29th December 2024

**Economic Data Releases & Their Historical Impact on Assets** 

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### Quantwater Tech Investments Data Release Deck –29th December 2024

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### Brief

Date	Day	Time (IST)	Cur.	Imp.	Event
30-Dec-24	Mon	20:15	USD	3	USD Chicago PMI (Dec)
31-Dec-24	Tue	5:30	Global	3	Major Markets closed or closing early
31-Dec-24	Tue	7:00	CNY	3	CNY Manufacturing PMI (Dec)
01-Jan-25	Wed	5:30	Global	3	Major Markets closed
02-Jan-25	Thur	5:30	Global	3	Markets closed: Swiss, Russia, NZ, Japan
02-Jan-25	Thur	19:00	USD	3	USD Initial Jobless Claims
02-Jan-25	Thur	20:15	USD	3	USD Manufacturing PMI (Dec)
02-Jan-25	Thur	21:30	Global	3	Crude Oil Inventories
03-Jan-25	Thur	5:30	Global	3	Markets closed: Japan, Russia
04-Jan-25	Fri	20:30	USD	3	USD ISM Manufacturing PMI
04-Jan-25	Fri	20:30	USD	3	USD ISM Manufacturing Prices (Dec)
30-Jan-25	Thu	0:30	USD	3	Fed Interest Rate Decision

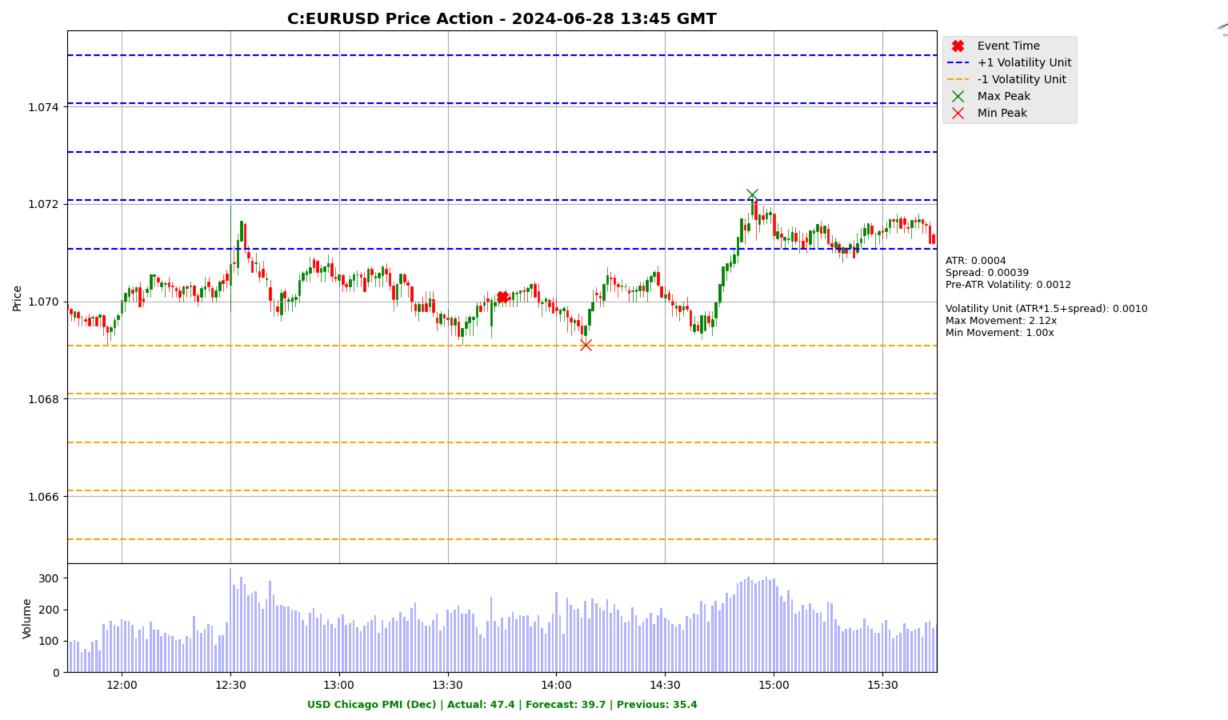
Annexure: Key Terms & Links

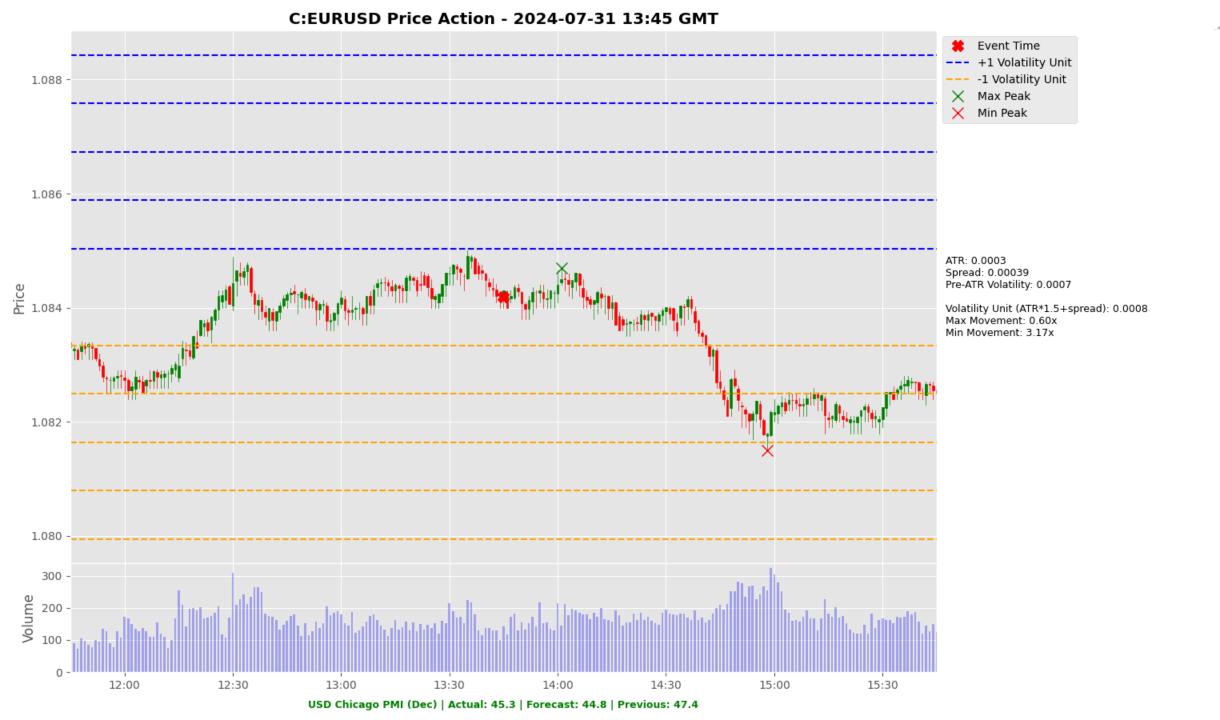
# USD Chicago PMI (Dec)

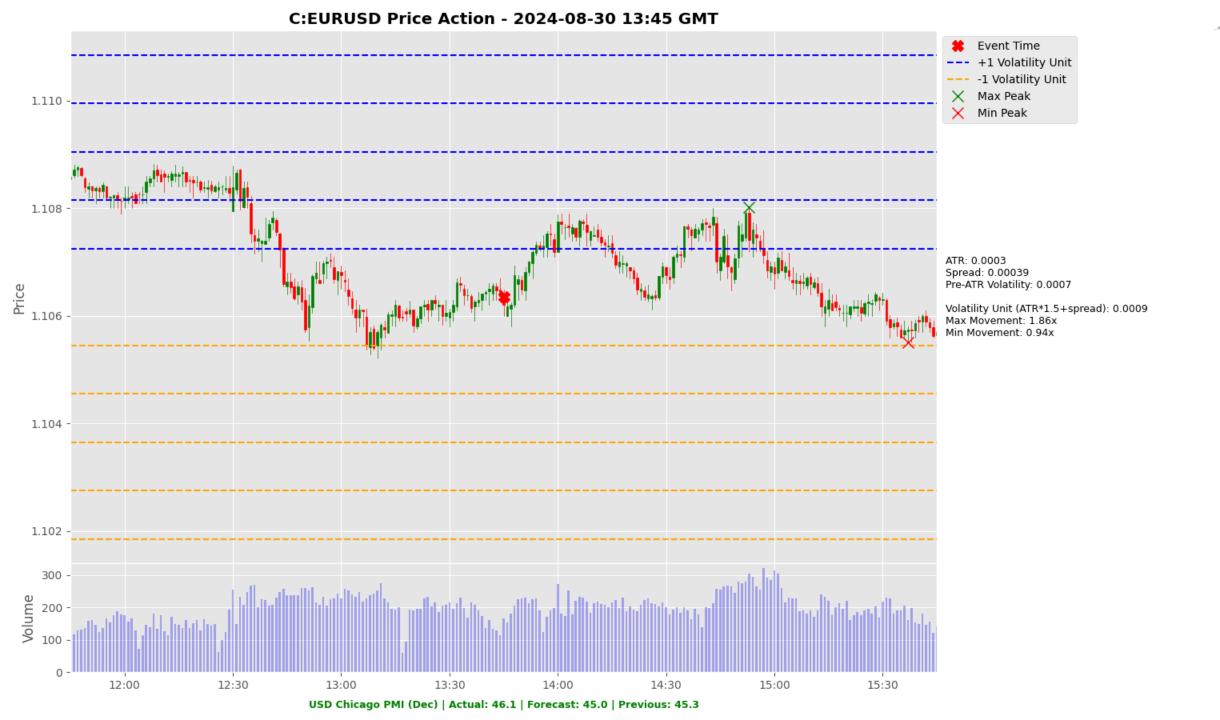
### USD Chicago PMI (Dec)

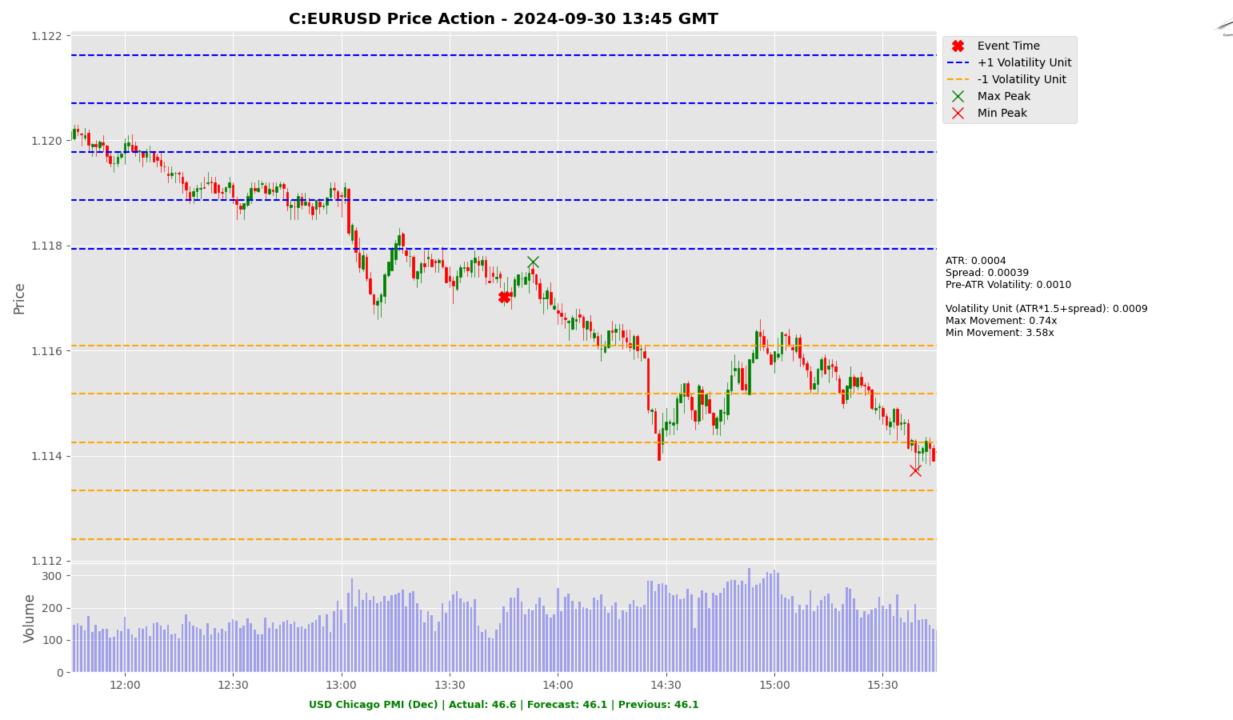
Event		USD Chicag	go PMI (Dec)	Description
Actual:				
Forecast:			42.7	
Previous:			40.2	
Time (GMT):			14:45	
Release Date	Actual	Forecast	Previous	The Chicago Purchasing Managers' Index (PMI) is a diffusion index incorporating survey results provided by manufacturing firms around the Chicago area. A reading above fifty suggests the manufacturing sector is expanding, while a reading below fifty
29-Nov-24	40.2	44.9	41.6	suggests the manufacturing sector is in contraction. The Chicago PMI can be of some assistance in forecasting the ISM manufacturing PMI.  A reading that is stronger than forecast is generally supportive (bullish) for the USD,
31-Oct-24	41.6	46.9	46.6	while a weaker than forecast reading is generally negative (bearish) for the USD.  -Historical Impact on Assets: EURUSD   USDJPY
30-Sep-24	46.6	46.1	46.1	
30-Aug-24	46.1	45.0	45.3	
31-Jul-24	45.3	44.8	47.4	
28-Jun-24	47.4	39.7	35.4	

