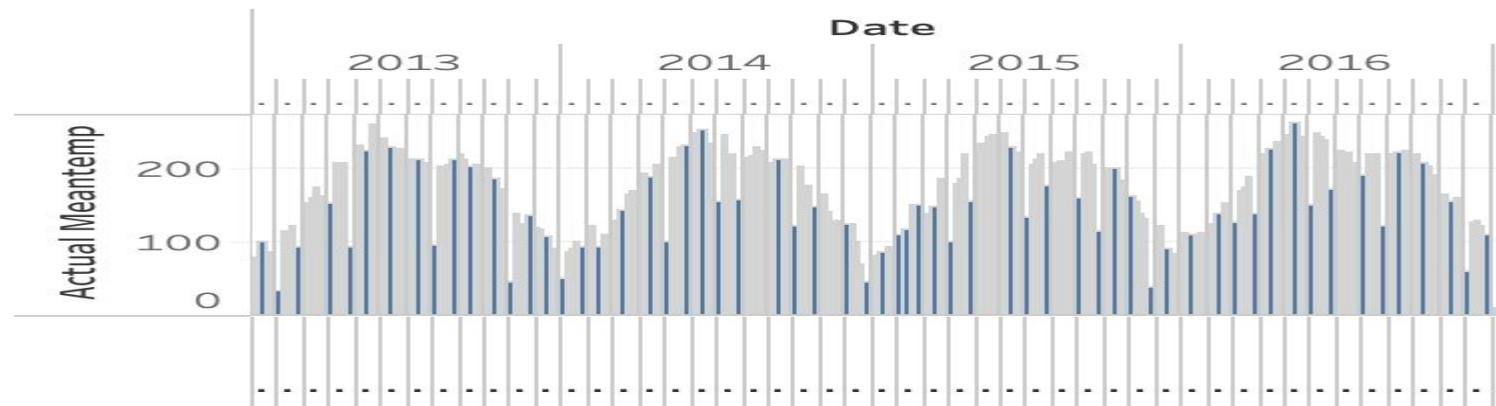
Temp as Low or High (Less than 15 Low)

Date					
2013	2014	2015	2016	2017	
2014	2015	2016	2017	Week of	Date [Ja..
Week of ..	Week of ..	Week of ..	Week of ..		

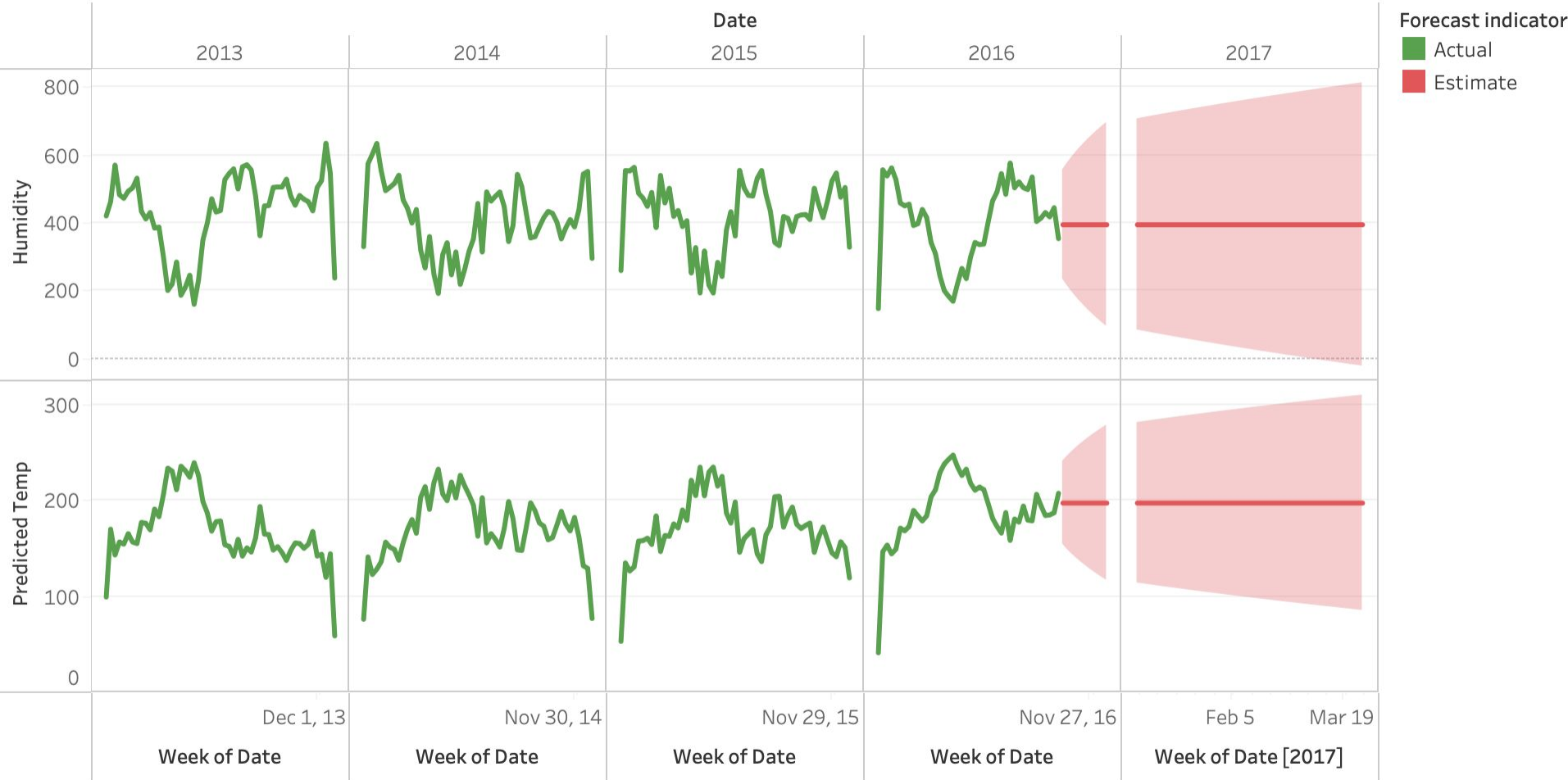
ML Quarterly and Week Temp and Predicted Temp



