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Quote Board Enhancements

The Quote Board has been enhanced to allow for more customization of Rows and Columns. The changes allow the user to display more quotes on a single page by the use of Field Groups.

This is accomplished by **Splitting** a quote board.

From the **Context** menu, select **Split** and you will be presented with 5 choices.

Split Options			
Insert Before	Creates new group to the left of the selected group		
Insert After	Creates new group to the right of the selected group		
Remove	Removes the selected group		
Auto Size	Auto Size selected group		
Auto Size All	Auto Size all groups on the Quote Board		

Each group may have its own unique set of column fields. When a new group is created, it will inherit the column list from the group that was active when you selected split. After it is created you may change the column set.

Symbol	Last	Change	Time	Symbol	Last	Change	Time	Symbol	Last	Change	Time
CL U7	72.25	-0.17	1:24:15 PM	HO U7	1.9679	+0.0038	1:24:15 PM	XRB U7	1.9330	-0.0112	1:24:07 PM
CL V7	72.02	-0.36	1:24:15 PM	HO V7	1.9931	+0.0035	1:24:02 PM	XRB V7	1.8846	-0.0046	1:23:08 PM
CL X7	71.80	-0.37	1:23:36 PM	HO X7	2.0188	+0.0012	1:16:41 PM	XRB X7	1.8710	-0.0062	1:10:00 PM
CL Z7	71.41	-0.45	1:24:14 PM	HO Z7	2.0400	+0.0009	1:24:02 PM	XRB Z7	1.8663	-0.0059	1:23:54 PM
CL F8	71.38	-0.26	12:02:01 PM	HO F8	2.0525	-0.0031	1:15:58 PM	XRB F8	1.8840	-0.0017	12:02:57 PM
CL G8	71.06	-0.42	1:11:50 PM	HO G8	2.0478	-0.0083	1:17:43 PM	XRB G8	1.9077	+0.0005	11:59:23 AM
CL H8	71.27	-0.06	10:02:24 AM	HO H8	2.0325	-0.0096	1:19:39 PM	XRB H8	1.9292	0	9:34:57 AM
CL J8	71.06	-0.17	2:19:22 AM	HO J8	2.0000	-0.0076	1:19:49 PM	XRB J8			
CL K8	71.10	-0.05	9:31:22 AM	HO K8	1.9825	+0.0049	11:45:36 AM	XRB K8			
CL M8	70.30	-0.78	1:10:14 PM	HO M8	1.9695	+0.0124	10:08:01 AM	XRB M8	2.0810	+0.0261	10:23:25 AM

You can customize the color and thickness of the split line via the Quotes Display Settings.

From the **Context Menu**, Select **Display Settings** and go to Split Line Settings

Split Line Settings			
Color	Color of the line that separates groups		
Width Width/Thickness of the line			

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Additional Fields Available within the Quotes Board

Two additional fields are now available for your Quote Boards.

CntrHigh – The High over the life of the Futures Contract **CntrLow** – The Low over the life of the Futures Contract

Extended Expressions Values within the Quotes Board

When you have an expression/spread inside a quote board, you will now be able to view more than just the Last/Current Price. Open, High & Low is available.

🔲 Quotes - Sheet-1						
Symbol	Last	Open	High	Low	Change	Time
(CL V7 + CL X7 + CL Z7) / 3	78.37	78.30	78.88	77.91	-0.21	11:10:19 AM
(CL V7 + CL X7 + CL Z7 + CL F8 + CL G8 + CL H8) / 6	76.96	77.02	77.44	76.55	-0.24	11:10:19 AM
Sheet-1 Sheet-2 Sheet-3						$\triangleleft \triangleright \times$

Symbol Entry Shortcut Available within the Quotes Board

A special syntax can now be used for quicker building of Quote Pages containing Futures Forward Symbols.

Syntax: *[Futures Root] [BeginningForwardNumber – EndingForwardNumber]

Example: *CL 1-12

Example: *BRN-ICE 1-12

Example: *CL=2 1-12

Symbol	Bid	Ask	High	Low	Last	Change	Time	Volume	OpenInt
CL V7	77.67	77.69	78.32	76.92	77.67	+0.18	1:19:18 PM	296680	266423
CL X7	76.41	76.43	77.03	75.72	76.37	+0.11	1:19:04 PM	146736	248806
CL Z7	75.17	75.20	75.79	74.48	75.17	+0.09	1:19:16 PM	54243	204792
EL F8	74.37	74.40	74.69	73.68	74.33	+0.08	1:18:26 PM	13982	71856
CL G8	73.74	73.81	74.10	73.00	73.60	-0.02	12:43:32 PM	6117	39036
CL H8	73.30	73.38	73.67	72,75	73.10	-0.07	12:49:48 PM	4501	40052
CL 38	73.00	73.15	73.13	72.62	72.96	+0.10	12:42:42 PM	1933	40117
CL K8	72.79	72.97	73.15	72.35	72.76	+0.13	12:42:42 PM	2132	46502
CL M8	72.63	72.77	73.00	72.10	72.75	+0.28	12:45:07 PM	3177	53540
CL N8	70.52	74.88	72.60	72.25	72.60	+0.27	12:45:07 PM	269	18457
CL Q8	70.46		72.10	72.10	72.10	+0.36	9:48:09 AM	77	13861
CL U8	70.35	72.58						221	45792

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Expiration Tool Tip

A new easier method for retrieving Expiration date on Future and Future Options is now available. When you mouse over the Symbol Cell in a Quote Board a Tool Tip will appear with the contracts expiration date.

Symbol	Bid	Ask	High	Low	Last	Change	Time	Volume	OpenInt
ES U7	1496.75	1497.00	1502.75	1480.50	1496.75	+14.25	11:21:24 AM	2610986	2093698
ES Z7	1509.00	1509.50	1514.25	1495.50	1508.25	+13.75	11:20:09 AM	3392	18282
E.	5 U7: Expiration: 9	121/2007							

Chart Window Enhancements

The Chart Window has been enhanced to allow multiple charts to be displayed without using up valuable screen real estate.

This is accomplished by the use of Chart Tabs.

When a new Chart Window is opened you will see 3 page tabs at the bottom of the window. A Chart window can have infinite tabs.

From the **Context** menu of any Tab, you will be presented with 3 choices.

