

# **COMPLEX HAMILTONIAN SYSTEMS**

## **VOLATILITY RESPONSE MODEL**

### **WEB PAGE DESCRIPTION**

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## 1 INTRODUCTION

This document describes the format of the web pages used to present the predictions of the Volatility Response Model (VRM) for one day and one week ahead for the FX Spot exchange rate pairs

EUR-CAD, EUR-CHF, EUR-GBP, EUR-JPY, EUR-USD

GBP-CAD, GBP-JPY, GBP-USD

USD-CAD, USD-CHF, USD-JPY

## 2 VOLATILITY RESPONSE MODEL (VRM) WEB PAGE FORMAT

The diagram on the following page shows the standard web page format for the EUR-GBP spot FX exchange rate for the week starting 30 October 2017 and the day starting 3 November 2017. The web page has two sections. To the left are the weekly predictions and to the right are the daily predictions.

The chart to the left shows the weekly high, low and close values for 50 weeks as vertical black bars and red tabs. The green channel shows the top, middle and bottom of the long-term trend channel. Listed above this chart are the values of the top, middle, bottom and range of the current week. The range is just the distance between the top and bottom of the long-term trend channel. Also shown is the last weekly closing value of the EUR-GBP. Note that although the date is Monday 30 October, the FX market started in New York the night before on Sunday 29 October.

# EUR-GBP Euro-UK Pound Sterling : EUR=GBP WEEKLY

LAST WEEKLY CLOSE: 0.8843

TREND CHANNEL: TOP = 0.9103 MIDDLE = 0.8856 BOTTOM = 0.8609 RANGE = 0.0494



WEEKLY LEVELS  
WEEK STARTING  
30-Oct-2017

H8 = 0.9063  
H7 = 0.9012  
H6 = 0.9003  
H5 = 0.8989  
H4 = 0.8962  
H3 = 0.8959  
H1 = 0.8934  
H2 = 0.8932

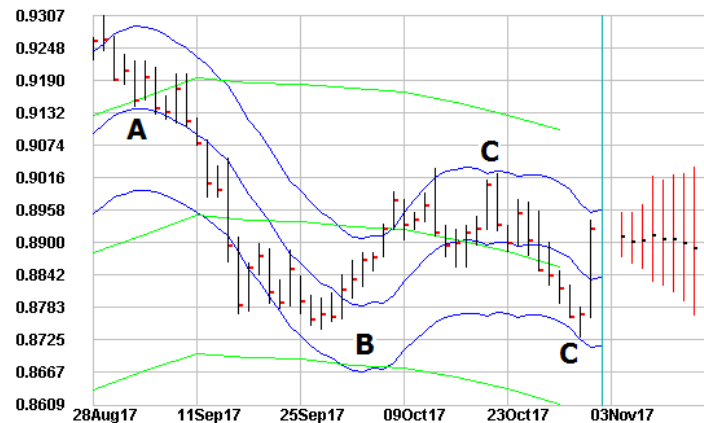
S1 = 0.8832  
S8 = 0.8811  
S2 = 0.8801  
S3 = 0.8793  
S7 = 0.8785  
S4 = 0.8782  
S6 = 0.8772  
S5 = 0.8758  
L1 = 0.8745  
L2 = 0.8681  
L3 = 0.8653  
L4 = 0.8628

L8 = 0.8605  
L5 = 0.8597  
L6 = 0.8582  
L7 = 0.8573

# EUR-GBP Euro-UK Pound Sterling : EUR=GBP DAILY

LAST DAILY CLOSE: 0.8927

TREND CHANNEL: TOP = 0.8960 MIDDLE = 0.8837 BOTTOM = 0.8715 RANGE = 0.0245



DAILY LEVELS  
DAY STARTING  
03-Nov-2017

H8 = 0.9036  
H7 = 0.9025  
H6 = 0.9022  
H4 = 0.902  
H5 = 0.9014  
H3 = 0.8969

H1 = 0.8955  
H2 = 0.8954

S4 = 0.8916  
S1 = 0.8913  
S5 = 0.8909  
S6 = 0.8908  
S3 = 0.8906  
S2 = 0.8903  
S7 = 0.8901  
S8 = 0.8891  
L1 = 0.8876  
L2 = 0.8864  
L3 = 0.8855

L4 = 0.8831  
L5 = 0.8825  
L6 = 0.8813  
L7 = 0.8796  
L8 = 0.8772

To the right of the weekly chart are the week date 30-Oct-2017 and the predicted 24 weekly levels calculated by the VRM. These stay the same until the market closes in New York on Friday night. Also to the right of this column are the long-term trend channel top, middle and bottom and the last weekly close listed in descending order.

The second chart to the right shows the daily high, low and close values as black bars with red tabs for the last 50 days. The long-term trend channel is again shown in green and the short-term trend channel is shown in blue. Listed above this chart are the top, middle, bottom and range of the short-term trend channel. The range is just the distance between the top and bottom of the short-term trend channel. Also shown is the last New York daily closing value of the EUR-GBP. Note that although the date is Friday 3 November, the FX market started in New York the night before on Thursday 2 November.

To the right of the daily chart are the day date 03-Nov-2017 and the predicted 24 daily levels calculated by the VRM. These stay the same until the market closes in New York for that day. Also to the right of this column are the short-term trend channel top, middle and bottom and the last daily close listed in descending order.

Note that VRM weekly predictions start on the Sunday at 5 pm New York local time and finish at 5 pm New York local time on Friday. Daily VRM predictions start at 5 pm the night before New York time and finish at 5 pm the following day after 24 hours.

Some standard observations to make for this chart and all other FX charts on the website are:

- a) Watch out for bounces of the short-term trend channel and the long-term trend channel. At label A on the chart the middle of the short-term trend channel bounced off the top of the long-term trend channel. At label B on the chart the bottom of the short-term trend chart bounced off the bottom of the long-term trend channel.
- b) Watch out for the daily price action bouncing off a trend channel top, middle or bottom. Shown at label C in the chart.

### 3 CHART NOTATION FOR VRM PREDICTED LEVELS

The figure below shows a chart design using the VRM predictions in the last section.



The weekly VRM predictions for EUR-GBP of the last section can be seen in the left chart for the week. This has 4-hour candlesticks and an Exponential Moving average channel of 4 and 7 intervals.

The daily VRM predictions for EUR-GBP of the last section can be seen in the right chart for the day. This has 30-minute candlesticks and an Exponential Moving average channel of 4 and 7 intervals.

The price action of triplets such as GBP-USD, EUR-GBP and EUR-USD about their corresponding VRM levels should be considered at the same time.

The chart above shows the EUR-GBP rapidly moving to the weekly VRM level 0.8932 after the Bank of England increased the UK interest rate by 0.25% on 2nd November.

## 4 CONTACT INFORMATION

Predictions updated daily after the New York Close can be found at

<https://www.complexhamiltoniansystems.com/fxcharts/>

More results and this document can be found at

<https://www.complexhamiltoniansystems.com/vrmdocs/>

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