

URSC-US plug-in kit v3.0

Universal Relative Strength Comparative (URSC) professional toolbox for MetaStock.

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<http://www.metastocktools.com/URSC/URSC.htm>

URSC-US v3.0 overview

Thank you for choosing this unique and powerful set of analysis & system-development tools.

This documentation may be updated from time to time.
You can find the latest documentation update at:
<http://www.metastocktools.com/URSC/URSC-US.pdf>

Relative Strength Comparative (RSC) description

An RSC study normally compares a security's price with that of a related composite index or other data.

When the indicator is moving up, it shows that the security (the one displayed in the chart) is performing better than the selected index it is being compared against.

When the indicator is moving sideways, it shows that both are performing the same (i.e., rising and falling by the same percentages).

When the indicator moves down, it shows that the security is under-performing the selected index (i.e., either not rising as fast or perhaps falling faster).

A typical use of the RSC would be to track the Comparative Relative Strength between say, stock XYZ and its own GICS Sector Index. This would give an indication of how well XYZ is performing relative to the entire GICS sector industry.

RSC traditional problems

Traditional Relative Strength Comparisons to another data set such as an index, have many problems:

RSC indicators don't plot any meaningfully consistent values, and thus values between different charts (specially those with different scales) cannot be directly compared;

The RSC starting zero-point - which is important in determining the current RSC level - shifts according to the amount of data

available for each chart;

RSC indices have to be manually chosen for each new chart, which means automatic explorations and systems based on traditional RSC's are not possible.

URSC solutions

All the above shortcomings (and more) are addressed by the URSC plug-in kit:

- Normalized values with true % levels that are directly comparable to all charts;
- Adjustable common zero-starting data points, independent of any missing chart data;
- Automatic selection of GICS Sector Indices, to match each stock;
- Automatic GICS vs major market index Relative Strength Comparisons;
- Automatic display of GICS Industry numbers for current chart;
- Chart Experts can display above/below strength zones and URSC-EMA breakout signals;
- Complex & detailed URSC Explorations of all stocks vs major indices;
- URSC Explorations of all stocks vs their respective GICS sector indices;
- Complex Exploration filtering of any combination of selected GICS Industry Groups.
- Create your own favourites lists - safer, easier and more useful than MetaStock's volatile-storage method.

URSC basics

The URSC plot values (on the y-axis) equate to the relative strength % between the chart and chosen index. These % values are absolutely comparable to other URSC readings thanks to the URSC common zero-start point.

The zero reference flat line (it automatically disappears if it puts the URSC plot out of scale) represents the index being compared to - in essence, it is the index flattened out.

URSC-based strategies

Countless articles & books have been written about the use or Relative Strength Comparison strategies. There is an excellent URSC strategy written by Jim, a full-time professional trader, available here:

MetaStock Tips & Tricks monthly newsletter (issues Dec 2004 ~ Feb 2005)

<http://www.metastocktips.co.nz/>

Jim chooses to remain anonymous, and kindly provides the following summary:

For the last several years, I've made my entire living from trading. I've developed almost all of my own systems, which I have learned to do by reading well over 100 trading and systems development books, and spending thousands of hours testing indicators, experts and filters.

Here's a few things I do with the URSC code.

1. Knowing that the RSC value of a stock is high does not indicate that particular stock is a good trade. So I don't use it that way. For an RSC value to have trade value, it has to be taken into context against other setups, indicators and signals.

2. One of the most useful features of the RSC is using it as a moving average crossover against itself. Some of the best trade signals come from the crossover. I like to use it with my other indicators as a confirmation, and sometimes as an entry. In addition, when I'm in a trade and the market is consolidating, an RSC crossover to the negative side is usually a very good early exit signal.

3. I sometimes use it as a filter. This has to be tested. Some of my systems perform better if I limit the range of the RSC values. This is not always the case, but sometimes it is.

4. When I find trades that are already in a trend, it's difficult to decide if entering the trade in the middle of the trend is a good idea. The slope of both the RSC and it's moving average, as well as the position of the RSC line in relation to it's MA, give me a lot of valuable insight into whether the timing is good for entering the trend.

5. When I'm trading the indexes, I use the RSC code to tell me which ones I should be trading and whether I should be long or short. I run the indexes through the RSC filter and sort them. I open a chart of the 3 highest ones and look at the price, volume and indicator position. If they are moving up and show signs of a continuing trend, I can take one or all of them as long trades. If the three highest RSC indexes are breaking below a 20 bar MA, I look at the three lowest scoring RSC indexes for possible short trades. Sometimes the market takes a day or two to identify the trend, and the RSC value and my charts tell me when the transition is in progress. During transitions days, I don't trade the indices.

6. When the indices indicate an up-trend, as stated in 5 above, I make sure all of my trades are long. When the indices indicate a down-trend, I only take short trades. You will be surprised how this increases the performance of a system - any system.

7. I have 20 sectors that I think represent the overall market. I have set them up as a comparison to the S&P 500 index. I have them on three charts, with each sector identified with a different color line. I have the colors identified on a legend. I can open the

charts and within a few minutes, I know how each sector is performing against the market.

8. I trade the ETF sector stocks and foreign stocks using exactly the same procedure as I've described in step 5 above.

9. I use the RSC method to rank mutual funds.

10. I can rank any list of stocks within a minute or two by their performance against any standard I choose.

URSC-US kit v3.0 contents

1 GICS reference database

C:\URSC folder - Contains 29 GICS reference data files

1 custom MetaStock dll

Filter.dll - MetaStock plug-in for GICS & favs
filtering

37 URSC-US index data-path reference indicators

US Indices data reference indicators:

URSC-US path AMEX	- AMEX Composite index data path
URSC-US path DJI	- Dow Jones 30 Industrials index data
URSC-US path DJT	- Dow Jones 20 Transportation index
URSC-US path DJU	- Dow Jones 15 Utilities index data
URSC-US path NASDAQ	- NASDAQ index data path
URSC-US path NASDAQ 100	- NASDAQ 100 index data path
URSC-US path NYSE	- NYSE Composite index data path
URSC-US path S&P 500	- S&P 500 index data path
URSC-US path S&P 100	- S&P 100 index data path
URSC-US path S&P 400 MidCap	- S&P 400 MidCap index data path
URSC-US path S&P 600 SmallCap	- S&P S&P 600 SmallCap index data path
URSC-US path Russell 1000	- Russell 1000 index data path
URSC-US path Russell 2000	- Russell 2000 index data path
URSC-US path Russell 3000	- Russell 3000 index data path

US Exchange Traded Funds (ETF) data reference indicators:

URSC-US path ETF-DIA	- ETF - Diamond Trust (DIA)
URSC-US path ETF-IWM	- ETF - iShares Trust (IWM)
URSC-US path ETF-MDY	- ETF - S&P MidCap 400 Depository Receipts (MDY)
URSC-US path ETF-QQQQ	- ETF - NASDAQ 100 Tracking Stock (QQQ/QQQQ)
URSC-US path ETF-SPY	- ETF - S&P Index Depository Receipts (SPY)

US GICS Indices data reference indicators:

URSC-US path 10 Energy	- GICS Energy sector index 10 path
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URSC-US path 15 Materials	- GICS Materials sector index 15
URSC-US path 20 Industrials	- GICS Industrials sector index 20
URSC-US path 25 Consumer Discr	- GICS Consumer Discretionary 25
URSC-US path 30 Consumer Staples	- GICS Consumer Staples sector 30
URSC-US path 35 Health Care	- GICS Health Care sector index 35
URSC-US path 40 Financials	- GICS Financials sector index 40
URSC-US path 45 Inf Tech	- GICS Information Technology 45
URSC-US path 50 Telecom	- GICS Telecommunication Services 50
URSC-US path 55 Utilities	- GICS Utilities sector index 55

Non-specific optional data reference indicators:

URSC path 01 generic data	- \$EuroStoxx 50 example data path
URSC path 02 generic data	- \$DAX index example data path
URSC path US Bonds	- \$US Bonds data path
URSC path Currency 01	- Currency pair data 1 path (US\$-Yen)
URSC path Currency 02	- Currency pair data 2 path (US\$-\$AU)
URSC path Gold	- \$Gold data path
URSC path Oil	- Crude Oil data path

New: Data path verification indicator:

URSC-US path Validation	- verifies correct index data paths
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14 URSC-US Chart vs major US Indices indicators

URSC-US Chart vs AMEX	- Chart vs AMEX index
URSC-US Chart vs DJI	- Chart vs Dow Jones 30 Industrials
URSC-US Chart vs DJT	- Chart vs Dow Jones 20 Transportation
URSC-US Chart vs DJU	- Chart vs Dow Jones 15 Utilities index
URSC-US Chart vs NASDAQ	- Chart vs NASDAQ index
URSC-US Chart vs NASDAQ 100	- Chart vs NASDAQ 100 index
URSC-US Chart vs NYSE	- Chart vs NYSE index
URSC-US Chart vs S&P 500	- Chart vs S&P 500 index
URSC-US Chart vs S&P 100	- Chart vs S&P 100 index
URSC-US Chart vs S&P 400 MidCap	- Chart vs S&P 400 MidCap index
URSC-US Chart vs S&P 600 SmallCap	- Chart vs S&P 600 SmallCap index
URSC-US Chart vs Russell 1000	- Chart vs Russell 1000 index
URSC-US Chart vs Russell 2000	- Chart vs Russell 2000 index
URSC-US Chart vs Russell 3000	- Chart vs Russell 3000 index

5 URSC-US Chart vs US ETFs indicators

URSC-US Chart vs ETF-DIA	- Chart vs Diamonds Trust ETF
URSC-US Chart vs ETF-IWM	- Chart vs iShares Trust ETF
URSC-US Chart vs ETF-MDY	- Chart vs S&P 400 MidCap ETF
URSC-US Chart vs ETF-QQQQ	- Chart vs NASDAQ 100 Tracking Stock ETF
URSC-US Chart vs ETF-SPY	- Chart vs S&P Index Depository Receipts ETF

8 URSC-US US-specific indicators

URSC-US Auto GICS Index	- Auto GICS Sector Idx match to chart
URSC-US Auto GICS vs S&P 500	- Auto GICS Sector Index vs S&P 500
URSC-US Auto Stock vs GICS Sector	- Chart vs auto GICS Sector Index
URSC-US GICS filter	- GICS filter binary indicator
URSC-US GICS Industry Group Number	- GICS number for current chart
URSC-US Manual GICS vs S&P 500	- GICS Index vs S&P 500 comparison
URSC-US Multi GICS [1] vs S&P 500	- GICS Indices 10~30 vs S&P 500
URSC-US Multi GICS [2] vs S&P 500	- GICS Indices 35~55 vs S&P 500

13 URSC non-specific indicators

URSC - Calendar Date default	- Choose your own reference date
URSC - Calendar Day counter	- Accurate calendar indicator
URSC - Chart vs 01 generic data	- Chart vs any data (\$EuroStoxx 50)
URSC - Chart vs 02 generic data	- Chart vs any data (\$DAX index)
URSC - Chart vs Bonds	- Chart vs US Bonds
URSC - Chart vs Chart	- Chart vs any local data
URSC - Chart vs Currency 01	- Chart vs forex pair (US\$-Yen)
URSC - Chart vs Currency 02	- Chart vs forex pair (US\$-AU\$)
URSC - Chart vs Gold	- Chart vs \$Gold
URSC - Chart vs Oil	- Chart vs Crude Oil
URSC - Basic	- Basic no-frills RSC, not normalized, no common zero point.
URSC - Alternative	- Alternative version, no common zero point, different plot.
URSC - Liquidity Filter	- Intelligent liquidity filter, for possible use in hi-capital strategy.

New: 5 System development indicators

Please see sysdev.htm & sysdev2.htm located in the Strategies folder for more information on these important system-development tools.

URSC-US Sector Trend	- Trend filter based on GICS Sector index breakouts (automatic index matching to current security).
URSC-US Sector Trend Profit Long %	- Sector Trend Profit Long % indicator; uses Risk-adjusted normalization.
URSC-US Sector Trend Profit Long pa% indicator.	- Annualized Long profit %pa; takes output from above
URSC-US Sector Trend Profit Short %	- Sector Trend Profit Short % indicator; uses Risk-adjusted normalization.
URSC-US Sector Trend Profit Short pa% indicator	- Annualized Short profit %pa; takes output from above indicator

4 URSC-US Expert Advisors

URSC-US Chart vs S&P 500	- Chart vs S&P 500 URSC crossover signals
URSC-US Stock vs GICS Sector	- Chart vs Auto GICS Sector Idx c/o signals
URSC-US GICS Expert Commentary-	Expert Commentary for multi-GICS template
URSC-US Sector Trend	- Sector trend chart signals

7 URSC-US chart Templates

URSC - Chart vs Gold-Oil-Bonds	- Chart vs Gold/Oil/Bonds
URSC-US Stock vs S&P 500	- Chart vs S&P 500 Index URSC c/o signals
URSC-US Stock vs GICS Sector	- Chart vs Auto GICS Sector c/o signals
URSC-US1 - GICS vs S&P 500	- GICS indices 10~30 vs S&P 500 URSC

URSC-US2 - GICS vs S&P 500	- GICS indices 35~55 vs S&P 500 URSC
URSC-US3 - multiple GICS vs S&P 500	- Same as 2 above, together in one chart
URSC-US Sector Trend	- Sector Trend signals, Long total & annualized profit indicators.