Tab Options			
Add Tab	Creates new screen within the single Chart Window		
Rename Tab	Allows for renaming of tab		
Delete Tab	Removes the tab from the Chart Window		

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In the example above, I have a single chart window with 6 different symbols in it.

Each Tab within the chart window can have its own unique Aggregation and Plot Style.

Logarithmic Chart Display

Workstation now allows for Logarithmic scaling of Chart Data. A Logarithmic price scale is skewed so that a given distance always represents the same "Percentage" change in price, rather than the same absolute change in price (as is the case for a regular linear chart). The distance from 1 to 10 is the same as the distance from 10-100 on a logarithmic chart, but the latter distance is 10 times greater on a linear chart.

To change between Scale types:

From the Context Menu of the Price Scale, select Log Scale.

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Seasonal Charting

A Seasonal Chart allows you to overlay data for a particular symbol(s) for particular years and Month Ranges (Seasons).

From the Context Menu select Add Seasonal or Add Seasonal Spread

OR

From the Seasonal Drop Down Menu above the Toolbar

Seasonal:

Add Seasonal	×
Years	Contract Form
2007	C Single Instrument
2005 - 2004 2003	Symbol:
2002 2001 2000	Single Root Futures
1999	Root:
Season	Suffix:
 whole year Specify Month Range 	Exp. Month: Jan (F)
From: Jan	F Pick period prior to expiration
To: Dec	Years: 1 year prior to expiration 💌
	OK Cancel

n		Date
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Years	Description	
Year Years that you wish to chart		
Contract Form	ract Form Description	
Single instrument	Select to chart symbols such as Indicies, Stocks, etc.	
Symbol	Input field for symbol you select	
Single Root Futures	Select to chart a Futures Contract	
Root	Input field for the Futures Root Symbol	
Suffix	Input field for Futures Symbols that contain a suffix at the end. (Must include entire suffix, i.e. –ICE as opposed to just ICE)	
Exp. Month	Select the Contract Month fo	r the Futures
Pick Period Prior to Exp*	To select data from a contra- contracts Delivery Year	ct N years prior to the
Years	How many years prior you w	rish to chart
Season	Description	
Whole Year	Select to have no Month/Sea	son Restriction
Specify Month Range**	Select to specify a Month rar	nge for the chart
From:	Input field for starting month	ו
То:	Input field for ending month	

* See Advanced Seasonal Charts for example of Pick Period Prior to Exp ** See Advanced Seasonal Charts for example of Month Ranges





In the example above we are viewing a Seasonal Chart of the symbol HAL, for the years 2005-2007 during the months June thru September.

25

Sep

9

15

24

Chart Header: Within the Chart Header you will see a definition of each plot that is being shown. It will also indicate the color of the plot. In this example you see a line for HAL[2006/6-9]. This tells you that the Blue line is a chart of HAL from 2006 showing the months 6 thru 9. The information in the Chart Header becomes very valuable when you start to do more **advanced customization** to your Seasonal Chart, which is explained further down.

5

15

25

Aug

9

15

24.00 23.00

30 Daily



In the example above we are viewing a Seasonal Chart of Crude's September contract, for the years 2005-2007 during the months June thru September. There is also a moving average applied to the U7 contract.

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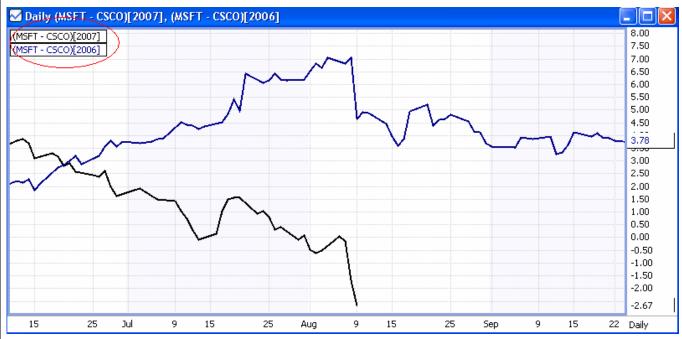
Date

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FutureSource Workstation	3.00	September 25, 2007	
Add Seasonal Spread Add Seasonal Spread Years 2007 2006 2007 2006 2001 2000 1999 Season Image: Whole Year		September 25, 2007	
Specify Month F From: Jan To: Dec Multipliers Multipliers #1 1.00 #2 1.00	ange Root: Suffix: Exp. Month: Jan t	ior to expiration	
Years	Description		
Year	Years that you wish to chart		
Contract Form	Description		
Cash Spread	Select to spread symbols such as Indicies, Stocks, etc.		
Symbol		fields for symbols you wish to spread	
Futures Spread	Select to spread Futures Con		
Root	Input field for the Futures Ro	5	
Suffix	end. (Must include entire suffix, i.e. –ICE as opposed to just ICE)		
Exp. Month	Select the Contract Month fo	r the Futures	

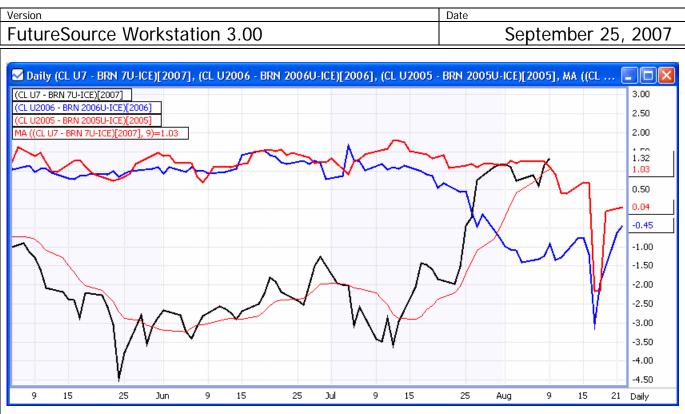
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Version		Date	
FutureSource Workstation	tureSource Workstation 3.00		
Pick Period Prior to Exp	contracts Delivery Year		
Years How many years prior you wis		sh to chart	
Season	Description		
Whole YearSelect to have no Month/SeasoSpecify Month RangeSelect to specify a Month range		son Restriction	
		ge for the chart	
From:	Input field for starting month		
То:	Input field for ending month		
Multipliers	Description		
Override Default	Select to override the default	of 1.00	
#1	Multiplier value applied to syr	nbol 1	
#2 Multiplier value applied to symbol 2		nbol 2	



In the example above we are viewing a Seasonal Spread Chart of the symbols MSFT and CSCO, for the years 2006-2007, with no month restriction.

