

# STARWARE Advertisement

22nd. Mar. 2017

Byul Moon

# STARWARE

- SpecTroscope Analysis for  $\gamma$ -Ray softWARE (STARWARE) : GUI program.
- Contains useful functions for  $\gamma$ -ray spectroscopy.
- Main functions :  $\gamma$ - $\gamma$  coincidence, half-life measurement, net area calculation,  $\log ft$  calculation, etc.
- Run with customized shared-library based on ROOT.
- Available on any platform(MacOS, Linux, Window 10) by using CMAKE.
- Since Jan. 2016.

# STARWARE

STARWARE Beta Ver.1.2

File Help

Projected Spectra | Gated Spectrum | T.Gated Spectrum | Time Growing | Half-life Measurement | Calculations

GATE

Input the time bin size.

0

DECAY GATE

NET AREA

Input the start time value.

0

Input the end time value.

0

TIME GATE

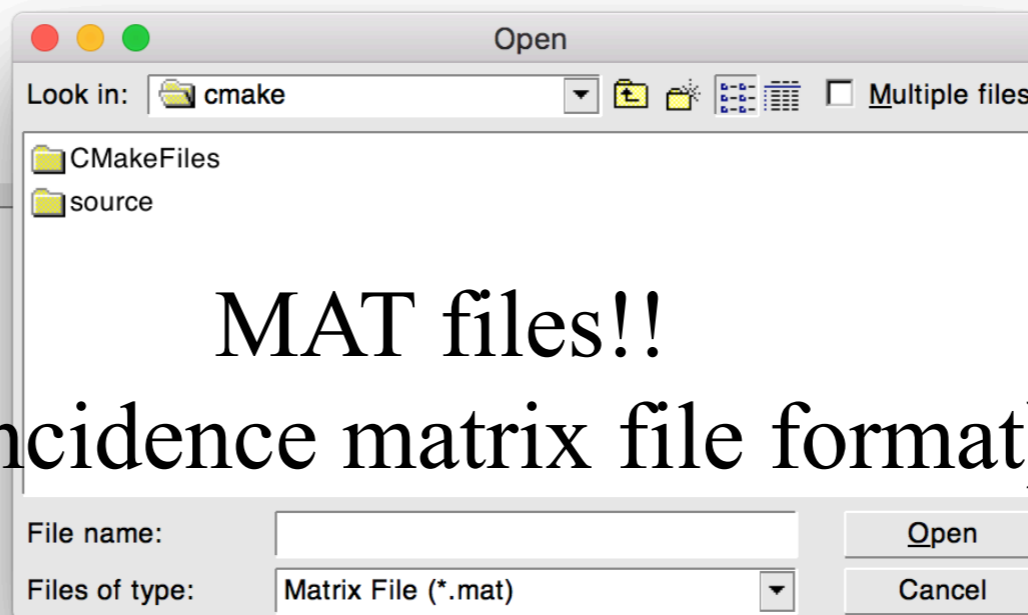
Input the peak value.

