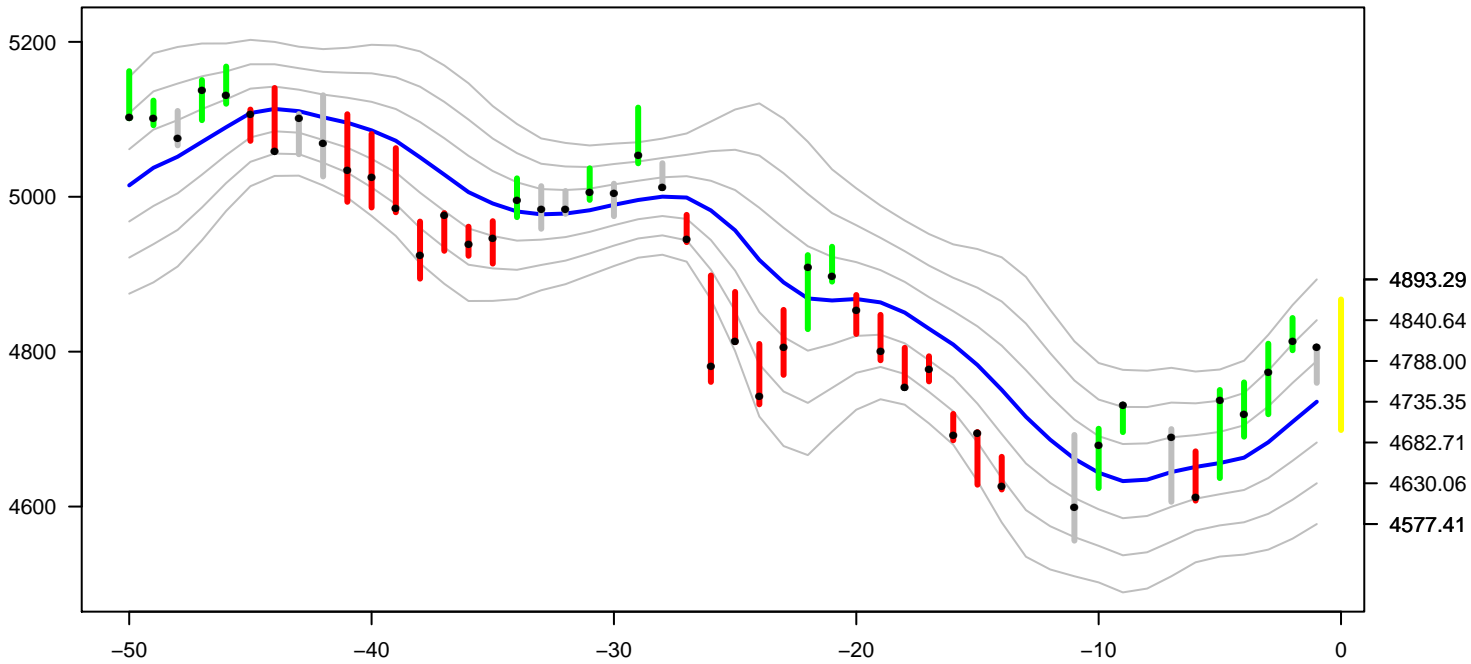
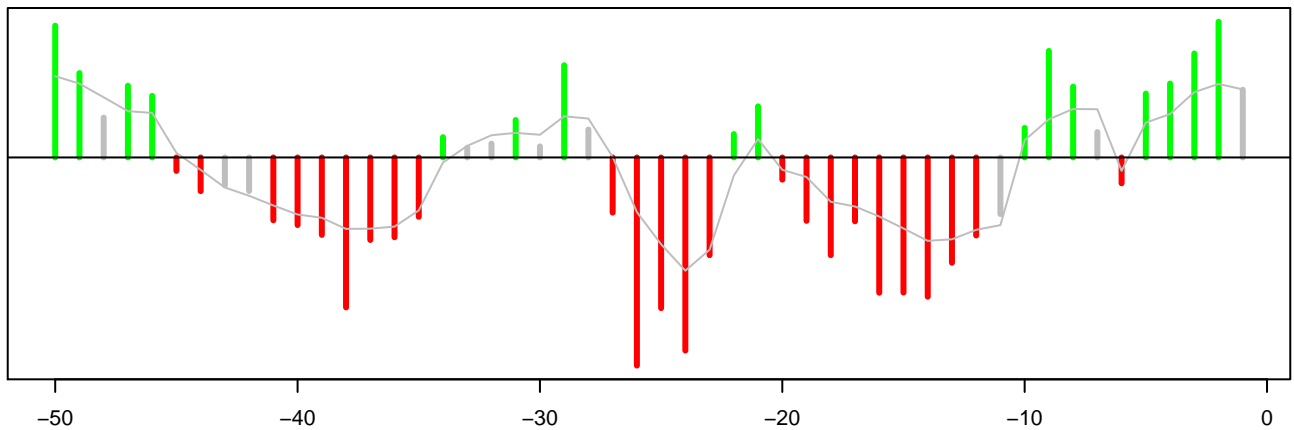


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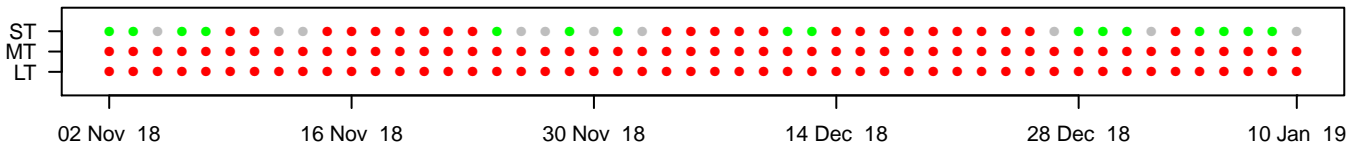
CAC Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



Short Term Signal Oscillator. Green: Bullish. Red: Bearish. Grey: Neutral, uncertainty in direction.