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In the example above we are viewing a Seasonal Spread of Crude and Brent Crude, September contract for the years 2005-2007. There is also a Moving Average Applied to the 2007 Year.

Customizing Seasonal Charts:

When using Seasonal Chart Plots, they can be customized just as a normal chart can. This includes:

- Plot style (Bar, Candlestick, Line, Area, Dot, Level
- Aggregation (Daily, Weekly, Monthly)
- Applying Studies
- Applying Drawing Tools
- Color and Size
- Overlays of any additional Symbols
- And many other features that exist for normal charts.

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Advanced Seasonal Charts

Within the Seasonal Charts Wizard, you also have a settings to specify Month Ranges and to pick period prior to expiration.

Pick Period Prior to Expiration

In this example, we want to see seasonal data for the January Crude Contract.

Crude Contracts expire in the month prior to the delivery month. So the January Crude Contract Expires in December (Which is the year prior to its Delivery Year).

So, to view a seasonal chart for the current Active January Contract, which is January 08, and to overlay year 2006 and 2005, I use the "Pick period prior to expiration" setting, because the January 08 contract traded and expired in 2007.

Add Seasonal	
Years	Contract Form
2007 2006 2005	C Non Futures (i.e. Stock, Index etc)
2004 2003 2002 2001	Symbol:
2000 1999 💌	Root: CL
 Whole Year 	Suffix:
C Specify Month Range	Exp. Month: Jan (F)
From: Jan	Pick period prior to expiration
To: Dec 💌	Years: 1 year prior to expiration
	OK Cancel

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Month Range

You can to view the seasonal data of the Sept Contract for RBOB Gasoline during April thru August.

When selecting a month range, the year selected corresponds to the Start/From Month.

In this example, it is straight forward that Apr-Aug is within a single year and doesn't cross Jan. 1st, in this case 2005, 2006 and 2007).

FutureSource Workstation 3.00	September 25, 2007
Add Seasonal	
Years Contract Form 2007 Image: Contract Form 2006 Symbol: 2004 Symbol: 2002 Image: Contract Form 2004 Symbol: 2002 Image: Contract Form 2003 Image: Contract Form 2004 Image: Contract Form 2005 Image: Contract Form 2004 Image: Contract Form 2002 Image: Contract Form Image: Contract Form Image: Contract Form Image: Contret Form Image: Contret Form <td>25 </td>	25
ок	Cancel
Daily XRB U2007[2007/4-8], XRB U2006[2006/4-8], XRB U2005[2005/4-8] IXRB U2006[2006/4-8] IXRB U2005[2005/4-8]	2.7500 2.6145 2.5500 2.6145 2.5500 2.4500 2.4000 2.3500 2.3000 2.2500 2.000 2.1500 2.1500 2.1500 2.2000 2.1000 1.9500 1.900 1.8207 1.7500 1.7500 1.7000 1.6500 1.6000 1.5500 1.5500 1.5000 1.4500 1.4000

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Black Plot: April 2007 to August 2007 *Blue Plot:* April 2006 to August 2006 *Red Plot:* April 2005 to August 2005

Month Range that spans New Year

In this example, you want to view seasonal data of the March Crude Contract from August to Feb.

Add Seasonal	×
-Years	Contract Form
2007 2006 2005	○ Non Futures (i.e. Stock, Index etc)
2005 2004 2003 2002	Symbol:
2001 2000 1999	Single Root Futures
	Root: CL
Season C Whole Year	Suffix:
Specify Month Range	Exp. Month: Mar (H)
From: Aug	Pick period prior to expiration
To: Feb	Years: 1 year prior to expiration
	OK Cancel

In this Month Range you spans thru the New Year.

When selecting a month range, the year selected corresponds to the Start/From Month.

So if the From/Start month is August and the End/To is February, I select 2005-2007 and select "1 year prior to expiration", it will plot:

- August 2005 to February 2006 for the March 06 Contract
- August 2006 to February 2007 for the March 07 Contract
- August 2007 to February 2008 for the March 08 Contract

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Advanced Seasonal Charts Syntax

You can also manually enter a Seasonal Symbol into a chart as opposed to using the wizard, or after using the wizard you wish to add an additional seasonal plot. Manual entry is also very useful if you wish to have a Seasonal Spread that is more than 2 Legs.

Syntax for entering manually: =(Expression or Symbols)[Year/Month Range]

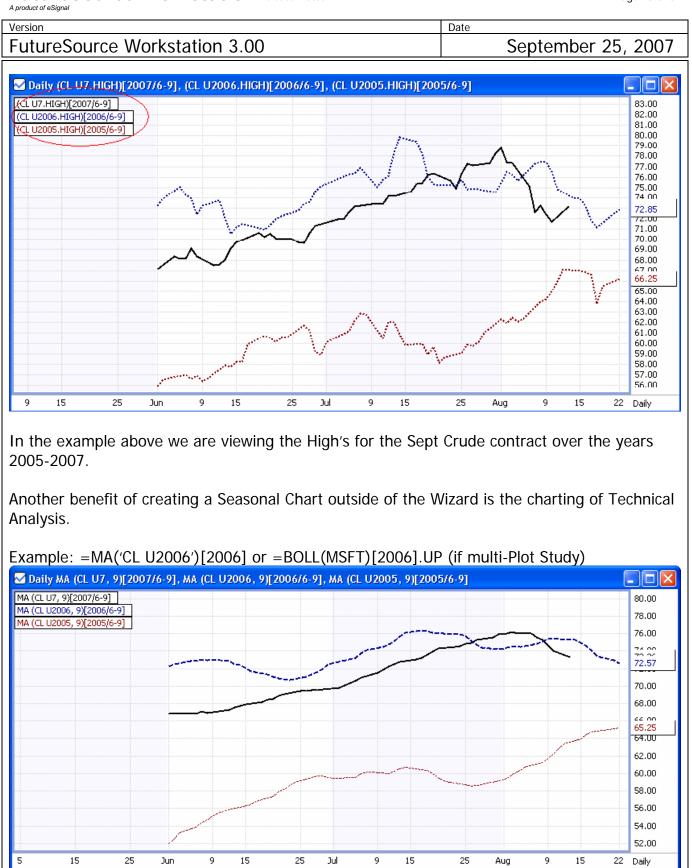
Example: =('CL U2006'-'BRN 2006U-ICE')[2005/6-9]

- 1. ('CL U2006'-'BRN 2006U-ICE') My Symbol or Expression
- 2. 2005 Calendar year to grab data from.
- 3. 6-9 Calendar months to only display

You may also chart just individual aspect. An example would be if you just wanted to see the High. For this you would need to manually create the plot as opposed to using the wizard.

