

# NIF data trends tool

Andrew MacPhee

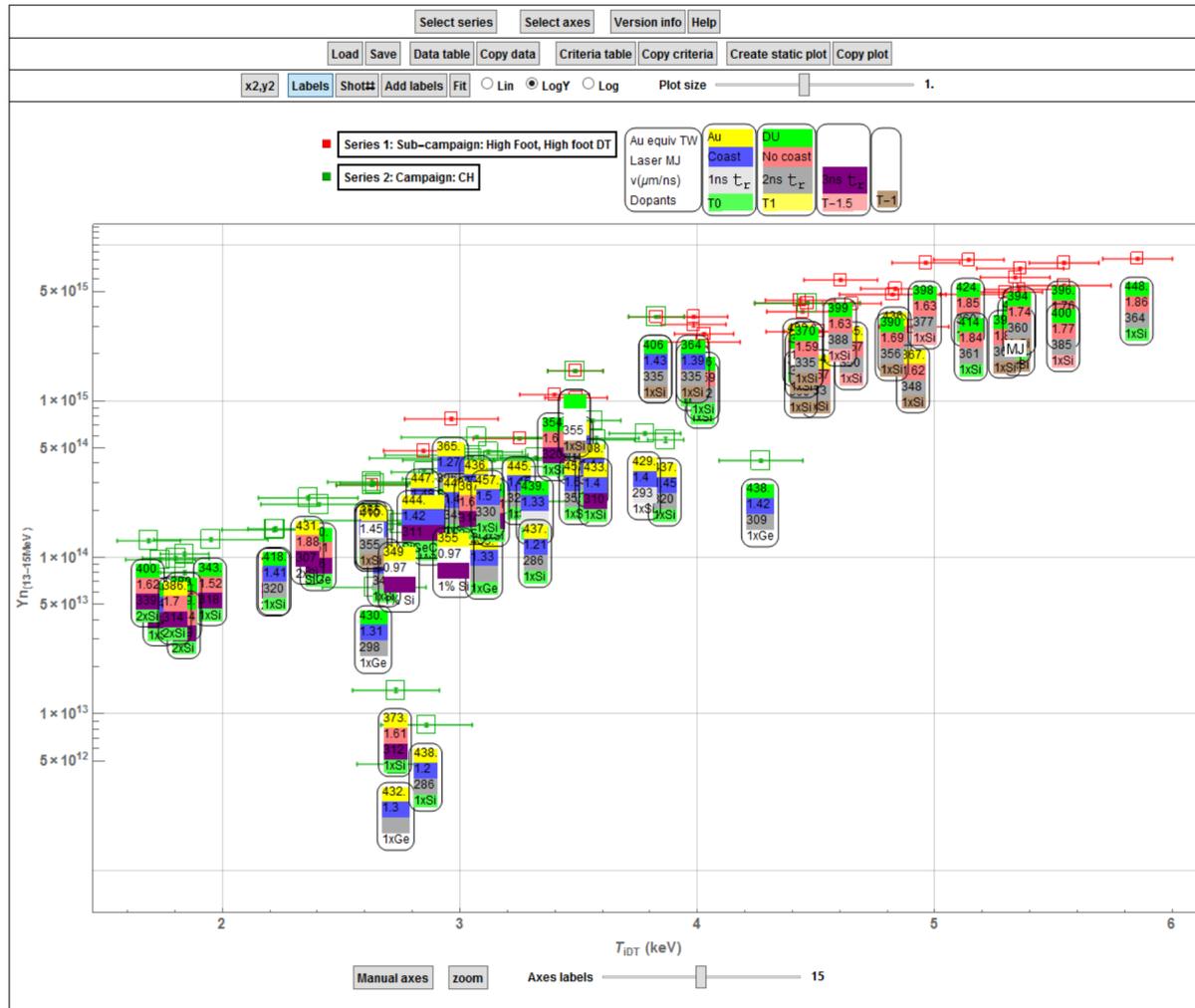
11/11/2016



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# The NIF data trends tool provides a convenient way to visualize (and extract) scalar NIF data





# Switch series on or off here



**Enable series:**

1 2 3 4 5 6

Target RVP and laser	Derived metrics	Authorized values	SXI values	Nino's Top Level Summary
Prav's derived metrics	NIF Archive Data	Simulations	Nuclear data	Diagnostics

Series 1  (19 shots satisfy criteria)

- Hohlraum length ( $\mu\text{m}$ )
- Hohlraum length (cryo) ( $\mu\text{m}$ )
- Tent thickness (nm)
- Ablator (RVP)
- Dopant #1
- Dopant #2
- Dopant #3
- ABLATOR\_DOPANT\_4\_MATERIAL\_RT

Sub-campaign

- Gbar
- HGR
- High Foot
- Hohlraum Perform
- Hohlraum Te
- Hot Electron
- HotSpotTeKr
- HydroGrowth
- Layered keyhole

Exclude

- N130409-001-999
- N130730-005-999
- N130802-002-999
- N130808-002-999
- N130812-002-999
- N131118-003-999
- N131219-003-999
- N140120-002-999
- N140304-003-999

Series 2  (168 shots satisfy criteria)

- Shot ID
- Expt ID
- Shot RI
- Campaign
- Sub-campaign
- Platform
- Target type
- Hohlraum shape
- Target description

Campaign

- 1D ablation/stagnation
- Ablative Rayleigh-Taylor
- Ablator
- Astrophysics
- Be
- BigFoot
- Burn Physics
- Capsule
- CH

Exclude

- N110603-001-999
- N110608-002-999
- N110612-003-999
- N110615-003-999
- N110620-002-999
- N110625-001-999
- N110627-001-999
- N110630-001-999
- N110728-001-999

# First select the criteria to gather shots by

Enable series:

1 2 3 4 5 6

Target RVP and laser	Derived metrics	Authorized values	SXI values	Nino's Top Level Summary
Prav's derived metrics	NIF Archive Data	Simulations	Nuclear data	Diagnostics

Series 1  (19 shots satisfy criteria)

- Hohlraum length ( $\mu\text{m}$ )
- Hohlraum length (cryo) ( $\mu\text{m}$ )
- Tent thickness (nm)
- Ablator (RVP)
- Dopant #1
- Dopant #2
- Dopant #3
- ABLATOR\_DOPANT\_4\_MATERIAL\_RT

Sub-campaign

- Gbar
- HGR
- High Foot
- Hohlraum Perform
- Hohlraum Te
- Hot Electron
- HotSpotTeKr
- HydroGrowth
- Layered keyhole

Exclude Clear

- N130409-001-999
- N130730-005-999
- N130802-002-999
- N130808-002-999
- N130812-002-999
- N131118-003-999
- N131219-003-999
- N140120-002-999
- N140304-003-999

Series 2  (168 shots satisfy criteria)

- Shot ID
- Expt ID
- Shot RI
- Campaign
- Sub-campaign
- Platform
- Target type
- Hohlraum shape
- Target description

Campaign

- 1D ablation/stagnation
- Ablative Rayleigh-Taylor
- Ablator
- Astrophysics
- Be
- BigFoot
- Burn Physics
- Capsule
- CH

Exclude Clear

- N110603-001-999
- N110608-002-999
- N110612-003-999
- N110615-003-999
- N110620-002-999
- N110625-001-999
- N110627-001-999
- N110630-001-999
- N110728-001-999

# The select the values for that criteria you want included

Enable series:

1 2 3 4 5 6

Target RVP and laser	Derived metrics	Authorized values	SXI values	Nino's Top Level Summary
Prav's derived metrics	NIF Archive Data	Simulations	Nuclear data	Diagnostics

Series 1  (2 shots satisfy criteria)

- Hohlraum length ( $\mu\text{m}$ )
- Hohlraum length (cryo) ( $\mu\text{m}$ )
- Tent thickness (nm)
- Ablator (RVP)
- Dopant #1
- Dopant #2
- Dopant #3
- ABLATOR\_DOPANT\_4\_MATERIAL\_RT

Exclude

Sub-campaign 45.721

Tent thickness (nm) 45.762

45.786

45.861

45.87

45.882

45.892

45.904

45.944

45.956

N130802-002-999

N140304-003-999

Series 2  (168 shots satisfy criteria)

- Shot ID
- Expt ID
- Shot RI
- Campaign
- Sub-campaign
- Platform
- Target type
- Hohlraum shape
- Target description

Exclude

Campaign 1D ablation/stagnation

Ablative Rayleigh-Taylor

Ablator

Astrophysics

Be

BigFoot

Burn Physics

Capsule

CH

N110603-001-999

N110608-002-999

N110612-003-999

N110615-003-999

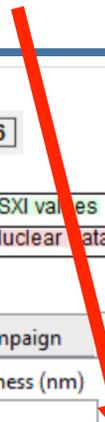
N110620-002-999

N110625-001-999

N110627-001-999

N110630-001-999

N110728-001-999



# You can combine multiple criteria, e.g., sub-campaign: High-Foot, plus a range of tent thickness'

Enable series:  1  2  3  4  5  6

Target RVP and laser	Derived metrics	Authorized values	SXI values	Nino's Top Level Summary
Prav's derived metrics	NIF Archive Data	Simulations	Nuclear data	Diagnostics

Series 1  (2 shots satisfy criteria)

Exclude

Sub-campaign: 45.721  
Tent thickness (nm): 45.762, 45.786, 45.861, 45.87, 45.882, 45.892, 45.904, 45.944, 45.956