Short (ST), Medium (MT) and Long Term (LT) Signals



CAC

The short term signal is grey, neutral.

The medium term signal is red, bearish

The long term signal is red, bearish

The trend channel is constructed from a factor model that looks at the dynamic relationship between related markets.

Among the factors considered in the model are Currencies, U.S. Bonds, Indexes. These weightings can vary through time and are recalculated daily using lasso and ridge regression. The short term signal is obtained from the Signal Oscillator which is calculated using an algorithm on the price movement around the Factor Trend Channel. Signals are also given for the medium and long term trend.

A short, medium and long term signal alert is given warning of a possible trend change.

A channel alert is given warning that prices may move above or below the trend channel.

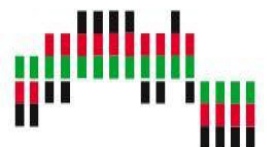
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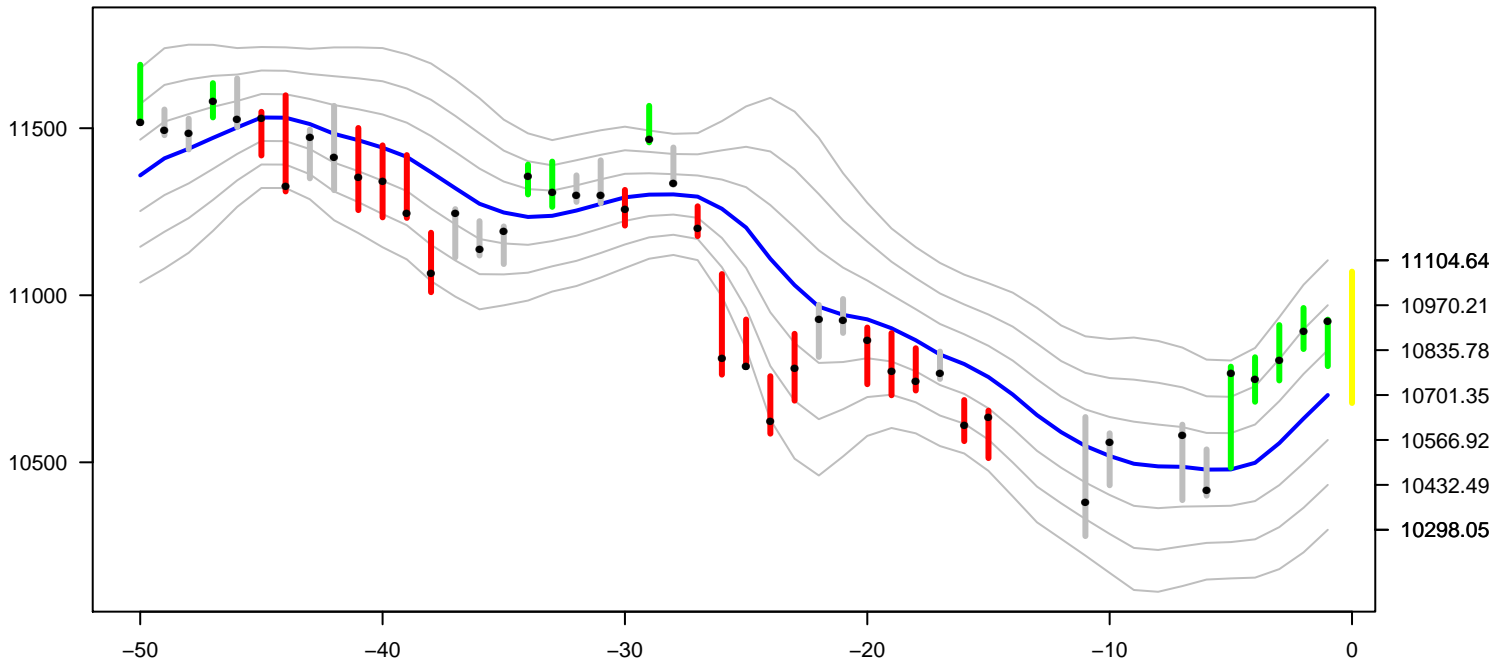
Historical Data may be subject to revision which may affect the signal.

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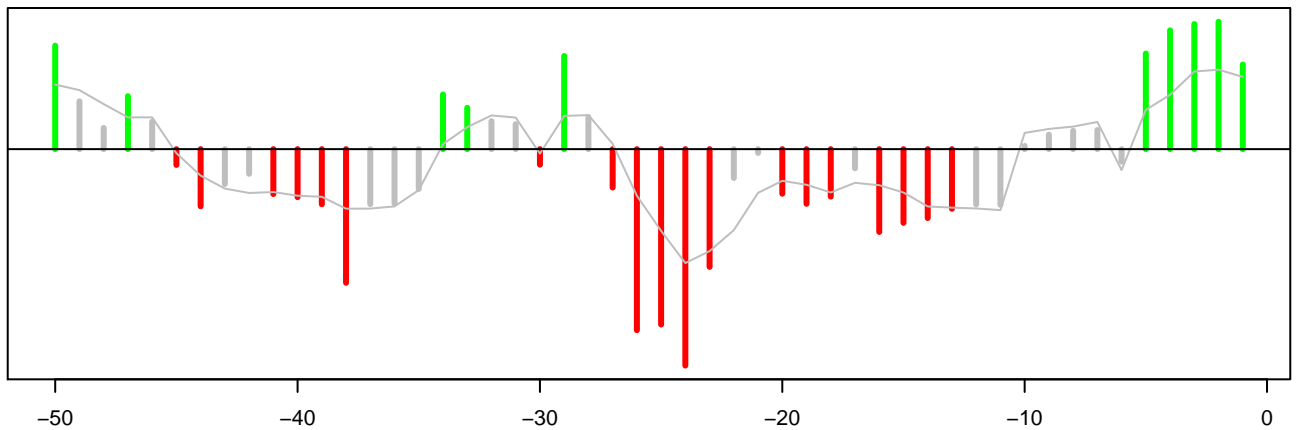