Example: =('CL U6'.HIGH)[2007/6-9].

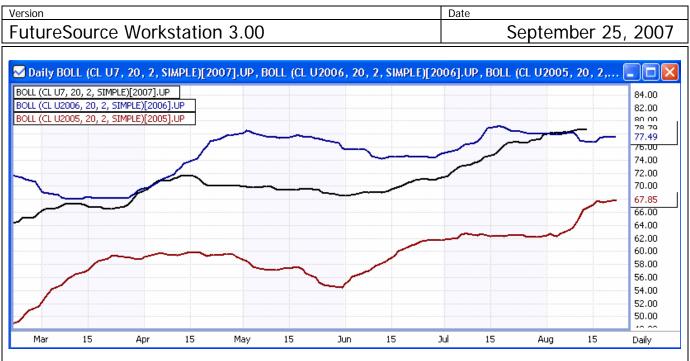
Note: When manually creating Seasonal Charts, each additional year that you Chart would be added just as if it was another Overlay on the chart.



In the example above we are viewing the Moving Averages for the Sept Crude contract over the years 2005-2007.

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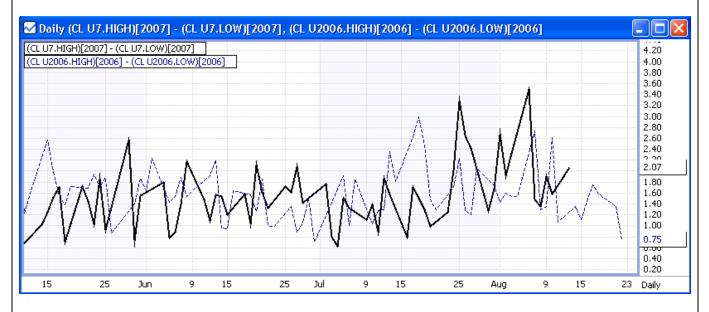
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In the example above we are viewing the Bollinger Bands Up Line for the Sept Crude contract for the years 2005-2007.

Another benefit of creating a Seasonal Chart outside of the Wizard is the charting of field spreads. An example would be to view the Range of High-Low.

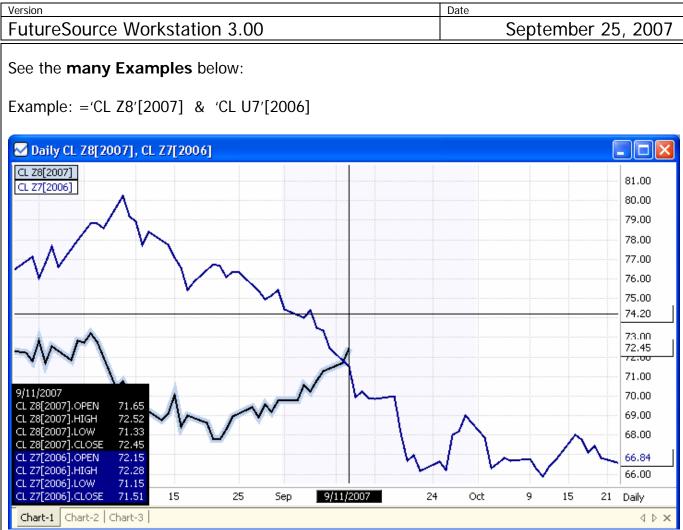
Example: =('CL U2006'.HIGH)[2006] - ('CL U2006'.LOW)[2006]



In the example above we are viewing the High/Low Range for the Sept Crude Contract for the years 2006-2007

Another benefit of creating a Seasonal Chart outside of the Wizard is that you can customize display years for contracts.

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In the example above we are viewing CL Z8 Data from 2007 and CL Z7 Data from 2006. Seasonal Data can also be viewed from the **Data Table Window**. This is done from the **Seasonal Drop Down Menu** above the Toolbar.

Time Templates

Time Templates are a feature that allows you to control the start and end times of data displayed on your Intraday Chart.

Time Templates Dialog

From the Context menu, select Time Templates | Edit Time Templates

n 		Date
ureSource Worksta	ition 3.00	September 25, 20
Time Templates		
N	ame Interval Sta	art Time End Time
Note: all times a display setting	ssociated with Time Templates are in Local Time,	regardless of your times
Selected Templ	ate: Auto - All Sessions	
Template Items	s	emplates
Interva	l: I-Default 💌	New Template
Start/End Times	: Custom	Delete Template
Start Time:	End Time:	
Start fille, J		Rename Template
	Update/Add Delete	Copy Template
Start/End time	s are only valid on intraday intervals	OK Cancel
Templates	Description	
New Template	Create Template	
Delete Template	Delete Template	
Rename Template	Rename Template	
Copy Template	Create a copy of a Template	
Template Items	Description	
Interval	The Intraday Interval to which th	
	I-Default will apply Time Templat Custom allows you to put in you	
Start/End Times		

	ation 2 00	Date	Sontombor 25 2
tureSource Workst			September 25, 2
Start Time	Time of day to start dis	splaying bars. (Us	sers Local Time Zone)
End time	Time of day to stop displaying bars. (Users Local Time Zone)		
Update/Add	Used to update Parameters of Template		
Delete	Used to delete Paramet	ters of Template	
eating Templates			
1. Click New Templa	te, Assign Name, Click Ok	ζ.	
0 0	nplate, and choose your T	•	
	ct I-Default for all Intrada ct Custom or Auto Times	ay Intervals or sp	pecify specific Interval
	ustom, Fill in Start and En	d Time (User Loo	cal Time, 24 Hr)
	CUpdate/Add	- (., ,
3. Click Ok after add	ling all templates		
ne Templates			
	The second se	ut Time Fed Ti	
Name • E-mini Pit	Interval Sta	art Time End Ti	me
	I-Default	8:30	15:15
- E-mini Night	I-Default	15:30	8:30
Auto - All Sessions	I-Default ,	Auto Auto	
	h Time Templates are in Local Time, I	regardless of your times	
display setting		regardless of your times	
display setting Selected Template: E-mini F	Pit		
display setting Selected Template: E-mini F Template Items	Pit	emplates	
display setting Selected Template: E-mini F	Pit		
display setting Selected Template: E-mini F Template Items	Pit	emplates	
display setting Selected Template: E-mini F Template Items Interval: I-Defau	Pit	emplates New Template	
display setting Selected Template: E-mini F Template Items Interval: I-Defau Start/End Times: Custom	Pit It v End Time: 15:15	emplates New Template Delete Template	

