MyENSDF Webtool

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Topics:

1. Processing user's data on Web-Server

- Concept
- MyENSDF - Web Tool for ENSDF Evaluators

2. MyENSDF programs and operations

- MyENSDF operations
- Login and input ENSDF file
- Programs and parameters
- NDSPUB in editing mode

3. Demo and discussion

- Examples of usage: running programs (+questions)
- Discussion: experience of usage, further needs
- MyEnsdf on NDS, NNDC and Mirror-sites. Working without Internet.
- Self-cleaning (squeeze temporary data)
- Temporary and permanent areas
- Users' privileges, administrating, continuing work (multiple entries)

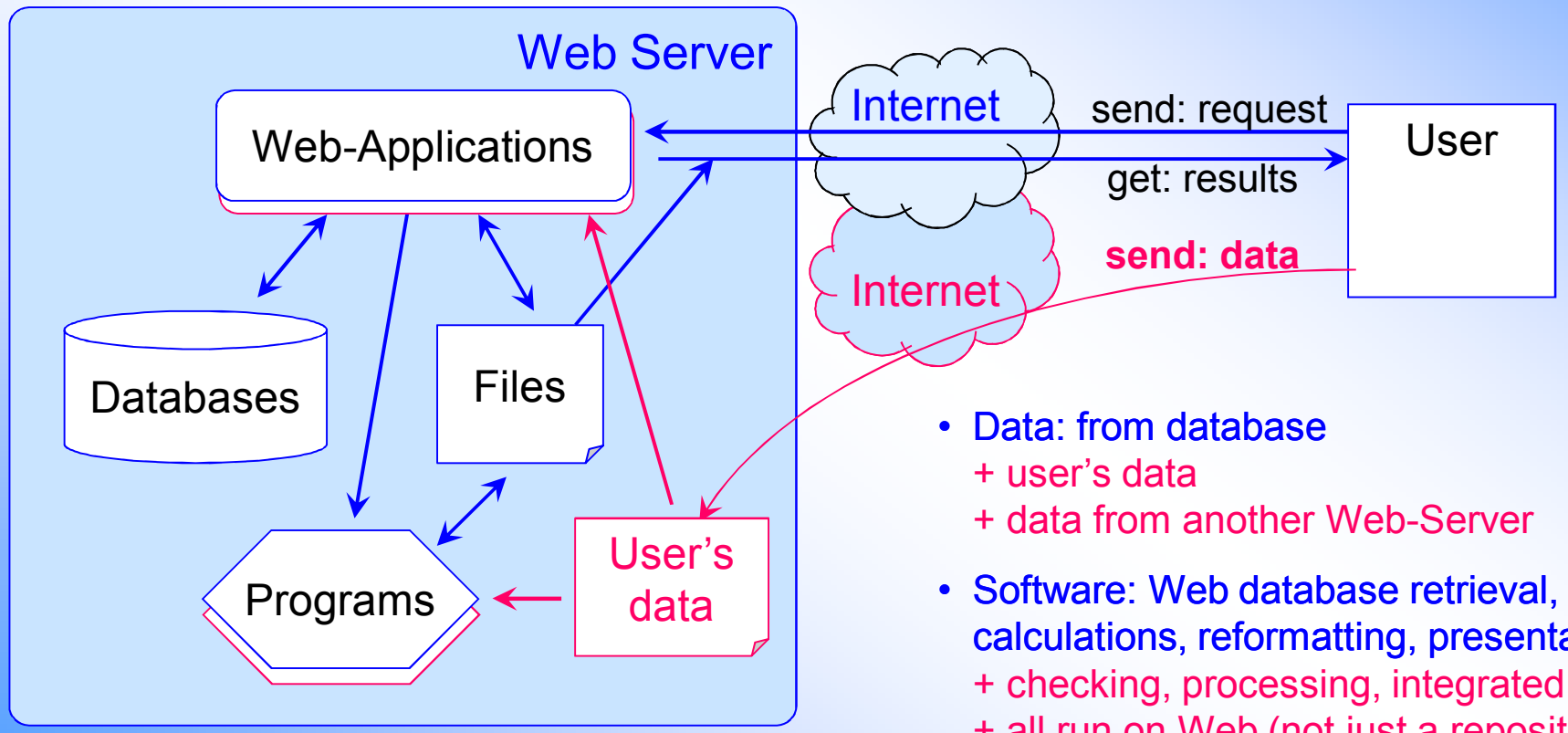
1. Processing user's data on Web-Server

Oriented to nuclear data professionals producing nuclear data

Modern definition: "Cloud computing" / "SaaS" = Software as a Service

Other types of cloud computing: IaaS (Infrastructure as a Service: disk space) and PaaS (Platform as a Service)

Structure and basic ideas

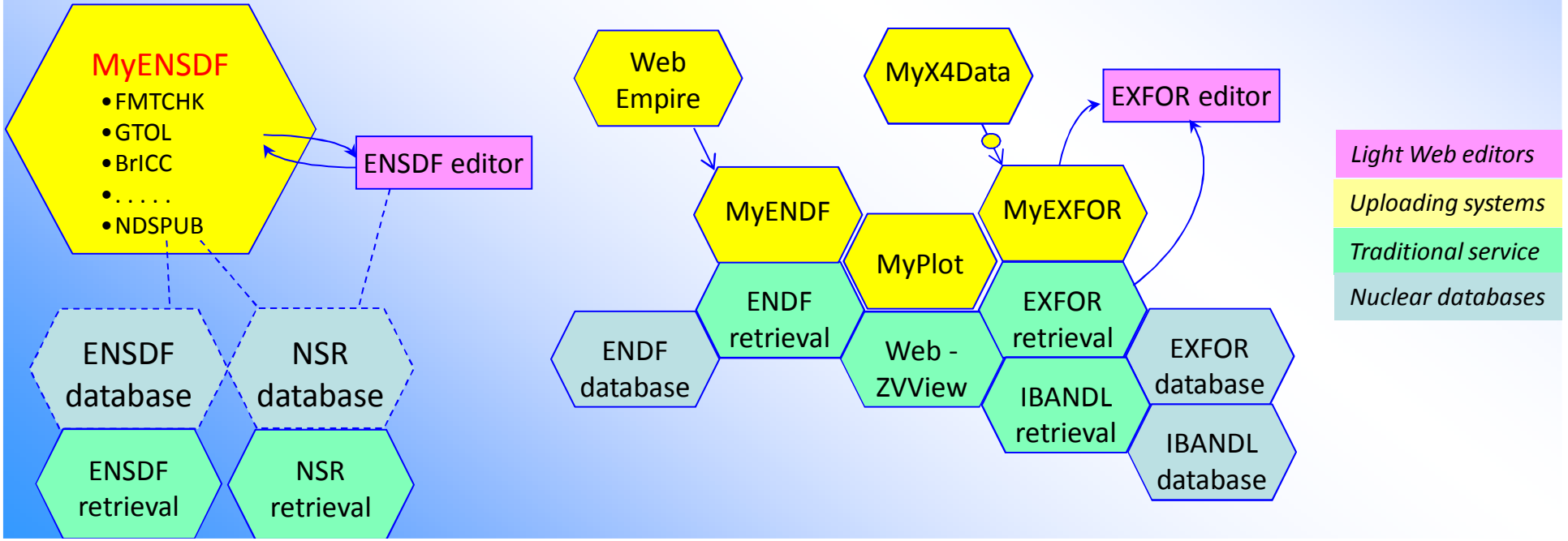


- Data: from database
  + user's data
  + data from another Web-Server
- Software: Web database retrieval, calculations, reformatting, presentation
  + checking, processing, integrated codes
  + all run on Web (not just a repository)
- User's data can be processed together with data from databases

