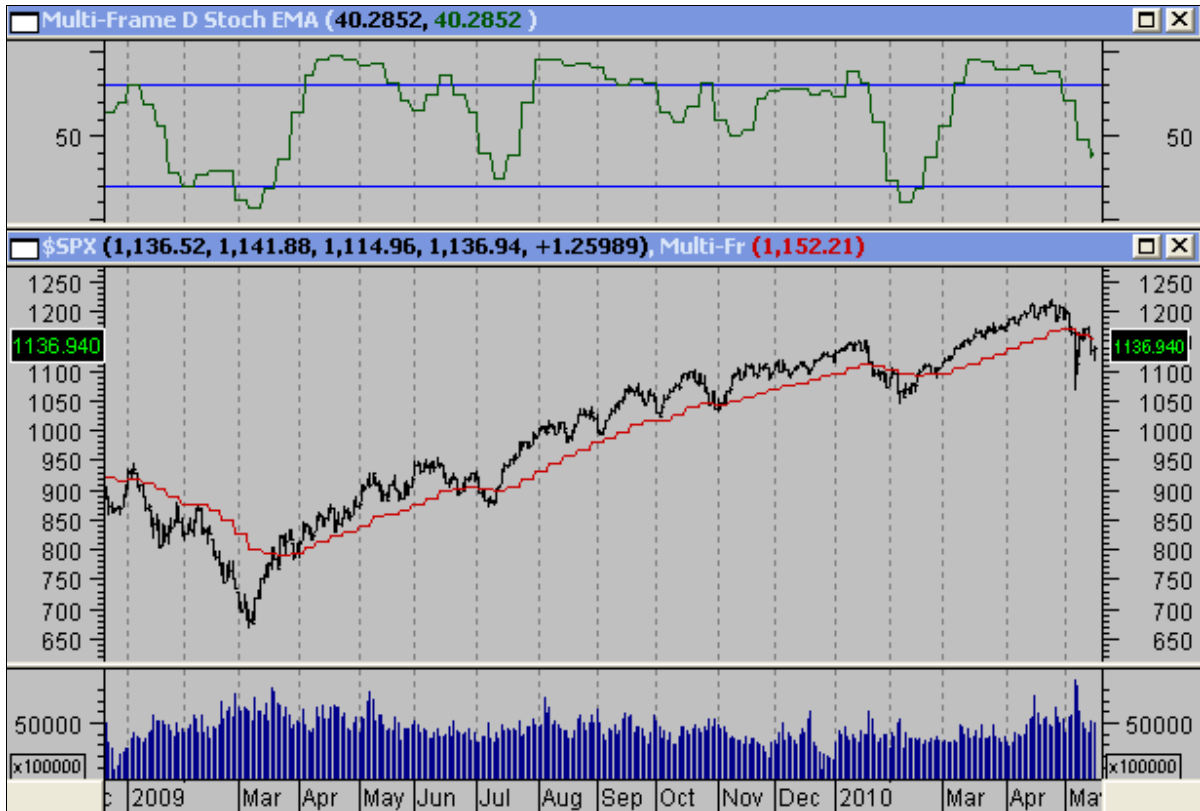


Multi-Frame Documents & Indicators

NB: No actual formulas are included in this document

Indicator Series	Indicator Periodicity Options (Frame Size Range)	Suggested Chart Periodicities	Page
D (EOD)	Weekly to Yearly	Daily to Monthly, also works on Intraday	2
D-C	Weekly to Yearly	Daily to Monthly, also works on Intraday	4
D-CE	Weekly to Yearly	Daily to Monthly, also works on Intraday	4
I (Intraday)	1 Minute to 240 Minutes	Tick to 2-Hourly (120 Minutes)	5
I-C	1 Minute to 240 Minutes	Tick to 2-Hourly (120 Minutes)	7
I-CE	1 Minute to 240 Minutes	Tick to 2-Hourly (120 Minutes)	7
ID (Intraday)	1 Minute to 1440 Minutes	Tick to 12-Hourly (720 Minutes)	8
ID-C	1 Minute to 1440 Minutes	Tick to 12-Hourly (720 Minutes)	10
ID-CE	1 Minute to 1440 Minutes	Tick to 12-Hourly (720 Minutes)	10
X (Extended Intraday)	1 Hour to 24 hours	Tick to 12-Hourly (720 Minutes)	11
X-C	1 Hour to 24 hours	Tick to 12-Hourly (720 Minutes)	13
X-CE	1 Hour to 24 hours	Tick to 12-Hourly (720 Minutes)	13



A daily SPX chart showing a Multi-Frame (weekly) stochastic plotted in the upper window, and a Multi-Frame (weekly) moving average scaled to price in the lower window. Compare the values of these same indicators when plotted on a weekly SPX chart – see page 3.

Notice that when weekly Multi-Frame indicators are plotted on a daily chart they form a "stepped" pattern. This is because values plotted by these indicators only change at the Friday close once prices for a complete week are known. Multi-Frame indicator values are held constant until the end of the following week or other nominated period.

D Series Document Names

multi_frame_d_adx.txt
multi_frame_d_adxi.txt
multi_frame_d_adxr.txt
multi_frame_d_aaron.txt
multi_frame_d_atr.txt
multi_frame_d_av_mean.txt
multi_frame_d_b_indicator.txt
multi_frame_d_bb.txt
multi_frame_d_bb_bot.txt
multi_frame_d_bb_top.txt
multi_frame_d_buy_p.txt
multi_frame_d_camarilla_levels.txt
multi_frame_d_cci.txt
multi_frame_d_close.txt
multi_frame_d_cmf.txt
multi_frame_d_cmo.txt
multi_frame_d_copock_guide.txt
multi_frame_d_dema.txt
multi_frame_d_dema_o.txt
multi_frame_d_di.txt
multi_frame_d_ehlers_dcf.txt
multi_frame_d_elders_force_index.txt
multi_frame_d_ema.txt
multi_frame_d_ema_o.txt
multi_frame_d_evs.txt
multi_frame_d_gann_hilo.txt
multi_frame_d_heikin_ashi.txt
multi_frame_d_hhv.txt
multi_frame_d_hlc.txt
multi_frame_d_ift_cmo.txt
multi_frame_d_ift_rsi.txt
multi_frame_d_imi.txt
multi_frame_d_inertia.txt
multi_frame_d_jcm.txt
multi_frame_d_kaufmans_ama.txt
multi_frame_d_kaufmans_ama_o.txt
multi_frame_d_keltner_channels.txt
multi_frame_d_llv.txt
multi_frame_d_lr.txt
multi_frame_d_lrs.txt
multi_frame_d_macd.txt
multi_frame_d_mass_index.txt
multi_frame_d_mdi.txt
multi_frame_d_mfi.txt
multi_frame_d_mom.txt
multi_frame_d_ohlc.txt
multi_frame_d_pdi.txt
multi_frame_d_pivots.txt
multi_frame_d_price_osc.txt
multi_frame_d_q_indicator.txt
multi_frame_d_qstick.txt
multi_frame_d_rmi.txt
multi_frame_d_roc.txt
multi_frame_d_rsi.txt
multi_frame_d_rvi.txt
multi_frame_d_sell_p.txt
multi_frame_d_siroc.txt
multi_frame_d_sma.txt
multi_frame_d_sma_demo.txt

