

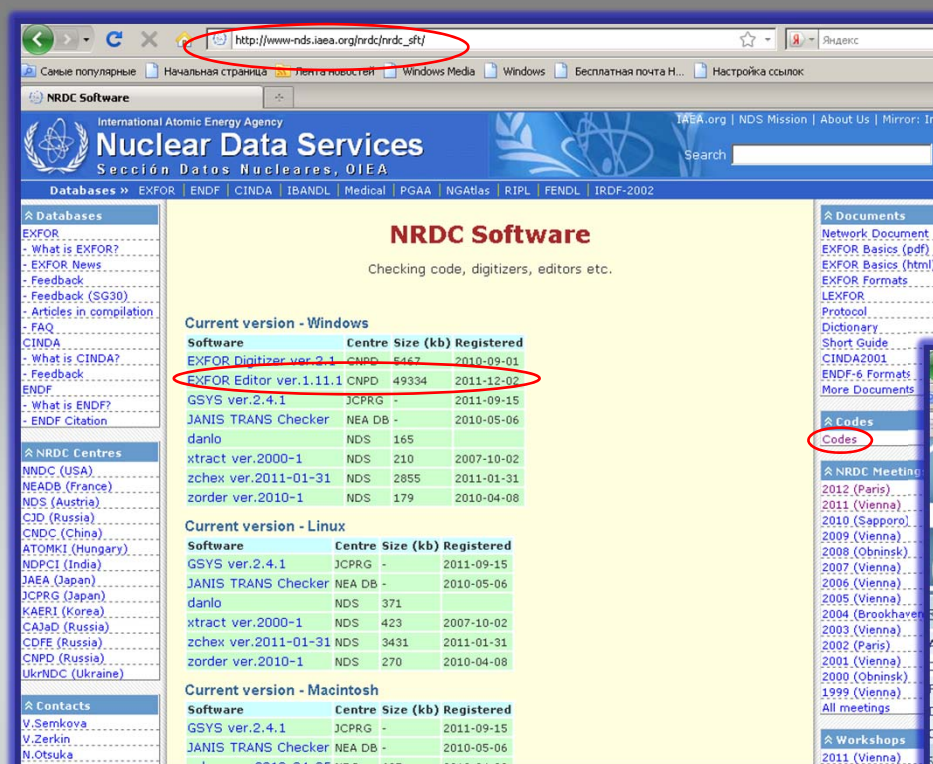
Development of Software Package for Input and Editing of Experimental Data in EXFOR Format

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G. Pikulina, S. Taova, S. Dunaeva

Russian Federal Nuclear Center-VNII EF

Russia, 607188, Sarov, Nizhnij Novgorod region, pr. Mira, 37



International Atomic Energy Agency
Nuclear Data Services
Sección Datos Nucleares, OIEA

Databases » EXFOR | ENDF | CINDA | IBANDL | Medical | PGAA | NGAtlas | RIPL | FENDL | IRDF-2002

NRDC Software

Checking code, digitizers, editors etc.

