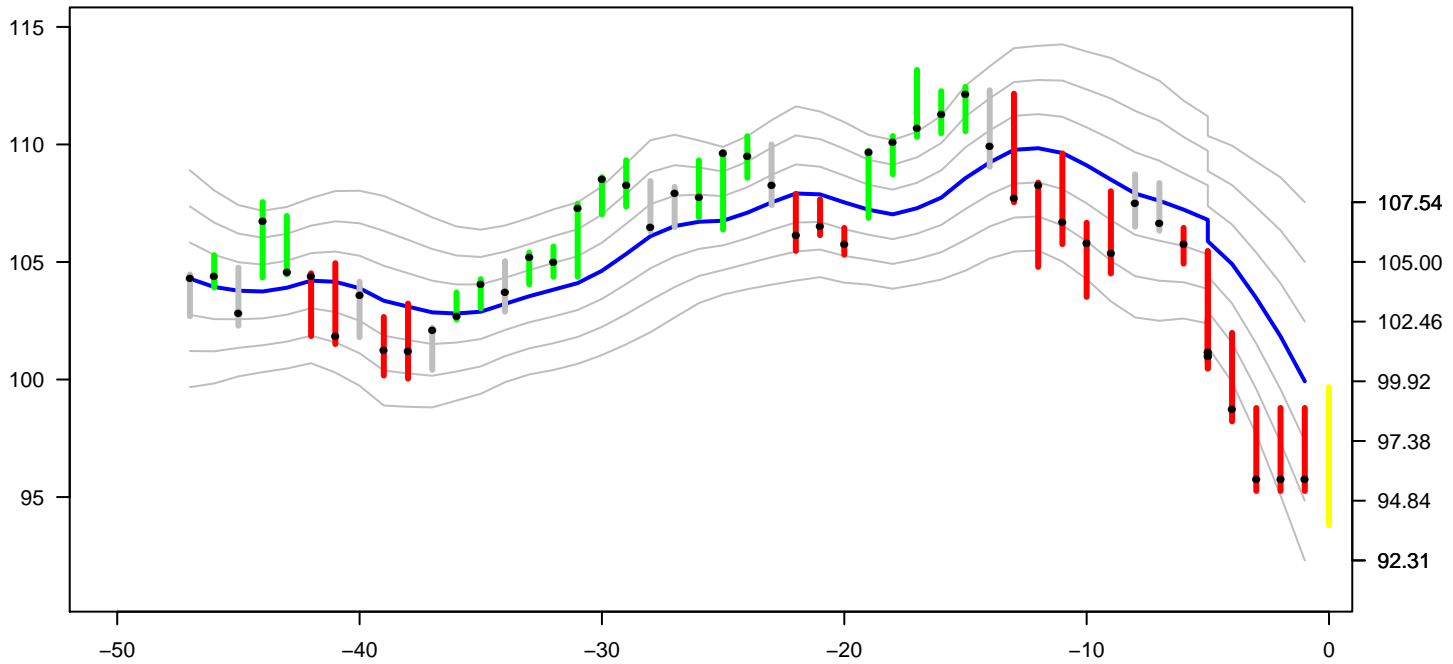
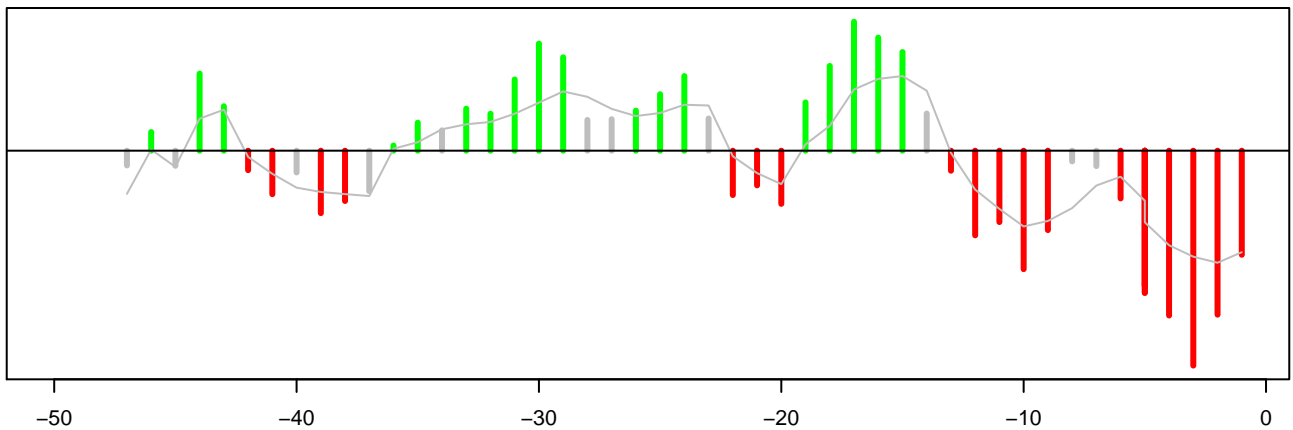


