

VISUALISING VOLATILITY

THOMSON REUTERS VOLATILITY SURFACE FOR EQUITIES AND EQUITY INDICES

Volatility Surface for Equities and Equity Indices (SURF) for EIKON users is the newest offering by Thomson Reuters — an intuitive and easy-to-navigate tool for generating implied volatility surface charts for traders in the equity derivatives market. SURF can be used for equity instruments including common and preferred stocks, indices, depository receipts and exchange traded funds (ETFs).

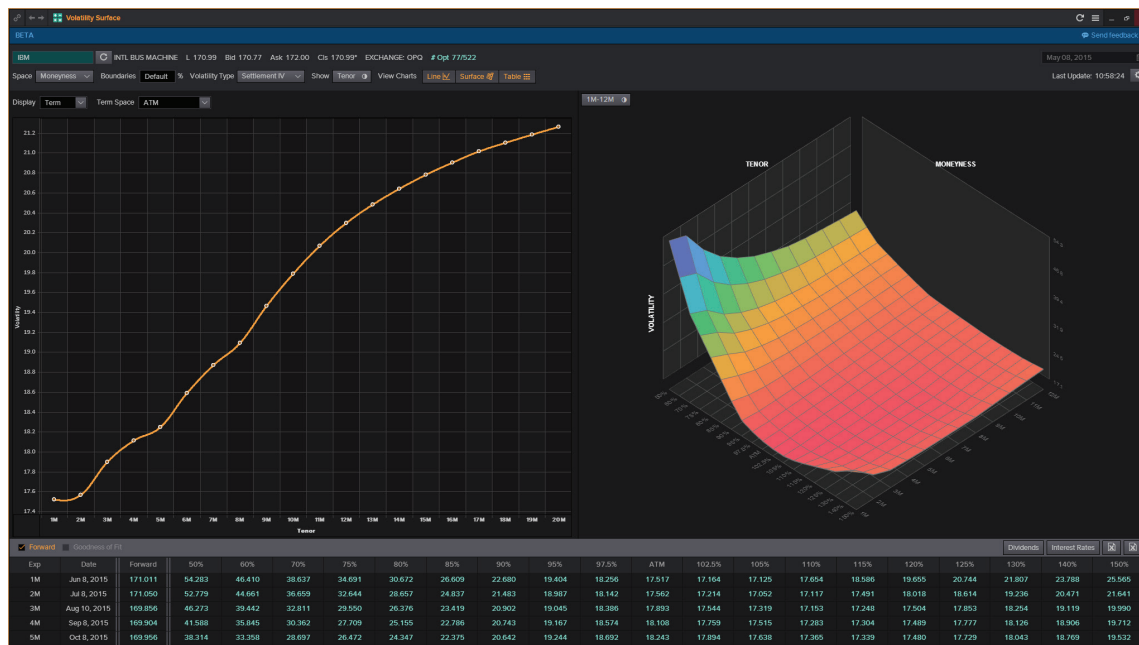
UNDERSTAND THE IMPACT OF VOLATILITY WITH SURF

Nothing affects the price of an option more dramatically than volatility, and even when traders accurately predict the direction of the underlying security, movements in volatility can quickly transform a formerly attractive options strategy into a losing trade. With SURF, users can generate the volatility surface for any equity instrument that has an options universe.

Powered by real-time market data, the application plots implied volatility (IV) against price (represented by strike price, Delta or moneyness) and expiry to produce a three dimensional representation of the market for an option. The application also produces

a 2D volatility smile chart that plots volatility vs. strike price (with the option to switch to moneyness or Delta) and a volatility table that depicts IV as a function of expiry and space (strike, Delta or moneyness).

Based on SURF output, the user can easily identify areas in which volatility is higher or lower relative to other strike prices, which helps options professionals quickly identify trading opportunities in the marketplace. The implied volatility surface facilitates the trader's ability to understand market expectations and psychology and identify temporary anomalies.