Beyond traditional Nuclear Data Services we can offer Nuclear Data Software as a Service oriented to the nuclear data compilers and evaluators

Our Web server applications

2009 MyPlot	Plotting with Web-ZVView
2010 MyEXFOR	EXFOR Uploading System for EXFOR compilers ZCHEX, ZORDER, XTRACT, X4TOC4; Web-EXFOR
2015 MyENDF	ENDF Uploading System CHECKR, FIZCON, STANEF, PSYCHE, INTER, PREPRO, ENDVER, Web-EXFOR-ENDF, FUDGE, GRUCON
2011 MyENSDF	ENSDF Uploading System FMTCHK, chk_ENSDF, PREPRO, XPQCHK, ALPHAD, GTOL, BrIcc, BrIccMixing, GABS, LOGFT, PANDORA, RADLST, RULER, NDSPUB, edit-NDSPUB, Viewers: Ensdf+ and iTree, ENSDF Web-Editor
2013 WebEMPIRE	Web Interface to Empire-3.1 /test-version/
2015 MyX4Data	Uploading experimental data as text to EXFOR system for constructing covariance matrices, plotting, inverse reaction calculations, etc.



Web Server Applications: Summary

Advantages:

- User does not need software installation (only Web browser)
- Central maintenance of utilities (only one platform on Web server)
- It can implement specific operations connecting with central database and Web (e.g. search for duplications of EXFOR references, DOI checking,..)
- Convenient Web interface to old legacy codes
  (automatic connection input-output of programs)
- Comparison users' data with data from central databases

Disadvantages:

- User needs Internet or has problems with connection
  (possible solution: VM technology)
- Adding new program: replace sequential dialogue by single web input-form

Potential problems and limitations:

- Speed, resources on server computer system
- IT security (current solution: password protection)

MyENSDF: programs and operations

- Run remotely ENSDF analysis and utility codes:

- **FMTCHK**	/10.3e+, 15-Dec-2015/
- **chk_ENSDF**	/v-0.4.7, 10-Apr-2014/
- **chk_PARENT**	/24-Jan-2009/
- **chk_brackets**	/20-Apr-2012/
- **PREPRO**, **XPQCHK**	/2014/
- **ALPHAD**	/v-2.0a, 06-Nov-2006/
- **BrIcc**, **BrIccMixing**	/v2.3b, 16-Dec-2014/
- **GABS**	/v-11.0, 02-Apr-2015/
- **GTOL**	/v-7.2h, 24-May-2013/
- **LOGFT**	/v-7.2, 7-Feb-2001/
- **PANDORA**	/v-7.0b, 01-May-2007/
- **RADLST**	/v-5.5, 05-Oct-1988, parameters: 2012/
- **RULER**	/v-3.2d, 20-Jan-2009/

- Run remotely NDSPUB:
  generates tables and drawings for Nuclear Data Sheets; allows editing control file for producing final PS/PDF; connected to NNDC relational databases: ENSDF and NSR
- Views: ensdf+ (interpreted “ENSDF cards”); ensdf± (interative tree)
- Light ENSDF Web editor
- Administrating users’ files and working areas

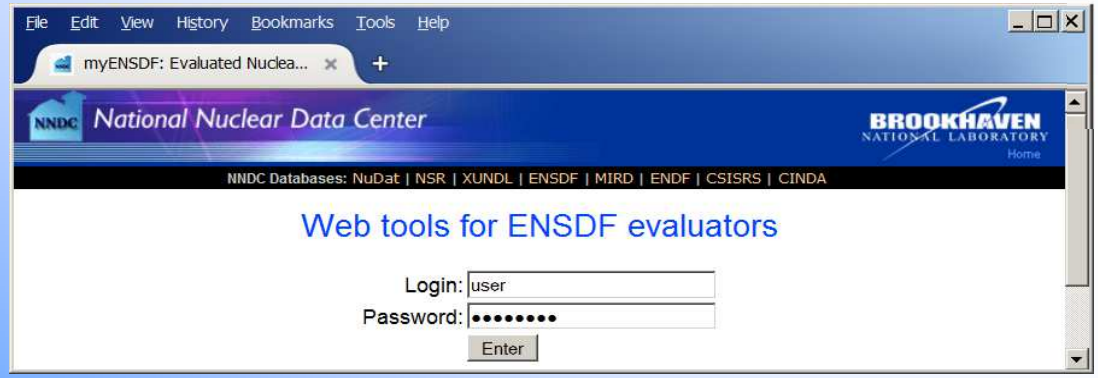
Start MyENSDF

IAEA-NDS → NSDD → Evaluation Tools → Online Webtools

http://www-nds.iaea.org/exfor/myensdf.htm

Also available at NNDC Web site:

http://www.nndc.bnl.gov/exfor/myensdf.htm



Request password by e-mail to NSDD co-ordinators

Input your ENSDF file

Web tools for ENSDF evaluators

by V.Zerkin, IAEA-NDS, 2011-2016, ver.2016-06-28

Upload your ENSDF dataset and run remotely ENSDF codes: FMTCHK, chk_ENSDF, PREPRO, XPQCHK, ALPHAD, GTOL, Brlcc, BrlccMixing, GABS, LOGFT, PANDORA, RADLST, RULER, NDSPUB, etc.

