"BB Trend Capture Indicator" (BBTCI)
Visual Indicator Engineered by Issey Yohannes

Additional Conditional Visual

Criteria A : 20 SMA below 200 SMA (Bear - Shorting) - Indicating downtrends

Signal : Downwards Green Arrow (All conditions must be true at same time)

1. First condition requirement : Most recent BB Indicator signal (red or neutral)
2. Second condition requirement : 10 Simple Moving Avg. Cross Below 20 Simple Moving Avg.

Repaint : All candles beyond the green arrow (entry for "Criteria A" are met) are red.

Signal : Upwards Red Arrow (All conditions must be true at same time)

3. Both conditions A1 and A2 have been met
4. First condition requirement : BB Indicator signal (green or neutral)
5. Second condition requirement : 10 Simple Moving Avg. Cross Above 20 Simple Moving Avg.

Repaint : All candles beyond the red arrow (exit for "Criteria A" are met) are gray.

Criteria B : 20 SMA above 200 SMA (Bull - Long) - Indicating uptrends

Signal : Upwards Green Arrow (All conditions must be true at same time)

1. First condition requirement : Most recent BB Indicator signal (green or neutral)
2. Second condition requirement : 10 Simple Moving Avg. Cross Above 20 Simple Moving Avg.

Repaint : All candles beyond the green arrow (entry for "Criteria B" are met) are green.

Signal : Downwards Red Arrow (All conditions must be true at same time)

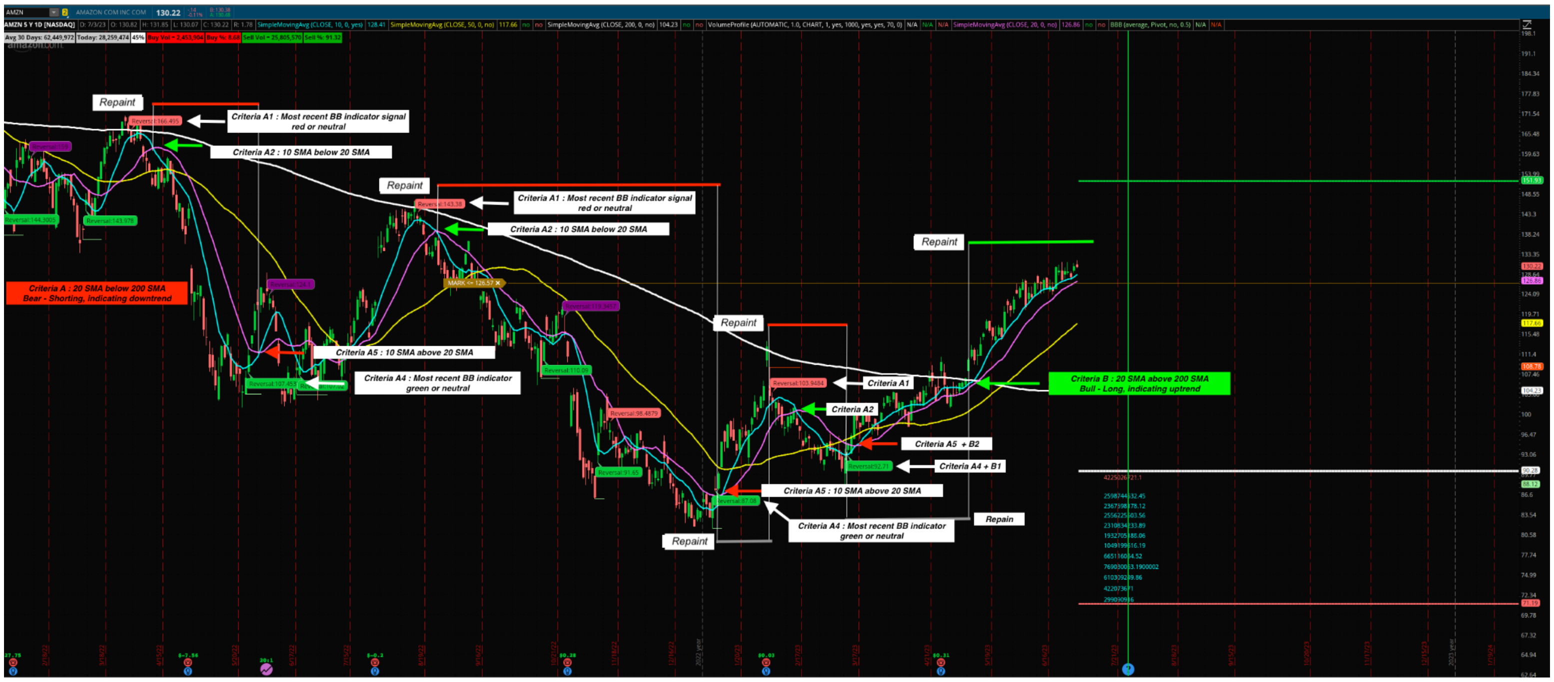
3. Both conditions B1 and B2 have been met
4. First condition requirement : BB Indicator signal (red or neutral)
5. Second condition requirement : 10 Simple Moving Avg. Cross Below 20 Simple Moving Avg.