34 URSC-US Explorations

All explorations in the 2 sections below include outputs for the following URSC comparison periods:

1 day	1 week	2 weeks
1 month	6 months	1 year

The exploration filters include a user-input inactivity date filter to exclude inactive stocks.

US Index explorations

URSC-US Charts vs AMEX	- Charts vs AMEX index
URSC-US Charts vs Dow Jones	- Charts vs Dow Jones 30 Industrials idx
URSC-US Charts vs DJT	- Charts vs Dow Jones 20 Transportation
URSC-US Charts vs DJU	- Charts vs Dow Jones 15 Utilities index
URSC-US Charts vs NASDAQ	- Charts vs NASDAQ index
URSC-US Charts vs NASDAQ 100	- Charts vs NASDAQ 100 index
URSC-US Charts vs NYSE	- Charts vs NYSE index
URSC-US Charts vs S&P 500	- Charts vs S&P 500 index
URSC-US Charts vs S&P 100	- Charts vs S&P 100 index
URSC-US Charts vs S&P 400 MidCap	- Charts vs S&P 400 MidCap index
URSC-US Charts vs S&P 600 SmallCap	- Charts vs S&P 600 SmallCap index
URSC-US Charts vs Russell 1000	- Charts vs Russell 1000 index
URSC-US Charts vs Russell 2000	- Charts vs Russell 2000 index
URSC-US Charts vs Russell 3000	- Charts vs Russell 3000 index

US Exchange Traded Funds (ETF) explorations

URSC-US Charts vs ETF-DIA	- Charts vs Diamonds Trust ETF
URSC-US Charts vs ETF-IWM	- Charts vs iShares Trust ETF
URSC-US Charts vs ETF-MDY	- Charts vs S&P 400 MidCap ETF
URSC-US Charts vs ETF-QQQQ	- Charts vs NASDAQ 100 Tracking Stock ETF
URSC-US Charts vs ETF-SPY	- Charts vs SPY

US Stocks vs GICS Sector Index explorations

2 explorations below include separate outputs for all GICS sector indices, with a user-input inactivity date filter to exclude inactive stocks.

URSC-US Stocks vs GICS 10~30	- Auto chart vs GICS indices 10~30, DJI
URSC-US Stocks vs GICS 35~55	- Auto chart vs GICS indices 35~55, S&P500

US Market Breadth explorations

Market breadth data extracting explorations, with inactivity date filters.

URSC-US Adv/Dec	- Advancers/Decliners, adv/dec \$ turnover
URSC-US True 52-Week Highs	- True 52-Week Highs, sort by GICS group
URSC-US True 52-Week Lows	- True 52-Week Lows, sort by GICS group

US GICS filtering explorations

These two explorations allow complex filtering and sorting of stocks by GICS Sector & GICS Industry Group criteria.

URSC-US favourites list creation - URSC filter/favourites list creation
URSC-US GICS filtering - GICS Industry Group number & filtering

Non-specific data explorations

All these explorations below include outputs for the following URSC comparison periods:

1 day 1 week 2 weeks
1 month 6 months 1 year

The exploration filters include a user-input inactivity date filter to exclude inactive stocks.

URSC - Charts vs 01 generic data - Charts vs any data (\$EuroStoxx 50)
URSC - Charts vs 02 generic data - Charts vs any data (\$DAX index)
URSC - Charts vs Bonds - Charts vs US Bonds
URSC - Charts vs Currency 01 - Charts vs forex pair (US\$-Yen)
URSC - Charts vs Currency 02 - Charts vs forex pair (US\$-AU\$)
URSC - Charts vs Gold - Charts vs \$Gold
URSC - Charts vs Oil - Charts vs Crude Oil

New: System development exploration

URSC-US Sector Trend Profit % - Profit % Exploration based on Sector Trend signals, Long & Short and annualized.

URSC-US kit v3.0 installation instructions

Note:

All imported URSC MetaStock Indicators, Expert Advisors and URSC Explorations, begin with the name "URSC" or "URSC-US".

Four easy steps:

1) **Make sure MetaStock is closed (not running).**

2) Run the GICSinstall.exe setup file. This will automatically install the GICS reference database to C:\URSC on your PC.

All GICS Industry Group reference data files must be in this location, C:\URSC*.dat. If this location is altered, then the data path to these files needs to be altered in the appropriate MetaStock indicator formulae.

The installation of the URSC GICS database can also be done manually:

- a) Create the necessary data folder for the MetaStock-URSC
GICS reference data: C:\URSC
- b) Copy the folder contents of the attached original URSC
data folder C:\(download folder)\URSC\URSC-US\URSC
into your newly created C:\URSC folder.
- 3) Run the USpath.exe (path indicators) and USsetup.exe
(URSC formulae) install/setup files.

Ignore any formula reference error messages whilst importing
formulae into MetaStock.

Note:

When updating to newer versions of the URSC kit, do not run the
included USpath.exe setup file again. Doing this will overwrite
your existing path indicators with default data paths, which will
then require you to copy & paste your index data path again.

- 4) The URSC kit needs to know the location of your MetaStock index
data, such as for example the S&P 500 index.

There are 36 index data-reference MetaStock indicators in the URSC
kit, but some of them may not be necessary for your use, or you
may not subscribe to that specific data. You will need to edit
the data path to each of these URSC data-reference MetaStock URSC
indicators.

For the S&P 500 data reference example, you will need to edit
the contents of the "URSC-US path S&P 500" URSC indicator.

MetaStock -> Tools -> Indicator Builder ->
highlight "URSC-US path S&P 500" -> Edit.

If your S&P 500 index data happens to be in the C:\MetaStock Data
\Indices\ folder, and the symbol for your S&P 500 index is GSPC,
then edit the following code line the "URSC-US path S&P 500" URSC
indicator:

Original MetaStock indicator code:

```
Security("C:\ASX\Norgate\Futures\Cash\SSP",C)
```

New MetaStock code:

```
Security("C:\MetaStock Data\Indices\GSPC",C)
```

If all of your MetaStock index data is located in the C:\MetaStock
Data\Indices\ folder, then its just a matter of copying & pasting
'C:\MetaStock Data\Indices\' into all URSC data reference
indicators data path, taking care to add the correct symbol for
each index and keep the "" quotation characters and all other code
intact.

