

## Choose Data

▶ Strip

▶ Pixel

&gt; Clusters

&gt; Misc

&gt; Logs

☒ Min and Max Value☒ Dead ROCS

&gt; ROCS

&gt; ROCS Logs

## Browsing Mode

Compare

Timeline

## Choose Runs

← /event\_display/Data2017/Beam/299/299000/StreamExpress/ →

← /event\_display/Data2017/Beam/299/299325/StreamExpress/ →

Quality tests ×

Quality tests - FED view ×

Quality tests - FED view: interactive ×

Quality tests - PSU view: interactive ×

Bad modules from quality tests ×

Total Number of Clusters ×

Min and Max Value ×

Dead ROCS ×

## Difference Mode

Disabled

Enabled

## REFERENCE

## Run: 299000, Tracker Map from QTestAlarm



## CURRENT

## Run: 299325, Tracker Map from QTestAlarm






# Section 1: Menu Bar

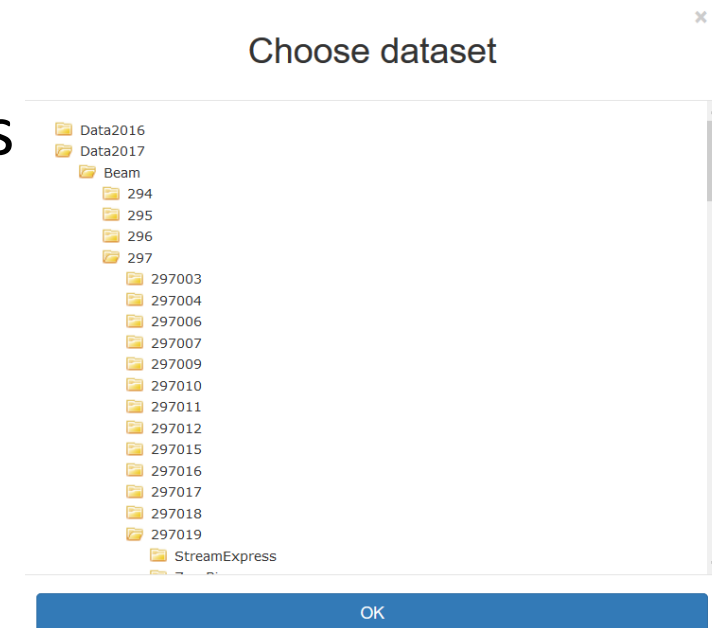
- Link Me: save current View (contents of **Options Panel** – including type of **Browsing Mode** - and currently selected **Tab**); new link will appear in the URL
- Mail Link: save current View and open your email client; the message content will be filled with the generated link
- How to?: open this document
- Bug, comment, suggestion?: send an email to the authors

## Section 2: Options Panel

- **Data picker:** choose available map/log type; every ticked checkbox will result in additional **Tab**
- **Browsing Mode:**
  - Compare: allows to directly compare data from 2 different Run Datasets
  - Timeline: switches to slideshow mode in which Tracker Maps in a given range will be presented; only png data will be shown in this mode

## Section 2: Options Panel contd

- **Run picker:** click on the browse button  to pick desired Run dataset
  - Top one input Run is considered as REFERENCE/FROM (Compare/Timeline **Browsing Mode**)
  - Bottom one input Run is considered as CURRENT/TO (Compare/Timeline **Browsing Mode**)
- Use   buttons to navigate between adjacent Runs
  - Tip: use your keyboard to navigate between runs:
    - U/J – previous REFERENCE/FROM
    - I/K – next REFERENCE/FROM
    - O/L – open browser for REFERENCE/FROM
  - especially useful when **Options Panel** is hidden



## Section 2: Options Panel contd

- Very bottom button of this section ▲ - toggle options: (un)hide **Options Panel**

## Section 3: Tab Bar

- Populates when User decides which data to present (using **Options Panel Data Picker**)
  - If **Browsing Type** is changed to Timeline only tabs which present Tracker Maps will be visible (no interactive and text data allowed)
- Tip: if you decide that you do not want given dataset (map/log) you can either
  - uncheck corresponding checkbox on **Options Panel** or
  - click close button in the top-right corner of the tab or
  - you can click Middle Mouse Button (MMB) to remove this tab