Repaint : All candles beyond the red arrow (exit for "Criteria B" are met) are gray.

Note : No subtractions from current visuals of BB are required.

Visual of Concept

EX.1



Note : This example is solely to visualize the concept, all potential signals within this graph were not highlighted in order to facilitate illustration with no clutter.

BB Study Summary (ChatGPT) - Implemented in BBTCI: BB carries out technical analysis using price action, volume, and Fibonacci retracement levels to identify potential trend reversals. It also combines several indicators, including moving averages, RSI, and MACD, to accomplish the identification of these reversals. In addition, BB includes a custom algorithm that looks for specific price patterns and volume behavior. Last but not least, Fibonacci retracement levels are used to identify potential support and resistance levels, and the study includes a feature to display these levels on the chart.

BBTCI Study Summary (ChatGPT) : The BBTCI combines the power of the BB indicator, SMA crosses, and other specific conditions to generate signals relating to potential short and long positions. Traders can utilize the alerts and SMS messages to monitor the market and take appropriate actions based on the signals received. This information can be used to purchase stock equity out right or utilize other financial instruments such as stock options. It is important to thoroughly test and validate the BBTCI's functionality before using it in real trading scenarios, as no trading strategy can guarantee success in all market conditions.

BB Break Down (ChatGPT)

1. **Fib Levels**: The code uses Fibonacci retracement levels to identify potential areas of support and resistance on the chart. The code calculates the Fibonacci levels based on the difference between the highest high and lowest low of the selected period. The levels that the code uses are 0.236, 0.382, 0.500, 0.618, and 0.786.
2. **Fib Skip**: The code allows the user to set a percentage difference between the Fibonacci high and low before a new Fibonacci grid is created. This is known as the Fib Skip. The default value is 1.0, but the user can manually set this value by changing the "fibskip" input.
3. **Chart Bubbles**: The code displays chart bubbles that show the current Fibonacci level as a percentage of the distance between the Fibonacci low and high. The bubbles are color-coded based on whether the current price is above or below the Fibonacci low.
4. **Reversal Signals**: The code generates reversal signals based on several criteria:
    - The current price must be below the Fibonacci low.
    - The current price must be above the previous low.
    - The previous low must be below the Fibonacci low.
    - The previous low must be a certain percentage (determined by the "percentagereversal" input) below the Fibonacci low.

If all of these conditions are met, the code generates a bullish reversal signal. The code generates a bearish reversal signal if the current price is above the Fibonacci high and the previous high meets the above criteria.

5. **Other Inputs**: The code also allows the user to customize several other inputs, including:
    - The period over which to calculate the Fibonacci levels (controlled by the "data1" input).
    - Whether to show the Fibonacci levels and bubbles (controlled by the "showfiblines" and "showBubblesfibratio" inputs).
    - Whether to show the current Fibonacci level as a label on the chart (controlled by the "showFibLabel" input).

Overall, BB is a technical analysis tool that uses Fibonacci retracement levels to identify potential areas of support and resistance on the chart, and generates reversal signals based on the price's relationship to these levels.