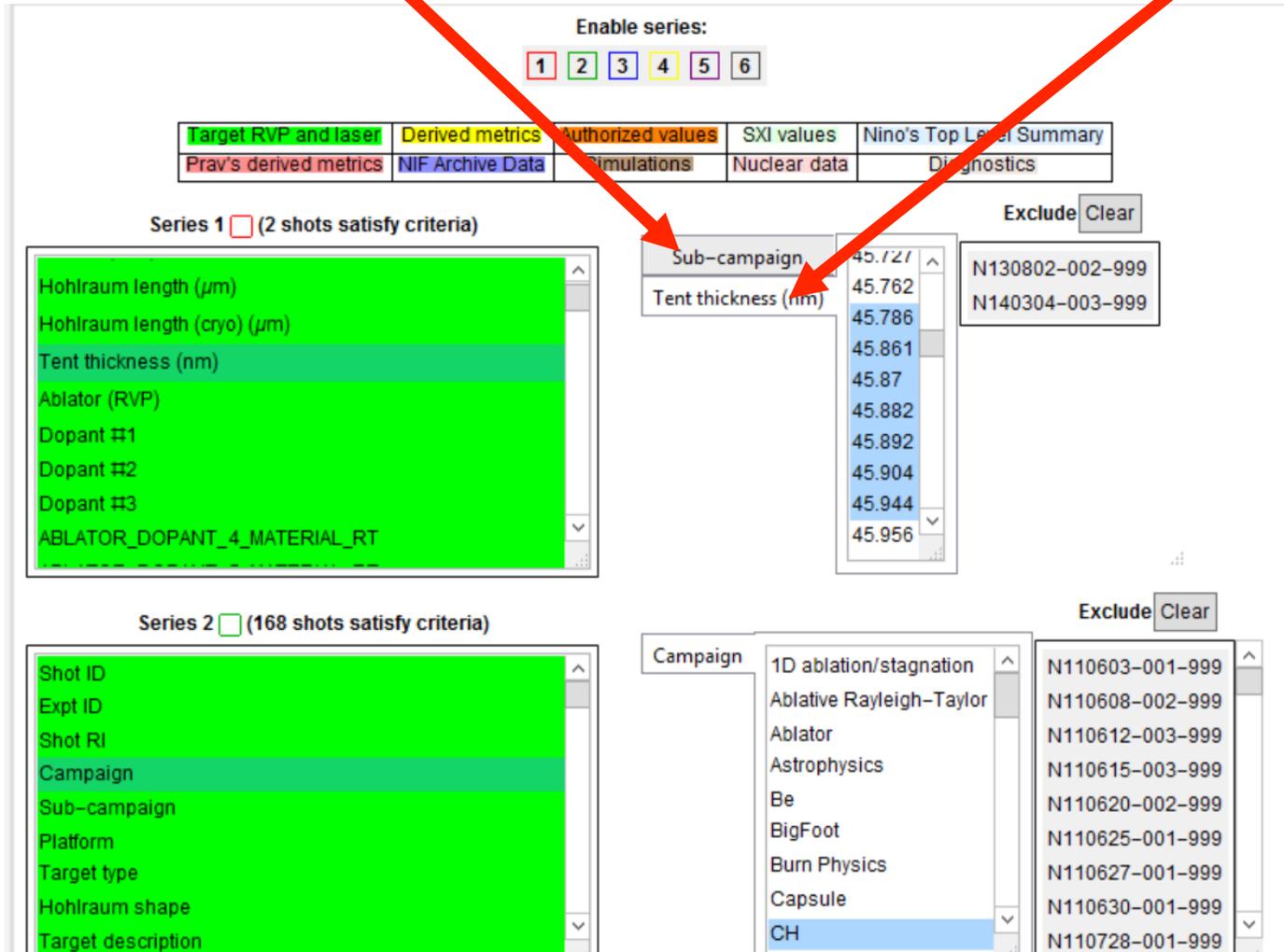
N130802-002-999  
N140304-003-999

Series 2  (168 shots satisfy criteria)

Exclude

Campaign: 1D ablation/stagnation, Ablative Rayleigh-Taylor, Ablator, Astrophysics, Be, BigFoot, Burn Physics, Capsule, CH

N110603-001-999  
N110608-002-999  
N110612-003-999  
N110615-003-999  
N110620-002-999  
N110625-001-999  
N110627-001-999  
N110630-001-999  
N110728-001-999



# The color coding tells you the source of the data

The interface displays data series selection options. A red arrow points to the 'Derived metrics' column in the 'Enable series' table. Below this are two series selection panels, each with a list of parameters and a dropdown menu for filtering.

Enable series:					
1	2	3	4	5	6
Target RVP and laser	Derived metrics	Authorized values	SXI values	Nino's Top Level Summary	
Prav's derived metrics	NIF Archive Data	Simulations	Nuclear data	Diagnostics	

**Series 1**  (19 shots satisfy criteria)

- Hohlraum length ( $\mu\text{m}$ )
- Hohlraum length (cryo) ( $\mu\text{m}$ )
- Tent thickness (nm)
- Ablator (RVP)
- Dopant #1
- Dopant #2
- Dopant #3
- ABLATOR\_DOPANT\_4\_MATERIAL\_RT

Sub-campaign: High Foot

Exclude: Clear

- N130409-001-999
- N130730-005-999
- N130802-002-999
- N130808-002-999
- N130812-002-999
- N131118-003-999
- N131219-003-999
- N140120-002-999
- N140304-003-999

**Series 2**  (168 shots satisfy criteria)

- Shot ID
- Expt ID
- Shot RI
- Campaign
- Sub-campaign
- Platform
- Target type
- Hohlraum shape
- Target description

Campaign: CH

Exclude: Clear

- N110603-001-999
- N110608-002-999
- N110612-003-999
- N110615-003-999
- N110620-002-999
- N110625-001-999
- N110627-001-999
- N110630-001-999
- N110728-001-999

# Then select the X-Y axes for the plot

Select axes:

Target RVP and laser	Derived metrics	Authorized values	SXI values	Nino's Top Level Summary
Prav's derived metrics	NIF Archive Data	Simulations	Nuclear data	Diagnostics

X-axis:  $T_{iDT}$  (keV)

Y-axis:  $Yn_{(13-15MeV)}$

Y<sub>n,DT</sub>/Y<sub>n,DD</sub>

Y<sub>n,DT</sub>/Y<sub>n,DD</sub> Exp(8.0+DSR)

Y<sub>n,DT</sub> Exp(4.0+DSR)

Y<sub>n,DD</sub> Exp(12.0+DSR)

Fuel  $\rho R$  (g/cm<sup>2</sup>)

DSR (DT)

DSR (DD)

Gamma BT (ns)

Gamma BW (ps)

T<sub>iDD</sub> (keV)

T<sub>iDT</sub> (keV)

X-ray BT (ns)

X-ray BW (ps)

Y<sub>n</sub><sub>(13-15MeV)</sub>

Y<sub>n</sub><sub>(2.2-2.7MeV)</sub>

Clear Ap dia U

Fuel  $\rho R$  (g/cm<sup>2</sup>)

DSR (DT)

DSR (DD)

Gamma BT (ns)

Gamma BW (ps)

T<sub>iDD</sub> (keV)

T<sub>iDT</sub> (keV)

X-ray BT (ns)

X-ray BW (ps)

