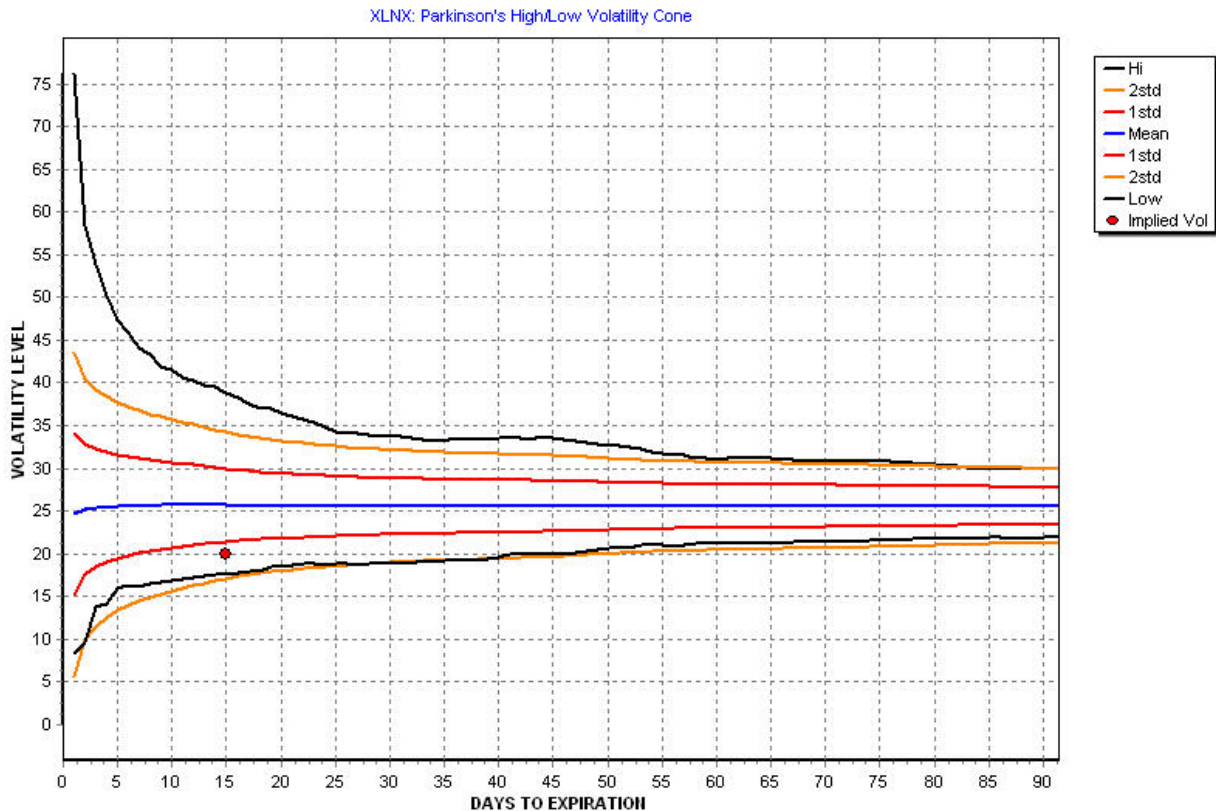




Our new Volcone software is a simple tool that will give you a true fair value of any particular option, which is plotted in an easy-to-read graph. By running your potential option trades through your Volcone software, you can avoid dangerous (over-priced) option purchases, and find good opportunities for options to buy (under-priced). Similarly, you can also quickly identify options that would be ideal to sell (over-priced).

We'll show you step-by-step how to use the calculator shortly. For now, assume you key in the underlying stock symbol, select the Days to Expiration (DTE) with our new, built in DTE calculator and then run your Volcone software. The following chart is the result of an actual analysis:



In the above chart, the red dot on the Volcone graph represents that options current Implied Volatility, and the lines on the graph represent the Historical Volatility of the underlying stock for different time periods shown on the horizontal axis.

This allows you to compare the volatility of the option for its given time period, to similar historical time periods of the stock which gives you a much more accurate idea of whether the option is cheap or expensive based on the stocks historical volatility performance for given similar time periods.

The blue line in the center of the cone represents the mean (average) volatility of that time period, and the other lines represent the first and second standard deviations up and down from the mean. The upper black line shows the highest recorded historic volatility for that particular time period while the lower black line shows the lowest volatility recorded for that particular time period. These lines are all noted in the legend to the right of the chart. Because of its shape, this graph is known as a “Volatility Cone” or “Volcone.”

Statistically, the actual volatility should fall within the range of the first standard deviation up and the first standard deviation down 68.4% of the time and fall between the second standard deviation up and the second standard deviation down 95.4% of the time. The natural tendency of the options implied volatility is to revert towards the mean (mean reversion).