BB Indicator Code

```
def price = close;
def superfast_length = 9;
def fast_length = 14;
def slow_length = 21;
def displace = 0;

def mov_avg9 = ExpAverage(price[-displace], superfast_length);
def mov_avg14 = ExpAverage(price[-displace], fast_length);
def mov_avg21 = ExpAverage(price[-displace], slow_length);

#moving averages
def Superfast = mov_avg9;
def Fast = mov_avg14;
def Slow = mov_avg21;

def buy = mov_avg9 > mov_avg14 and mov_avg14 > mov_avg21 and low > mov_avg9;
def stopbuy = mov_avg9 <= mov_avg14;
def buynow = !buy[1] and buy;
def buysignal = CompoundValue(1, if buynow and !stopbuy then 1 else if buysignal[1] == 1 and stopbuy
then 0 else buysignal[1], 0);

def Buy_Signal = buysignal[1] == 0 and buysignal == 1;

#Alert(condition = buysignal[1] == 0 and buysignal == 1, text = "Buy Signal", sound = Sound.Bell, "alert
type" = Alert.BAR);

def Momentum_Down = buysignal[1] == 1 and buysignal == 0;

#Alert(condition = buysignal[1] == 1 and buysignal == 0, text = "Momentum_Down", sound = Sound.Bell,
"alert type" = Alert.BAR);

def sell = mov_avg9 < mov_avg14 and mov_avg14 < mov_avg21 and high < mov_avg9;
def stopsell = mov_avg9 >= mov_avg14;
def sellnow = !sell[1] and sell;
def sellsignal = CompoundValue(1, if sellnow and !stopsell then 1 else if sellsignal[1] == 1 and stopsell
then 0 else sellsignal[1], 0);

def Sell_Signal = sellsignal[1] == 0 and sellsignal;

#Alert(condition = sellsignal[1] == 0 and sellsignal == 1, text = "Sell Signal", sound = Sound.Bell, "alert
type" = Alert.BAR);

def Momentum_Up = sellsignal[1] == 1 and sellsignal == 0;

#Alert(condition = sellsignal[1] == 1 and sellSignal == 0, text = "Momentum_Up", sound = Sound.Bell,
"alert type" = Alert.BAR);
```

```
plot Colorbars = if buysignal == 1 then 1 else if sellsignal == 1 then 2 else if buysignal == 0 or sellsignal
== 0 then 3 else 0;
Colorbars.Hide();
Colorbars.DefineColor("Buy_Signal_Bars", Color.GREEN);
Colorbars.DefineColor("Sell_Signal_Bars", Color.RED);
Colorbars.DefineColor("Neutral", Color.PLUM);
#___________________________________________________________________________

input method = {default average, high_low};
def bubbleoffset = .0005;
def percentamount = .01;
def revAmount = .05;
def atrreversal = 2.0;
def atrlength = 5;
def pricehigh = high;
def pricelow = low;
def averagelength = 5;
def averagetype = AverageType.EXPONENTIAL;
def mah = MovingAverage(averagetype, pricehigh, averagelength);
def mal = MovingAverage(averagetype, pricelow, averagelength);
def priceh = if method == method.high_low then pricehigh else mah;
def pricel = if method == method.high_low then pricelow else mal;
def EI = ZigZagHighLow("price h" = priceh, "price l" = pricel, "percentage reversal" = percentamount,
"absolute reversal" = revAmount, "atr length" = atrlength, "atr reversal" = atrreversal);
def reversalAmount = if (close * percentamount / 100) > Max(revAmount < atrreversal * reference
ATR(atrlength), revAmount) then (close * percentamount / 100) else if revAmount < atrreversal *
reference ATR(atrlength) then atrreversal * reference ATR(atrlength) else revAmount;
rec EISave = if !IsNaN(EI) then EI else GetValue(EISave, 1);
def chg = (if EISave == priceh then priceh else pricel) - GetValue(EISave, 1);
def isUp = chg >= 0;
rec isConf = AbsValue(chg) >= reversalAmount or (IsNaN(GetValue(EI, 1)) and GetValue(isConf, 1));
def EId = if isUp then 1 else 0;
#plot EnhancedLines = if EId <= 1 then EI else Double.NaN;
#EnhancedLines.AssignValueColor(if EId == 1 then Color.GREEN else if EId == 0 then Color.RED else
Color.DARK_ORANGE);
#EnhancedLines.SetStyle(Curve.FIRM);
#EnhancedLines.EnableApproximation();
#EnhancedLines.HideBubble();
#Price Change between Enhanceds
def xxhigh = if EISave == priceh then priceh else xxhigh[1];