D Series Indicator Names

Multi-Frame D ADX
Multi-Frame D ADXI
Multi-Frame D ADXR
Multi-Frame D Aroon
Multi-Frame D ATR
Multi-Frame D Average/Mean
Multi-Frame D B Indicator
Multi-Frame D BB
Multi-Frame D BB Bot
Multi-Frame D BB Top
Multi-Frame D BuyP
Multi-Frame D Camarilla Levels
Multi-Frame D CCI
Multi-Frame D CLOSE
Multi-Frame D CMF
Multi-Frame D CMO
Multi-Frame D Copock Guide
Multi-Frame D DEMA
Multi-Frame D DEMA-O
Multi-Frame D Demand Index
Multi-Frame D Ehler's DCF
Multi-Frame D Elder's Force Index
Multi-Frame D EMA
Multi-Frame D EMA-O
Multi-Frame D EVS
Multi-Frame D Gann HiLo
Multi-Frame D Heikin-Ashi
Multi-Frame D HHV
Multi-Frame D HLC
Multi-Frame D IFT CMO
Multi-Frame D IFT RSI
Multi-Frame D IMI
Multi-Frame D Inertia
Multi-Frame D JCM
Multi-Frame D Kaufmans AMA
Multi-Frame D Kaufmans AMA-O
Multi-Frame D Keltner Channels
Multi-Frame D LLV
Multi-Frame D LR
Multi-Frame D LRS
Multi-Frame D MACD
Multi-Frame D Mass Index
Multi-Frame D MDI
Multi-Frame D MFI
Multi-Frame D Momentum
Multi-Frame D OHLC
Multi-Frame D PDI
Multi-Frame D Pivots
Multi-Frame D Price Osc
Multi-Frame D Q Indicator
Multi-Frame D Q-Stick
Multi-Frame D RMI
Multi-Frame D ROC
Multi-Frame D RSI
Multi-Frame D RVI
Multi-Frame D SellP
Multi-Frame D SIROC
Multi-Frame D SMA
Multi-Frame D SMA Demo

Comment

Average Directional Movement
Directional Movement Index
Directional Movement Rating

Average True Range
Nominate price Average / Mean
Trend Strength
Bollinger Bands
Bollinger Band Bottom
Bollinger Band Top
Buying Pressure

Commodity Channel Index

Chaikin's Money Flow
Chande Momentum Oscillator

Double-smoothed EMA

Ehler's Distant Coefficient Filter

Exponential Moving Average

Erlanger Volume Swing

Highest High Value of Price
High, Low, Close
Inverse Fisher Transform of CMO
Inverse Fisher Transform of RSI
Intraday Momentum Index

Jay's Copock Model

Lowest Low Value of Price
Linear Regression
Linear Regression Slope

Minus DI
Money Flow Index

Open, High, Low, Close
Plus DI
Pivot Levels
Price Oscillator
Trend Quality

Relative Momentum Index
Price Rate-of-Change
Relative Strength Index
Relative Volatility Index
Selling Pressure
SIROC Indicator
Simple Moving Average
SMA - Demonstration version

D Series Document Names

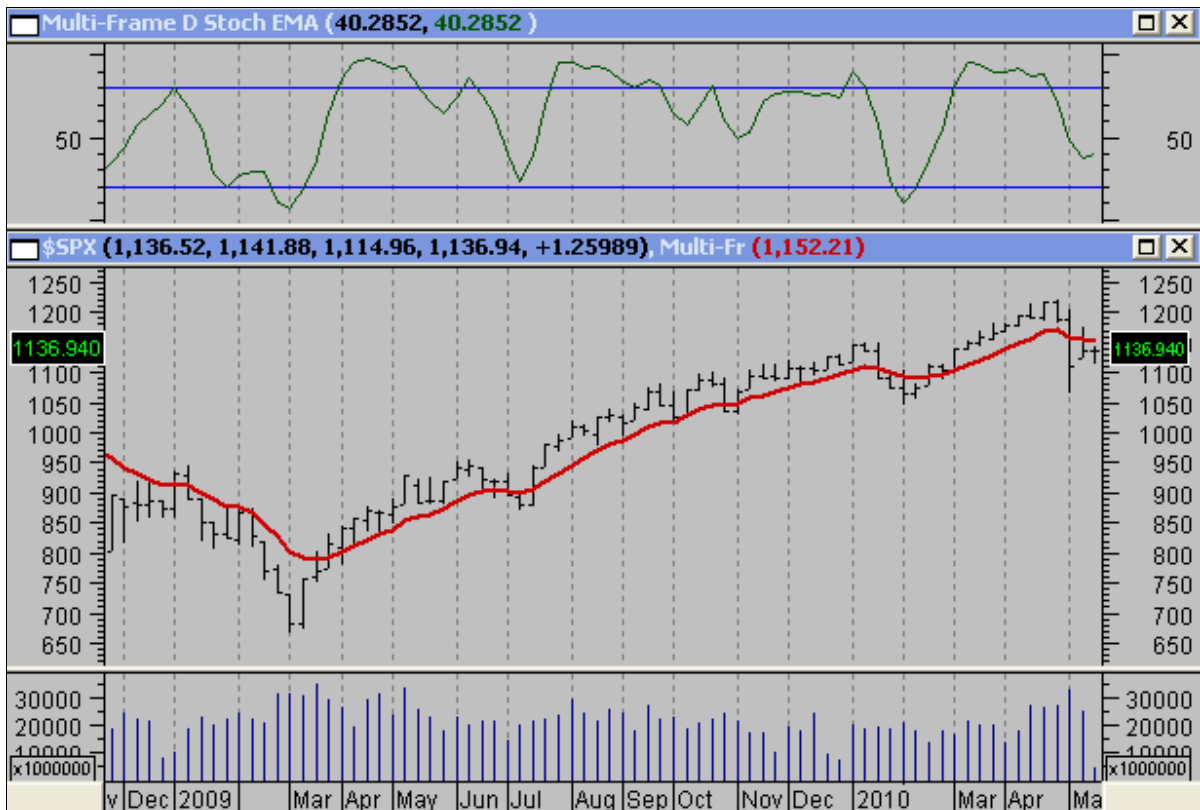
multi_frame_d_sma_o.txt
 multi_frame_d_sd.txt
 multi_frame_d_stoch_ds.txt
 multi_frame_d_stoch_ema.txt
 multi_frame_d_stoch_prem.txt
 multi_frame_d_stoch_sma.txt
 multi_frame_d_stochrsi.txt
 multi_frame_d_tema.txt
 multi_frame_d_tema_o.txt
 multi_frame_d_trix.txt
 multi_frame_d_tsf.txt
 multi_frame_d_vhf.txt
 multi_frame_d_vhf_o.txt
 multi_frame_d_vidya.txt
 multi_frame_d_vidya_o.txt
 multi_frame_d_volatility_chaikins.txt
 multi_frame_d_volume.txt
 multi_frame_d_volume_oscillator.txt
 multi_frame_d_vortex.txt
 multi_frame_d_wilders.txt
 multi_frame_d_wilders_o.txt
 multi_frame_d_williams_%r_o.txt
 multi_frame_d_wma.txt
 multi_frame_d_wma_o.txt
 multi_frame_d_zlag_ema.txt