So whenever we see an option's current Implied Volatility outside of these standard deviations, we get a good feel for how often (or infrequently) true volatility actually traded at these levels. From this, we know whether an option is price very high, somewhat high, very low, somewhat low, or fairly priced in terms of historic performance. Now, we can make a fully informed decision as to whether we should buy or sell that option or not buy or not sell that option. Both situations are equally important.

If you see that the option's current Implied Volatility, which is represented by the red dot on the graph, happens to be below the historic volatility mean or average, it can be considered under-valued. If you were looking to sell that option, you may want to reevaluate. Conversely, if you were looking to buy that option, you have just received confirmation that it is indeed not over priced.

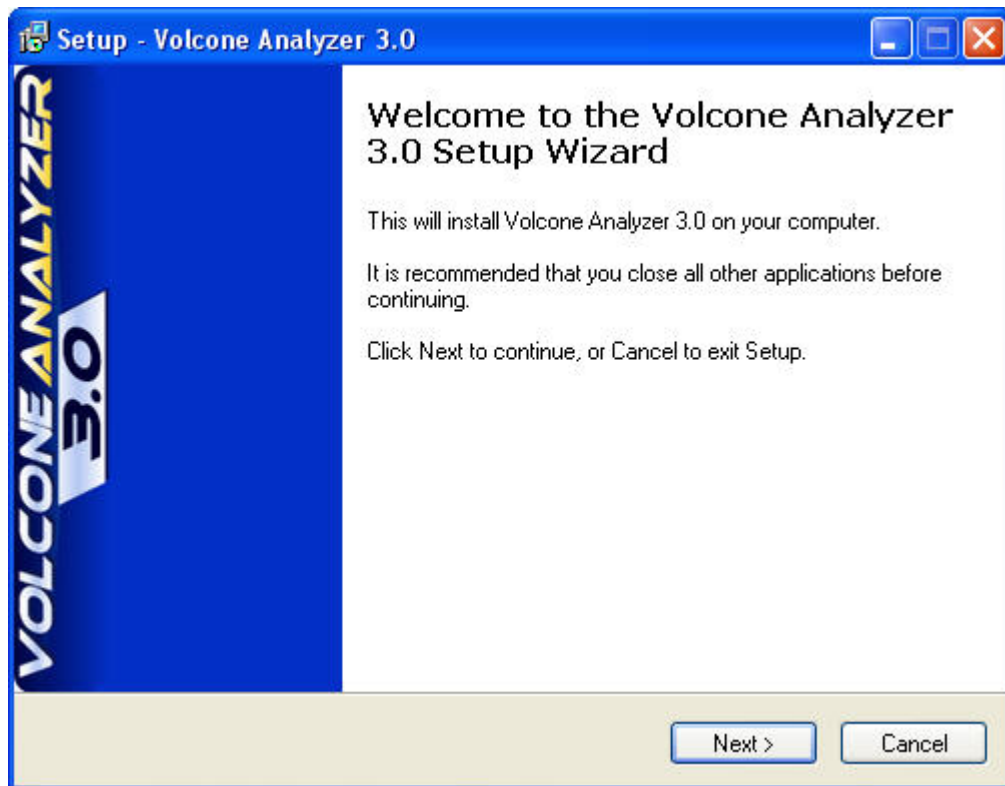
In the graph above, the options current implied volatility is slightly undervalued (since the red dot falls below the average), and therefore slightly under-priced. Ideally, if you were buying this option, you would want to see the current Implied Volatility, represented by the Red dot 'at', 'near' or even 'outside' of the 2<sup>nd</sup> Standard Deviation (represented by the orange line). This would have indicated that the option was severely cheap by historical standards and you could have more confidence in a purchase.

Occasionally, you will see the IV Red dot outside of the Volcone entirely, which represents an extremely over or under valued option. In this case, the current implied volatility of that option has never been sustained historically. This could represent a very good time to capitalize on what may be a great opportunity.

Let's look at an example:

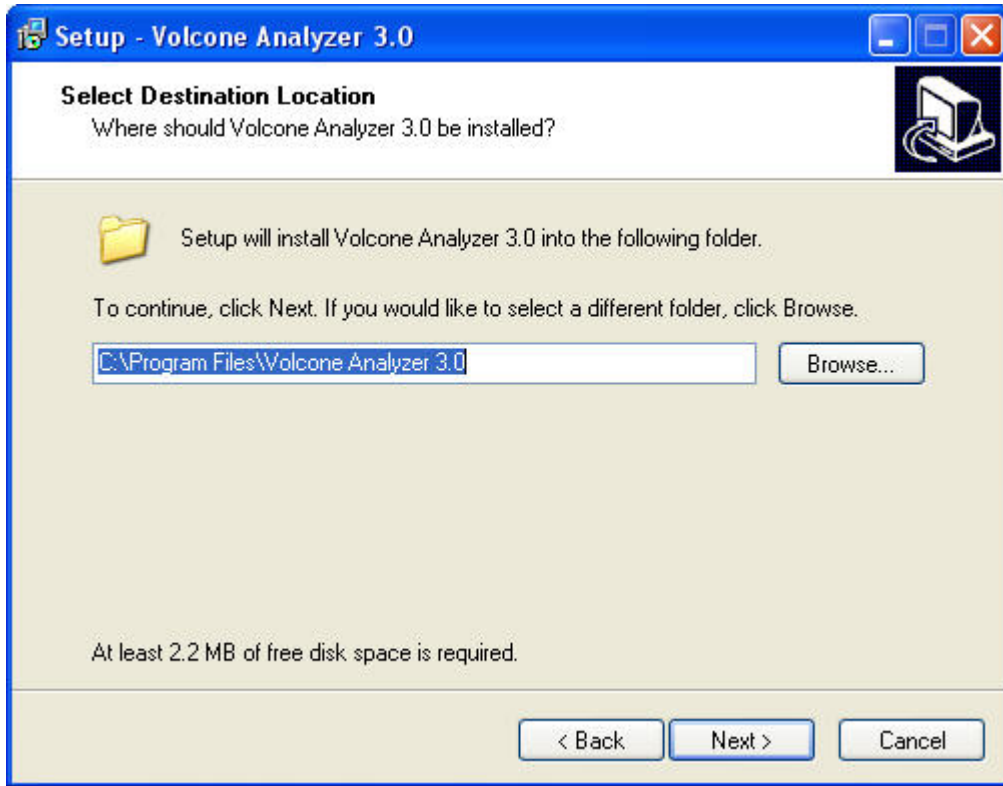


The following installation screen will appear:



Click 'Next' then read and accept the License Agreement on the next page.

Hc`W Ub[ YH Y]bgHJ`Ujcb`Z`XYf`cb`nci f`Vta di hYfžnci `a UmW Ub[ Y]hVY`ck`"



**Note:** This software requires 1.Ī GMB of free computer space for installation.

You also have the option to install a desktop icon, and / or 'Quick Launch' icons.

## Instructions For Use

Once you have successfully installed your software, just double click on the Volcone Analyzer shortcut, which should be located on your desktop, and looks like this:



This will open the program, and allow you to start using it.

The first thing you will want to do is to become familiar with the various buttons and functions of the software. Most of the buttons have hover titles, so you can just mouse over them, and their function title will appear.

For example:



The first button is used for adding a new stock to the software. To do this, just click on the icon below, and a new screen will appear asking you to enter a new stock symbol.



Add Model

Clicking on this button will bring up this screen:

In this window, you can select different Historical Periods to download into your model.

The Volcone Analyzer will later calculate the options actual Historical Volatility, based on how far back you select. A longer term range is best, but 12 months (default) is usually sufficient. The minimum recommended term is 6 months.

Be aware that if you are viewing longer term options such as leaps, the historical period you select must be longer than the DTE of the option. It is suggested that the historical period be 50% longer than the options DTE.

Another way to get started is to begin adding stock symbols into your 'Stocks List' in the lower right hand corner of the program.



Just click on the Green + sign, and the same database creation window will appear.

The next step is to highlight a particular stock symbol you want to analyze the options for, and then click on the 'Calculate Volatility Cone' button, shown below:

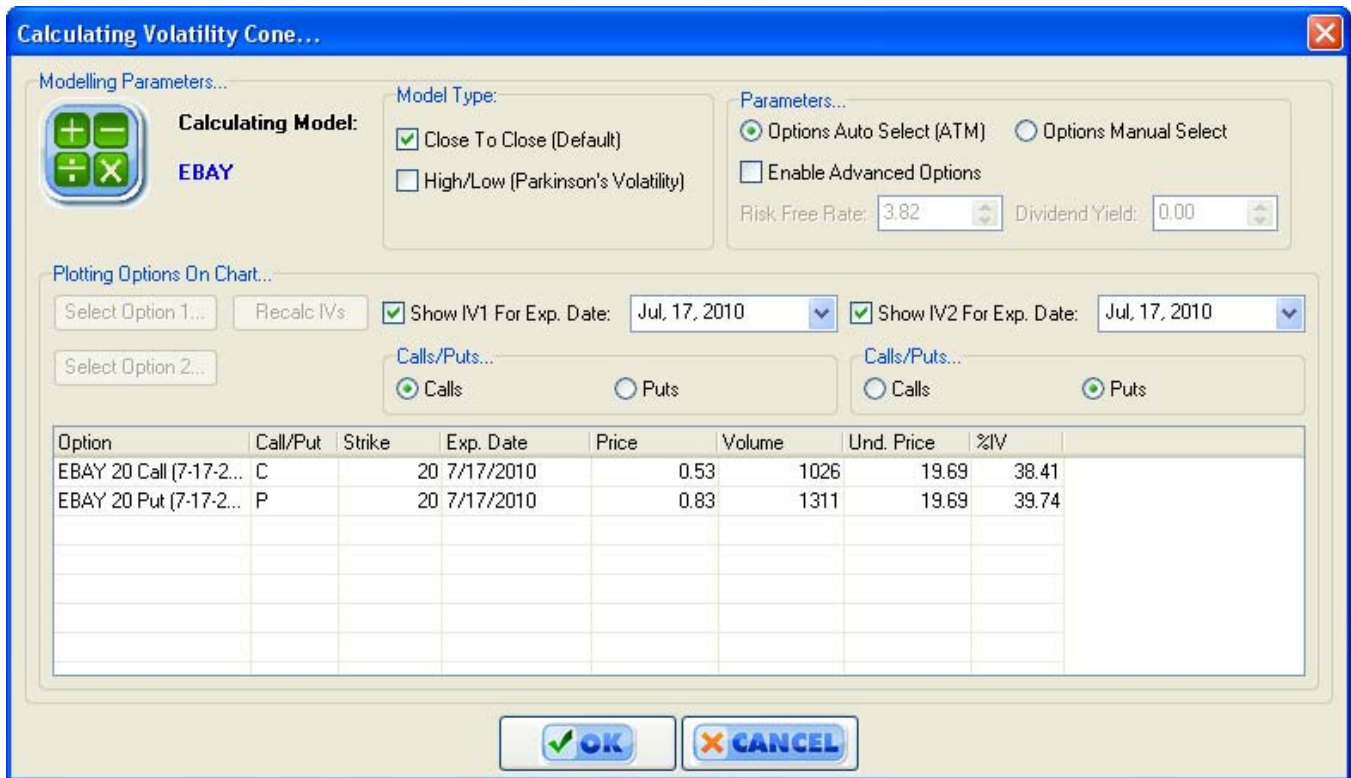


Calculate Volatility Cone



This will bring up the following window:

In this window, you can select both the T [ à^|Á^ ] ^Á [ !^Ó^| ] , and enter the XÁÚáá ^c!• for the option 9 D which will be graphed à^ the Volcone 03 á : ^!Á for comparison.



You can choose from any of the three Implied Volatility methods below:

- The Close-to-Close Method (Historical Volatility)
- The High/Low Model (Parkinson's Volatility)
- The IJ Adjusted Close Volatility Model (Developed by Ron Ianieri and Bill Johnson)

In previous versions of the Volcone, you were limited to choosing between two methods for calculating your Volcone, and only had the ability to plot one Implied Volatility point on a single Volcone graph.

Now you have the ability to choose from two out of three different methods, and can actually plot two separate Volcone graphs at the same time, as well as plot two different Implied Volatilities and DTE's, which will also aid in analyzing spreads.

The industry default is the Close-to-Close Method. Most of the time, the Close-to-Close is the method you will be using to check an options volatility level. The other two methods are mostly used by Gamma Traders, so the large majority of users will want to use the close to close.