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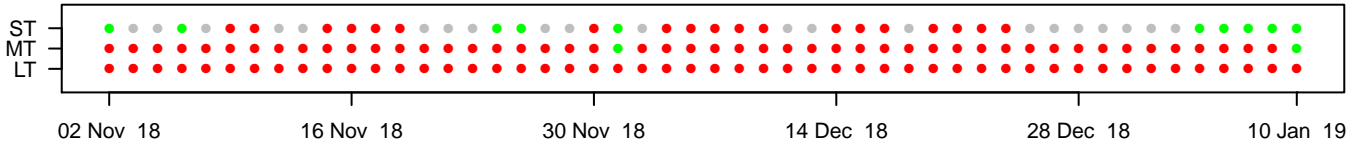
DAX Price and Factor Model Trend Channel.
Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



Short Term Signal Oscillator. Green: Bullish. Red: Bearish. Grey: Neutral, uncertainty in direction.



Short (ST), Medium (MT) and Long Term (LT) Signals



DAX

The short term signal is green, bullish.

The medium term signal is green, bullish. Alert: The medium term oscillator has turned positive.

The long term signal is red, bearish

The trend channel is constructed from a factor model that looks at the dynamic relationship between related markets.

Among the factors considered in the model are Currencies, U.S. Bonds, Indexes. These weightings can vary through time and are recalculated daily using lasso and ridge regression. The short term signal is obtained from the Signal Oscillator which is calculated using an algorithm on the price movement around the Factor Trend Channel. Signals are also given for the medium and long term trend. A short, medium and long term signal alert is given warning of a possible trend change. A channel alert is given warning that prices may move above or below the trend channel.

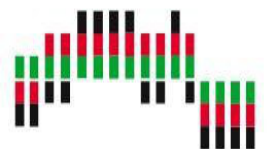
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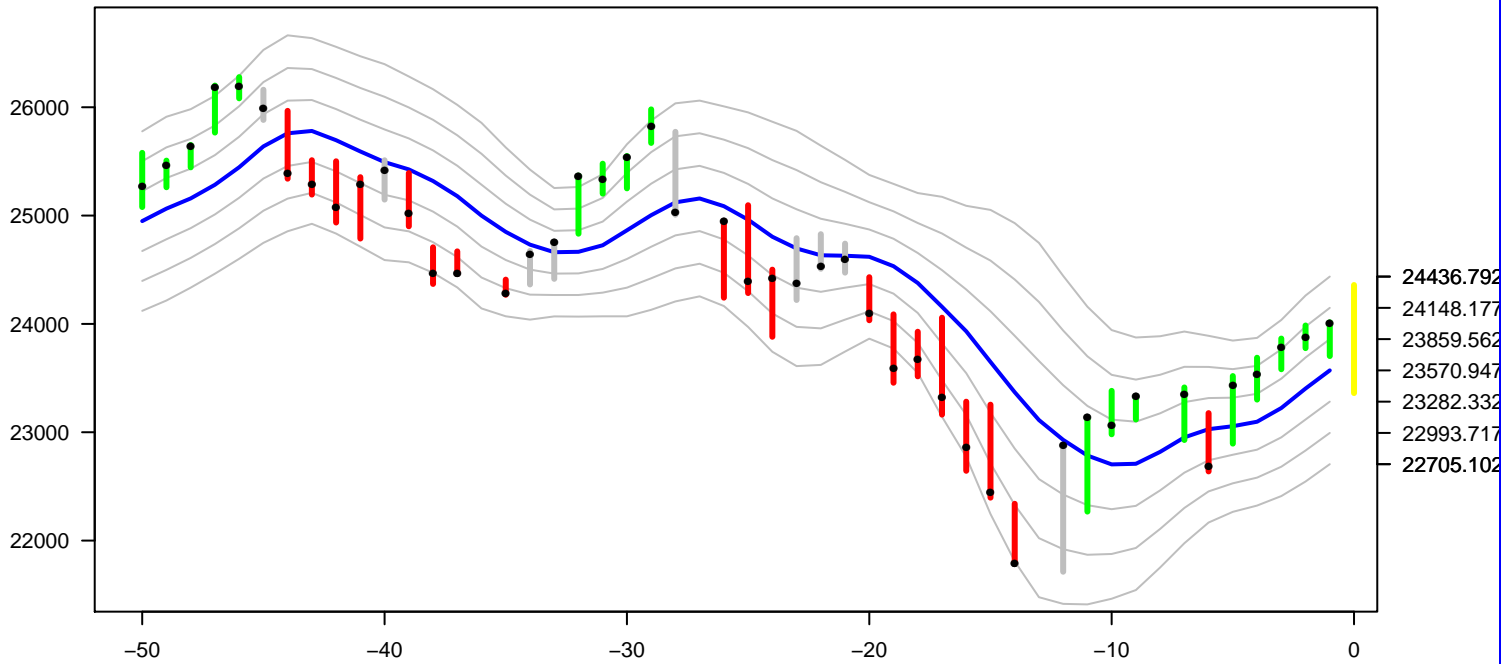
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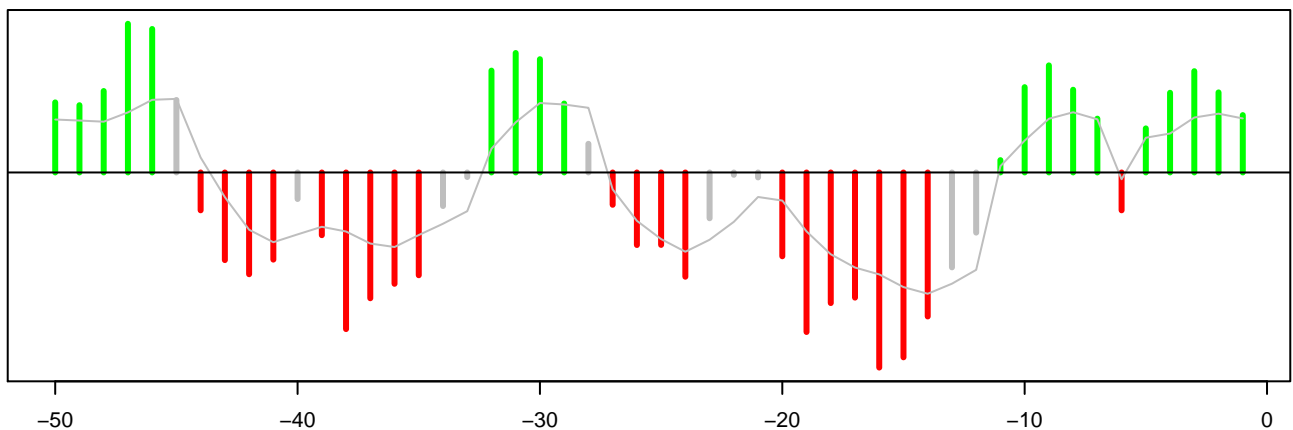