When all index data path has been placed within the data path
indicators, verify correct data paths by plotting the
"URSC-US path Validation" indicator in a window below any chart.
MetaStock will flag any errors found in the main data path
indicators, making any necessary correction easier to accomplish.

For US GICS Sector indices, input the data path and name to your
REUTERS/Bloomberg GICS indices as per table below.

GICS Sector	US Index	
	Reuters	Bloomberg
10 Energy	.GSPE	S5ENRS
15 Materials	.GSPM	S5MATR
20 Industrials	.GSPI	S5INDU
25 Consumer Discretionary	.GSPD	S5COND
30 Consumer Staples	.GSPS	S5CONS
35 Health Care	.GSPA	S5HLTH
40 Financials	.GSPF	S5FINL
45 Information Technology	.GSPT	S5INFT
50 Telecommunication Services	.GSPL	S5TELS
55 Utilities	.GSPU	S5UTIL

If data is available, US GICS Industry Group indices may also be used to create additional reference/URSC indicators, as per instructions later in this documentation and data table below.

GICS Industry Group	US Index	
	Reuters	Bloomberg
101 Energy	.GSPEN	S5ENRSX
151 Materials	.GSPMA	S5MATRX
201 Capital Goods	.GSPIC	S5CPGS
202 Commercial Services & Supplies	.GSPCS	S5COMS
203 Transportation	.GSPTRN	S5TRAN
251 Automobile & Components	.GSPAU	S5AUCO
252 Consumer Durables & Apparel	.GSPLP	S5CODU
253 Consumer Services	.GSPHR	S5HOTR
254 Media	.GSPME	S5MEDA
255 Retailing	.GSPMS	S5RETL
301 Food & Staples Retailing	.GSPFD	S5FDDR
302 Food, Beverage & Tobacco	.GSPFBT	S5FDBT
303 Household & Personal Products	.GSPHHP	S5HOUS
351 Health Care Equipment & Services	.GSPHC	S5HCES
352 Pharmaceuticals, Biotechnology & Life Sciences	.GSPPHB	S5PHRM
401 Banks	.GSPBK	S5BANKX
402 Diversified Financials	.GSPDF	S5DIVF
403 Insurance	.GSPINSC	S5INSU
404 Real Estate	.GSPREC	S5REAL
451 Software & Services	.GSPIS	S5SFTW
452 Technology Hardware & Equipment	.GSPTEHW	S5TECH
453 Semiconductors & Semiconductor Equipment	.GSPSE	S5SSEQX
501 Telecommunication Services	.GSPTS	S5TELSX
551 Utilities	.GSPUL	S5UTILX

<http://www.metastocktools.com/downloads/Gics.htm>

Once copying & pasting "C:\MetaStock Data\Indices\" (or other path data) into the data-path reference indicators is complete, you are now ready to harness the real power of URSC Relative Strength analysis.

URSC-US kit v3.0 usage

To begin, open any chart in MetaStock, right-click on the chart, and

apply the URSC template of your choice. Add indicators to suit your own style, and save chart setup as a new MetaStock template.

URSC indicator user-input fields

1) "Zero URSC at x calendar days back (0 = use Date)"

This parameter allows the zero reference synchronizing point of the Relative Strength Comparison (RSC) to be set at a specific number of calendar days ago, or at a specific past date.

All URSC indicators may reference a specific date in the indicator "URSC - Calendar Date default".

This date (default: 1/Jan/2005) can be easily changed by the following process:

MetaStock -> Tools -> Indicator Builder -> select "URSC - Calendar Date default" indicator -> Edit -> change dd/mm/yyy dates within -> Ok -> Close.

2) "plot: [1]URSC, [2]Index-normalized plot"

This parameter allows the URSC to be plotted as a % RSC, or as a direct comparison which can be plotted on charts.

3) "EMA signal periods (1 = no signal)"

This parameter allows the change of the visual EMA signal.

Profit % indicator set

The URSC kit's profit % indicators have been designed as part of a powerful system development tool. They correctly measure a number of relevant system metrics, and can be a great aid in rapid & valid system development.

These backtesting / system development tools are much faster/accurate/reliable than MetaStock's System Tester, and have risk-normalizing / annualizing functions which allow the direct comparison of different strategies with markedly contrasting risk profiles. Fast & powerful system development.

Money Management vs Risk Management

"Money management" is usually a label given to the fixed percentage allocation of capital to each trade, such as the "place 2% of your portfolio capital into each trade" general rule. If this process is supposed to protect a trader's capital from risk, then obviously risk needs to be added to the equation.

A fixed trade capital amount per trade (such as 2%) disregards the fact that some trades (and trading strategies) are riskier than others, and thus their capital needs to be reduced accordingly to allow for this greater risk. Placing an equal % of capital into each

trade and disregarding different levels of risk, is analogous to dividing one's wealth and placing equal amounts into each investment, regardless of whether it is a safe interest-bearing account or a risky lottery ticket.

The promise of "money management" is that it will protect a trader from the risk of losing his trading capital. Not necessarily so - it will probably just slow down the losing process.

Money Management is *not* Risk Management

Typical Money Management strategies such as fixed trade allocation, do not take capital risk into consideration.

Risk Management is not possible without measuring actual risk, and adjusting exposed capital to it, at both trade and strategy levels.

Risk Management or correct capital allocation, is a major component of the risk-adjusted profit indicator set in both the URSC tool-kit and MACDH Divergence kit.

Individual security position size is automatically determined by the profit indicators, according to historical risk for the particular security.

Using position size tailored to individual security risk allows 100% of total capital allocation to any given portfolio without excessive risk.

More capital on safer trades, less on riskier trades.
This is the essence of risk-management.

Profit % indicators

By default, these indicators plot an instant profit % curve based on URSC-US Sector Trend signals (Entry & Exit rules for these indicators are system development examples - do not trade!), or any other combination of system Entry/Exit signals you wish to add (when adding additional entries/exits, due to a lack of available formula space it is best to place all code in a separate indicator, and reference its signals in your new profit indicator).

User inputs:

"[1]%Profit, [2]%DrwDwn, [3]PosSize%, [4]Signals"

Choice of following 5 plots:

- [1] historical rolling % profit curve;
- [2] profit Peak/Trough % drawdown curve *;
- [3] Historically risk-adjusted position % size **;
- [4] Clean Entry/Exit trade signals;
- [5] %Profit/maxRisk ratio.

