

# ACTRIS-2:

## Task 3.1 gases: improve the data quality

### **Yearly meeting in the process of data submission**

**VOC/NO<sub>x</sub>-1: November 2015**

**VOC/NO<sub>x</sub>-2: May 2016**, proposed in Grindelwald (Switzerland)

**VOC/NO<sub>x</sub>-1: May 2017**

**VOC/NO<sub>x</sub>-1: April 2018**

**→ Feedback on data quality to the stations → action items**

**→ revision of data**

### **Discussion of data with CONTROL charts (Task 3.3)**

Monthly means

xy-ratio plots

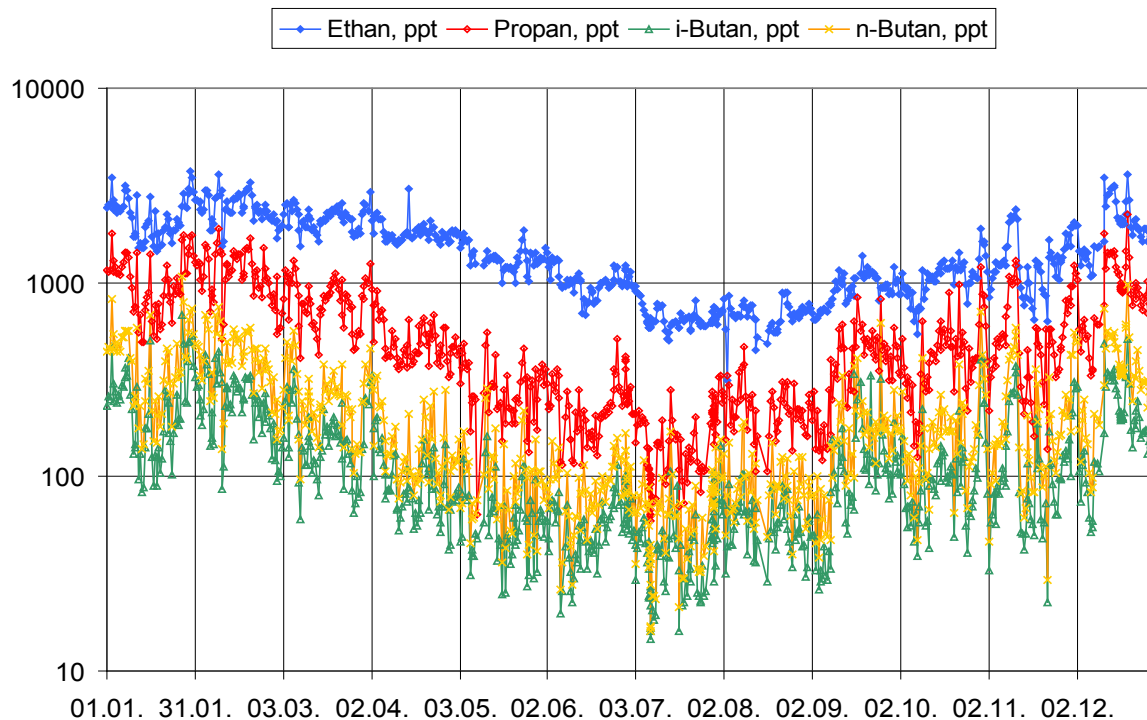
A clever way to do so has to be discussed in the 1st WP 3 meeting also in conjunction with the WCCs.

# ACTRIS-2: Task 3.1 gases: sustain the quality

## Implement control procedures for VOCs (Examples)

implementation of quality assurance tools for data submission  
(in combination with EBAS/NILU)