Temperature Per Month Bar Plot



Forecasting Temp and Humidity



The trends of sum of Humidity (actual & forecast) and sum of Predicted Temp (actual & forecast) for Date Week broken down by Date Year. Color shows details about Forecast indicator.

Description of "Forecasting Temp and Humidity"

The trends of sum of Humidity (actual & forecast) and sum of Predicted Temp (actual & forecast) for Date Week broken down by Date Year. Color shows details about Forecast indicator.

Sum of Humidity (actual & forecast) Properties

Marks

The mark type is Line (Automatic).
Stacked marks is off.

Shelves

Rows: Humidity, Predicted Temp
Columns: Year of Date, Week of Date
Color: Forecast indicator

Sum of Predicted Temp (actual & forecast) Properties

Marks

The mark type is Line (Automatic).
Stacked marks is off.

Shelves

Rows: Humidity, Predicted Temp
Columns: Year of Date, Week of Date
Color: Forecast indicator

Dimensions

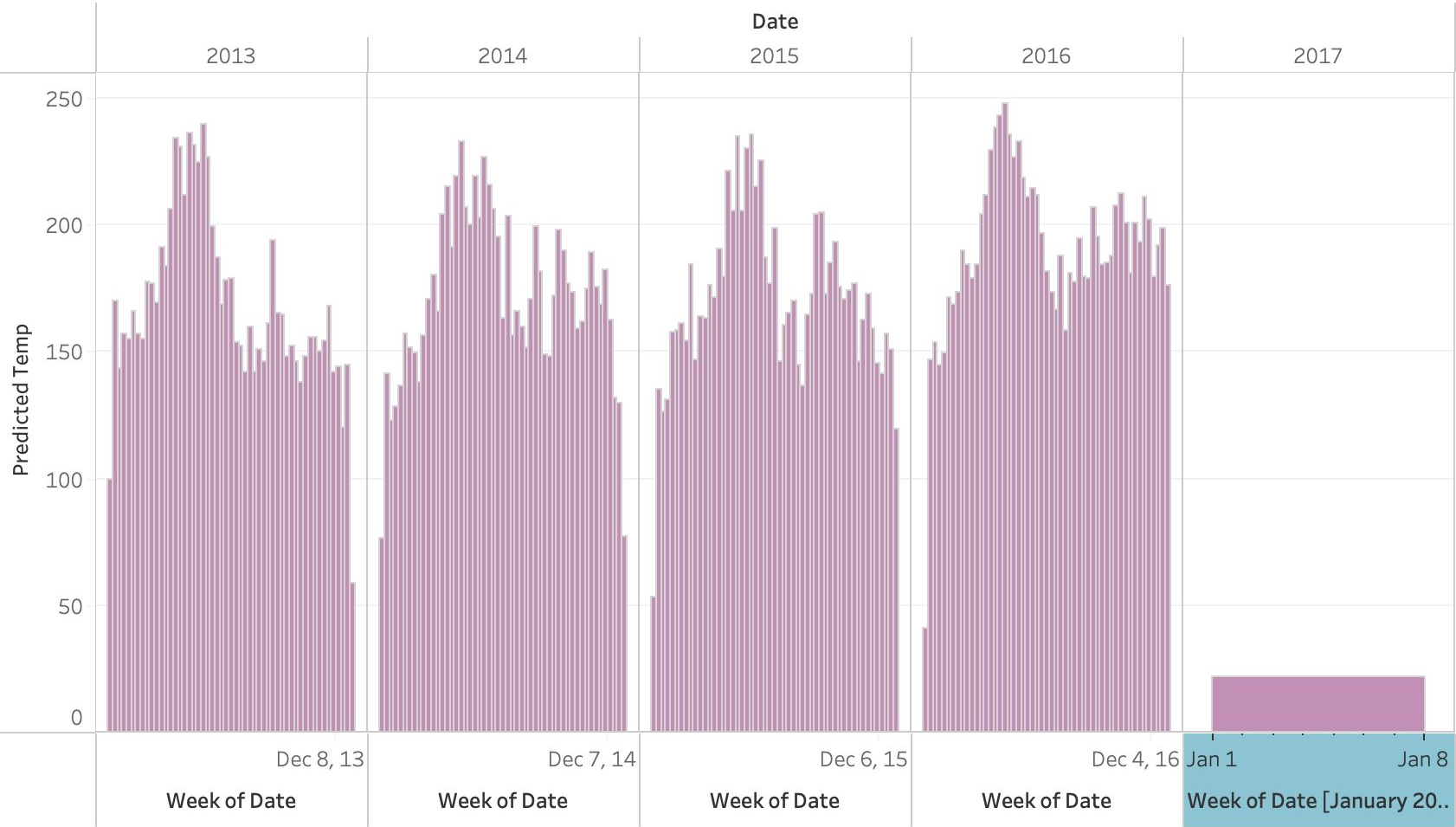
Forecast indicator has 2 members on this sheet
Members: Actual; Estimate
Date Week ranges from December 30, 2012 to March 26, 2017 on this sheet.
Date Year has 5 members on this sheet
Members: 2013; 2014; 2015; 2016; 2017

Measures

Sum of Humidity (actual & forecast) ranges from 148.2 to 636.1 on this sheet.
1 logical tableDescriptionForecastTempandHumidity

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ML Prediction for year 2016 and 2017



The plot of sum of Predicted Temp for Date Week broken down by Date Year. The view is filtered on Date Year, which keeps 2013, 2014, 2015, 2016 and 2017.

Description of "prediction for year 2016 and 2017"

The plot of sum of Predicted Temp for Date Week broken down by Date Year. The view is filtered on Date Year, which keeps 2013, 2014, 2015, 2016 and 2017.

Marks

The mark type is Bar.
Stacked marks is on.

Shelves

Rows: Predicted Temp
Columns: Year of Date, Week of Date
Filters: Year of Date

Dimensions

Date Week ranges from December 30, 2012 to January 1, 2017 on this sheet.
Date Year has 5 members on this sheet
Members: 2013; 2014; 2015; 2016; 2017

Measures

Sum of Predicted Temp ranges from 22.1 to 247.8 on this sheet.
1 logical table used to determine value:
predicted_temperatures_2025-02-05_22-39-21.csv

