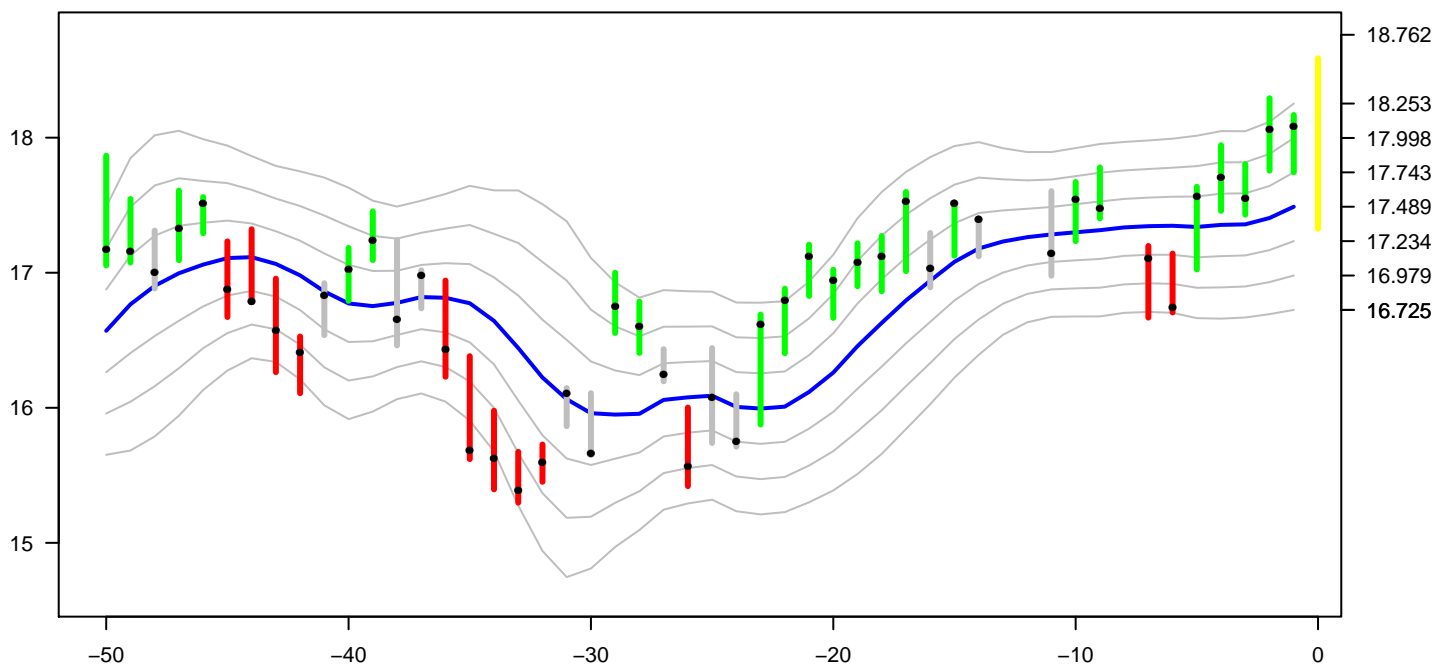
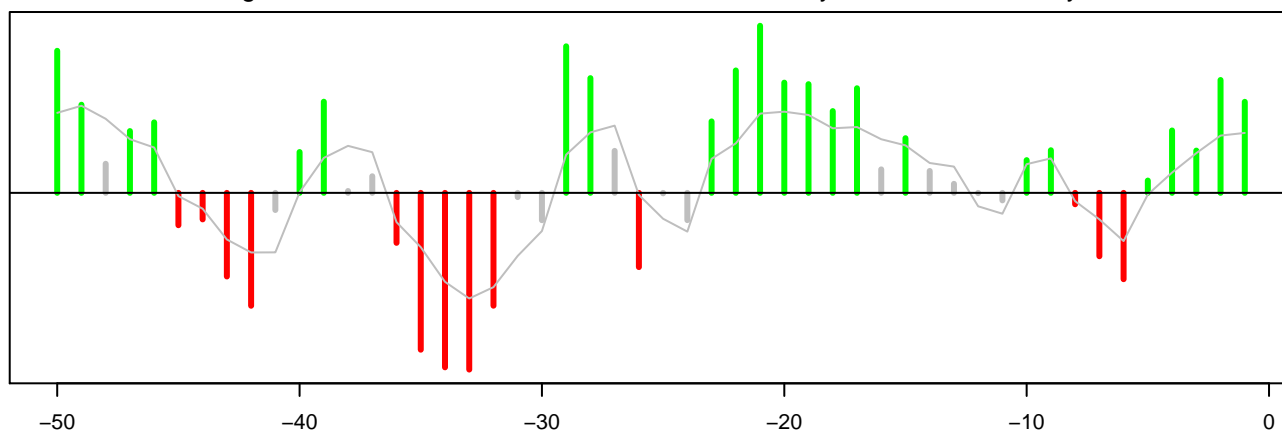


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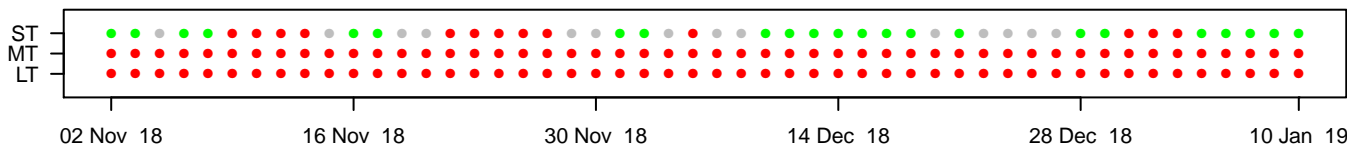
Anglo American (AAL) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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

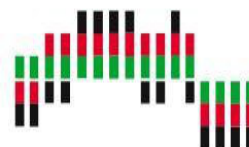


Anglo American (AAL). Channel Alert: The price may move above the upper channel.
 The short term signal is green, bullish.
 The medium term signal is red, bearish
 The long term signal is red, bearish