Y<sub>n</sub><sub>(13-15MeV)</sub>

Y<sub>n</sub><sub>(2.2-2.7MeV)</sub>

Clear Ap dia U

Soft x-ray dia U

Frac in CI Ap dis U

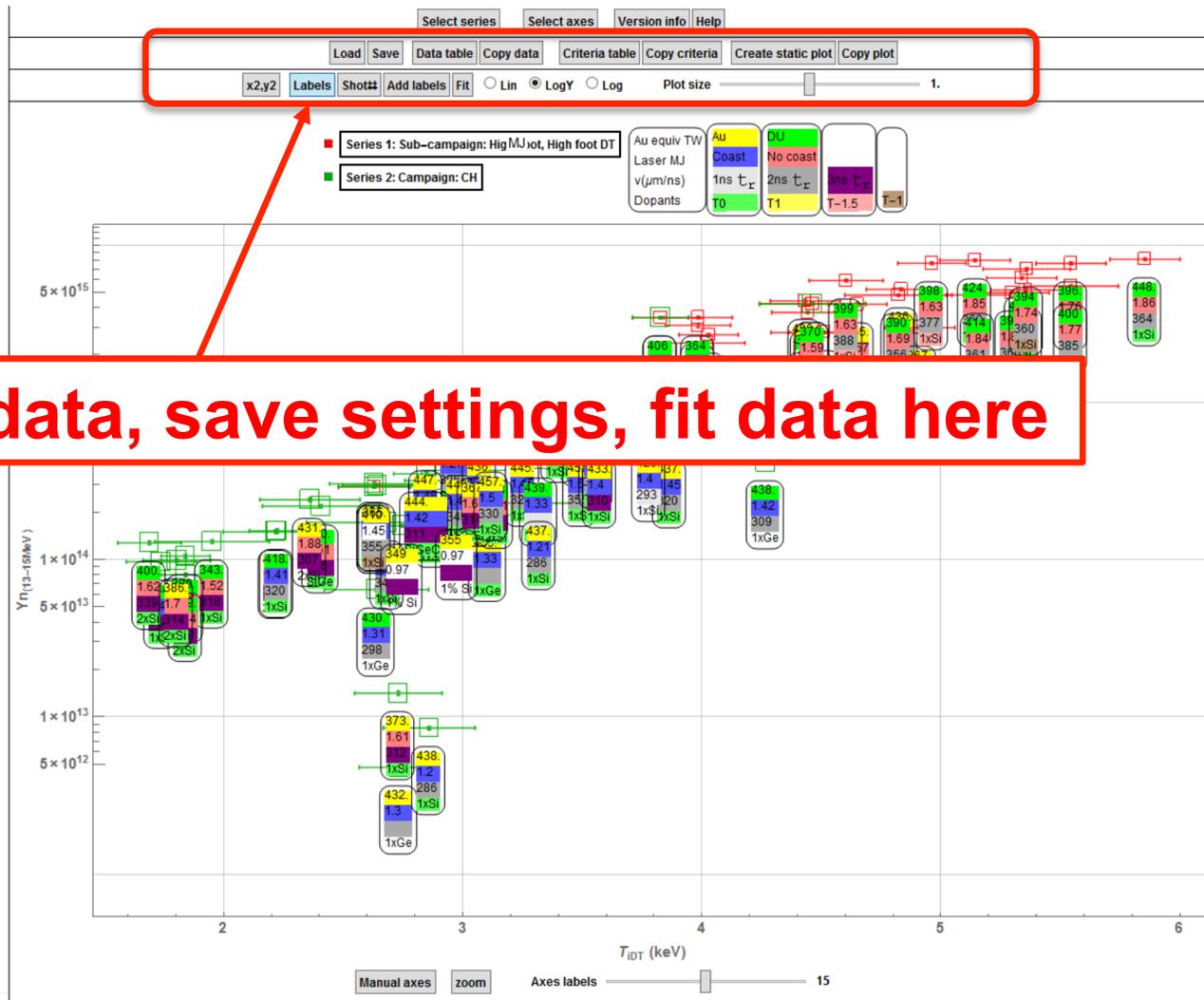
Dia for Frac U

Clear Ap dia L

Max Fuel Velocity ( $\mu\text{m/ns}$ )



# Export series data, save settings, overlay least-squares fits, choose axes type, copy plot



Export data, save settings, fit data here

# Filter shots to include in each series from all target shots since NIC shock timing (N110603)

**Series 1 (65 shots satisfy criteria)**

Sub-campaign: 2Shk, 2shk: 1D, 2Shk: 1D, 2 Shock, 3Shk: 1D, 3shk: Shape, 3Shk: Shape, 3shk: Shocks, 3Shk: Shocks, 4shk: 1D, 4shk: Shape

Exclude: N121023-001, N121102-002, N121130-001, N130108-001, N130122-004, N130214-002, N130303-001

**Series 2 (148 shots satisfy criteria)**

Campaign: 1D ablation/stagnation, Ablative Rayleigh-Taylor, Ablator, Astrophysics, Be, Burn Physics, Capsule, CH, Code Validation, Collisionless Shock, Diagnostics, Diffraction

Exclude: N110603-001, N110608-002, N110612-003, N110615-003, N110620-002, N110625-001, N110627-001

Select additional popup labels:

Shot ID	This upload:	Mon 9 Nov 2015 07:56:50
Expt ID	New functionality added:	Mon 31 Aug 2015 15:53:58
Shot RI	Authorized values:	Mon 9 Nov 2015 07:13:05
Campaign	Experiment values:	Mon 9 Nov 2015 07:24:35
Sub-campaign	SXI values:	Mon 9 Nov 2015 07:46:01
Platform	Simulation values:	Mon 9 Nov 2015 07:29:21
Target type	RVP and laser values:	Mon 9 Nov 2015 07:51:14
Hohlraum shape	Nino's Top Level Summary:	Mon 2 Nov 2015 08:29:38
Target description	Prav's derived values:	Wed 8 Apr 2015 14:45:54
Serial	NTOP/NAD/MRS data:	Mon 9 Nov 2015 07:43:00
Hohlraum material	NIS data:	Mon 9 Nov 2015 07:43:34

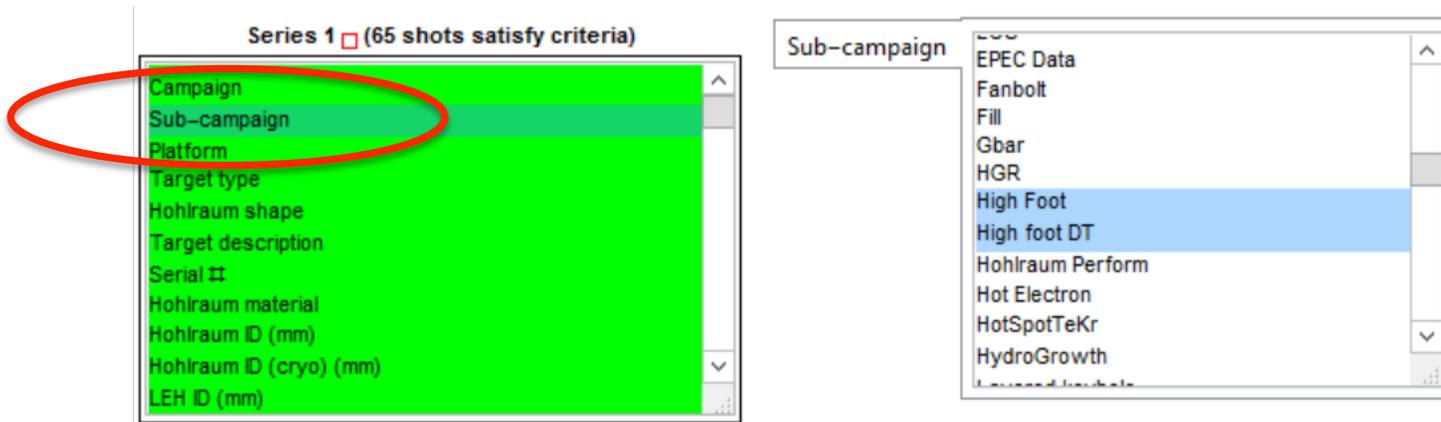
**Define series 1**

**Define series 2,... 3, 4, 5, 6**

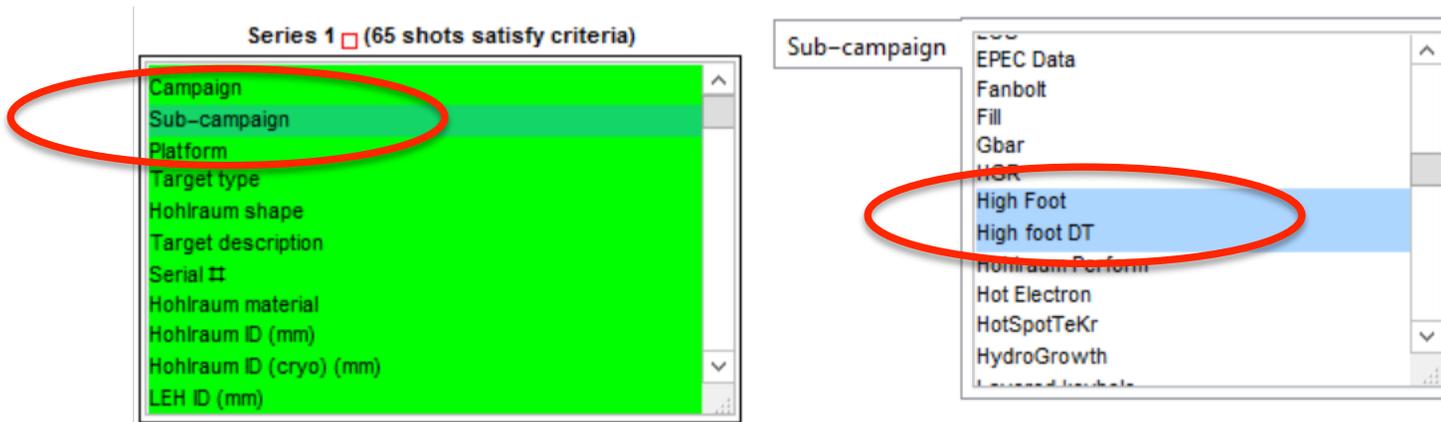
# Choose one or more parameter to filter shots by

For example, filter by “Sub-campaign” name:

---



# Select which “sub-campaign” names to include e.g., all “High Foot” and “High foot DT” shots



# This filter returns 65 shots:

The image shows a software interface for filtering data. On the left, a list of criteria is displayed with a green background. A red oval highlights the text "Series 1" and "(65 shots satisfy criteria)". The criteria list includes: Campaign, Sub-campaign, Platform, Target type, Hohlräum shape, Target description, Serial II, Hohlräum material, Hohlräum ID (mm), Hohlräum ID (cryo) (mm), and LEH ID (mm). On the right, a dropdown menu labeled "Sub-campaign" is open, showing a list of options: EPEC Data, Fanbolt, Fill, Gbar, HGR, High Foot (highlighted in blue), High foot DT, Hohlräum Perform, Hot Electron, HotSpotTeKr, and HydroGrowth.