Data Source Details

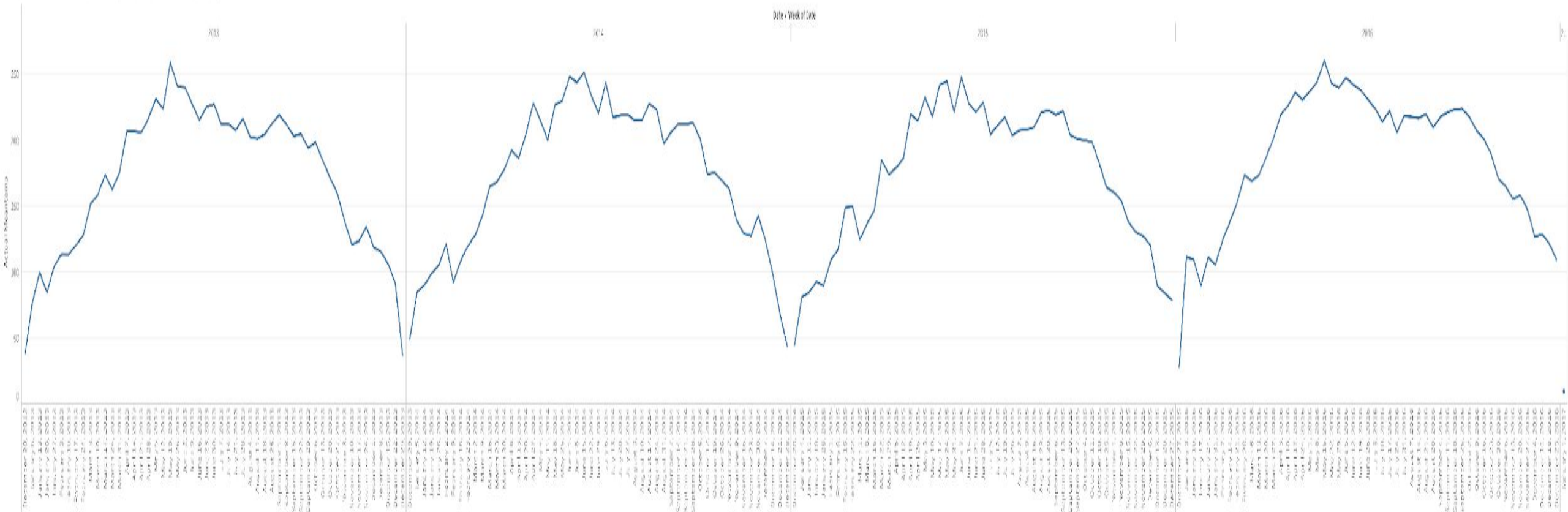
Data Source: predicted_temperatures_2025-02-05_22-39-21
Type: Federated
Table: predicted_temperatures_2025-02-05_22-39-21#csv

1 Logical table:

predicted_temperatures_2025-02-05_22-39-21.csvDescriptionprediction year2016and 2017

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Src chart interactions - Actual Temp - Shows the Predicted Temp



The trend of sum of Actual Means for Date Week broken down by Date Year

Description of "src chart"

The trend of sum of Actual Meantemp for Date Week broken down by Date Year.

Marks

The mark type is Line (Automatic).
Stacked marks is off.

Shelves

Rows: Actual Meantemp
Columns: Year of Date, Week of Date

Dimensions

Date Week has 210 members on this sheet
Members: April 19, 2015; April 24, 2016; April 27, 2014; March 1, 2015; September 15, 2013; ...
Date Year has 5 members on this sheet
Members: 2013; 2014; 2015; 2016; 2017

Measures

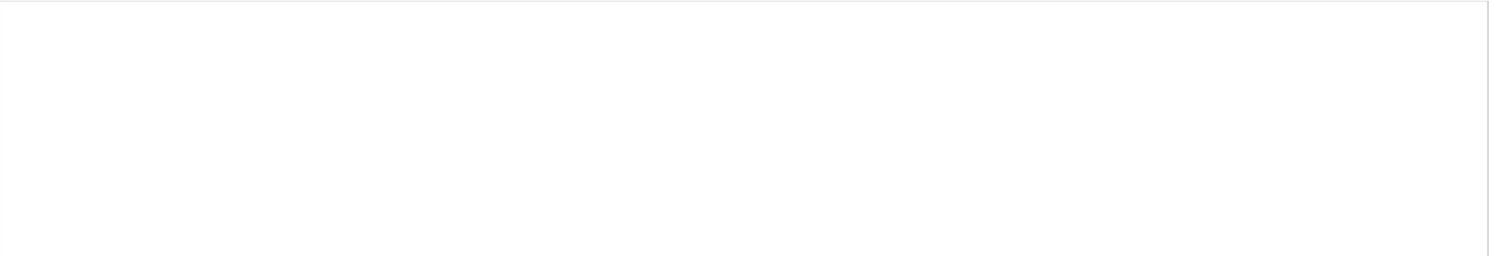
Sum of Actual Meantemp ranges from 10.0 to 260.6 on this sheet.
1 logical table used to determine value:
predicted_temperatures_2025-02-05_22-39-21.csv