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

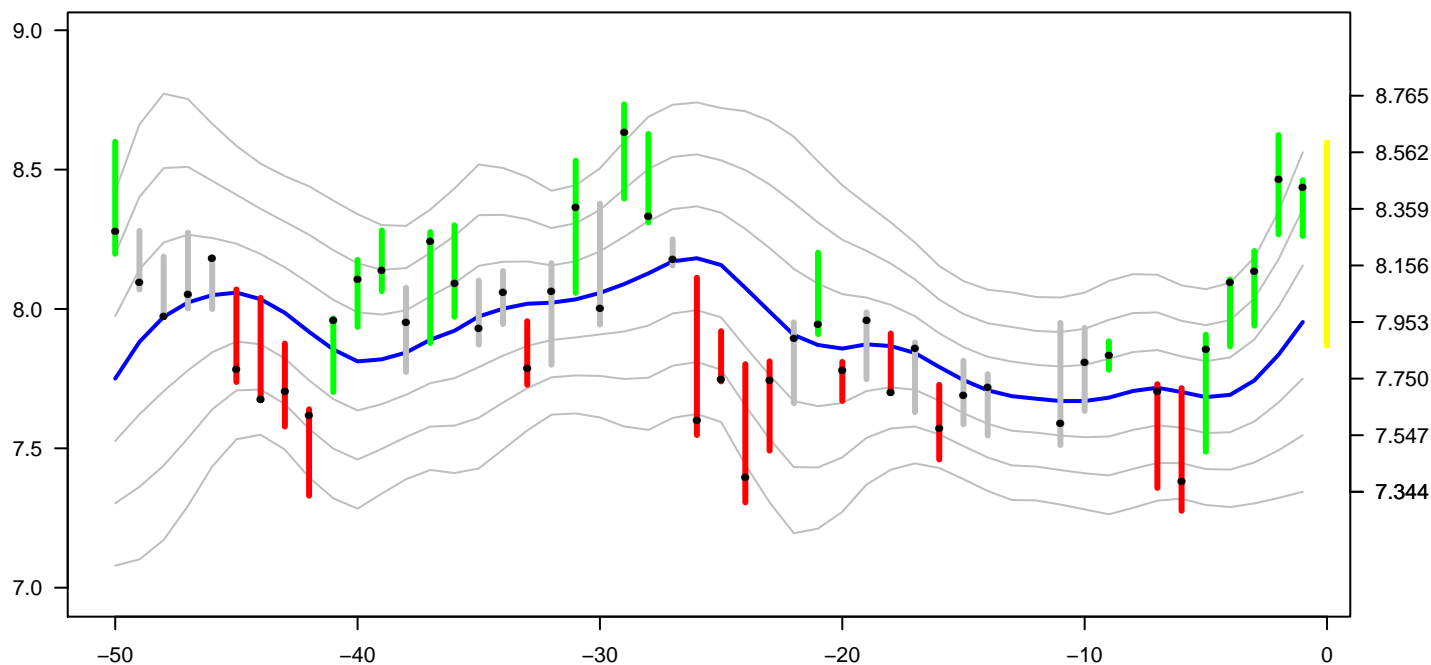
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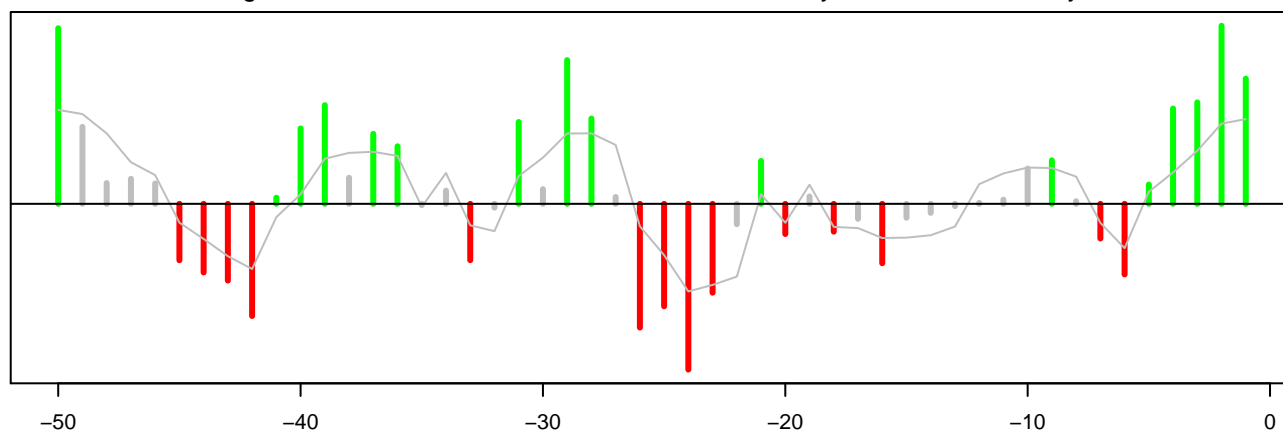


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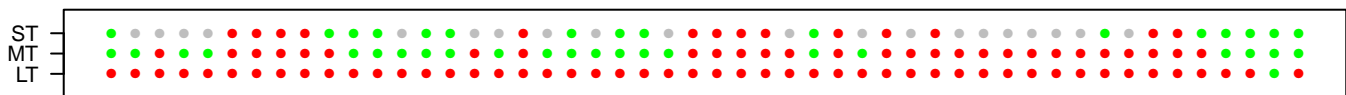
Antofagasta (ANTO) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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



02 Nov 18 16 Nov 18 30 Nov 18 14 Dec 18 28 Dec 18 10 Jan 19

Antofagasta (ANTO). Channel Alert: The price may move above the upper channel.

The short term signal is green, bullish.

The medium term signal is green, bullish.

The long term signal is red, bearish Alert: The long term oscillator has turned negative.