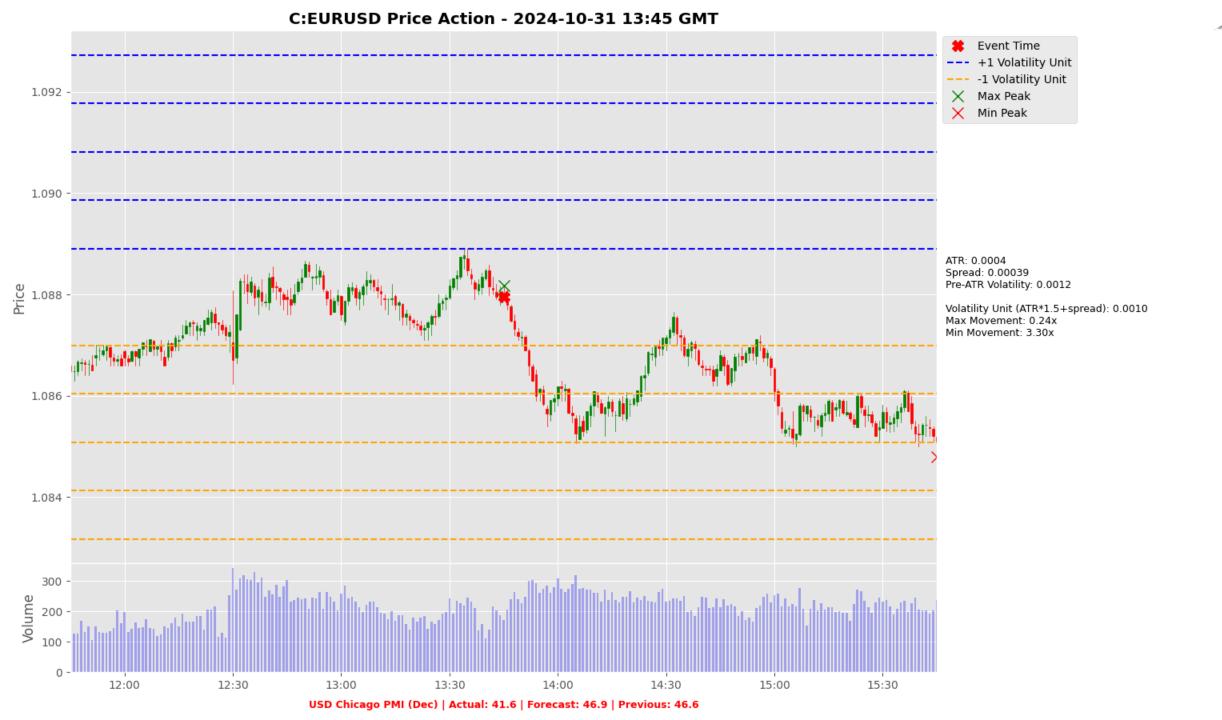
## USD Chicago PMI (Dec) EURUSD

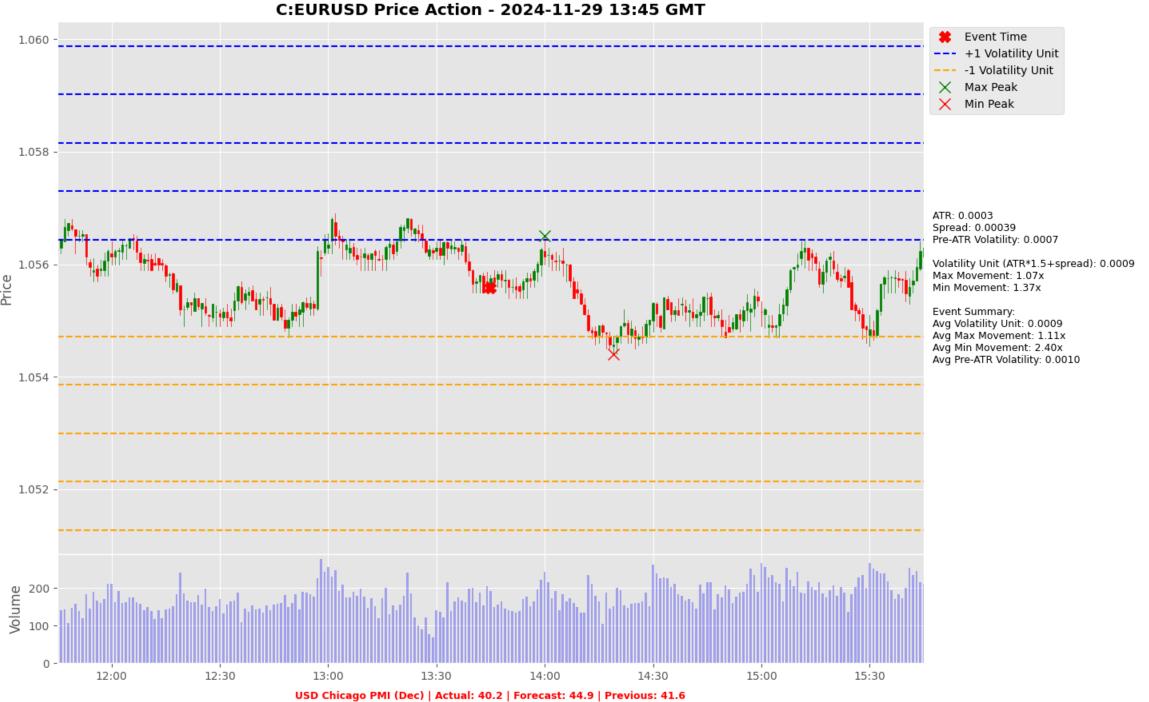




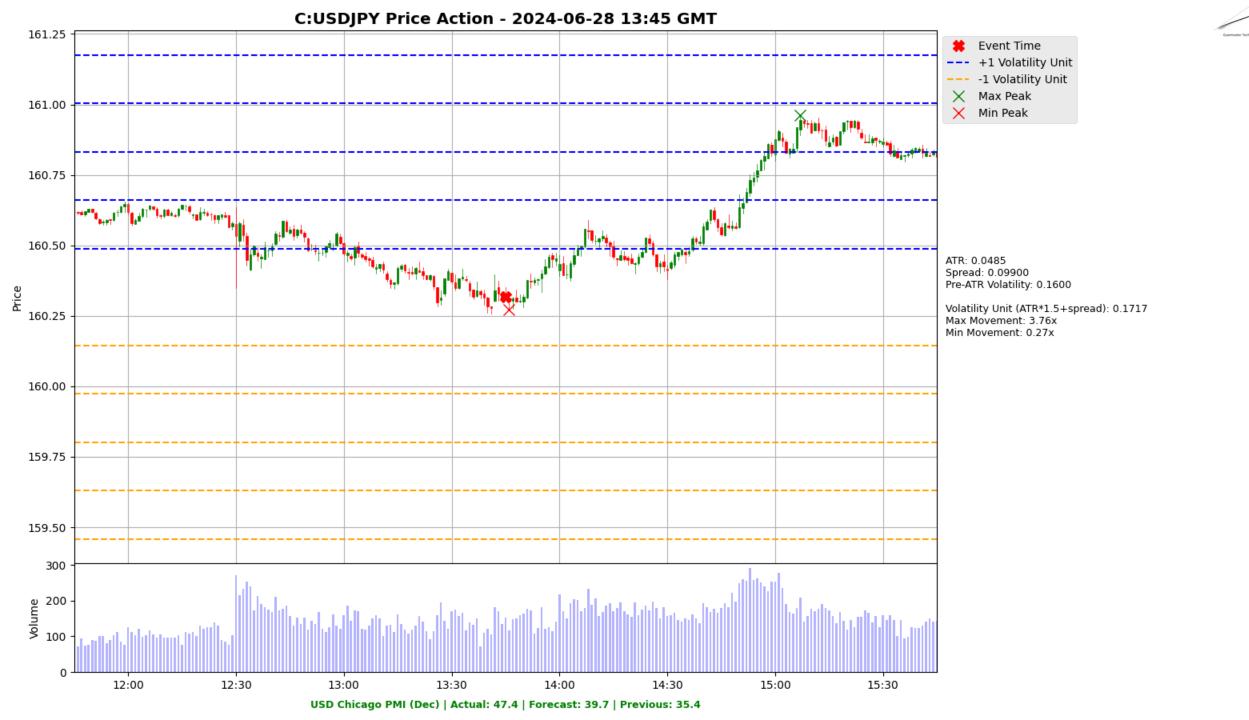








## USD Chicago PMI (Dec) USDJPY

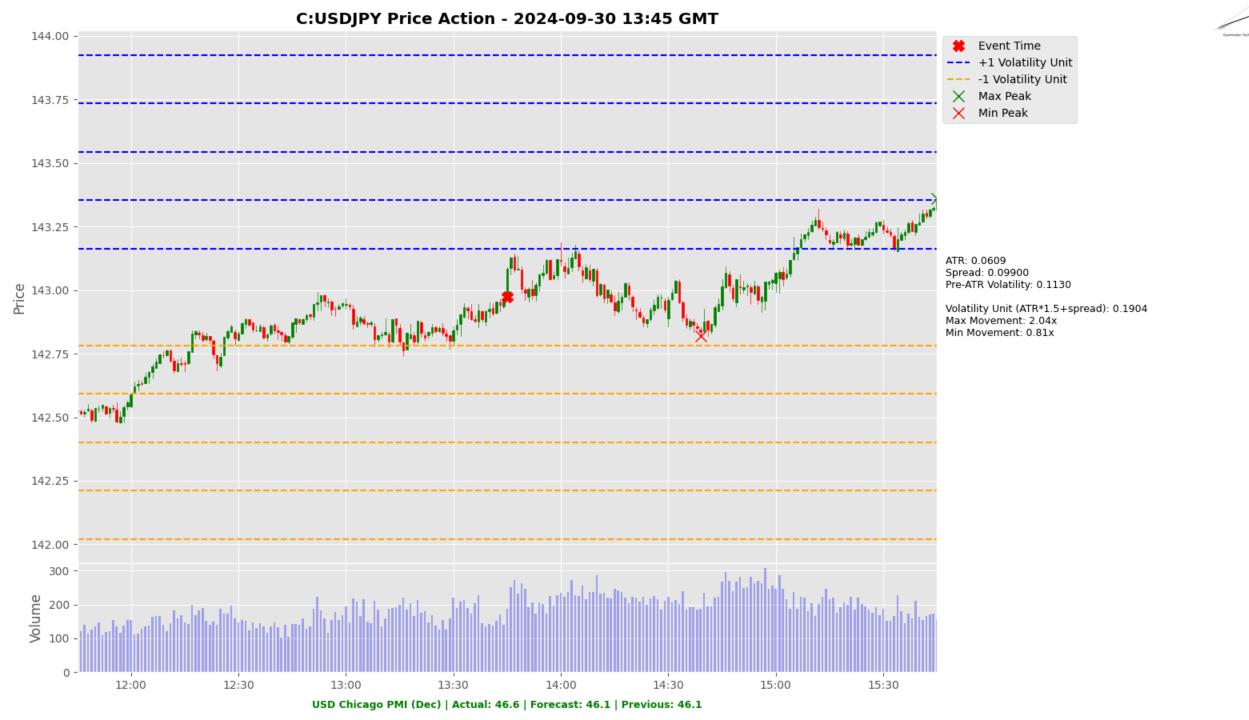


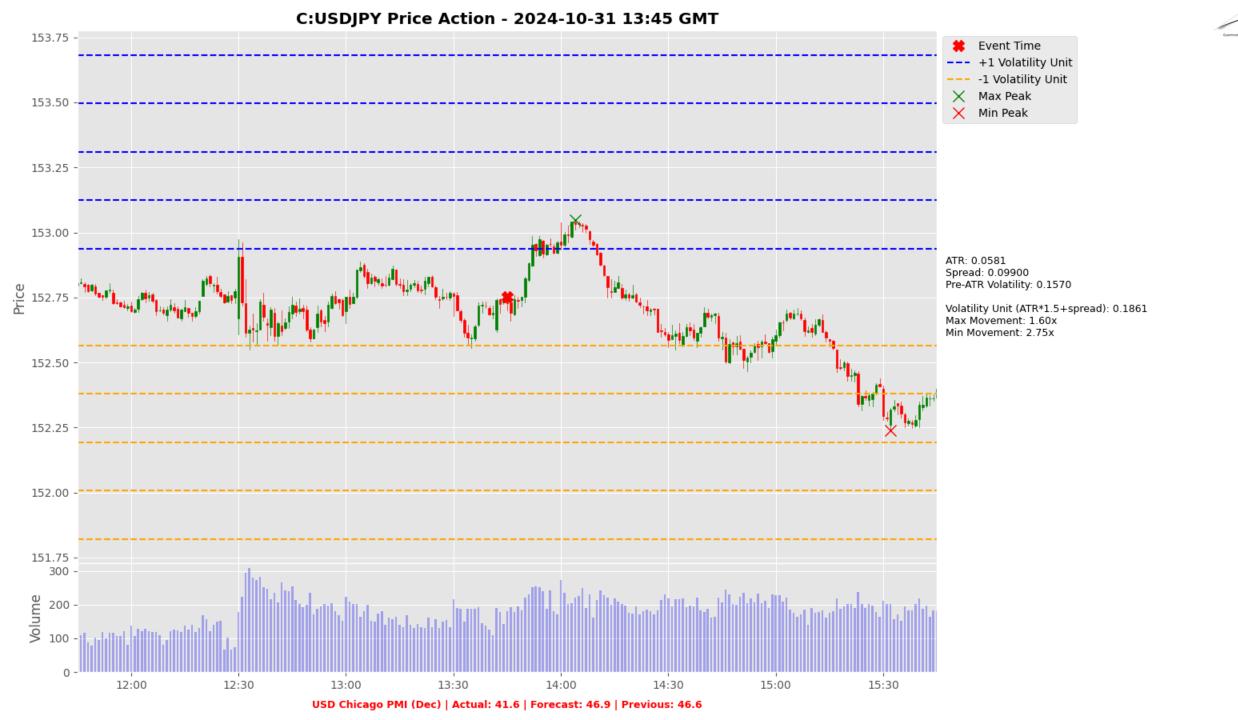
### C:USDJPY Price Action - 2024-07-31 13:45 GMT # Event Time --- +1 Volatility Unit --- -1 Volatility Unit X Max Peak X Min Peak 151.0 -150.5 ATR: 0.0709 Spread: 0.09900 Pre-ATR Volatility: 0.1830 Price Volatility Unit (ATR\*1.5+spread): 0.2054 Max Movement: 2.48x Min Movement: 2.61x 150.0 149.5 300 Volume 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30