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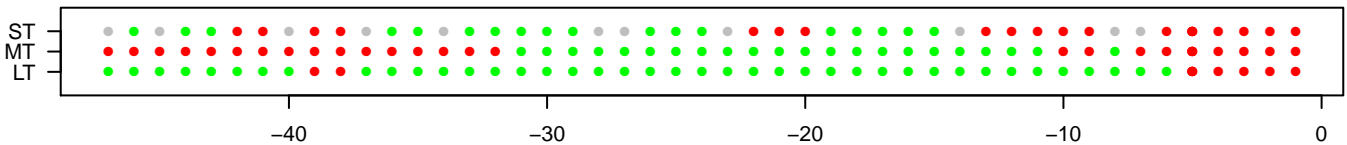
American Express (AXP) Price and Factor Model Trend Channel.
 Last Price History Date: 24 Dec 2018. Expected region for the next day: Yellow Bar.



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



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



American Express (AXP)

The short term signal is red, bearish

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.

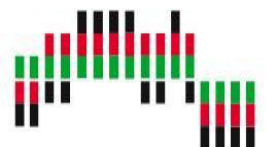
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Past performance is not indicative of future results.

Every effort has been taken to present the correct information, however, neither Metal Price Analytics Ltd nor its staff are liable to any error that may occur.

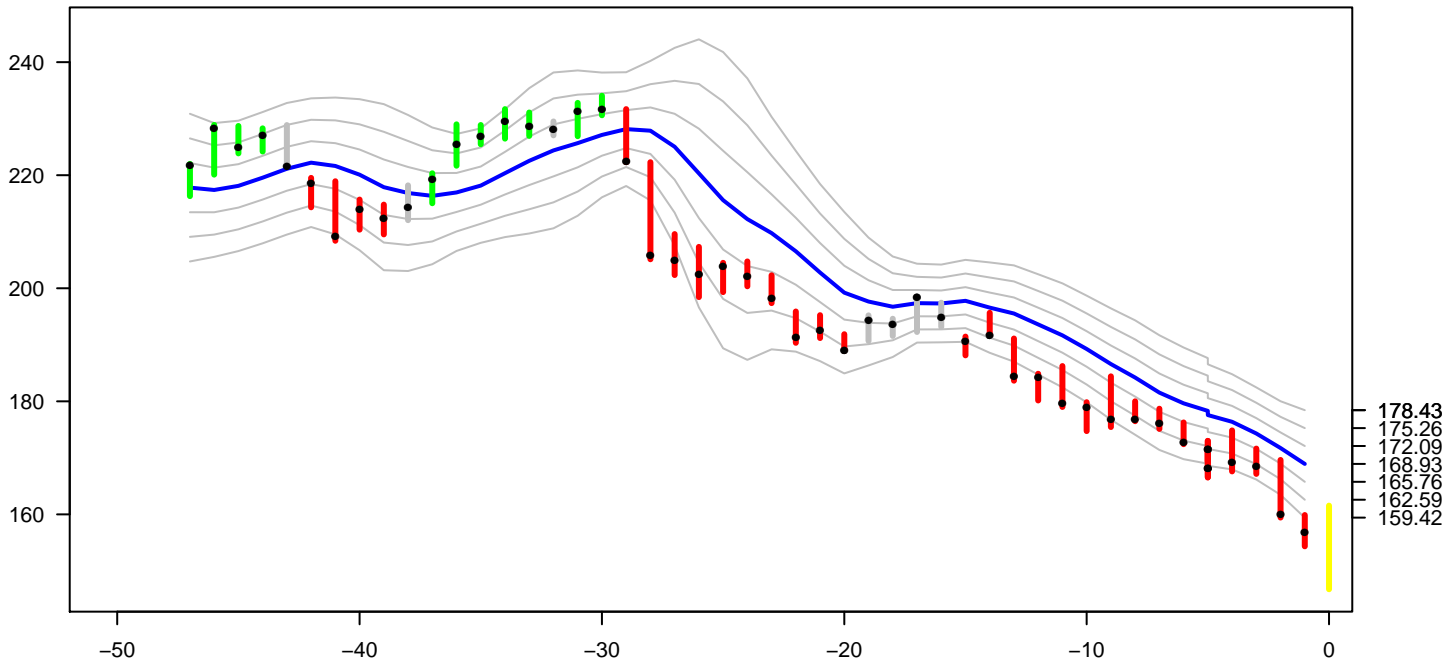
Historical Data may be subject to revision which may affect the signal.