D Series Indicator Names

Multi-Frame D SMA-O
 Multi-Frame D StDev
 Multi-Frame D Stoch DS
 Multi-Frame D Stoch EMA
 Multi-Frame D Stoch Premier
 Multi-Frame D Stoch SMA
 Multi-Frame D StochRSI
 Multi-Frame D TEMA
 Multi-Frame D TEMA-O
 Multi-Frame D TRIX
 Multi-Frame D TSF
 Multi-Frame D VHF
 Multi-Frame D VHF-O
 Multi-Frame D VIDYA
 Multi-Frame D VIDYA-O
 Multi-Frame D Volatility-Chaikins
 Multi-Frame D Volume
 Multi-Frame D Volume Oscillator
 Multi-Frame D Vortex
 Multi-Frame D Wilders
 Multi-Frame D Wilders-O
 Multi-Frame D Williams' %R
 Multi-Frame D WMA
 Multi-Frame D WMA-O
 Multi-Frame D Z-Lag EMA

Comment

Standard Deviation
 Double Smoothed Stochastic
 EMA Smoothed Stochastic
 Premier Stochastic
 SMA Smoothed Stochastic
 Triple-smoothed EMA
 Time Series Forecast
 Vertical Horizontal Filter
 Variable Moving Average
 Wilders Smoothing
 Weighted Moving Average
 Zero-lag Exponential MA



A weekly SPX chart showing a Multi-Frame stochastic plotted in the upper window, and a Multi-Frame moving average scaled to price in the lower window. Compare the values of these same indicators when plotted on a daily SPX chart – see page 1.

D-C Series Document Names

multi_frame_d_c_mov_demo.txt
 multi_frame_d_c_ma_options.txt
 multi_frame_d_c_stochastic.txt

D-CE Series Indicator Names

Multi-Frame D-C Mov Demo
 Multi-Frame D-C MA Options
 Multi-Frame D-C Stochastic

Comment

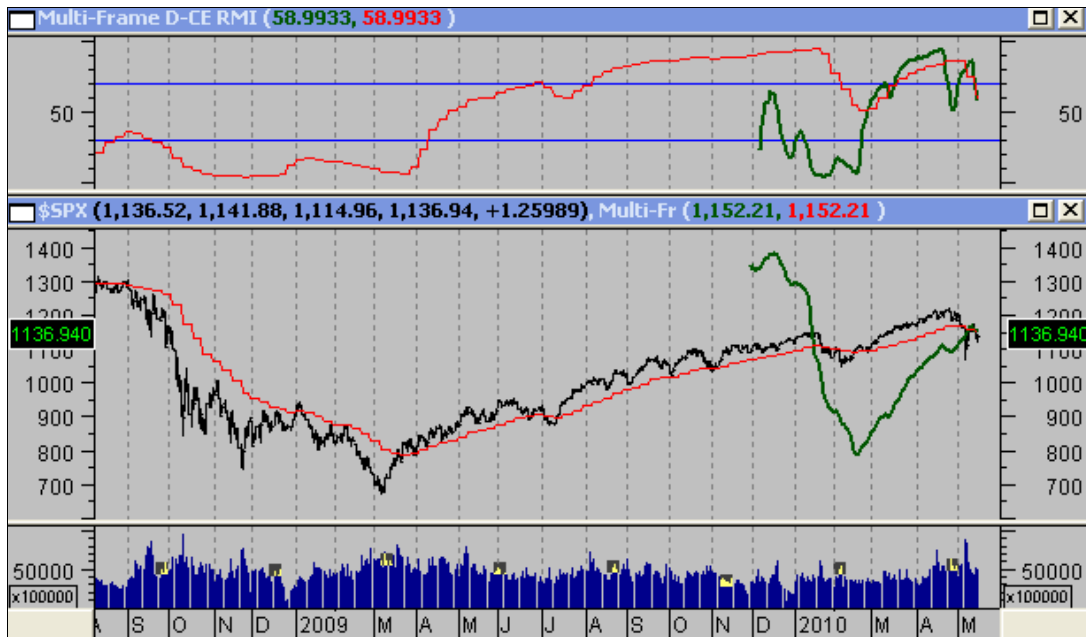
D-CE Series Document Names

multi_frame_d_ce_cmo.txt
 multi_frame_d_ce_dema.txt
 multi_frame_d_ce_dmi.txt
 multi_frame_d_ce_forecast_osc.txt
 multi_frame_d_ce_hhv.txt
 multi_frame_d_ce_lr.txt
 multi_frame_d_ce_lrs.txt
 multi_frame_d_ce_midpoint.txt
 multi_frame_d_ce_mov.txt
 multi_frame_d_ce_mov_e.txt
 multi_frame_d_ce_mov_s.txt
 multi_frame_d_ce_mov_t.txt
 multi_frame_d_ce_mov_tri.txt
 multi_frame_d_ce_mov_w.txt
 multi_frame_d_ce_pfe.txt
 multi_frame_d_ce_rmi.txt
 multi_frame_d_ce_rsi.txt
 multi_frame_d_ce_rsquared.txt
 multi_frame_d_ce_stdev.txt
 multi_frame_d_ce_ste.txt
 multi_frame_d_ce_tema.txt
 multi_frame_d_ce_tsf.txt
 multi_frame_d_ce_vhf.txt
 multi_frame_d_ce_wilders.txt
 multi_frame_d_ce_zig.txt

D-CE Series Indicator Names

Multi-Frame D-CE CMO
 Multi-Frame D-CE DEMA
 Multi-Frame D-CE DMI
 Multi-Frame D-CE Forecast Osc
 Multi-Frame D-CE HHV
 Multi-Frame D-CE Linear Reg
 Multi-Frame D-CE Lin Reg Slope
 Multi-Frame D-CE Midpoint
 Multi-Frame D-CE Mov
 Multi-Frame D-CE Mov-E
 Multi-Frame D-CE Mov-S
 Multi-Frame D-CE Mov-T
 Multi-Frame D-CE Mov-TRI
 Multi-Frame D-CE Mov-W
 Multi-Frame D-CE PFE
 Multi-Frame D-CE RMI
 Multi-Frame D-CE RSI
 Multi-Frame D-CE rSquared
 Multi-Frame D-CE StDev
 Multi-Frame D-CE STE
 Multi-Frame D-CE TEMA
 Multi-Frame D-CE TSF
 Multi-Frame D-CE VHF
 Multi-Frame D-CE Wilders
 Multi-Frame D-CE Zig

Comment



Shows compressed RMI and EMA plots (green), and red plots show compressed results after expansion back to a regular Multi-Frame time and date format. Compressed plots are only shown for demonstration purposes.