# Hover over series name to see the list of shots that match the filter (click for table and copy/paste)

Series 1  (65 shots satisfy criteria)

Sub-campaign  ESEC Date

Series 1 <input type="checkbox"/> (65 shots satisfy criteria)		
Campaign	N121023-001-999	IT_3_Shock_Hifoot_S01a
Sub-campaign	N121102-002-999	IT_3_Shock_Hifoot_S02a
Platform	N121130-001-999	IT_0_Symcap_HF_C1_S01a
Target type	N130108-001-999	IT_0_Symcap_HF_C1_S02a
Hohlraum shape	N130122-004-999	H_Abl_Key_Hfoot_S02a
Target description	N130214-002-999	H_Abl_Key_Hfoot_S03b
Serial <input type="checkbox"/>	N130303-001-999	H_Abl_2DConA_Hfoot_S01a
Hohlraum material	N130409-001-999	H_Abl_1DSConA_Hfoot_S01a
Hohlraum ID (mm)	N130501-002-999	H_Abl_DT_Hfoot_S01b
Hohlraum ID (cryo)	N130508-002-999	H_Abl_2DConA_Hfoot_S02a
LEH ID (mm)	N130521-003-999	H_Abl_Key_Hfoot_S04a
	N130522-002-999	H_Abl_ReemitP_Hfoot_S01a
	N130530-001-999	H_Abl_DT_Hfoot_S02b
	N130710-002-999	H_Abl_DT_Hfoot_S03a
	N130726-002-999	H_Abl_Key_Hfoot_S05a
	N130730-005-999	H_Abl_2DConA_Hfoot_S03a
	N130802-002-999	H_Abl_DT_Hfoot_S05a
	N130808-002-999	H_Abl_2DConA_Hfoot_S04a
	N130812-002-999	H_Abl_DT_Hfoot_S06a

Series 2

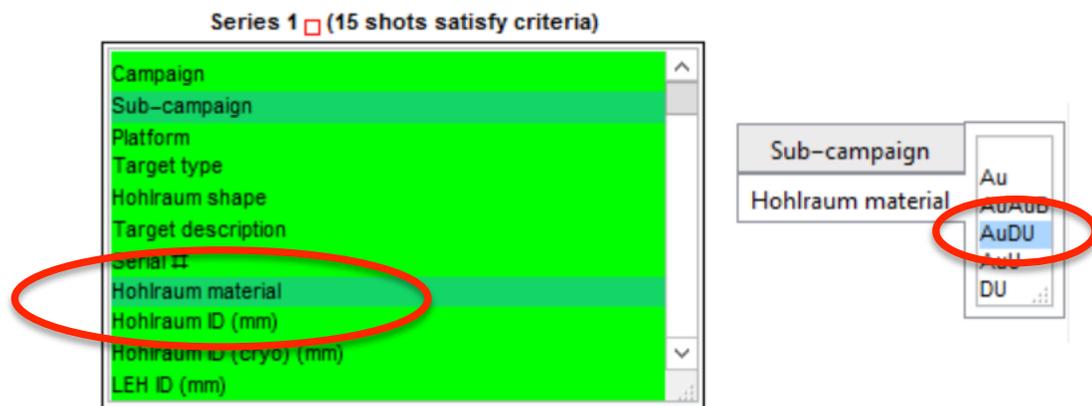
Shot ID		
Expt ID		
Shot RI		
Campaign		
Sub-campaign		
Platform		
Target type		
Hohlraum shape		
Target description		
Serial <input type="checkbox"/>		
Hohlraum material		

Select

Shot ID		
Expt ID		

# Include additional parameter to further refine the filter

## For example, include all “AuDU” hohlraums



# This refined filter returns 15 shots

Series 1 (15 shots satisfy criteria)		
Campaign	Series 1 (15 shots satisfy criteria)	
Sub-campaign		
Platform	N140120-002-999	I_Abl_DT_HfootDU_S01a
Target type	N140304-003-999	I_Abl_DT_HfootDU_S02a
Hohlräum shape	N140511-001-999	I_Abl_DT_HfootDU_S03a
Target description	N140520-001-999	I_Abl_DT_HfootDU_S04a
Serial	N140819-001-999	I_Abl_DT_HfootDU_S05a
Hohlräum material	N141008-003-999	I_Abl_DT_HfootDU_S07a
Hohlräum ID (mm)	N141123-001-999	H_CVal_DT_4ShAS_S01a
LEH ID (mm)	N150115-001-999	H_CVal_DT_3ShAS_S01a
Series	N150211-001-999	H_Cval_DT_Tshell_S07b
Shot ID	N150218-003-999	I_Abl_DT_HfootDU_S09a
Expt ID	N150401-003-999	I_Abl_DT_HfootDU_S10a
Shot RI	N150416-001-999	H_CVal_DT_3ShAS_S03a
Campaign	N150610-001-999	H_CVal_DT_HfootDU_S01b
Sub-campaign	N150826-002-999	H_CVal_2DConA_672CH_S01a
Platform	N151020-003-999	H_CVal_DT_672CH_S01a
Target type		
Hohlräum shape		
Target description		
Serial		

i.e., 15 shots since N110603 were in Sub-campaigns “High foot” and “High foot DT”, and also used a “AuDU” hohlraum

# Select X and Y axes for the plot:

Example: X axis:  $T_{ion\ DT}$ , Y axis: 13-15MeV yield

Set plot axes:

X-axis:  $T_{IDT}$  (keV)

Y-axis:  $Y_{n(13-15MeV)}$

Layered fuel thickness ( $\mu\text{m}$ )

Final rise class (ns)

Coast time (ns)

$\Delta BT_{x-y}$  (ps)

$\Delta T_{I(DT-DD)}$

$Y_{n,DT}/Y_{n,DD}$

$Y_{n,DT}/Y_{n,DD} \text{ Exp}(8.0 \times \text{DSR})$

$Y_{n,DT} \text{ Exp}(4.0 \times \text{DSR})$

$Y_{n,DD} \text{ Exp}(12.0 \times \text{DSR})$

Fuel  $\rho R$  ( $\text{g}/\text{cm}^2$ )

DSR (DT)

DSR (DD)

Gamma BT (ns)

Gamma BW (ps)

$T_{IDD}$  (keV)

$T_{IDT}$  (keV)

$Y_{n,DT} \text{ Exp}(4.0 \times \text{DSR})$

$Y_{n,DD} \text{ Exp}(12.0 \times \text{DSR})$

Fuel  $\rho R$  ( $\text{g}/\text{cm}^2$ )

DSR (DT)

DSR (DD)

Gamma BT (ns)

Gamma BW (ps)

$T_{IDD}$  (keV)

$T_{IDT}$  (keV)

X-ray BT (ns)

X-ray BW (ps)