Current version - Windows

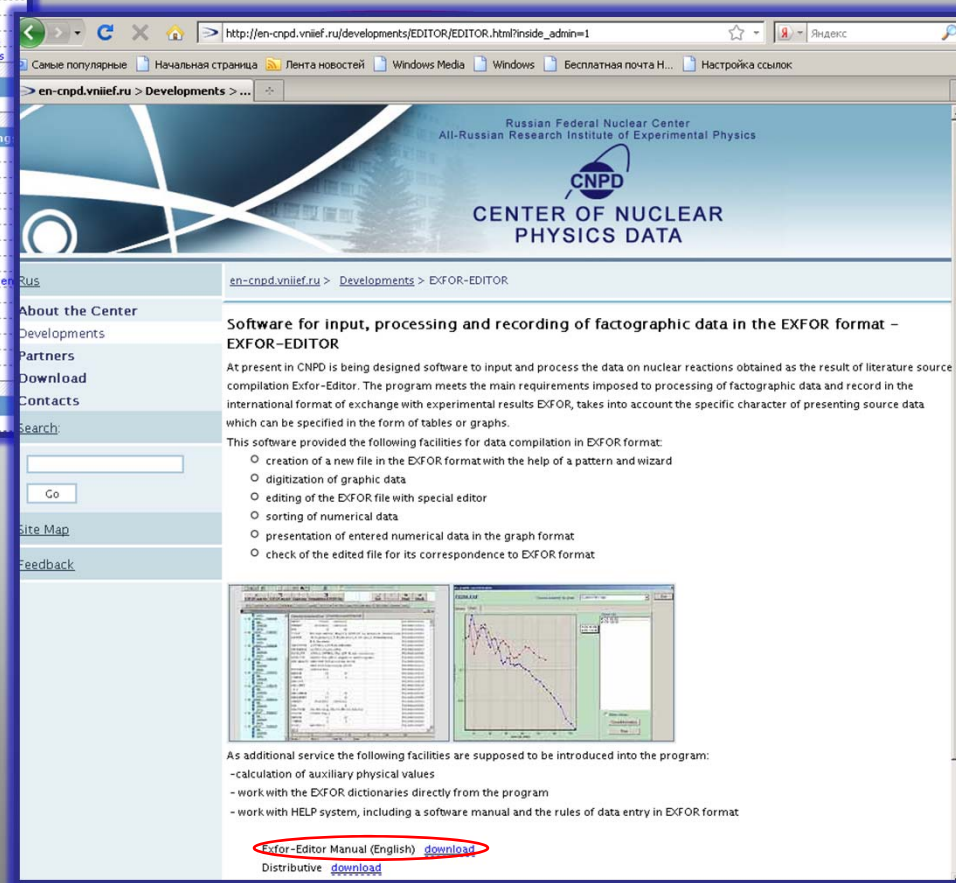
| Software | Centre | Size (kb) | Registered |
|---------------------------------|-------------|--------------|-------------------|
| EXFOR Digitizer ver. 2.1 | CNPD | 5463 | 2010-09-01 |
| EXFOR Editor ver. 1.11.1 | CNPD | 49334 | 2011-12-02 |
| GSYS ver. 2.4.1 | JCPRG | - | 2011-09-15 |
| JANIS TRANS Checker | NEA DB | - | 2010-05-06 |
| danlo | NDS | 165 | 2010-04-08 |
| xtract ver. 2000-1 | NDS | 210 | 2007-10-02 |
| zchex ver. 2011-01-31 | NDS | 2855 | 2011-01-31 |
| zorder ver. 2010-1 | NDS | 179 | 2010-04-08 |

Current version - Linux

| Software | Centre | Size (kb) | Registered |
|-----------------------|--------|-----------|------------|
| GSYS ver. 2.4.1 | JCPRG | - | 2011-09-15 |
| JANIS TRANS Checker | NEA DB | - | 2010-05-06 |
| danlo | NDS | 371 | 2010-04-08 |
| xtract ver. 2000-1 | NDS | 423 | 2007-10-02 |
| zchex ver. 2011-01-31 | NDS | 3431 | 2011-01-31 |
| zorder ver. 2010-1 | NDS | 270 | 2010-04-08 |

Current version - Macintosh

| Software | Centre | Size (kb) | Registered |
|---------------------|--------|-----------|------------|
| GSYS ver. 2.4.1 | JCPRG | - | 2011-09-15 |
| JANIS TRANS Checker | NEA DB | - | 2010-05-06 |



en-cnnpd.vniief.ru > Developments > ...

en-cnnpd.vniief.ru > Developments > EXFOR-EDITOR

Software for input, processing and recording of factographic data in the EXFOR format - EXFOR-EDITOR

At present in CNPD is being designed software to input and process the data on nuclear reactions obtained as the result of literature source compilation Exfor-Editor. The program meets the main requirements imposed to processing of factographic data and record in the international format of exchange with experimental results EXFOR, takes into account the specific character of presenting source data which can be specified in the form of tables or graphs.