Evaluator: Viktor
Working area: 21
Session: 21
Use existing ENSDF file: Choose File No file chosen Submit Reset

Go…

or ENSDF text. Examples: text Test input: alphad fmtchk gabs gtol logft pandora radlst ruler xpqchk 1-5 152 aa 177Lu 235Pa

```
184AU     184HG EC DECAY                2005SA40,1994IB01,1978NE1010NDS    201002
184AU   H TYP=FUL$AUT=CORAL M. BAGLIN$CIT=NDS 111,275 (2010)$CUT=1-Oct-2009$
184AU  D  PARENT T: 30.6 S 3 (1972Fi12), 30.9 S 3 (1994Wa23).
184AU2D   32.5 S 10 (1970Ha18); from 5535A(T).  32.0 S 10 (1969Ha03).
184AU3D   WEIGHTED AVERAGE: 30.87 S 26.
184AU  c  Others: 1975Ho03, 1971Hu02, 1969Ha03 (observed 157|g and 237|g).
184AU  c  2005Sa40: mass-separated {+184}Hg source from fragmentation of molten
184AU2c   Pb target by 600 MeV or 1 GeV protons; Ge(Li) and Si(Li) detectors,
184AU3c   high resolution 180|' magnetic spectrograph; measured E|g, I|g,
184AU4c   E(ce), I(ce). Additional sources from {+148}Sm({+40}Ar,X); planar Ge
184AU5c   (FWHM=0.9 keV at 122 keV) for E|g|<1 MeV; two HPGe detectors (FWHM
184AU6c   |?2.3 keV at 1.3 MeV) for E|g|<1.3 MeV; measured x-|g-t and |g-|g-t
184AU7c   events which were sorted to provide prompt-, total- and delayed-
184AU8c   coincidence bidimensional matrices (60 ns or 100 ns time windows).
184AU2c   Supersedes 2003IbZZ; see also 1994Ib01.
184AU  c  1994Ib01: mass separated source from bombardment of {+148}Sm by 185 MeV
184AU2c   {+40}Ar ions; He-jet transport, iodine aerosol; two HPGe coaxial
```

Useful links:
- NSDD
- NuDat2
- LiveChart
- ENSDF:
  - web-retrieval
  - manual
  - programs
  - data archive
- XUNDL:
  - web-retrieval
  - data archive
- x4pdf-nsr
- x4pdf-all

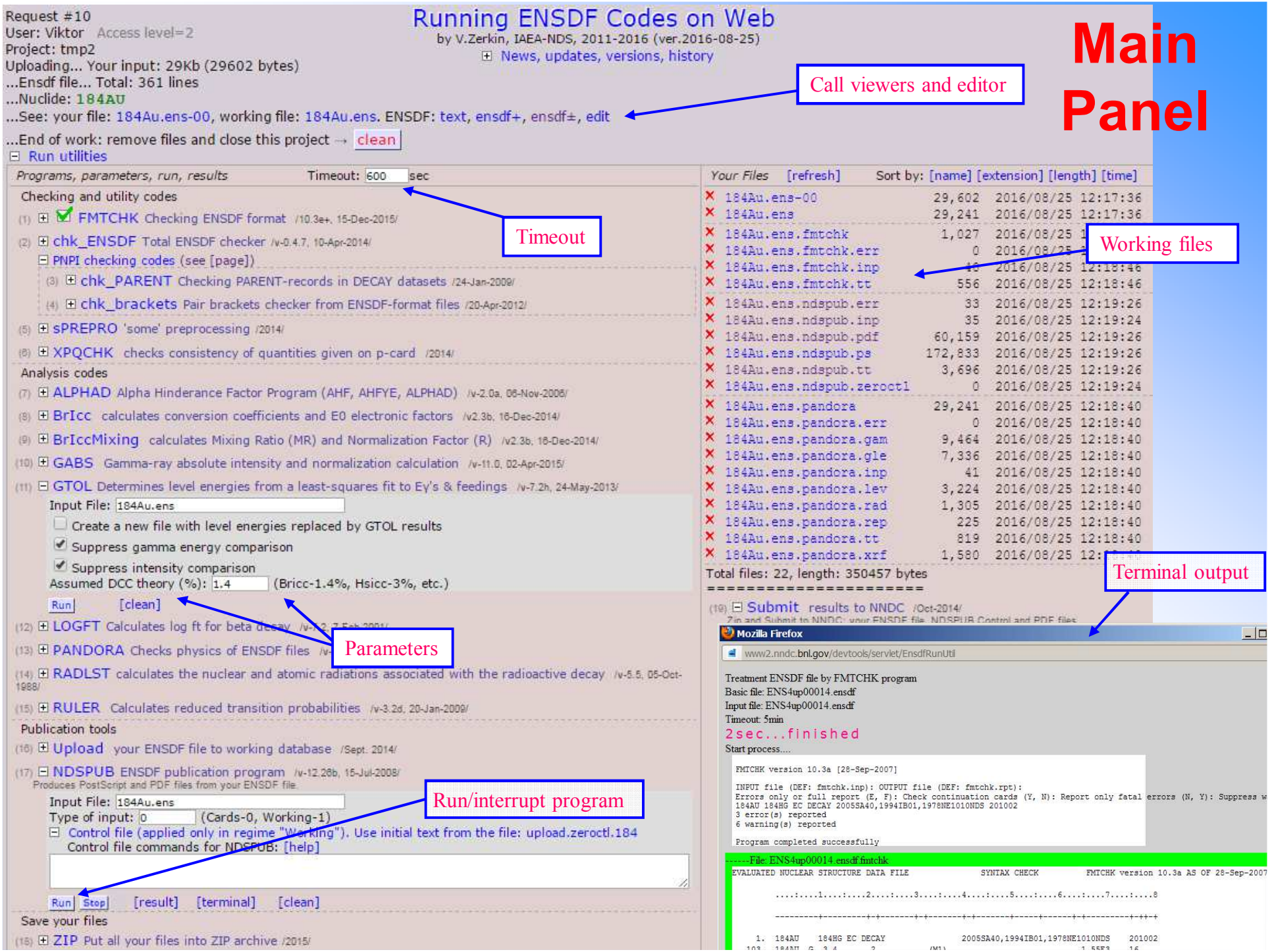
Login: Viktor 2016/08/24:15:49:06 161.5.6.220::Austria Access level=2

#	Area	ENSDF file	Files	Created	
1.1	tmp16 Viktor	184Au.ens	8	2016/08/22 09:01:54 Viktor 161.5.6.223::Austria	continue
2.1	tmp20 Nikola	123Ba.ens	7	2016/08/23 15:08:07 Nikola 140.105.22.76::Italy	continue

Copy/Paste/Edit your ENDSF data file or put Web link

Continue your previous session

Web Design and Programming: Viktor Zerkin, NDS, International Atomic Energy Agency (V.Zerkin@iaea.org)
Last updated: 08/24/2016 17:49:40