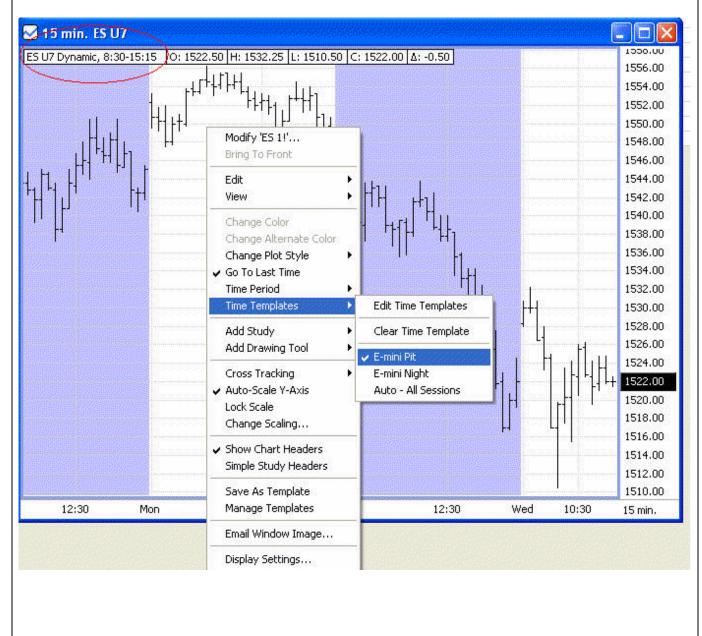


Apply and Clear Time Templates

Applying

- 1. Open a Intraday Chart and Insert Symbol
- 2. Right Click to view Context Menu.
 - 1. Highlight Time Templates
 - 2. Select Time Template to Apply

Chart heading displays Time Template Parameters



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Removing

- 1. Right Click to view Context Menu.
 - 1. Highlight Time Templates
 - 2. Select Clear Time Template

Note: When changing symbol on Intraday Chart, Time Template will remain applied until cleared

Working with Multiple Intervals

You can have a single time template that contains different properties depending on the Intraday Interval of the chart.

This feature is useful when you want to have a general rule for most Intraday intervals but wish to apply a specific time template rule to a specific Intraday aggregation. Remember that you use the I-Default setting to cover all Intraday intervals, but if you want a specific Intraday interval(s) to have a special time template rule(s), follow these steps.

- 1. Create your Time Template with I-Default as the interval
- 2. Once you have it created, highlight the Template Name that you would like to add an additional interval too, set your parameters and click Update/Add
- 3. Click Ok When Done.
- 4. Apply time template to chart. Change Intraday Intervals of the chart to see the different rules applied. Rule that is active is visible in chart header.

utureSource Workst	ation 3.00		Date	
ime Templates			Septen	nber 25, 20
Name	Interval	Start Time	End Time	
Special 3 min interval				
	I-Default	8:30	15:15	
L	3	8:30	11:00	
Note: all times associated wit	h Time Templates are in Lo	cal Time, regardless of yo	our times	
display setting		cal Time, regardless of yo	our times	
		cal Time, regardless of yo	our times	
display setting Selected Template: Special	l 3 min interval			
display setting Selected Template: Special Template Items	l 3 min interval	Templates	plate	
display setting Selected Template: Special Template Items Interval: I-Defau	l 3 min interval	Templates	plate	

In the example shown, all Intraday intervals will use the 8:30 to 15:15 times, but when the chart is changed to a 3 min chart the 8:30 to 11:00 times will be automatically applied.

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Default Parameters for Black Scholes Option Pricing Model

The default values for the Black Scholes option pricing model parameters are set through the following dialog box. It is accessible via the menu item **Preferences | Edit Default Model Parameters | Black Scholes**:

Default model parameters for Black Scholes			
Option interest rate	0.05		
Dividend interest rate	0.035		
Option ImpVol Price	Recent		
Underlying ImpVol Price	Recent		
	OK Cancel		

The **Option Interest Rate** is the short-term cost of capital for the currency in which the option is denominated. For USD-based options, it is usually set to a value like the USD LIBOR rate, the 90-day T-Bill rate, or the nearby Eurodollar rate.

The **Dividend Interest Rate** is only used for stock index options. It is set to the annual dividend rate of the basket of stocks that makes up the stock index.

The **Option ImpVol Price** is the data aspect of the option that is used in calculating the ImpVol column.

The **Underlying ImpVol Price** is the data aspect of the underlying instrument to the option that is used in calculating the ImpVol column.

For the dialog box displayed above, the Option Interest Rate is 5% per year, the Dividend Rate is 3.5% per year, and both prices are set to Recent. The ImpVol column will display the implied volatility calculated using the Recent price for both the option and the underlying instrument for that option. The Recent price is equal to the Last price unless the Last is blank; then Recent is equal to OldSet.

Additional Fields Available within the Options Board

AskSize – The number of shares that are being offered for sale at the ask price Bid Size – The number of shares that are being offered for purchase at the bid price.

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Snapshot Data Capabilities

Workstation now has snap shot capability within 3 of its Windows.

- Option Board
- Fixed Pages (Snapshot is on by default)
- OptionSource

On the toolbar of each of the 3 windows you will see a button to activate.

Not Activated:



Activated:

🗙 Snapshot 🤤 Refresh

This feature is useful when viewing many Future Option Symbols so that they do not count against the Workstation Symbol Limit.

Time & Sales Enhancements

Time and Sales has been improved to allow for easier retrieval and viewing of Historical Data. This functionality is available via a Date and Time Setting that is available on the Toolbar.