I Series Document Names

multi_frame_i_adx.txt
multi_frame_i_adxi.txt
multi_frame_i_adxr.txt
multi_frame_i_aroon.txt
multi_frame_i_atr.txt
multi_frame_i_av_mean.txt
multi_frame_i_b_indicator.txt
multi_frame_i_bb.txt
multi_frame_i_bb_bot.txt
multi_frame_i_bb_top.txt
multi_frame_i_buy_p.txt
multi_frame_i_camarilla_levels.txt
multi_frame_i_cci.txt
multi_frame_i_close.txt
multi_frame_i_cmf.txt
multi_frame_i_cmo.txt
multi_frame_i_copock_guide.txt
multi_frame_i_dema.txt
multi_frame_i_dema_o.txt
multi_frame_i_di.txt
multi_frame_i_ehlers_dcf.txt
multi_frame_i_elders_force_index.txt
multi_frame_i_ema.txt
multi_frame_i_ema_o.txt
multi_frame_i_evs.txt
multi_frame_i_gann_hilo.txt
multi_frame_i_heikin_ashi.txt
multi_frame_i_hhv.txt
multi_frame_i_hlc.txt
multi_frame_i_ift_cmo.txt
multi_frame_i_ift_rsi.txt
multi_frame_i_imi.txt
multi_frame_i_inertia.txt
multi_frame_i_jcm.txt
multi_frame_i_kaufmans_ama.txt
multi_frame_i_kaufmans_ama_o.txt
multi_frame_i_keltner_channels.txt
multi_frame_i_llv.txt
multi_frame_i_lr.txt
multi_frame_i_lrs.txt
multi_frame_i_macd.txt
multi_frame_i_mass_index.txt
multi_frame_i_mdi.txt
multi_frame_i_mfi.txt
multi_frame_i_mom.txt
multi_frame_i_ohlc.txt
multi_frame_i_pdi.txt
multi_frame_i_pivots.txt
multi_frame_i_price_osc.txt
multi_frame_i_q_indicator.txt
multi_frame_i_qstick.txt
multi_frame_i_rmi.txt
multi_frame_i_roc.txt
multi_frame_i_rsi.txt
multi_frame_i_rvi.txt
multi_frame_i_sell_p.txt
multi_frame_i_siroc.txt
multi_frame_i_sma.txt
multi_frame_i_sma_demo.txt

I Series Indicator Names

Multi-Frame I ADX
Multi-Frame I ADXI
Multi-Frame I ADXR
Multi-Frame I Aroon
Multi-Frame I ATR
Multi-Frame I Average/Mean
Multi-Frame I B Indicator
Multi-Frame I BB
Multi-Frame I BB Bot
Multi-Frame I BB Top
Multi-Frame I BuyP
Multi-Frame I Camarilla Levels
Multi-Frame I CCI
Multi-Frame I CLOSE
Multi-Frame I CMF
Multi-Frame I CMO
Multi-Frame I Copock Guide
Multi-Frame I DEMA
Multi-Frame I DEMA-O
Multi-Frame I Demand Index
Multi-Frame I Ehler's DCF
Multi-Frame I Elder's Force Index
Multi-Frame I EMA
Multi-Frame I EMA-O
Multi-Frame I EVS
Multi-Frame I Gann HiLo
Multi-Frame I Heikin-Ashi
Multi-Frame I HHV
Multi-Frame I HLC
Multi-Frame I IFT CMO
Multi-Frame I IFT RSI
Multi-Frame I IMI
Multi-Frame I Inertia
Multi-Frame I JCM
Multi-Frame I Kaufmans AMA
Multi-Frame I Kaufmans AMA-O
Multi-Frame I Keltner Channels
Multi-Frame I LLV
Multi-Frame I LR
Multi-Frame I LRS
Multi-Frame I MACD
Multi-Frame I Mass Index
Multi-Frame I MDI
Multi-Frame I MFI
Multi-Frame I Momentum
Multi-Frame I OHLC
Multi-Frame I PDI
Multi-Frame I Pivots
Multi-Frame I Price Osc
Multi-Frame I Q Indicator
Multi-Frame I Q-Stick
Multi-Frame I RMI
Multi-Frame I ROC
Multi-Frame I RSI
Multi-Frame I RVI
Multi-Frame I SellP
Multi-Frame I SIROC
Multi-Frame I SMA
Multi-Frame I SMA Demo

Comment

Average Directional Movement
Directional Movement Index
Directional Movement Rating

Average True Range
Nominate price Average / Mean
Trend Strength
Bollinger Bands
Bollinger Band Bottom
Bollinger Band Top
Buying Pressure

Commodity Channel Index

Chaikin's Money Flow
Chande Momentum Oscillator

Double-smoothed EMA

Ehler's Distant Coefficient Filter

Exponential Moving Average

Erlanger Volume Swing

Highest High Value of Price
High, Low, Close
Inverse Fisher Transform of CMO
Inverse Fisher Transform of RSI
Intraday Momentum Index

Jay's Copock Model

Lowest Low Value of Price
Linear Regression
Linear Regression Slope

Minus DI
Money Flow Index

Open, High, Low, Close
Plus DI
Pivot Levels
Price Oscillator
Trend Quality

Relative Momentum Index
Price Rate-of-Change
Relative Strength Index
Relative Volatility Index
Selling Pressure
SIROC Indicator
Simple Moving Average
SMA - Demonstration version