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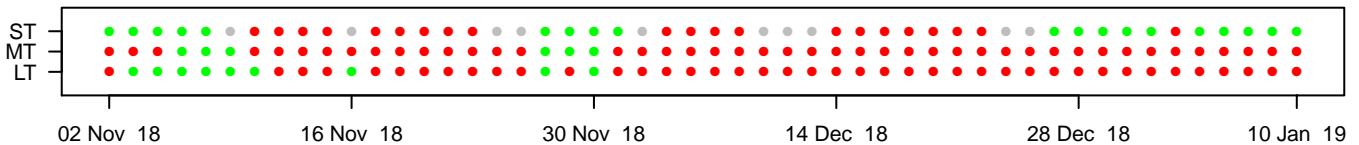
Dow Jones (DJI) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



Short Term Signal Oscillator. Green: Bullish. Red: Bearish. Grey: Neutral, uncertainty in direction.



Short (ST), Medium (MT) and Long Term (LT) Signals



Dow Jones (DJI)

The short term signal is green, bullish.

The medium term signal is red, bearish

The long term signal is red, bearish

The trend channel is constructed from a factor model that looks at the dynamic relationship between related markets.

Among the factors considered in the model are Currencies, U.S. Bonds, Indexes. These weightings can vary through time and are recalculated daily using lasso and ridge regression. The short term signal is obtained from the Signal Oscillator which is calculated using an algorithm on the price movement around the Factor Trend Channel. Signals are also given for the medium and long term trend.

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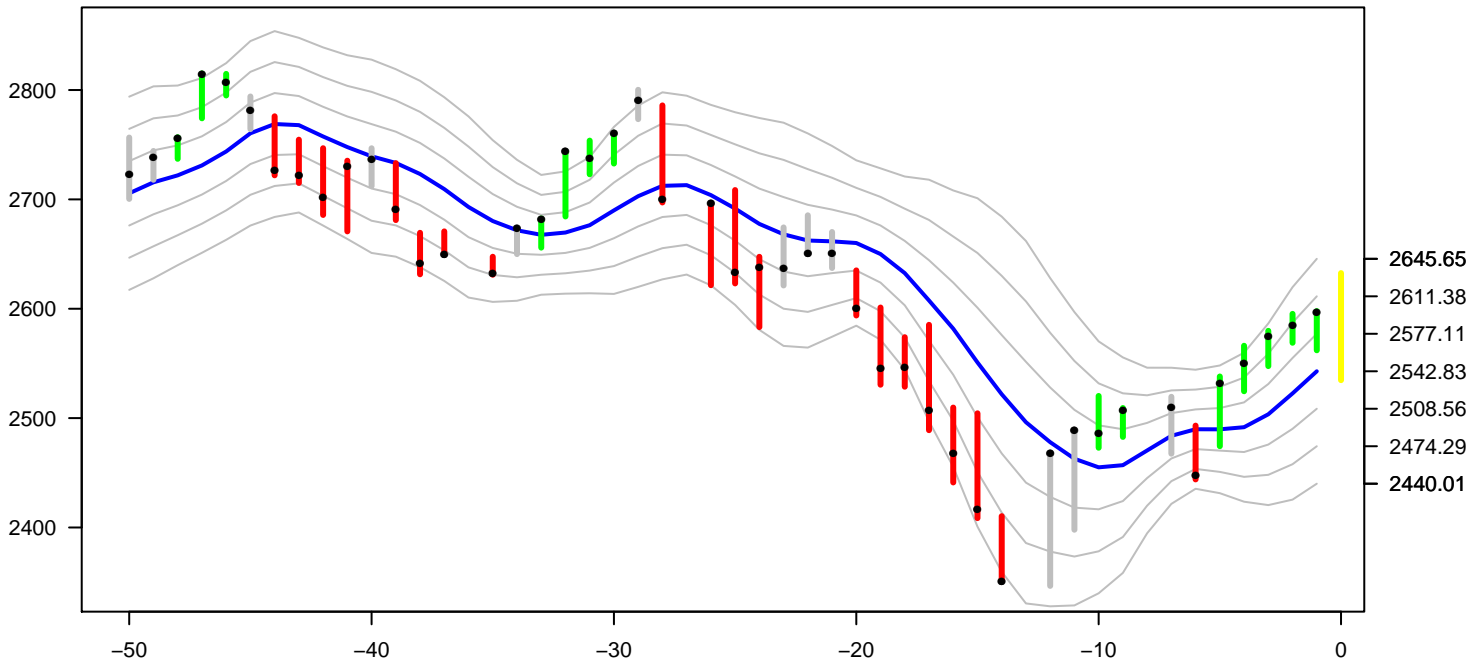
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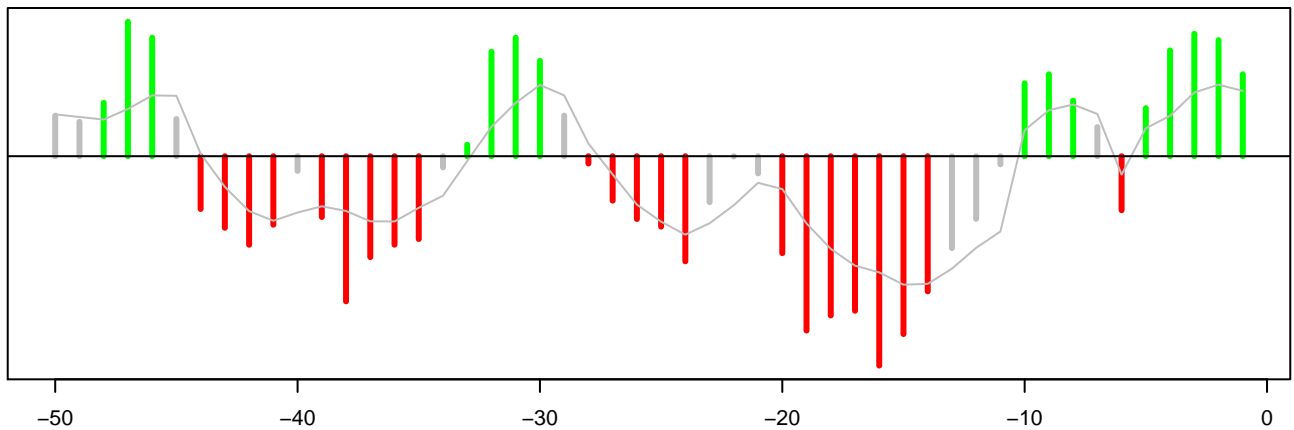