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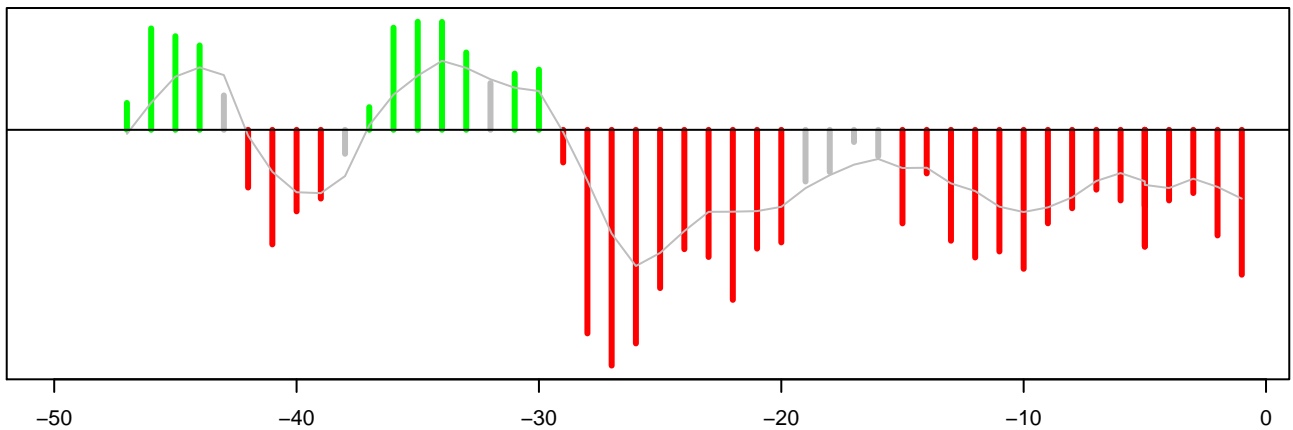


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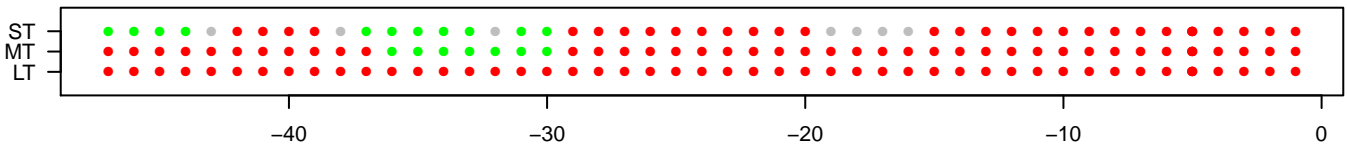
Goldman Sachs (GS) Price and Factor Model Trend Channel.
 Last Price History Date: 24 Dec 2018. Expected region for the next day: Yellow Bar.



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



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



Goldman Sachs (GS). Channel Alert: The price may move below the lower channel.

The short term signal is red, bearish

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.