Request #10
User: Viktor Access level=2
Project: tmp2
Uploading... Your input: 29Kb (29602 bytes)
...Ensdf file... Total: 361 lines
...Nuclide: 184AU
...See: your file: 184Au.ens-00, working file: 184Au.ens. ENSDF: text, ensdf+, ensdf±, edit
...End of work: remove files and close this project → clean
Run utilities
Running ENSDF Codes on Web
by V.Zerkin, IAEA-NDS, 2011-2016 (ver.2016-08-25)
News, updates, versions, history
Main Panel
Call viewers and editor
Timeout
Working files
Terminal output
Parameters
Run/interrupt program
Programs, parameters, run, results
Timeout: 600 sec
Checking and utility codes
(1) FMTCHK Checking ENSDF format /10.3e+, 15-Dec-2015/
(2) chk_ENSDF Total ENSDF checker /v-0.4.7, 10-Apr-2014/
PNPI checking codes (see [page])
(3) chk_PARENT Checking PARENT-records in DECAY datasets /24-Jan-2009/
(4) chk_brackets Pair brackets checker from ENSDF-format files /20-Apr-2012/
(5) sPREPRO 'some' preprocessing /2014/
(6) XPQCHK checks consistency of quantities given on p-card /2014/
Analysis codes
(7) ALPHAD Alpha Hinderance Factor Program (AHF, AHFYE, ALPHAD) /v-2.0a, 06-Nov-2006/
(8) BrIcc calculates conversion coefficients and E0 electronic factors /v2.3b, 16-Dec-2014/
(9) BrIccMixing calculates Mixing Ratio (MR) and Normalization Factor (R) /v2.3b, 16-Dec-2014/
(10) GABS Gamma-ray absolute intensity and normalization calculation /v-11.0, 02-Apr-2015/
(11) GTOL Determines level energies from a least-squares fit to Ey's & feedings /v-7.2h, 24-May-2013/
Input File: 184Au.ens
Create a new file with level energies replaced by GTOL results
Suppress gamma energy comparison
Suppress intensity comparison
Assumed DCC theory (%): 1.4 (Bricc-1.4%, Hsicc-3%, etc.)
Run [clean]
(12) LOGFT Calculates log ft for beta decay
(13) PANDORA Checks physics of ENSDF files
(14) RADLST calculates the nuclear and atomic radiations associated with the radioactive decay /v-5.5, 05-Oct-1988/
(15) RULER Calculates reduced transition probabilities /v-3.2d, 20-Jan-2009/
Publication tools
(16) Upload your ENSDF file to working database /Sept. 2014/
(17) NDSPUB ENSDF publication program /v-12.26b, 15-Jul-2008/
Produces PostScript and PDF files from your ENSDF file.
Input File: 184Au.ens
Type of input: 0 (Cards-0, Working-1)
Control file (applied only in regime "Working"). Use initial text from the file: upload.zeroctl.184
Control file commands for NDSPUB: [help]
Run Stop [result] [terminal] [clean]
Save your files
(18) ZIP Put all your files into ZIP archive /2015/
Your Files [refresh] Sort by: [name] [extension] [length] [time]
184Au.ens-00 29,602 2016/08/25 12:17:36
184Au.ens 29,241 2016/08/25 12:17:36
184Au.ens.fmtchk 1,027 2016/08/25
184Au.ens.fmtchk.err 0 2016/08/25
184Au.ens.fmtchk.inp 2016/08/25 12:18:46
184Au.ens.fmtchk.tt 556 2016/08/25 12:18:46
184Au.ens.ndspub.err 33 2016/08/25 12:19:26
184Au.ens.ndspub.inp 35 2016/08/25 12:19:24
184Au.ens.ndspub.pdf 60,159 2016/08/25 12:19:26
184Au.ens.ndspub.ps 172,833 2016/08/25 12:19:26
184Au.ens.ndspub.tt 3,696 2016/08/25 12:19:26
184Au.ens.ndspub.zeroctl 0 2016/08/25 12:19:24
184Au.ens.pandora 29,241 2016/08/25 12:18:40
184Au.ens.pandora.err 0 2016/08/25 12:18:40
184Au.ens.pandora.gam 9,464 2016/08/25 12:18:40
184Au.ens.pandora.gle 7,336 2016/08/25 12:18:40
184Au.ens.pandora.inp 41 2016/08/25 12:18:40
184Au.ens.pandora.lev 3,224 2016/08/25 12:18:40
184Au.ens.pandora.rad 1,305 2016/08/25 12:18:40
184Au.ens.pandora.rep 225 2016/08/25 12:18:40
184Au.ens.pandora.tt 819 2016/08/25 12:18:40
184Au.ens.pandora.xrf 1,580 2016/08/25
Total files: 22, length: 350457 bytes
(19) Submit results to NNDC /Oct-2014/
Mozilla Firefox
www2.nndc.bnl.gov/devtools/servlet/EnsdfRunUtl
Treatment ENSDF file by FMTCHK program
Basic file: ENS4up00014.ensdf
Input file: ENS4up00014.ensdf
Timeout: 5min
2sec...finished
Start process....
FMTCHK version 10.3a [28-Sep-2007]
INPUT file (DEF: fmtchk.inp): OUTPUT file (DEF: fmtchk.rpt):
Errors only or full report (E, F): Check continuation cards (Y, N): Report only fatal errors (N, Y): Suppress w
184AU 184HG EC DECAY 2005SA40,1994IB01,1978NE1010NDS 201002
3 error(s) reported
6 warning(s) reported
Program completed successfully
------File: ENS4up00014.ensdf.fmtchk
EVALUATED NUCLEAR STRUCTURE DATA FILE SYNTAX CHECK FMTCHK version 10.3a AS OF 28-Sep-2007
1. 184AU 184HG EC DECAY 2005SA40,1994IB01,1978NE1010NDS 201002

Programs and parameters

FMTCHK

FMTCHK Checking ENSDF format /v-10.3a, 28-Sep-2007/

Analyzes the format of an ENSDF formatted file to verify that it conforms to "EVALUATED NUCLEAR STRUCTURE DATA FILE. A Manual for Preparation of Data Sets" by J.K. Tuli, Brookhaven National Laboratory, USA

Input File: a184.ens

- [x] Errors only (or full report)
- [x] Check continuation cards
- [ ] Report only fatal errors
- [ ] Suppress warning messages
- [ ] Suppress XREF/DSID check

Run [result] [terminal]

- a184.ens.fmtchk
- a184.ens.fmtchk.err
- a184.ens.fmtchk.inp
- a184.ens.fmtchk.tt

chk_ENSDF

chk_ENSDF Total ENSDF checker /v-0.4.7, 10-Apr-2014/

Written by G. Shulyak, Petersburg Nuclear Physics Institute Nuclear Data Center, Russia, 1996-2014.
Analyzes the format of an ENSDF formatted file to verify that it conforms to"Evaluated Nuclear Structure Data File. A Manual for Preparation of Data Sets", BNL-NCS-51655-01/02-Rev

-w: [ ] suppress warning messages
-d: [ ] output level (default = 0)
-x: <=$~01deFGHlNpPruX values: [<=$~01deFGHlNpPruX] (see help below)

