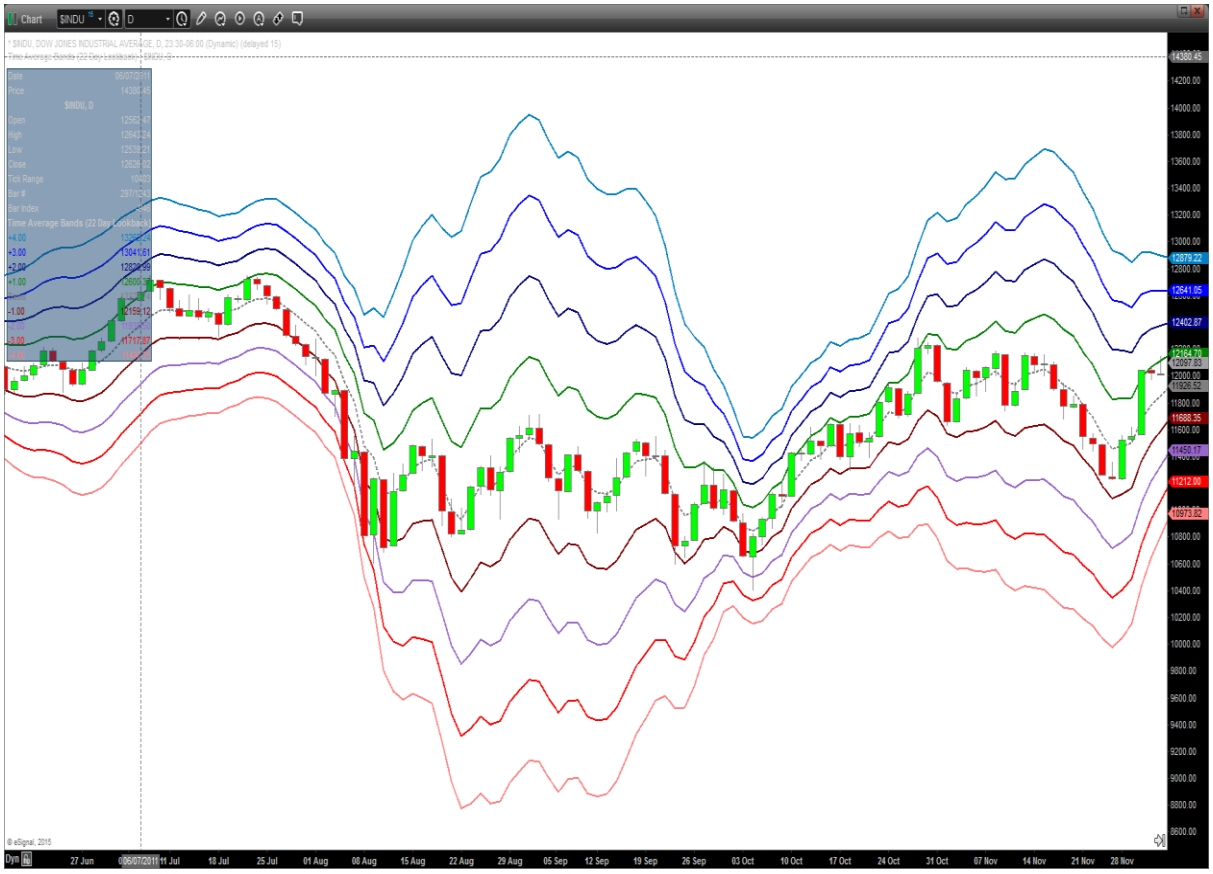
Time Average Bands (TAvBand)



This study looks at the current range of a bar for the time of day in relationship to the average of range. On Historical charts it simple looks at range on the previous bar in relationship to the user defined average of range. From that, it applies a moving average between the range of 3 and 21 depending on the relationship of the current range to the historical. It then places 1, 2, 3, and 4 standard deviations around the price.

Philosophy

Time Average Bands are only touched on briefly in Trading Time on Page 50, due to the fact that they had a scaling problem as a custom study.

Nearly all momentum based indicators look at momentum on a continuous basis and have no automatic adjustment for the time of day that it is, or what the normal behavior is at that time. Time Average Bands analyses both the time of day and its relationship to range. The study calculates the current time of days range in relationship to its user defined average of range, and from propriety algorithm, creates a variable moving average depending on that relationship. The greater the range from the normalized ranges the lower the moving average and vice versa. The limits are set between a 3 period and 21 periods. Based on this expansion or contraction, it takes another propriety algorithm and then places 1 and 2 and 3 standard deviations around the opening of the current bar if the offset is zero or the close if the offset is 1. This is so that the value on the current bar is fixed. The lowest timeframe for computation is set at a 15 minute bar.

Interpretation

The fact that the bands use standard deviations around a moving average is a similar concept to Bollinger Bands. However, by taking the relationship between range instead of close to close, plus the skew associated with a variable moving average that falls if range expands, means that whilst one of the primary uses of the bands is as a breakout method, there subsequent behavior having qualified that break is significantly different. The bands will expand by far more which means that there are rarely subsequent breakouts once that trend has developed. Often what is a breakout on Bollinger is simply a move to support or resistance.

Note that this study uses a long Lookback period. On daily charts with little history, you may need to change Lookback days to 10 in order to have enough data for the calculation.

Within Setup the user can modify the number of Lookback days, the length over which standard deviation is calculated, and the standard deviation number. The default is recommended.