Metal Price Analytics: Index Report 11-Jan-2019

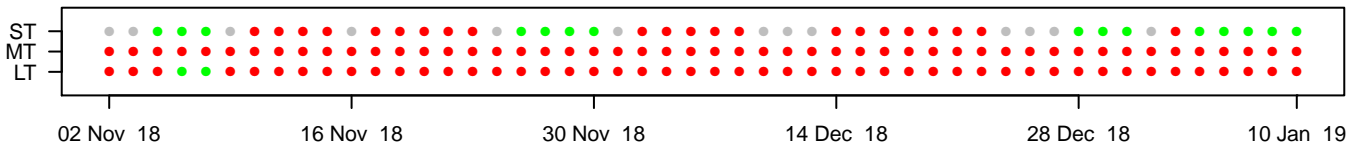
S&P 500 (GSPC) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



Short Term Signal Oscillator. Green: Bullish. Red: Bearish. Grey: Neutral, uncertainty in direction.



Short (ST), Medium (MT) and Long Term (LT) Signals



S&P 500 (GSPC)

The short term signal is green, bullish.

The medium term signal is red, bearish

The long term signal is red, bearish

The trend channel is constructed from a factor model that looks at the dynamic relationship between related markets.

Among the factors considered in the model are Currencies, U.S. Bonds, Indexes. These weightings can vary through time and are recalculated daily using lasso and ridge regression. The short term signal is obtained from the Signal Oscillator which is calculated using an algorithm on the price movement around the Factor Trend Channel. Signals are also given for the medium and long term trend. A short, medium and long term signal alert is given warning of a possible trend change.