I Series Document Names

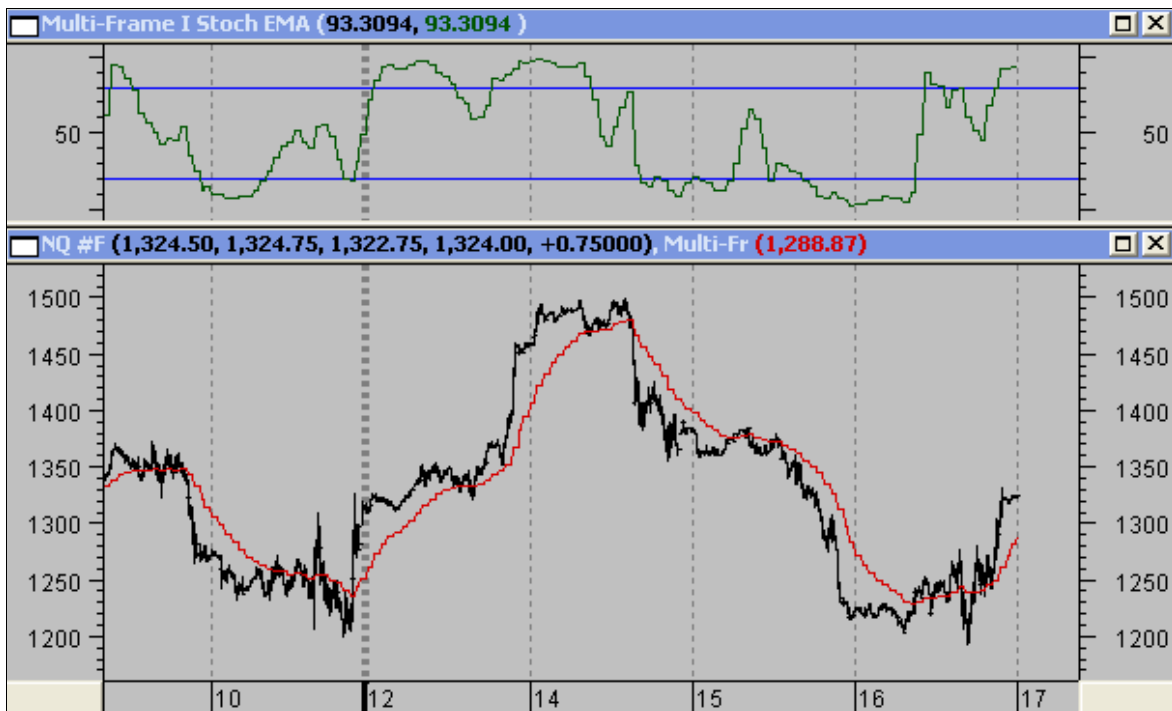
multi_frame_i_sma_o.txt
 multi_frame_i_sd.txt
 multi_frame_i_stoch_ds.txt
 multi_frame_i_stoch_ema.txt
 multi_frame_i_stoch_prem.txt
 multi_frame_i_stoch_sma.txt
 multi_frame_i_stochrsi.txt
 multi_frame_i_tema.txt
 multi_frame_i_tema_o.txt
 multi_frame_i_trix.txt
 multi_frame_i_tsf.txt
 multi_frame_i_vhf.txt
 multi_frame_i_vhf_o.txt
 multi_frame_i_vidya.txt
 multi_frame_i_vidya_o.txt
 multi_frame_i_volatility_chaikinsi.txt
 multi_frame_i_volume.txt
 multi_frame_i_volume_oscillator.txt
 multi_frame_i_vortex.txt
 multi_frame_i_wilders.txt
 multi_frame_i_wilders_o.txt
 multi_frame_i_williams_%r_o.txt
 multi_frame_i_wma.txt
 multi_frame_i_wma_o.txt
 multi_frame_i_zlag_ema.txt

I Series Indicator Names

Multi-Frame I SMA-O
 Multi-Frame I StDev
 Multi-Frame I Stoch DS
 Multi-Frame I Stoch EMA
 Multi-Frame I Stoch Premier
 Multi-Frame I Stoch SMA
 Multi-Frame I StochRSI
 Multi-Frame I TEMA
 Multi-Frame I TEMA-O
 Multi-Frame I TRIX
 Multi-Frame I TSF
 Multi-Frame I VHF
 Multi-Frame I VHF-O
 Multi-Frame I VIDYA
 Multi-Frame I VIDYA-O
 Multi-Frame I Volatility-Chaikins
 Multi-Frame I Volume
 Multi-Frame I Volume Oscillator
 Multi-Frame I Vortex
 Multi-Frame I Wilders
 Multi-Frame I Wilders-O
 Multi-Frame I Williams' %R
 Multi-Frame I WMA
 Multi-Frame I WMA-O
 Multi-Frame I Z-Lag EMA

Comment

Standard Deviation
 Double Smoothed Stochastic
 EMA Smoothed Stochastic
 Premier Stochastic
 SMA Smoothed Stochastic
 Triple-smoothed EMA
 Time Series Forecast
 Vertical Horizontal Filter
 Variable Moving Average
 Wilders Smoothing
 Weighted Moving Average
 Zero-lag Exponential MA



A 15-minute NQ chart showing a Multi-Frame (60-minute) stochastic plotted in the upper window, and a Multi-Frame (60-minute) moving average scaled to price in the lower window.

The primary function of Multi-Frame indicators is to allow the plotting of higher timeframe indicators directly on charts without the need to flick between different chart periodicities and pull down various indicators. An even more important role could be to incorporate the use of other timeframes in trading systems and simplify testing of those systems.

I-C Series Document Names

multi_frame_i_c_mov_demo.txt
 multi_frame_i_c_ma_options.txt
 multi_frame_i_c_stochastic.txt

I-CE Series Indicator Names

Multi-Frame I-C Mov Demo
 Multi-Frame I-C MA Options
 Multi-Frame I-C Stochastic

Comment**I-CE Series Document Names**

multi_frame_i_ce_cmo.txt
 multi_frame_i_ce_dema.txt
 multi_frame_i_ce_dmi.txt
 multi_frame_i_ce_forecast_osc.txt
 multi_frame_i_ce_hhv.txt
 multi_frame_i_ce_lr.txt
 multi_frame_i_ce_lrs.txt
 multi_frame_i_ce_midpoint.txt
 multi_frame_i_ce_mov.txt
 multi_frame_i_ce_mov_e.txt
 multi_frame_i_ce_mov_s.txt
 multi_frame_i_ce_mov_t.txt
 multi_frame_i_ce_mov_tri.txt
 multi_frame_i_ce_mov_w.txt
 multi_frame_i_ce_pfe.txt
 multi_frame_i_ce_rmi.txt
 multi_frame_i_ce_rsi.txt
 multi_frame_i_ce_rsquared.txt
 multi_frame_i_ce_stdev.txt
 multi_frame_i_ce_ste.txt
 multi_frame_i_ce_tema.txt
 multi_frame_i_ce_tsf.txt
 multi_frame_i_ce_vhf.txt
 multi_frame_i_ce_wilders.txt
 multi_frame_i_ce_zig.txt

I-CE Series Indicator Names

Multi-Frame I-CE CMO
 Multi-Frame I-CE DEMA
 Multi-Frame I-CE DMI
 Multi-Frame I-CE Forecast Osc
 Multi-Frame I-CE HHV
 Multi-Frame I-CE Linear Reg
 Multi-Frame I-CE Lin Reg Slope
 Multi-Frame I-CE Midpoint
 Multi-Frame I-CE Mov
 Multi-Frame I-CE Mov-E
 Multi-Frame I-CE Mov-S
 Multi-Frame I-CE Mov-T
 Multi-Frame I-CE Mov-TRI
 Multi-Frame I-CE Mov-W
 Multi-Frame I-CE PFE
 Multi-Frame I-CE RMI
 Multi-Frame I-CE RSI
 Multi-Frame I-CE rSquared
 Multi-Frame I-CE StDev
 Multi-Frame I-CE STE
 Multi-Frame I-CE TEMA
 Multi-Frame I-CE TSF
 Multi-Frame I-CE VHF
 Multi-Frame I-CE Wilders
 Multi-Frame I-CE Zig