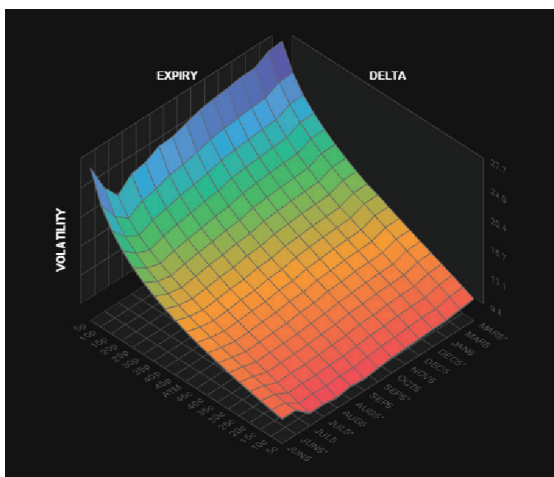
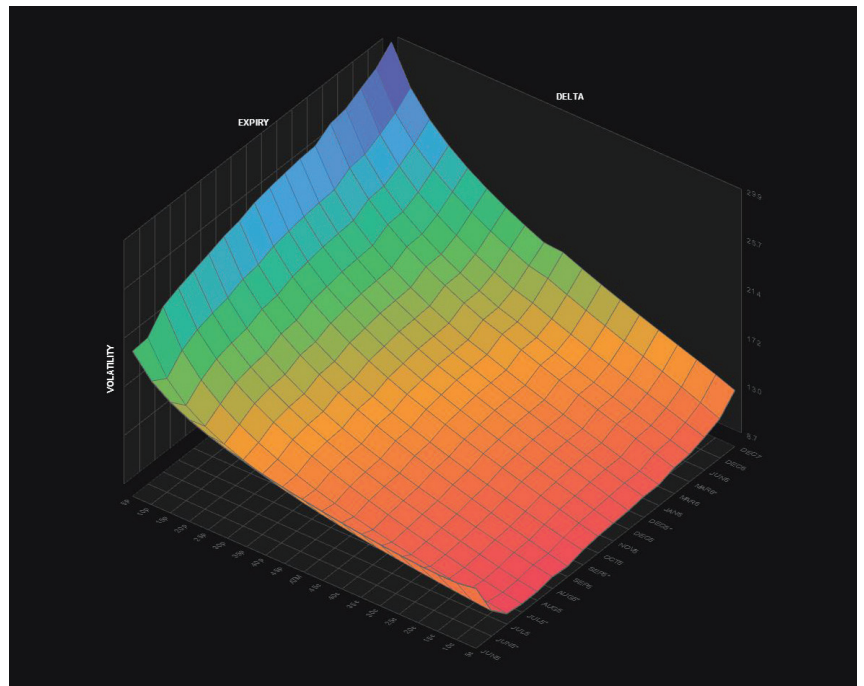
USER-CENTRED INTERFACE

SURF makes it easy to generate a 3D model of the market for an option. Generate a surface with as little as one click. The volatility surface data typically tracks market data with a high goodness of fit score (90%+).



A ROBUST MODEL WITH HIGH PREDICTIVE VALUE

With average goodness of fit scores exceeding 90% and a smooth surface output, SURF can add significant value for traders.



The smoothness of the surface testifies to its high quality.

SURF CREATES VALUE BY ADDING TRANSPARENCY TO THE MARKET

Having an unbiased volatility surface removes the need to rely on counterparties for a full view of the market for a particular option, a tangible benefit since counterparties hold their own particular points of view. SURF uses market data to power a sophisticated model that yields a neutral view free from the influences of other market participants.

AN ATTRACTIVE AND INTUITIVE INTERFACE MAKES SURF EASY TO USE

The user can generate a surface with as little as one click, choosing strike price, moneyness or Delta from a pull-down menu. At most, the user identifies three inputs, space, granularity (choosing from steps of 1%, 5%, etc.) and expiry.

- By checking the goodness of fit box in the interface, the user can view a score depicting how closely the volatility surface data is calibrated to market data.
- SURF implied volatility output typically has a goodness of fit score of 90% or higher.
- The SURF volatility output can be paired with our Options Pricer application in EIKON to calculate the option price.

THE THOMSON REUTERS ADVANTAGE LIES IN THE STRENGTH OF OUR MODEL

The quality of an implied volatility surface is represented by the smoothness of the surface, and Thomson Reuters SURF produces one of the smoothest yet developed. We use a stochastic volatility inspired model to calculate the implied volatility surface, and deploy our own high quality data algorithms for statistical validation of market data.

Results of such quality require extensive resources — sophisticated quantitative skills, extensive computing power and multiple servers — and updating the model involves even more computing resources, drawing on Thomson Reuters highly scalable capabilities.

We are trusted by the financial services industry to ensure data integrity across an unmatched breadth of financial content, to deliver innovative technological solutions and provide insight to empower decisions. Thomson Reuters SURF application is designed to accomplish all this and set a new standard for the equity derivatives market.

