

## **Professor Per B Solibakke, NTNU**

We use a method that is a form of nonlinear Kalman filtering. The method can be used to forecast the unobservable of nonlinear latent. Hence, we have obtained re-projected Latent Volatility (filtered volatility for forecasting the latent volatility process)

The important application re-projection, which is a form of nonlinear Kalman filtering, can be used to forecast the unobservable of nonlinear latent variables models. The leading example is forecasting the volatility process of continuous time stochastic volatility models (Gallant & Tauchen , 2020).

### **Mar-22            The indices can be updated hourly/daily            (from prices 04.03.2022)**

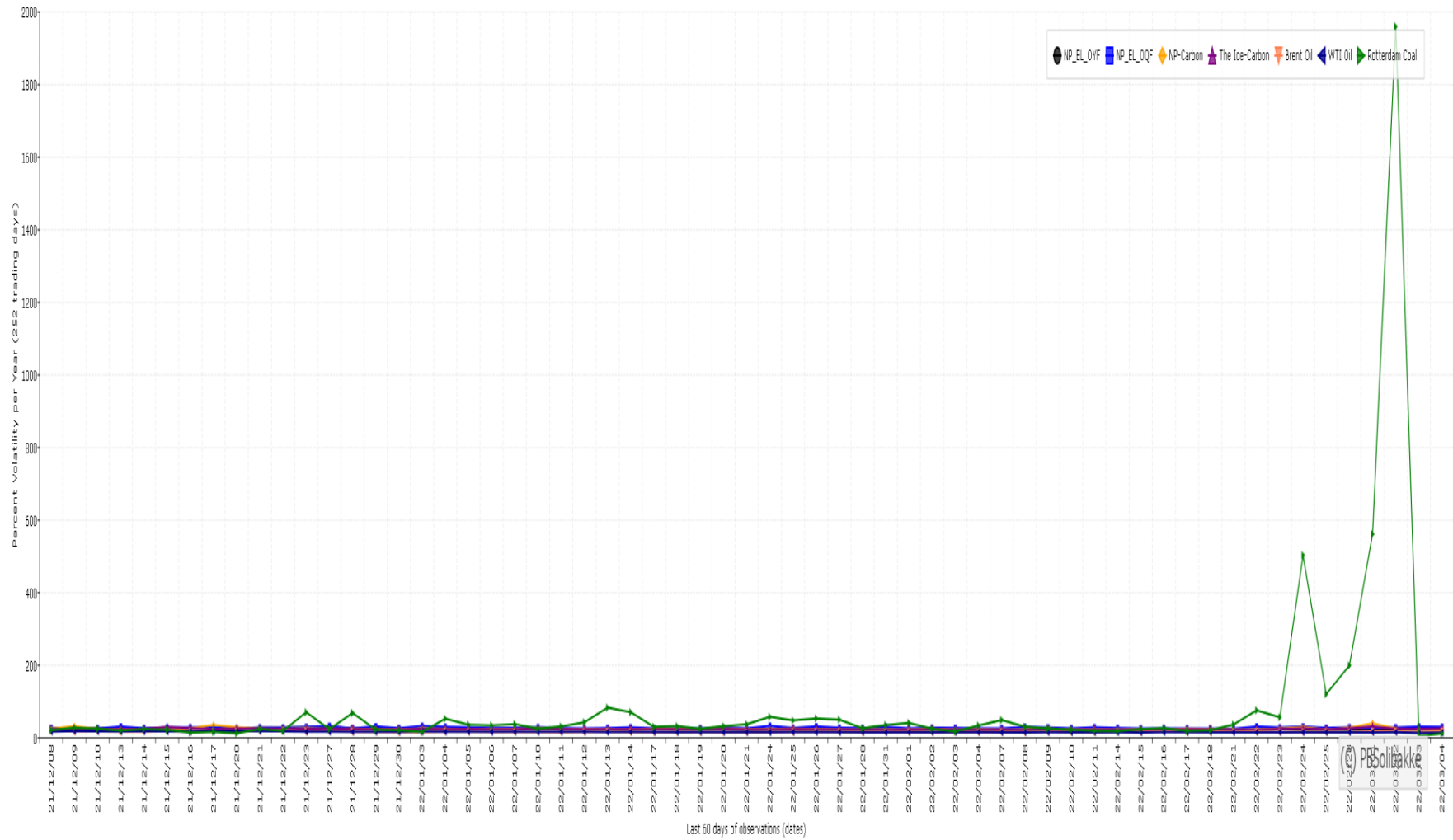
1. Volatility indices for Energy Commodities - Future markets; Nord Pool and the Ice
2. Volatility Indices for Norwegian Salmon markets
3. Spot Volatility Indices for Swedish Electricity Certificates markets; Spot and One Year Forward
4. Volatility Indices for the Norwegian Equity market (OB)
5. Volatility Indices for Norwegian Stock market
6. Volatility Indices for the International Equity markets
7. Volatility Indices for the US Equity markets
8. Volatility Indices for International Commodity markets (the ICE futures)
9. Volatility indices for International Currency markets
10. Volatility Indices for International Crypto Markets
11. Volatility Indices for International Interest Rates /Bonds Markets
12. A. Volatility Indices for Euronext ESG Stock indices
12. B. Volatility Indices for Bond (non-) ESG indices
13. Volatility Indices for Norwegian and International Equity Markets