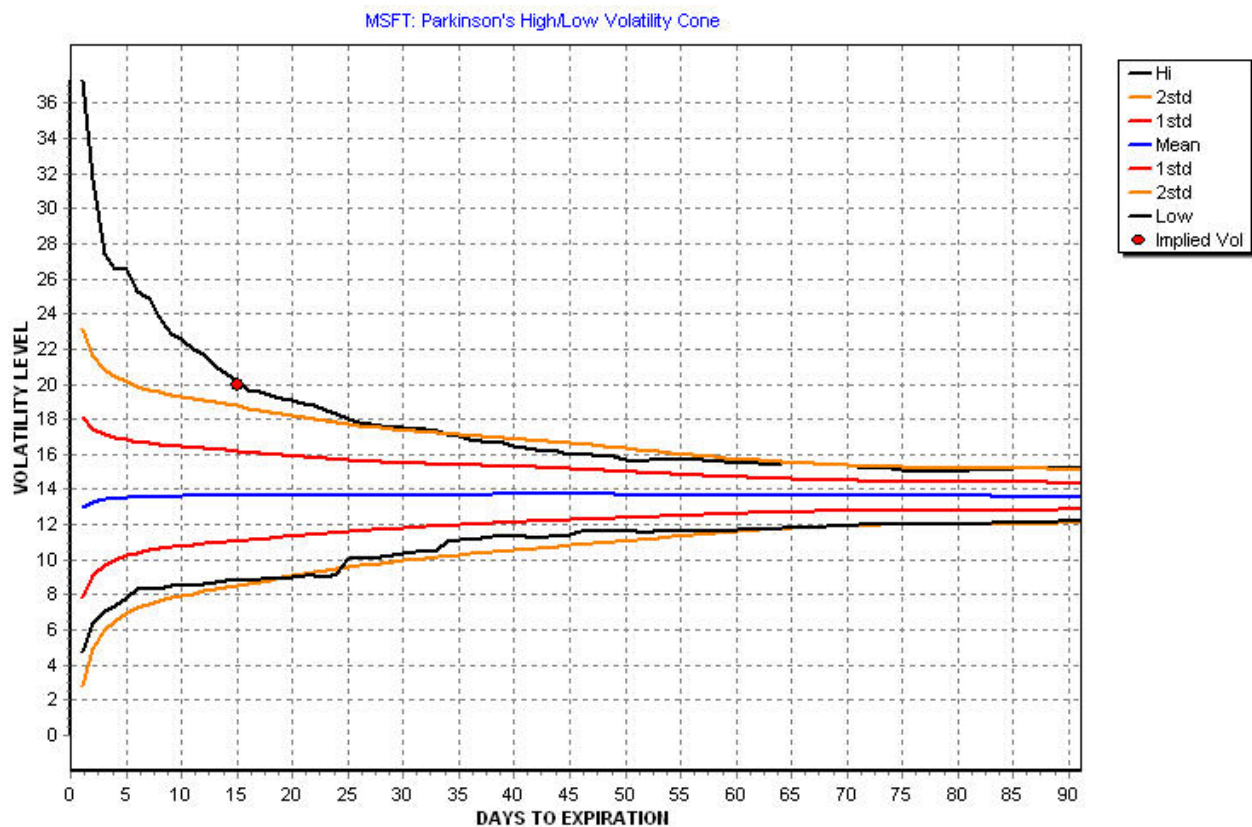
The Parkinson High/Low Model will be of great use to Gamma traders who want to check on the volatility level of the stock's intraday range, which are not accounted for well with the Close-to-Close Method.

The IJ Adjusted Close combines the best features of the Close to Close Method and the Parkinson High/Low and discards the weaknesses of each. It gives you a better picture of the stock's full tradable range (FTR). It is more intuitive and encompassing than Wilder's Average True Range (ATR). Again, Gamma Traders will find this calculation of particular interest.

We will cover these in more detail on our live web trainings which will be announced.

After selecting your desired Method, the DTE and IV above, and clicking on the 'OK' button, your Volcone(s) will be calculated and graphed in real time, as in the charts below.

### Example 1



In Example 1 above, you can see a graphical representation of the Volcone for MSFT, and the Red dot representing its current Implied Volatility in relation to its historical volatility for similar time periods dating back 12 months, and for options with a DTE of 15.

This chart shows that MSFT's 15 DTE options are currently very expensive, and potentially over priced. Therefore, these would probably not be good options to buy. They would most likely, however, be good options to sell, based on our previous conclusion that an options' natural tendency is to revert to the mean. The Volcone graph applies to all of the options for that stock with the same expiration month, or DTE (Days to Expiration), and strike price

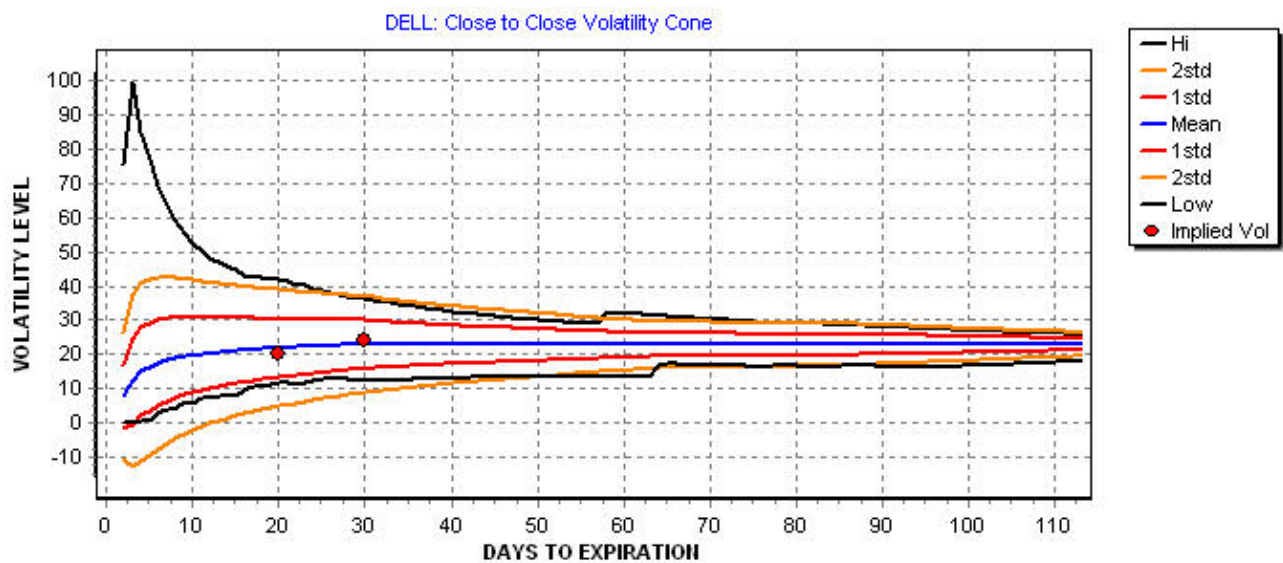
is not a factor but it is recommended that you use the Implied volatility of the at-the-money options.