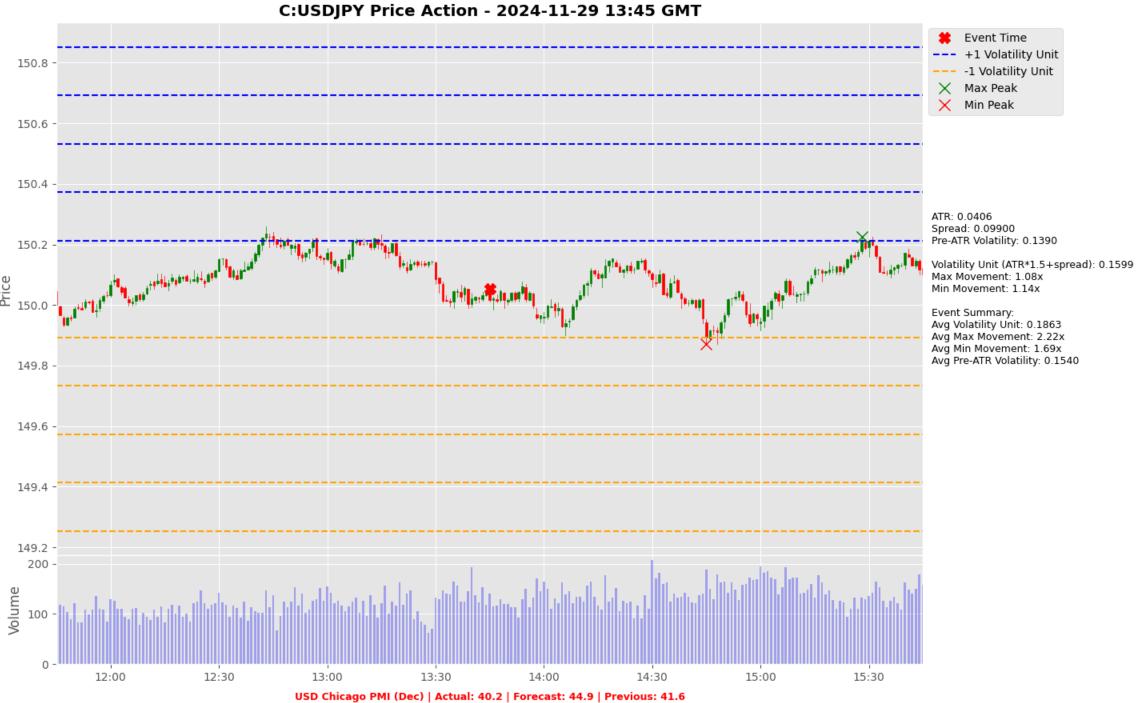
USD Chicago PMI (Dec) | Actual: 45.3 | Forecast: 44.8 | Previous: 47.4

C:USDJPY Price Action - 2024-08-30 13:45 GMT # Event Time --- +1 Volatility Unit 146.50 --- -1 Volatility Unit X Max Peak
X Min Peak 146.25 146.00 ATR: 0.0525 Spread: 0.09900 Pre-ATR Volatility: 0.1570 145.75 -Price Volatility Unit (ATR\*1.5+spread): 0.1777 Max Movement: 1.24x Min Movement: 2.03x 145.50 145.25 145.00 144.75 300 omn 200 100 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30

USD Chicago PMI (Dec) | Actual: 46.1 | Forecast: 45.0 | Previous: 45.3







## CNY Manufacturing PMI (Dec)

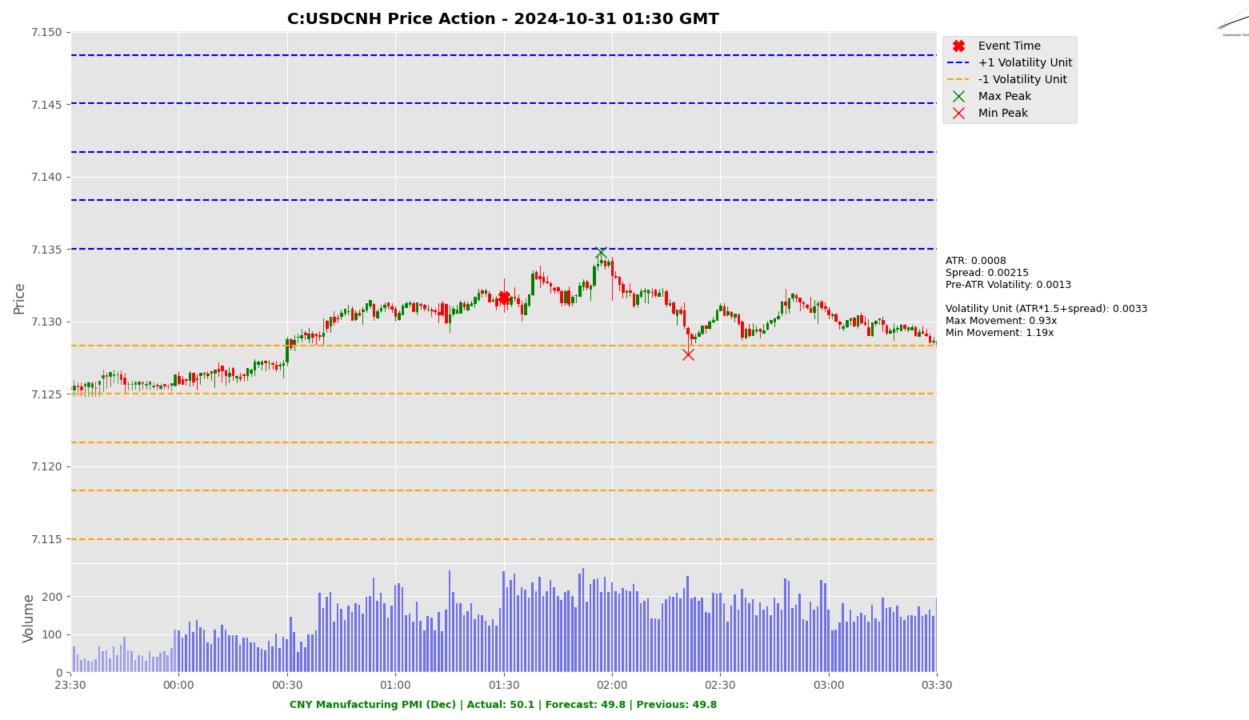
### CNY Manufacturing PMI (Dec)

Event		CNY Manufacti	uring PMI (Dec)	Description
Actual:				
Forecast:			50.3	
Previous:			50.3	
Time (GMT):			1:30	China Manufacturing Purchasing Managers Index (PMI) provides an early indication
Release Date	Actual	Forecast	Previous	each month of economic activities in the Chinese manufacturing sector. It is compiled by China Federation of Logistics & Purchasing (CFLP) and China Logistics Information Centre (CLIC), based on data collected by the National Bureau of Statistics (NBS).Li & Fung Research Centre is responsible for drafting and disseminating the English PMI
30-Nov-24	50.3	50.2	50.1	report. Every month questionnaires are sent to over 700 manufacturing enterprises all over China. The data presented here is compiled from the enterprises responses about their purchasing activities and supply situations. The PMI should be compared to other
31-Oct-24	50.1	49.8	49.8	economic data sources when used in decision-making.  A reading that is stronger than forecast is generally supportive (bullish) for the CNY, while a weaker than forecast reading is generally negative (bearish) for the CNY.
30-Sep-24	49.8	49.4	49.1	-Historical Impact on Assets: USDCNH   USDCNY
31-Aug-24	49.1	49.5	49.4	
31-Jul-24	49.4	49.4	49.5	
30-Jun-24	49.5	49.5	49.5	

# CNY Manufacturing PMI (Dec) USDCNH

### C:USDCNH Price Action - 2024-09-30 01:30 GMT



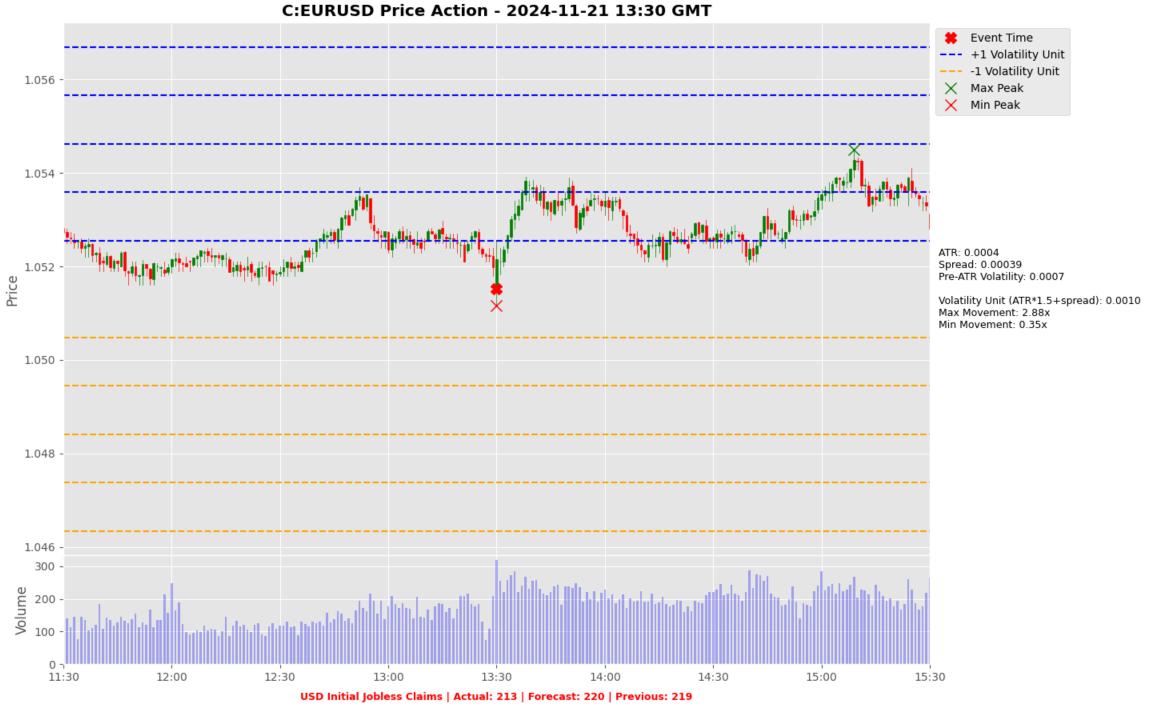


## **USD Initial Jobless Claims**

### **USD Initial Jobless Claims**

Event		USD Initial Jo	bless Claims	Description
Actual:				
Forecast:			220K	
Previous:			219K	Initial Jobless Claims measures the number of people who filed for unemployment
Time (GMT):			13:30	
Release Date	Actual	Forecast	Previous	
26-Dec-24	219	223	220	insurance for the first time during the past week. This is the most timely U.S. economic data, but the market impact varies from week to week.  A reading that is higher than forecast is generally negative (bearish) for the USD, while a lower than forecast reading is generally supportive (bullish) for the USD.
19-Dec-24	220	229	242	-Historical Impact on Assets: EURUSD   USDJPY
12-Dec-24	242	221	225	
05-Dec-24	224	215	215	
27-Nov-24	213	215	215	
21-Nov-24	213	220	219	

# USD Initial Jobless Claims EURUSD



### C:EURUSD Price Action - 2024-11-27 13:30 GMT # Event Time --- +1 Volatility Unit 1.058 --- -1 Volatility Unit X Max Peak X Min Peak



ATR: 0.0004 Spread: 0.00039 Pre-ATR Volatility: 0.0009

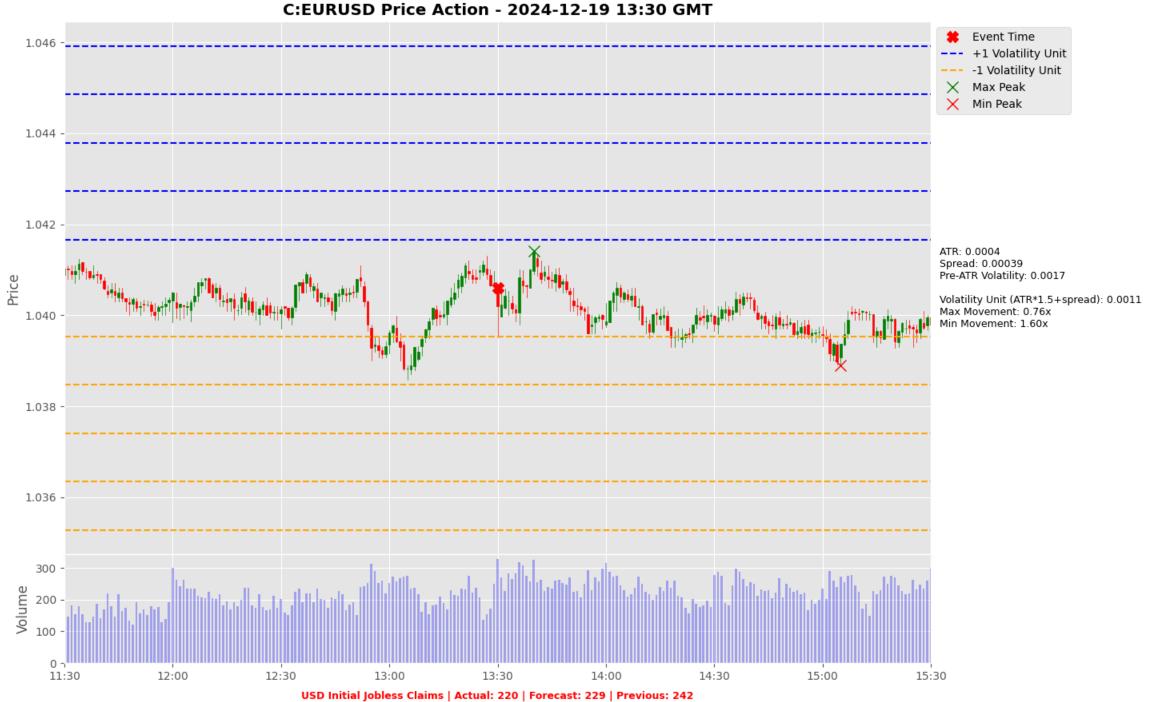
Volatility Unit (ATR\*1.5+spread): 0.0011 Max Movement: 4.39x