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.

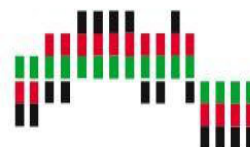
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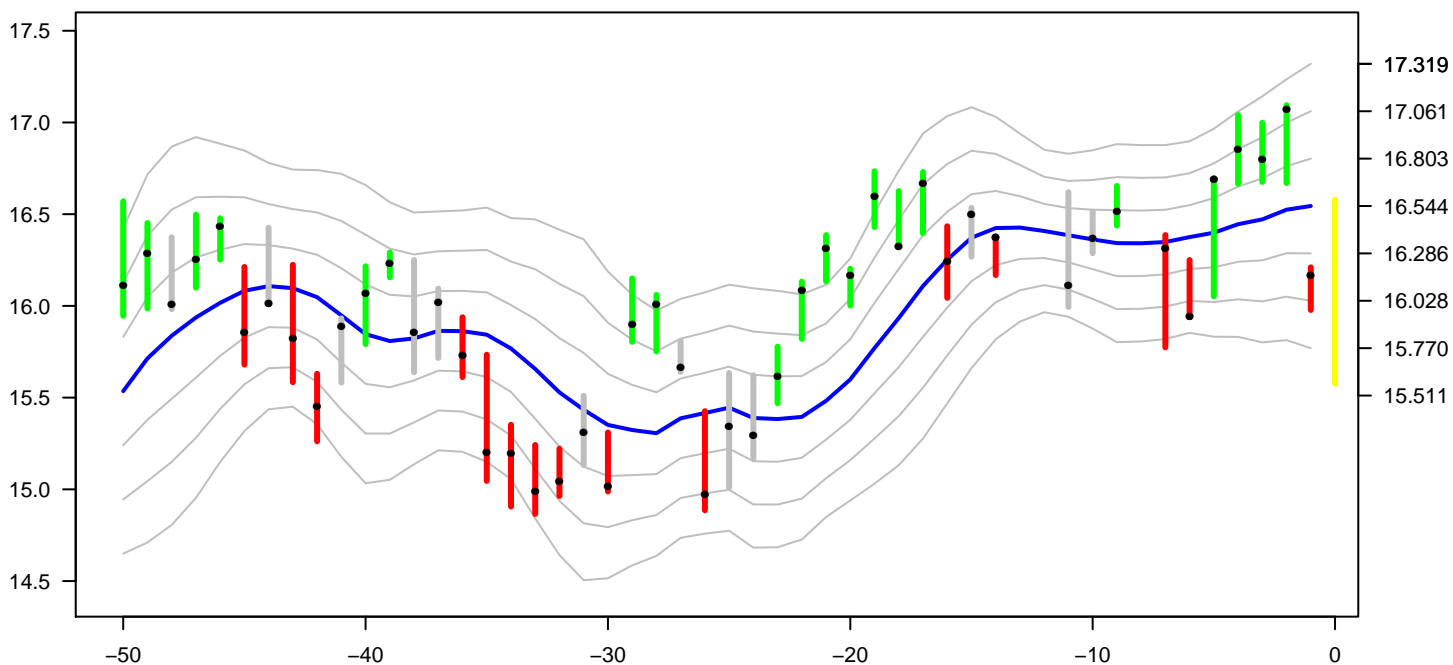
Historical Data may be subject to revision which may affect the signal.

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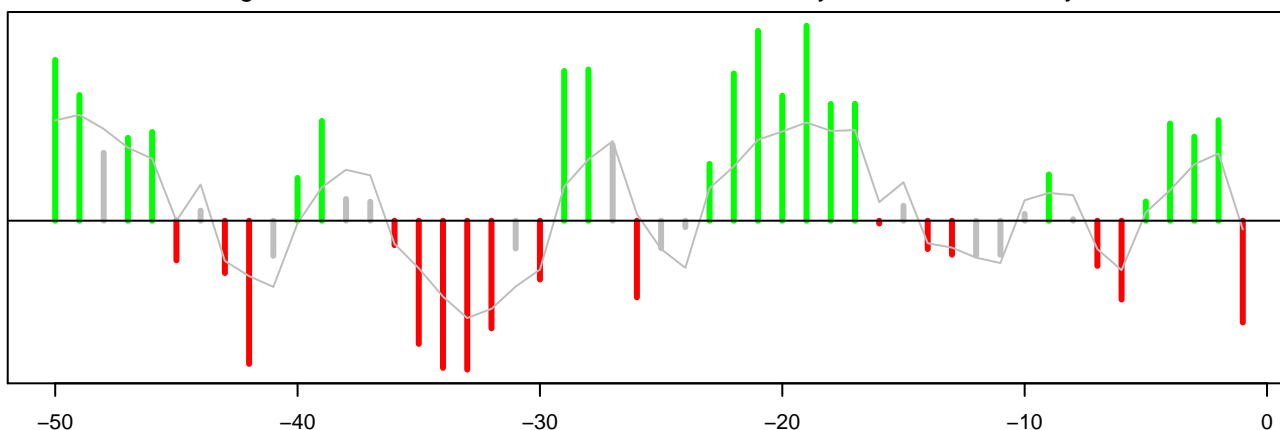


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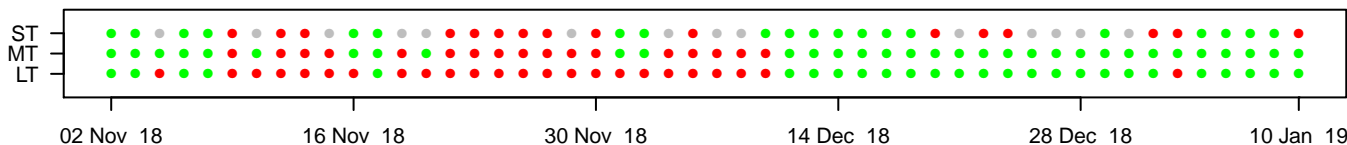
BHP Group (BHP) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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



BHP Group (BHP). Channel Alert: The price may move below the lower channel.
 The short term signal is red, bearish Alert: The short term oscillator has turned negative.
 The medium term signal is green, bullish.
 The long term signal is green, bullish.