### 1. Step visual inspection of data set



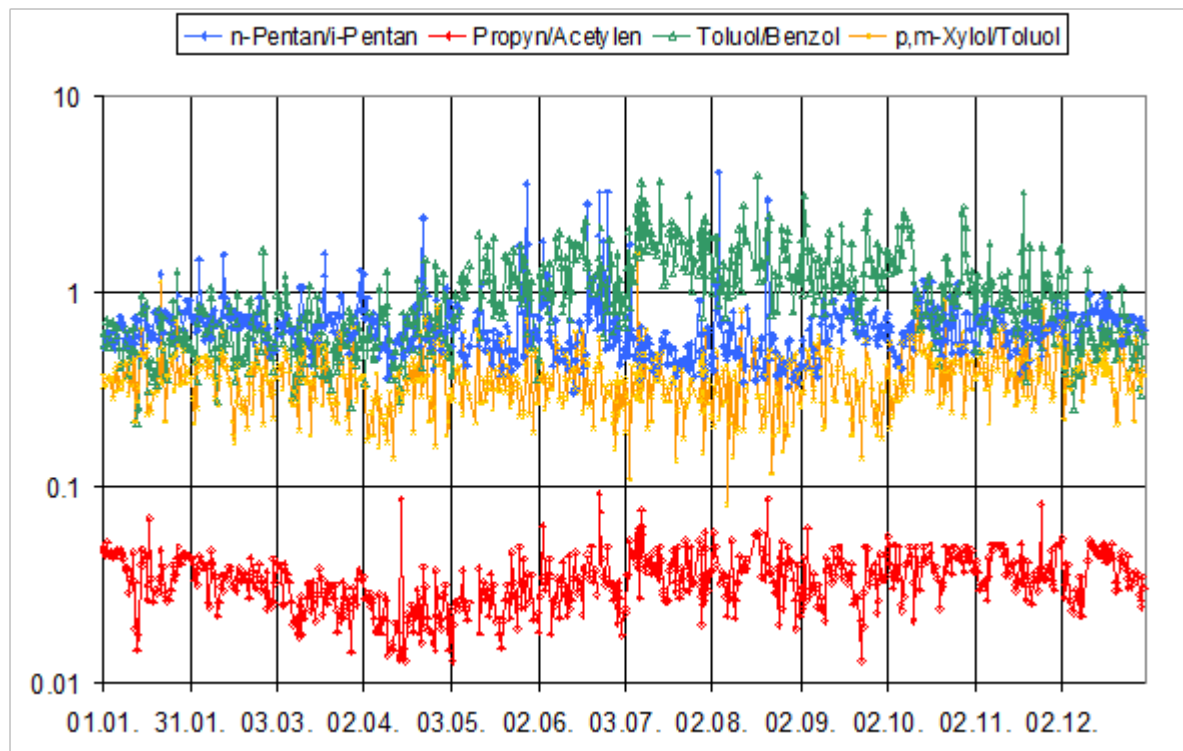
Time series (annual cycle) of C2-C4 alkanes measured at Hohenpeissenberg

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## Implement control procedures for VOCs (Examples)

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### 2. Step visual inspection of ratios



Time ratio series of VOCs measured at Hohenpeissenberg

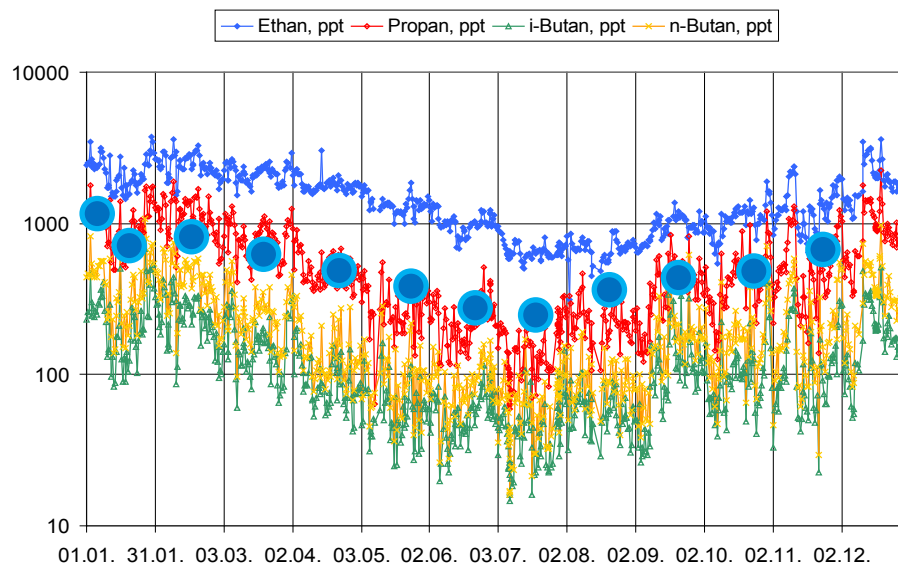
# ACTRIS-2:

## Task 3.1 gases: sustain the quality

### Implement control procedures for VOCs (Examples)

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#### 2. Step visual inspection of MONTHLY MEANS