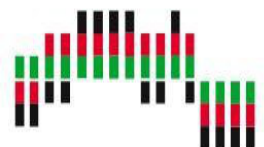
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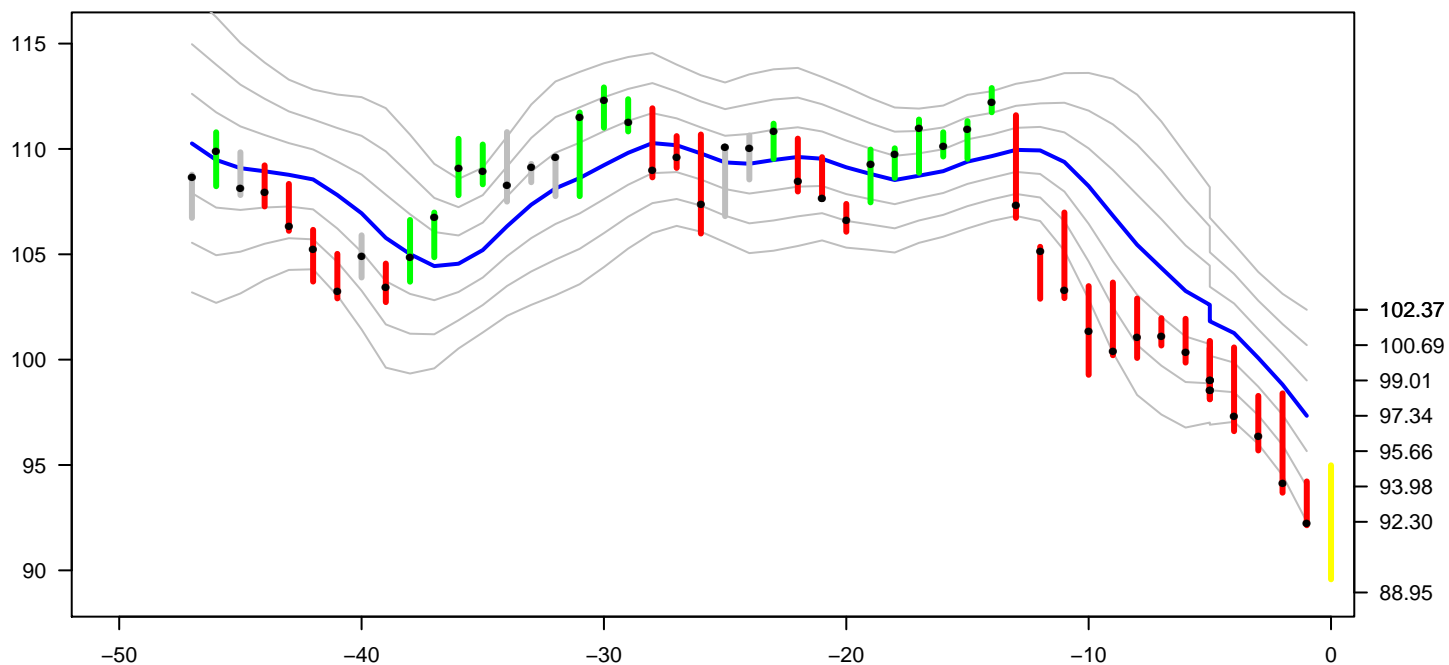
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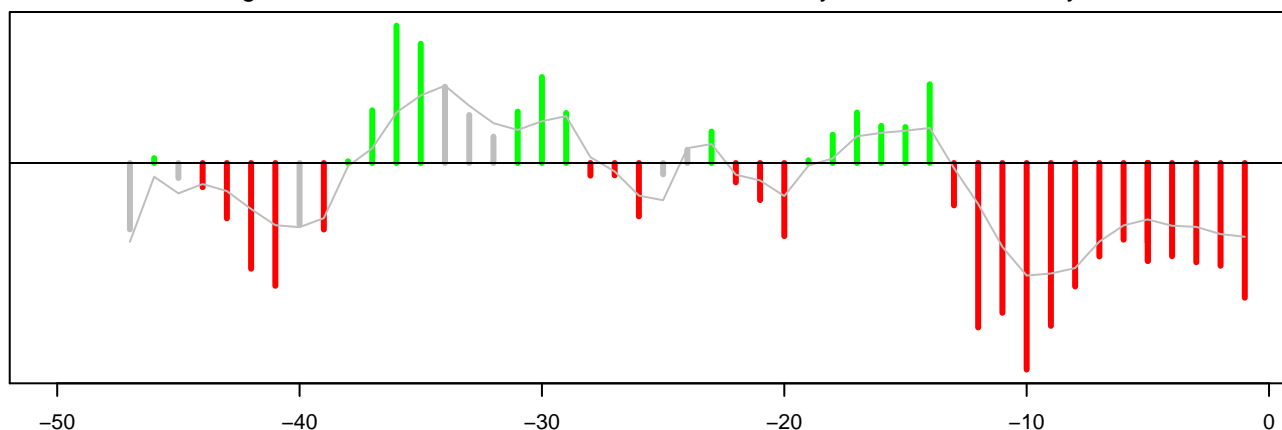


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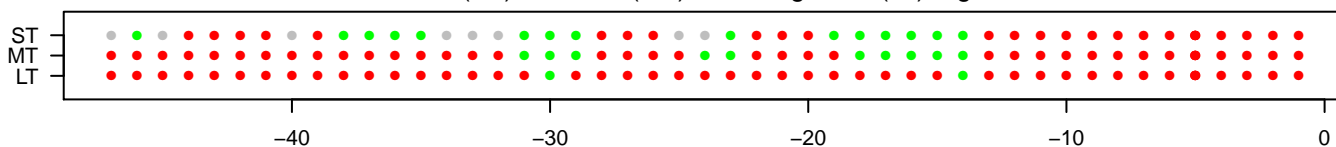
J.P. Morgan Chase (JPM) Price and Factor Model Trend Channel.
 Last Price History Date: 24 Dec 2018. Expected region for the next day: Yellow Bar.