CL 1!

🝷 ... 🔳 Go To Last Time 🛛 Date: 08/17/07

💽 Go To Date/Time

Time:

Toolbar Options		
Date	Trading Day you wish to view	
Time	Time Range from the Trading Day you wish to view (User Local Time, 24 Hr)	

Input	Result	
Date Only	Data from that specific Trading Day Only	
Date & Start/End Time	Data from that specific Trading Day for the given Time Span Only	
Date & Start Time Only	Data from that Specific Trading Day, from the Start Time to the end of the Trading Day	
Date & End Time Only	Data from that Specific Trading Day, from the End Time to the beginning of the Trading Day	

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Start & End Time OnlyData from Current Trading Day, From the End Time. Example: 0915-1430Start Time OnlyData from Current Trading Day, from updating Real Time until the end of the Example: 0915End Time OnlyData from Current Trading Day, from beginning of the Trading Day. Example: 0915		5	
		updating Real Time until the	•
		5	
No Dat	e or Time	Data from Current Trading D Time, ability to view continue backwards.	

Note: When using End Time and Current Trading day, Time & Sales will update Real Time until End Time is reached.

Tip: Remember besides using the Mouse to Grab and Scroll backwards to view History, you can use the Page Up/Down buttons on the Keyboard for easier scrolling.

When you have a Time & Sales window that you have applied Date/Time restrictions to, it will always be noted in the Windows Title Bar.

🕒 Time & Sales LIGHT CRUDE OIL (filtered by Type) [On 8/16/2007 From 13:00 To 14:30]					
Date 🗸	Time	Туре	Value	Size	Identifier
8/16/2007	2:29:49 PM	Trade	71.00	1	
8/16/2007	2:29:38 PM	Trade	71.00	1	
8/16/2007	2:29:38 PM	Trade	71.00	1	
8/16/2007	2:29:38 PM	Trade	71.00	1	
8/16/2007	2:29:38 PM	Trade	71.00	1	
8/16/2007	2:29:38 PM	Trade	71.00	2	
8/16/2007	2:29:38 PM	Trade	71.00	1	
8/16/2007	2:29:38 PM	Trade	71.00	2	

News Window Enhancements

The News Window has been enhanced to allow for the display of more news windows and filters without using up valuable screen real estate within your Workstation Terminal.

This is accomplished by the use of News Tabs.

When a new News Window is opened you will see a single page tab at the bottom of the window.

From the **Context** menu of that Tab, you will be presented with 3 choices.

sion ItureSource Workstation 3.00		tation 3.00	Date September 25, 200	
				• • • • • •
			Tab Opt	tions
Ade	d Tab)	Creates new screen wit	ithin the single News Window
Re	name	Tab	Allows for renaming of	tab for ease of use
Delete Tab		ab	Removes the screen fro	om the News Window
ews	Convig			Headline
Time 47 PM	∇ Servic DM	20	e Oil Runs Up 6.7% On Yr At 27.51 Min Tons	Headline
47 PM	DF		e Oil Runs Up 6.7% On Yr At 27.51 Min Tons	
47 PM	EN		e Oil Runs Up 6.7% On Yr At 27.51 Min Tons	
47 PM	ER	*DI China Juli Crude Oil Runs Up 6.7% ON Yr At 27.51 Min Tons		
47 PM	DJ	*D) China Jul crude Oli Runs Up 6.7% On Yr At 27.51 Min Tons		
47 PM	DM	*DJ china Jul Crude Ol Output Down 1.7% On Yr At 15.47 Min Tons		
47 PM	DF	*DJ china Jul Crude DI Output Down 1.7% On Yr At 15.47 Min Tons		
47 PM	EN	*DJ China Jul Crude	*D) china Jul crude Oil Output Down 1.7% On Yr At 15.47 Min Tons	
47 PM	ER	*DJ China Jul Crude	e Oil Output Down 1.7% On Yr At 15.47 Min Tons	s
47 PM	DJ	*DJ China Jul Crude	e Oil Output Down 1.7% On Yr At 15.47 Min Tons	s
:43 PM	ODJ		Edible Oil Prices May Fall Oct 07-Nov 08-Mistry	
:43 PM	DF		ld Edible Oil Prices May Fall Oct 07-Nov 08-Mistry	
:43 PM	EN		ld Edible Oil Prices May Fall Oct 07-Nov 08-Mistry	
:43 PM	CA		ld Edible Oil Prices May Fall Oct 07-Nov 08-Mistry	
:36 PM	EN	DJ Dubai Crude Oil F		
:36 PM	DS ODJ	DJ Dubai Crude Oil P		
:34 PM :26 PM	EN	전 것같이 많은 것 같은 것이 같이 많이 많이 많이 했다. 특히 집	ged Finance Sector May Duck Global Credit Turmoil	
:26 PM :25 PM	EN		DJ MARKET TALK: S'pore Fuel Oil Swaps To Rise; Market Balanced DJ MARKET TALK: China HSFO Futures Rise; Eyes On Crude Oil	
:25 PM :22 PM	EN			
:22 PM :15 PM		DJ MARKET TALK: US Storms May Hit Oil Prices Even If Output Safe DJ e-cbot Grains/Oilseeds Futures Hourly Price Update		
:05 PM			an July Power Output Down 1.5% At 85.96B KWh	
:05 PM	DE		an July Power Output Down 1.5% At 85.96B KWh	
:05 PM	ER		an July Power Output Down 1.5% At 85.96B KWh	
:05 PM	EN		an July Power Output Down 1.5% At 85.96B KWh	
:05 PM	CM			
05 PM CM DJ OIL DATA: Japan July Power Output Down 1.5% At 85.96B KWh				
:00 PM	9:00 PM ODJ DJ * Japan Utilities July Crude Oil Use 401,631 Vs 425,143			
:00 PM :00 PM	DF	*DJ Japan Util <u>ities Ju</u>	July Crude Oil Use 401,631 Vs 425,143	

In the example above I have 3 Scrolling News Pages within the single News Window.

Once you have added a new News Page you can assign a saved Filter to that tab. When you are creating your news filters you may have the window automatically create an additional tab automatically by selecting the check box labeled "Create new page and apply" from within the save filter dialog.