0

TIME GROW

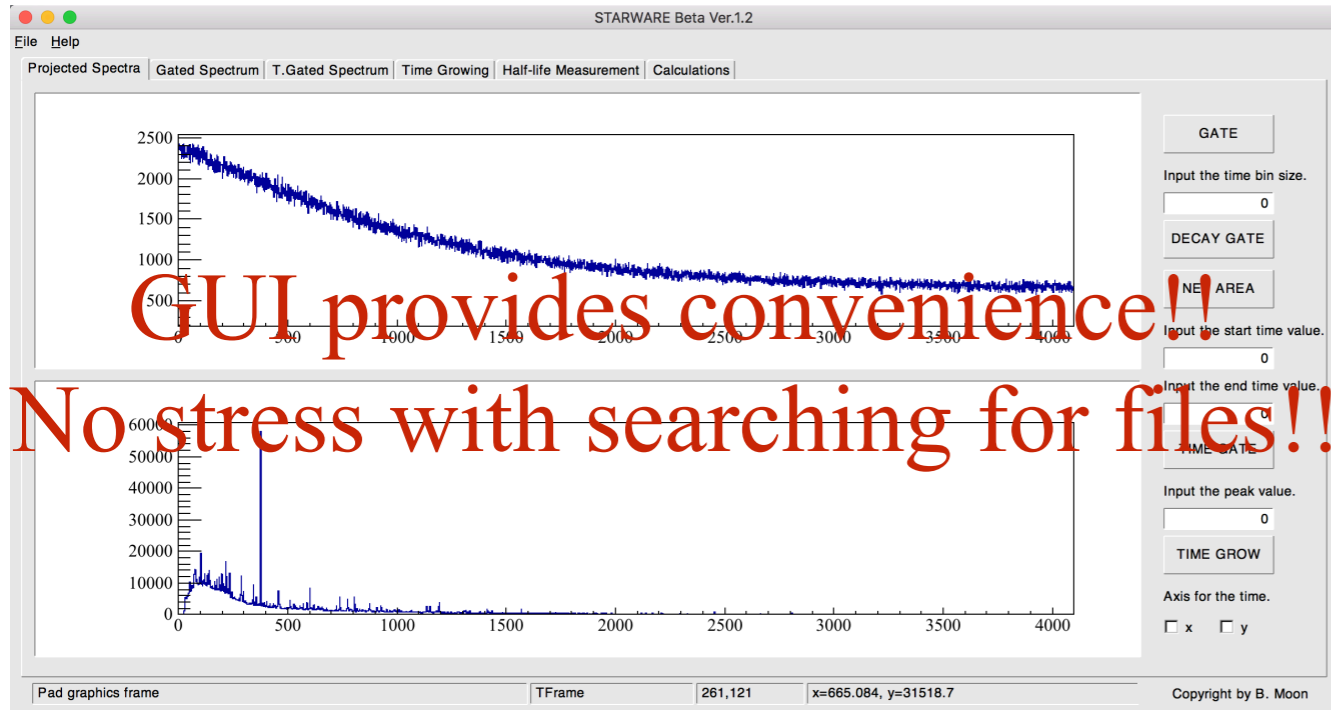
Axis for the time.

x  y



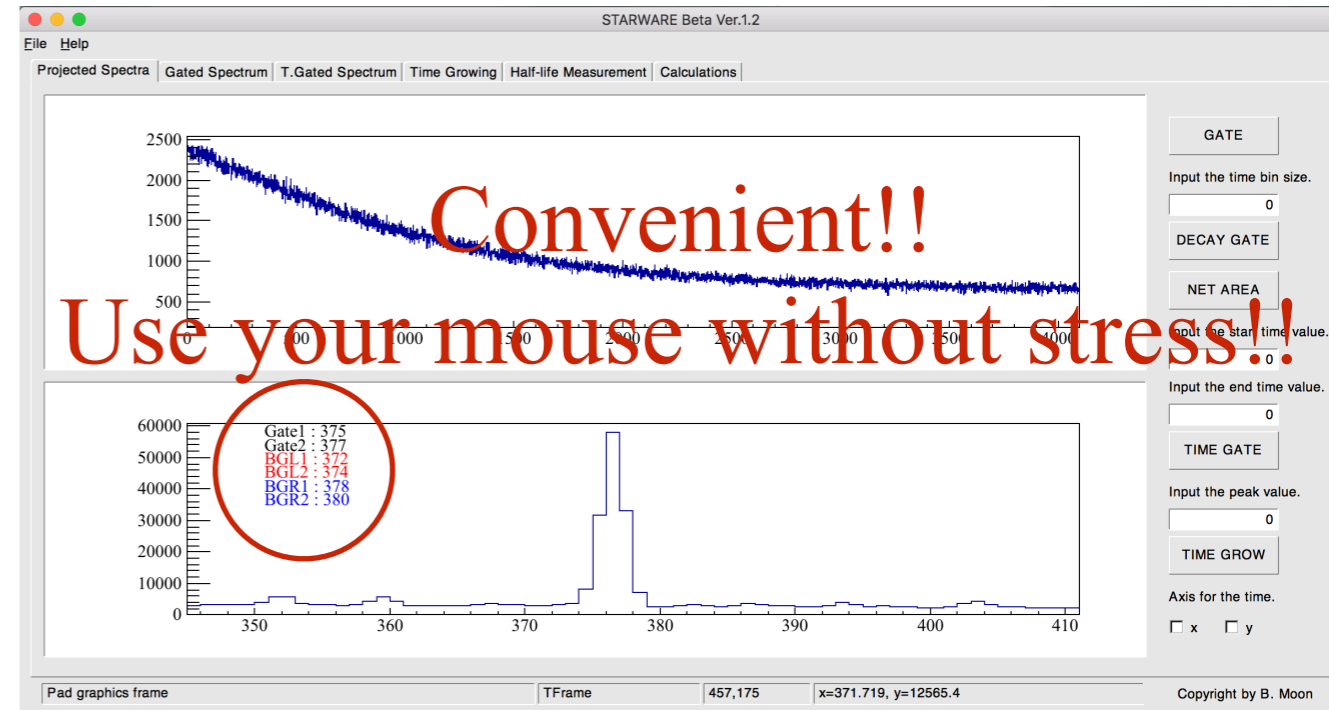
MAT files!!  
(coincidence matrix file format)