$Y_{n(13-15MeV)}$

$Y_{n(2.2-2.7MeV)}$

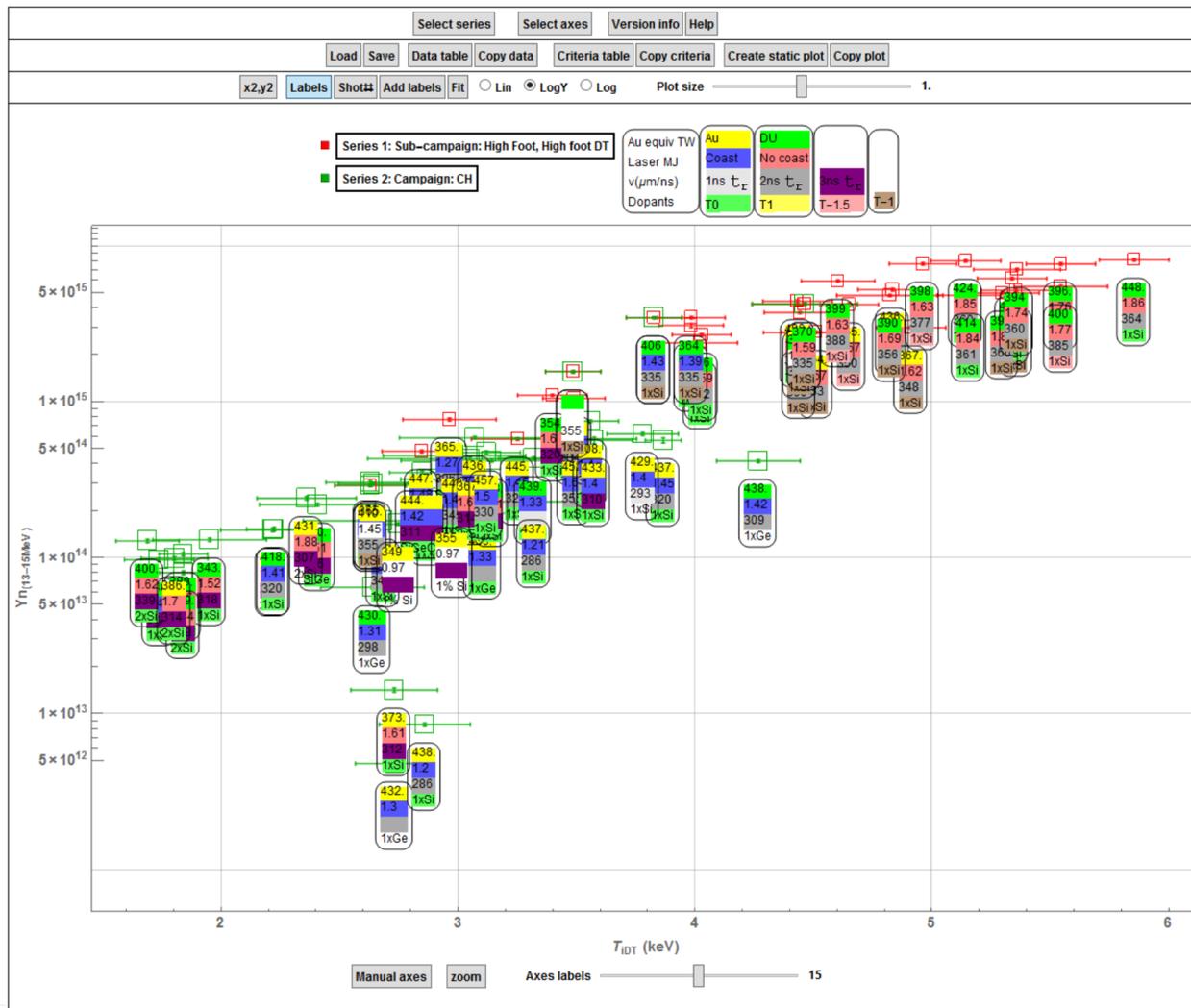
Clear Ap dia U

Soft x-ray dia U

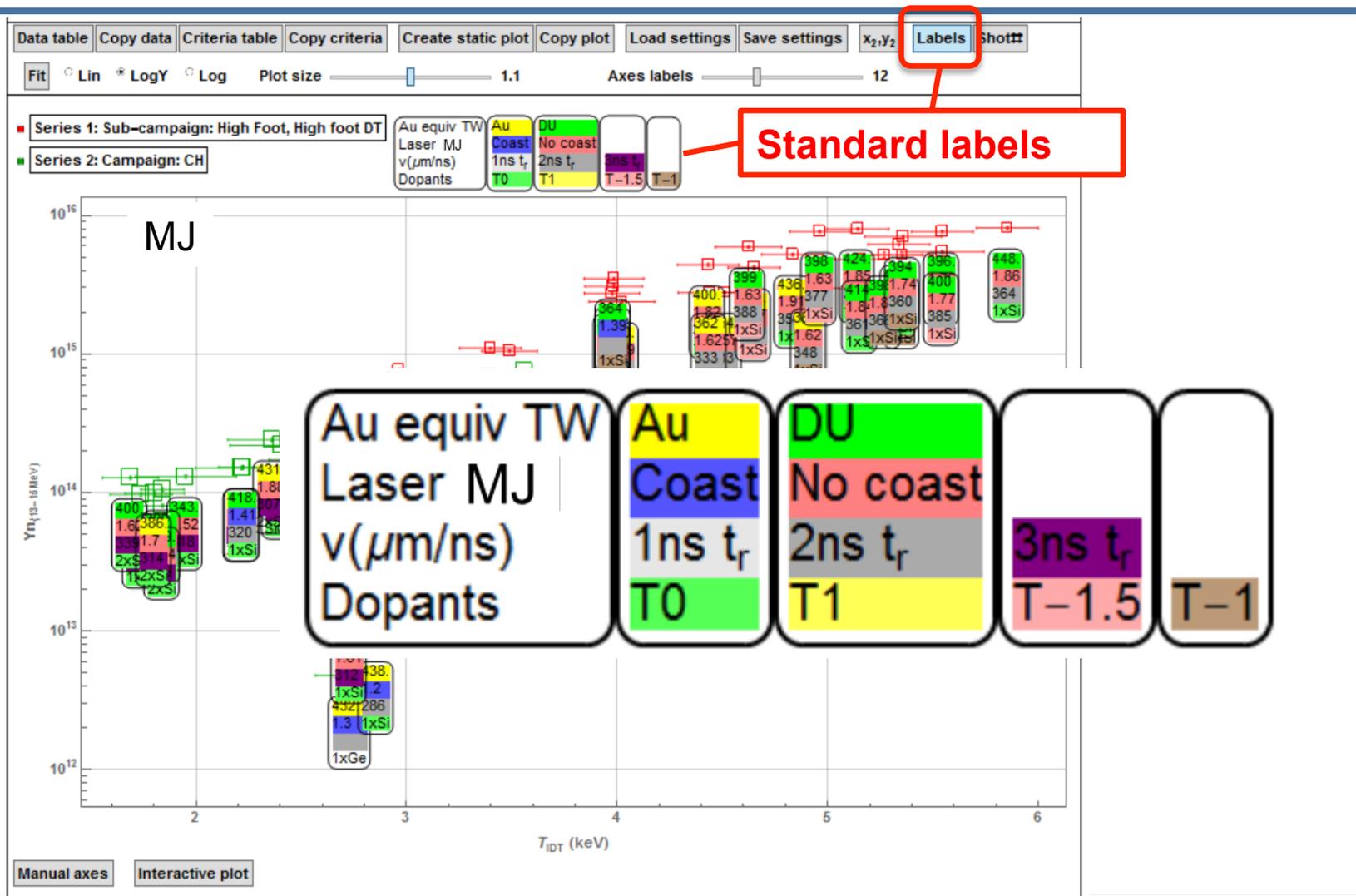
Frac in Cl Ap dis U

Dia for Frac U

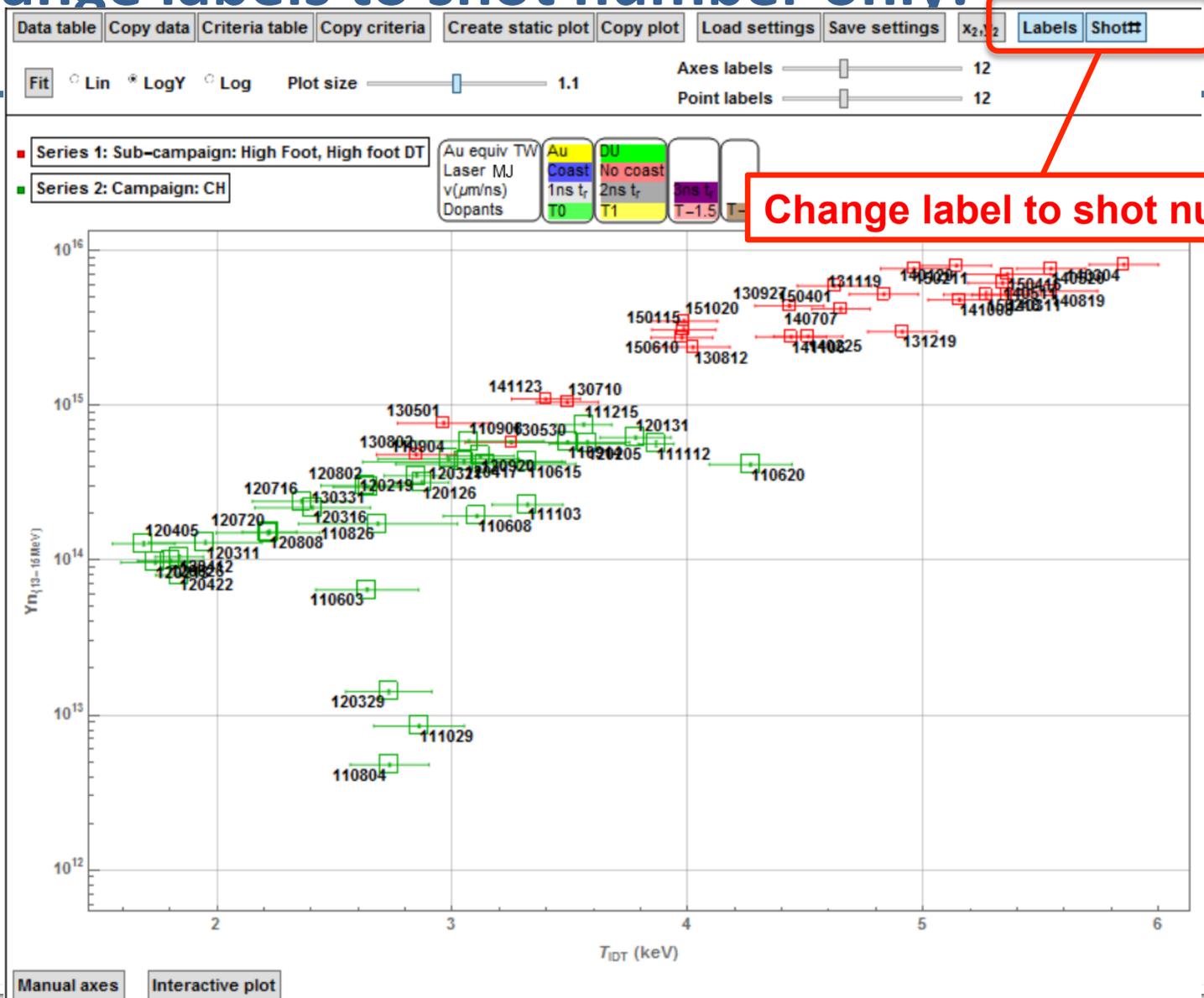
...gives this plot.