This option's volatility is above its 2<sup>nd</sup> standard deviation, and since we determined that 95.4% of all actual historical results for the same time period options stay within their 2<sup>nd</sup> STD, this means this options volatility will likely revert towards its mean, causing the options price to deflate. The implied volatility of this option has only been achieved historically less than 2.2% of the time. That is pretty rare!

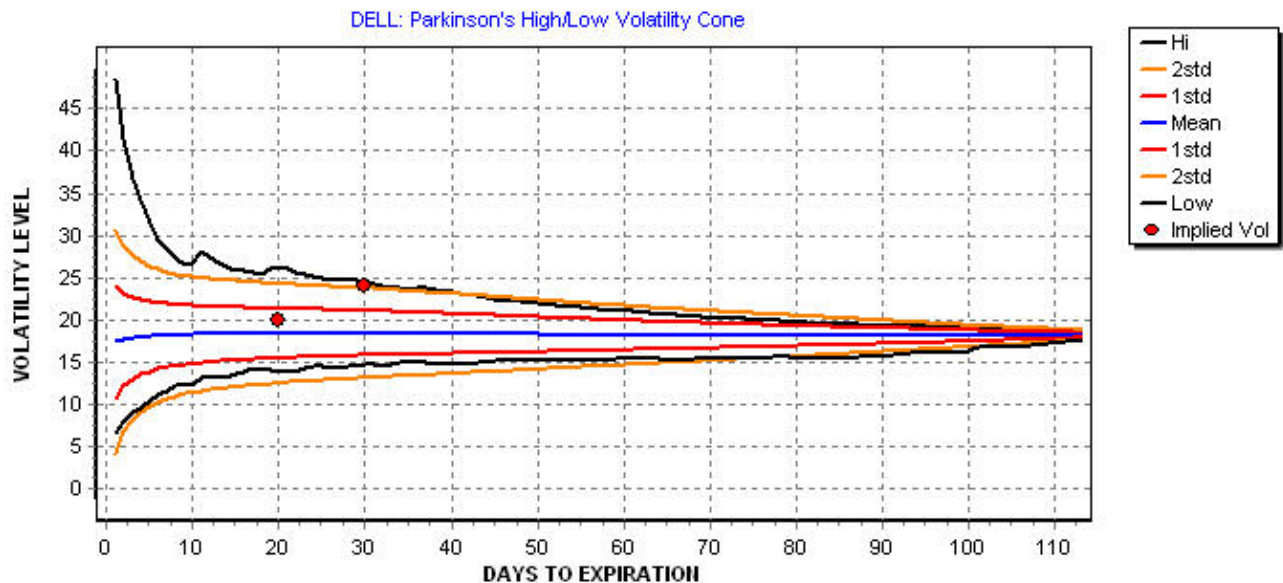
This is a simple example of how you would use your Volcone software.

In Example 2 below, we'll look at a dual graph, showing two separate Volcones, which were run at the same time.

### Example 2



Volatility Cone Chart...



In this example, we can see that the software is also able to plot two separate Volcone graphs in the same window. In the top half of the window, the software has plotted a Volcone of DELL using the Close-to-Close Method, and the Implied Volatilities that appear in-line with the Historical Implied Volatility of the stock.

Using the Parkinson's High/Low Model, we see that this option's current Implied Volatilities are above the Mean of the stocks historical volatility. From this we can determine that the implied volatility of this option is slightly higher than the average historical volatility of all similar time periods. Depending on the situation, this information not only may or may not lead to a trade but might also stop a trade from happening.

Please consult the Volcone training website for more information on when to use each IV Method, or stand by for future web trainings and teleseminars.

Before running your software on an existing stock symbol that is already in your Stocks List, you should first update the models for that stock by clicking on the 'Update Models' icon below.