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



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



J.P. Morgan Chase (JPM). Channel Alert: The price may move below the lower channel.
 The short term signal is red, bearish
 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.

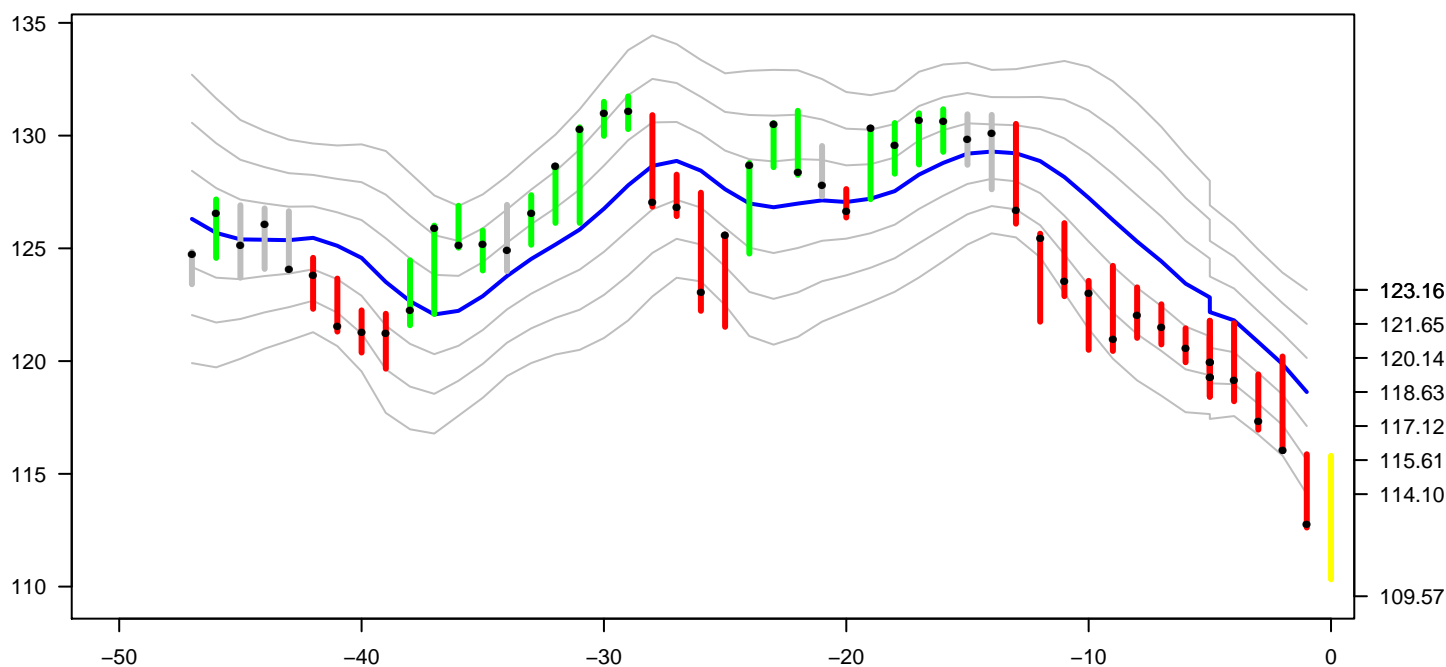
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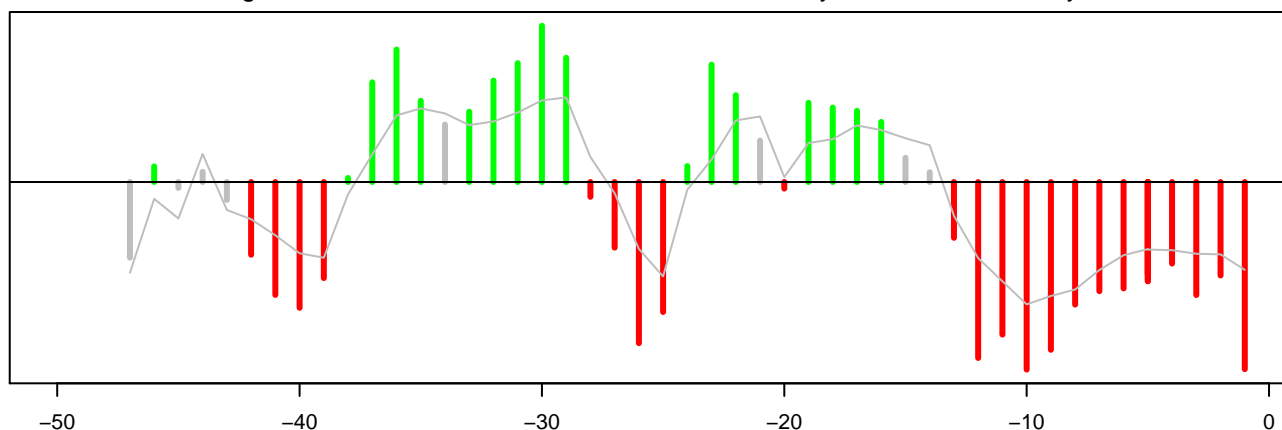