NRT for selected station and checks  
(2-3 stations to be decided at the WP3 meeting)

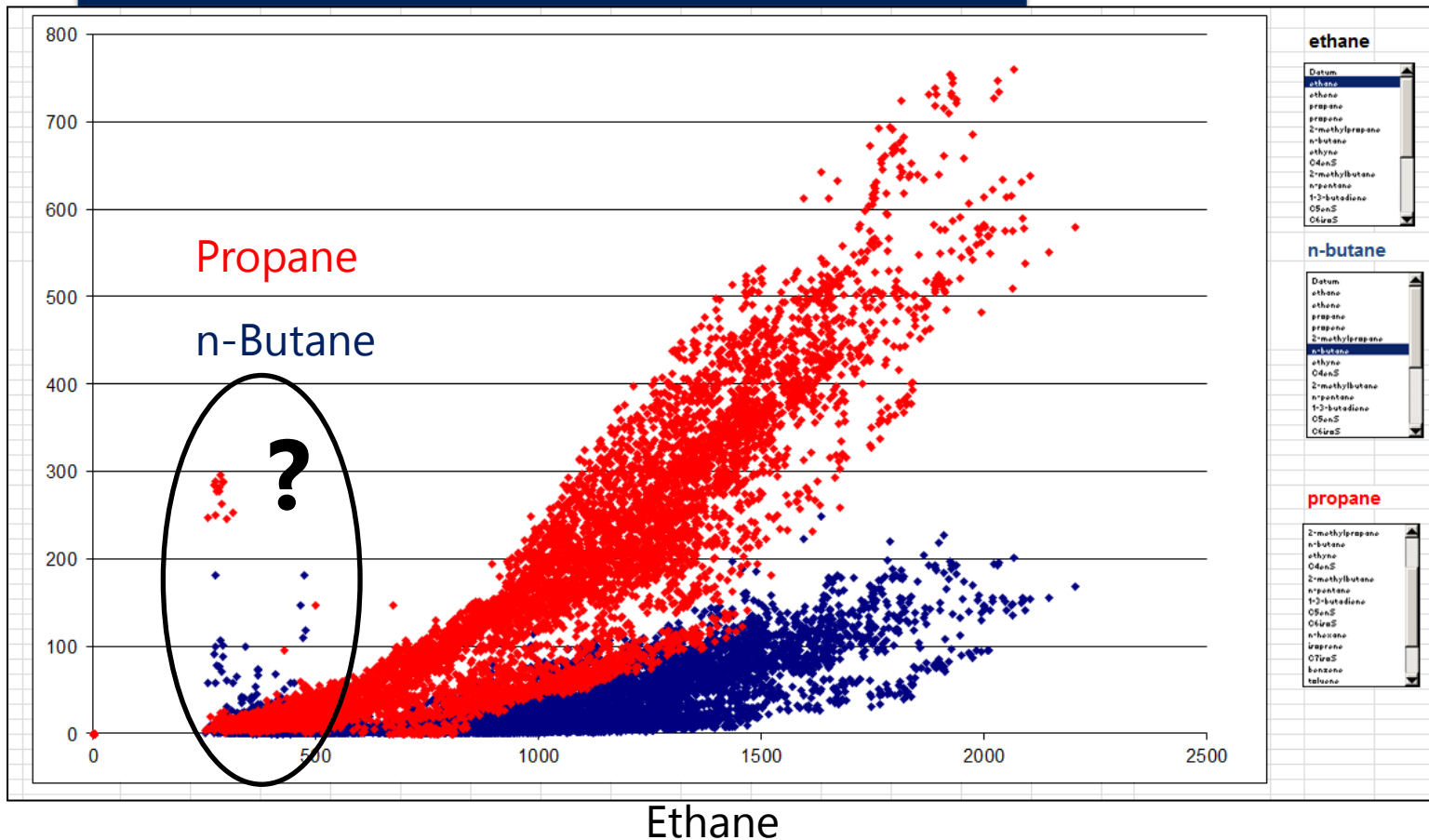
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## Task 3.1 gases: sustain the quality

### Implement control procedures for VOCs (Examples)

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#### 3. Ratio plots against for inspection of outliers