## **Cryptocurrency Meaning Explained**

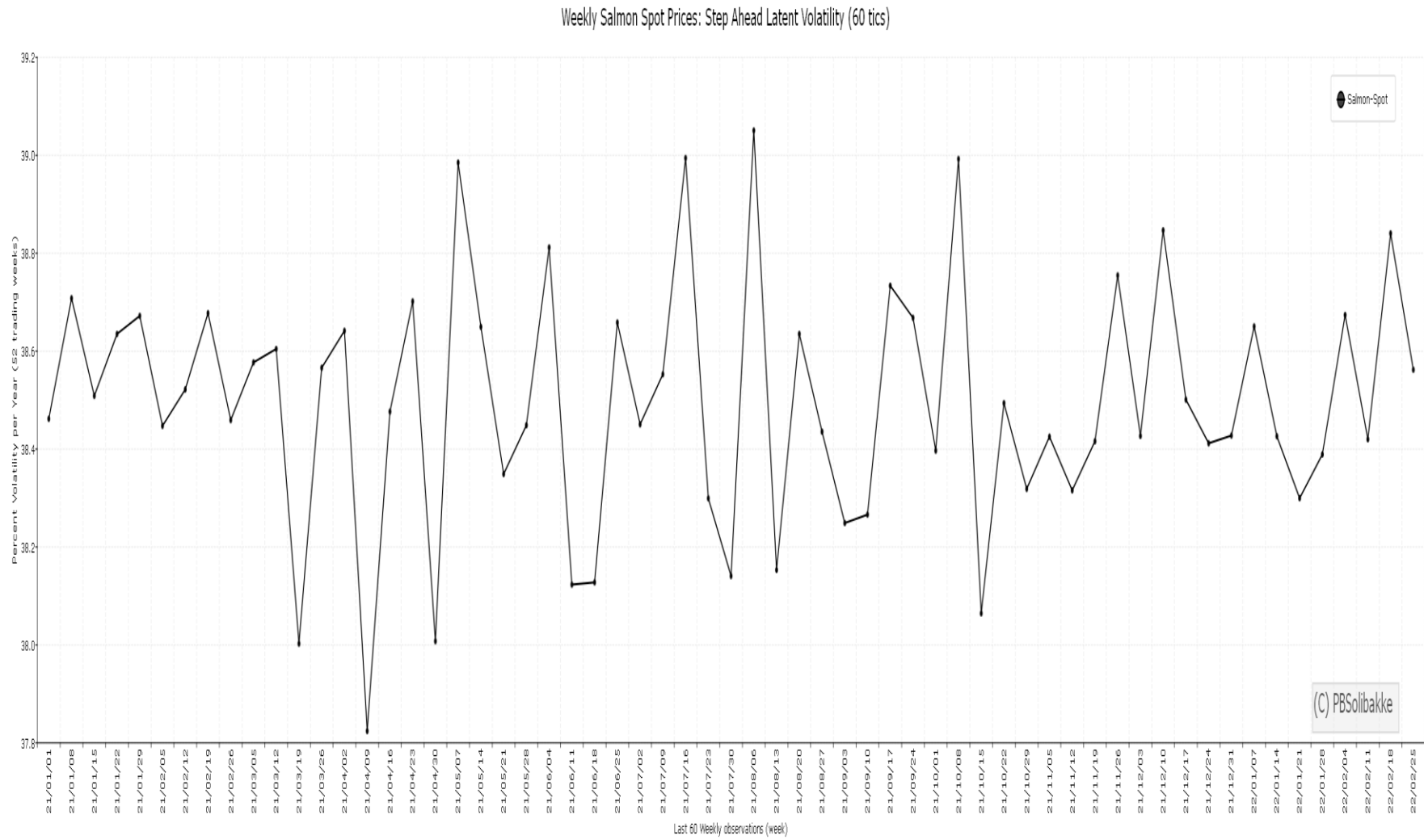
Lots of people engage in Bitcoin trading and Altcoin investments. Not so many of them know that the term 'cryptocurrency' is a direct reference to the fact that their creators use cryptographic and data encryption techniques to create the underlying programming codes. The generation of new units (coins) and the transfer of funds depend solely on the algorithm.

# 1. Volatility indices for Energy Commodities - Future markets; Nordpool and the Ice

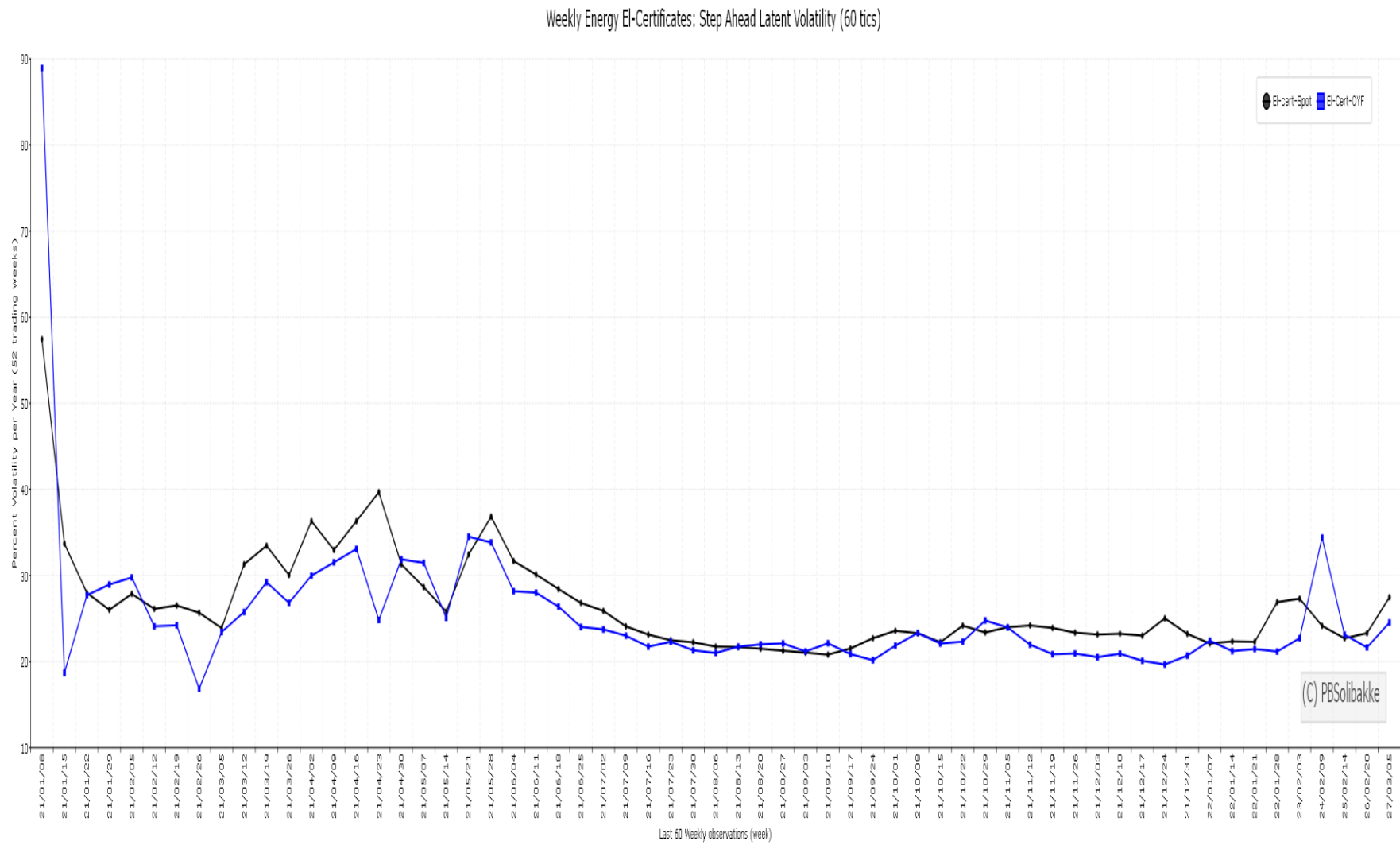
Daily Energy Commodity Indices/Prices: Step Ahead Latent Volatility (Plot) (60 tics)