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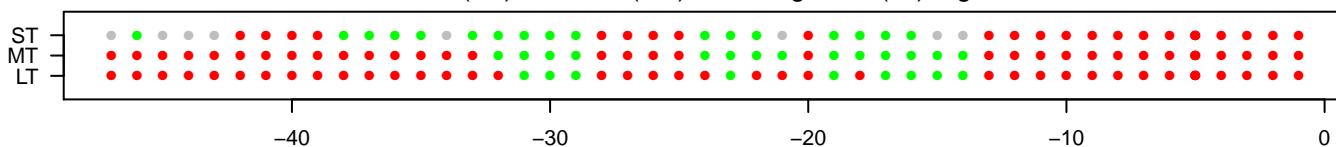
The Travelers Companies (TRV) Price and Factor Model Trend Channel.
 Last Price History Date: 24 Dec 2018. Expected region for the next day: Yellow Bar.



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



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



The Travelers Companies (TRV). Channel Alert: The price may move below the lower channel.

The short term signal is red, bearish

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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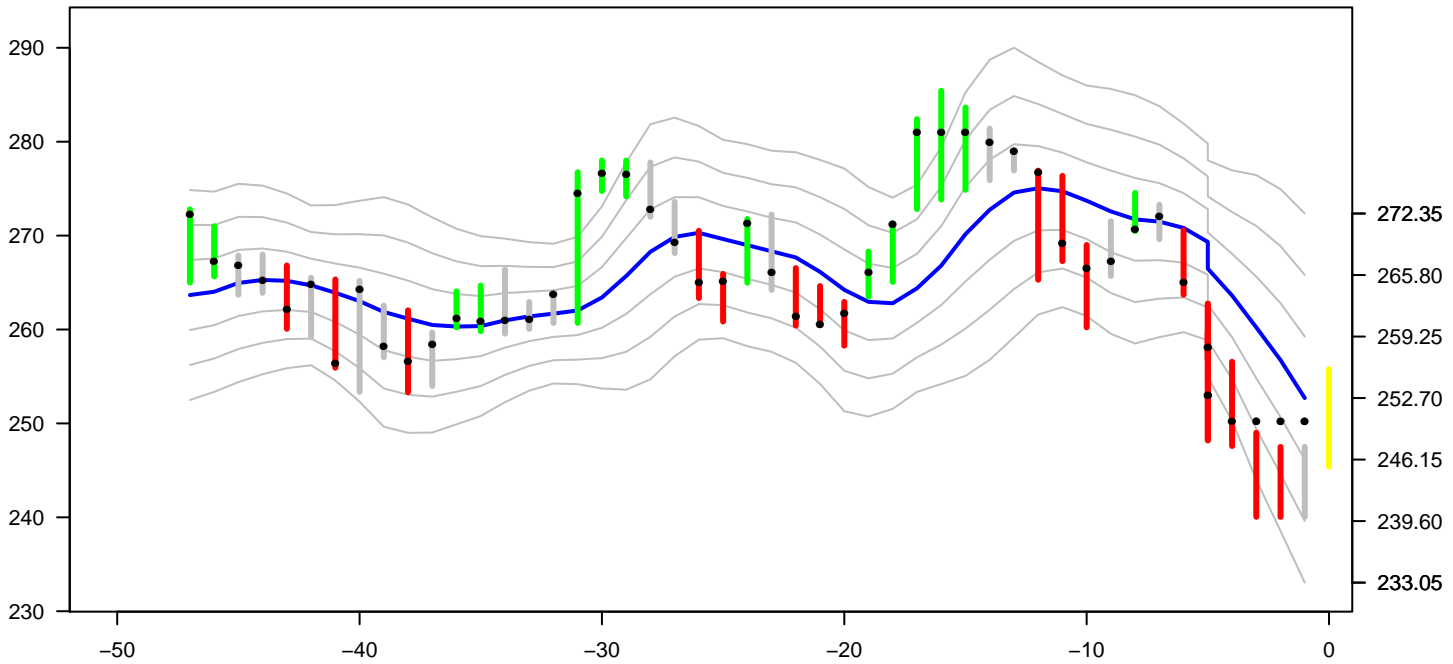
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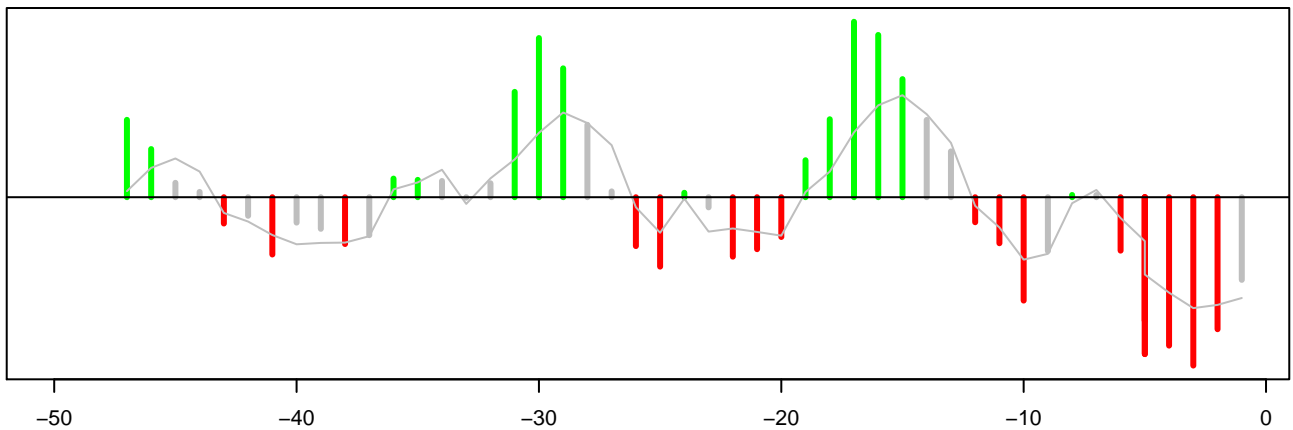