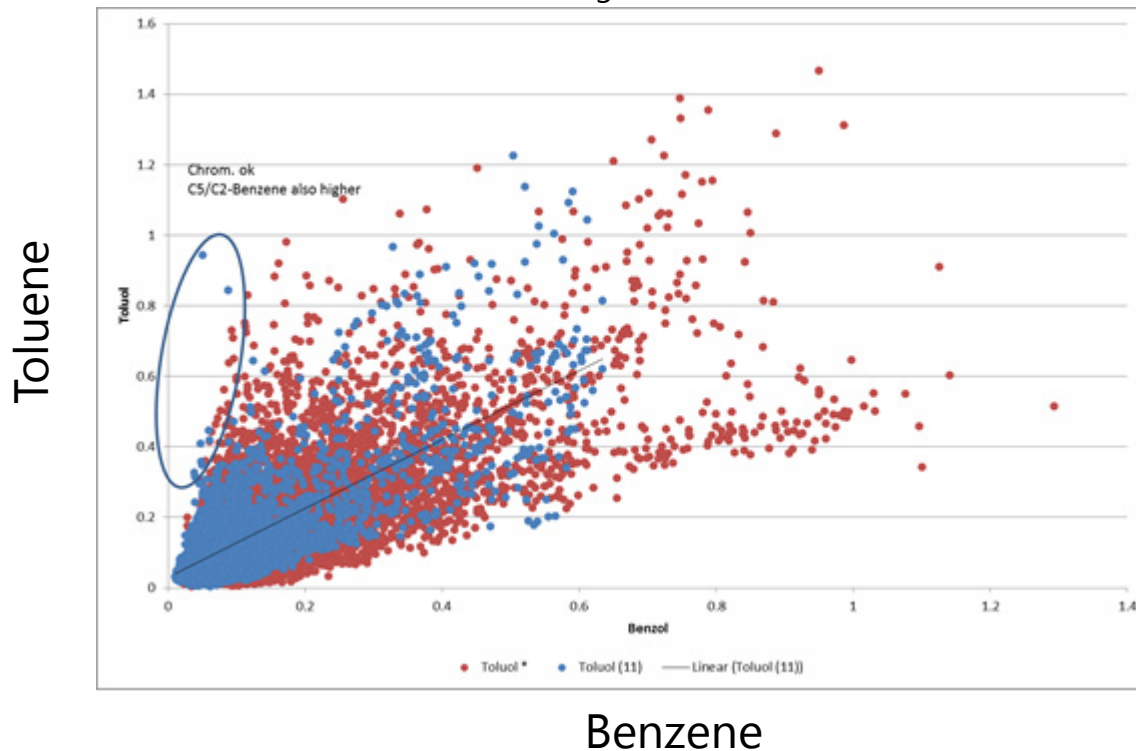
# ACTRIS-2: Task 3.1 gases: sustain the quality

## Implement control procedures for VOCs (Examples)

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### 4. Ratio plots against former years for inspection of outliers

Toluene vs Benzene ratio at Rigi, Switzerland (2011 and 2012)

