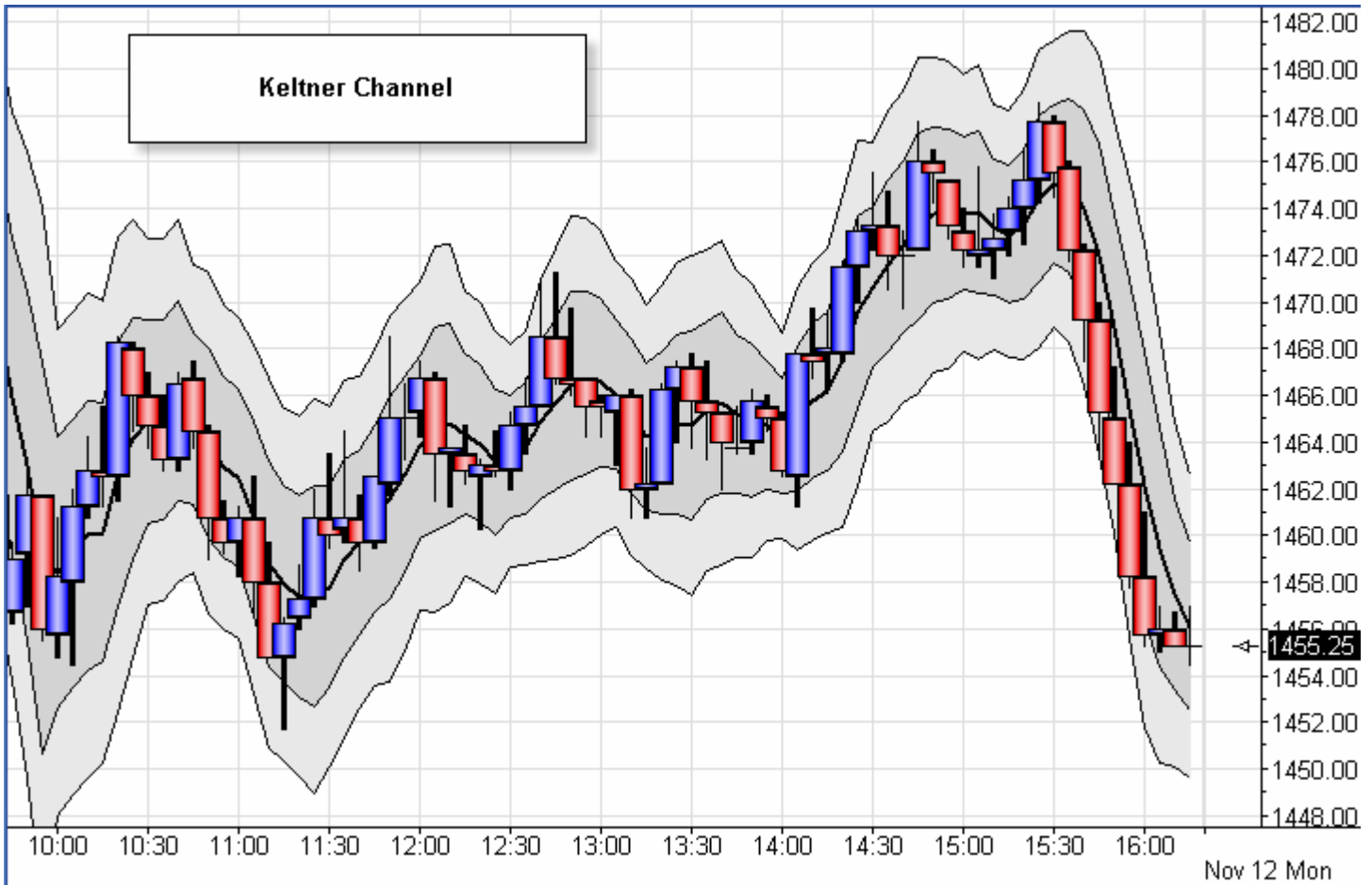


Keltner Channel

The Keltner Channel draws two band lines around a moving average line. The band distance from the moving average line is calculated based on the True Range for each bar. The True Range is averaged over N periods and then added or subtracted from the moving average line. The average True Range is multiplied by a multiplier number to adjust the band distance. The band distance will narrow if the average True Range values are small. This indicates low volatility. The band distance will increase in volatile wide ranging markets. Watch for the price to penetrate the upper or lower channels. A move outside the bands calls for a continuation of the current trend.



