

## SPIKES® Volatility Products FAQs

### What is the SPIKES Index?

The SPIKES Volatility Index measures expected 30-day volatility in the SPDR® S&P 500® ETF Trust (SPY) options.

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### What is volatility?

Volatility is the amount of variation in a time series of prices, measured by the standard deviation of log returns. Historical volatility is based on what was observed in the past, and implied volatility is the expected future volatility derived from the options market's prices. The implied volatility over the next 30 days is a common measurement used to compare volatilities of different time periods or different instruments.

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### How is SPIKES calculated?

SPIKES uses SPY option prices and interpolates between two expirations' computed variances to determine the 30-day volatility.

The full index methodology guide is available [here](#).

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### What are some key features of SPIKES?

- Using SPY options inputs provides a high degree of accuracy. The options are multiply listed across many venues, ensuring no single point of failure for the option price inputs to the index.
- SPIKES Price Dragging technique prioritizes trades over quotes, and updates option price inputs using an algorithm designed to insulate the index from erratic movements in the bid-ask spread of constituent options by only considering order submissions which change the market in a meaningful way.
- SPIKES truncates the SPY options used in the calculation by excluding all out-of-the-money options after the first two consecutive options with Cash Reference Prices (CRPs) of 5 cents or less, both calls and puts. CRP is the option price resulting from the price dragging technique, applied to the option quote and trade information. The truncation reduces the number of low-priced components in the index. This decreases the potential to distort the index value as fewer far out-of-the-money option prices are used in the calculation of the index.
- SPIKES is calculated and disseminated every 100 milliseconds, ensuring timely and accurate representation of actual market conditions.

The full index methodology guide is available [here](#).

## SPIKES Overview: **Frequently Asked Questions**

### How frequently does the SPIKES Index update?

SPIKES is calculated and disseminated every 100 milliseconds, ensuring timely and accurate representation of actual market conditions.

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### Why is the SPIKES Index more robust in fast markets?

SPIKES price dragging technique prioritizes trades over quotes, and updates option price inputs using an algorithm designed to insulate the index from erratic movements in the bid-ask spread of constituent options by only considering order submissions which change the market in a meaningful way. This prevents erratic moves in the index from quotes merely widening out.

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### Who created SPIKES?

SPIKES has been developed by T3 Index - a research-driven financial indexing firm focused on developing innovative, investible proprietary indexes that transform the way people invest and manage risk. For more information, visit [www.t3index.com](http://www.t3index.com).

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### Can I hold the SPIKES Index itself?

No. Since the SPIKES index components change over time, it is impossible to hold the index itself.

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### Is an index calculation example spreadsheet available?

Yes, please see an example calculation spreadsheet [here](#).

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### Which vendors carry the real-time index values?

Index values are available via [OPRA](#) and the [MIAX® Product Feed \(MPF\)](#). Most major data vendors include the index; a sample of data vendors and their index symbols is below.

Data Vendor	Symbol
<a href="#">Bloomberg</a>	SPIKE
<a href="#">Thomson Reuters</a>	.SPIKE
<a href="#">LiveVol</a>	^SPIKE
<a href="#">Yahoo Finance</a>	^SPIKE

## **Are there any potential tax advantages of trading SPIKES Options and Futures?**

Yes. Certain cash-settled index options and futures, such as options and futures on the SPIKES Index that are listed in the United States may be eligible for the preferential 60/40 tax treatment. The ratio is such that 60% of any gains could be taxed as long term capital gains and the remaining 40% as short term capital gains. Options and futures on the SPIKES Index may fall into this category. Please consult your tax professional for advice on this topic. See, <https://www.irs.gov/forms-pubs/about-form-6781>, for self-directed guidance from the government's IRS website. MIAX® and its affiliates do not offer tax advice.

# **SPIKES® OPTIONS FAQs**

## **How can I trade SPIKES Options?**

Cash settled index options are available on MIAX Options. The ticker is **SPIKE**.

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## **What are the trading hours for SPIKES Options?**

9:30 a.m. - 4:15 p.m. Eastern Time (New York time).

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## **What are the trading increments for SPIKES Options?**

\$0.01 for series trading below \$3.00 and \$0.05 for series trading at or above \$3.00. Complex Orders and PRIME Price Improvement Auctions are in \$0.01 increments.

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## **Which expirations are available for SPIKES Options? Are weekly options available?**

Monthly expirations are available. SPIKES options expire on the Wednesday that is thirty days prior to the third Friday of the calendar month immediately following the expiring month and are AM settled.

The expiration dates are available [here](#).

Please note, weekly options are not available.

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## **When do SPIKES Options expire?**

SPIKES options expire on the Wednesday that is thirty days prior to the third Friday of the calendar month immediately following the expiring month and are AM settled.

The expiration dates are available [here](#).