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.

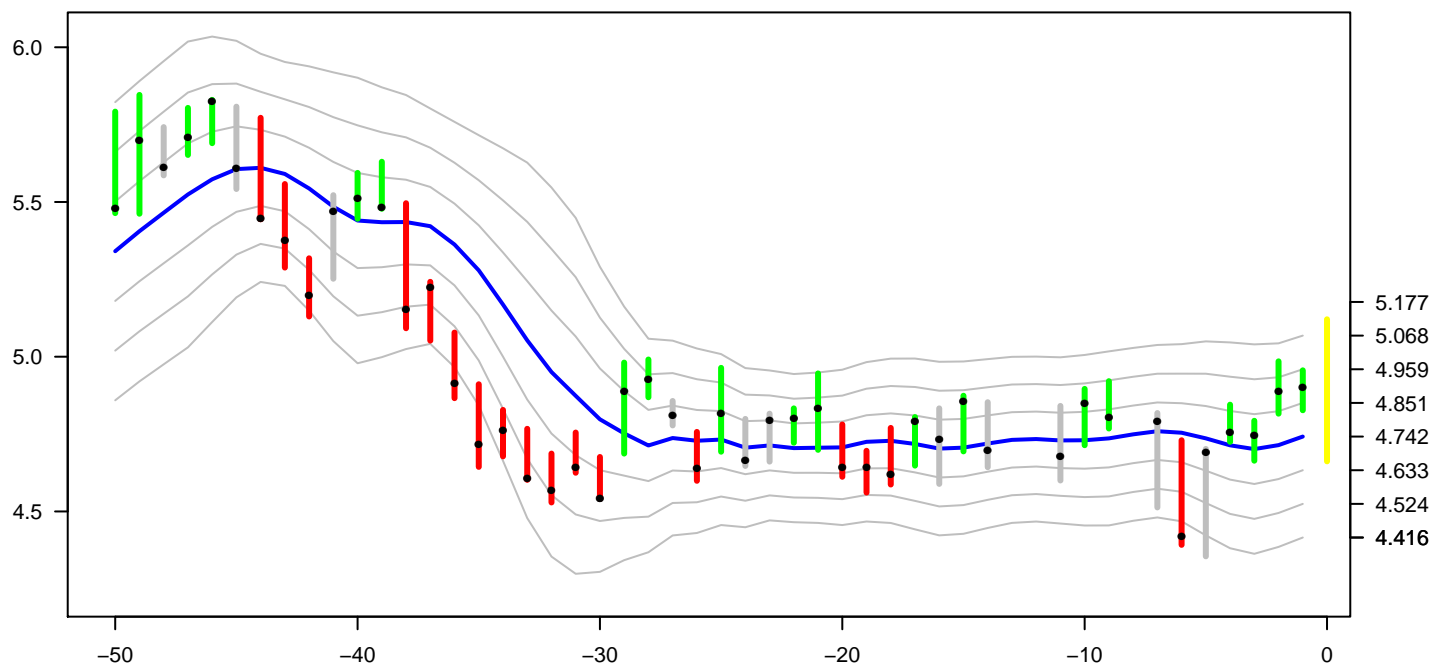
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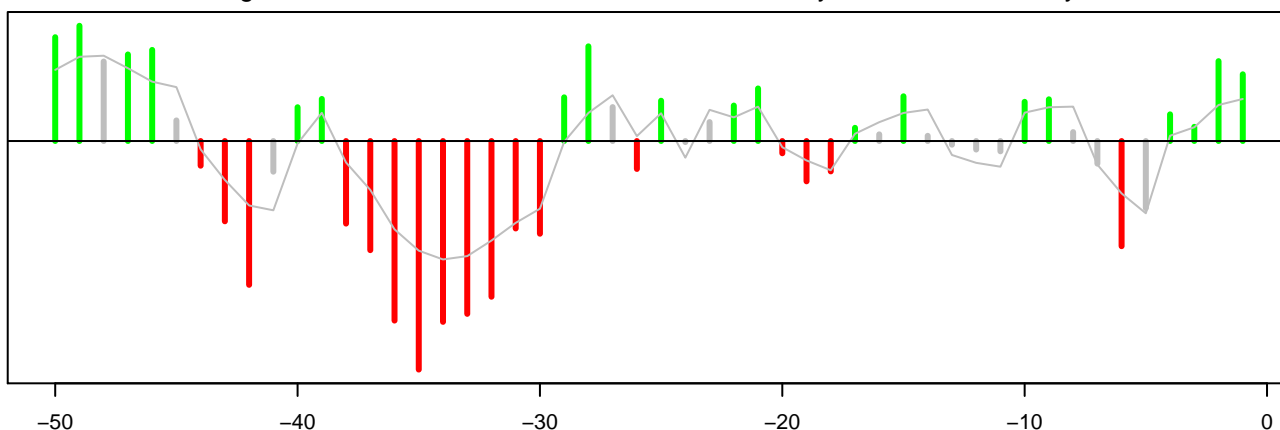


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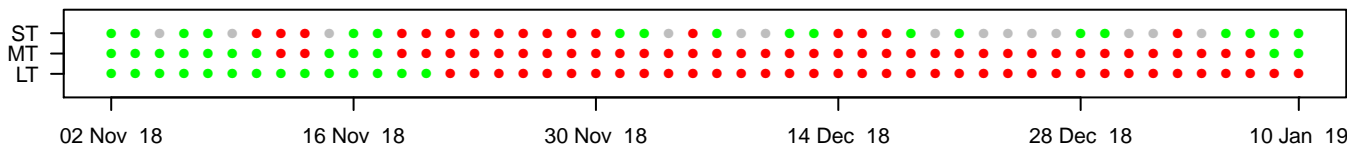
Evraz (EVR) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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



Evraz (EVR). Channel Alert: The price may move above the upper channel.
 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.