Min Movement: 0.06x

### C:EURUSD Price Action - 2024-12-12 13:30 GMT



USD Initial Jobless Claims | Actual: 242 | Forecast: 221 | Previous: 225



### C:EURUSD Price Action - 2024-12-26 13:30 GMT



# USD Initial Jobless Claims USDJPY

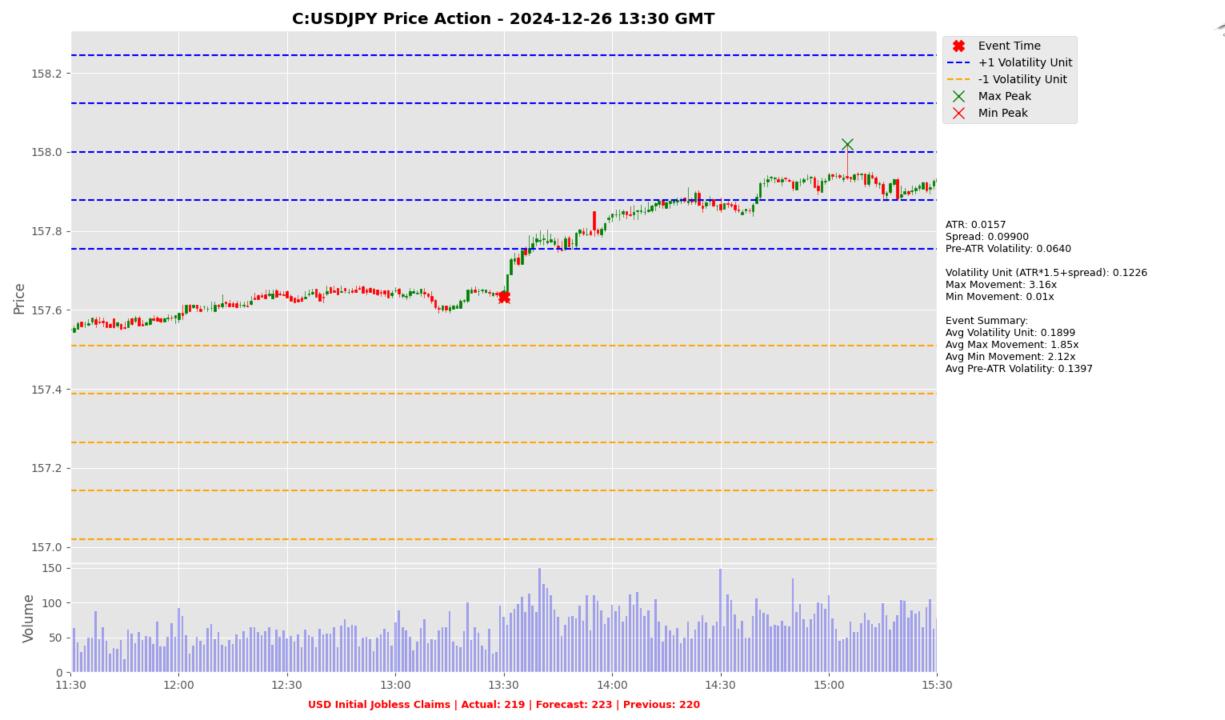
C:USDJPY Price Action - 2024-11-27 13:30 GMT # Event Time 152.50 --- +1 Volatility Unit --- -1 Volatility Unit X Max PeakX Min Peak 152.25 152.00 151.75 ATR: 0.0566 Spread: 0.09900 Pre-ATR Volatility: 0.1280 Price Volatility Unit (ATR\*1.5+spread): 0.1840 Max Movement: 1.16x 151.50 Min Movement: 3.22x 151.25 151.00 150.75 300 9 200 100 11:30 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30

USD Initial Jobless Claims | Actual: 213 | Forecast: 215 | Previous: 215

C:USDJPY Price Action - 2024-12-05 13:30 GMT # Event Time --- +1 Volatility Unit 151.25 --- -1 Volatility Unit X Max Peak
X Min Peak 151.00 150.75 150.50 ATR: 0.0570 Spread: 0.09900 Pre-ATR Volatility: 0.1240 Price Volatility Unit (ATR\*1.5+spread): 0.1845 Max Movement: 1.84x 150.25 Min Movement: 0.75x 150.00 149.75 149.50 Nolume 200 100 11:30 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 USD Initial Jobless Claims | Actual: 224 | Forecast: 215 | Previous: 215

C:USDJPY Price Action - 2024-12-12 13:30 GMT # Event Time 153.25 --- +1 Volatility Unit --- -1 Volatility Unit X Max Peak
X Min Peak 153.00 152.75 152.50 ATR: 0.0679 Spread: 0.09900 Pre-ATR Volatility: 0.1740 Volatility Unit (ATR\*1.5+spread): 0.2009 Max Movement: 0.63x Min Movement: 2.37x 152.00 151.75 151.50 151.25 300 -900 Nolumber 2000 1000 200 11:30 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 USD Initial Jobless Claims | Actual: 242 | Forecast: 221 | Previous: 225

C:USDJPY Price Action - 2024-12-19 13:30 GMT # Event Time 157.75 --- +1 Volatility Unit --- -1 Volatility Unit X Max Peak X Min Peak 157.50 157.25 ATR: 0.0608 Spread: 0.09900 Pre-ATR Volatility: 0.1330 Volatility Unit (ATR\*1.5+spread): 0.1902 Max Movement: 3.80x Min Movement: 2.15x 156.50 156.25 156.00 300 Volume 200 100 0 -11:30 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 USD Initial Jobless Claims | Actual: 220 | Forecast: 229 | Previous: 242

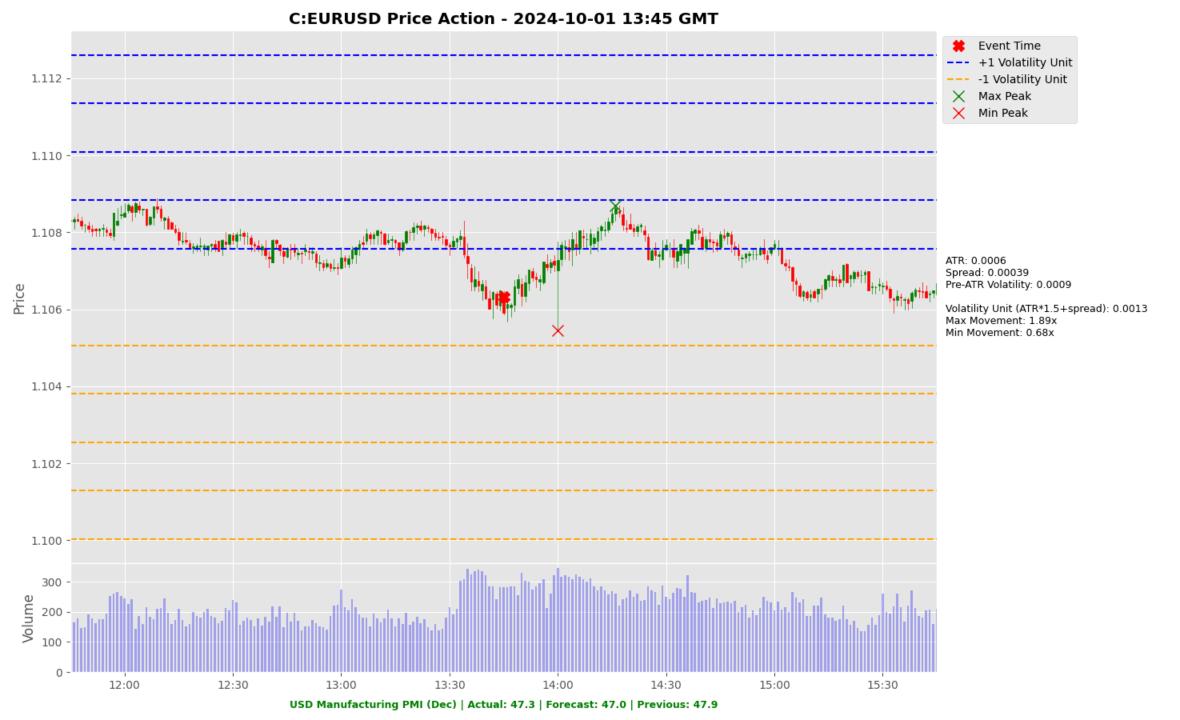


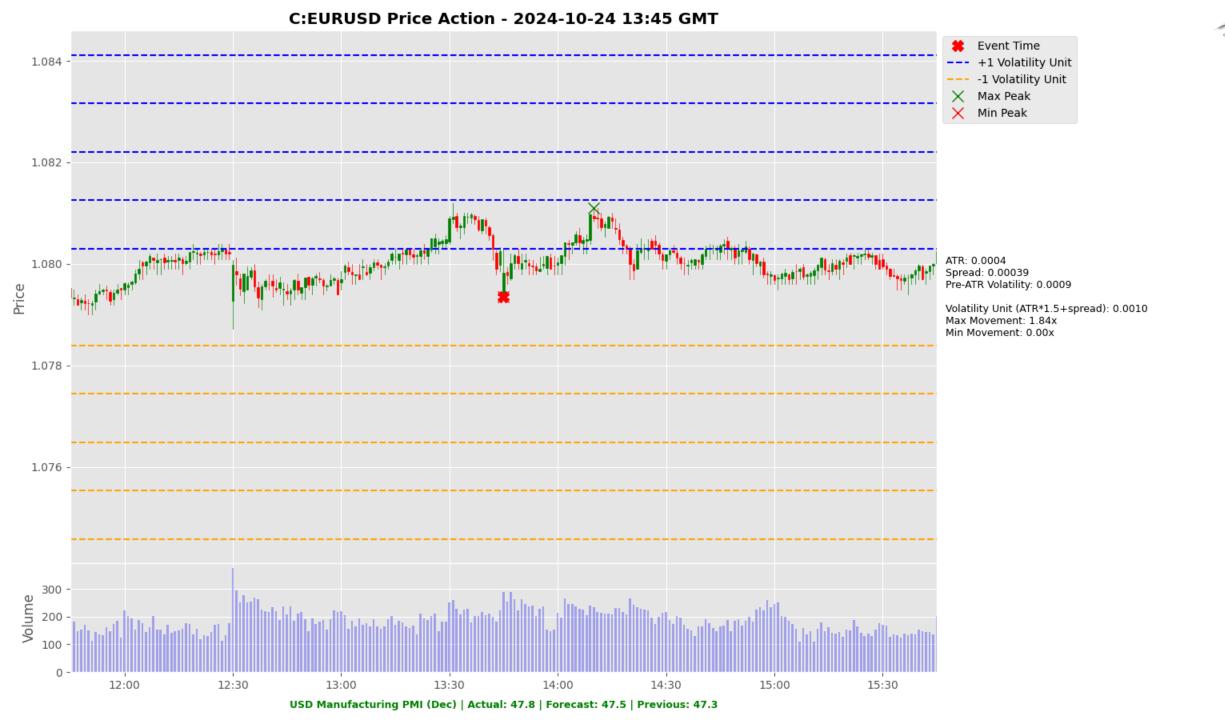
# USD Manufacturing PMI (Dec)

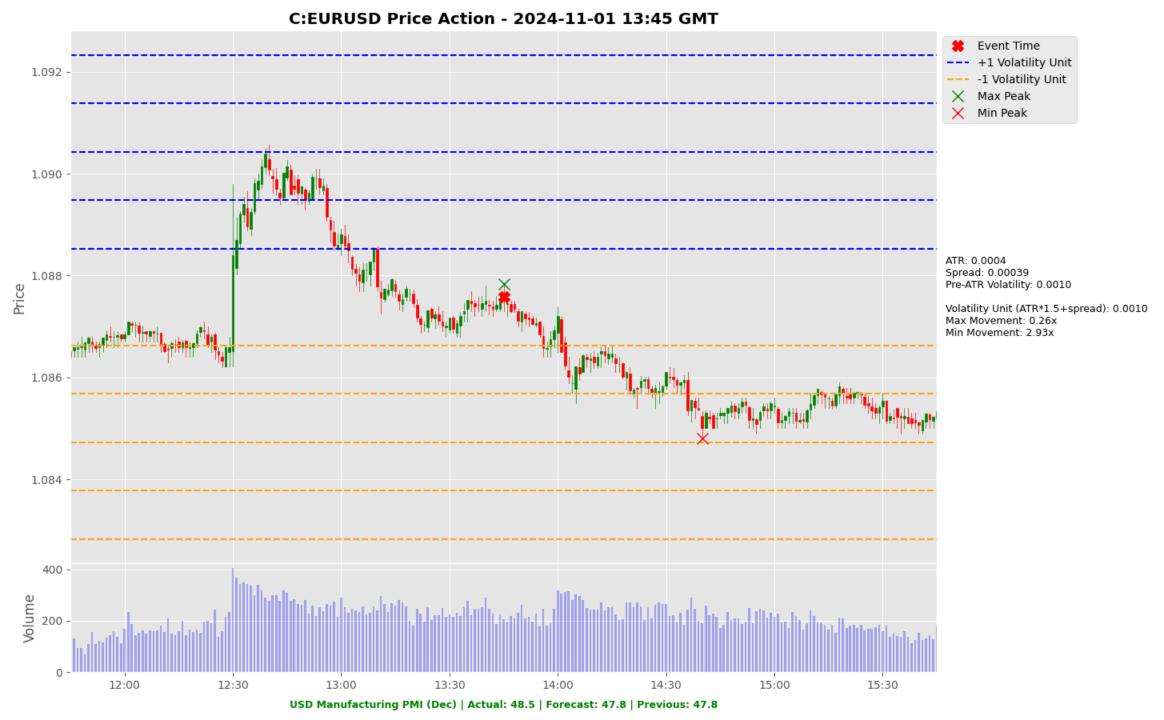
## USD Manufacturing PMI (Dec)