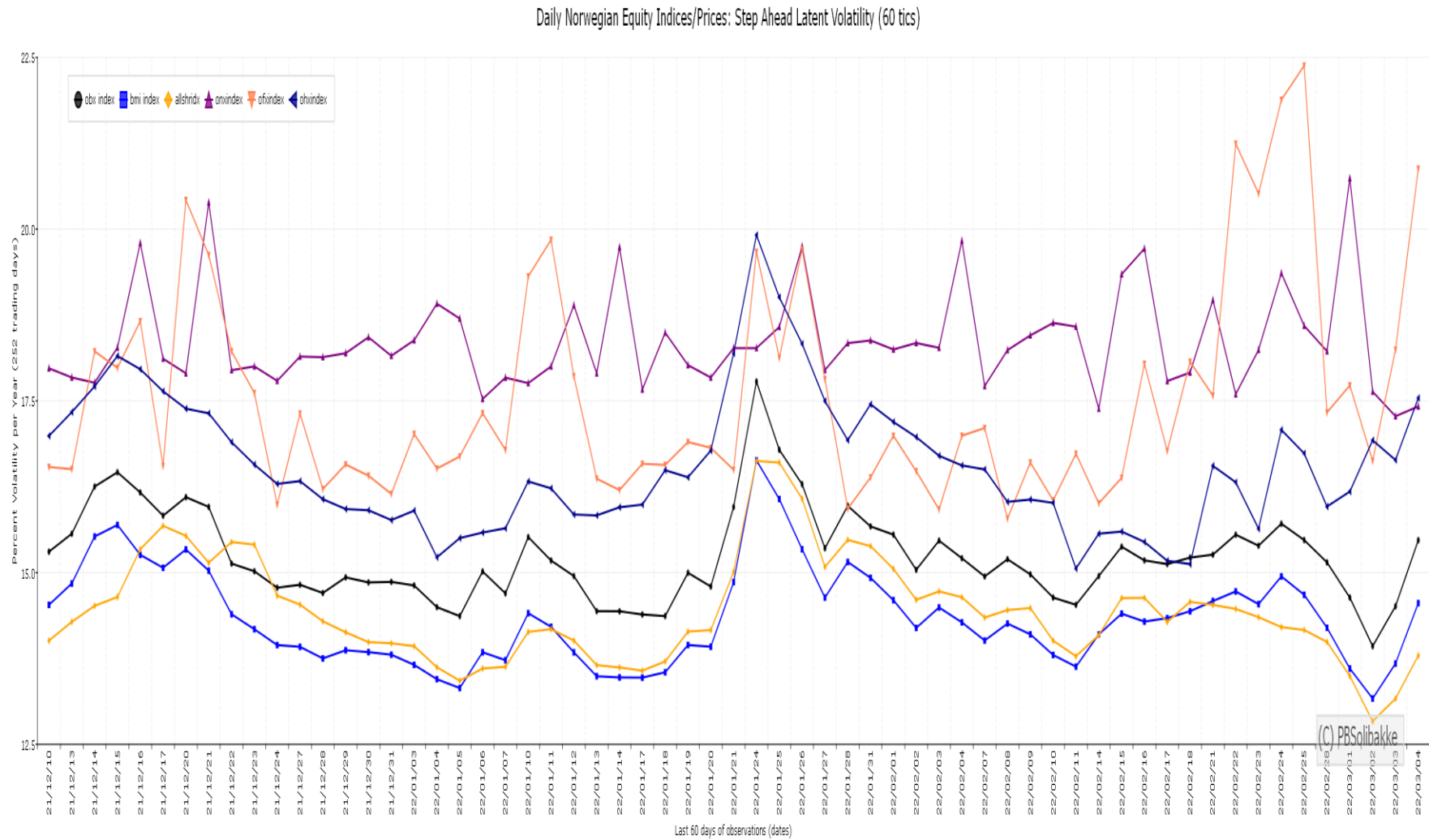
## 2. Volatility Indices for Salmon markets



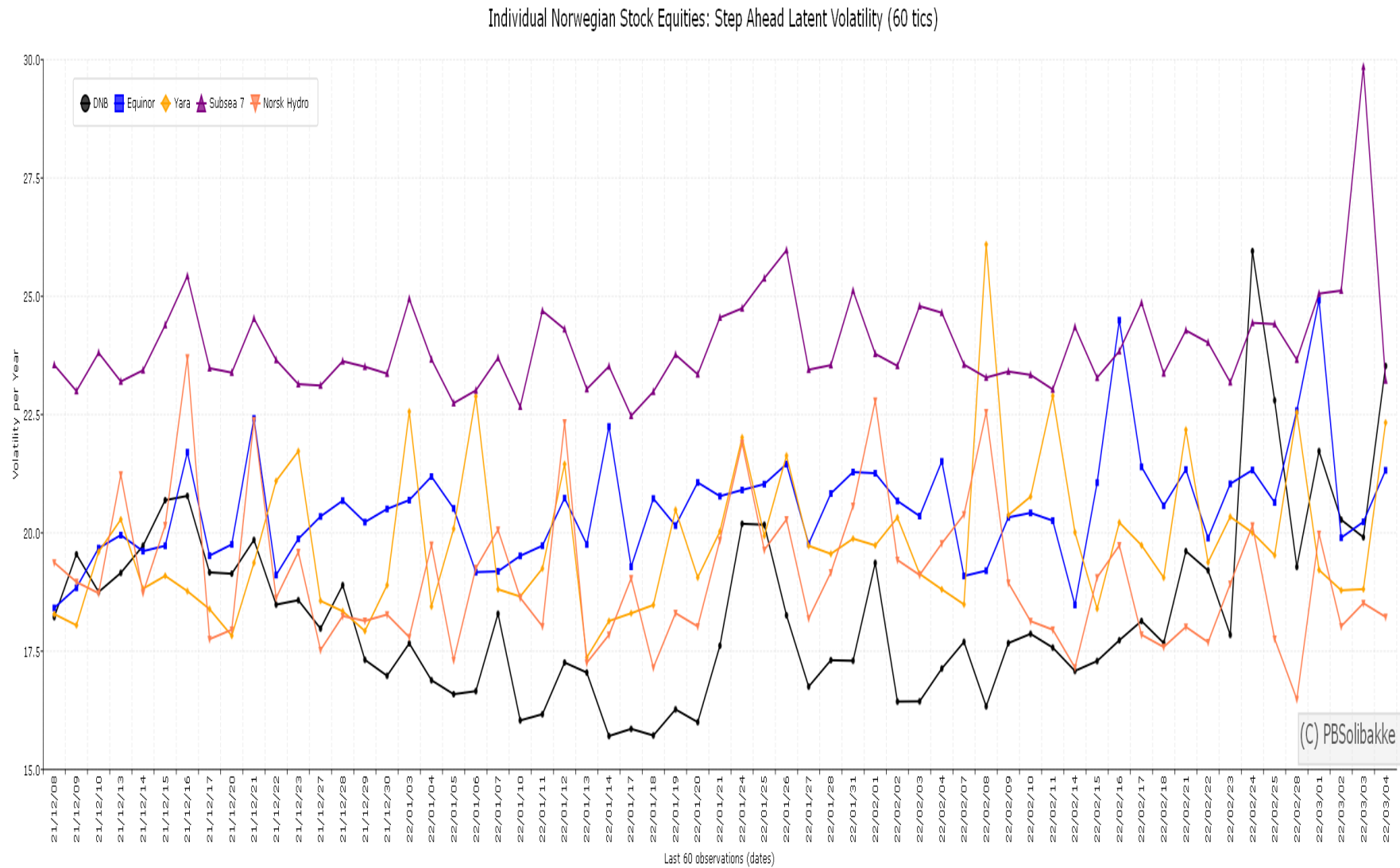
### 3. Volatility Indices for Electricity certificates markets; Spot and One Year Forward