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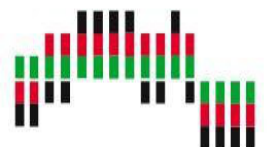
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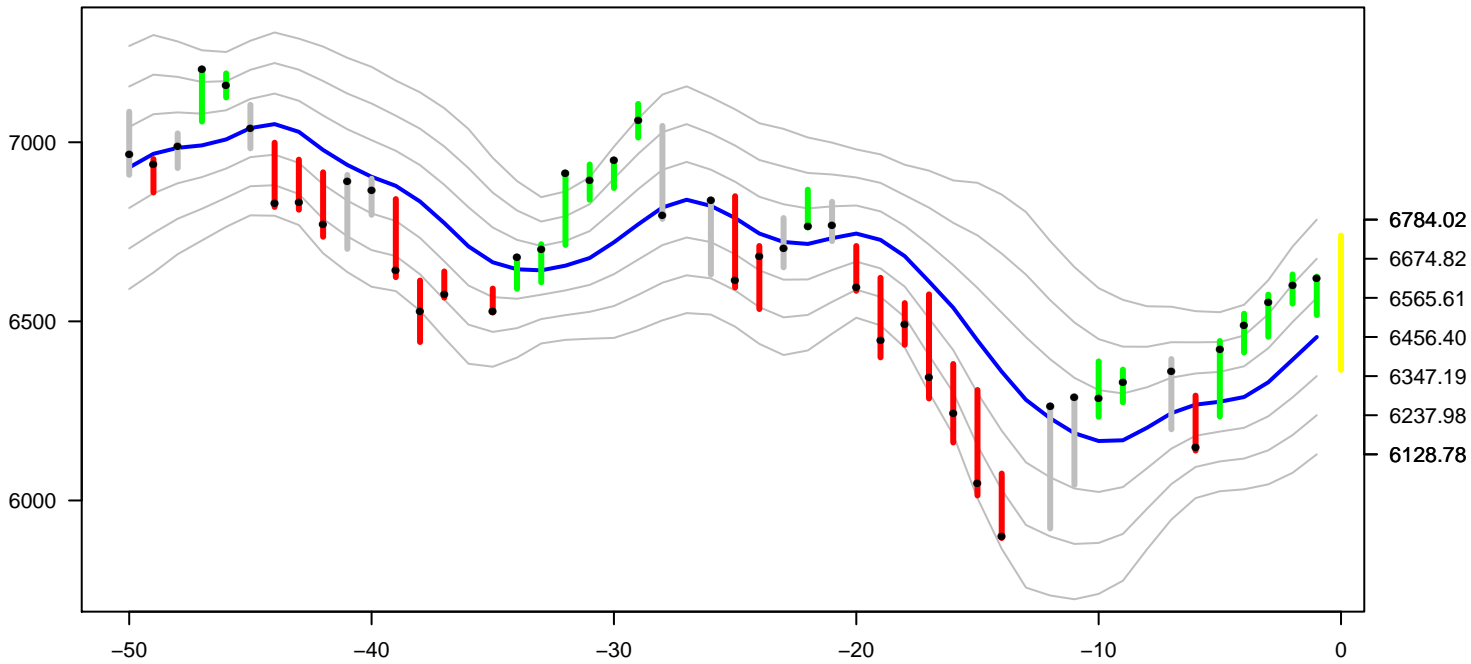
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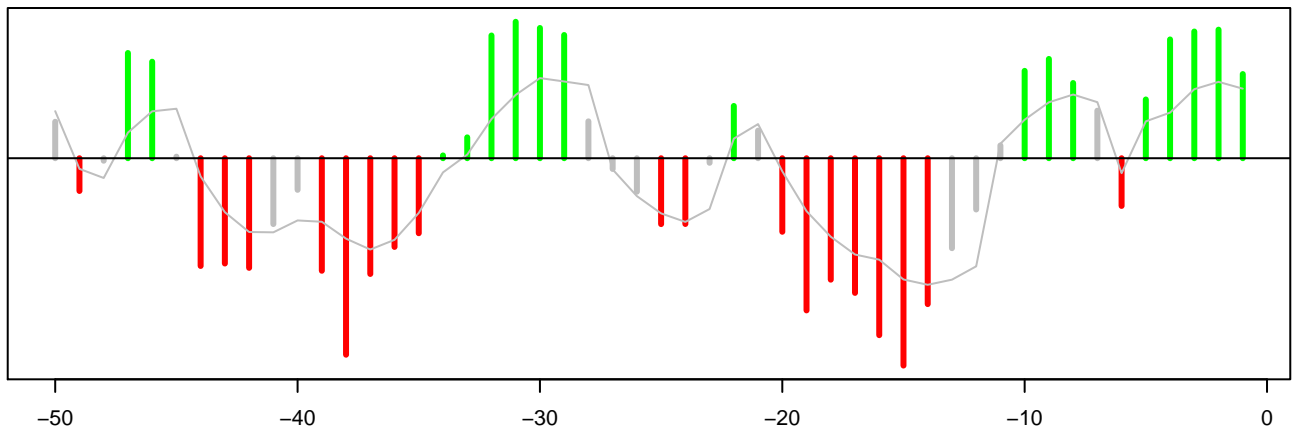


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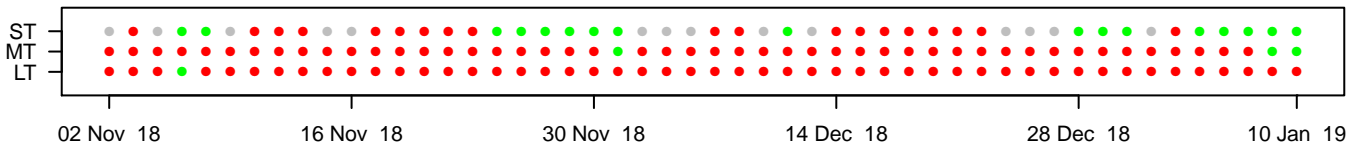
Nasdaq 100 (IXND) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



Short Term Signal Oscillator. Green: Bullish. Red: Bearish. Grey: Neutral, uncertainty in direction.



Short (ST), Medium (MT) and Long Term (LT) Signals



Nasdaq 100 (IXND)

The short term signal is green, bullish.

The medium term signal is green, bullish.

The long term signal is red, bearish

The trend channel is constructed from a factor model that looks at the dynamic relationship between related markets.

Among the factors considered in the model are Currencies, U.S. Bonds, Indexes. These weightings can vary through time and are recalculated daily using lasso and ridge regression. The short term signal is obtained from the Signal Oscillator which is calculated using an algorithm on the price movement around the Factor Trend Channel. Signals are also given for the medium and long term trend. A short, medium and long term signal alert is given warning of a possible trend change. A channel alert is given warning that prices may move above or below the trend channel.