def chghigh = priceh - xxhigh[1];
def xxlow = if EISave == pricel then pricel else xxlow[1];
def chglow = pricel - xxlow[1];
def showBubbleschange = no;
AddChartBubble(showBubbleschange and !IsNaN(EI) and BarNumber() != 1, if isUp then priceh * (1 +
bubbleoffset) else pricel * (1 - bubbleoffset) , "$" + chg , if isUp and chghigh > 0 then Color.GREEN else if
isUp and chghigh < 0 then Color.RED else if isUp then Color.YELLOW else if !isUp and chglow > 0 then
Color.GREEN else if !isUp and chglow < 0 then Color.RED else Color.YELLOW, isUp);
#Price at High/Low
```

```
def showBubblesprice = no;
AddChartBubble(showBubblesprice and !IsNaN(EI) and BarNumber() != 1, if isUp then priceh * (1 +
bubbleoffset) else pricel * (1 - bubbleoffset) , if isUp then "$" + priceh else "$" + pricel , if isUp and chghigh
> 0 then Color.GREEN else if isUp and chghigh < 0 then Color.RED else if isUp then Color.YELLOW else
if !isUp and chglow > 0 then Color.GREEN else if !isUp and chglow < 0 then Color.RED else
Color.YELLOW, isUp);
#Label for Confirmed/Unconfirmed Status of Current Enhanced

#Bar Count between Enhanceds
rec EIcount = if EISave[1] != EISave then 1 else if EISave[1] == EISave then EIcount[1] + 1 else 0;
def EIcounthilo = if EIcounthilo[1] == 0 and (EISave == priceh or EISave == pricel) then 1 else if EISave
== priceh or EISave == pricel then EIcounthilo[1] + 1 else EIcounthilo[1];
def EIhilo = if EISave == priceh or EISave == pricel then EIcounthilo else EIcounthilo + 1;
def EIcounthigh = if EISave == priceh then EIcount[1] else Double.NaN;
def EIcountlow = if EISave == pricel then EIcount[1] else Double.NaN;
def showBubblesbarcount = no;
AddChartBubble(showBubblesbarcount and !IsNaN(EI) and BarNumber() != 1, if isUp then priceh * (1 +
bubbleoffset) else pricel * (1 - bubbleoffset) , if EISave == priceh then EIcounthigh else EIcountlow, if isUp
and chghigh > 0 then Color.GREEN else if isUp and chghigh < 0 then Color.RED else if isUp then
Color.YELLOW else if !isUp and chglow > 0 then Color.GREEN else if !isUp and chglow < 0 then
Color.RED else Color.YELLOW, if isUp then yes else no );
#Arrows
def EIL = if !IsNaN(EI) and !isUp then pricel else GetValue(EIL, 1);
def EIH = if !IsNaN(EI) and isUp then priceh else GetValue(EIH, 1);
def dir = CompoundValue(1, if EIL != EIL[1] or pricel == EIL[1] and pricel == EISave then 1 else if EIH !=
EIH[1] or priceh == EIH[1] and priceh == EISave then -1 else dir[1], 0);
def signal = CompoundValue(1, if dir > 0 and pricel > EIL then if signal[1] <= 0 then 1 else signal[1] else if
dir < 0 and priceh < EIH then if signal[1] >= 0 then -1 else signal[1] else signal[1], 0);
def showarrows = yes;
def U1 = showarrows and signal > 0 and signal[1] <= 0;
#U1.SetPaintingStrategy(PaintingStrategy.BOOLEAN_ARROW_UP);
#U1.SetDefaultColor(Color.GREEN);
#U1.SetLineWeight(4);
def D1 = showarrows and signal < 0 and signal[1] >= 0;
#D1.SetPaintingStrategy(PaintingStrategy.BOOLEAN_ARROW_DOWN);
#D1.SetDefaultColor(Color.RED);
#D1.SetLineWeight(4);
def barnumber = BarNumber()[10];

AddChartBubble((barnumber and U1), if isUp then low else high, if showarrows and signal > 0 and
signal[1] <= 0 then "Reversal:" + low else "" , if Colorbars == 3 then Color.PLUM else Color.UPTICK, no);
AddChartBubble((barnumber and D1), if isUp then low else high, if showarrows and signal < 0 and
signal[1] >= 0 then "Reversal:" + high else "" , if Colorbars == 3 then Color.PLUM else Color.DOWNTICK,
yes);

def revLineTop;
def revLineBot;

if barnumber and D1 {
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```
revLineBot = Double.NaN;
revLineTop = high[1];
} else if barnumber and U1 {
revLineTop = Double.NaN;
revLineBot = low[1];
} else if !IsNaN(revLineBot[1]) and (Colorbars[2] == 2 or Colorbars[1] == 2) {
revLineBot = revLineBot[1];