Comment

ID Series Document Names

multi_frame_id_adx.txt
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multi_frame_id_adxr.txt
multi_frame_id_aaron.txt
multi_frame_id_atr.txt
multi_frame_id_av_mean.txt
multi_frame_id_b_indicator.txt
multi_frame_id_bb.txt
multi_frame_id_bb_bot.txt
multi_frame_id_bb_top.txt
multi_frame_id_buy_p.txt
multi_frame_id_camarilla_levels.txt
multi_frame_id_cci.txt
multi_frame_id_close.txt
multi_frame_id_cmf.txt
multi_frame_id_cmo.txt
multi_frame_id_copock_guide.txt
multi_frame_id_dema.txt
multi_frame_id_dema_o.txt
multi_frame_id_di.txt
multi_frame_id_ehlers_dcf.txt
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multi_frame_id_ema.txt
multi_frame_id_ema_o.txt
multi_frame_id_evs.txt
multi_frame_id_gann_hilo.txt
multi_frame_id_heikin_ashi.txt
multi_frame_id_hhv.txt
multi_frame_id_hlc.txt
multi_frame_id_ift_cmo.txt
multi_frame_id_ift_rsi.txt
multi_frame_id_imi.txt
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multi_frame_id_kaufmans_ama_o.txt
multi_frame_id_keltner_channels.txt
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multi_frame_id_macd.txt
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multi_frame_id_mfi.txt
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multi_frame_id_ohlc.txt
multi_frame_id_pdi.txt
multi_frame_id_pivots.txt
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multi_frame_id_rsi.txt
multi_frame_id_rvi.txt
multi_frame_id_sell_p.txt
multi_frame_id_siroc.txt
multi_frame_id_sma.txt
multi_frame_id_sma_demo.txt

ID Series Indicator Names

Multi-Frame ID ADX
Multi-Frame ID ADXI
Multi-Frame ID ADXR
Multi-Frame ID Aroon
Multi-Frame ID ATR
Multi-Frame ID Average/Mean
Multi-Frame ID B Indicator
Multi-Frame ID BB
Multi-Frame ID BB Bot
Multi-Frame ID BB Top
Multi-Frame ID BuyP
Multi-Frame ID Camarilla Levels
Multi-Frame ID CCI
Multi-Frame ID CLOSE
Multi-Frame ID CMF
Multi-Frame ID CMO
Multi-Frame ID Copock Guide
Multi-Frame ID DEMA
Multi-Frame ID DEMA-O
Multi-Frame ID Demand Index
Multi-Frame ID Ehler's DCF
Multi-Frame ID Elder's Force Index
Multi-Frame ID EMA
Multi-Frame ID EMA-O
Multi-Frame ID EVS
Multi-Frame ID Gann HiLo
Multi-Frame ID Heikin-Ashi
Multi-Frame ID HHV
Multi-Frame ID HLC
Multi-Frame ID IFT CMO
Multi-Frame ID IFT RSI
Multi-Frame ID IMI
Multi-Frame ID Inertia
Multi-Frame ID JCM
Multi-Frame ID Kaufmans AMA
Multi-Frame ID Kaufmans AMA-O
Multi-Frame ID Keltner Channels
Multi-Frame ID LLV
Multi-Frame ID LR
Multi-Frame ID LRS
Multi-Frame ID MACD
Multi-Frame ID Mass Index
Multi-Frame ID MDI
Multi-Frame ID MFI
Multi-Frame ID Momentum
Multi-Frame ID OHLC
Multi-Frame ID PDI
Multi-Frame ID Pivots
Multi-Frame ID Price Osc
Multi-Frame ID Q Indicator
Multi-Frame ID Q-Stick
Multi-Frame ID RMI
Multi-Frame ID ROC
Multi-Frame ID RSI
Multi-Frame ID RVI
Multi-Frame ID SellP
Multi-Frame ID SIROC
Multi-Frame ID SMA
Multi-Frame ID SMA Demo

Comment

Average Directional Movement
Directional Movement Index
Directional Movement Rating

Average True Range
Nominate price Average / Mean
Trend Strength
Bollinger Bands
Bollinger Band Bottom
Bollinger Band Top
Buying Pressure

Commodity Channel Index

Chaikin's Money Flow
Chande Momentum Oscillator

Double-smoothed EMA

Ehler's Distant Coefficient Filter

Exponential Moving Average

Erlanger Volume Swing

Highest High Value of Price
High, Low, Close
Inverse Fisher Transform of CMO
Inverse Fisher Transform of RSI
Intraday Momentum Index

Jay's Copock Model

Lowest Low Value of Price
Linear Regression
Linear Regression Slope

Minus DI
Money Flow Index

Open, High, Low, Close
Plus DI
Pivot Levels
Price Oscillator
Trend Quality

Relative Momentum Index
Price Rate-of-Change
Relative Strength Index
Relative Volatility Index
Selling Pressure
SIROC Indicator
Simple Moving Average
SMA - Demonstration version

ID Series Document Names	ID Series Indicator Names	Comment
multi_frame_id_sma_o.txt	Multi-Frame ID SMA-O	
multi_frame_id_sd.txt	Multi-Frame ID StDev	Standard Deviation
multi_frame_id_stoch_ds.txt	Multi-Frame ID Stoch DS	Double Smoothed Stochastic
multi_frame_id_stoch_ema.txt	Multi-Frame ID Stoch EMA	EMA Smoothed Stochastic
multi_frame_id_stoch_prem.txt	Multi-Frame ID Stoch Premier	Premier Stochastic
multi_frame_id_stoch_sma.txt	Multi-Frame ID Stoch SMA	SMA Smoothed Stochastic
multi_frame_id_stochrsi.txt	Multi-Frame ID StochRSI	
multi_frame_id_tema.txt	Multi-Frame ID TEMA	Triple-smoothed EMA
multi_frame_id_tema_o.txt	Multi-Frame ID TEMA-O	
multi_frame_id_trix.txt	Multi-Frame ID TRIX	
multi_frame_id_tsf.txt	Multi-Frame ID TSF	Time Series Forecast
multi_frame_id_vhf.txt	Multi-Frame ID VHF	Vertical Horizontal Filter
multi_frame_id_vhf_o.txt	Multi-Frame ID VHF-O	
multi_frame_id_vidya.txt	Multi-Frame ID VIDYA	Variable Moving Average
multi_frame_id_vidya_o.txt	Multi-Frame ID VIDYA-O	
multi_frame_id_volatility_chaikinsi.txt	Multi-Frame ID Volatility-Chaikins	
multi_frame_id_volume.txt	Multi-Frame ID Volume	
multi_frame_id_volume_oscillator.txt	Multi-Frame ID Volume Oscillator	
multi_frame_id_vortex.txt	Multi-Frame ID Vortex	
multi_frame_id_wilders.txt	Multi-Frame ID Wilders	Wilders Smoothing
multi_frame_id_wilders_o.txt	Multi-Frame ID Wilders-O	
multi_frame_id_williams_%r_o.txt	Multi-Frame ID Williams' %R	
multi_frame_id_wma.txt	Multi-Frame ID WMA	Weighted Moving Average
multi_frame_id_wma_o.txt	Multi-Frame ID WMA-O	
multi_frame_id_zlag_ema.txt	Multi-Frame ID Z-Lag EMA	Zero-lag Exponential MA



A 60-minute NQ chart showing a Multi-Frame (4-hour) stochastic in the upper window, and a Multi-Frame (4-hour) moving average scaled to price in the lower window.