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Custom News Se Services & Catego	a de la companya de En la companya de la c	Keyword(s)
News Services	Categories	KCYHOIU(3)
AA AFX Asia AE AFX Interna AF AFX France AG dpa - AFX (AU AFX United BTU BTU's Daily BU BTU's Daily	e Add Filter Germar Kingd Name Gas \	Veather NOT gas
BW Business W CA Dow Jones CB Dow Jones CM Dow Jones CS Dow Jones CX Dow Jones Select All Service:	/ire Description Comm Comm Comm Comm Comm	4 PM

OptionSource Enhancements

DDE capabilities

DDE capabilities is now available within OptionSource

After selecting the cells you wish to link to excel, you choose a DDE Option.

From the **Context** menu, you have 3 Options.

DDE Options		
Copy as Text	Copies the Cells as Plain text	
Copy as DDE Link	Creates just the DDE Link to the cells	
Copy as DDE Link with Headers	Creates new group to the right of the selected group	

Note: Once DDE Links are created from OptionSource, Portfolio Changes are not dynamic within Excel. Real-time Values and Prices are dynamic, but not user defined Changes.

Weather Analysis Offerings

Workstation now has a 5th Weather Services Package. This package contains 84 Animated Metro, Regional and Canadian Radar Maps.

The last page of this document contains a list of all Weather Maps available.

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Version	Date
FutureSource Workstation 3.00	September 25, 2007

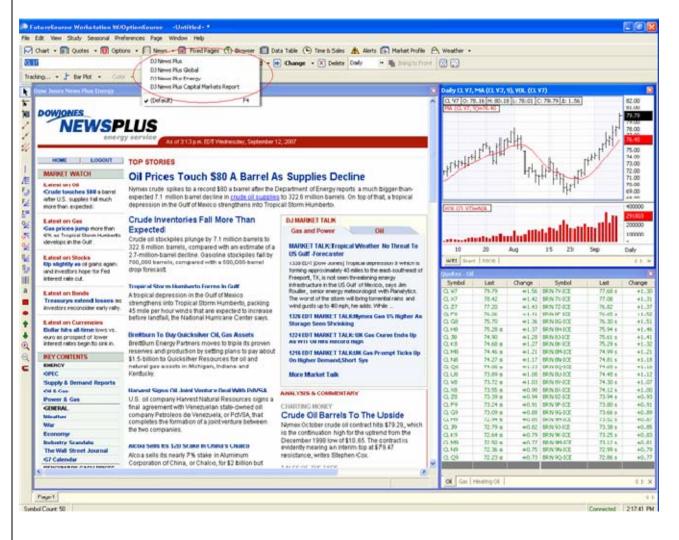
News Service Offerings

Workstation now offers 4 additional News Services provided by Dow Jones.

- Dow Jones News Plus
- Dow Jones News Plus Global
- Dow Jones New Plus Energy
- Dow Jones News Plus Capital Markets Report

These services are web based and will open inside a Workstation embedded browser.

From the **News Button** on the Main Toolbar, Select the **Drop Down** and choose the service.



A product of eSignal

Version		Date
FutureSource Workstation 3	3.00	September 25, 2007

Performance Improvements & System Requirements Changes

Numerous improvements have been made within Workstation to further create a better user experience.

Historical Data Requests

Data Requests for History are now returned in a timelier manner.

Memory Foot Print

System Memory usage is much lower than previous versions

Intraday Charts

Increased responsiveness when using multiple Intraday Charts with same symbol, yet different aggregation per window.

New System Requirements

Minimum

1.2 GHz Pentium IV or greater1GB of RAM or higher100MB of hard drive space1024x768 or higher screenresolution

Recommended

2.0 GHz Pentium IV or greater1GB of RAM or higher100MB of hard drive space1024x768 or higher screenresolution

Power User

2.8 GHz Pentium IV or greater1GB of RAM or higher100MB of hard drive space1024x768 or higher screenresolution

Available Workstation Weather Map Add-on Services as of June 2007

Con Metro U.S. Radar		Regional U.S. Rada	 Canada Radar & Precipitation
	Camden	AZ Prescott	Canadian National
ΑZ		CA Bakersfield	British Columbia
	Tucson	CO Denver	East Maritimes
	Fresno	FL St. Petersburg	Quebec East Ontario
	San Diego	GA Columbus	Manitoba West Ontario
CA	Susanville	LA New Orleans	Alberta Saskatchewan
	Eagle	MI Cadillac	Eastern Observed Precipitation
CO	Kim	MN St. Cloud	Central Observed Precipitation
СТ	Hartford	MO Jefferson City	Western Observed Precipitatio
FL	Bartow	MT Lewistown	
FL	Daytona Beach	NH Berlin	9 Canada Maps
FL	Key west	OH Dayton	
FL	Tallahassee	OK Lawton	
GA	Atlanta	OR Redmond	
ĠΑ	Savannah	TX San Antonio	
A	Carroll	UT Provo	
D	Idaho Falls	VA Staunton	
D	Mullan	Vit Oldunion	
L	Sterling/Rock Falls	17 Regional Maps	
	Winfield		
	Covington		
	Jackson		
	Houma		
	Bangor		
MI	Flint		
MI	Pellston		
	Grand Marais		
	Saint Louis		
	Springfield		
	Natchez		
	Jordan		
	Stumpy Point Wilmington		
	Devils Lake		
NE NJ	Imperial		
	Atlantic City Carlsbad		
	Corona		
	Farmington		
NV	Caliente		
NY			
	Youngstown		
	Durant		
	Lakeview		
SD	Aberdeen		
	Philip		
ΤN	Nashville		
ТΧ	Del Rio		
ΤХ	Galveston		
ТΧ			
	San Angelo		
ТΧ	Tyler		
	Dugway		
VA	Richmond		
	Wenatchee		
	Phillips		
	Charleston		
	Buffalo		
	58 Metro Maps		