Last two options are handy with hidden **Options Panel**

# Section 4: Comparison Bar

- Type of comparison depends on the type of data:
  - Image: Comparison is done by subtracting values in each pixel:  
 $\text{DIFF} = \text{REFERENCE} - \text{CURRENT}$   
Difference will show up instead of the CURRENT and its transformation (position and zoom) will be the same as transformation of the REFERENCE
  - Text: Side by Side or Combined Inline; color legend:
    - There is a difference between the two lines
    - The line does not exist in the CURRENT
    - The line does not exist in the REFERENCE
    - Placeholder to keep lines in order
  - Comparisons are not allowed in the Timeline **Browsing Mode**

## Section 5A: Data Show: Comparison

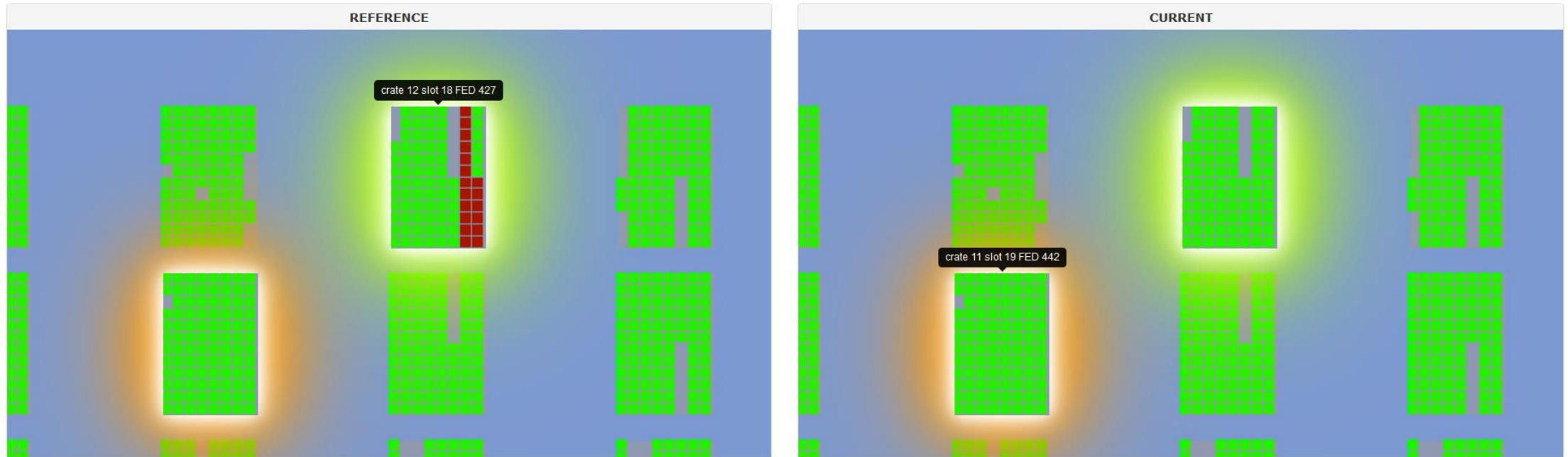
- Presents data for currently chosen dataset in **Tab Bar** with REFERENCE Run on the left and CURRENT on the right
- Data can be either Images or Text:
  - Images: they allow for panning(dragging) & zooming with your Mouse and its Scroll, keeping the same transformation in both views
  - Text files
- Both forms allow to make comparison views using **Comparison Bar**