# By default the plots are labelled with a few key parameters

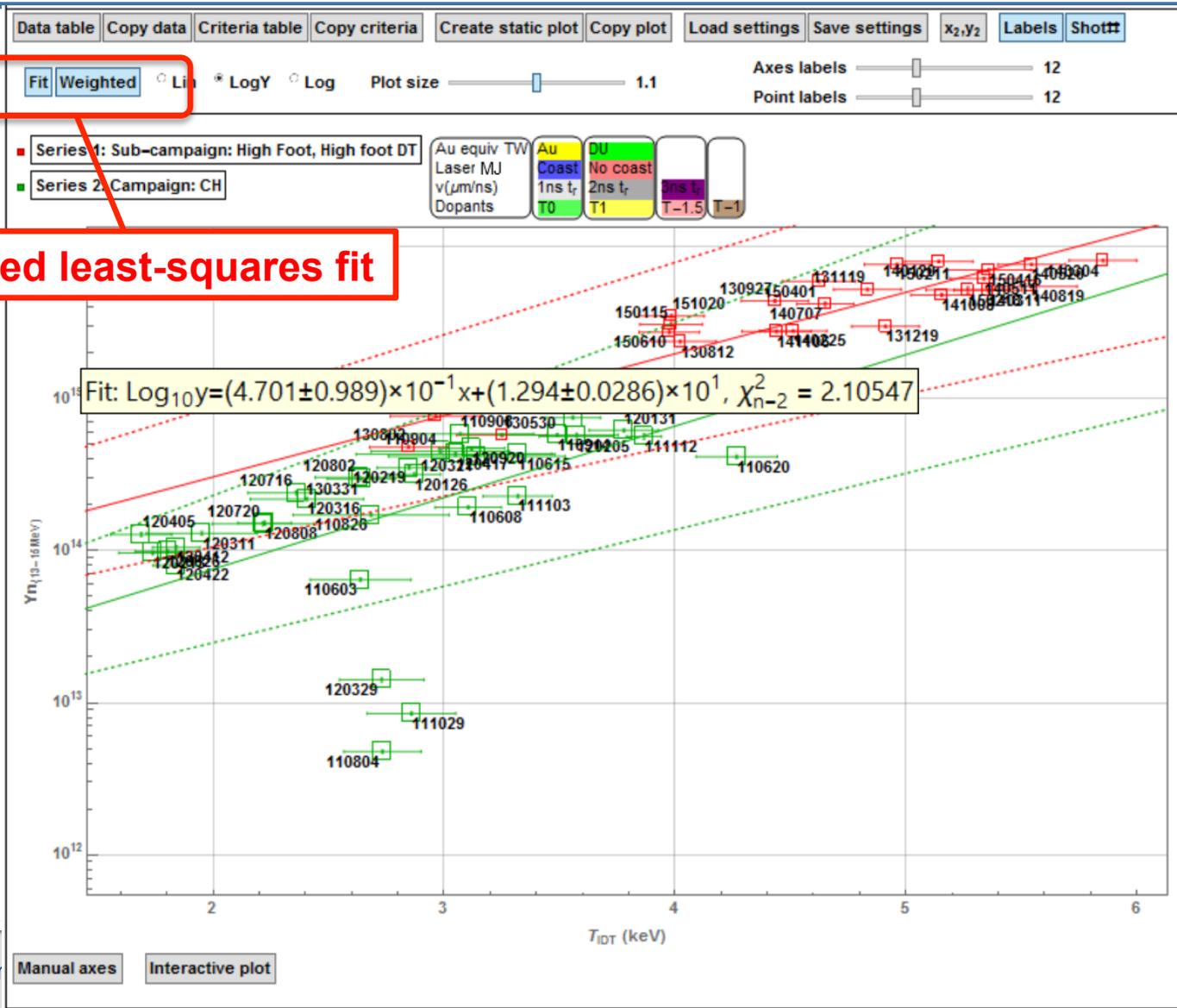


# Change labels to shot number only:



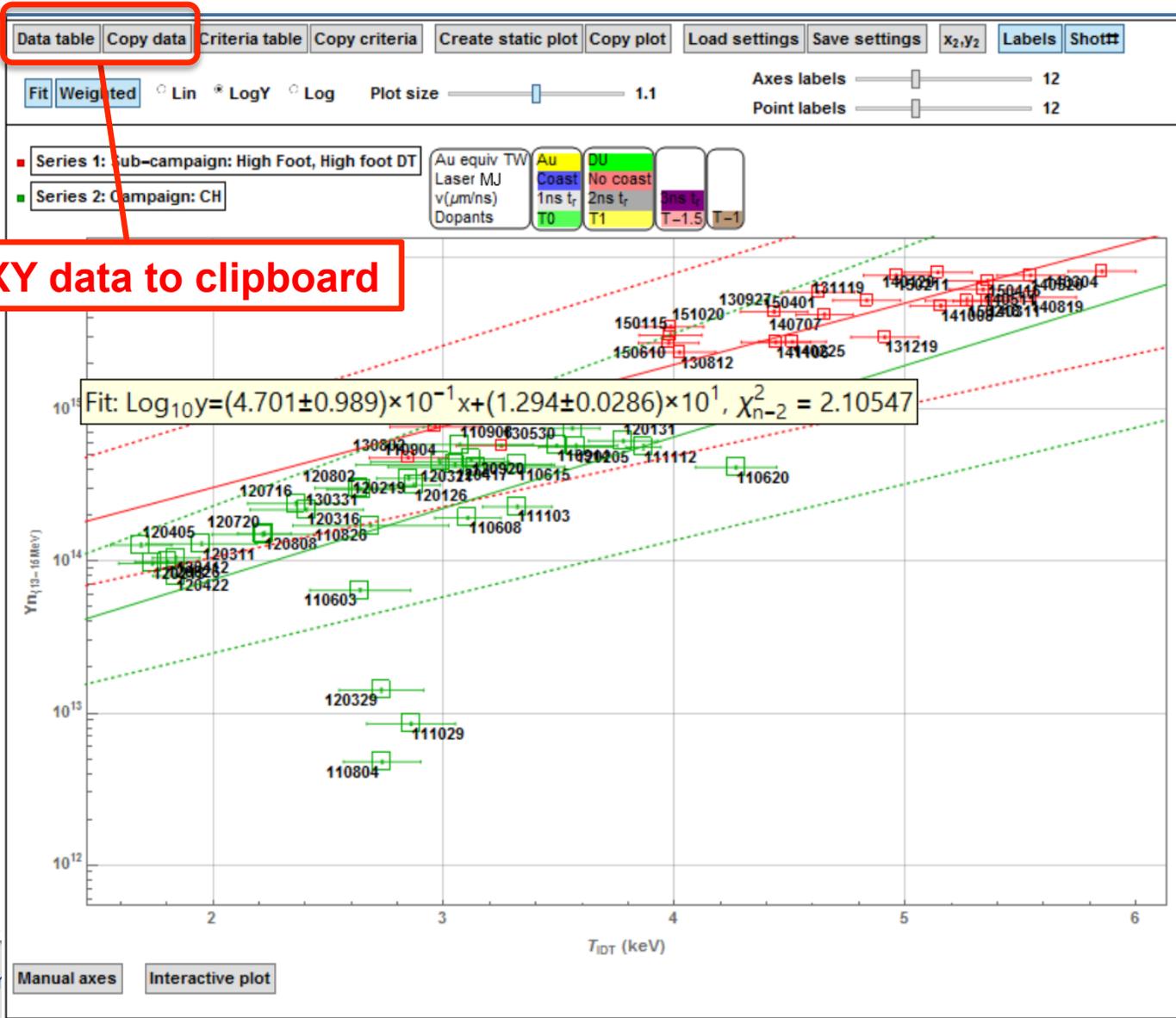
# Weighted least-squares fit, hover for fit parameters.