Short help from the program

```
-d level    - output level (default = 0)
-w          - no warning messages
-x flags    - suppress any messages
   <        - ignore 'value <= dvalue' message
   =        - ignore 'value == dvalue' message
   $        - ignore 'extra $' message
   ~        - ignore 'COND impossile with DVALUE' message
   0        - used '1' in comments as 1-st record of comments
   1        - suppress '1' in comments
   d        - suppress 'Invalid DATE' message
   e        - ignore empty field of E/DE
   F        - ignore 'undefined FLAG' message
   G        - ignore skipped uncertainty in '2 G': KC, LC, MC,...
   H        - ignore 'H'-record
   l        - ignore illegal record size
   N        - ignore 'Incompatible NUCID' message
   p        - suppress 'Invalid PUB' message
   P        - consider " PG " and " PL " as comment
   r        - suppress 'Src(Reaction)Dst' message
   u        - consider "?u  " as comment
   X        - ignore '2 L XREF=x(?)'
```

Run [result] [terminal]

- a184.ens.chk_ENSDF.err
- a184.ens.chk_ENSDF.inp
- a184.ens.chk_ENSDF.tt

Programs and parameters

PREPRO

sprepro 'some' preprocessing /v-?, 2014/

Input File: a184.ens

Run [result] [terminal]

- a184.ens.sprepro.chg
- a184.ens.sprepro.err
- a184.ens.sprepro.inp
- a184.ens.sprepro.new
- a184.ens.sprepro.tt

GTOL

GTOL Determines level energies from a least-squares fit to Eγ's & feedings
/v-7.2h, 24-May-2013/

Input File: a184.ens

- [ ] Create a new file with level energies replaced by GTOL results
- [x] Suppress gamma energy comparison
- [x] Suppress intensity comparison

Assumed DCC theory (%): 1.4 (Bricc-1.4%, Hsicc-3%, etc.)

Run [result] [terminal]

- a184.ens.gtol
- a184.ens.gtol.err
- a184.ens.gtol.inp
- a184.ens.gtol.tt

LOGFT

LOGFT Calculates log ft for beta decay /v-7.2, 7-Feb-2001/

This program calculates log ft for beta decay. It also calculates the partial capture fractions for electron capture, the electron capture to positron ratio for positron decay, and the average beta energies. It will do special calculations for first and second forbidden unique; All other categories are treated as allowed.

Input File: a184.ens

Run [result] [terminal]

- a184.ens.logft
- a184.ens.logft.dat
- a184.ens.logft.err
- a184.ens.logft.inp
- a184.ens.logft.rpt
- a184.ens.logft.tt

PANDORA

PANDORA Checks physics of ENSDF files /v-7.0b, 01-May-2007/

Provides the physics checks for an ENSDF file

Input File: a184.ens

- [x] Level report and file sorted
- [x] Gamma report and files sorted
- [x] Radiation report and files sorted
- [x] Cross-reference output
- [ ] Suppress warning messages

Run

- a184.ens.pandora
- a184.ens.pandora.err
- a184.ens.pandora.gam
- a184.ens.pandora.gle
- a184.ens.pandora.inp
- a184.ens.pandora.lev
- a184.ens.pandora.rad
- a184.ens.pandora.rep
- a184.ens.pandora.tt
- a184.ens.pandora.xrf

Programs and parameters

RADLST

RADLST calculates the nuclear and atomic radiations associated with the radioactive decay /v-5.5, 05-Oct-1988/

The program RADLST (Radiation Listing) is designed to calculate the nuclear and atomic radiations associated with the radioactive decay of nucley. It uses as its primary input nuclear decay data in the ENSDF format. By T.W.Burrows Brookhaven National Laboratory. See [manual]

Input File: a184.ens

- [x] Output Radiation Listing
- [x] Output ENDF-like File
- [x] Output File For Nudat
- [x] Output Mird Listing
- [x] Calculate Continua
  - [ ] Calculate Bremsstrahlung

Run [result] [terminal]

- a184.ens.radlst.ENDF.RAW
- a184.ens.radlst.ENSDF.RPT
- a184.ens.radlst.err
- a184.ens.radlst.inp
- a184.ens.radlst.NUDAT.OUT
- a184.ens.radlst.RADLST.INP
- a184.ens.radlst.RADLST.RPT
- a184.ens.radlst.tt

RULER

RULER Calculates reduced transition probabilities /v-3.2d, 20-Jan-2009/

RULER (1984-2009) either calculates the reduced electromagnetic transition strengths and compares these to the Recommended Upper Limits (RUL) or calculates BEλW and BMλW for inclusion in ENSDF datasets. See [manual]

Input File: 184Au.ens

Mode of Operation: (•) Compare to RULs ( ) Calculate BEλW and BMλW

Assumed DCC theory (%): 1.4 (Bricc-1.4%, Hsicc-3%, etc.)

Run [result] [terminal] [clean]

- 184Au.ens.ruler.err
- 184Au.ens.ruler.inp
- 184Au.ens.ruler.rpt
- 184Au.ens.ruler.tt

BrIcc

BrIcc calculates conversion coefficients and E0 electronic factors /v2.3b, 16-Dec-2014/

BrIcc v2.3b (16-Dec-2014) calculates conversion coefficients (for electron conversion and pair production) and E0 electronic factors using cubic spline interpolation. See [manual]

Input File: a184.ens

- [x] List conversion coefficients for all subshells
- [x] Calculate conversion coefficients for all transitions

Lowest CC value to be put on G-card: 1e-4 (default 1.E-4)

Assumed value MR for E2/M1 transitions: 1 (default 1.)

Run [result] [terminal]

- a184.ens.bricc.BrIcc.lst
- a184.ens.bricc.Cards.mrg
- a184.ens.bricc.Cards.new
- a184.ens.bricc.Compar.lst
- a184.ens.bricc.err
- a184.ens.bricc.inp
- a184.ens.bricc.Out.ens
- a184.ens.bricc.tt

Wrapping program BrIccMixing

BrIccMixing

BrIccMixing calculates Mixing Ratio (MR) and Normalization Factor (R) /v2.3b, 16-Dec-2014/

BrIccMixing v2.3b (by T.Kibedi, 2008-2014) determines Mixing Ratio (MR) and Normalization Factor (R) from conversion electron data See [manual]

Input file: type/paste/edit text below See how-to in: [manual] Use example: [1] [2] [3]