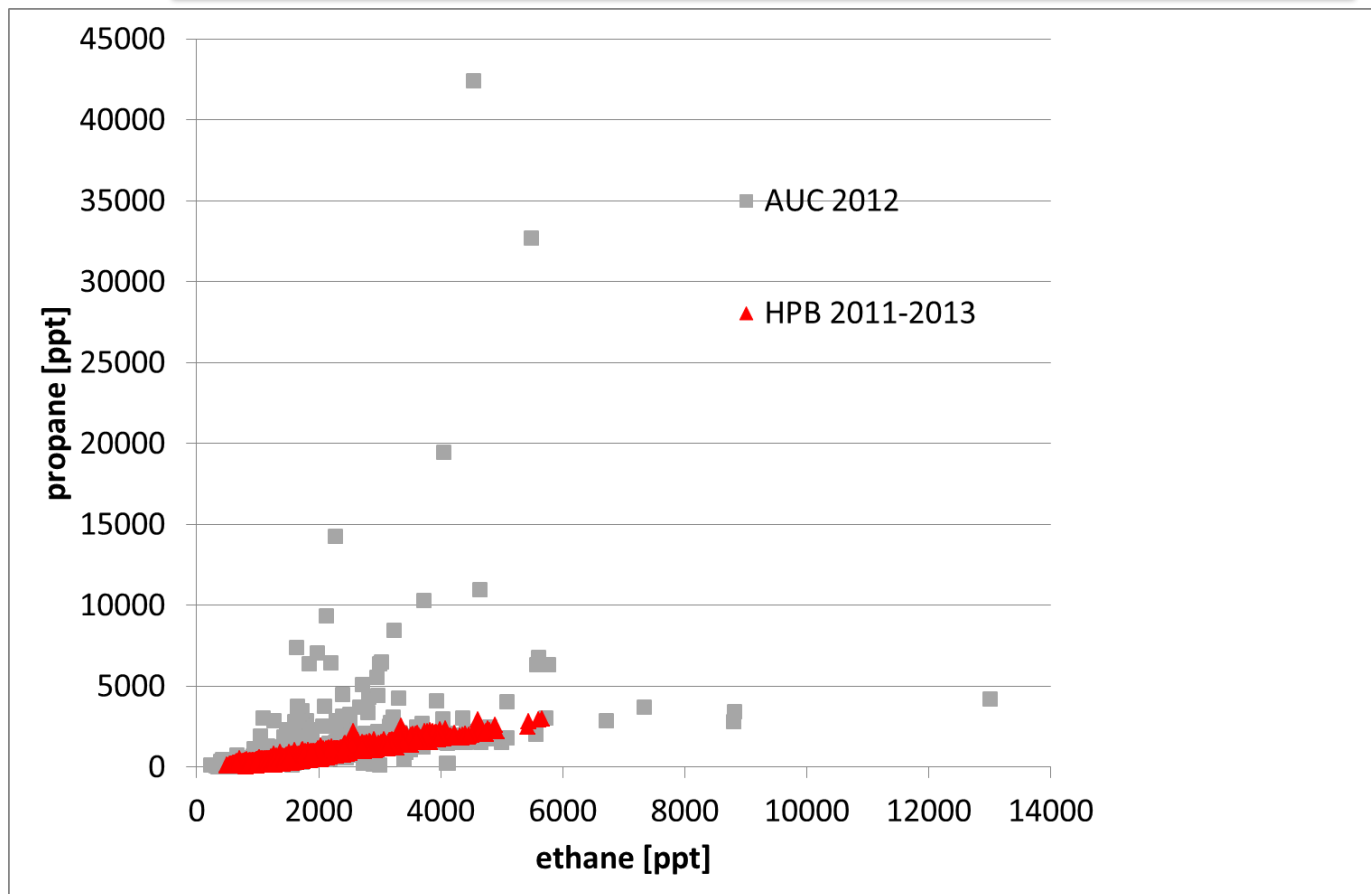


# ACTRIS-2: Task 3.1 gases: sustain the quality

## Implement control procedures for VOCs (Examples)

implementation of quality assurance tools for data submission  
(in combination with EBAS/NILU)