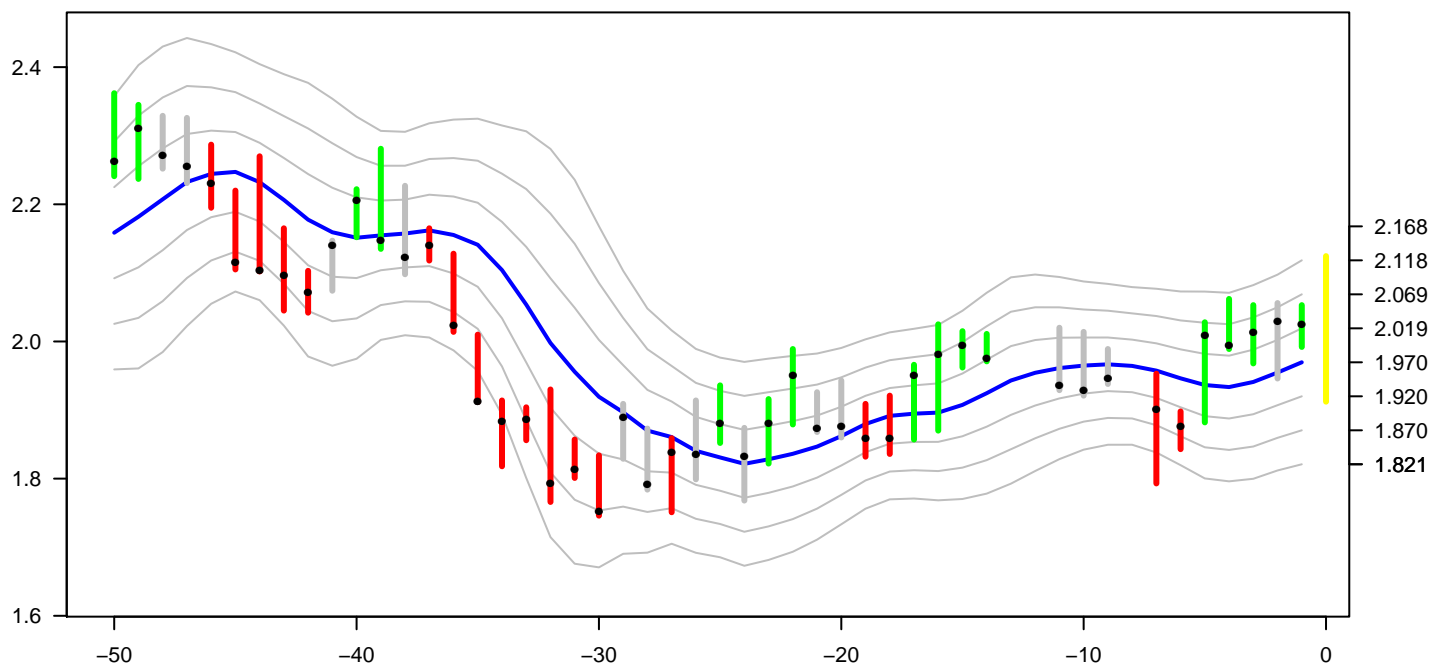
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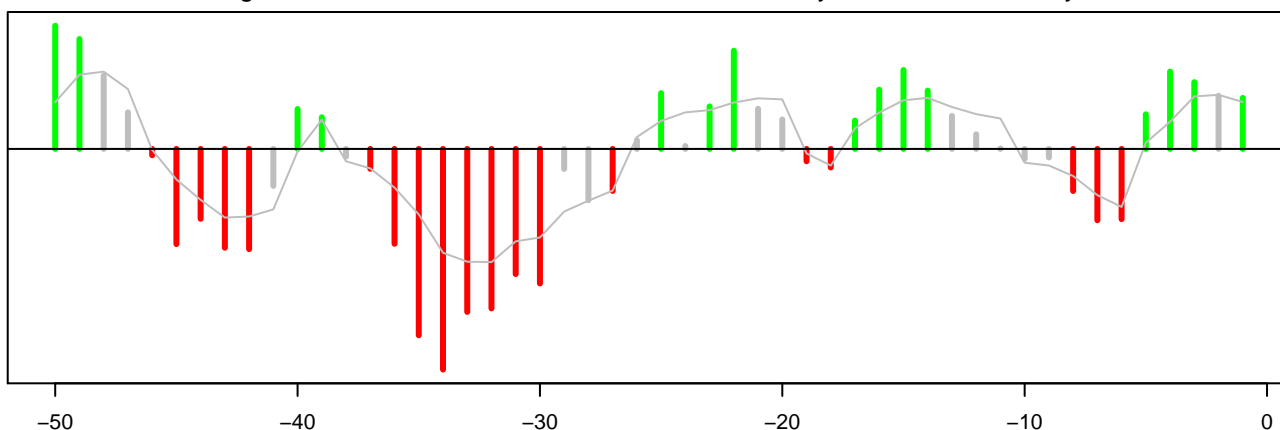


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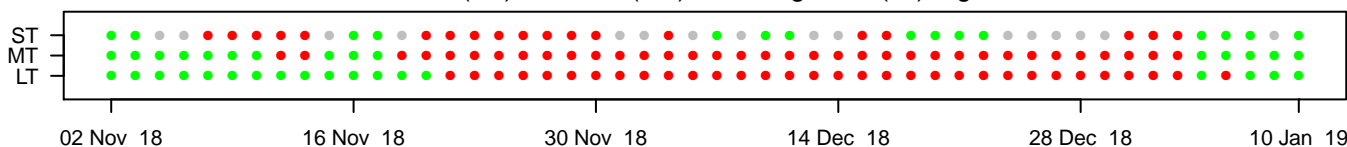
Ferrexpo (FXPO) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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



Ferrexpo (FXPO). Channel Alert: The price may move above the upper channel.
 The short term signal is green, bullish.
 The medium term signal is green, bullish.
 The long term signal is green, bullish.