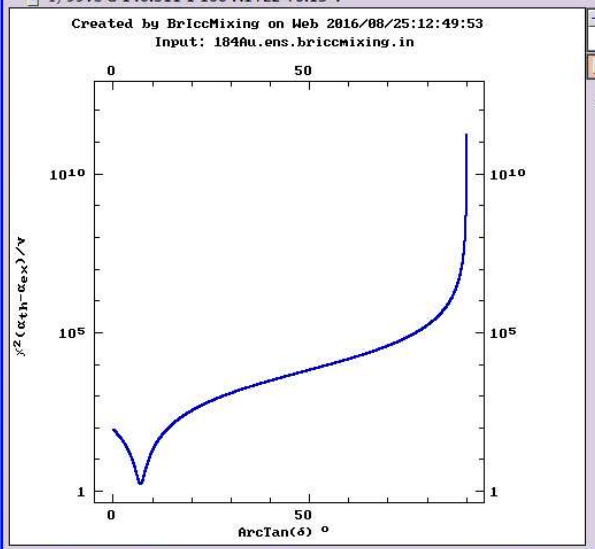
```
99TC  G 140.511   1  100      M1+E2     +0.13   4
99Tc 140.511 1
M1+E2 0.13  1.0
# NsrKey    Shell   IccVal    Unc   Type
1981Ge05    K       0.097     3     A
1981Ge05    T       0.119     3     A
1969Ag04    L1/L2   12        4     R
1969Ag04    L1/L3   18        7     R
1969Ag04    L2/L3   1.7       7     R
1974Ga01    MR      +0.118    6     A
```

Note. Results are collected in the files *.htm and *.zvd

Run [result] [terminal] [clean]

- 184Au.ens.briccmixing.BrIccMixing.in
- 184Au.ens.briccmixing.BrIccMixing.lst
- 184Au.ens.briccmixing.BrIccMixing_01.dat
- 184Au.ens.briccmixing.BrIccMixing_01.plt
- 184Au.ens.briccmixing.err
- 184Au.ens.briccmixing.htm
- 184Au.ens.briccmixing.in
- 184Au.ens.briccmixing.inp
- 184Au.ens.briccmixing.tt
- *184Au.ens.briccmixing.zvd

Welcome to BrIccMixing on Web
Run: 2016/08/25:12:49:53
BrIccMixing Datasets
1) 99TC G 140.511 1 100 M1+E2 +0.13 4



Select data for plotting [all] [none]
1) 9TC G 140.511 1 100 M1+E2 +0.13 4
2) Use my data [example]
See: plotted data (247Kb)

Log: XY| X| Y|Lin: XY| X| Y|Auto-range: XY| X| Y|Page: >>| <<|Zoom: <>| ><|Grid: VH| 0| V| H|Pts: Txt| Box| PL| Print
Reset Repaint Legend Authors Info+ PostScript Manual options:[+] Clipboard: Copy
Shift legend:x=0 y=0 Split:0 1:xy;2:y Plot data or ratio:0 0:data; 1:ratio to dataset-1; 2:ratio to 2-nd, etc.
Data for plotting: ZVD (213Kb), send to ZVView; download ZVView; upload and plot your ZVD file

Welcome to BrIccMixing on Web
Run: 2016/08/25:12:49:53

```
99TC  G 140.511   1  100      M1+E2     +0.13   4
Transition: 140.511 (1) keV
Adopted from fit:   δ=0.122(+13-13);   χ²/v= 1.70E+00
Input data ----------------------------------------------------------
                                  Experiment          Fit
NSRkey      Shell         Icc(Unc)          Icc(Unc)          Type
1981Ge05    K             0.097(3)            0.0985(14)        A
1981Ge05    T             0.119(3)            0.1129(16)        A
1969Ag04    L1/L2         12(4)               15.8(4)           R
1969Ag04    L1/L3         18(7)               31.3(7)           R
1969Ag04    L2/L3         1.7(7)              1.98(4)           R
1974Ga01    MR            +0.118(6)           0.1218            A
```

$^{184}_{79}Au_{105}$

^{184}Hg ε Decay 2005Sa40,1994Ib01,1978Ne10

Parent ^{184}Hg: E=0.0; Jπ=0+; $T_{1/2}$=30.87 s *26*; Q(g.s.)=3970 *24*; %ε+%β+ decay=98.89 *6*.

Others: 1975Ho03, 1971Hu02, 1969Ha03 (observed 157γ and 237γ).

2005Sa40: mass-separated ^{184}Hg source from fragmentation of molten Pb target by 600 MeV or 1 GeV protons; Ge(Li) and Si(Li) detectors, high resolution 180° magnetic spectrograph; measured Eγ, Iγ, E(ce), I(ce). Additional sources from ^{148}Sm(^{40}Ar,X); planar Ge (FWHM=0.9 keV at 122 keV) for Eγ≤1 MeV; two HPGe detectors (FWHM ≈2.3 keV at 1.3 MeV) for Eγ≤1.3 MeV; measured x-γ-t and γ-γ-t events which were sorted to provide prompt-, total- and delayed-coincidence bidimensional matrices (60 ns or 100 ns time windows). Supersedes 2003IbZZ; see also 1994Ib01.

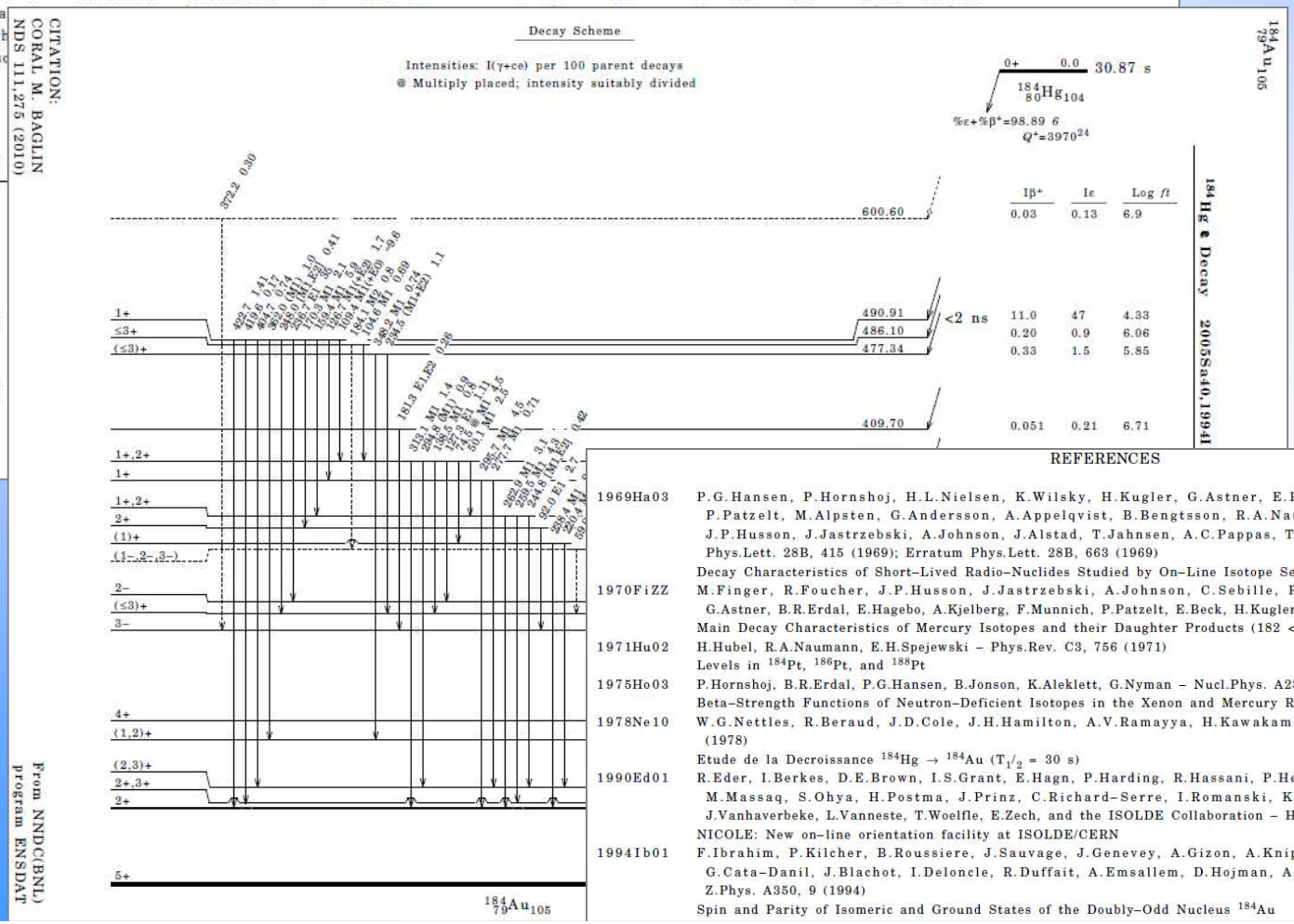
1994Ib01: mass separated source from bombardment of ^{148}Sm by 185 MeV ^{40}Ar ions; He-jet transport, iodine aerosol; two HPGe coaxial detectors, one HPGe x-ray detector; measured singles γ and x-ray spectra, γγ(t), x-γ(t). See also 1994RoZY.