Update Models

This will import updated data, necessary for calculating your new Volcone graph.

### **DTE Calculator**

By clicking on this button, you will bring up an embedded DTE calculator which will tell you how many Days to Expiration (DTE) there are for any given option, in any given month.



Simply enter any day in a month for which you wish to calculate the options DTE, as shown below.



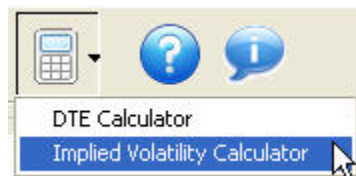
Once calculated, you can use this number when creating your Volcone graphs, as shown earlier. Many users have requested this new feature, so we have added into the software.

**NOTE:** Options technically expire on the Saturday following the third Friday of the expiration month. However, when selecting the days to expiration, you should assume they expire on the third Friday since options cannot be traded on Saturday.

#### IV Calculator

The sole purpose of the Implied Volatility Calculator is to calculate the implied volatility of an option by using its price. In this way, you will be able to have the options implied volatility to put into the Volcone if you can't find it anywhere else. However, you can usually find the IV of an option in better options brokerage software or by calling your broker.

By clicking on the Implied Volatility Calculator link from drop down menu below, you are able to key in several known factors of a particular option to instantly calculate that options Implied Volatility.



In this window, you can select either a Call or a Put option to calculate IV for, and then enter in today's date, the option's expiration date (DTE), stock price, option price and desired strike price, then enter the current quarterly dividend (if applicable), the risk-free rate of return, and the desired amount of binomial tree steps. All but the latter should be obvious. Think of the binomial tree steps as iterations. The more continuous grinding of the numbers should and does produce more accurate Greeks. So, the more steps (or extensions as they are called) taken, the more accurate the calculated Greeks become. Ultimately, an ideal selection will be around 10 to 20. Any more than that, the change in the values becomes extremely negligible.

The major key here is to always use the base volatility of the month of the option you are looking at. This is determined by the ATM option regardless of the strike you are looking at, always use the ATM Option.

There are several reasons for this. First, in any given month, the ATM option has the highest sensitivity to implied volatility (Vega) of any option in the month.

Second, the ATM option is the option that is going to be priced the most accurately. This is because it is the most actively traded and widely followed and held option in the month.

For these two reasons, the ATM option is the most accurate gauge on the true volatility level of the month. This is why the ATM is considered the “base” volatility of the month. This helps avoid the distortion created by the low volatility sensitivity of the deep ITM and deep OTM options and the effects of the volatility smile.

\*\*\*NOTE\*\*\* This binomial model uses the more accurate Extended Tree Method for the calculation of the Greeks.

When calculating the Implied Volatility (IV), this will be given as a percentage because they are also annualized yields. To look up the Dividend Yield (DY) input for the model above, either look it up in any paper under the stock listings section, Barrons online, or do a search on the internet.

To locate the Risk Free Rate (RFR) input above, you can either use the current 10yr bond yields listed in the paper, or call your broker for this number.

### **Zoom Feature**

To access the zoom feature, which will allow you to enlarge your Volcone graph at any specified point, first select the ‘zoom’ tool from the toolbar which looks like this:



Once you have selected the zoom tool, you can then place your mouse pointer over your Volcone graph and left click with your mouse to enlarge the graph at that point.



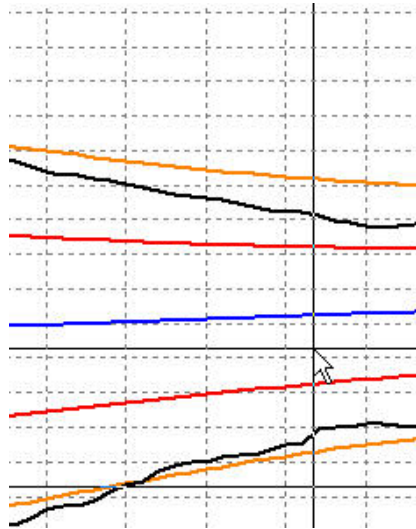
To zoom out, select the tool shown above and then click on the graph. Your Volcone will zoom back out towards its original size.



To restore your graph, select the restore button above, then click anywhere on the Volcone graph to restore it to its original size.

## CrossHairs & Data Window

One of the most unique features of your Volcone software is the ability to move your mouse pointer over the Volcone graphs, and instantly view the updated values in the Data Windows. These windows show the options Days to Expiration (DTE), Average Historical Volatility (Avg Vol), Standard Deviation (StdDev), High, Low, One Standard Deviation Up (1SD Up), Two Standard Deviations Up (2SD Up), 1SD Down, and 2SD Down. These update in real time, as you move your mouse pointer on the screen, at various points on each Volcone graph.