## Section 5A: Data Show: Comparison contd

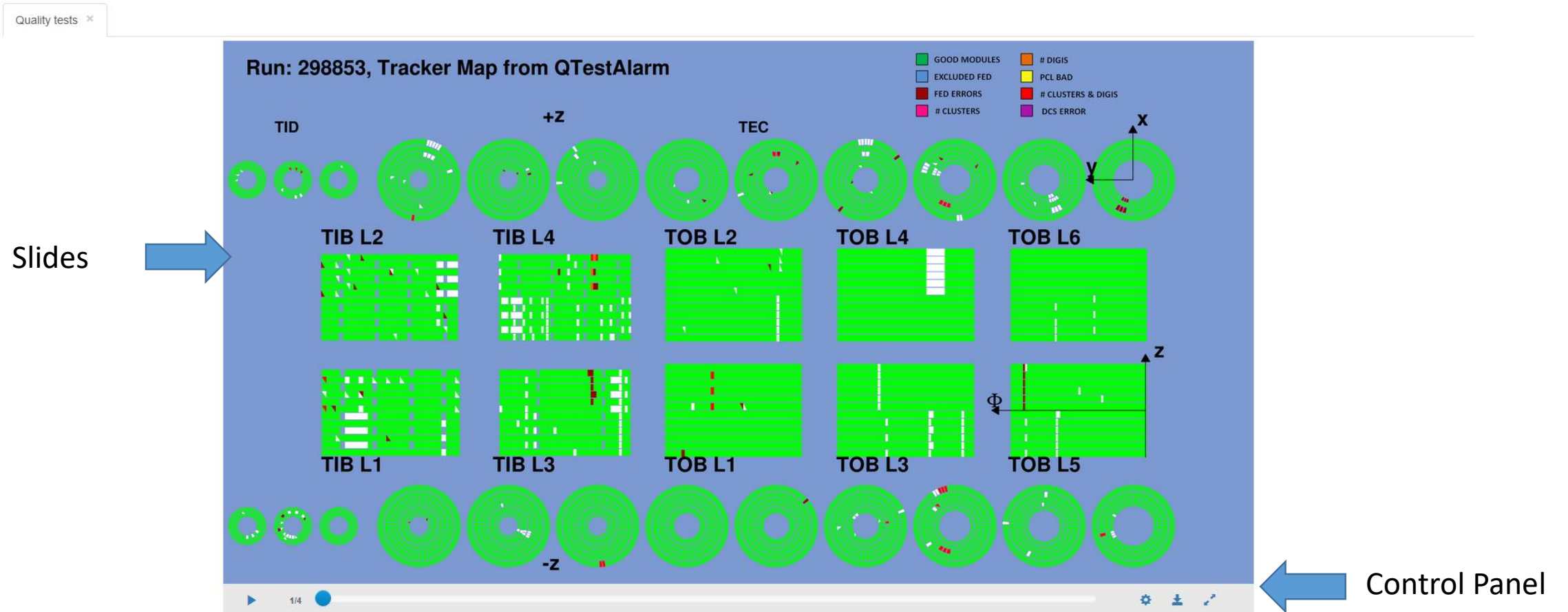
- There is a special type of Tracker Maps – Interactive Tracker Maps
  - Quality tests - FED view: interactive
  - Quality tests - PSU view: interactive
- The main difference between them and regular Tracker Maps is that when you hover over visible module:
  - you are informed about the current module name in the tooltip
  - the module gets orange highlight
  - clicking (LMB) on the module sets it in the metastable state
    - highlight changes to green
    - tooltip is not hiding
      - However tooltip is hidden when zooming and clicking MMB on the Tracker Map

## Section 5A: Data Show: Comparison contd



- Interactive Tracker Maps not only have synchronized pan&zoom but also highlights
- However, these Maps do not have interactive elements in the **Difference View** (because of the performance concerns)

# Section 5B: Data Show: Timeline



# Section 5B: Data Show: Timeline

- Timeline Control Panel (from left to right):
  - Play/Pause/Repeat button
  - Current slide number
  - Progress Bar – you can also drag it manually to adjust its position
  - Settings:
    - Enable playback looping
    - TkMPS: number of Tracker Maps that will be shown during 1s (min: 1, max: 25)
  - Download slideshow as gif
    - Resolution of the output file depends on the current size of Tracker Maps
    - Generation process might take a while
  - Toggle Fullscreen Mode
- Note: Timeline does not support pan&zoom at this moment

# Known issues

- Browsers supported:
  - Chrome
  - Firefox
  - Safari
- Browsers **NOT** supported at all:
  - IE / Edge
- Interactive Maps:
  - In certain situations interactive areas are not being scaled properly; if this problem occurs solution can be to click once again on the active tab
- Timeline:
  - In Firefox environment Maps are not being shown properly when the Map is being shown for the first time