Uses method of D. York *Am. J. Phys.* 72 (3), March 2004

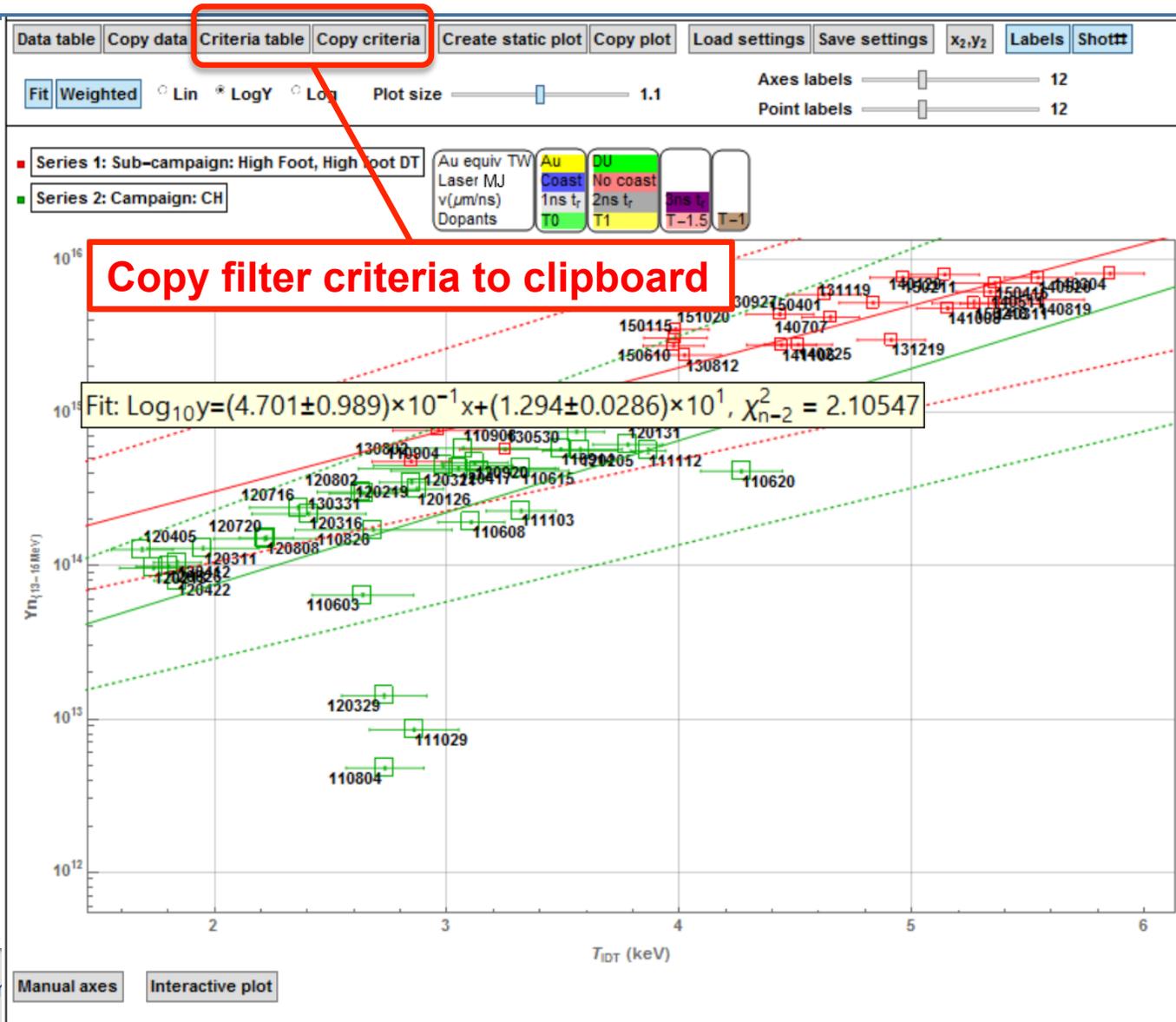


weighted least-squares fit

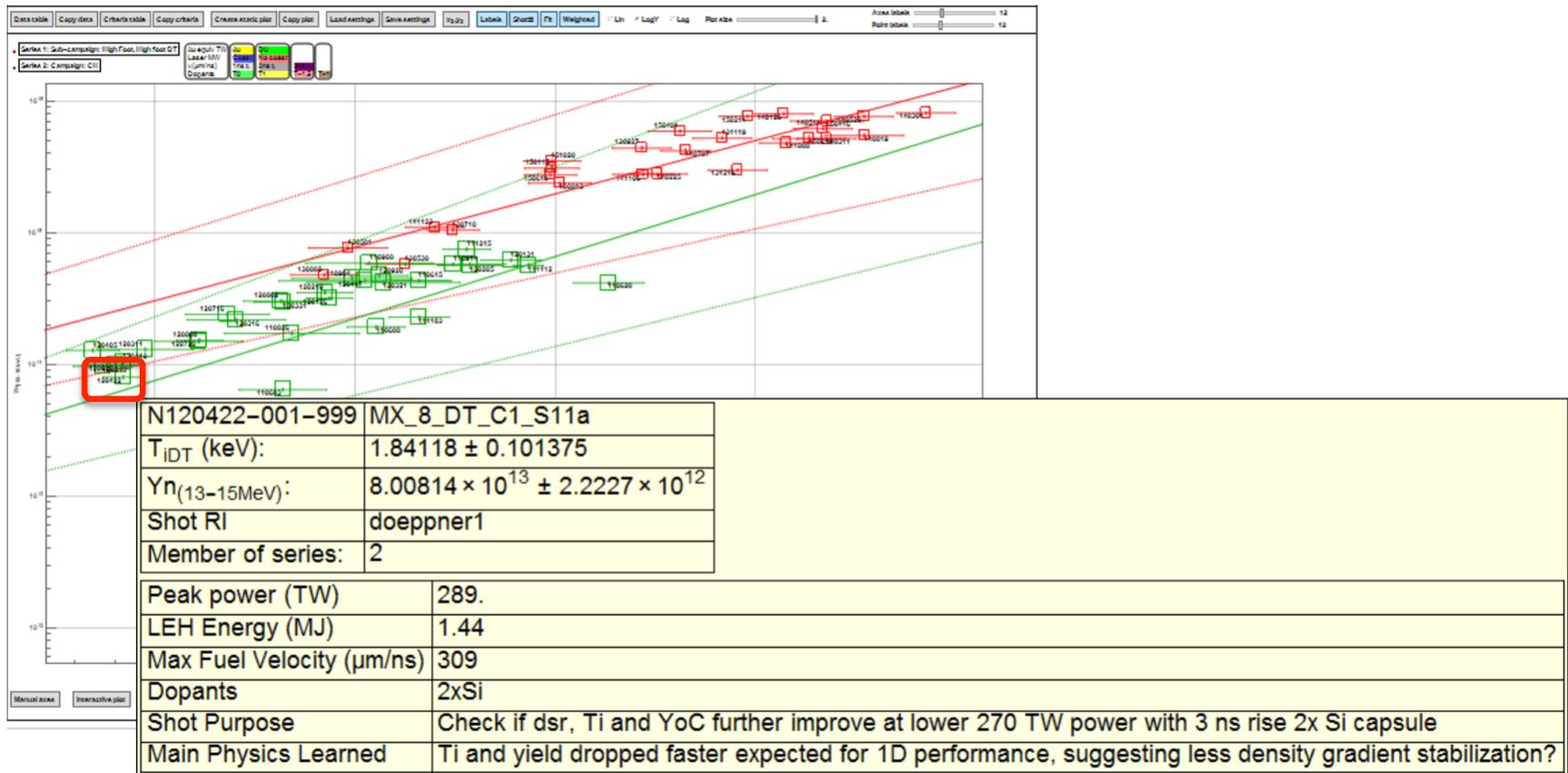
# Copy data for all series to the clipboard



# Copy filter criteria to clipboard



# Hover over XY points for more detailed shot info: Includes “Shot Purpose” and “Main Physics Learned” cells from Nino’s spreadsheet



The tool combines data from several sources: Webdav (archive), Nino's spreadsheet, Prav's metrics, the Target RVP, and a bunch of other derived metrics i.e. coast time,  $\Delta BT_{x-y}$  etc...

Enable data series:



Color code:

Target RVP and laser

Derived metrics

Authorized values

SXI values

Nino's Top Level Summary

Prav's derived metrics

NIF Archive Data

Simulations

Nuclear data

Diagnostics

1: Switch series' on/off using the 6 buttons above

2: Define shot series' using criteria in the tables below:

i) Select parameters in the left panel

ii) Select values in adjacent tabbed panels

Use **SHIFT** for a range, **⌘** (or **CTRL** on pc) for discrete multiples

3: Set x/y plot axes using the menu on the right

Hover over points, legend etc for details (click for more)

'Interactive plot' button enables zoom:

Click and drag to zoom, shift to pan, double click to reset

Interactive plot interferes with

series selection so disable when selecting data

Weighted (in both x and y) orthogonal

regression of a straight line uses *York*

# You can find the data trends tool in the NIF wiki under HED-ICF

The screenshot shows a web browser window with the URL <https://nifit.llnl.gov/wiki/dashboard.action>. The page title is "Dashboard - Wiki". The navigation bar includes links for LAB, Archive, AppMan, NIF, The Big Board, Data Tool, Calendar, Reports, Shot data, and 90 da. A yellow notification box says "New to the WIKI? Check out these demo videos". A blue information box states: "Wiki spaces that are not viewed for one year will be archived. Archiving removes the space from the Dashboard, but it does not remove content from the wiki. You can still use a URL to view the space and the search tool to view archived space content." A red warning box says: "Do not place classified information nor UCI on this wiki." Below these are tabs for Spaces, Pages, and Network. The "Site Spaces" section lists several spaces, with "HED-ICF" circled in red. A red callout box with the text "In NIF wiki select HED-ICF" points to the "HED-ICF" entry. Other spaces listed include CIS Training, Demonstration Space, ICCS, LiteProp, NIF Engineering Apps Wiki, and NIF Operations. On the right side, there are user avatars and names: IC-447, Archive I, I\_CH, Gatu Joh, ICF P, Addec, Conrad, BC Nc, bc not, BC Nc, Holder, J, X-ray, Archive I, and H\_Hy. The bottom right corner features the NASA logo and the number 28.

# Select NIF Data Trends Tool in left panel

The screenshot shows a web browser window with the URL <https://nifit.llnl.gov/wiki/display/vc/NIF+Data+Trends+Tool>. The browser's address bar and tabs are visible at the top. Below the browser is a navigation bar with the NIF logo and links for Wiki, Spaces, People, Browse, and a Create button. The left sidebar contains a 'Main' section with 'ICF Wiki Home', a 'Summary' section with 'Documents', 'ICF Summary Spreadsheets', and 'NIF Data Trends Tool' (circled in red), and other sections like 'HED/ICF Activities', 'Shot Planning & Reviews', and 'Laser & Target Files'. A red callout box with the text 'Select NIF Data trends Tool here' points to the circled item. The main content area features the NIF HED-ICF logo and the title 'NIF Data Trends Tool', followed by creation information and a heading 'Generate exportable interactive plots of NIF data using var'. Below this are two informational boxes: one with a download link and instructions for using the Mathematica CDF Player, and another with an email contact for Andrew MacPhee. At the bottom, there are controls for 'Enable data series' (a row of six numbered buttons) and 'Color code' instructions.

Select NIF Data trends Tool here

## Generate exportable interactive plots of NIF data using var

**i** [Download the latest version of the interactive NIF Data Trends Tool here](#)

You can run the tool using the FREE [Mathematica CDF Player v10](#), you don't need (although it will also work with Mathematica v10 installed)

A new version of the tool is built every morning using freshly downloaded data back (so if a bunch of values get retroactively updated as happens from time to time, this Build starts at 7am and is usually available by ~8.10am. The date in the box below t

The tool works cross-platform on OSX, Window and Linux

[Here's a zip file of the raw data embedded in the tool \(not needed to run the tool\)](#)

**i** **Email me if you have any questions or if you would like**

[Andrew MacPhee](#)

Enable data series:  1  2  3  4  5  6

Color code: 1: Switch series' on/off using the 6 buttons above  
2: Define what series' using criteria in the tables below

**Main**  
ICF Wiki Home

**Summary**  
Documents  
ICF Summary Spreadsheets  
NIF Data Trends Tool

**HED/ICF Activities**  
HED/ICF Standing Meeting List  
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# HED-ICF NIF Data Trends Tool

Created by Hutton, Matthew S., last modified by MacPhee, Andrew on Nov 05, 2015

## Generate exportable interactive plots of NIF data using various tools

**Download the latest version of the interactive NIF Data Trends Tool here**

You can run the tool using the FREE [Mathematica CDF Player v10](#), you don't need (although it will also work with **Download the tool here**)

A new version of the tool is built every morning using freshly downloaded data back (so if a bunch of values get retroactively updated as happens from time to time, this Build starts at 7am and is usually available by ~8.10am. The date in the box below t

The tool works cross-platform on OSX, Window and Linux

[Here's a zip file of the raw data embedded in the tool \(not needed to run the tool\)](#)