* Risk is measured as the difference between profit curve peaks & troughs, and the largest historical difference is taken as the maximum potential risk.
This is more straight-forward and realistic than using equity Standard Deviation, as in the traditional Sharpe ratio method of measuring risk for adjusting returns to risk. More on Sharpe ratio:

<http://www.miapavia.com/homes/ik2h1b/sr.htm>

** This option displays the risk-adjusted position size % (100% = normal pos size). More on risk normalizing below.

"Normalize %Profit beyond x% historical Drawdown"

This option allows the profit curve to be normalized to the user's chosen maximum historical risk of losing a trading account. Default: 30% maximum risk.

By normalizing risk to a maximum threshold, different strategies can be directly compared to each other. For example, by choosing the Buy & Hold option (which can have larger profits yet with much higher drawdowns), the divergence strategy's performance can be directly compared to it as a benchmark for the same period of trading.

"Entry Price: [1]Open, [2]Close"

Choose to enter trade on the Open or Close. Default: [2].

"Exit Price: [1]Open, [2]Close, [0]Buy+Hold"

Choose to exit trade on Open or Close, or choose "0" to ignore all exits and plot Buy & Hold profit curve for the equivalent trading period. Default: [2].

For performance exploration comparisons to Buy & Hold, edit this line of code to change the default exit signal:

Original:

```
ExitPrice:=Input("Exit Price: [1]Open, [2]Close, [0]Buy+Hold",0,2,2);
```

Buy & Hold default:

```
ExitPrice:=Input("Exit Price: [1]Open, [2]Close, [0]Buy+Hold",0,2,0);
```

"Entry/Exit Delay periods:"

Choose to delay entry & exit by one day if using the Open for entry price. Default: [0].

"Total Transaction costs (Brokerage + Slippage) %:"

Add estimated brokerage & slippage % for realistic profit testing. Default: 0.2% (use higher values for smaller trades than \$10k).

Profit pa% indicators

These indicators take the output from their corresponding profit indicators, and plot the following:

- [1] Risk-normalized Profit %pa;
- [2] Rolling annual (from 1st Jan) risk-normalized DrawDown %;
- [3] Average trade duration in calendar Days, measured at each trade exit;
- [4] Average % of time (% of calendar days) spent in trades;
- [5] Trading backtest period in Years.

After the first year of trading, the pa% profit indicator begins to annualize returns (i.e., average profit over 365 calendar days).

Whenever there are no active trade periods, the existing profit % divided by an increasing non-active period results in a decrease of the pa% average annual profit. This plots as a down-sloping line for profits, and up-sloping line for losses.

For example, if the profit% indicator shows a profit of 40% over four years, the profit pa% will show an annualized profit of 10%pa by the end of that period. For a 40% loss over the same period, the profit pa% will show an annualized profit of -10%pa by the end of that period.

If there is a period where the stock was totally inactive (i.e., suspended and with no data), then the profit pa% will correctly plot a profit pa% step up/down when the stock returns to trading after the inactive period.

Profit % exploration

This exploration is an excellent system-developing tool. It quickly determines median profitability for any universe of securities, and allows the rapid development of profitable trading strategies.

After running the exploration:

- a) Click on the column A profit % header to rank results by profitability;
- b) Select the middle profit % result, so that clicking again on the column header (and reversing the profitability order) does not change the position of the selected result.

Please see sysdev.htm & sysdev2.htm located in the Strategies folder for more information on this important system-development tool.

Duplicating/adapting the Profit indicators to measure different strategies' performance.

The profit indicators are quite versatile, and can be used to test any trading strategy with valid entry/exit signals.

Three easy steps:

- 1) Copy** "URSC-US Sector Trend Profit Long %" and "URSC-US Sector Trend Profit Long pa%" indicators;
- 2) Rename** copied "URSC-US ...(2)" indicators to your chosen profit indicator names;
- 3) Edit/change** & save the following code in your new profit indicator:

Original code:
{* Entry Long *}

```
x:=Fml("URSC-US Sector Trend");
entry:=x=1;
```

```
Change to:
{* Entry Long* }
entry:=Fml("Your Entry formula/indicator");
```

```
Original code:
{* Exit Long *}
exit:=x=0;
```

```
Change to:
{* Exit Long *}
exit:=Fml("Your Exit formula/indicator");
```

```
Original risk-based entry position size code:
{* Variable Trade Size % formula }
VarSize:=0;
```

```
Change to:
{* Variable Trade Size % formula }
VarSize:=Fml("Your Position Sizing formula");
```

```
Or, if no Position Sizing formula available:
{* Variable Trade Size % formula }
VarSize:=0;
(All original position size will now be a fixed 100%)
```

Actual example

Let's take an actual test example - a variation of the Darvas system.

```
=====
Darvas Box - Buy & Sell
=====
---8<-----

{ Darvas Box - Buy & Sell v1.0

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  For personal use only.
  http://www.metastocktools.com }

{ User input }
pds:=Input("Lookback periods",2,2600,100);

{ Variables }
h3:=Ref(H,-3);
l3:=Ref(L,-3);
init:=Cum(IsDefined(Ref(HHV(H,pds),-4)))=1;

{ Darvas High }
DvHi:=ValueWhen(1,init OR
  h3>=Ref(HHV(H,pds),-4) AND h3>HHV(H,3),h3);

{ New Darvas High }
NuDvHi:=Dvhi<>Ref(DvHi,-1);

{ New Darvas Low }
NuDvLo:=l3<LLV(L,3) AND DvHi>HHV(H,3);
NuDvLo:=NuDvLo AND Ref(NuDvLo,-1)<1
```

```

AND Cum(NuDvHi)>0;

{ Darvas Low }
DvLo:=ValueWhen(1,NuDvLo,13);

{ Darvas Box End }
DvEnd:=
  BarsSince(NuDvHi)<BarsSince(Ref(NuDvLo,-1));
DvEnd:=(DvEnd AND NuDvLo)
  OR Cum(IsDefined(DvEnd))=1;

{ Darvas Box High }
DvBoxHi:=ValueWhen(1,DvEnd,DvHi);

{ Darvas Box Low }
DvBoxLo:=ValueWhen(1,DvEnd,DvLo);

{ Darvas Possible Sell }
DvPosSell:=L<DvBoxLo AND Alert(L<DvBoxLo=0,2);

{ Darvas Sell }
exit:=BarsSince(DvEnd)<BarsSince(DvPosSell);
exit:=exit=0 AND Alert(exit,2)
  OR Cum(IsDefined(exit))=1;

{ Darvas Buy }
{ Classic Darvas: change next line to H>DvBoxHi} entry:=C>DvBoxHi
  AND BarsSince(DvEnd)<BarsSince(exit);

{ Clean signals }
init:=Cum(IsDefined(entry+exit))=1;
bin:=ValueWhen(1,entry-exit<>0 OR init,entry);
long:=bin*(Alert(bin=0,2) OR init);
short:=(bin=0)*(Alert(bin,2) OR init);

{ Plot in own window }
long-short

---8<-----

```

1) Copy & Paste above "Darvas Box - Buy & Sell" indicator into MetaStock's Indicator Builder.