US AG - (86 Maps) Current Temperatures Crop Moisture Index Topsoil Moisture Subsoil Moisture Palmer Drought Severity Index Current Dewpoint Current Relative Humidity Current Heat Index Observed Precipitation Yesterday **Observed Precipitation Past 7 Days** Day 1 Rainfall Forecast Day 2 Rainfall Forecast Day 3 Rainfall Forecast Day 4 Rainfall Forecast Day 5 Rainfall Forecast Day 6 Rainfall Forecast Day 7 Rainfall Forecast Month To Date Precipitation % of Norm MTD Precipitation Drought Monitor 10 Day Temperature Outlook 10 Day Precipitation Outlook Observed High Temps Observed Low Temps Todays Max Temp Forecast Tomorrows Max Temp Forecast Day 3 Max Temp Forecast Day 4 Max Temp Forecast Day 5 Max Temp Forecast Day 6 Max Temp Forecast Day 7 Max Temp Forecast Tomorrows Min Temp Forecast Day 3 Min Temp Forecast Day 4 Min Temp Forecast Day 5 Min Temp Forecast Day 6 Min Temp Forecast Day 7 Min Temp Forecast Current Wind Chill 6 Day Precipitation Forecast 30 Day Forecast 90 Day Forecast Jet Stream 2 Day Jet Stream Current Wind Gusts Current Wind Speed Current Wind Direction Tropical Satellite Image Satellite Image Radar Northwest Radar North Central Radar Northeast Radar Southwest Radar Central Radar East Central Radar South Central Radar Southeast Radar US Seasonal Drought Outlook Palmer (long term) Drought Monitor Crop (short term) Moisture Index 7-day Total Precipitation Through Last Saturday 7-Day Average Temperature Anomaly Though Last Saturday 7-Day Extreme Maximum Temperature Through Last Saturday 7-Day Maximum Apparent Temperature (Heat Index) Through Last Saturday U.S. Climate at a Glance Keeth-Byram Drought Index (Updated Daily) Soil Moisture - Most Recent Day Soil Moisture - Most Recent Month Soil Moisture - Most Recent 12 Months Soil Moisture Anomaly - Most Recent Day Soil Moisture Anomaly - Most Recent Month Soil Moisture Anomaly - Most Recent 12 Months Soil Moisture Percentiles - Most Recent Day Soil Moisture Percentiles - Most Recent Month Soil Moisture Percentiles - Most Recent 12 Months Soil Moisture Climatology - Monthly Soil Wetness Climatology - Monthly Soil Moisture Animated Loop Evaporation - Current Month Evaporation - Most Recent 12 Month Evaporation Anomaly - Current Month Evaporation Anomaly - Most Recent 12 Months Evaporation Percentilies - Most Recent 12 Month Monthy Climatology Evaporation Experimental Short-Term Blends Experimental Long-Term Blends

US Energy - (45 Maps) Current US Temperatures US Observed High Temps US Observed Low Temps Today's US Max Temp. Forecast Current US Relative Humidity Current US Heat Index Current US Wind Chill US CDD Day 1 US CDD Day 2 US CDD Day 3 US CDD Day 4 US CDD Day 5 US CDD Day 6 US CDD Day 7 US CDD Deviation Day 1 US CDD Deviation Day 2 US CDD Deviation Day 3 US CDD Deviation Day 4 US CDD Deviation Day 5 US CDD Deviation Day 6 US CDD Deviation Day 7 US HDD Day 1 US HDD Day 2 US HDD Day 3 US HDD Day 4 US HDD Day 5 US HDD Day 6 US HDD Day 7 US HDD Deviation Day 1 US HDD Deviation Day 2 US HDD Deviation Day 3 US HDD Deviation Day 4 US HDD Deviation Day 5 US HDD Deviation Day 6 US HDD Deviation Day 7 Tropical Satellite Image Satellite Image Radar Northwest Radar North Central Radar Northeast Radar Central Radar Fast Central Radar South Central Radar Southeast Radar

Europe Energy - (45 Maps)
Current Temps
Todays Low
Todays High
HDD Day 1
HDD Day 2
HDD Day 3
HDD Day 4
HDD Day 5
HDD Day 6
HDD Day 7
CDD Day 1
CDD Day 2
CDD Day 3
CDD Day 4
CDD Day 5
CDD Day 6
CDD Day 7
Forecast Highs Day 1
Forecast Highs Day 2
Forecast Highs Day 3
Forecast Highs Day 4
Forecast Highs Day 5
Forecast Highs Day 6
Forecast Highs Day 7
Forecast Lows Day 1
Forecast Lows Day 2
Forecast Lows Day 3
Forecast Lows Day 4
Forecast Lows Day 5
Forecast Lows Day 6
Forecast Lows Day 7
Forcast Rainfall Day 1
Forcast Rainfall Day 2
Forcast Rainfall Day 3
Forcast Rainfall Day 4
Forcast Rainfall Day 5
Forcast Rainfall Day 6
Forcast Rainfall Day 7
Month To Date Rainfall
Month To Date Percent Of Normal Rainfall
Europe satellite Image
Europe Jet Stream
Europe 2 Day Jet Stream
Europe 10 Day Temperature Outlook
Europe 10 Day Precipitation Outlook

South America - (40 Maps) Brazil Latest Temps Brazil 10 Day Outlook Brazil High Temps Brazil Low Temps Brazil Day 1 Low Temp. Forecast Brazil Day 2 Low Temp. Forecast Brazil Day 3 Low Temp. Forecast Brazil Day 4 Low Temp. Forecast Brazil Day 5 Low Temp, Forecast Brazil Day 6 Low Temp. Forecast Brazil Day 7 Low Temp. Forecast Brazil Day 1 High Temp, Forecast Brazil Day 2 High Temp, Forecast Brazil Day 3 High Temp. Forecast Brazil Day 4 High Temp. Forecast Brazil Day 5 High Temp. Forecast Brazil Day 6 High Temp. Forecast Brazil Day 7 High Temp. Forecast Brazil Observed Rain Yesterday Brazil Observed Rain Past 7 Days Brazil Rain Day 2 Brazil Day 1 Precipitation Forecast Brazil Day 2 Precipitation Forecast Brazil Day 3 Precipitation Forecast Brazil Day 4 Precipitation Forecast Brazil Day 5 Precipitation Forecast Brazil Day 6 Precipitation Forecast Brazil Day 7 Precipitation Forecast Brazil Month To Date Precipitation Brazil % Of Norm MTD Precipitation Brazil Topsoil Moisture Brazil Subsoil Moisture Columbia Observed Rain Yesterday Columbia Observed Rain Past 7 Days Columbia Month To Date Precipitation Columbia % Of Norm MTD Precipitation Columbia High Temps Columbia Low Temps Columbia Topsoil Moisture Columbia Subsoil Moisture