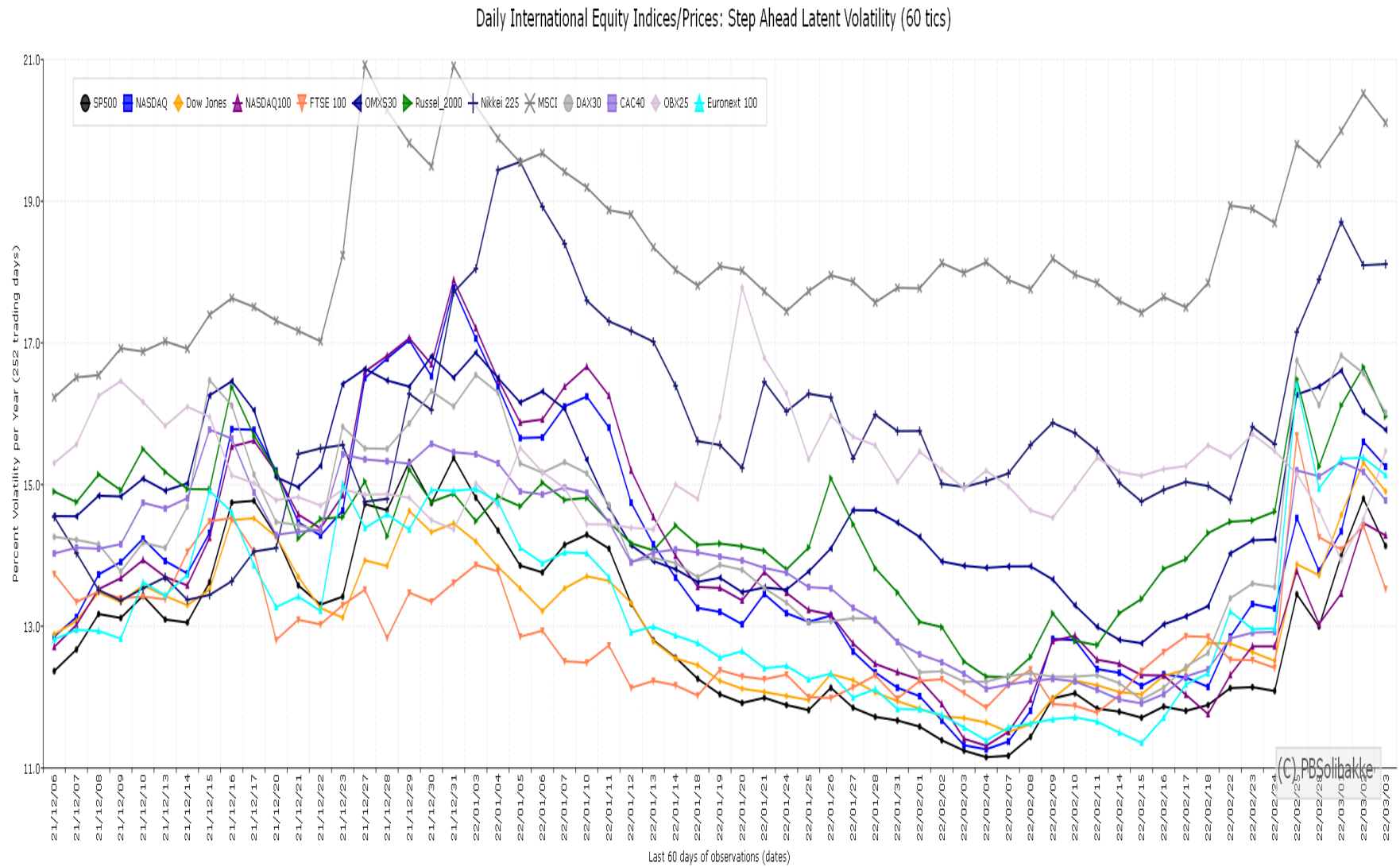
#### 4. Volatility Indices for the Norwegian Index Equity market (OB)



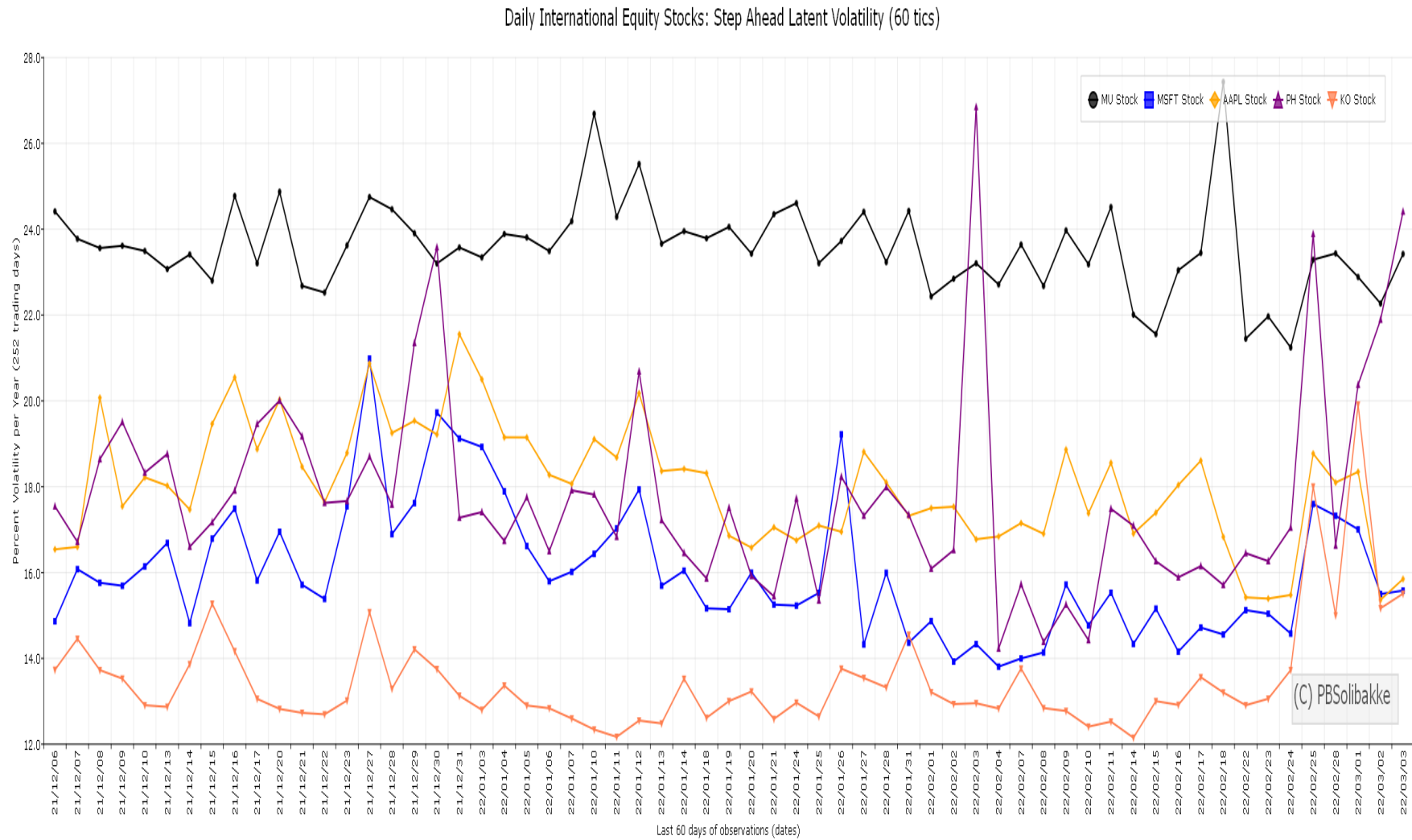
## 5. Volatility Indices for Norwegian Stock Equity market