Properties

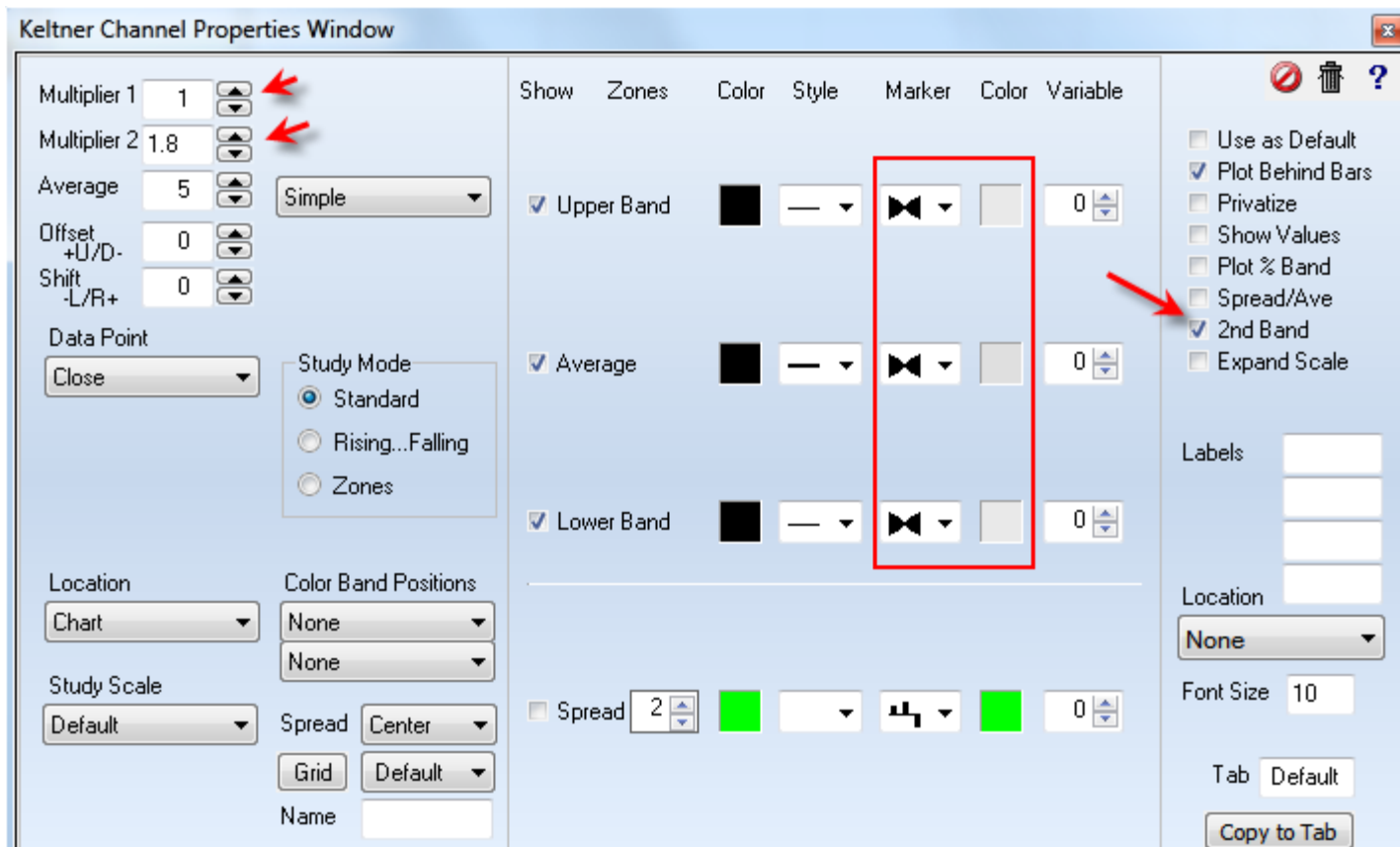
Plot % Band - Place a check mark in the 'Plot % Band' check box to enable a %B Indicator. In this case, the 'Spread' study line will change to '% Band'. If you enable this Study Line then an indicator will be plotted that represents where the close price is in relation to the Upper and Lower Bands. For example, if the close is exactly in the middle of the Upper and Lower band range, then the %B Indicator will be 50. The $(High + Low + Close)/3$ is recommended to use for the Data Point.

Spread/Ave - Place a check mark in the 'Spread/Ave' box to normalize the spread value. The spread is divided by the median average line.

Multiplier - Used to adjust the distance of the Bands from the middle line (usually a value from .5 to 2).

Average - Number of N periods used for the Moving Average (middle line).

The Keltner channel shown on the chart was created with these properties. Note the 2nd Band option has been checked so that 2 Keltner channels show. The Upper Band Fill marker does the light gray coloring between the 1st and 2nd upper bands. The Fill marker on the Average line is coloring the darker shade of gray between the 1st upper band and the 1st lower band. The Lower Band Fill marker is coloring between the 1st and 2nd lower bands.



Formula

Moving average line = Select from Simple, Exponential, Weighted, or Smoothed averaging.

True Range = High – Low

(Substitute the previous bar's Close for the High, if higher than the current High)

(Substitute the previous bar's Close for the Low, if lower than the current Low)

Average True Range (ATR) = Average of each bar's true range using N periods

Upper Channel = Moving average line + (ATR * Multiplier)

Lower Channel = Moving average line - (ATR * Multiplier)

Credits

Developed by Chester W. Keltner