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.

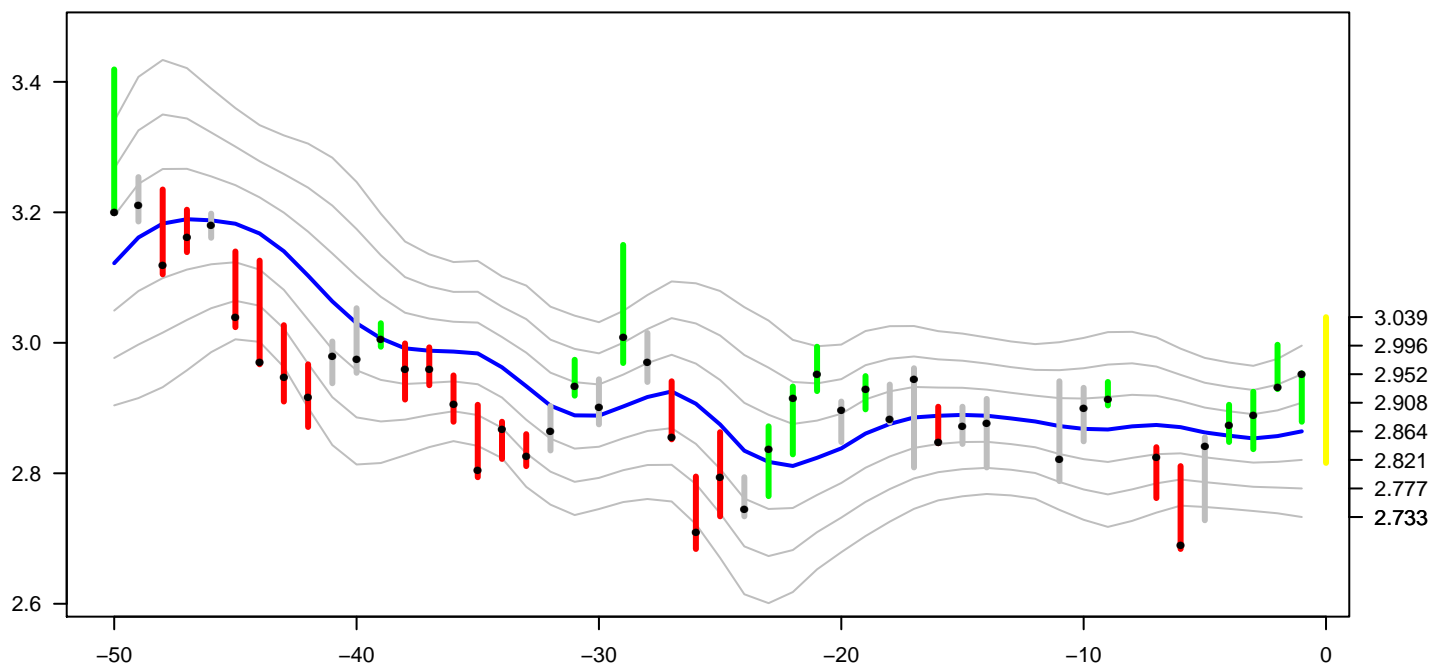
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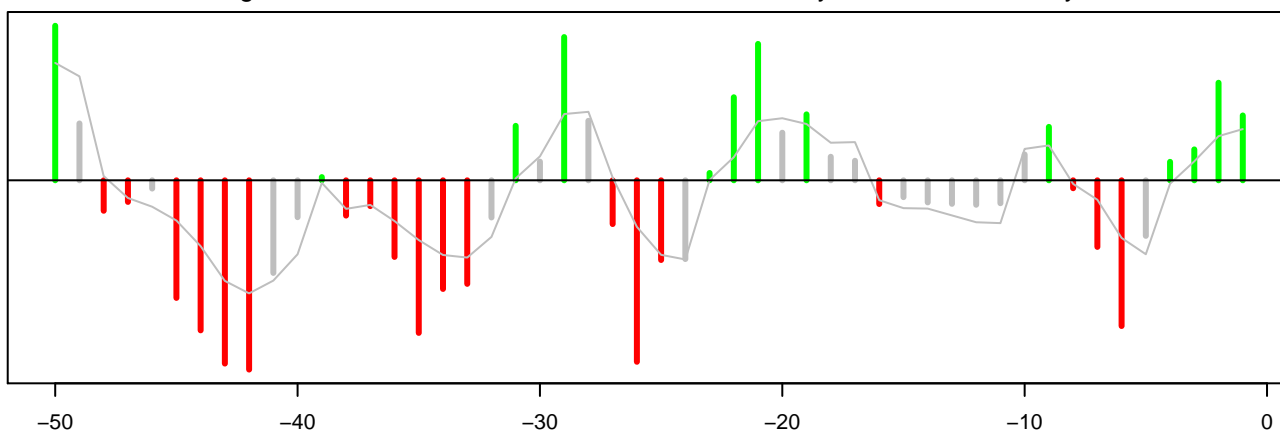


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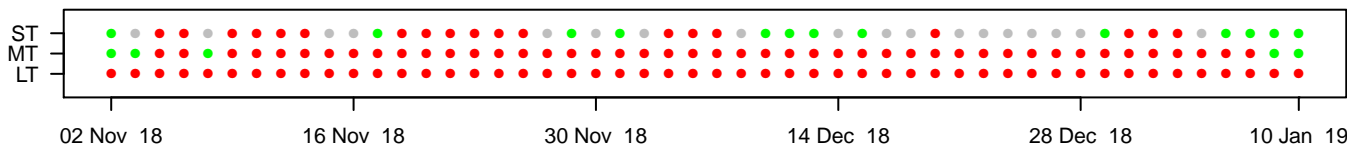
Glencore (GLEN) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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



Glencore (GLEN). Channel Alert: The price may move above the upper channel.
 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.