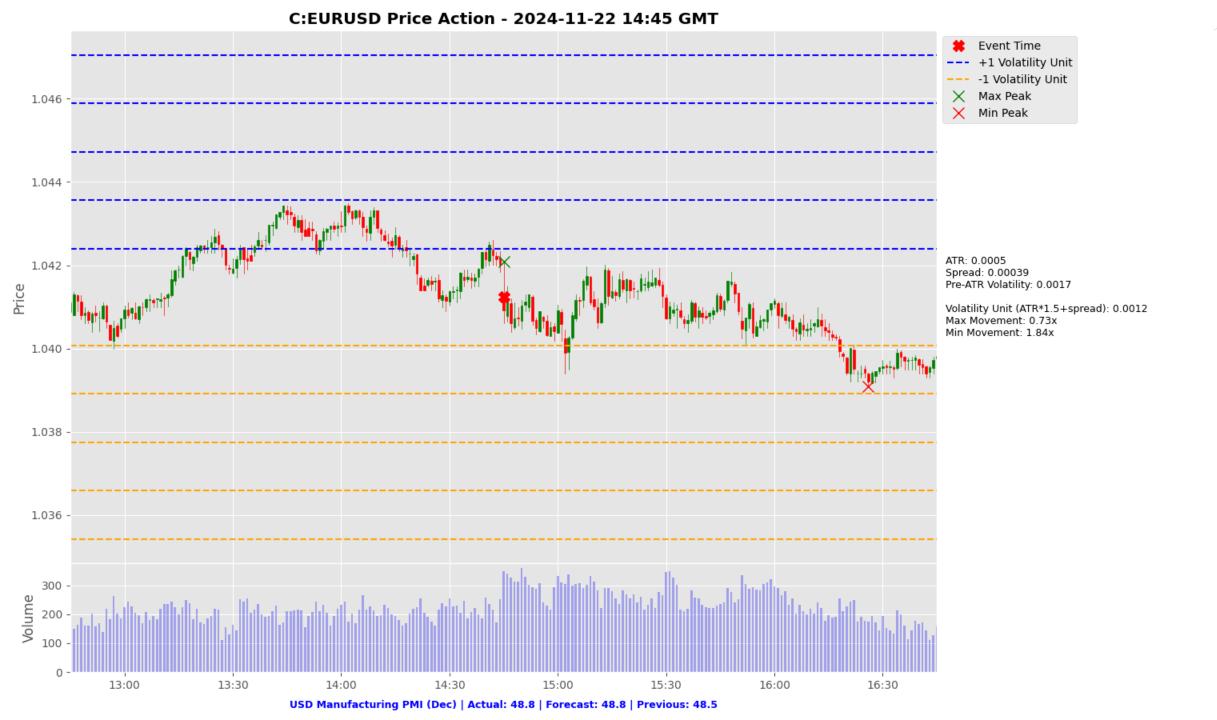
Event	USD Manufacturing PMI (Dec)			Description
Actual:				
Forecast:			48.30	
Previous:			49.70	
Time (GMT):			14:45	The Manufacturing Purchasing Managers' Index (PMI) is a diffusion index incorporating
Release Date	Actual	Forecast	Previous	survey results provided by manufacturing firms throughout the country. A reading above fifty suggests the manufacturing sector is expanding, while a reading below fifty suggests the manufacturing sector is in contraction. Policymakers and traders watch
16-Dec-24	48.3	49.4	49.7	these surveys closely as purchasing managers usually have early access to data about their company's performance, rather than waiting for the hard data to emerge. While manufacturing accounts for a far smaller percentage of economic output than services, it is far more cyclical and is therefore a useful indicator of where in the
02-Dec-24	49.7	48.8	48.5	economic cycle the economy is currently situated. A reading that is stronger than forecast is generally supportive (bullish) for the USD while a weaker than forecast reading is generally negative (bearish) for the USD.
22-Nov-24	48.8	48.8	48.5	-Historical Impact on Assets: EURUSD   USDJPY
01-Nov-24	48.5	47.8	47.8	
24-Oct-24	47.8	47.5	47.3	
01-Oct-24	47.3	47.0	47.9	

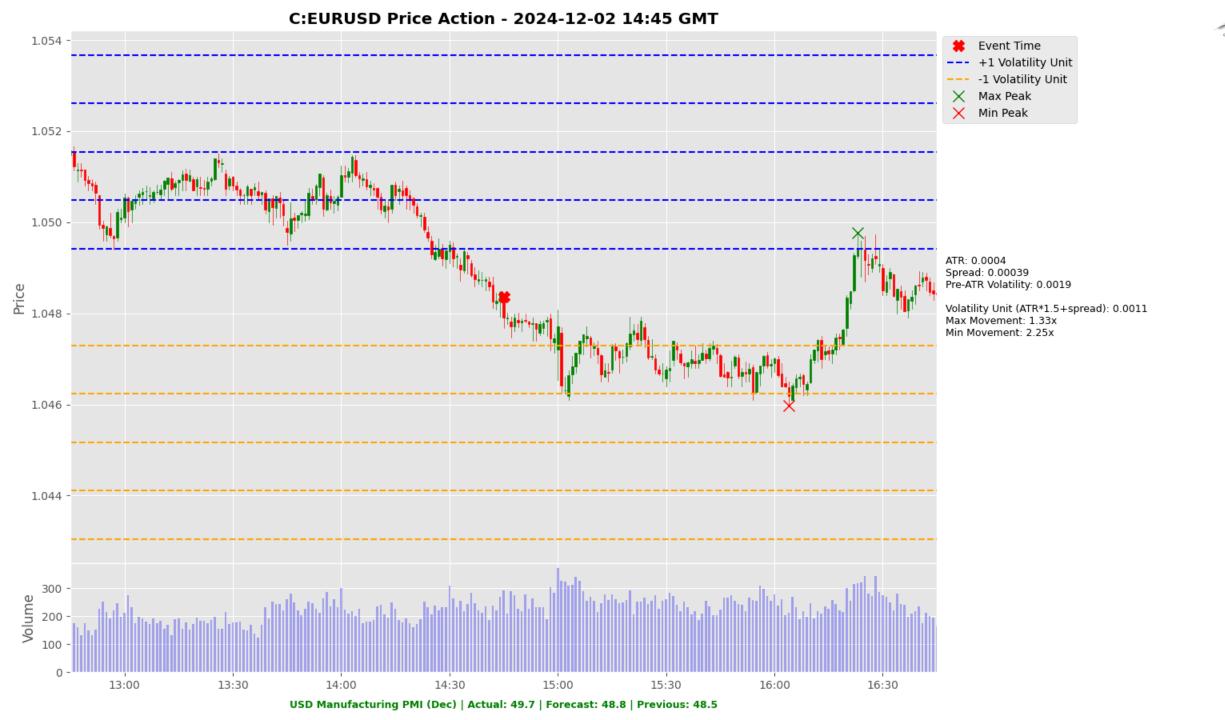
# USD Manufacturing PMI (Dec) EURUSD

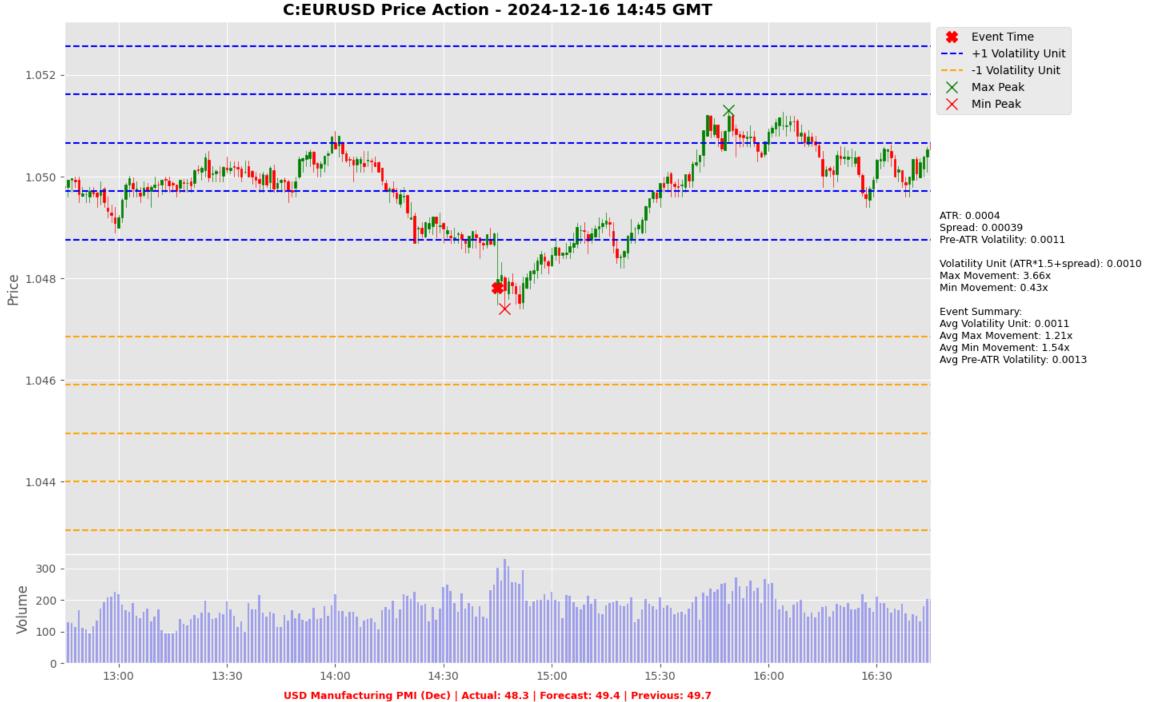












## **Crude Oil Inventories**

### **Crude Oil Inventories**

Event	Crude Oil Inventories			Description
Actual:				
Forecast:			-	
Previous:			-4.237M	
Time (GMT):			16:00	The Energy Information Administration's (EIA) Crude Oil Inventories measures the
Release Date	Actual	Forecast	Previous	weekly change in the number of barrels of commercial crude oil held by US firms. The level of inventories influences the price of petroleum products, which can have an impact on inflation.  If the increase in crude inventories is more than expected, it implies weaker demand and is bearish for crude prices. The same can be said if a decline in inventories is less than expected.  If the increase in crude is less than expected, it implies greater demand and is bullish for crude prices. The same can be said if a decline in inventories is more than expected.
27-Dec-24	-4.237	-0.700	-0.934	
18-Dec-24	-0.934	-1.600	-1.425	
11-Dec-24	-1.425	-1.000	-5.073	-Historical Impact on Assets: USOILRoll
04-Dec-24	-5.073	-1.600	-1.844	
27-Nov-24	-1.844	-1.300	0.545	
20-Nov-24	0.545	0.400	2.089	

# **Crude Oil Inventories USOILROII**



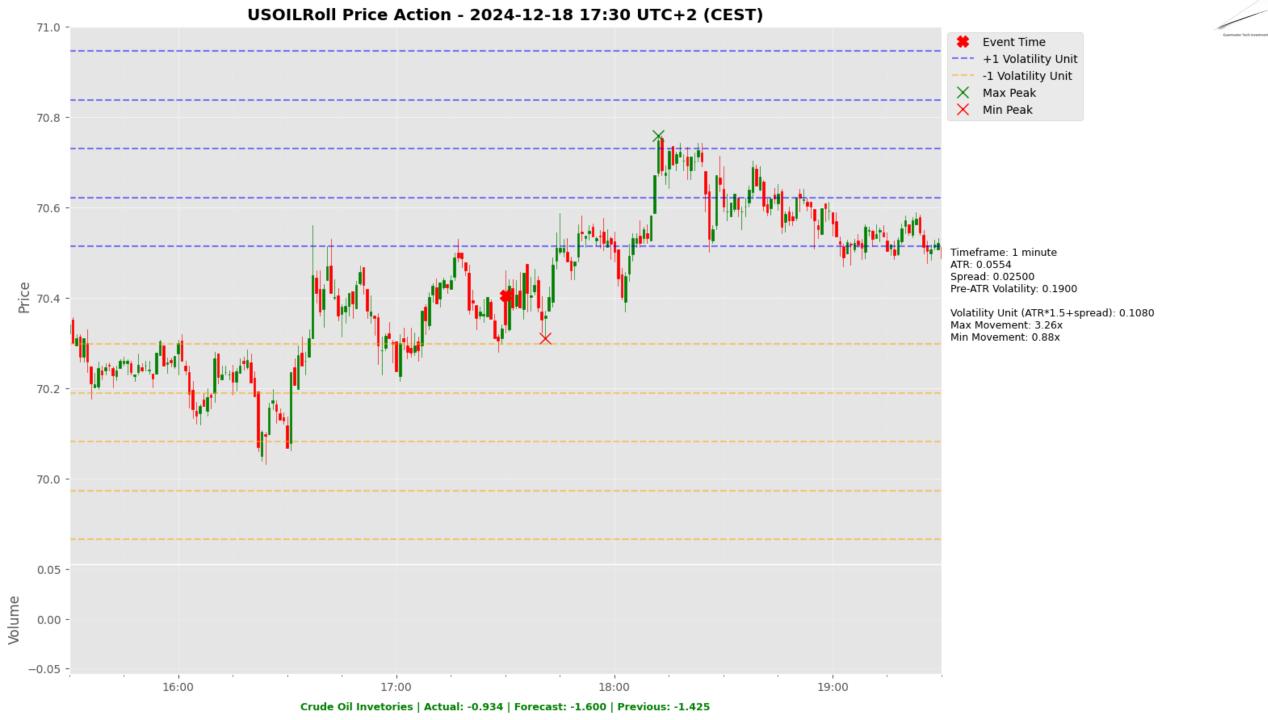
### USOILRoll Price Action - 2024-11-27 17:30 UTC+2 (CEST)