2) Copy & rename the "URSC-US Sector Trend Profit Long %" & "URSC-US Sector Trend Profit Long pa%" to "Darvas Signals Profit Long %" & "Darvas Signals Profit Long pa%".

3) In the new "Darvas Signals Profit Long %" indicator,

Change original code line:

```

{* Entry Long *}
x:=Fml("URSC-US Sector Trend");

```

For:

```

{* Entry Long *}
x:=Fml("Darvas Box - Buy & Sell");

```

4) In the new "Darvas Signals Profit Long pa%" indicator,

Change original code lines:

```
{ Reference Profit Long & trade flag }
profit:=Fml("URSC-US Sector Trend Profit Long %");
flag:=FmlVar("URSC-US Sector Trend Profit Long %","FLAG");
```

```
For:
{ Reference Profit Long & trade flag }
profit:=Fml("Darvas Signals Profit Long %");
flag:=FmlVar("Darvas Signals Profit Long %","FLAG");
```

5) New exploration:

```
Column A: %pa
Fml("Darvas Signals Profit Long pa%")
```

```
Filter
colA<>0
```

6) Buy & Hold testing for the same period is done by changing original default output in "Darvas Signals Profit Long %" indicator code:

```
Original (exit on Close):
ExitPrice:=Input("Exit Price: [1]Open, [2]Close, [0]
Buy+Hold",0,2,2);
```

```
To Buy & Hold (no exit):
ExitPrice:=Input("Exit Price: [1]Open, [2]Close, [0]
Buy+Hold",0,2,0);
```

Actual testing was done on 485 securities in the ASX's All Ordinaries, backtested over a median 6.25 years of EOD data, mid-Feb 2006.

Normally, survivorship bias would present a major problem when backtesting a current list of surviving securities, but since we'll also be testing a risk-normalized/annualized Buy&Hold strategy for the same period as a benchmark, any bias can be easily measured and accounted for.

Entry & Exit was on the Close of the signal day, 0.2% was used as a total brokerage/slippage to mirror lower transaction expenses in the US.

Risk was normalized to a maximum 30% historical drawdown, using backtesting methodology as explained in the Trading System Development Tolls webpage (available from the local strategies folder or <http://www.metastocktools.com/URSC/sysdev.htm>).

```
Results
=====
```

Median (risk-normalized) net profit over the last 6 years:

```
Buy & Hold: 3.0%pa profit
Darvas: 1.6%pa profit
```

```
Summary
=====
```

No doubt a better exit may improve the Darvas system's performance, but for the time being, it under-performs a risk-normalized Buy &

Hold strategy (for the same period) by 1.4%pa.

In other words, taking out market biases, the current Darvas system's annual net profit is -1.4%pa.

URSC templates explained

URSC - Chart vs Gold-Oil-Bonds

Setup:

Price (chart)
URSC - Chart vs Gold (yellow)
URSC - Chart vs Oil (red)
URSC - Chart vs Bonds (green)

This template looks at the chart vs three major market indicators: Gold, Oil and US Bonds.

URSC-US Stock vs GICS Sector

Setup:

URSC-US GICS Industry Group Number (yellow)
Price chart with "URSC-US Stock vs GICS Sector" Expert Advisor
URSC-US Auto Stock vs GICS Sector (yellow)

This template looks at the chart vs its corresponding GICS Sector Index.

The Expert Advisor arrow signals are basic crossovers of the "URSC-US Auto Stock vs GICS Sector" indicator and it's own 63-period EMA signal line.

URSC-US Stock vs S&P 500

Setup:

URSC-US GICS Industry Group Number (yellow)
Price chart with "URSC-US Chart vs S&P 500" Expert Advisor
URSC-US Chart vs S&P 500 (yellow)

This template looks at the chart vs the S&P 500 Index.

The Expert Advisor arrow signals are basic crossovers of the "URSC-US Chart vs S&P 500" indicator and it's own 63-period EMA signal line.

This template is the most basic URSC setup, and can easily be copied and adapted to chart comparisons vs any other index (see "Modifying URSC indicators/explorations" below).

URSC-US1 - GICS vs S&P 500

Setup:

"URSC-US Manual GICS vs S&P 500" indicators x5

This template is a visual representation of the "URSC-US Stocks vs GICS 10~30" Exploration. It plots each of the first five of ten GICS

indices vs the S&P 500.

In other words, it ranks each GICS sector's performance against the S&P 500.

MetaStock often loses track of parameters chosen for multiple plots of the same indicator, so if all five indicators in this template are displaying identical curves, do the following:

- 1) Double-click on the 1st (red) indicator, and choose GICS Sector Index 10;
- 2) Double-click on the 2nd (orange) indicator, and choose GICS Sector Index 15;
- 3) Double-click on the 3rd (pink) indicator, and choose GICS Sector Index 20;
- 4) Double-click on the 4th (gold) indicator, and choose GICS Sector Index 25;
- 5) Double-click on the 5th (dark yellow) indicator, and choose GICS Sector Index 30.

- 6) Go to File, Save As..., Save as Type: Template, double-click "URSC-US1 - GICS vs S&P 500.mwt" template and save (overwrite).

URSC-US2 - GICS vs S&P 500

Setup:

"URSC-US Manual GICS vs S&P 500" indicators x5

This template is a visual representation of the "URSC-US Stocks vs GICS 35~55" Exploration. It plots each of the last five of ten GICS indices vs the S&P 500.

In other words, it ranks each GICS sector's performance against the S&P 500.

MetaStock often loses track of parameters chosen for multiple plots of the same indicator, so if all five indicators in this template are displaying identical curves, do the following:

- 1) Double-click on the 1st (bright green) indicator, and choose GICS Sector Index 35;
- 2) Double-click on the 2nd (teal) indicator, and choose GICS Sector Index 40;
- 3) Double-click on the 3rd (turquoise) indicator, and choose GICS Sector Index 45;
- 4) Double-click on the 4th (blue-gray) indicator, and choose GICS Sector Index 50;
- 5) Double-click on the 5th (blue) indicator, and choose GICS Sector Index 55.

