Torrent Scout Release Notes

Table of Contents

Release 2.0 Update

DAT files

- Support for “cutting corners” .dat format
- Support for experimental data that has been split up into “blocks” (multiple sub-experiments)

Improvements to Existing Components

General

- Hint Action (light bulb) in mostly new components that gives hints on what can be done in this component

Heat Maps

- In all heat maps, the values for the color gradient can be changed by right clicking on the gradient panel on the right (and entering new min/max values)

Experiment Browser

- Additional filters (by name)
- Improved UI

Raw Data View

- Enter a range of flows (such as 0-4 or comma separated such as 1,2,4 or a combination)

Whole Chip Component

- View raw data for any chosen frame and flow (and raw type) of entire chip

Process Component

- Open an area on the chip (100x100 for instance) and view all raw data
- View raw data for any frame (by sliding frame slider around)
- View raw or BG subtracted data for any number of cursors (selected wells)
- View masks overlaid
- Move cursors with keys
- Export charts
- Compute bg subtraction
- Overlay peak or background adjustment functions in chart and change their parameters
- Define start and end frame by dragging green vertical lines around, which is used in the Fit component
- For some functions, dragging is also enabled

Mask Edit Component

- Create and edit masks (add, subtract, invert, shift etc)
- Includes command line editor to do computation on masks
- Drop down mask calculator

- Export or import masks
- Find pinned pixels
- Use those masks in other components (Automate, Process, Fit)

Fit Component

- Compute histogram using a given mask and a specified function (such as integral) between user defined frames (usually green frames as defined in Process component)
- View % or absolute values (Options)
- Create a mask by selecting a part of the histogram
- View example wells by clicking on the histogram
- The cursors from the process component are shown in the histogram
- Used for instance to separate good wells from bg wells
- Export histogram to file

Automate Component

- Compute bg subtraction and compute the median signal for a area on the chip (such 100x100) for a range of flows (such as 0-7) and for a selected mask (such as “live wells”). Mask can be a custom mask
- The result of a flow can be subtracted from the other results if desired
- Creates 2 charts, one with all signals in one view, the other with the results one after the other (multi flow)
- Charts and results can be exported to Excel or image format

Release 1.5 Update

Data Access

DAT files

- Support of region based format
- No more need for caching/indexing .dat files in region based format
- .Dat files are read about 80x faster than before
- Support of 316 and 318 chips
- Added XT channel correction code to fix electrical cross talk for 316+ chips

HDF5

- Support of HDF5 format for 1.wells file

Other

- No longer using wellstats file (computing SFF and other parameters using sff and bam file)

User Interface

Experiment Explorer

- Enabled experiment explorer for community release

Alignments

- Added Q lengths to alignment panel
- Fixed computation of Q lengths for reverse alignments
- Printing flow information

Raw data view

- Cleaned up user interface
- Allow turning on/off of transformations (XT correction, normalization etc)
- Turned off need for caching for region based format

Scores Heat Map

- Custom heat map generation can also contain flow numbers as search parameters (example: search for CCC in a row between flows 10-20)

Feedback

- Added feedback action/menu item that sends email to me (including last exception if one is found)

Splash screen

Added one time splash screen for very first time users with one button to hopefully guide the