revLineTop = Double.NaN;
} else if !IsNaN(revLineTop[1]) and (Colorbars[2] == 1 or Colorbars[1] == 1) {
revLineTop = revLineTop[1];
revLineBot = Double.NaN;
} else {
revLineTop = Double.NaN;
revLineBot = Double.NaN;
}

plot botLine = revLineBot[-1];
botLine.SetDefaultColor(Color.LIGHT_GREEN);
plot topLine = revLineTop[-1];
topLine.SetDefaultColor(Color.LIGHT_RED);

#Alerts
def usealerts = no;
#Alert(usealerts and U1, "EI-UP", Alert.BAR, Sound.Bell);
#Alert(usealerts and D1, "EI-DOWN", Alert.BAR, Sound.Chimes);
#Supply Demand Areas
rec data1 = CompoundValue(1, if (EISave == priceh or EISave == pricel) then data1[1] + 1 else data1[1],
0);
def datacount1 = (HighestAll(data1) - data1[1]);
def numbersuppdemandtoshow = 0;
input showSupplyDemand = {default Pivot, Arrow, None};
def idx = if showSupplyDemand == showSupplyDemand.Pivot then 1 else 0;
def rLow;
def rHigh;
if signal crosses 0 {
rLow = pricel[idx];
rHigh = priceh[idx];
} else {
rLow = rLow[1];
rHigh = rHigh[1];
}
def HighLine = if datacount1 <= numbersuppdemandtoshow and showSupplyDemand !=
showSupplyDemand.None and !IsNaN(close) and rHigh != 0 then rHigh else Double.NaN;

def LowLine = if datacount1 <= numbersuppdemandtoshow and showSupplyDemand !=
showSupplyDemand.None and !IsNaN(close) and rLow != 0 then rLow else Double.NaN;

def hlUp = if signal > 0 then HighLine else Double.NaN;
def hlDn = if signal < 0 then HighLine else Double.NaN;
def showsupplydemandcloud = no;
AddCloud(if showsupplydemandcloud then hlUp else Double.NaN, LowLine, Color.LIGHT_GREEN,
Color.LIGHT_GREEN);
AddCloud(if showsupplydemandcloud then hlDn else Double.NaN, LowLine, Color.LIGHT_RED,
Color.LIGHT_RED);
#Store Previous Data
def EIsave1 = if !IsNaN(EISave) then EISave else EIsave1[1];
def EIsave2 = EIsave1;
rec priorEI1 = if EIsave2 != EIsave2[1] then EIsave2[1] else priorEI1[1];
rec priorEI2 = if priorEI1 != priorEI1[1] then priorEI1[1] else priorEI2[1];
rec priorEI3 = if priorEI2 != priorEI2[1] then priorEI2[1] else priorEI3[1];
#Fibonacci Extensions
rec data = CompoundValue(1, if (EISave == priceh or EISave == pricel) then data[1] + 1 else data[1], 0);
def datacount = (HighestAll(data) - data[1]);
def numberextfibstoshow = 2;
rec cpo = if dir[1] != dir then 0 else 1;
def showFibExtLines = no;
def showtodayonly = no;
def today = if showtodayonly == yes then GetDay() == GetLastDay() else GetDay();
def extfib1 = if EISave == priceh then priceh - AbsValue(priorEI2 - priorEI1) * 1
else extfib1[1];
def extfib100 = if datacount <= numberextfibstoshow and today and showFibExtLines and !IsNaN(extfib1)
and dir < 0 and cpo != 0 then extfib1[1] else Double.NaN;

def extfib1a = if EISave == priceh then priceh - AbsValue(priorEI2 - priorEI1) * 0.382
else extfib1a[1];
def extfib382 = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib1a) and dir < 0 and cpo != 0 then extfib1a[1] else Double.NaN;

def extfib2 = if EISave == priceh then priceh - AbsValue(priorEI2 - priorEI1) *
0.618 else extfib2[1];
def extfib618 = if datacount <= numberextfibstoshow and today and showFibExtLines and !IsNaN(extfib2)
and dir < 0 and cpo != 0 then extfib2[1] else Double.NaN;

def extfib3 = if EISave == priceh then priceh - AbsValue(priorEI2 - priorEI1) *
1.618 else extfib3[1];
def extfib1618 = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib3) and dir < 0 and cpo != 0 then extfib3[1] else Double.NaN;

def extfib3a = if EISave == priceh then priceh - AbsValue(priorEI2 - priorEI1) *
2.000 else extfib3a[1];
def extfib2000 = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib3a) and dir < 0 and cpo != 0 then extfib3a[1] else Double.NaN;

def extfib4 = if EISave == priceh then priceh - AbsValue(priorEI2 - priorEI1) *
2.618 else extfib4[1];