ID-C Series Document Names

multi_frame_id_c_mov_demo.txt
 multi_frame_id_c_ma_options.txt
 multi_frame_id_c_stochastic.txt

ID-C Series Indicator Names

Multi-Frame ID-C Mov Demo
 Multi-Frame ID-C MA Options
 Multi-Frame ID-C Stochastic

Comment**ID-CE Series Document Names**

multi_frame_id_ce_cmo.txt
 multi_frame_id_ce_dema.txt
 multi_frame_id_ce_dmi.txt
 multi_frame_id_ce_forecast_osc.txt
 multi_frame_id_ce_hhv.txt
 multi_frame_id_ce_lr.txt
 multi_frame_id_ce_lrs.txt
 multi_frame_id_ce_midpoint.txt
 multi_frame_id_ce_mov.txt
 multi_frame_id_ce_mov_e.txt
 multi_frame_id_ce_mov_s.txt
 multi_frame_id_ce_mov_t.txt
 multi_frame_id_ce_mov_tri.txt
 multi_frame_id_ce_mov_w.txt
 multi_frame_id_ce_pfe.txt
 multi_frame_id_ce_rmi.txt
 multi_frame_id_ce_rsi.txt
 multi_frame_id_ce_rsquared.txt
 multi_frame_id_ce_stdev.txt
 multi_frame_id_ce_ste.txt
 multi_frame_id_ce_tema.txt
 multi_frame_id_ce_tsf.txt
 multi_frame_id_ce_vhf.txt
 multi_frame_id_ce_wilders.txt
 multi_frame_id_ce_zig.txt

ID-CE Series Indicator Names

Multi-Frame ID-CE CMO
 Multi-Frame ID-CE DEMA
 Multi-Frame ID-CE DMI
 Multi-Frame ID-CE Forecast Osc
 Multi-Frame ID-CE HHV
 Multi-Frame ID-CE Linear Reg
 Multi-Frame ID-CE Lin Reg Slope
 Multi-Frame ID-CE Midpoint
 Multi-Frame ID-CE Mov
 Multi-Frame ID-CE Mov-E
 Multi-Frame ID-CE Mov-S
 Multi-Frame ID-CE Mov-T
 Multi-Frame ID-CE Mov-TRI
 Multi-Frame ID-CE Mov-W
 Multi-Frame ID-CE PFE
 Multi-Frame ID-CE RMI
 Multi-Frame ID-CE RSI
 Multi-Frame ID-CE rSquared
 Multi-Frame ID-CE StDev
 Multi-Frame ID-CE STE
 Multi-Frame ID-CE TEMA
 Multi-Frame ID-CE TSF
 Multi-Frame ID-CE VHF
 Multi-Frame ID-CE Wilders
 Multi-Frame ID-CE Zig

Comment

Polarized Fractal Efficiency
 Relative Momentum Index
 Relative Strength Index

 Standard Deviation
 Standard Error

 Time Series Forecast
 Vertical Horizontal Filter
 Wilders Smoothing

X Series Document Names

multi_frame_x_adx.txt
multi_frame_x_adxi.txt
multi_frame_x_adxr.txt
multi_frame_x_aroon.txt
multi_frame_x_atr.txt
multi_frame_x_av_mean.txt
multi_frame_x_b_indicator.txt
multi_frame_x_bb.txt
multi_frame_x_bb_bot.txt
multi_frame_x_bb_top.txt
multi_frame_x_buy_p.txt
multi_frame_x_camarilla_levels.txt
multi_frame_x_cci.txt
multi_frame_x_close.txt
multi_frame_x_cmf.txt
multi_frame_x_cmo.txt
multi_frame_x_copock_guide.txt
multi_frame_x_dema.txt
multi_frame_x_dema_o.txt
multi_frame_x_di.txt
multi_frame_x_ehlers_dcf.txt
multi_frame_x_elders_force_index.txt
multi_frame_x_ema.txt
multi_frame_x_ema_o.txt
multi_frame_x_evs.txt
multi_frame_x_gann_hilo.txt
multi_frame_x_heikin_ashi.txt
multi_frame_x_hhv.txt
multi_frame_x_hlc.txt
multi_frame_x_ift_cmo.txt
multi_frame_x_ift_rsi.txt
multi_frame_x_imi.txt
multi_frame_x_inertia.txt
multi_frame_x_jcm.txt
multi_frame_x_kaufmans_ama.txt
multi_frame_x_kaufmans_ama_o.txt
multi_frame_x_keltner_channels.txt
multi_frame_x_llv.txt
multi_frame_x_lr.txt
multi_frame_x_lrs.txt
multi_frame_x_macd.txt
multi_frame_x_mass_index.txt
multi_frame_x_mdi.txt
multi_frame_x_mfi.txt
multi_frame_x_mom.txt
multi_frame_x_ohlc.txt
multi_frame_x_pdi.txt
multi_frame_x_pivots.txt
multi_frame_x_price_osc.txt
multi_frame_x_q_indicator.txt
multi_frame_x_qstick.txt
multi_frame_x_rmi.txt
multi_frame_x_roc.txt
multi_frame_x_rsi.txt
multi_frame_x_rvi.txt
multi_frame_x_sell_p.txt
multi_frame_x_siroc.txt
multi_frame_x_sma.txt
multi_frame_x_sma_demo.txt

X Series Indicator Names

Multi-Frame X ADX
Multi-Frame X ADXI
Multi-Frame X ADXR
Multi-Frame X Aroon
Multi-Frame X ATR
Multi-Frame X Average/Mean
Multi-Frame X B Indicator
Multi-Frame X BB
Multi-Frame X BB Bot
Multi-Frame X BB Top
Multi-Frame X BuyP
Multi-Frame X Camarilla Levels
Multi-Frame X CCI
Multi-Frame X CLOSE
Multi-Frame X CMF
Multi-Frame X CMO
Multi-Frame X Copock Guide
Multi-Frame X DEMA
Multi-Frame X DEMA-O
Multi-Frame X Demand Index
Multi-Frame X Ehler's DCF
Multi-Frame X Elder's Force Index
Multi-Frame X EMA
Multi-Frame X EMA-O
Multi-Frame X EVS
Multi-Frame X Gann HiLo
Multi-Frame X Heikin-Ashi
Multi-Frame X HHV
Multi-Frame X HLC
Multi-Frame X IFT CMO
Multi-Frame X IFT RSI
Multi-Frame X IMI
Multi-Frame X Inertia
Multi-Frame X JCM
Multi-Frame X Kaufmans AMA
Multi-Frame X Kaufmans AMA-O
Multi-Frame X Keltner Channels
Multi-Frame X LLV
Multi-Frame X LR
Multi-Frame X LRS
Multi-Frame X MACD
Multi-Frame X Mass Index
Multi-Frame X MDI
Multi-Frame X MFI
Multi-Frame X Momentum
Multi-Frame X OHLC
Multi-Frame X PDI
Multi-Frame X Pivots
Multi-Frame X Price Osc
Multi-Frame X Q Indicator
Multi-Frame X Q-Stick
Multi-Frame X RMI
Multi-Frame X ROC
Multi-Frame X RSI
Multi-Frame X RVI
Multi-Frame X SellP
Multi-Frame X SIROC
Multi-Frame X SMA
Multi-Frame X SMA Demo

Comment

Average Directional Movement
Directional Movement Index
Directional Movement Rating

Average True Range
Nominate price Average / Mean
Trend Strength
Bollinger Bands
Bollinger Band Bottom
Bollinger Band Top
Buying Pressure