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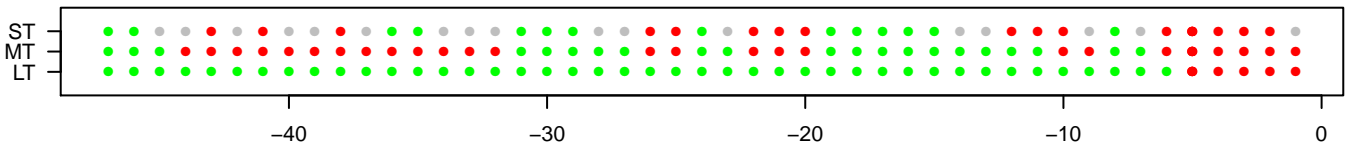
UnitedHealth Group (UNH) Price and Factor Model Trend Channel.
 Last Price History Date: 24 Dec 2018. Expected region for the next day: Yellow Bar.



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



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



UnitedHealth Group (UNH)

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.

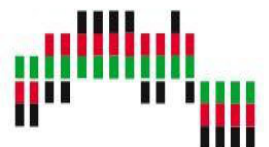
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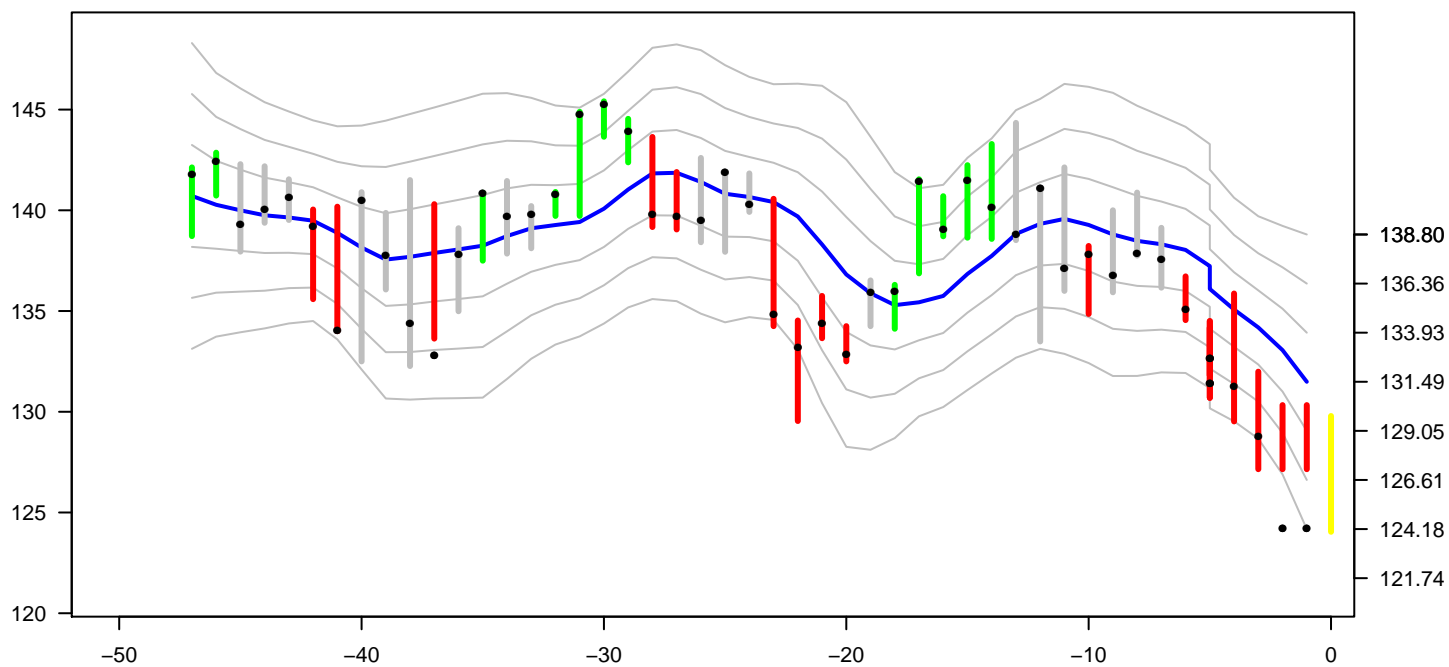