## 6. Volatility Indices for the International Equity markets (indices)

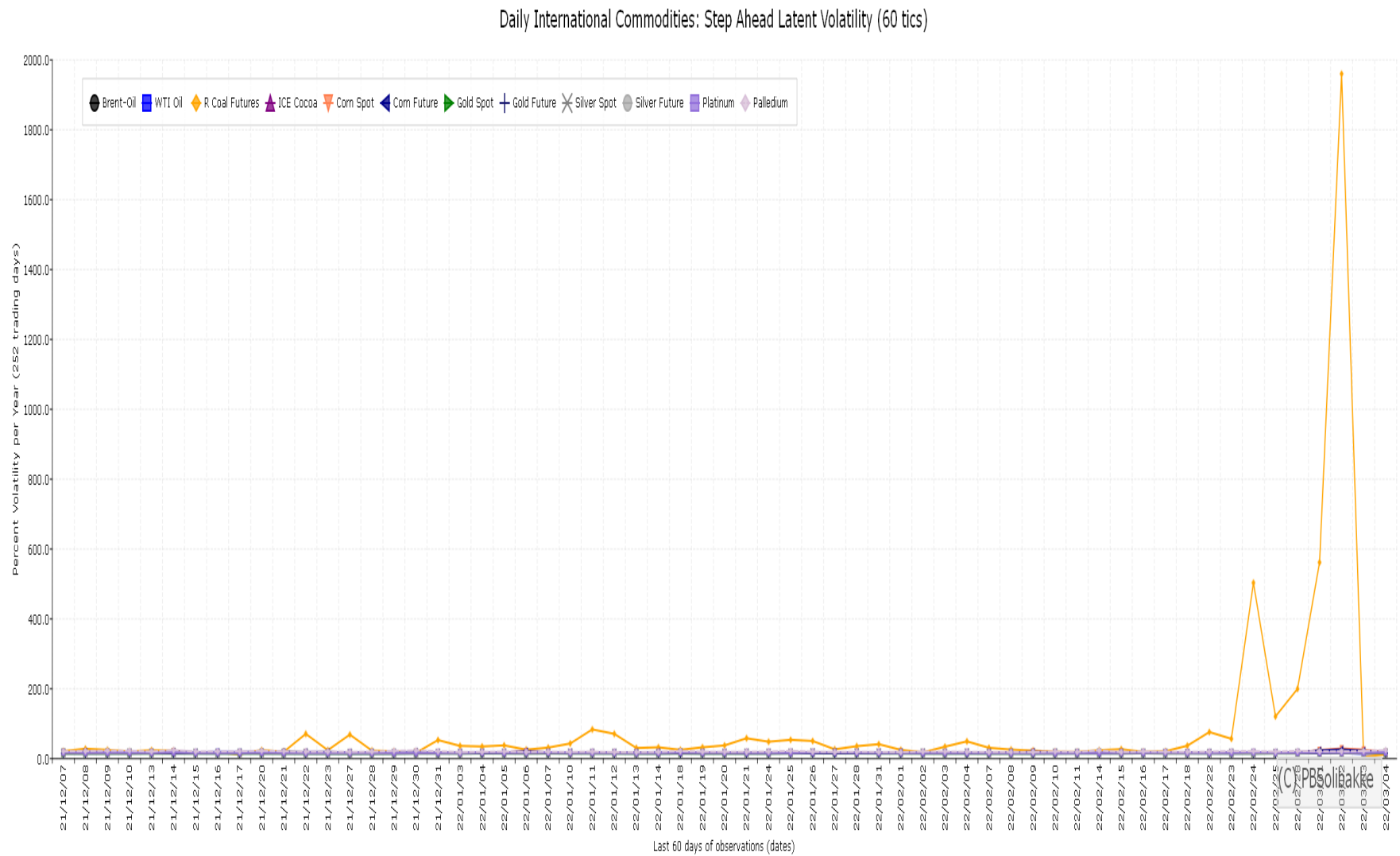


## 7. Volatility Indices for International Stocks (US)