def extfib2618 = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib4) and dir < 0 and cpo != 0 then extfib4[1] else Double.NaN;
```

```
def extfib5 = if ElSave == priceh then priceh - AbsValue(priorEl2 - priorEl1) *
3.618 else extfib5[1];
def extfib3618 = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib5) and dir < 0 and cpo != 0 then extfib5[1] else Double.NaN;

def extfib1_ = if ElSave == pricel then pricel + AbsValue(priorEl2 - priorEl1) * 1
else extfib1_[1];
def extfib100_ = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib1_) and dir > 0 and cpo != 0 then extfib1_[1] else Double.NaN;

def extfib1a_ = if ElSave == pricel then pricel + AbsValue(priorEl2 - priorEl1) * 0.382
else extfib1a_[1];
def extfib382_ = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib1a_) and dir > 0 and cpo != 0 then extfib1a_[1] else Double.NaN;

def extfib2_ = if ElSave == pricel then pricel + AbsValue(priorEl2 - priorEl1) *
0.618 else extfib2_[1];
def extfib618_ = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib2_) and dir > 0 and cpo != 0 then extfib2_[1] else Double.NaN;

def extfib3_ = if ElSave == pricel then pricel + AbsValue(priorEl2 - priorEl1) *
1.618 else extfib3_[1];
def extfib1618_ = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib3_) and dir > 0 and cpo != 0 then extfib3_[1] else Double.NaN;

def extfib3a_ = if ElSave == pricel then pricel + AbsValue(priorEl2 - priorEl1) *
2.000 else extfib3a_[1];
def extfib2000_ = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib3a_) and dir > 0 and cpo != 0 then extfib3a_[1] else Double.NaN;

def extfib4_ = if ElSave == pricel then pricel + AbsValue(priorEl2 - priorEl1) *
2.618 else extfib4_[1];
def extfib2618_ = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib4_) and dir > 0 and cpo != 0 then extfib4_[1] else Double.NaN;

def extfib5_ = if ElSave == pricel then pricel + AbsValue(priorEl2 - priorEl1) *
3.618 else extfib5_[1];
def extfib3618_ = if datacount <= numberextfibstoshow and today and showFibExtLines and
!IsNaN(extfib5_) and dir > 0 and cpo != 0 then extfib5_[1] else Double.NaN;

def fibextbubblespacesinexpansion = 8;
def b = fibextbubblespacesinexpansion;
def direction = if !isUp then 1 else 0;
AddChartBubble( direction[b + 1] == 1 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib1[b + 2], "100%", Color.RED, no);
AddChartBubble( direction[b + 1] == 1 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib1a[b + 2], "38.2%", Color.RED, no);
```

```
AddChartBubble( direction[b + 1] == 1 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib2[b + 2], "61.8%", Color.RED, no);
AddChartBubble( direction[b + 1] == 1 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib3[b + 2], "161.8%", Color.RED, no);
AddChartBubble( direction[b + 1] == 1 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib3a[b + 2], "200%", Color.RED, no);
AddChartBubble( direction[b + 1] == 1 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib4[b + 2], "261.8%", Color.RED, no);
AddChartBubble( direction[b + 1] == 1 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib5[b + 2], "361.8%", Color.RED, no);
AddChartBubble( direction[b + 1] == 0 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib1_[b + 2], "100%", Color.GREEN, yes);
AddChartBubble( direction[b + 1] == 0 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib1a_[b + 2], "38.2%", Color.GREEN, yes);
AddChartBubble( direction[b + 1] == 0 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib2_[b + 2], "61.8%", Color.GREEN, yes);
AddChartBubble( direction[b + 1] == 0 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib3_[b + 2], "161.8%", Color.GREEN, yes);
AddChartBubble( direction[b + 1] == 0 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib3a_[b + 2], "200%", Color.GREEN, yes);
