# Automated Monitoring of Price Feeds

Data plausibility checks under time pressure

# State of the art



**ISSUERS** 



**EXCHANGES** 

The "Market" seeks capital

#### Raw data sent:

- in different formats & structures
- with diverging fields
- with errors & gaps
- at different frequencies





DATA VENDORS

**Data vendors** contribute to the functioning of the financial market

#### Data is delivered:

- in a consolidated format with a uniform structure
- with accurate & complete information
- at desired frequencies
- including uniform prices & asset classes



READY TO USE DATA



Investors offer capital

## What's the Problem?

- Heterogeneous raw data
- Multiple monitoring systems
- ♦ Unreliable error detection (static bounds, manual config)
- Slow error processing

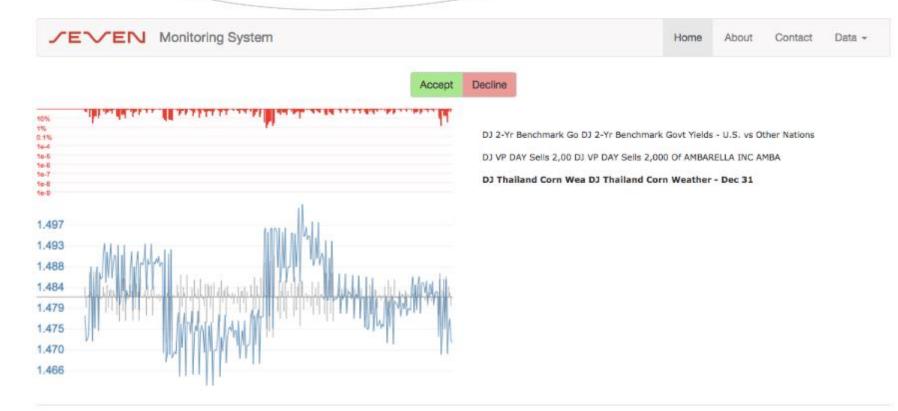
#### What we offer

- Integrated data monitoring
- Dynamic, robust volatility measurement (fully automated)
- Statistical outlier detection for identifying corrupted streams
- Fast error handling

## What we did

- ♦ Switch to workshop 3: Realtime data checks → success
  - Sliding window robust estimator
- No satisfactory plotting libary → own solution
- Website using bootstrap and HTML 5  $\rightarrow$  mobile compatible

# Look and Feel



# Outlier detected