### USOILRoll Price Action - 2024-12-11 17:30 UTC+2 (CEST)





### USOILRoll Price Action - 2024-12-27 20:00 UTC+2 (CEST)



Crude Oil Invetories | Actual: -4.237 | Forecast: -0.700 | Previous: -0.934

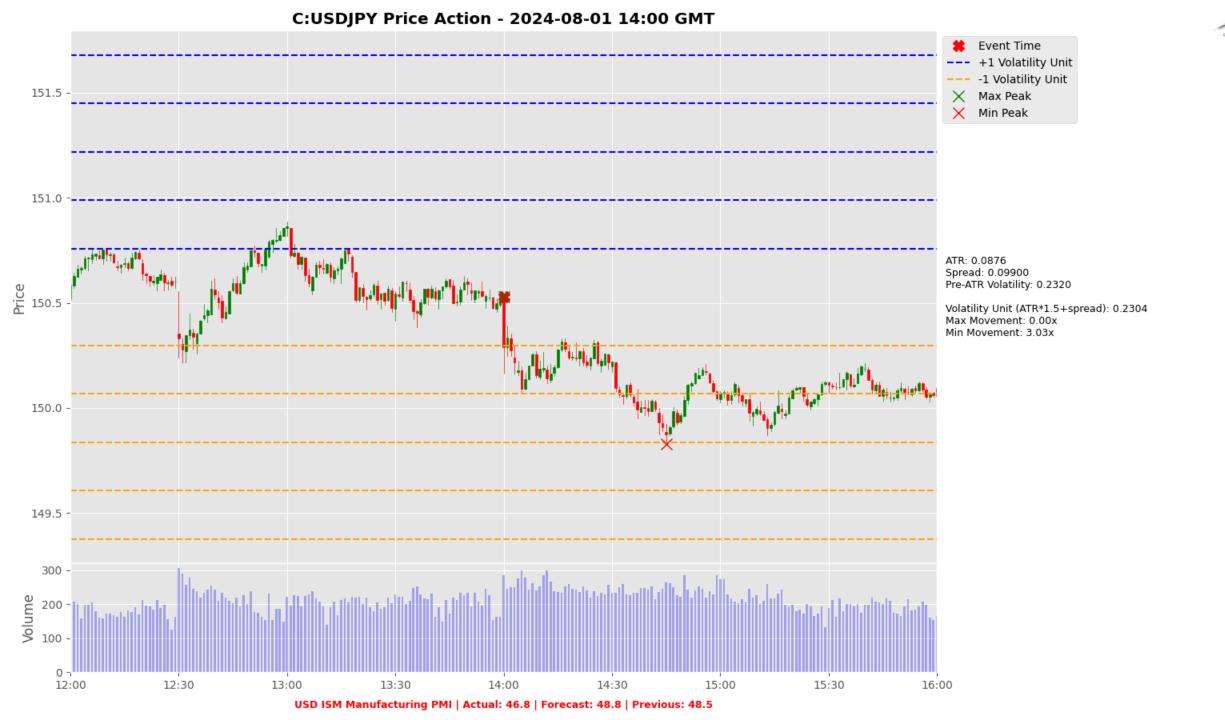
# **USD ISM Manufacturing PMI**

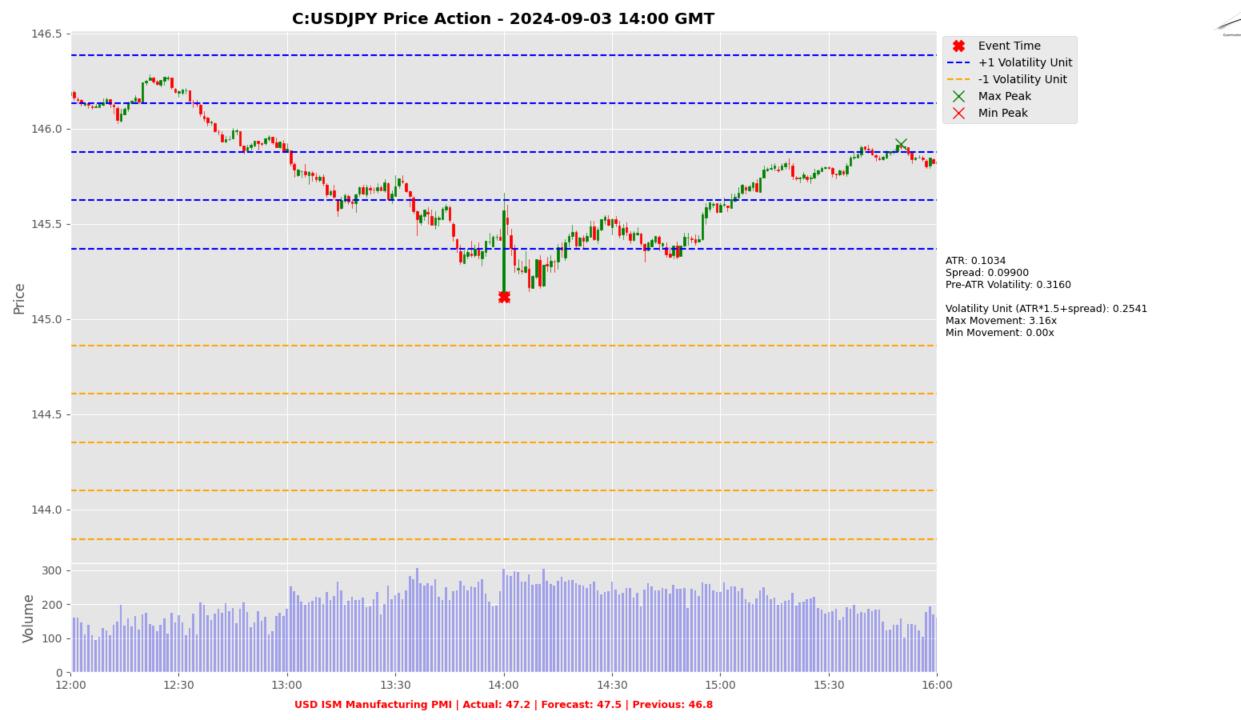
## **USD ISM Manufacturing PMI**

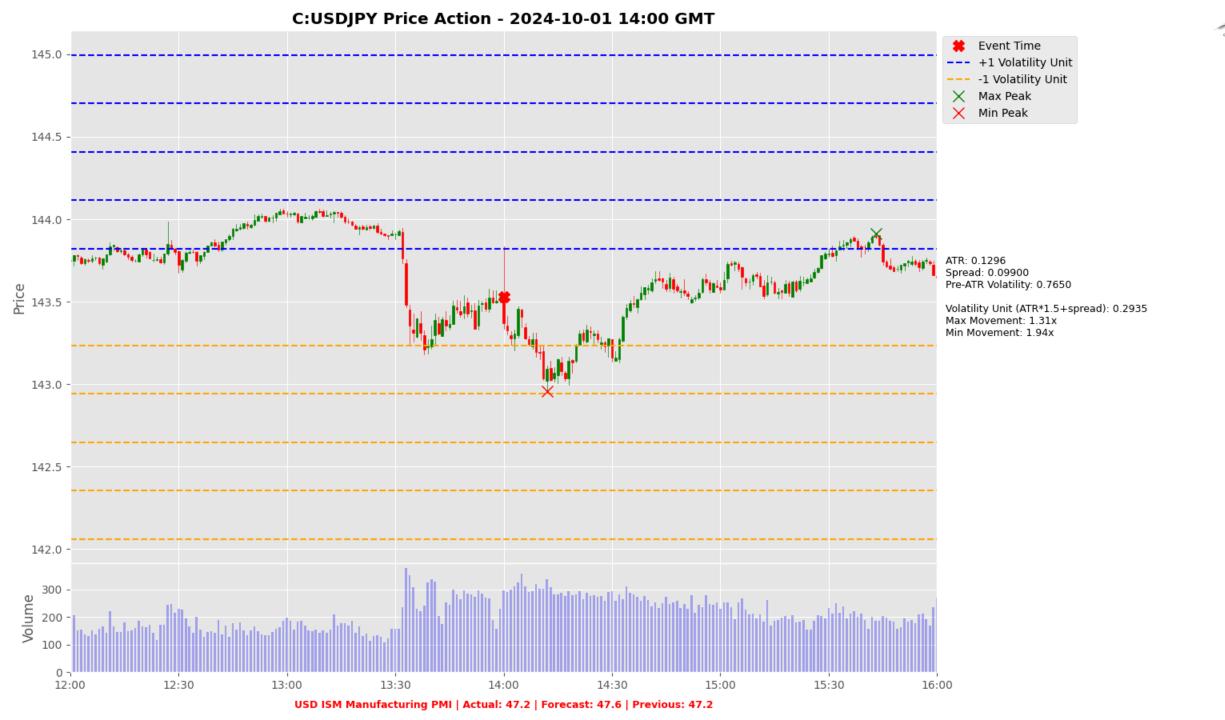
Event	USD ISM Manufacturing PMI			Description
Actual:				
Forecast:			48.30	
Previous:			48.4	
Time (GMT):			15:00	The Institute of Supply Management (ISM) Manufacturing Purchasing Managers Index (PMI) Report on Business is based on data compiled from monthly replies to questions asked of purchasing and supply executives in over 400 industrial companies across the
Release Date	Actual	Forecast	Previous	United States. For each of the indicators measured (New Orders, Backlog of Orders, New Export Orders, Imports, Production, Supplier Deliveries, Inventories, Customers Inventories, Employment, and Prices), a diffusion index is calculated by adding the percent of positive responses plus one-half of those responding the same (considered positive). The resulting single index number is then seasonally adjusted.  The PMI is a composite index based on the seasonally adjusted diffusion indices for five of the indicators with differing weights: New Orders30% Production25% Employment20% Supplier Deliveries15% and Inventories 10%.  A reading that is stronger than forecast is generally supportive (bullish) for the USD, while a weaker than forecast reading is generally negative (bearish) for the USD.  -Historical Impact on Assets: EURUSD   USDJPY
02-Jan-25	-		48.4	
02-Dec-24	48.4	47.7	46.5	
01-Nov-24	46.5	47.6	47.2	
01-Oct-24	47.2	47.6	47.2	
03-Sep-24	47.2	47.5	46.8	
01-Aug-24	46.8	48.8	48.5	

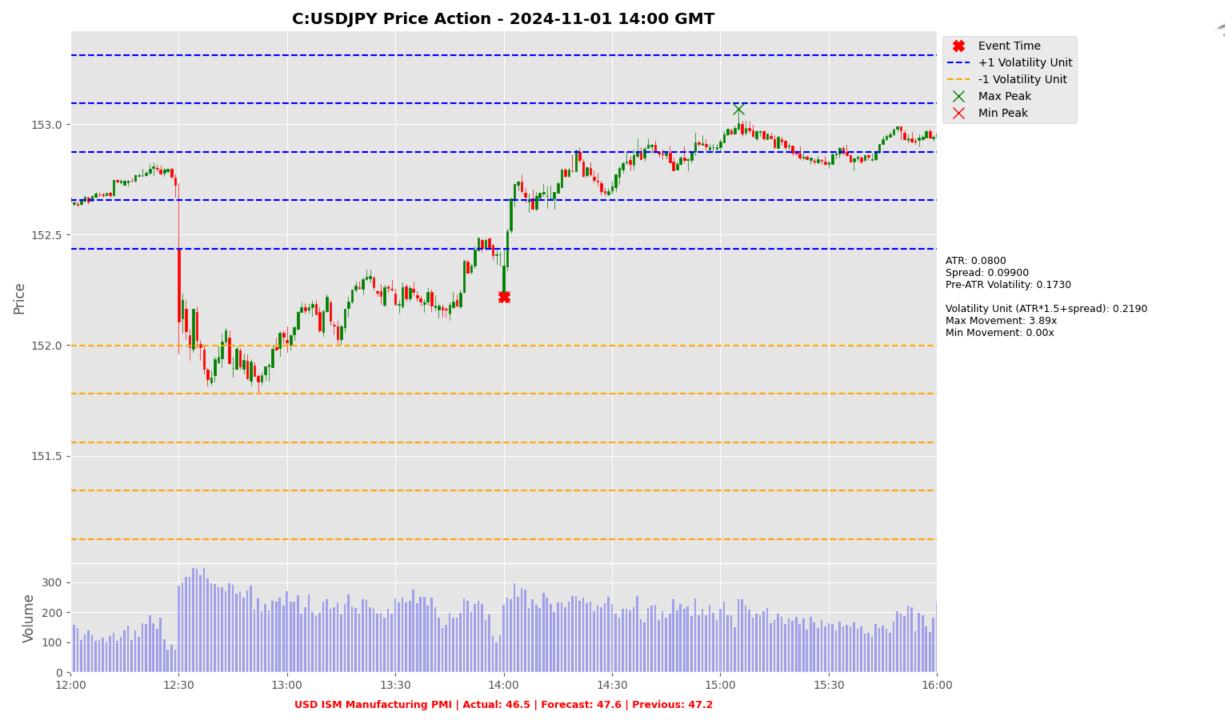
# USD ISM Manufacturing PMI USDJPY

C:USDJPY Price Action - 2024-07-01 14:00 GMT # Event Time 162.25 ---- +1 Volatility Unit --- -1 Volatility Unit X Max Peak X Min Peak 162.00 161.75 161.50 ATR: 0.0564 Spread: 0.09900 Pre-ATR Volatility: 0.1200 Price Volatility Unit (ATR\*1.5+spread): 0.1835 161.25 Max Movement: 2.26x Min Movement: 2.06x 161.00 160.75 160.50 Nolume 100 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 16:00 USD ISM Manufacturing PMI | Actual: 48.5 | Forecast: 49.2 | Previous: 48.7









C:USDJPY Price Action - 2024-12-02 15:00 GMT # Event Time --- +1 Volatility Unit 151.00 --- -1 Volatility Unit X Max Peak X Min Peak 150.75 150.50 ATR: 0.0687 Spread: 0.09900 Pre-ATR Volatility: 0.2210 150.25 Volatility Unit (ATR\*1.5+spread): 0.2021 Pic 150.00 Max Movement: 0.81x Min Movement: 4.95x Event Summary: Avg Volatility Unit: 0.2361 Avg Max Movement: 2.12x Avg Min Movement: 1.41x Avg Pre-ATR Volatility: 0.3212 149.75 149.50 149.25 149.00 -300 om 200 100 13:00 13:30 14:00 14:30 15:00 15:30 16:00 16:30 17:00