# STARWARE



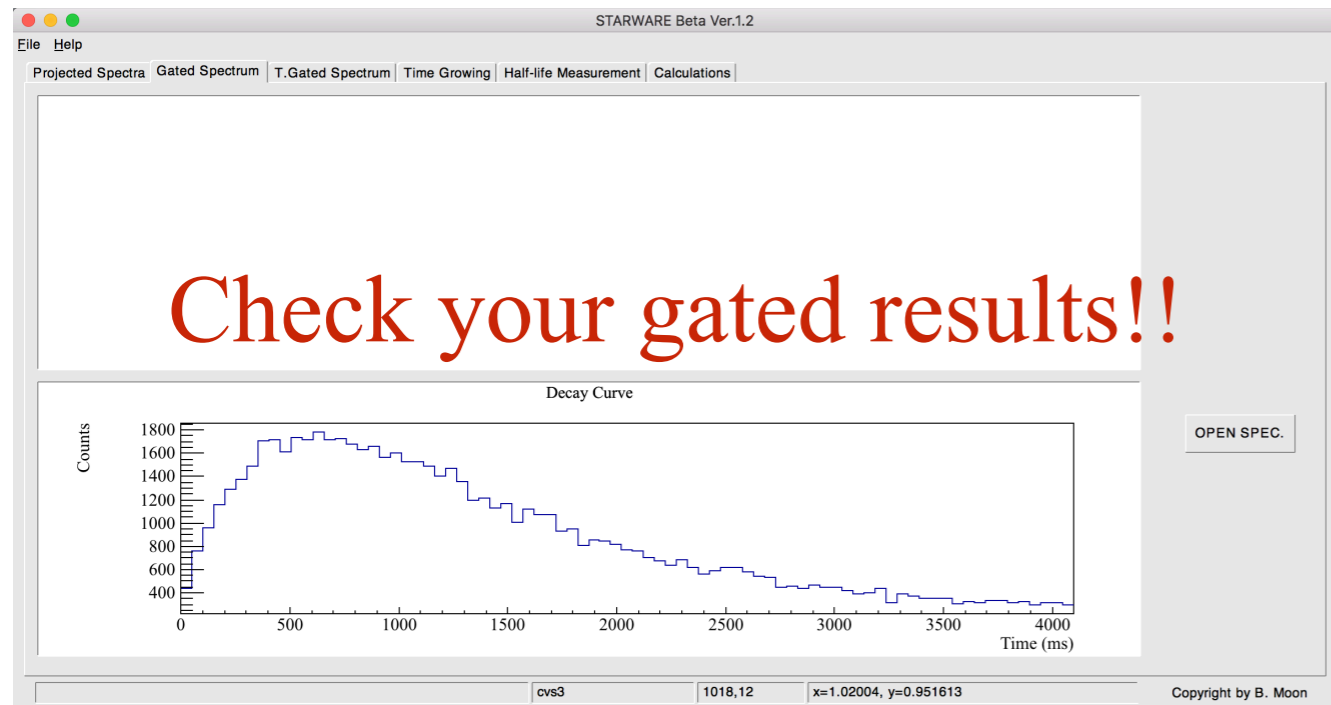
GUI provides convenience!!