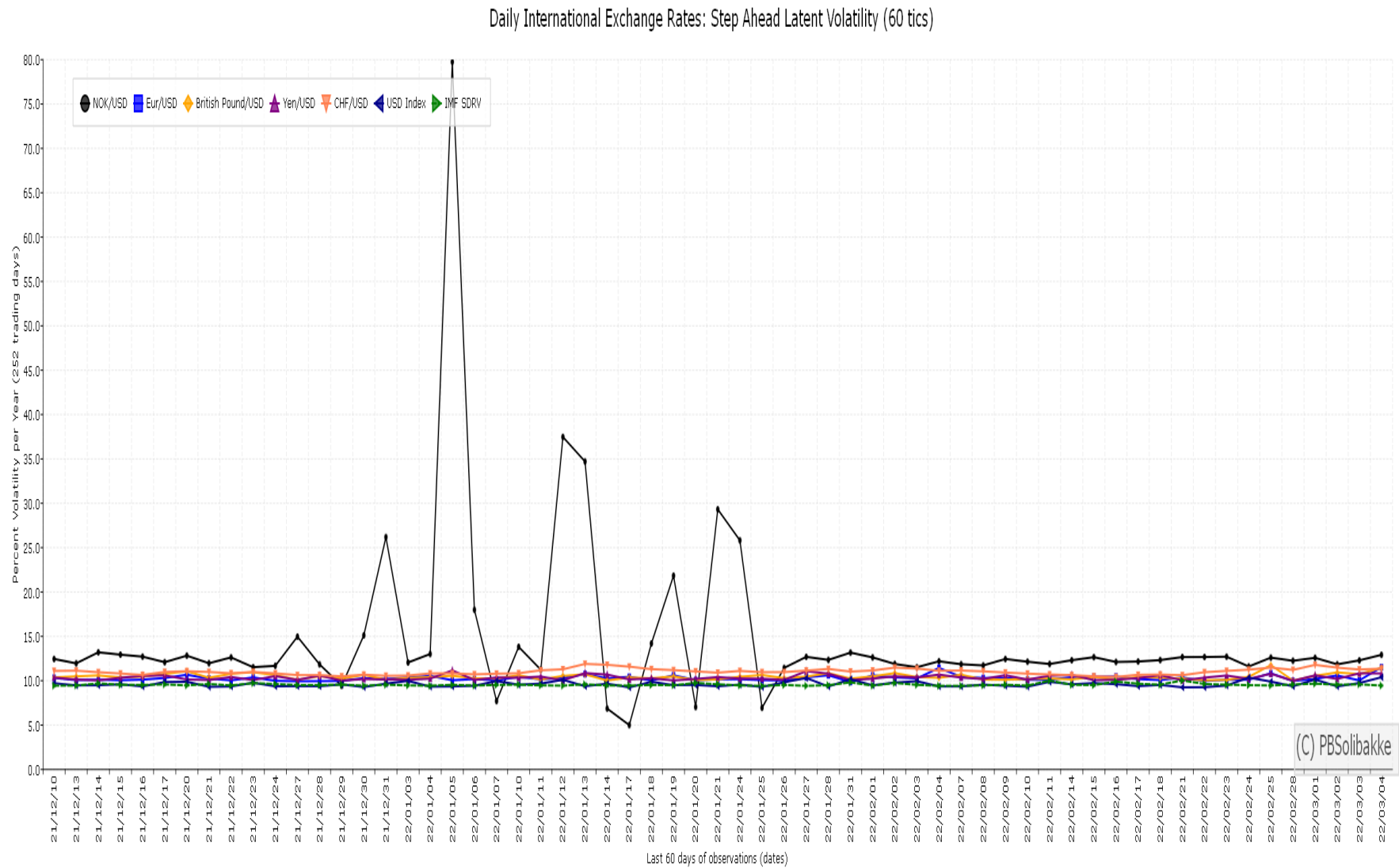




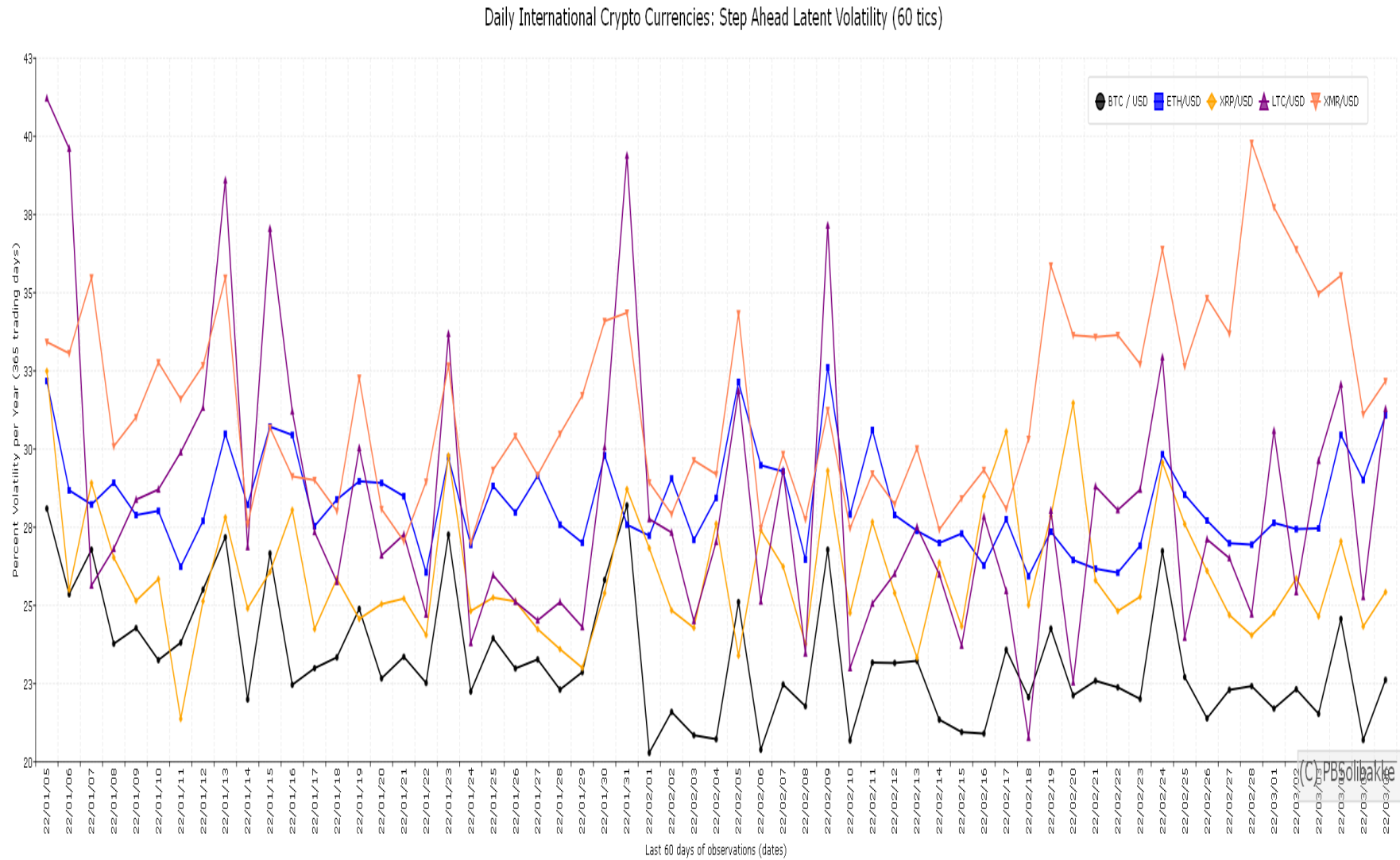
## 8. Volatility Indices for International Commodity markets (the ICE futures)