- 6) Go to File, Save As..., Save as Type: Template, double-click "URSC-US2 - GICS vs S&P 500.mwt" template and save (overwrite).

URSC-US3 - multiple GICS vs S&P 500

Setup:

URSC-US Multi GICS [1] vs S&P 500

URSC-US Multi GICS [2] vs S&P 500

This template is similar to the two above, but visually compares all GICS Sector Indices (vs S&P 500) directly against each other on the same window.

Each colored plot represents a GICS sector's URSC:

Red:	10 - Energy index
Orange:	15 - Materials index
Pink:	20 - Industrials index
Gold:	25 - Consumer Discretionary index
Dark Yellow:	30 - Consumer Staples index
Bright Green:	35 - Health Care index
Teal:	40 - Financials index
Turquoise:	45 - Information Technology index
Blue-Gray:	50 - Telecommunication index
Blue:	55 - Utilities index

Clicking on View -> Expert Commentary will produce a handy information window with all the index color descriptions, as well as their corresponding URSC values for the selected period on the chart.

Notes

Modifying URSC indicators/explorations

Allowing comparisons to other markets

"How do I create a URSC indicator/exploration set that compares my charts to a different set of data, for example, the Hang Seng index?"

5 easy steps for a complete set of new URSC tools:

#1 - new data path indicator

Using MetaStock -> Tools -> Indicator Builder:

- a) Make a copy of "URSC path 01 generic data" indicator.
- b) Rename this new indicator
from "URSC path 01 generic data(2)"
to "URSC path Hang Seng".
- c) Edit code data path in last line of the new indicator,
to point data reference to your Hang Seng index data path.
i.e.:

Change:

Security("C:\ASX\Norgate\Futures\Cash\\$\$SX",C)

To:

Security("C:\MetaStock Data\Indices\Cash\\$\$HS",C)

#2 - new URSC indicator

Using MetaStock -> Tools -> Indicator Builder:

- a) Make a copy of "URSC - Chart vs 01 generic data" indicator.
- b) Rename this new indicator

from "URSC - Chart vs 01 generic data(2)"
to "URSC - Chart vs Hang Seng".

- c) Edit code data path within the new indicator (11th code line down), to point data reference to your new Hang Seng data path indicator. i.e.:

Change:

```
Idx:=Fml("URSC path 01 generic data");
```

To:

```
Idx:=Fml("URSC path Hang Seng");
```

#3 - new URSC exploration

Using MetaStock -> Tools -> The Explorer:

- a) Make a copy of "URSC - Charts vs 01 generic data" exploration.
- b) Rename this new exploration
from "URSC - Charts vs 01 generic data"
to "URSC - Charts vs Hang Seng".
- c) Edit code data path within each column of the new exploration
(1st line of code), to point data reference to your new Hang Seng
data path indicator. i.e.:

Change:

```
Idx:=Fml("URSC path 01 generic data");
```

To:

```
Idx:=Fml("URSC path Hang Seng");
```

#4 - new URSC chart Expert

Using MetaStock -> Tools -> Expert Advisor:

- a) Make a copy of "URSC-US Chart vs S&P 500" expert advisor.
- b) Rename this new expert advisor to "URSC - Charts vs Hang Seng".
- c) Change each formula reference
from "URSC-US Chart vs S&P 500"
to "URSC - Charts vs Hang Seng" in:

```
2 locations in the Trends tab;  
2 locations in the Highlights tab;  
2 locations in the Symbols tab;  
2 locations in the Alerts tab;
```

#5 - new URSC template

- a) Open a new clean chart.
- b) Attach new "URSC - Charts vs Hang Seng" expert advisor.
- c) Drop the "URSC - Chart vs Hang Seng" indicator on
to its own window below the price chart.
- d) Go to File -> Save As... -> Save as type: Template

-> "URSC Chart vs Hang Seng".

Using the five simple steps above, a complete set of URSC indicators/explorations may be created for any market in the world.

Chart vs any other local data URSC

Relative strength between securities can be compared to each other in two different ways, directly and indirectly.

The "URSC Chart vs Security" indicator compares the current chart to a (hard-coded) selected security using the direct method.

For an example using (ASX stocks) BHP vs TLS, open a BHP chart and edit this code line in indicator "URSC Chart vs Security":

```
{ Input path to selected security (TLS example) }  
chart2:=Security("TLS",C);
```

Direct comparison

As at 13/09/2004, stock ABC is +9.9% above XYZ for the year, when compared directly to each other.

Indirect comparison

The current 1-year relative strength for ABC vs its main index is +2%.

The current 1-year relative strength for XYZ vs its main index is -1.26%. The difference between these two securities is +3.26% in ABC's favour, when both are compared to their respective indices.

GICS reference data updates

To update the GICS Industry Group reference data files in C:\URSC\ use any text editor (Notepad or Wordpad) to add/remove new symbols as their GICS Group classifications change.

US GICS Industry Group constituent lists here:

<http://jcsb.slu.edu/faculty/betkerbl/463/gics.html>

S&P 500 index constituent list here:

[http://www2.standardandpoors.com/servlet/Satellite?
pagename=sp/Page/IndicesConstituentsPg&b=4&r=1&l=EN&s=6&ig=51&i=56
&si=null&d=null&xcd=500](http://www2.standardandpoors.com/servlet/Satellite?pagename=sp/Page/IndicesConstituentsPg&b=4&r=1&l=EN&s=6&ig=51&i=56&si=null&d=null&xcd=500)

S&P's GICS webpage:

[http://www2.standardandpoors.com/NASApp/cs/ContentServer?
pagename=sp/Page/IndicesGICSPg&r=1&l=EN&b=4&f=1](http://www2.standardandpoors.com/NASApp/cs/ContentServer?pagename=sp/Page/IndicesGICSPg&r=1&l=EN&b=4&f=1)

Personal Favourites portfolio creation

How to isolate your own personal stock portfolios (favourites lists), for system testing and exploration purposes:

- 1) Using any text editor such as NotePad, place your own list of symbols/tickers/codes in the text file named "Favs-01.dat", located in the C:\URSC folder.
You can add an unlimited number of code symbols to Favs-01.dat

Note: the lookup data file must contain the exact matching symbols without any leading or trailing spaces, or any other invisible formatting characters such as tabs.

e.g.:

```
Favs-01.dat
=====
---8<-----
* Personal basket of stocks - insert your own codes below *
* 500 codes in S&P 500 index as at close of 27 January 2006 *
A
AA
AAPL
ABC
...
...
YHOO
YUM
ZION
ZMH
---8<-----
```

- 2) Make sure Favs-01.dat remains in the C:\URSC folder;
- 3) Use in explorations, system tests, indicators, etc, to filter out any stock not in your list, by enabling this line of code:

```
{ *personal favourites stock portfolio* }
ExtFml("Filter.Symbol","C:\URSC\Favs-01.dat");
```

All formulae with this code activated, will now exclusively process only stock data in your portfolio list as above.

