

Fit Parameters Specification

DataShop page:

Subscription: [Fit Parameters - Subscription](#)

Description:

This report provides parameters which define the volatility surface per option class calculated by a proprietary Volatility Surface Fitter. This proprietary valuation model uses a business day calendar with intraday time decay along with discrete dividend estimates, proprietary implied borrow rates, and a proprietary arbitrage-free smoothed volatility surfaces. Files are labeled with a date-time in Central time.

One file will be delivered at the end of the day, if End of Day interval is chosen.

If 15 min interval is selected, files will be delivered every 15 minutes during the day with 15 minutes delayed data.

Filename pattern:

Intraday - FTRefFitParameters_YYYYMMDD_HHMM.zip (Zipped CSV file, timestamp value is in U.S. Central Time)

EOD - FTRefFitParameters_YYYYMMDD.zip (Zipped CSV file)

Subscription delivery frequency & timing: Monday - Friday (except holidays where U.S. markets are closed)

Layout & Field Definitions:

| Field # | Column name | Data Type | Field Description |
|---------|-----------------------|-----------|--|
| 1 | Underlyer | String | The ticker symbol of the underlying security |
| 2 | ExpirationDate | Datetime | Expiration Date (yyyy-mm-dd hh:mm:ss) |
| 3 | OptionRoot | String | Option symbol for the underlying asset |
| 4 | ATMVol | Numeric | Implied volatility of the theoretical at the money strike |
| 5 | Skew | Numeric | $\frac{([IV \text{ of } 25d \text{ Put}] - [IV \text{ of } 25d \text{ Call}])}{[ATMVol]}$ {typically displayed as *100 in GUI tools} |
| 6 | Kurtosis | Numeric | $\frac{(([IV \text{ of } 25d \text{ Put}] + [IV \text{ of } 25d \text{ Call}]) / 2) - [ATMVol]}{[ATMVol]}$ - 1 {typically displayed as *100 in GUI tools} |
| 7 | PutTail | Numeric | $\frac{[IV \text{ of } 1d \text{ Put}]}{[IV \text{ of } 25d \text{ Put}]}$ |
| 8 | CallTail | Numeric | $\frac{[IV \text{ of } 1d \text{ Call}]}{[IV \text{ of } 25d \text{ Call}]}$ |
| 9 | ReferenceSpotPrice | Numeric | Underlyer Spot price used in the calculation |
| 10 | ReferenceForwardPrice | Numeric | Underlyer Forward price used in the calculation |
| 11 | TimeToExpiration | Numeric | Time to expiration in business years |
| 12 | IV_25P | Numeric | Calculated Implied volatility of the theoretical 25d Put |
| 13 | IV_25C | Numeric | Calculated Implied volatility of the theoretical 25d Call |
| 14 | Strike_25P | Numeric | Calculated Strike Price of the theoretical 25d Put |
| 15 | Strike_25C | Numeric | Calculated Strike Price of the theoretical 25d Call |
| 16 | Strike_ATM | Numeric | Calculated Strike Price of the theoretical ATM strike |
| 17 | FitConfidence | Numeric | A score ranging for 0 to 1 indicating the quality of fit |
| 18 | ReferenceAtmStrike | Numeric | Strike Price of the ATM strike used in the calculation |
| 19 | ReferenceAtmVol | Numeric | Implied Volatility of the ATM strike used in the calculation |
| 20 | Skew10 | Numeric | $\frac{([IV \text{ of } 10d \text{ Put}] - [IV \text{ of } 10d \text{ Call}])}{[ATMVol]}$ {typically displayed as *100 in GUI tools} |

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|----|--------------|----------|--|
| 21 | Kurt10 | Numeric | $(([\text{IV of 10d Put}] + [\text{IV of 10d Call}]) / 2) / [\text{ATMVol}] - 1$ {typically displayed as *100 in GUI tools} |
| 22 | ImpliedBasis | Numeric | Implied basis in dollars for the option class |
| 23 | Updated | Datetime | Time at which the record was updated (yyyy-mm-dd hh:mm:ss Central Time Zone) |