USD ISM Manufacturing PMI | Actual: 48.4 | Forecast: 47.7 | Previous: 46.5

# **USD ISM Manufacturing Prices (Dec)**

## USD ISM Manufacturing Prices (Dec)

Event	USD ISM Manufacturing Prices (Dec)			Description
Actual:				The Institute of Supply Management (ISM) Manufacturing Purchasing Managers Index (PMI) Report on Business is based on data compiled from monthly replies to questions
Forecast:				asked of purchasing and supply executives in over 400 industrial companies. For each of the indicators measured (New Orders, Backlog of Orders, New Export Orders, Imports, Production, Supplier Deliveries, Inventories, Customers Inventories,
Previous:	50.30			Employment, and Prices), this report shows the percentage reporting each response, the net difference between the number of responses in the positive economic direction and the negative economic direction and the diffusion index. Responses are raw data and are never changed.
Time (GMT):			15:00	The diffusion index includes the percent of positive responses plus one-half of those responding the same (considered positive). The resulting single index number is then
Release Date	Actual	Forecast	Previous	seasonally adjusted to allow for the effects of repetitive intra-year variations resulting primarily from normal differences in weather conditions, various institutional arrangements, and differences attributable to non-moveable holidays. All seasonal
02-Dec-24	50.3	55.2	54.8	adjustment factors are supplied by the U.S. Department of Commerce and are subject annually to relatively minor changes when conditions warrant them.
01-Nov-24	54.8	49.9	48.3	The PMI is a composite index based on the seasonally adjusted diffusion indices for five of the indicators with varying weights: New Orders30% Production25% Employment20% Supplier Deliveries15% and Inventories 10%.
01-Oct-24	48.3	53.5	54.0	The Prices Paid subcategory is a diffusion index calculated by adding the percent of responses indicating they paid more for inputs plus one-half of those responding that they paid the same for inputs. The resulting single index number is then seasonally adjusted.
03-Sep-24	54.0	52.1	52.9	The Prices Paid diffusion index is one of a number of indicators pointing to the degree of inflationary pressures in the economy.
01-Aug-24	52.9	51.9	52.1	A higher than expected reading should be taken as positive/bullish for the USD, while a lower than expected reading should be taken as negative/bearish for the USD.
01-Jul-24	52.1	55.8	57.0	-Historical Impact on Assets: EURUSD   USDJPY

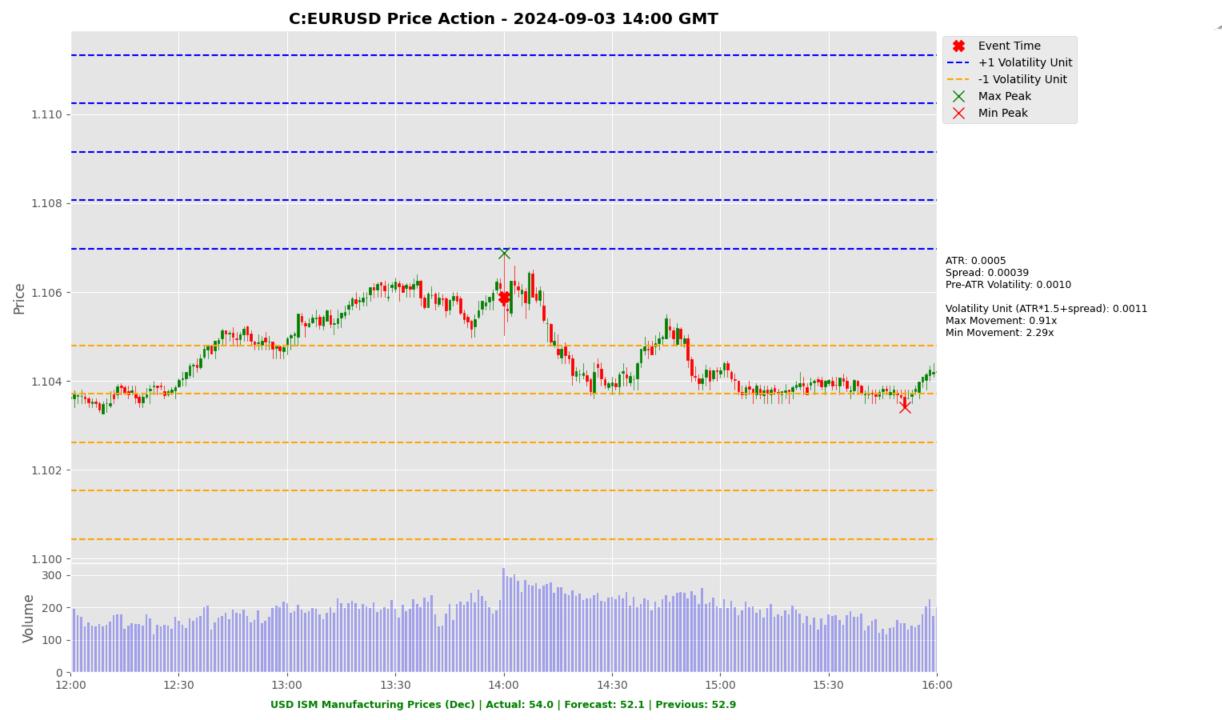
# USD ISM Manufacturing Prices (Dec) EURUSD

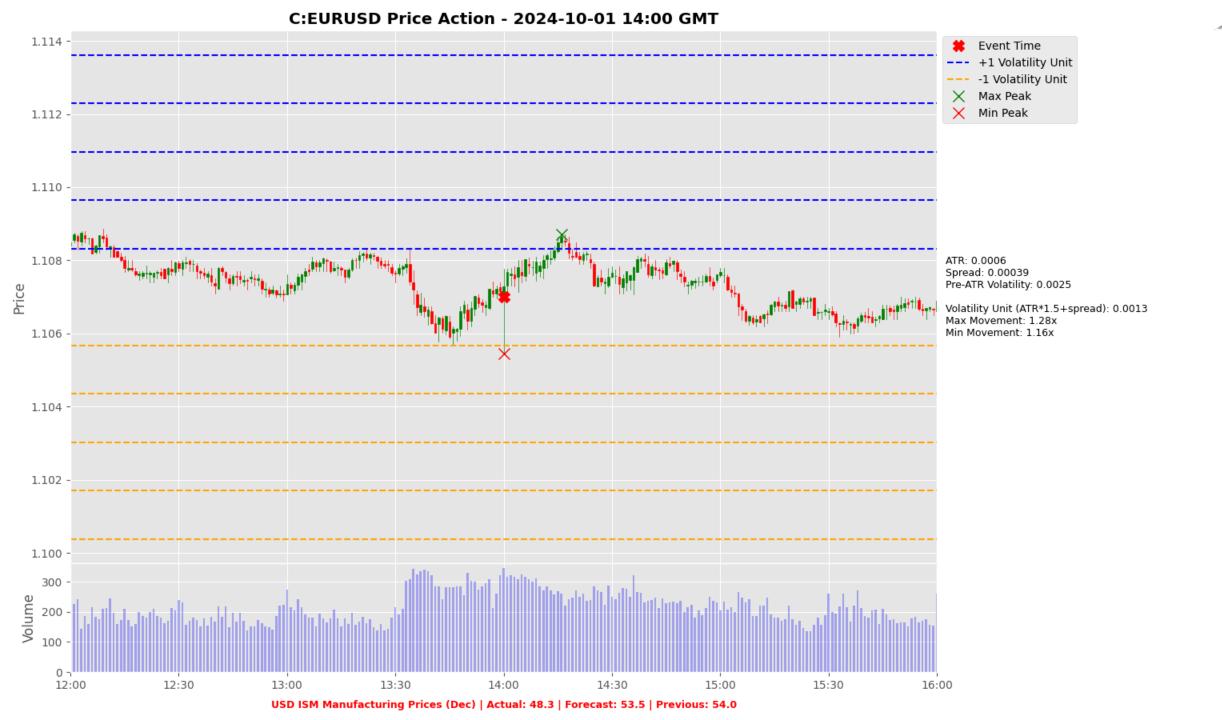
### C:EURUSD Price Action - 2024-07-01 14:00 GMT # Event Time 1.080 --- +1 Volatility Unit --- -1 Volatility Unit X Max Peak X Min Peak 1.078 ATR: 0.0004 1.076 Spread: 0.00039 Pre-ATR Volatility: 0.0007 Price Volatility Unit (ATR\*1.5+spread): 0.0009 Max Movement: 1.71x Min Movement: 3.76x 1.074 -1.072 300 Volume 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 16:00

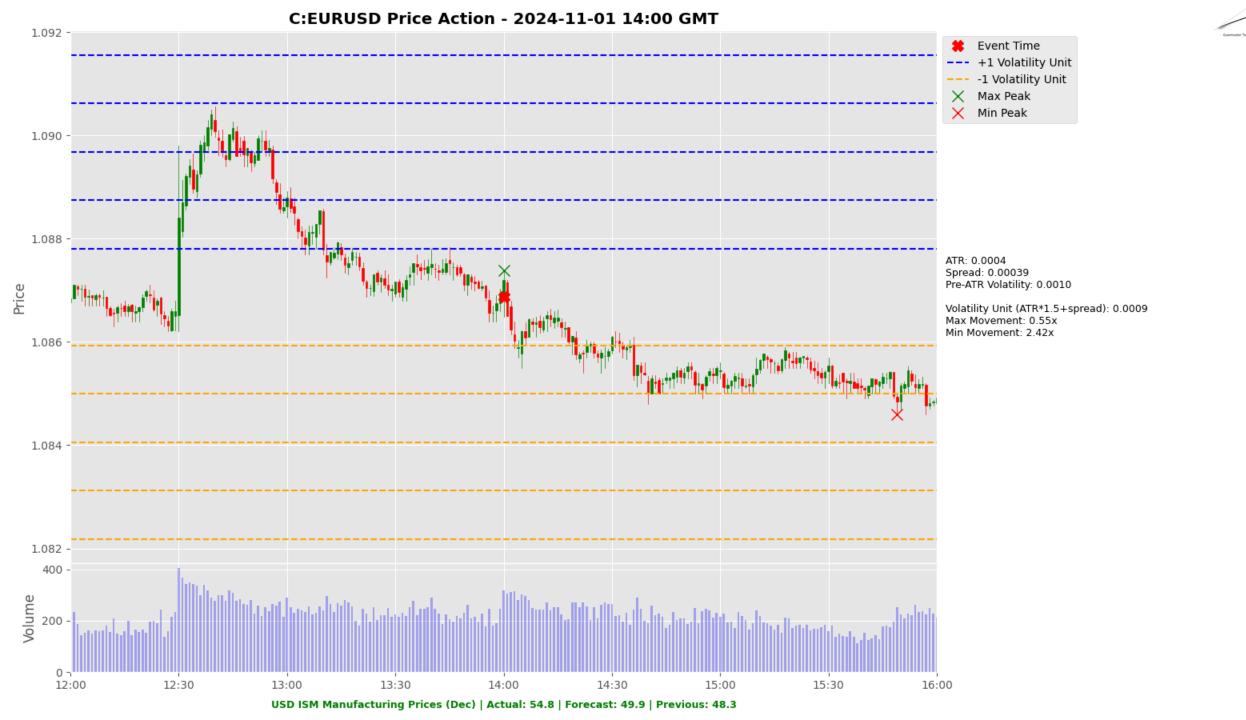
USD ISM Manufacturing Prices (Dec) | Actual: 52.1 | Forecast: 55.8 | Previous: 57.0

### C:EURUSD Price Action - 2024-08-01 14:00 GMT # Event Time --- +1 Volatility Unit --- -1 Volatility Unit X Max PeakX Min Peak 1.084 1.082 ATR: 0.0004 Spread: 0.00039 Pre-ATR Volatility: 0.0012 년 1.080 Volatility Unit (ATR\*1.5+spread): 0.0010 Max Movement: 1.52x Min Movement: 2.11x 1.078 1.076 -300 olume 200 100 100 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 16:00

USD ISM Manufacturing Prices (Dec) | Actual: 52.9 | Forecast: 51.9 | Previous: 52.1