1975Ho03: β strength function deduced from total-absorption γ measurement.

1978Ne10: Mass-separated source; measured Eγ, Iγ, γγ coin, γγ(t) (time resolution 6 ns *1*).

The decay scheme is adopted from 2005Sa40. It differs greatly from that proposed by 1978Ne10. Although Eγ and Iγ da wh is

E(level)†
0.0
68.46 *4*
71.87 *9*
86.50 *8*
129.13 *8*
146.50 *12*
228.40 *7*
242.87 *10*
254.26 *7*



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Decay Characteristics of Short-Lived Radio-Nuclides Studied by On-Line Isotope Separator Techniques

1970FiZZ M.Finger, R.Foucher, J.P.Husson, J.Jastrzebski, A.Johnson, C.Sebille, R.Henck, J.M.Kuchly, R.Regal, P.Siffert, G.Astner, B.R.Erdal, E.Hagebo, A.Kjelberg, F.Munnich, P.Patzelt, E.Beck, H.Kugler – CERN-70-29 (1970)
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1971Hu02 H.Hubel, R.A.Naumann, E.H.Spejewski – Phys.Rev. C3, 756 (1971)
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1990Ed01 R.Eder, I.Berkes, D.E.Brown, I.S.Grant, E.Hagn, P.Harding, R.Hassani, P.Herzog, B.Kastelein, A.Knipper, G.Marguier, M.Massaq, S.Ohya, H.Postma, J.Prinz, C.Richard-Serre, I.Romanski, K.Schlosser, N.J.Stone, W.Vanderpoorten, J.Vanhaverbeke, L.Vanneste, T.Woelfle, E.Zech, and the ISOLDE Collaboration – Hyperfine Interactions 59, 83 (1990)
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NDSPUB result: PS, PDF

NDSPUB in editing mode

1-st step: Upload to “Working” database

Publication tools (2014)

Upload your ENSDF file to working database /Sept. 2014/

Note: needed only for advanced use of NDSPUB

Input File: a210.ens

☑ Run NDSPUB to create initial control file "upload.zeroctl.210"

1 Run [result] [terminal]

NDSPUB ENSDF publication program /v-12.26b, 15-Jul-2008/

a210.ens.upload.dsid.210	6,318
a210.ens.upload.eref.210	32,805
a210.ens.upload.err	767
a210.ens.upload.inp	33
a210.ens.upload.msg	7,355
a210.ens.upload.pdf	1,099,680
a210.ens.upload.ps	4,307,544
a210.ens.upload.tt	125,151
a210.ens.upload.zeroctl.210	14,947

Initial Control file

2-nd step: NDSPUB (type of input: “Working”)

Publication tools (2014)

Upload your ENSDF file to working database /Sept. 2014/

Note: needed only for advanced use of NDSPUB

Input File: a210.ens

☑ Run NDSPUB to create initial control file "upload.zeroctl.210"

Run [result] [terminal]

NDSPUB ENSDF publication program /v-12.26b, 15-Jul-2008/

Produces PostScript and PDF files from your ENSDF file.

Input File: a210.ens

Type of input: 1 (Cards-0, Working-1)

Control file (applied only in regime "Working"). Use initial text from the file: upload.zeroctl.210

Control file commands for NDSPUB: [help]

```
PUBLICATION /N:564/A:210
PAGE /S:0/N:567
210AU    ADOPTED
LEVELS
GENCOM
LEVEL
```

Copy/Paste/Edit Control file

2 Run [result] [terminal]

a210.ens.ndspub.err	453
a210.ens.ndspub.inp	48
a210.ens.ndspub.pdf	559,125
a210.ens.ndspub.ps	1,972,939
a210.ens.ndspub.tt	86,076
a210.ens.ndspub.zeroctl	14,938
a210.ens.upload.dsid.210	6,318
a210.ens.upload.eref.210	32,805
a210.ens.upload.err	767
a210.ens.upload.inp	33
a210.ens.upload.msg	7,355
a210.ens.upload.pdf	1,099,680
a210.ens.upload.ps	4,307,544
a210.ens.upload.tt	125,151
a210.ens.upload.zeroctl.210	14,947

Total files: 17, length: 9804721 bytes

==========

Submit results to NNDC /Oct-2014/

Zip and Submit to NNDC: your ENSDF file, NDSPUB Control and PDF

Run

NDSPUB in editing mode

3-rd step: Zip and Send result

Publication tools (2014)

Upload your ENSDF file to working database /Sept. 2014/
Note: needed only for advanced use of NDSPUB

Input File: a210.ens
☑ Run NDSPUB to create initial control file "upload.zeroctl.210"

Run [result] [terminal]

NDSPUB ENSDF publication program /v-12.26b, 15-Jul-2008/
Produces PostScript and PDF files from your ENSDF file.