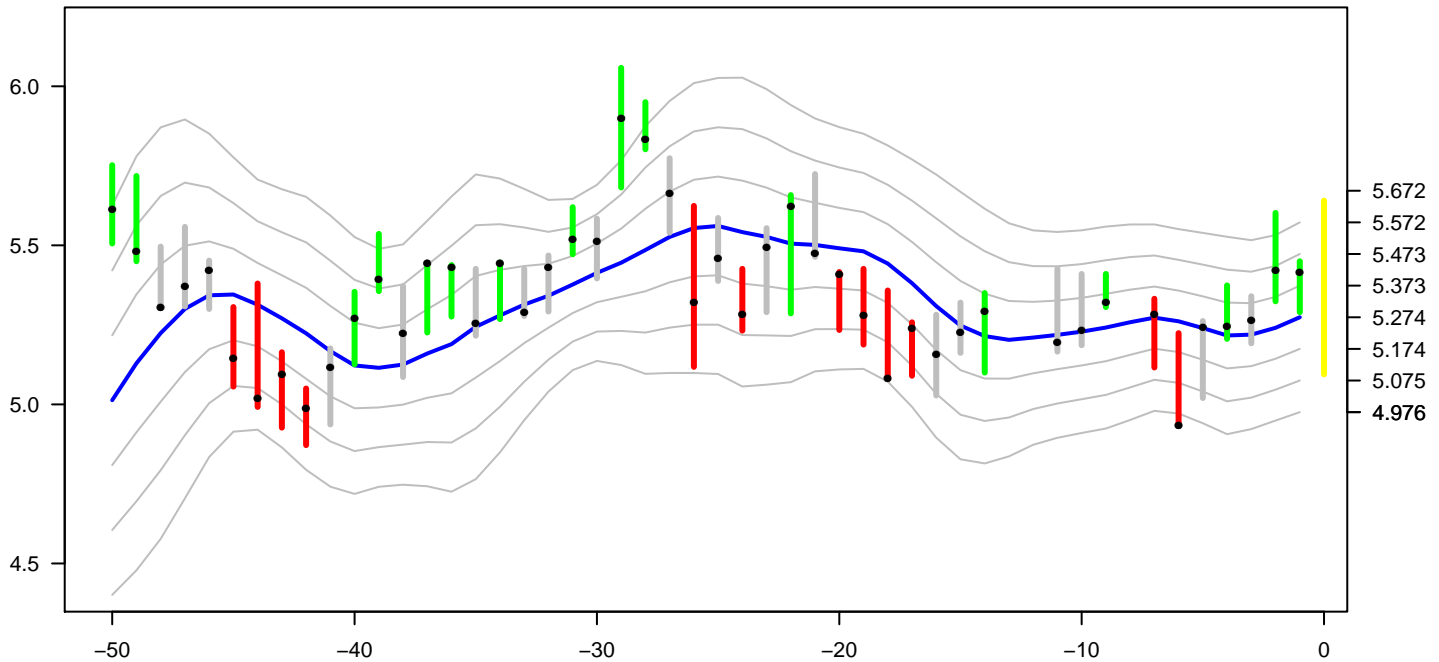
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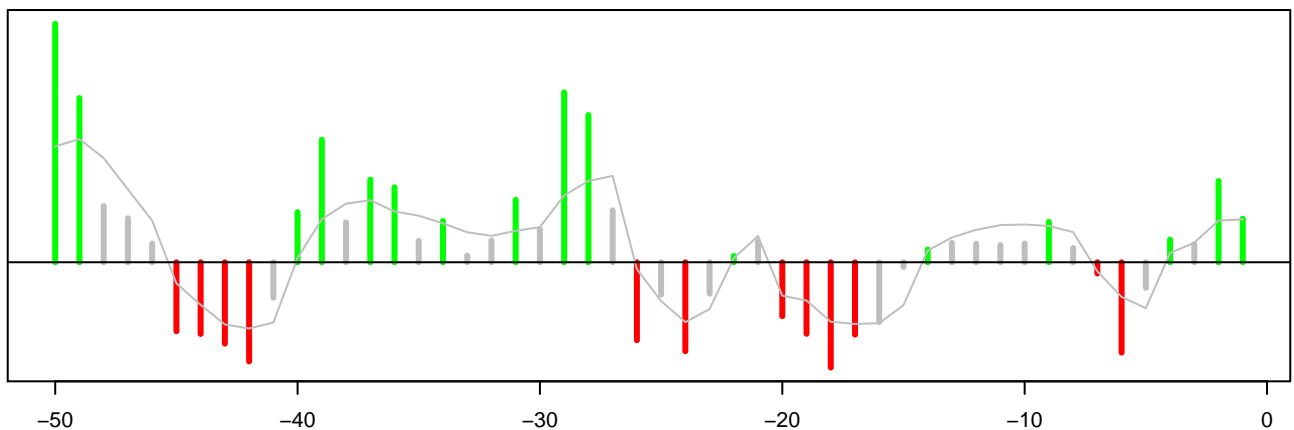


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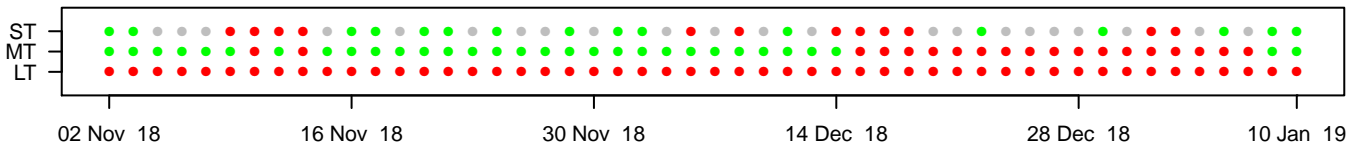
KAZ Minerals (KAZ) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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



KAZ Minerals (KAZ). Channel Alert: The price may move above the upper channel.
 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.