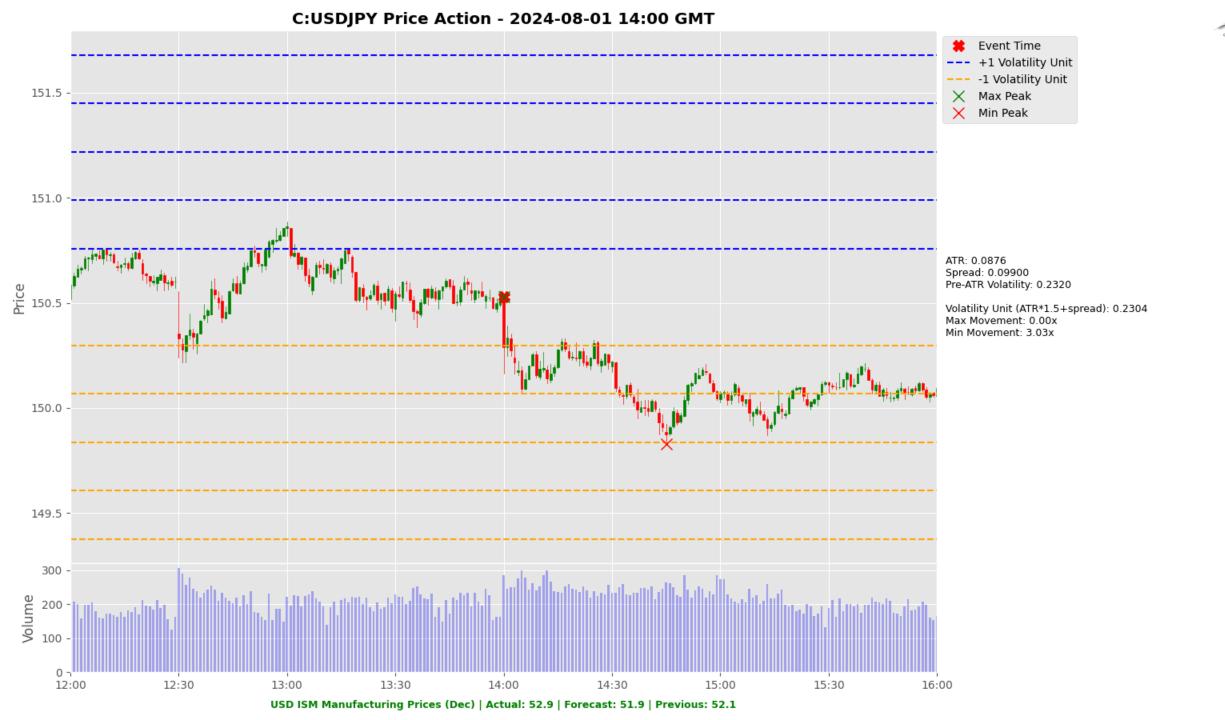


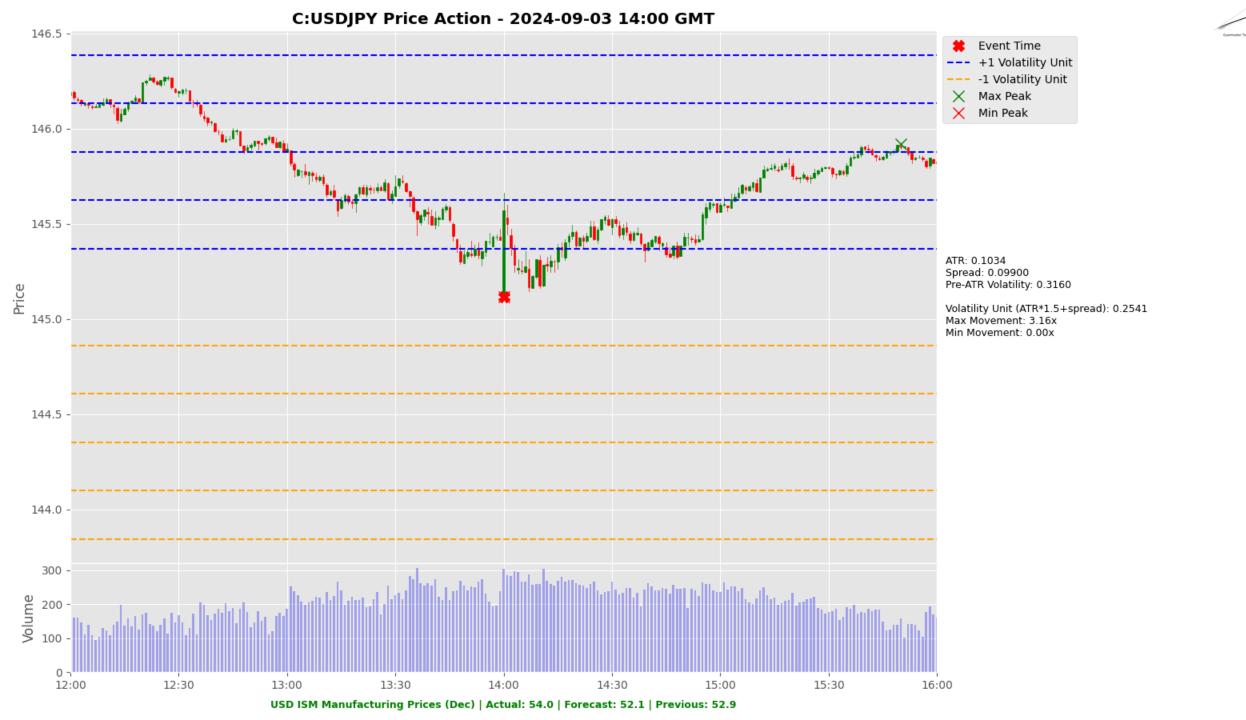


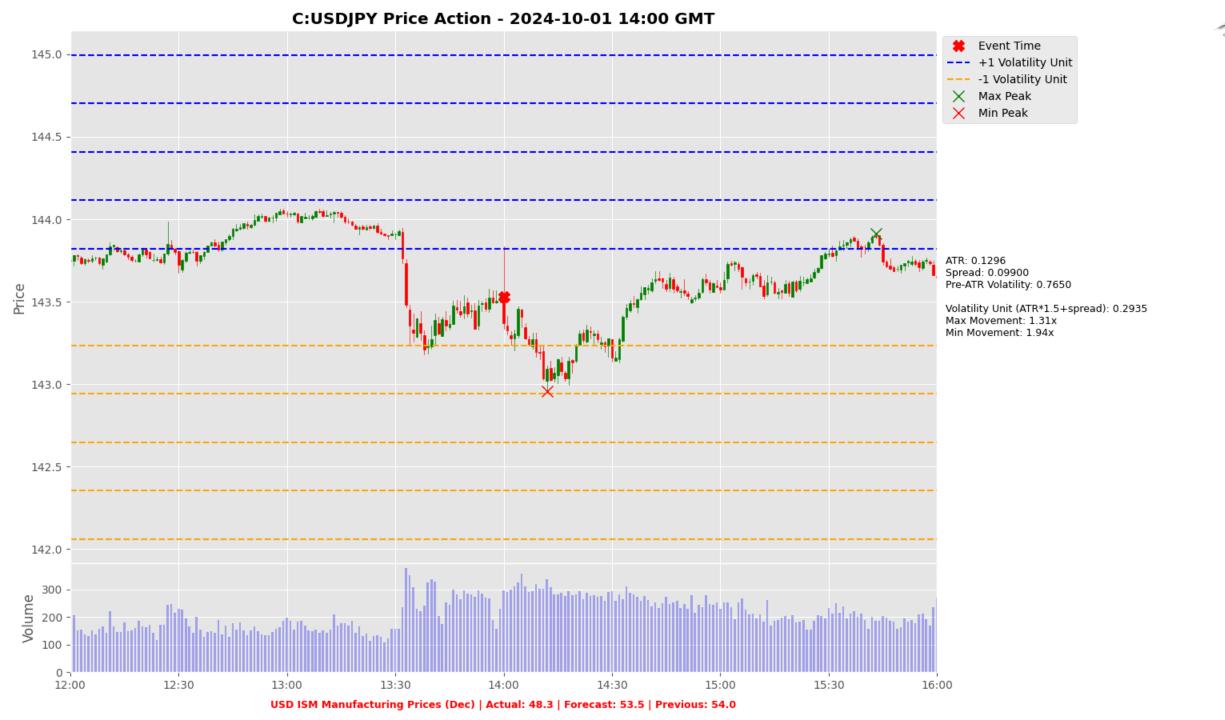


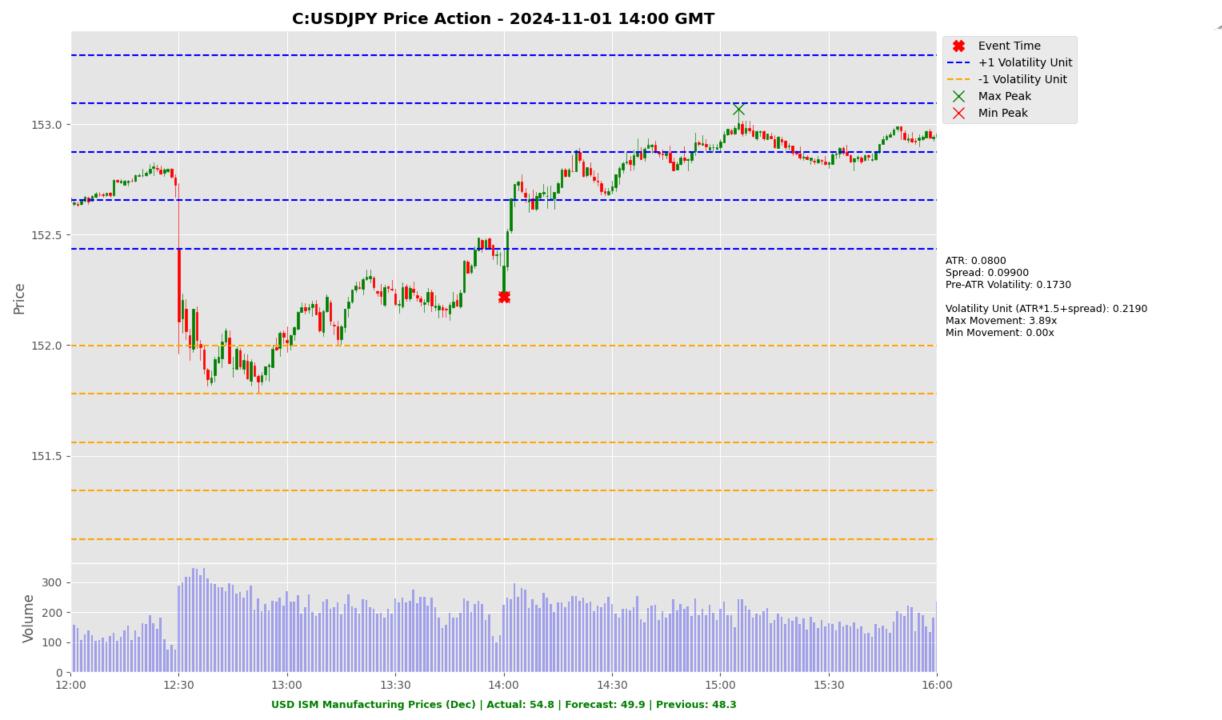
# USD ISM Manufacturing Prices (Dec) USDJPY

C:USDJPY Price Action - 2024-07-01 14:00 GMT # Event Time 162.25 ---- +1 Volatility Unit --- -1 Volatility Unit X Max Peak X Min Peak 162.00 161.75 161.50 ATR: 0.0564 Spread: 0.09900 Pre-ATR Volatility: 0.1200 Price Volatility Unit (ATR\*1.5+spread): 0.1835 161.25 Max Movement: 2.26x Min Movement: 2.06x 161.00 160.75 160.50 Nolume 100 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 16:00 USD ISM Manufacturing Prices (Dec) | Actual: 52.1 | Forecast: 55.8 | Previous: 57.0









C:USDJPY Price Action - 2024-12-02 15:00 GMT # Event Time --- +1 Volatility Unit 151.00 --- -1 Volatility Unit X Max Peak X Min Peak 150.75 150.50 ATR: 0.0687 Spread: 0.09900 Pre-ATR Volatility: 0.2210 150.25 Volatility Unit (ATR\*1.5+spread): 0.2021 9 150.00 Max Movement: 0.81x Min Movement: 4.95x Event Summary: Avg Volatility Unit: 0.2361 Avg Max Movement: 2.12x Avg Min Movement: 1.41x Avg Pre-ATR Volatility: 0.3212 149.75 149.50 149.25 149.00 -300 om 200 100 13:00 13:30 14:00 14:30 15:00 15:30 16:00 16:30 17:00

USD ISM Manufacturing Prices (Dec) | Actual: 50.3 | Forecast: 55.2 | Previous: 54.8

### **Appendix: Key Economic & Analytical Concepts**

### **Economic Data Interpretation**

- Forecast Vs. Actual: Comparing predicted values with released data
- **Previous Reading:** Last reported value, used as a benchmark
- Market Impact: How releases affect financial markets

### Average True Range (ATR)

- Definition: A technical indicator that measures market volatility
- Calculations:
  - Calculate True Range (TR) for each period:
    - TR = max [(high low), abs(high previous close), abs(low previous close)]
  - ATR = Simple moving average of TR over N periods (typically 14)
- Interpretation:
  - Higher ATR = Higher Volatility
  - Lower ATR = Lower Volatility
- Usage in Our Analysis:
  - Helps standardize price movements across different market conditions
  - Forms the basis of our Volatility Unit Calculations

#### **Volatility Unit**

- Formula: (ATR \* multiple) + Spread (multiple is typically 1.5)
- Purpose: Standardizes price movements

#### **Price Movements**

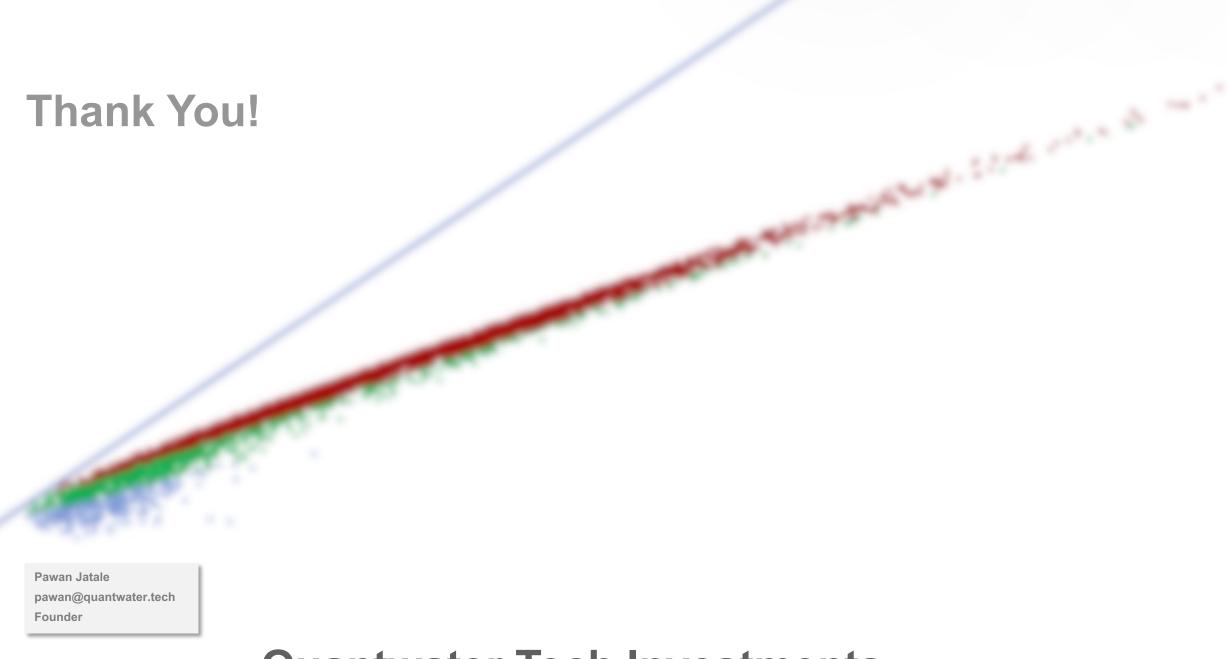
- Max Movement: Largest upward price move after event
- Min Movement: Largest downward price move after event
- Both measured in Volatility Units

### **Using This Analysis**

- Analyze volatility across different economic releases
- Identify patterns in market reactions
- Assess importance of economic indicators based on market impact

#### **Resources**

- https://github.com/pawan-pro/quantwater-tech-investments/blob/main/RiskEventTrader
- https://quantwater.tech/research



# **Quantwater Tech Investments**