## 9. Volatility indices for International Currency markets

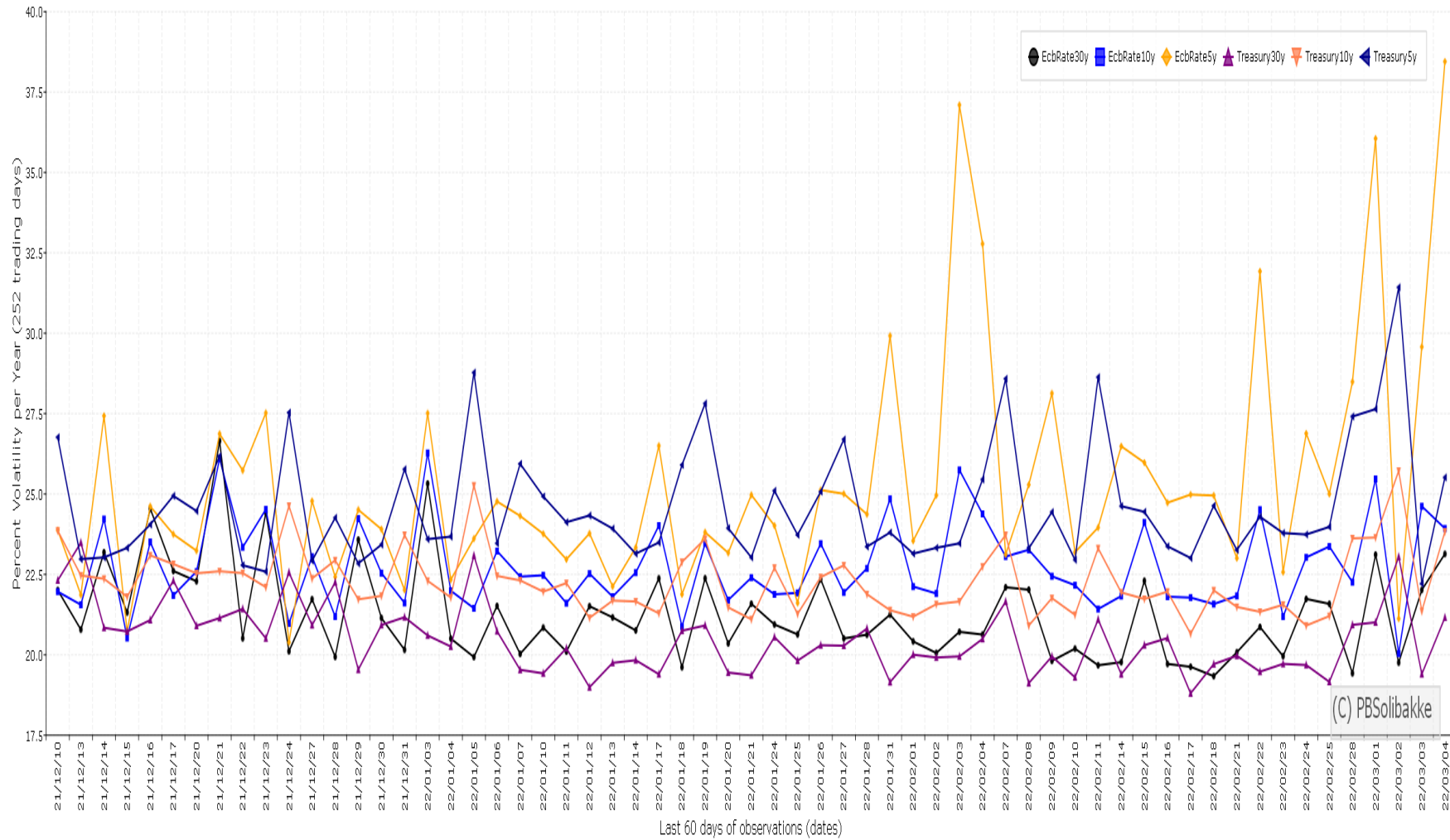


## 10. Volatility Indices for International Crypto Markets



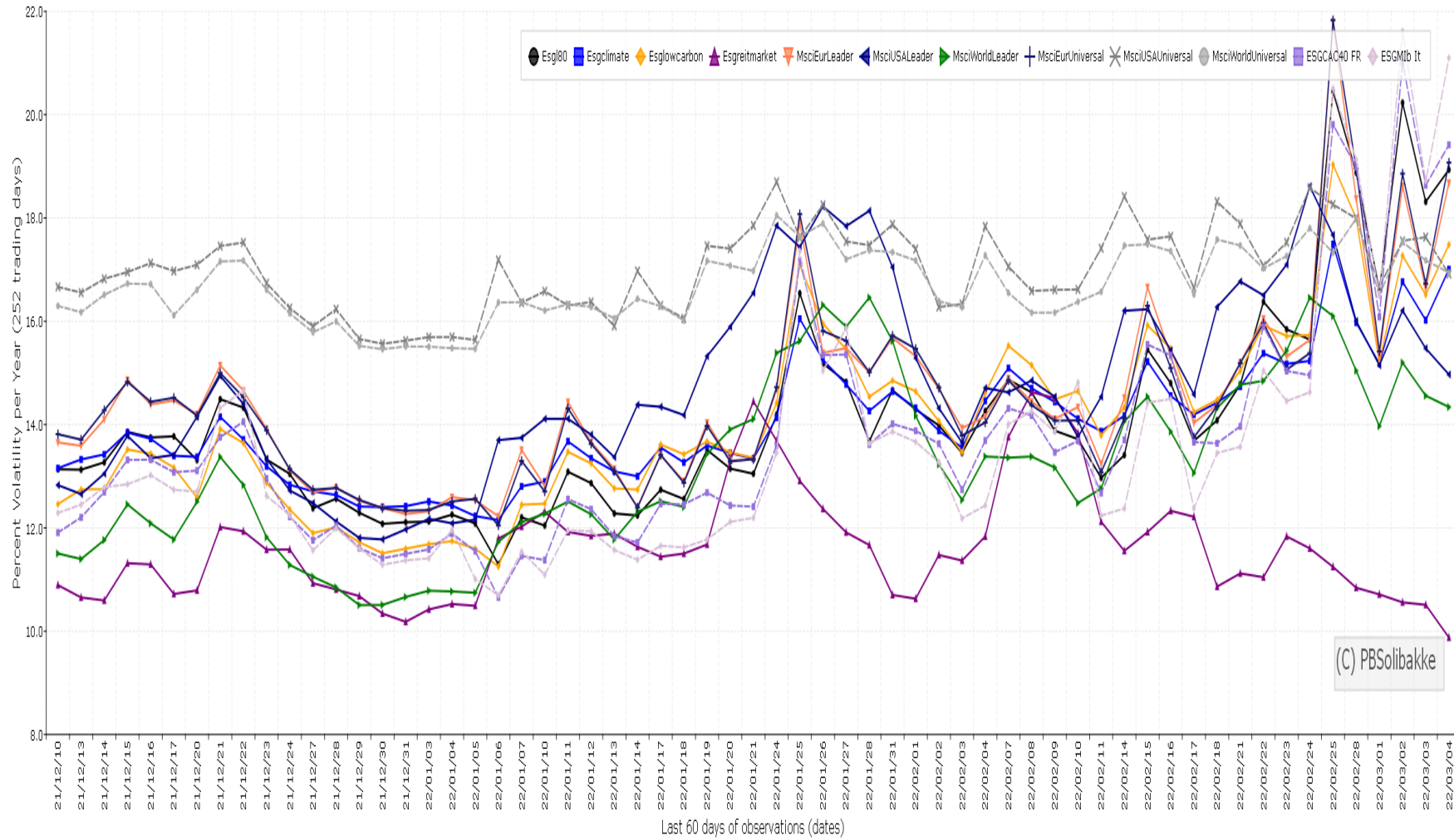
## 11. A. Volatility Indices for International Interest Rate / Bond Markets

Daily European and US Interest Rates / Bonds: Step Ahead Latent Volatility (60 tics)