AddChartBubble( direction[b + 1] == 0 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib4_[b + 2], "261.8%", Color.GREEN, yes);
AddChartBubble( direction[b + 1] == 0 and showFibExtLines and !IsNaN(close[b + 1]) and IsNaN(close),
extfib5_[b + 2], "361.8%", Color.GREEN, yes);
#Volume at Reversals
def vol = if BarNumber() == 0 then 0 else volume + vol[1];
def vol1 = if BarNumber() == 1 then volume else vol1[1];
def xxvol = if EISave == priceh or EISave == pricel then TotalSum(volume) else xxvol[1];
def chgvol = if xxvol - xxvol[1] + vol1 == vol then vol else xxvol - xxvol[1];
def showBubblesVolume = no;
AddChartBubble(showBubblesVolume and !IsNaN(EI) and BarNumber() != 1, if isUp then priceh * (1 +
bubbleoffset) else pricel * (1 - bubbleoffset), chgvol, if isUp and chghigh > 0 then Color.GREEN else if
isUp and chghigh < 0 then Color.RED else if isUp then Color.YELLOW else if !isUp and chglow > 0 then
Color.GREEN else if !isUp and chglow < 0 then Color.RED else Color.YELLOW, if isUp then yes else no );

input usemanualfibskip = no;#Hint usemanualfibskip: Select no to use preprogrammed fibskip amounts.
Select no, to use the amount entered at input fibskip.
input fibskip = .50;#Hint fibskip: Set input usemanualfibskip == yes to use this amount versus
preprogrammed amounts. Standard is 1.0. This is percentage difference between fib high and low before
a new fib grid created.
def showBubblesfibratio = no;
def showFibLabel = no;#Hint showfibLabel: Select yes to show label of current fib level as of last price
def showfiblines = no;
def fib1level = .236;
def fib2level = .382;
def fibMlevel = .500;
def fib3level = .618;
def fib4level = .786;
#Fibs
```

```
def datacount2 = (HighestAll(data1) - data1[1]);
def numberfibretracementstoshow = 2;
def fibskipit = if usemanualfibskip == no then if close > 800 then .25 else .5 else fibskip;
def EIfibh = if EISave == priceh and AbsValue(EISave - EISave[1]) > priceh * fibskipit * .01 then priceh
else EIfibh[1];
def EIfibl = if EISave == pricel and AbsValue(EISave - EISave[1]) > priceh * fibskipit * .01 then pricel else
EIfibl[1];
def range = EIfibh - EIfibl;
def fibH = if showfiblines == no then Double.NaN else if datacount2 <= numberfibretracementstoshow
then EIfibh else Double.NaN;
def fibL = if showfiblines == no then Double.NaN else if datacount2 <= numberfibretracementstoshow
then EIfibl else Double.NaN;
def fibM = if showfiblines == no then Double.NaN else if datacount2 <= numberfibretracementstoshow
then EIfibl + range * fibMlevel else Double.NaN;
def fib1 = if showfiblines == no then Double.NaN else if datacount2 <= numberfibretracementstoshow
then EIfibl + range * fib1level else Double.NaN;
def fib2 = if showfiblines == no then Double.NaN else if datacount2 <= numberfibretracementstoshow
then EIfibl + range * fib2level else Double.NaN;
def fib3 = if showfiblines == no then Double.NaN else if datacount2 <= numberfibretracementstoshow
then EIfibl + range * fib3level else Double.NaN;
def fib4 = if showfiblines == no then Double.NaN else if datacount2 <= numberfibretracementstoshow
then EIfibl + range * fib4level else Double.NaN;

AddLabel(showFibLabel, Concat( "Current Fib Level ", AsPercent((close - EIfibl) / (range))), if close >
EIfibl then Color.GREEN else if EIfibh == close then Color.WHITE else Color.RED);

AddChartBubble(showBubblesfibratio and !IsNaN(EI) and BarNumber() != 1, if isUp then priceh * (1 +
bubbleoffset) else pricel * (1 - bubbleoffset) , if isUp then AsPercent((priceh - EIfibl) / (range)) else
AsPercent((pricel - EIfibl) / range), if isUp and chghigh > 0 then Color.GREEN else if isUp and chghigh <
0 then Color.RED else if isUp then Color.GREEN else if !isUp and chglow > 0 then Color.GREEN else if
!isUp and chglow < 0 then Color.RED else Color.RED, isUp);
```