- 4) Further favourites lists can also be created.
The files may be named any name except existing data files names.

e.g.:

```
Favs02:=ExtFml("Filter.Symbol","C:\URSC\Favs-02.dat");
Favs03:=ExtFml("Filter.Symbol","C:\URSC\Favs-03.dat");
```

Warning:

Some word processors attempt to save text data files with an *.txt file extension, such as **Favs-01.dat.txt!**
Files with a *.txt extension cannot be found by the URSC Filter.dll if a *.dat file is requested.

Limitations

Due to some MetaStock data access "features", all URSC comparisons are backwards-restricted to the index data file with the least amount of data.

This means that if your indices data begins on 03/04/2000, indicators and explorations will only begin the earliest URSC comparison from 03/04/2000.

Q/A, problems

Unusual/inconsistent errors

MetaStock is renown for poor memory management. Possible out-of-memory errors can occasionally manifest themselves as an unusual high count in exploration rejections, or an unusually smooth/jagged indicator plot.

If this occurs, try shutting down MetaStock and restarting it again. If the problem persists, try re-booting your PC before contacting the author at the email address below.

No values displayed

If a URSC chart vs GICS indicator plots only zero values, that particular stock symbol is not in any of the URSC folder GICS reference databases. Either the GICS reference database has not been updated, or that particular stock is now defunct.

I seem to get identical exploration results for all lookback periods (1 day % to 1 year%) in all the URSC exploration columns.

By default, MetaStock loads the minimum required records for each new exploration. Make sure that your exploration options are set to at least "Load 1000 Records", and **not** "Load Minimum Records".

MetaStock -> Tools -> The Explorer -> Options -> tick "Load 1000 Records" -> Ok.

In the "URSC-US multiple GICS vs S&P500" template, I see 10 colored lines representing each market sector's URSC. Is there a way of adding a legend to the chart defining each of the URSC 10 plots?

Unfortunately there is no automatic way for MetaStock to label each of the 10 chart plots. However, by clicking on "View" and then "Expert Commentary", all 10 URSC values may be viewed there together with their matched colored GICS Index names, as shown here:

<http://www.metastocktools.com/URSC/URSC-7.png>

***I've just tried the "URSC-US1 - GICS vs S&P 500.mwt" template.
It seems all five windows display identical values - why is this?***

On URSC kit import, sometimes MetaStock resets all stored values to indicator default values in some templates.

To rectify this, double-click on the template's first indicator (red line), and in "choose GICS Sector Index (10~55)", set this option to "10".

Click on the 2nd indicator, and set the same option to "15", and so on:

3rd - "20"

4th - "25"

5th - "30"

Then go to File -> Save As -> Save as type Template (*.mwt) -> overwrite existing "URSC-US1 - GICS vs S&P 500.mwt" template and save.

You may need to do the same for the "URSC-US2 - GICS vs S&P 500.mwt" template (apply 35~55 values).

The URSC Expert commentary values will match the indicator values after this.

Can you explain more on the date filter in the exploration?

When a MetaStock Exploration is run, it explores every stock available in that data folder(s). Some of those stocks may be suspended, others may even be delisted, yet the exploration will keep considering those dead stocks as if they are still trading today. For example, if a stock last traded in 1996, and its data is still available, a normal MetaStock exploration would consider it as still trading today.

The date filter in the URSC exploration filters force the exploration to ignore any stocks that have not traded since the date in the filter, so that only active/trading stocks are searched. Without this filter, the exploration may come up with the same dead stocks over and over again.

Would you please further explain the nature of the shifting plot of the URSC? Can this be a problem?

Relative Strength Comparisons (RSC) need a common starting point (zero point), from where they can begin its strength comparison between two data sets.

As default (and this is adjustable), the URSC kit begins its RSC from 365 calendar days (exactly one year) back.

This means that if today is the 9th of May 2005, it begins its strength comparison from the 9th of May 2004 (or nearest trade date). At this point, both data sets are set to zero % RSC.

Tomorrow, on the 10th of May 2005, the URSC will begin its comparison from a day later, the 10th of May 2004. As the zero-start point has now shifted forward by one day, this creates a slight "shifting" of the URSC plot (values). Although this shifting may be considered dynamic, it is not hindsight-based such as for example, with the ZigZag plot.

I personally do not see the URSC's floating zero start as a problem. However, the zero-start point can be locked to a specific date in the URSC kit (e.g. 01/01/2004), and the dynamic nature of the URSC would then become static - i.e. no more shifting.

To lock the URSC zero point to a specific past date, choose "0" lookback days in the "Zero URSC at x calendar days back (0 = use Date)" URSC indicator parameters. The "URSC - Calendar Date default" indicator holds the default date data when "0" lookback days are chosen in the URSC indicators. This date (default: 1/Jan/2005) can be easily changed by the following process:

MetaStock -> Tools -> Indicator Builder -> select "URSC - Calendar Date default" indicator -> Edit -> change to new dd/mm/yyyy date within -> Ok -> Close.

Is there more information on the Filter.dll?

ExtFml("Filter.Symbol", "Path & Filename")

The Filter.dll was developed specifically for the URSC kit. It is basically a very handy symbol-to-database matching tool that can be used as a security filter. For a working example, see the "URSC favourites list creation" exploration.

The filter.dll simply looks for a match between the current chart's symbol, and any identical symbol found in the specified data path/file.

It will plot a "1" (true) signal if it finds a symbol match, and "0" (false) if it fails to find a match on the specified list.

Example:

```
{ ASX 500 (All Ords) liquidity filter }  
filter:=ExtFml("Filter.Symbol","C:\URSC-ASX\Top-500.dat");
```

The code above will plot a "1" signal if it finds a match between the current chart symbol and the exact symbol found in the C:\URSC-ASX\Top-500.dat file, and a "0" if it doesn't. Adding this line of code as a filter to any system code, will force it to ignore any securities that are not part of the ASX's All Ords index.

Support:

jose@MetaStockTools.com

Additional services

Personal trading system programming & testing, custom formula writing for MetaStock and specialized data services are available for US \$60/hr.

Confidentiality and exclusivity is guaranteed.

<http://www.MetaStockTools.com>

I wish you all the best in your endeavor to develop and trade your personal successful strategy.

Trade with the Strength.

jose '-)

Disclaimer

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