Data Source Details

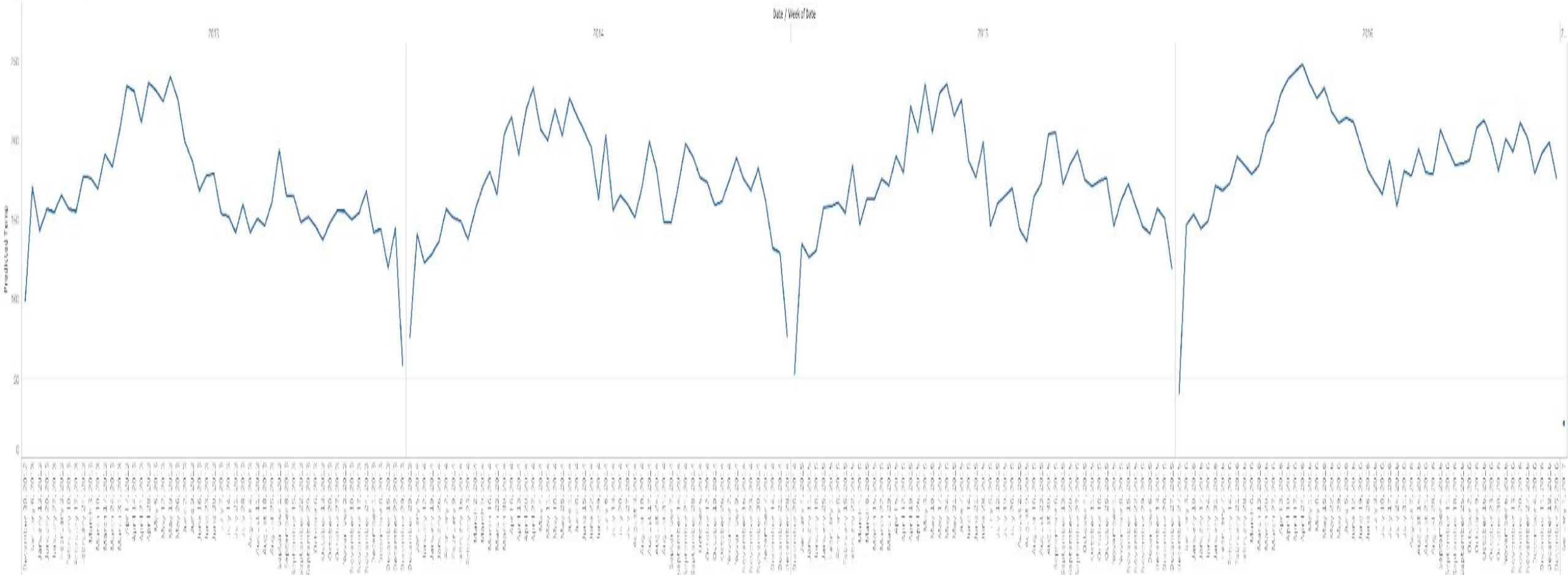
Data Source: predicted_temperatures_2025-02-05_22-39-21
Type: Federated
Table: predicted_temperatures_2025-02-05_22-39-21#csv

1 Logical table:

predicted_temperatures_2025-02-05_22-39-21.csvdescriptionsrcchart



Target Chart Predict Temp



The trend of sum of Predicted Temp for Date-Week broken down by Date-Year. The data is fit based on Action (Y-axis, MON-Hour), which keeps 4 members. The view is fit based on Action (Y-axis, MON-Hour), which keeps 23 members.

Description of "target chart"

The trend of sum of Predicted Temp for Date Week broken down by Date Year. The data is filtered on Action (YEAR(Date),MONTH(Date)), which keeps 49 members. The view is filtered on Action (YEAR(Date),WEEK(Date)), which keeps 213 members.

Marks

The mark type is Line (Automatic).
Stacked marks is off.

Shelves

Rows: Predicted Temp
Columns: Year of Date, Week of Date
Filters: Action (YEAR(Date),WEEK(Date)), Action (YEAR(Date),MONTH(Date))

Dimensions

Date Week has 210 members on this sheet
Members: December 20, 2015; December 21, 2014; January 26, 2014; July 3, 2016; March 6, 2016; ...
Date Year has 5 members on this sheet
Members: 2013; 2014; 2015; 2016; 2017

Measures

Sum of Predicted Temp ranges from 22.1 to 247.8 on this sheet.
1 logical table used to determine value:
predicted_temperatures_2025-02-05_22-39-21.csv

Data Source Details

Data Source: predicted_temperatures_2025-02-05_22-39-21
Type: Federated
Table: predicted_temperatures_2025-02-05_22-39-21#csv

1descriptiontargetchart





Thanking you