No stress with searching for files!!

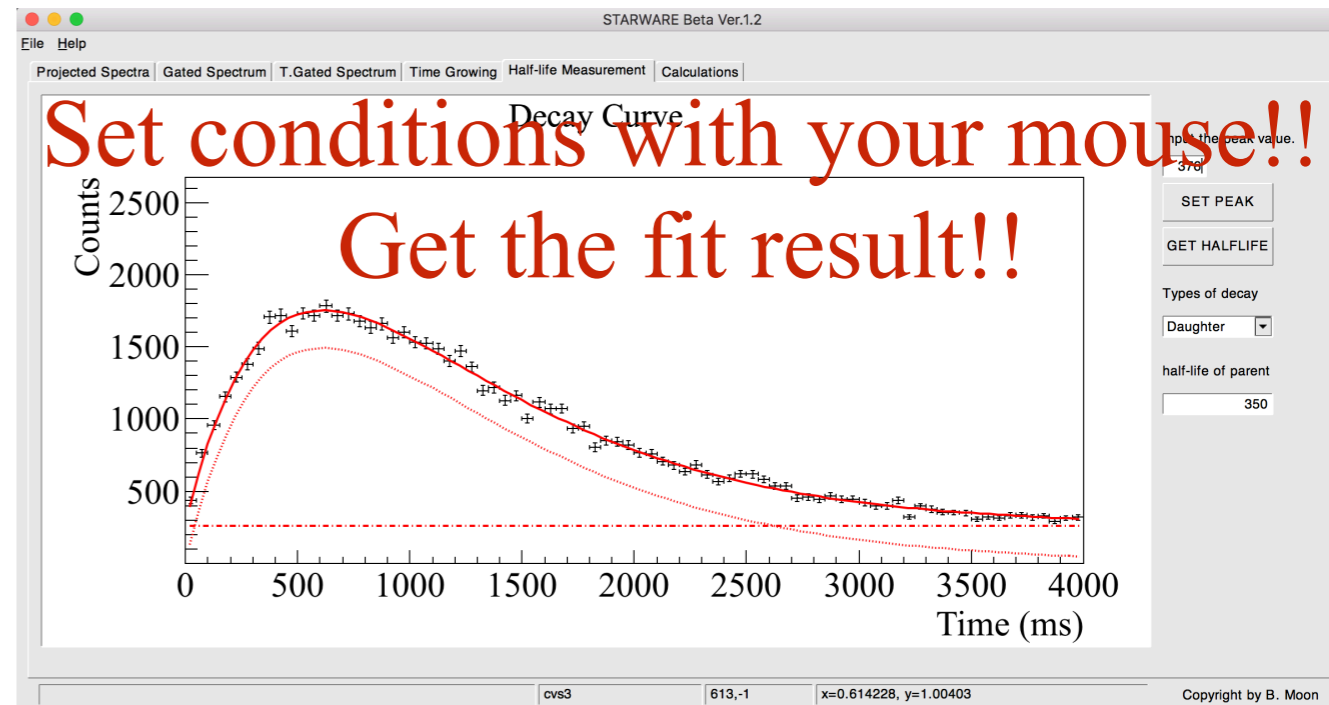


Convenient!!

Use your mouse without stress!!