Input File: a210.ens
Type of input: 1 (Cards-0, Working-1)
⊞ Control file (applied only in regime "Working"). Use initial text from the file: upload.zeroctl.210

a210.ens.ndspub.err	453
a210.ens.ndspub.inp	48
a210.ens.ndspub.pdf	559,125
a210.ens.ndspub.ps	1,972,939
a210.ens.ndspub.tt	86,076
a210.ens.ndspub.zeroctl	14,938
a210.ens.submit.txt	1,144
a210.ens.submit.zip	2,797,304
a210.ens.upload.dsid.210	6,318
a210.ens.upload.eref.210	32,805
a210.ens.upload.err	767
a210.ens.upload.inp	33
a210.ens.upload.msg	7,355
a210.ens.upload.pdf	1,099,680
a210.ens.upload.ps	4,307,544
a210.ens.upload.tt	125,151
a210.ens.upload.zeroctl.210	14,947

Total files: 19, length: 12603169 bytes
==========

Submit results to NNDC /Oct-2014/
Zip and Submit to NNDC: your ENSDF file, NDSPUB Control and PDF

Run [result] [terminal]

3

Draft e-mail with list of files

```
Dear Dr. J. Tuli,

The automated ENSDF system has sent you attached ENSDF files.

Archive:  a210.ens.submit.zip
  Length      Date    Time    Name
---------  ---------- -----   ----
   787968  2015-04-16 12:52   a210.ens
   788574  2015-04-16 12:52   a210.ens-00
      453  2015-04-16 13:00   a210.ens.ndspub.err
       48  2015-04-16 13:00   a210.ens.ndspub.inp
   559125  2015-04-16 13:00   a210.ens.ndspub.pdf
  1972939  2015-04-16 13:00   a210.ens.ndspub.ps
    86076  2015-04-16 13:00   a210.ens.ndspub.tt
    14938  2015-04-16 13:00   a210.ens.ndspub.zeroctl
     6318  2015-04-16 12:52   a210.ens.upload.dsid.210
    32805  2015-04-16 12:52   a210.ens.upload.eref.210
      767  2015-04-16 12:53   a210.ens.upload.err
       33  2015-04-16 12:52   a210.ens.upload.inp
     7355  2015-04-16 12:52   a210.ens.upload.msg
  1099680  2015-04-16 12:53   a210.ens.upload.pdf
  4307544  2015-04-16 12:53   a210.ens.upload.ps
   125151  2015-04-16 12:53   a210.ens.upload.tt
    14947  2015-04-16 12:53   a210.ens.upload.zeroctl.210
---------                     -------
  9804721                     17 files

Best regards,
Viktor (via MyENSDF)
```

Store all files on you PC using
< Mouse Right-button click>

Continue sessions, common data, administrating

Web tools for ENSDF evaluators

by V.Zerkin, IAEA-NDS, 2011-2015 (ver.2015-01-16)

Upload your ENSDF dataset and run remo
FMTCHK, chk_ENSDF, PREPRO, GTOL, LOGFT, PAND

Your name: admin
Working area: 307
Use existing ENSDF file: Choose File No file chosen
or ENSDF text. Examples: text web-links: fmtchk.inp pandora.inp
139

Login: admin 2015/04/17:02:56:19 161.5.6.220::Austria Access leve

#	Area	ENSDF file	Files	Created
1.1	tmp307 Grace	a139.ens	24	2015/04/15 08:16:29 Grac
2.1	tmp311 Grace	a209.ens	24	2015/04/16 12:50:18 Grac

Web Design and Programming: Viktor Zerkin, NDS, International Atomic Energy Age
Last updated: 04/17/2015 09:56:20

Running ENSDF Codes on Web

by V.Zerkin, IAEA-NDS, 2011-2015 (ver.2015-01-16)

⊞ News, updates, versions, history

Login: admin
Now: 2015/04/17 02:58:32

- 1) Area:tmp307 Files:24 Masses:1
  - 1) Mass:a139 Files:24 Grace 152.3.175.45::United States

a139.ens-00	1,562,028	2015/04/15	08:16:29
a139.ens	1,553,418	2015/04/15	08:16:29
a139.ens.fmtchk	111,666	2015/04/14	10:53:43
a139.ens.fmtchk.err	0	2015/04/14	10:53:43
a139.ens.fmtchk.inp	38	2015/04/14	10:53:43
a139.ens.fmtchk.tt	9,806	2015/04/14	10:53:43
a139.ens.fmtchk.tt1	9	2015/04/14	10:53:43
a139.ens.ndspub.err	33	2015/04/15	08:20:13
a139.ens.ndspub.inp	48	2015/04/15	08:18:47
a139.ens.ndspub.pdf	1,188,713	2015/04/15	08:20:31
a139.ens.ndspub.ps	4,410,625	2015/04/15	08:20:13
a139.ens.ndspub.tt	127,181	2015/04/15	08:20:31
a139.ens.ndspub.tt1	9	2015/04/15	08:20:13
a139.ens.ndspub.zeroctl	30,772	2015/04/15	08:18:47
a139.ens.upload.dsid.139	8,019	2015/04/15	08:16:45
a139.ens.upload.eref.139	30,375	2015/04/15	08:16:45
a139.ens.upload.err	67	2015/04/15	08:18:11
a139.ens.upload.inp	33	2015/04/15	08:16:45
a139.ens.upload.msg	10,198	2015/04/15	08:16:44
a139.ens.upload.pdf	2,382,979	2015/04/15	08:18:34
a139.ens.upload.ps	9,203,524	2015/04/15	08:18:11
a139.ens.upload.tt	232,244	2015/04/15	08:18:34
a139.ens.upload.tt1	9	2015/04/15	08:18:34
a139.ens.upload.zeroctl.139	30,329	2015/04/15	08:18:11

- 2) Area:tmp311 Files:24 Masses:1
  - 1) Mass:a209 Files:24 Grace 152.3.175.45::United States

- Logins

1)	2015/01/09,09:50:19 171	admin	130.199.210.35::United States
2)	2015/01/09,09:50:38 172	Zerkin	161.5.6.223::Austria
3)	2015/01/09,09:51:19 173	Zerkin	161.5.6.223::Austria

Data structures:

area/mass.program.files ~ dir/file

area: **tmp**<auto-sequential-number>

mass: **a**<mass-number-from-ENSDF-file>

Squeeze - recursive deleting users' areas/files:

- temporary areas: automatically - after 2 days
- permanent areas: automatically – never,
  remotely - by admin,
  locally - by authorized staff

User's responsibility: to store files on his/her PC.

Demo and discussion

1. Examples of usage: demo (running programs + questions)
2. MyEnsdf on NDS, NNDC and Mirror-sites.
   Working without Internet.
3. Discussion:
   - experience of usage;
   - further needs;
   - self-cleaning (squeeze temporary data);
   - temporary and permanent areas;
   - privileged users, administrating,
   - continuing work (multiple entries)

Thank you.