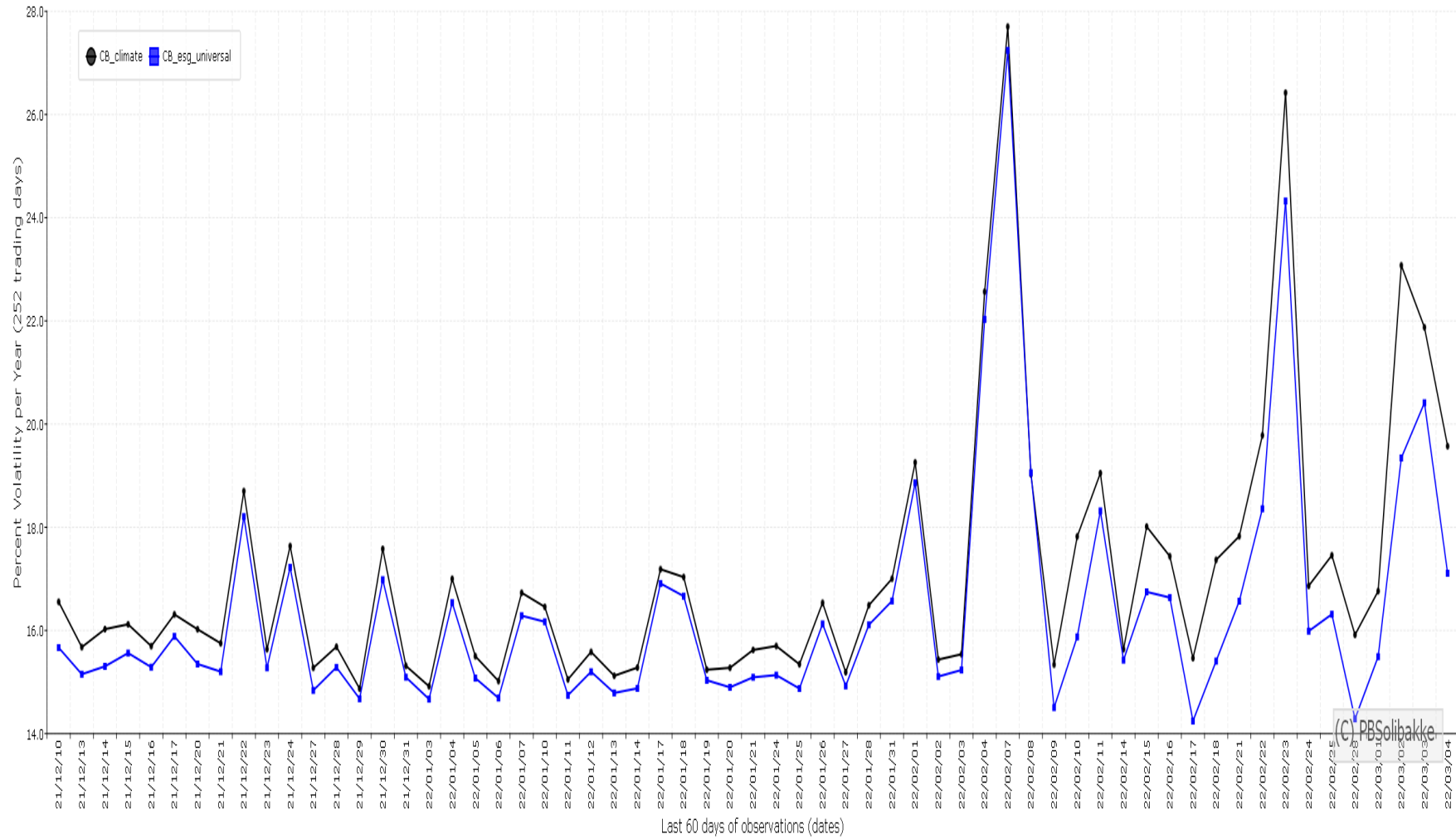
## 12. A. Volatility Indices for Euronext/MSCI ESG Stocks (Large 80, Climate, Low Carbon)

Daily ESG Stock indices: Step Ahead Latent Volatility (60 tics)



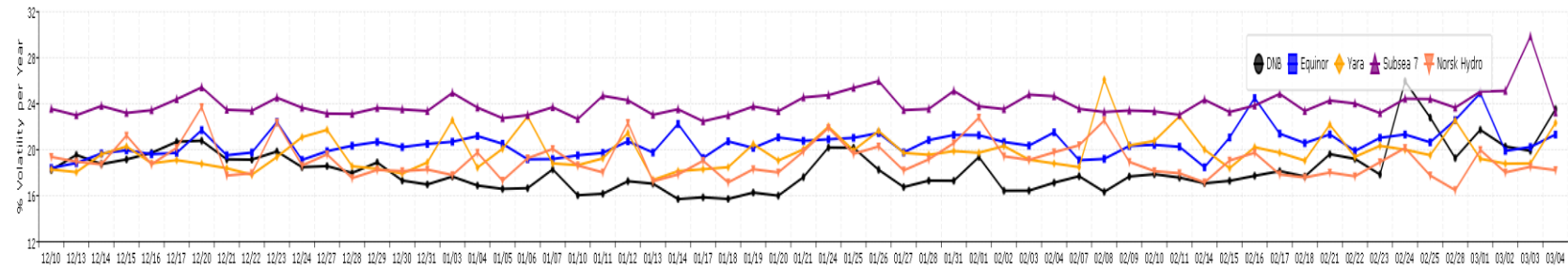
## 12. B. Volatility Indices for Euronext BONDS (CB ESG Climate, CB ESG Universal)

Daily ESG Bond indices: Step Ahead Latent Volatility (60 tics)

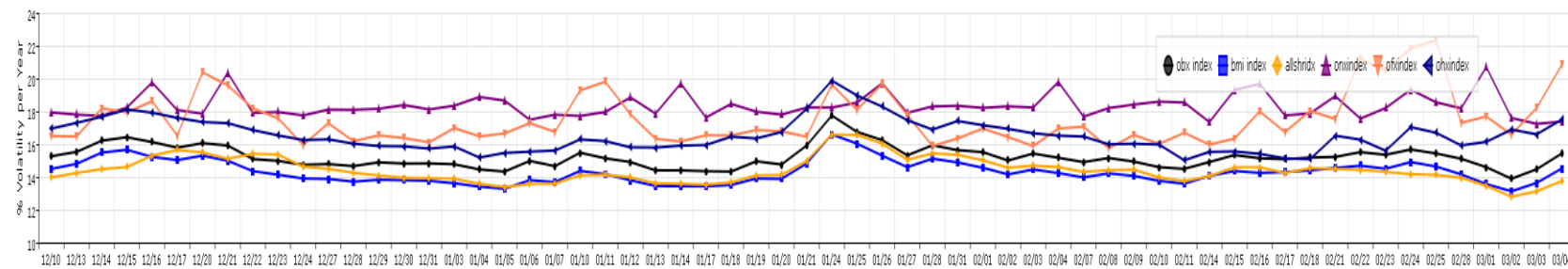


### 13. Volatility Indices International Stocks and Indices

Individual Norwegian Stock Equities: Step Ahead Latent Volatility (60 tics)



Daily Norwegian Equity Indices/Prices: Step Ahead Latent Volatility (60 tics)



Daily International Equity Indices/Prices: Step Ahead Latent Volatility (60 tics)