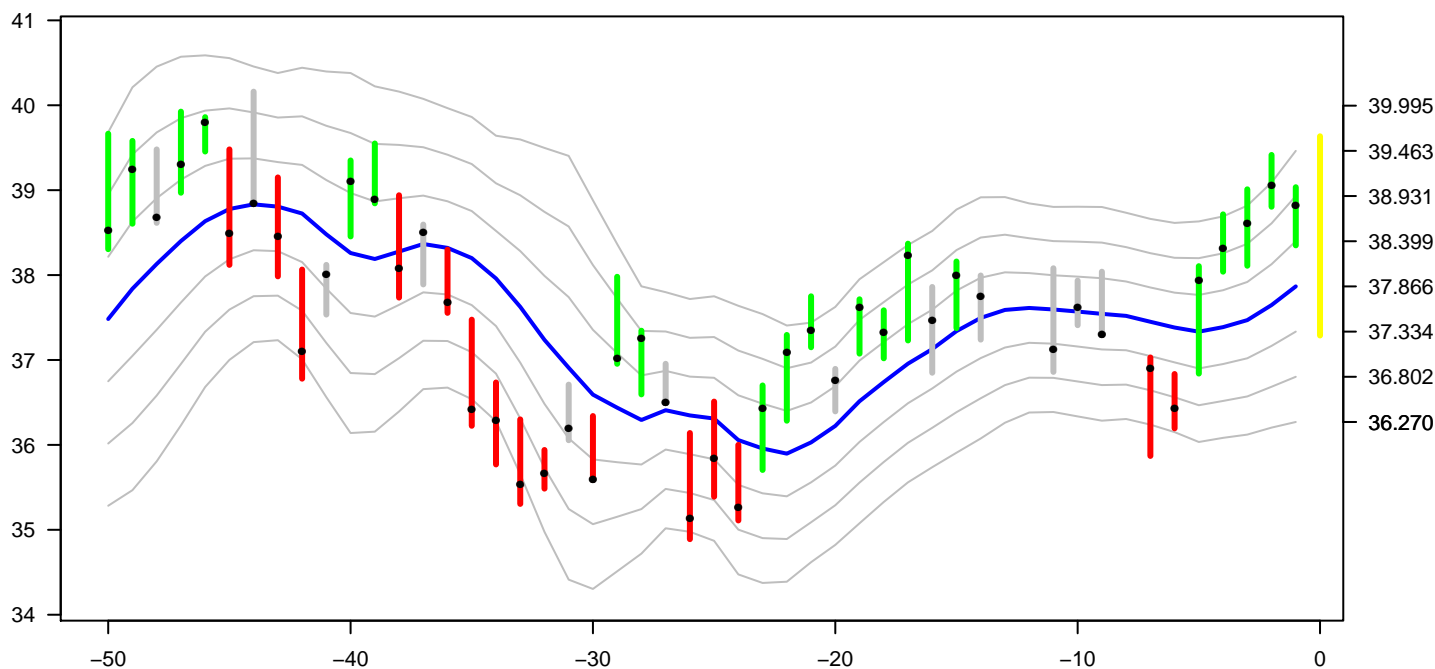
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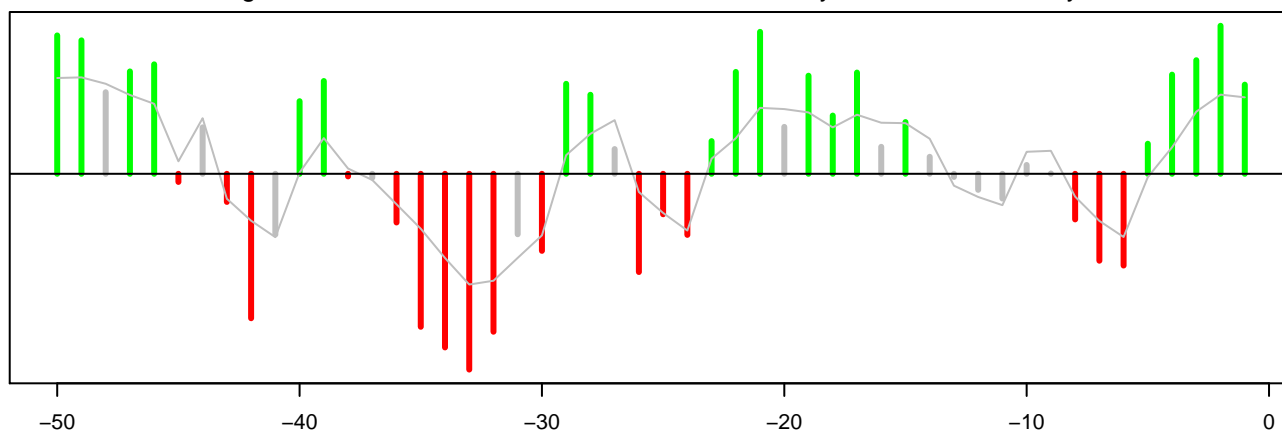


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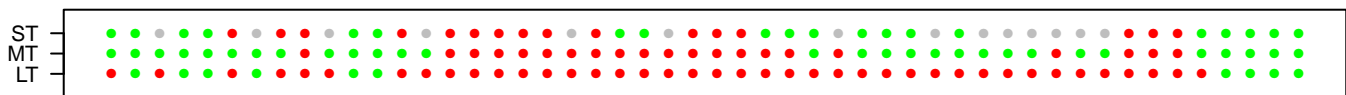
Rio Tinto (RIO) Price and Factor Model Trend Channel.
 Last Price History Date: 10 Jan 2019. Expected region for the next day: Yellow Bar.



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



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



02 Nov 18 16 Nov 18 30 Nov 18 14 Dec 18 28 Dec 18 10 Jan 19

Rio Tinto (RIO). Channel Alert: The price may move above the upper channel.
 The short term signal is green, bullish.
 The medium term signal is green, bullish.
 The long term signal is green, bullish.

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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