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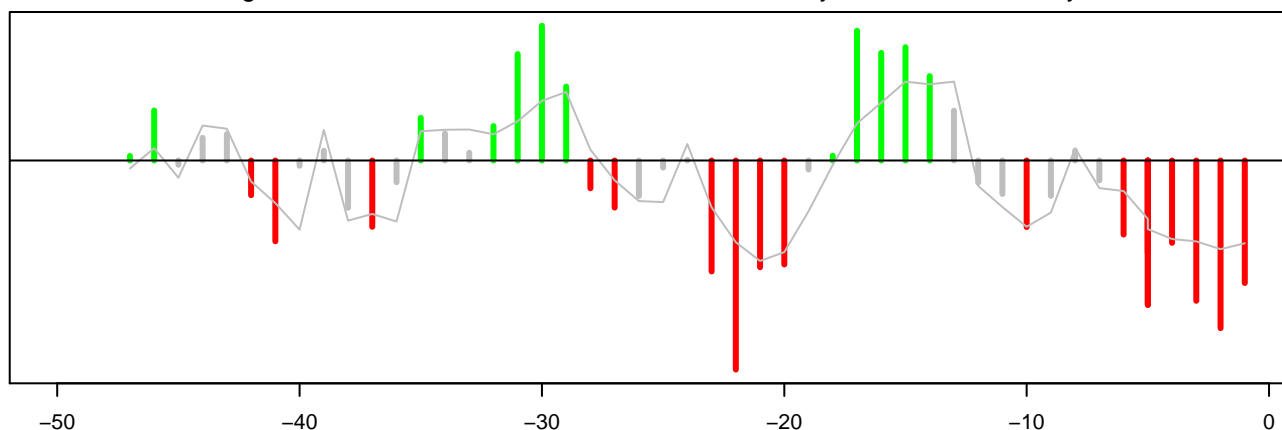


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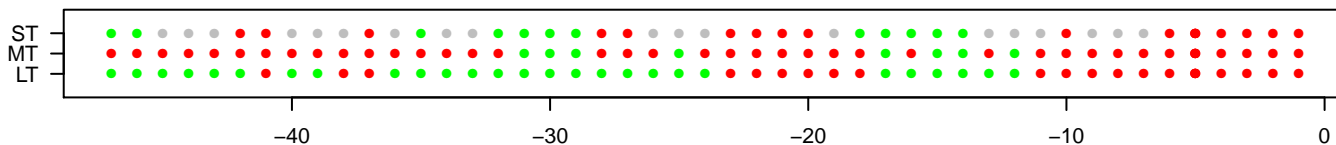
Visa (V) Price and Factor Model Trend Channel.
 Last Price History Date: 24 Dec 2018. Expected region for the next day: Yellow Bar.



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



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



Visa (V). Channel Alert: The price may move below the lower channel.
 The short term signal is red, bearish
 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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