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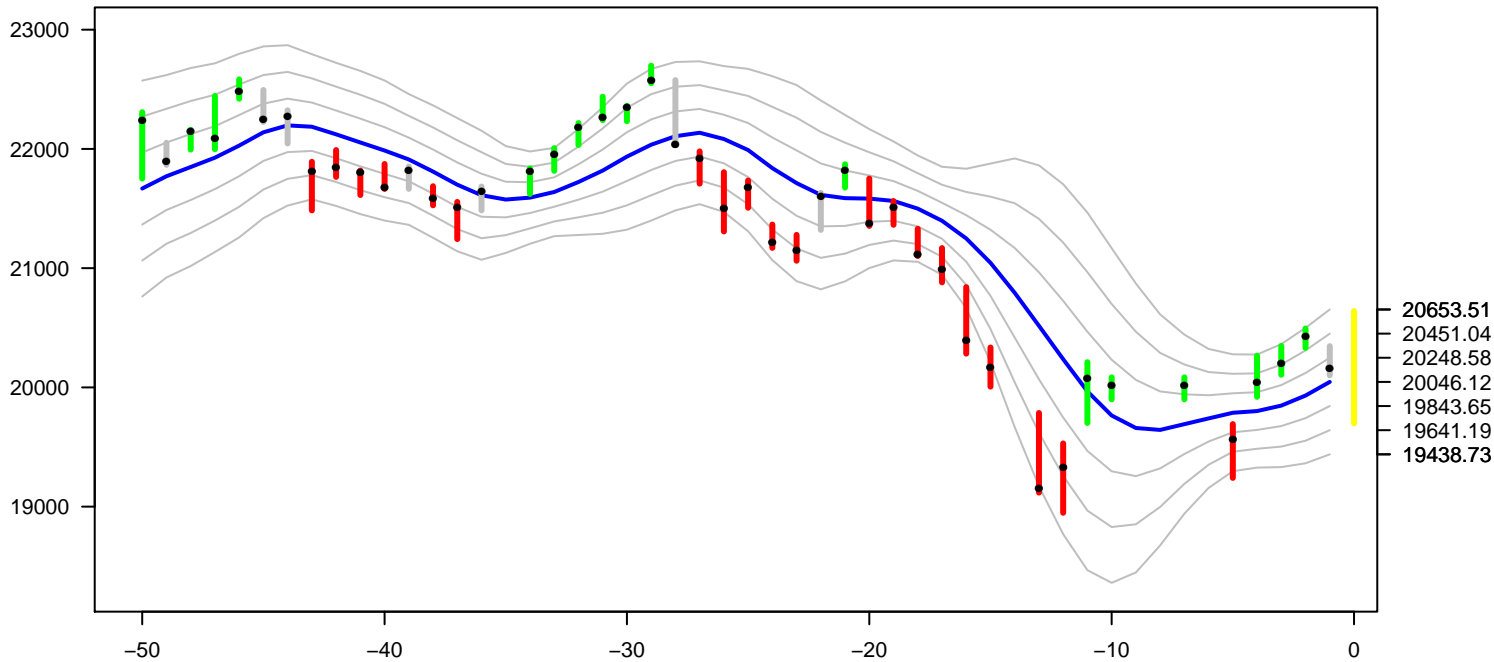
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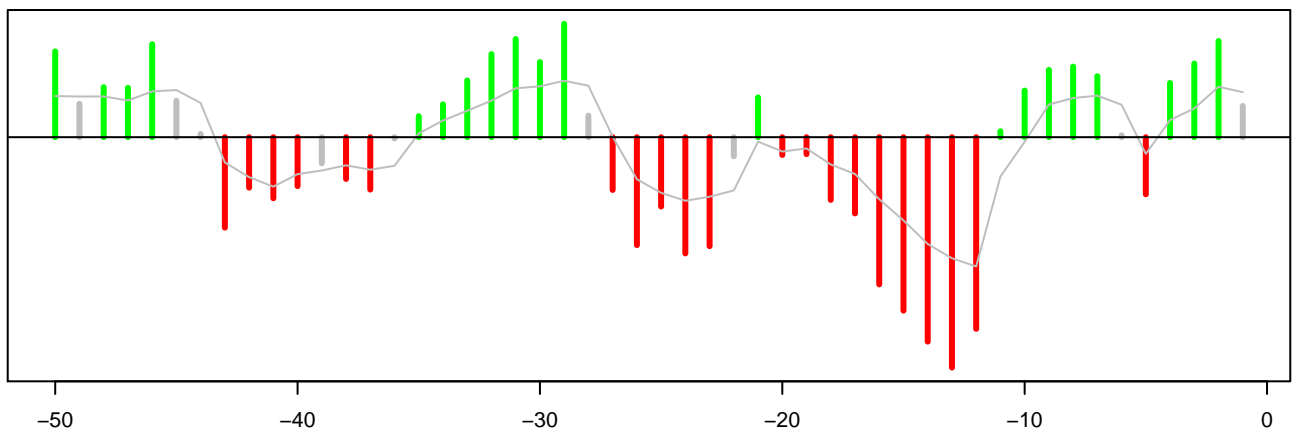


Metal Price Analytics: Index Report 11-Jan-2019

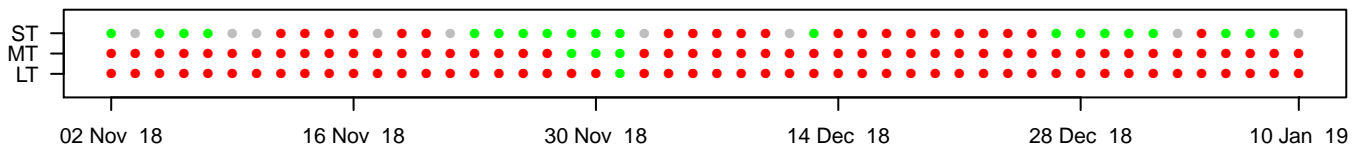
Nikkei 225 (NIK) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



Short Term Signal Oscillator. Green: Bullish. Red: Bearish. Grey: Neutral, uncertainty in direction.



Short (ST), Medium (MT) and Long Term (LT) Signals



Nikkei 225 (NIK)

The short term signal is grey, neutral.

The medium term signal is red, bearish

The long term signal is red, bearish

The trend channel is constructed from a factor model that looks at the dynamic relationship between related markets.

Among the factors considered in the model are Currencies, U.S. Bonds, Indexes. These weightings can vary through time and are recalculated daily using lasso and ridge regression. The short term signal is obtained from the Signal Oscillator which is calculated using an algorithm on the price movement around the Factor Trend Channel. Signals are also given for the medium and long term trend. A short, medium and long term signal alert is given warning of a possible trend change.