### 5. Ratio plots for inspection against a "master station"

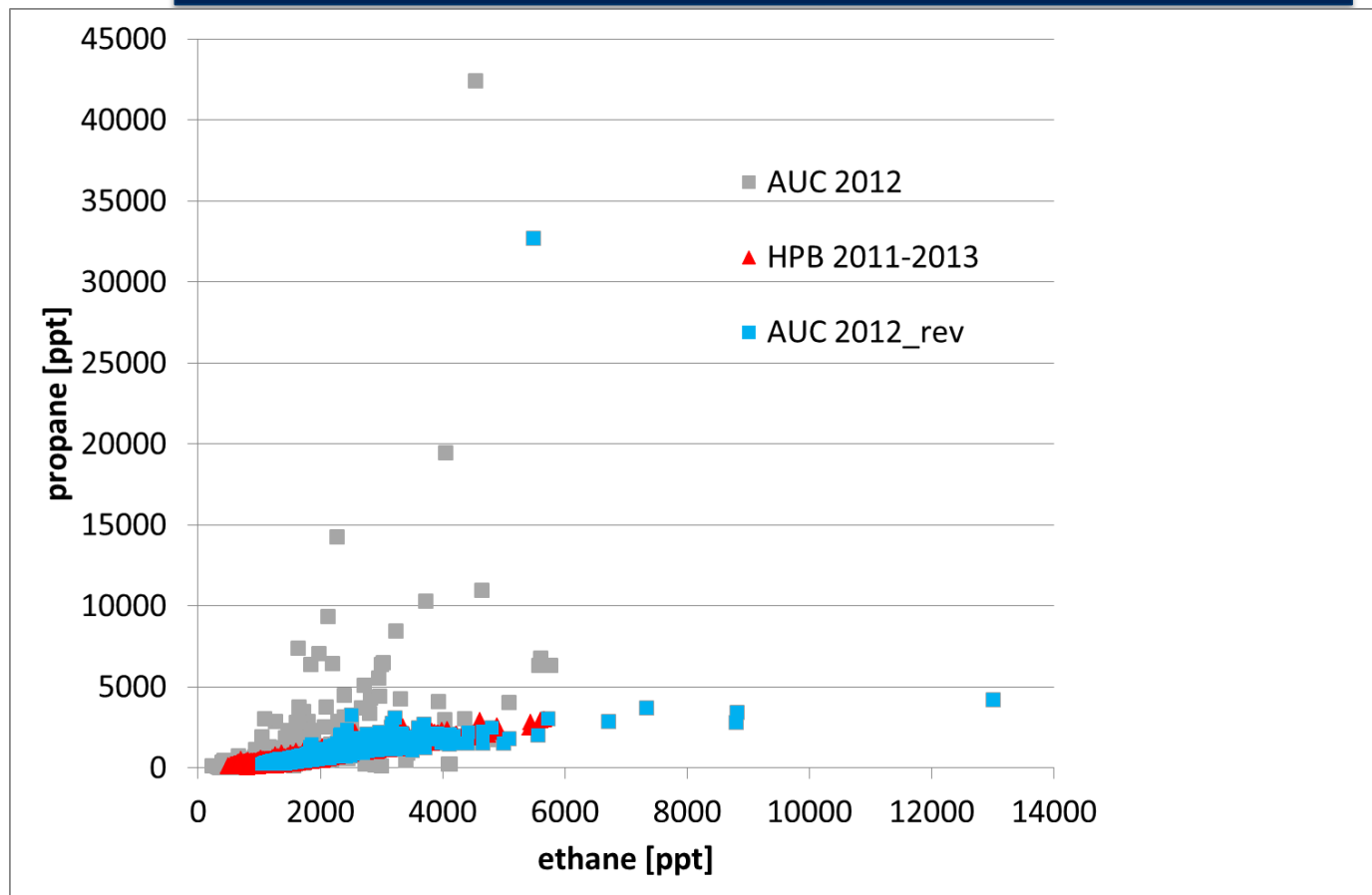


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## Implement control procedures for VOCs (Examples)

implementation of quality assurance tools for data submission  
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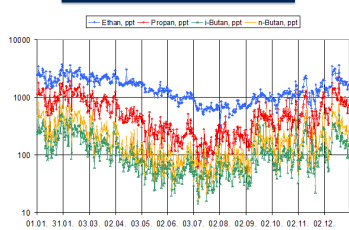
# ACTRIS-2:

Task 3.1 → task. 3.3 : sustain the quality

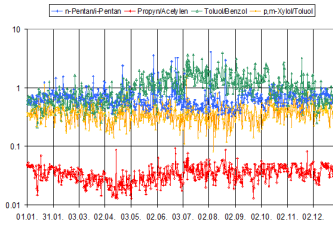
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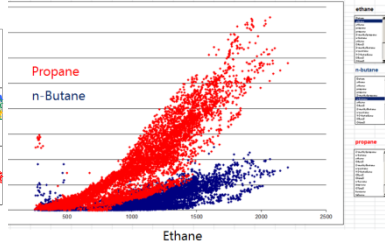
1. Step visual inspection of data set



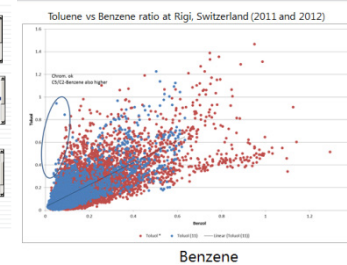
2. Step visual inspection of ratios



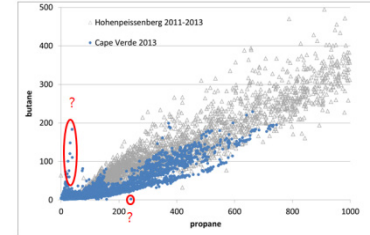
3. Ratio plots against former years for inspection of outliers



4. Ratio plots against former years for inspection of outliers



5. Ratio plots for inspection against a "master station"



Implementation into EBAS (task 3.3)