## **SPIKES Overview: Frequently Asked Questions**

### **What are the full contract specifications for SPIKES Options?**

Contract specifications are available [here](#).

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### **What are the fees for trading SPIKES Options?**

Please see the fee schedule [here](#).

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### **What is the ticker for SPIKES?**

SPIKES and its option chain use the ticker **SPIKE**.

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### **Can I trade a SPIKES Combo?**

Participants may enter a combo order in any individual SPIKES combo using the standard MIAX Options complex order mechanism. Complex strategies/orders can also be entered which include a combo as a delta hedge against other options. The maximum allowable ratio in SPIKES is eight contracts in the largest quantity component of the complex strategy to one combo. The maximum number of SPIKES option components in a given strategy is 8 (2 of which would be the combo).

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### **Is the margin for SPIKES Options the same as for VIX®?**

Yes, customer strategy based margin is the same.

## **SPIKES<sup>®</sup> FUTURES FAQs**

### **Where do SPIKES Futures trade?**

SPIKES Futures are offered by MGEX™, via the CME Globex® platform.

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### **Where do SPIKES Futures clear?**

All SPIKES Futures clear and settle at MGEX.

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### **What are the full contract specifications for SPIKES Futures?**

Contract specifications are available [here](#).

## SPIKES Overview: **Frequently Asked Questions**

### **Do I need to be a member of MGEX to trade SPIKES Futures?**

As of December 4, 2020, MGEX is no longer a membership organization, therefore a membership at MGEX is not required to trade SPIKES Futures. Please see the next question.

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### **What is required to trade at MGEX?**

A market participant must have an account with an MGEX Clearing Member or an account with an FCM and be permissioned to access MGEX markets via the Clearing Member.

List of current MGEX Clearing Members is available [here](#).

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### **How do I access MGEX?**

The MGEX Clearing Member and the market participant will choose how the participant will connect to the CME Globex® platform and the Clearing Member will offer connectivity methods to the market participants in question.

To access CME Globex® you or your broker needs a trading account with an MGEX Clearing Member or an account with an FCM who has a relationship with an MGEX Clearing Member. Clearing Members provide connectivity once you have an account.

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### **How do I access SPIKES Futures market data?**

SPIKES market data is available on the MGEX Electronic (Globex®) feed (Channel 460). Check with your data provider.

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### **What are the symbols used by market data vendors for SPIKES?**

**SPK** is the code that is used to trade on Globex® however data vendors may use different codes for products.

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### **What are the SPIKES Futures trading hours?**

**SPIKES Futures will trade as follows (all hours listed in Eastern Time):**

<b>Regular Trading Session:</b>	<b>9:30 a.m. – 4:00 p.m. (Monday – Friday)</b>
<b>Extended Trading Session I:</b>	<b>6:00 p.m. – 9:30 a.m. (Sunday – Friday)</b>
Pre-Open:	5:00 p.m. – 6:00 p.m. (Sunday)
	5:45 p.m. – 6:00 p.m. (Monday – Thursday)
<b>Extended Trading Session II:</b>	<b>4:00 p.m. – 5:00 p.m. (Monday – Friday)</b>
<b>TAS Futures:</b>	<b>9:30 a.m. – 3:58 p.m. ET (Monday – Friday)</b>
<b>Daily Settlement for SPIKES Futures:</b>	<b>3:59:00 – 3:59:59 p.m. ET</b>

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### **When is the last Trade at Settlement (TAS) for each SPIKES future?**

The last TAS is at 2:58 p.m. (Central Time) the business day prior to the SPIKES future's Final Settlement.

# SETTLEMENT FAQs

## When does the settlement auction take place?

The settlement auction takes place on the SPIKES expiration date at the open of the constituent SPY options.

The expiration dates are available [here](#).

A document explaining the settlement auction in detail is available [here](#).

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## Who can participate in the settlement auction?

Any MIAX Member can enter Settlement Auction Only (SAO) orders (prior to 9:20am ET) to replicate a full or partial strip of options at settlement. Any MIAX Member can see the auction imbalances and can respond to those auctions with orders.

A document explaining the settlement auction in detail is available [here](#).

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## How can traders see what is happening in the settlement auction before the open?

Traders may subscribe to the MIAX Administrative Information Subscriber Feed (AIS) which includes imbalance messages beginning at 9:15 am ET. It updates every 5 seconds until 9:30 am. Once SPY opens, the imbalance messages are updated in real time. Traders may also subscribe to the MIAX Order Feed (MOR) which includes all orders on the book beginning at 7:30 am ET.

A document explaining the settlement auction in detail is available [here](#).

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## How is settlement determined?

The final settlement value is calculated from actual opening prices of SPY options on MIAX Options through the SPIKES Special Settlement Auction and makes use of a new Special Settlement Imbalance Process (SSIP).

A document explaining the settlement auction in detail is available [here](#).



For more information about SPIKES Options & SPIKES Futures contact Sales at:

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