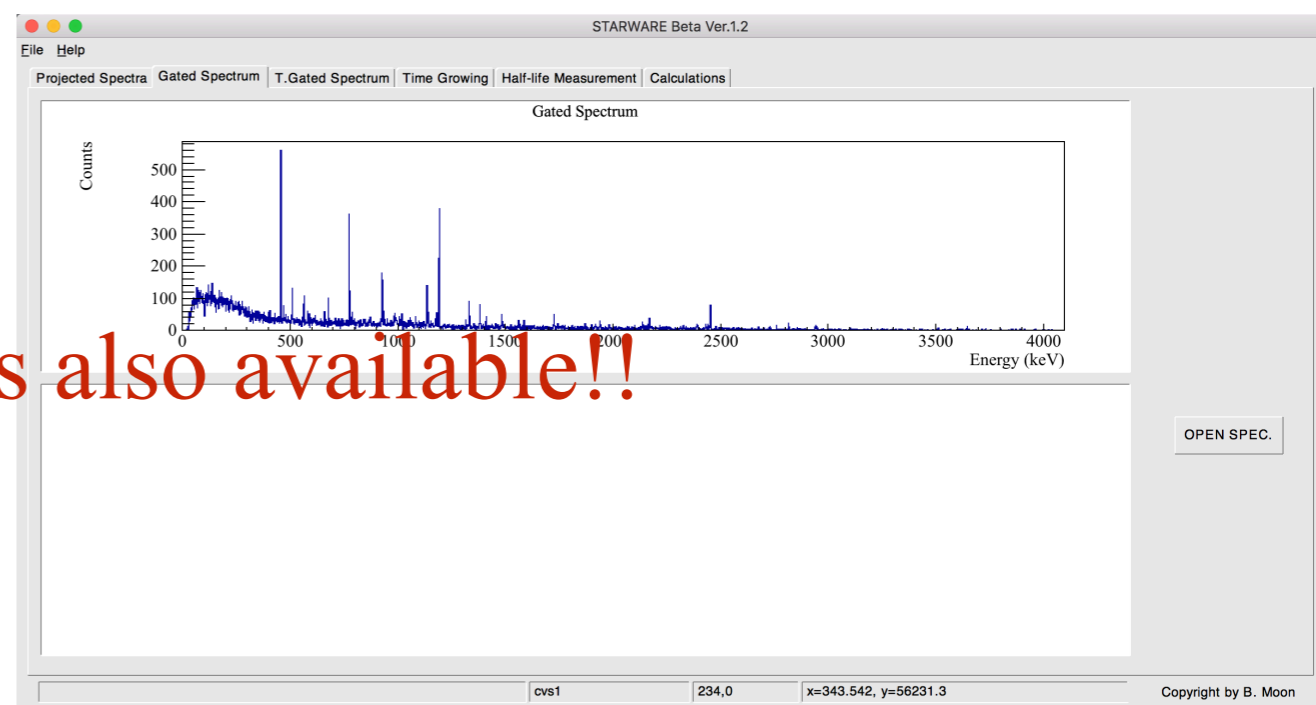
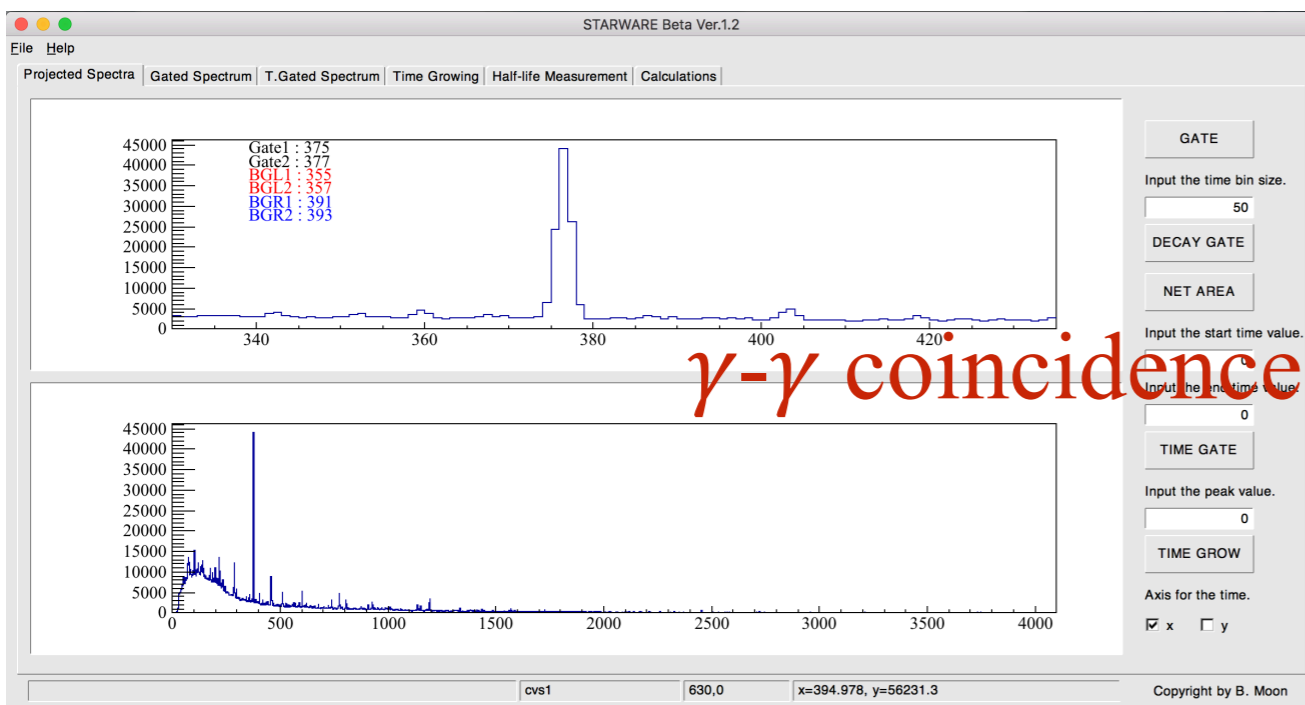
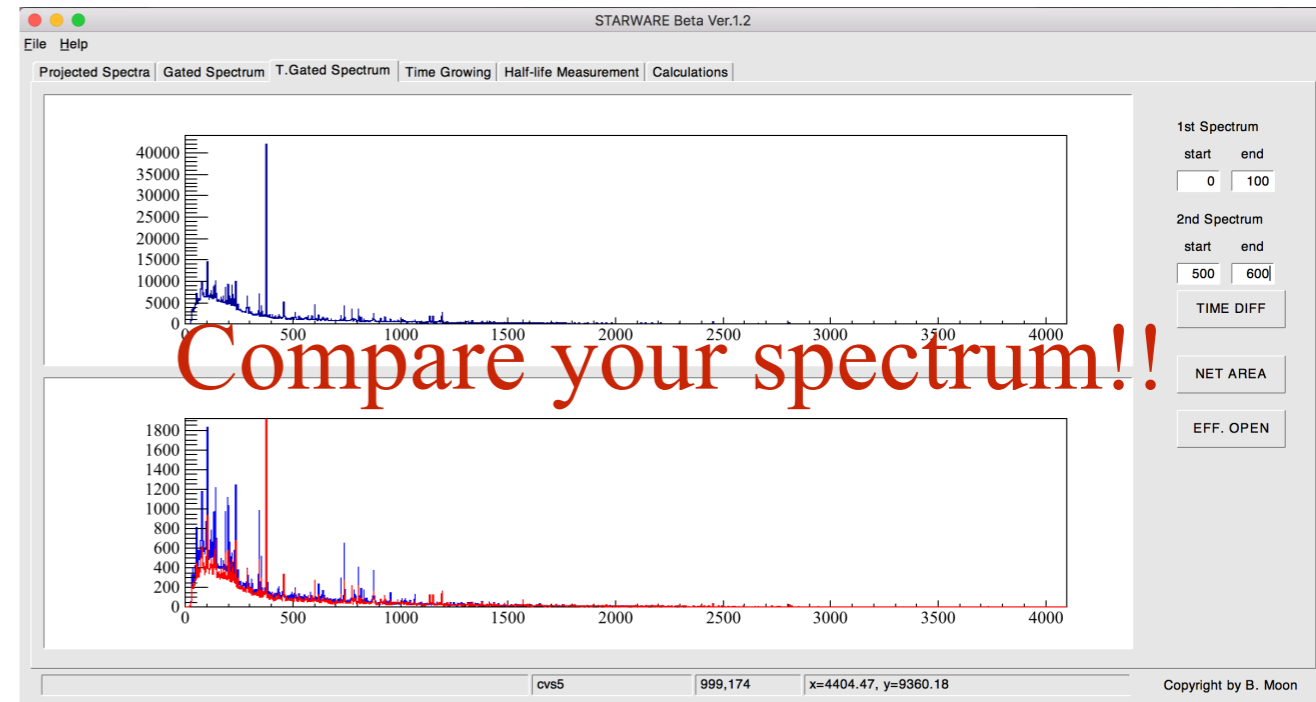
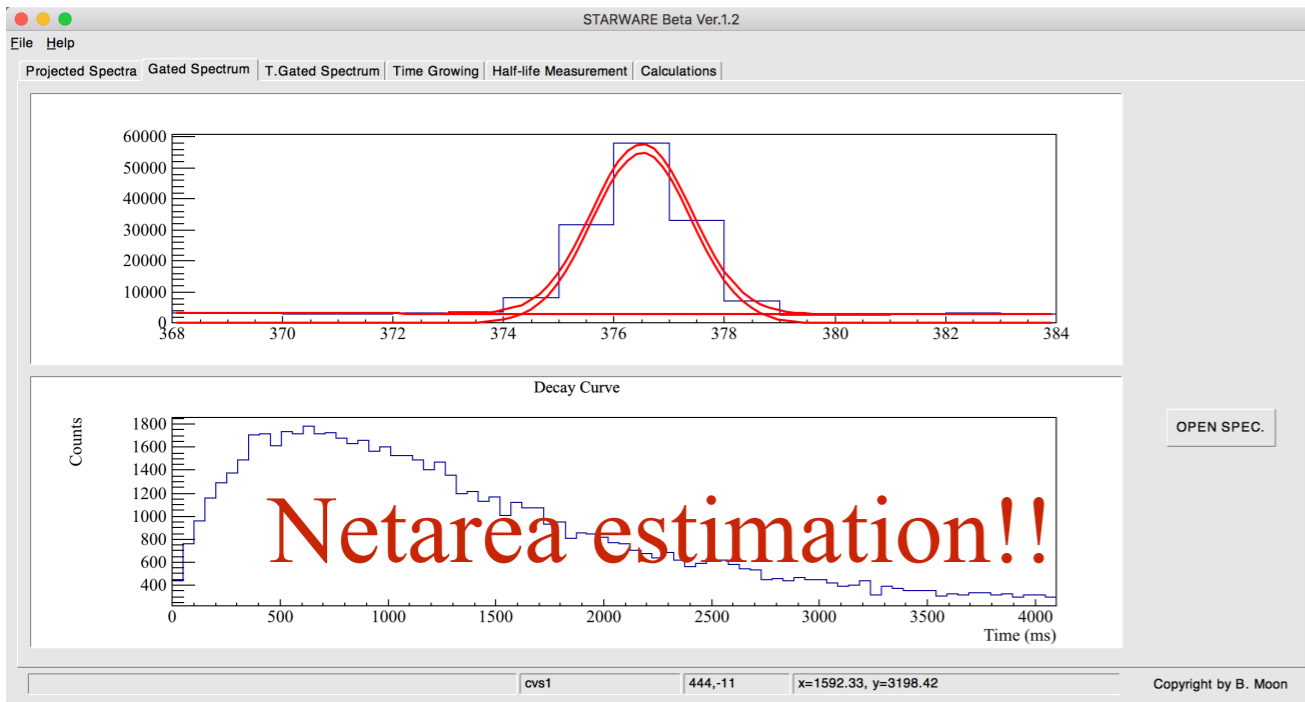
Check your gated results!!



Set conditions with your mouse!!

Get the fit result!!

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LOGFT Calculation

Parent Information

Z

Half-life

Units

Q-value (MeV)

Level Energy (keV)

Reduced Matrix Element Calculation

Multipole

Half-life

Daughter Information

Level Energy (keV)

Intensity (0 to 1)

Get LOGFT

Get B(GT)

Energy (keV)

Units

Calculate

Useful calculations are available!!

cvs5 | 673,-19 | x=2752.66, y=58450.3 | Copyright by B. Moon

# Future Plan

- Additional functions.
- Make the distributable version.  
(First version : alpha 1. 0. with no GUI system, Current version : beta 1. 2.)
- FADC500 → DAQ / Online monitoring system : GUI  
(IF TIME ALLOWS.)