**Email me if you have any questions or if you would like**  
[Andrew MacPhee](#)

Enable data series:  1  2  3  4  5  6

Color code:  1: Switch series' on/off using the 6 buttons above  
 2: Define shot series' using criteria in the tables below

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# NIF HED-ICF Data Trends Tool

Created by Hutton, Matthew S., last modified by MacPhee, Andrew on Nov 05, 2015

## Generate exportable interactive plots of NIF data using var

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You can run the tool using the FREE [Mathematica CDF Player v10](#), you don't need (although it will also work with Mathematica v10 installed)

A new version of the tool is built every morning using freshly downloaded data back

**The tool runs in the free Mathematica viewer  
Also runs in the full Mathematica version**

The tool works cross-platform on OSX, Window and Linux

[Here's a zip file of the raw data embedded in the tool \(not needed to run the tool\)](#)

Email me if you have any questions or if you would like  
[Andrew MacPhee](#)

Enable data series:  1  2  3  4  5  6

Color code:  1: Switch series' on/off using the 6 buttons above  
 2: Define shot series' using criteria in the tables below

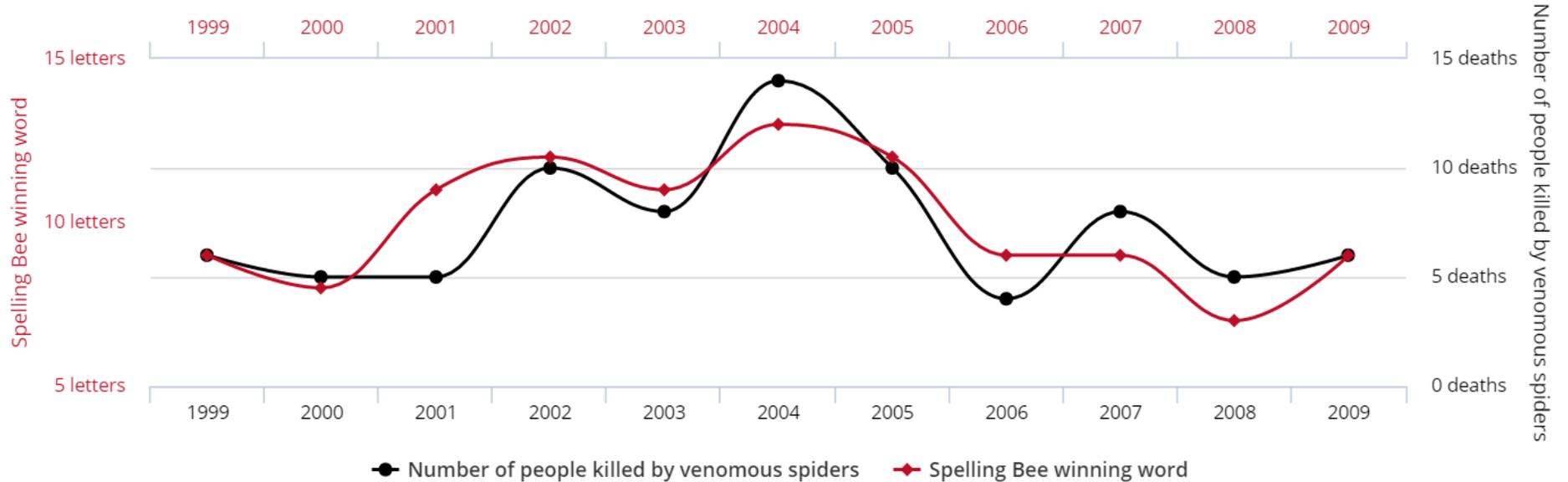
# Beware spurious correlations:

Letters in Winning Word of Scripps National Spelling Bee

correlates with

Number of people killed by venomous spiders

Correlation: 80.57% ( $r=0.8057$ )



tylervigen.com

Data sources: National Spelling Bee and Centers for Disease Control & Prevention

From: <http://www.tylervigen.com/spurious-correlations>



**Lawrence Livermore  
National Laboratory**

# Most of the data is pulled from the archive daily on the fly using WebDav, hence always up to date

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<http://nifitservices.llnl.gov/ArchiveWebDav/export/shotdata/tags>

Requires a webdav username and password (Steve Hahn, B671, x4-5542)

“tags” define the list of shots retrieved:

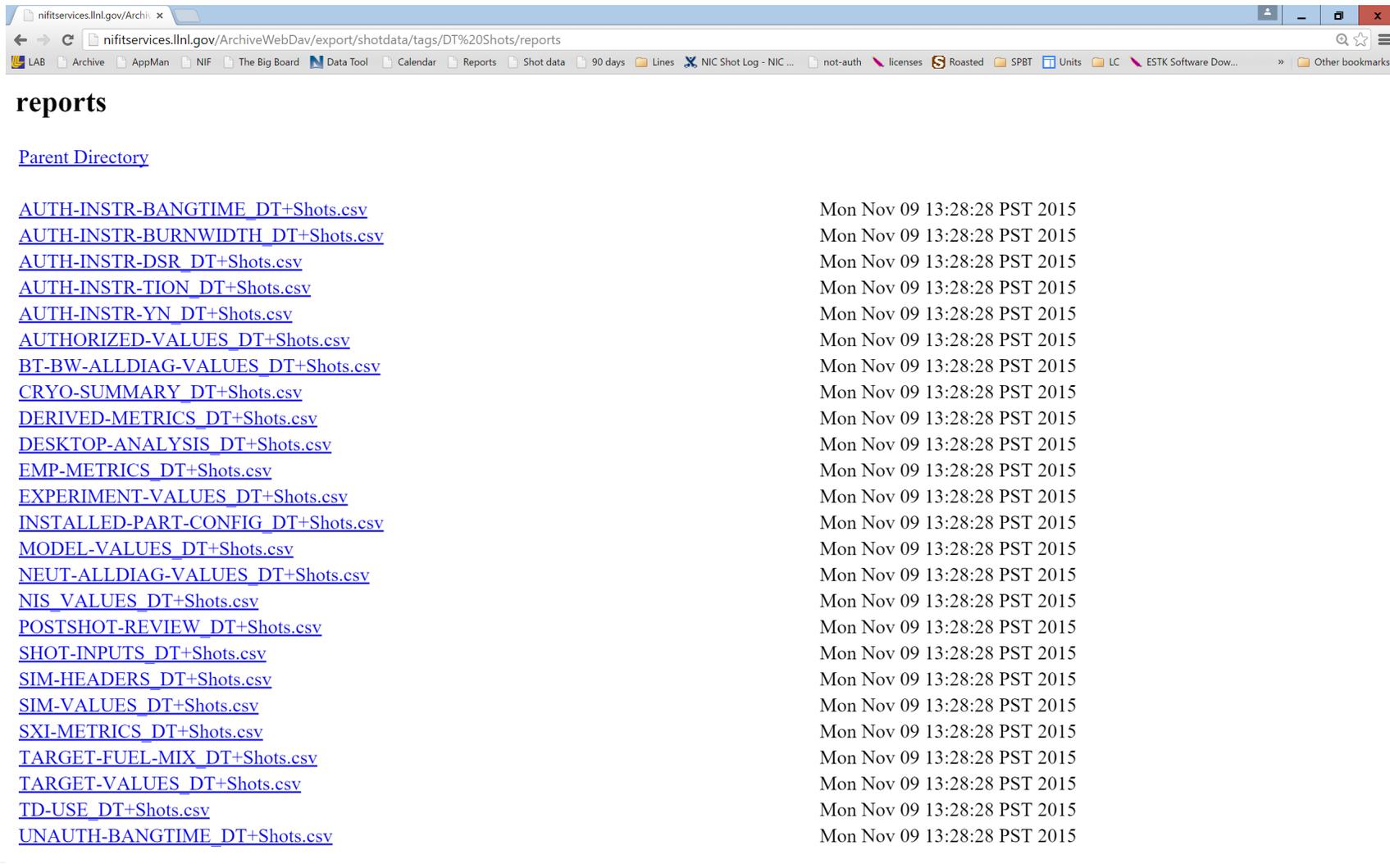
DT\_shots, Target\_shots\_since\_shock\_timing,...

“reports” define what data is retrieved:

Authorized\_values, Shot\_inputs,...



# The list of available reports has grown over the years. Clicking a link fires up a script that goes and builds the .csv for that tag



The screenshot shows a web browser window with the address bar displaying `nifitservices.llnl.gov/ArchiveWebDav/export/shotdata/tags/DT%20Shots/reports`. The page content includes a heading "reports" and a "Parent Directory" link. Below this is a list of 25 report links, each followed by a timestamp: "Mon Nov 09 13:28:28 PST 2015".

Report Name	Timestamp
<a href="#">AUTH-INSTR-BANGTIME_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">AUTH-INSTR-BURNWIDTH_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">AUTH-INSTR-DSR_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">AUTH-INSTR-TION_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">AUTH-INSTR-YN_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">AUTHORIZED-VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">BT-BW-ALLDIAG-VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">CRYO-SUMMARY_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">DERIVED-METRICS_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">DESKTOP-ANALYSIS_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">EMP-METRICS_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">EXPERIMENT-VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">INSTALLED-PART-CONFIG_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">MODEL-VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">NEUT-ALLDIAG-VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">NIS_VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">POSTSHOT-REVIEW_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">SHOT-INPUTS_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">SIM-HEADERS_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">SIM-VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">SXI-METRICS_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">TARGET-FUEL-MIX_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">TARGET-VALUES_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">TD-USE_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015
<a href="#">UNAUTH-BANGTIME_DT+Shots.csv</a>	Mon Nov 09 13:28:28 PST 2015