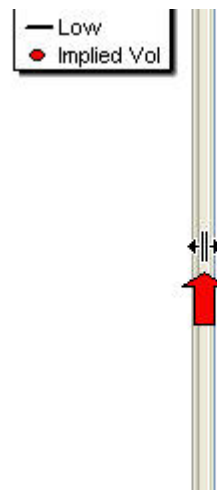
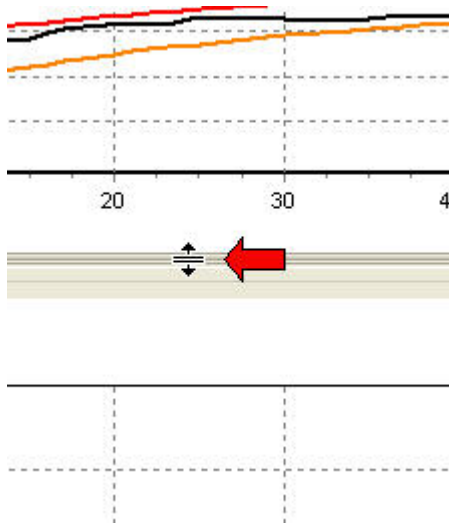


Data Window
DTE=68
Avg Vol=30.97937
StdDev=3.26073
High=36.78010
Low=24.97172
1SD Up=34.24010
2SD Up=37.50083
1SD Down=27.71864
2SD Down=24.45790

## Resizing Windows

We've added the ability to re-size all the various window sizes, by simply placing your cursor between windows, and then clicking and dragging the windows to fit your needs.

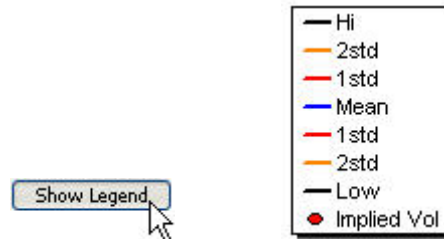
As the Red arrows show, when the cursor is placed over the border in the right spot, it changes into a resizing tool that allows the user to resize the windows on either size.





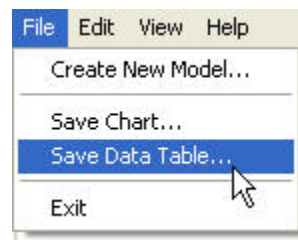
## Legends

The Volcone graph includes a Legend for each Volcone graph to show what each of the data lines represent, and their respective colors. The red dot represents the current implied volatility of the options. Also listed are the DTE, first and second standard deviations (std's), high / low, and mean. To hide and restore the legend, just click on the 'Show Legend' button as shown below.



## Data Tables

We have also included the actual data table calculations for advanced users. To export the data tables, just click on the File menu, then 'Save Data Table' option, as shown below.



Data tables can then be imported to Excel for those who wish to perform other calculations. However, this is beyond the scope of 99% of users. We generally do not use the information in the data tables.

Date	Period=1	Period=2	Period=3
10/7/2004	14.47633		
10/8/2004	12.21652	13.39417	
10/11/2004	9.86733	11.10422	12.33115
10/12/2004	11.94719	10.95672	11.39215
10/13/2004	11.21638	11.58755	11.04396
10/14/2004	12.29075	11.76584	11.82660
10/15/2004	14.31370	13.34062	12.67217

To hide the data table and make your Volcone graph larger, simply click on the 'Show Table' button at the far right. To make the table appear, click on the button below again.



## View Menu

You can also toggle on or off each of the following features from the 'View' drop down menu, located at the top of the screen:

- Show or Hide the Vertical Cross Hair Line
- Show or Hide the Horizontal Cross Hair Line
- Show or Hide the Vertical Grid
- Show or Hide the Horizontal Grid
- Show or Hide the Legend

## Help

For getting Video Help, click on the Video Help button below which will take you to our video help web page. Screen cam videos will be available, showing you how to use the software.



Video Help

We'll also be uploading an archive of our first live web training for your review.

Software support questions should be directed to:

[support@options-university.com](mailto:support@options-university.com).

Please allow up to 3-5 days for a reply, and please note that we will not be providing email training beyond our videos and online archives.

We recommend that you consult these resources before emailing us.

Thank you

Customer Software Support  
The Options University.com

\*\* Are you part of an investment club? Want to earn \$\$ by promoting our software and other products? You can sign up for our affiliate partner program by going the link below.\*\*

<http://www.options-university.com/AffiliateRegistration.htm>

Our affiliate partner program allows everyday investors to 'refer' other investors to our products and services, and earn up to 35% of every referred sale in monthly commissions. The page above will create custom tracking links you can share with other traders, and make sure you get credit for every referred sale, even on future orders from that customer.