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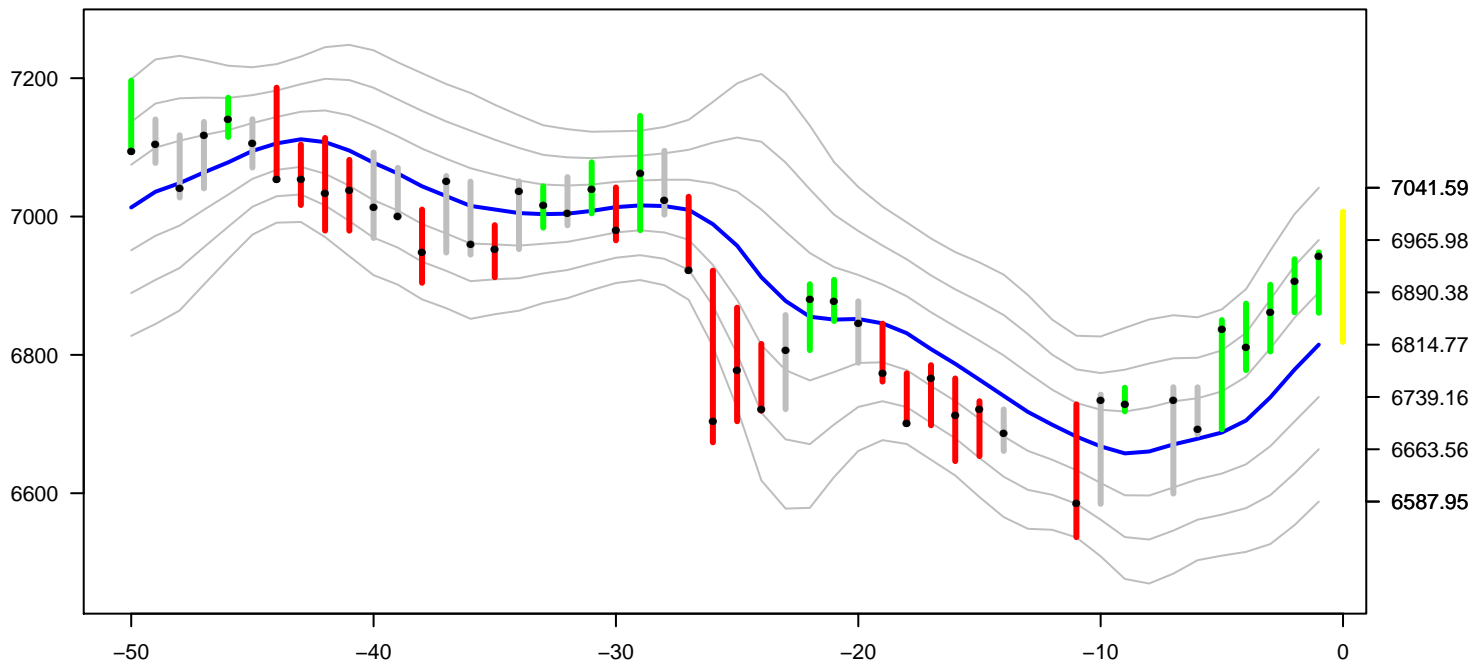
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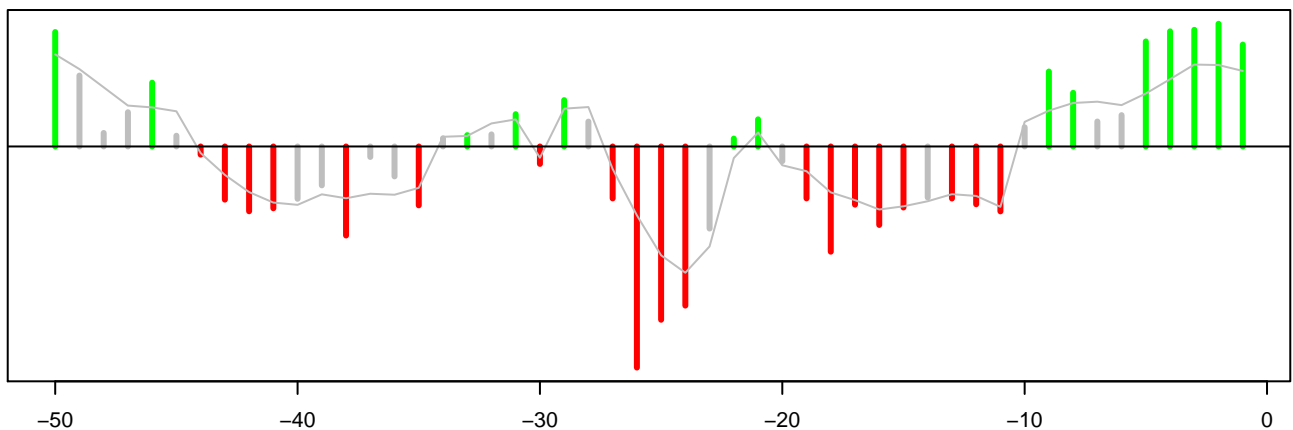


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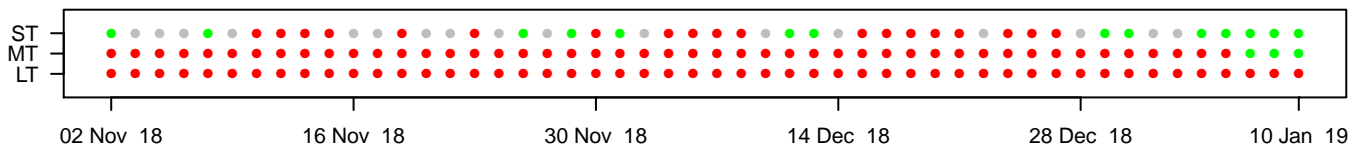
FTSE 100 (UKX) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



Short Term Signal Oscillator. Green: Bullish. Red: Bearish. Grey: Neutral, uncertainty in direction.



Short (ST), Medium (MT) and Long Term (LT) Signals



FTSE 100 (UKX)

The short term signal is green, bullish.

The medium term signal is green, bullish.

The long term signal is red, bearish

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