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Chaikin's Money Flow
Chande Momentum Oscillator

Double-smoothed EMA

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Exponential Moving Average

Erlanger Volume Swing

Highest High Value of Price
High, Low, Close
Inverse Fisher Transform of CMO
Inverse Fisher Transform of RSI
Intraday Momentum Index

Jay's Copock Model

Lowest Low Value of Price
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Linear Regression Slope

Minus DI
Money Flow Index

Open, High, Low, Close
Plus DI
Pivot Levels
Price Oscillator
Trend Quality

Relative Momentum Index
Price Rate-of-Change
Relative Strength Index
Relative Volatility Index
Selling Pressure
SIROC Indicator
Simple Moving Average
SMA - Demonstration version

X Series Document Names

multi_frame_x_sma_o.txt
multi_frame_x_sd.txt
multi_frame_x_stoch_ds.txt
multi_frame_x_stoch_ema.txt
multi_frame_x_stoch_prem.txt
multi_frame_x_stoch_sma.txt
multi_frame_x_stochrsi.txt
multi_frame_x_tema.txt
multi_frame_x_tema_o.txt
multi_frame_x_trix.txt
multi_frame_x_tsf.txt
multi_frame_x_vhf.txt
multi_frame_x_vhf_o.txt
multi_frame_x_vidya.txt
multi_frame_x_vidya_o.txt
multi_frame_x_volatility_chaikinsi.txt
multi_frame_x_volume.txt
multi_frame_x_volume_oscillator.txt
multi_frame_x_vortex.txt
multi_frame_x_wilders.txt
multi_frame_x_wilders_o.txt
multi_frame_x_williams_%r_o.txt
multi_frame_x_wma.txt
multi_frame_x_wma_o.txt
multi_frame_x_zlag_ema.txt

X Series Indicator Names

Multi-Frame X SMA-O
Multi-Frame X StDev
Multi-Frame X Stoch DS
Multi-Frame X Stoch EMA
Multi-Frame X Stoch Premier
Multi-Frame X Stoch SMA
Multi-Frame X StochRSI
Multi-Frame X TEMA
Multi-Frame X TEMA-O
Multi-Frame X TRIX
Multi-Frame X TSF
Multi-Frame X VHF
Multi-Frame X VHF-O
Multi-Frame X VIDYA
Multi-Frame X VIDYA-O
Multi-Frame X Volatility-Chaikins
Multi-Frame X Volume
Multi-Frame X Volume Oscillator
Multi-Frame X Vortex
Multi-Frame X Wilders
Multi-Frame X Wilders-O
Multi-Frame X Williams' %R
Multi-Frame X WMA
Multi-Frame X WMA-O
Multi-Frame X Z-Lag EMA

Comment

Standard Deviation
Double Smoothed Stochastic
EMA Smoothed Stochastic
Premier Stochastic
SMA Smoothed Stochastic
Triple-smoothed EMA
Time Series Forecast
Vertical Horizontal Filter
Variable Moving Average
Wilders Smoothing
Weighted Moving Average
Zero-lag Exponential MA

X-C Series Document Names	X-C Series Indicator Names	Comment
multi_frame_x_c_mov_demo.txt	Multi-Frame X-C Mov Demo	
multi_frame_x_c_ma_options.txt	Multi-Frame X-C MA Options	
multi_frame_x_c_stochastic.txt	Multi-Frame X-C Stochastic	

X-CE Series Document Names	X-CE Series Indicator Names	Comment
multi_frame_x_ce_cmo.txt	Multi-Frame X-CE CMO	
multi_frame_x_ce_dema.txt	Multi-Frame X-CE DEMA	
multi_frame_x_ce_dmi.txt	Multi-Frame X-CE DMI	
multi_frame_x_ce_forecast_osc.txt	Multi-Frame X-CE Forecast Osc	
multi_frame_x_ce_hhv.txt	Multi-Frame X-CE HHV	
multi_frame_x_ce_lr.txt	Multi-Frame X-CE Linear Reg	
multi_frame_x_ce_lrs.txt	Multi-Frame X-CE Lin Reg Slope	
multi_frame_x_ce_midpoint.txt	Multi-Frame X-CE Midpoint	
multi_frame_x_ce_mov.txt	Multi-Frame X-CE Mov	
multi_frame_x_ce_mov_e.txt	Multi-Frame X-CE Mov-E	
multi_frame_x_ce_mov_s.txt	Multi-Frame X-CE Mov-S	
multi_frame_x_ce_mov_t.txt	Multi-Frame X-CE Mov-T	
multi_frame_x_ce_mov_tri.txt	Multi-Frame X-CE Mov-TRI	
multi_frame_x_ce_mov_w.txt	Multi-Frame X-CE Mov-W	
multi_frame_x_ce_pfe.txt	Multi-Frame X-CE PFE	
multi_frame_x_ce_rmi.txt	Multi-Frame X-CE RMI	
multi_frame_x_ce_rsi.txt	Multi-Frame X-CE RSI	
multi_frame_x_ce_rsquared.txt	Multi-Frame X-CE rSquared	
multi_frame_x_ce_stdev.txt	Multi-Frame X-CE StDev	
multi_frame_x_ce_ste.txt	Multi-Frame X-CE STE	
multi_frame_x_ce_tema.txt	Multi-Frame X-CE TEMA	
multi_frame_x_ce_tsf.txt	Multi-Frame X-CE TSF	
multi_frame_x_ce_vhf.txt	Multi-Frame X-CE VHF	
multi_frame_x_ce_wilders.txt	Multi-Frame X-CE Wilders	
multi_frame_x_ce_zig.txt	Multi-Frame X-CE Zig	

Notes

The ID series incorporates I and X series indicators but with frame sizes set only in minutes. This allows the user to reduce the number of formulas stored in MetaStock from three series (D, I and X) down to just two (D and ID).

Although D series indicators do work with intraday data you shouldn't underestimate the amount of data that must be loaded for this to be successful. A 10-week exponential moving average, for example, requires about 1 year of data to return an accurate weekly value.

If a chart's periodicity is set to equal or higher than a Multi-Frame Indicator's periodicity (frame size) the indicator will default to the chart's periodicity as if it were a conventional function or formula. The Multi-Frame indicator's "stepped" effect will only be evident when the frame size is set higher than the base chart's periodicity setting.

The **CE** indicators **C**ompress data to the required higher timeframe, plot that data on contiguous bars at the right side of the chart, apply a standard MS function to that data, then **E**xpand that function's result to reestablish correct date and time alignment. These formulas can be easily modified to give a **C**ompressed-only result (that is not returned to full chart width) by removing the last 5 lines of code and converting the active MetaStock function to serve as an output.

The **C** Indicators also **C**ompress data to the required higher timeframe but omit the **E**xpansion process. The few indicators of this type are provided primarily to demonstrate the compression process. The advantage of working with compressed data is that it considerably increases the number of functions that the Multi-Frame process can be applied to. Some users may find it helpful to plot only a compressed result and as mentioned above, removing the expansion module from any CE indicator is a quite simple process.