This software provided the following facilities for data compilation in EXFOR format:

- creation of a new file in the EXFOR format with the help of a pattern and wizard
- digitization of graphic data
- editing of the EXFOR file with special editor
- sorting of numerical data
- presentation of entered numerical data in the graph format
- check of the edited file for its correspondence to EXFOR format

As additional service the following facilities are supposed to be introduced into the program:

- calculation of auxiliary physical values
- work with the EXFOR dictionaries directly from the program
- work with HELP system, including a software manual and the rules of data entry in EXFOR format

Exfor-Editor Manual (English) [download](#)

Distributive [download](#)

MAIN CORRECTIONS:

- Error arising in the Author's Second Name containing hyphen was corrected.
- Pointers are preserved when editing code information containing pointers.
- Displacement of position when entering many code words under one Keyword is now eliminated.
- Error arising when launching CHEX after automatic changing of subentry number is corrected.
- Lines with keywords without information are inserted in DUMMY-File now.

| | | | | | |
|-----------|----------------------------|---------------|-----------|-----------|-------------|
| F1094.EXF | D0997.EXF | F1066.exf | T0242.EXF | F0675.exf | 11914.exf |
| SUBENT | 11914004 | 771101 | | 20050926 | 0000 |
| BIB | 3 | 5 | | | |
| REACTION | 1(42-MO-95(N,0),,EN) | | | | |
| | 2(42-MO-95(N,EL),,WID,,2G) | | | | |
| | 3(42-MO-95(N,G),,WID) | | | | |
| ANALYSIS | (AREA) | AREA ANALYSIS | | | |
| ASSUMED | (ASSUM,42-MO-95(N,G),,WID) | | | | |
| ENDBIB | 5 | | | | |
| NOCOMMON | 0 | 0 | | | |
| DATA | 7 | 11 | | | |
| DATA | 1DATA-ERR | 1DATA | 2DATA-ERR | 2DATA | 3DATA-ERR 3 |
| ASSUM | | | | | |
| MEV | MEV | MILLI-EV | | | |
| MILLI-EV | | | | | |

| Data Table | | | | | | | |
|--------------------|-----------|-----------------|----------|------------|----------|------------|-----|
| Selected Column: 1 | | Selected Row: 3 | | | | | |
| 1 | DATA 1 | DATA-ERR 1 | DATA 2 | DATA-ERR 2 | DATA 3 | DATA-ERR 3 | AS |
| 2 | MEV | MEV | MILLI-EV | MILLI-EV | MILLI-EV | MILLI-EV | MIL |
| 3 | 1.179E-04 | 3.E-07 | 1.51E-01 | 1.2E-02 | 200. | 120. | |
| 4 | 2.179E-04 | 4.E-07 | 1.10 | 1.1E-01 | | | |
| 5 | 2.457E-04 | 6.E-07 | 5.2E-01 | 5.E-02 | | | |
| 6 | 2.637E-04 | 7.E-07 | 1.2 | 3.E-01 | | | |
| 7 | 3.312E-04 | 1.0E-06 | 2.6 | 1.2 | | | |
| 8 | 4.680E-04 | 1.2E-06 | 9. | 2. | | | |
| 9 | 6.300E-04 | 2.0E-06 | 1.3E+01 | 4 | | | |
| 10 | 7.446E-04 | 2.4E-06 | 3.2 | | | | |
| 11 | 7.710E-04 | 2.8E-06 | 7.6 | | | | |
| 12 | 1.343E-03 | 2.1E-05 | 4.7E | | | | |
| 13 | 1.420E-03 | 2.2E-05 | 6.20E | | | | |

Current Subentry
11914004

DATA

Import

Sort

Paste

Chart

Clear All

Check

Column

Add

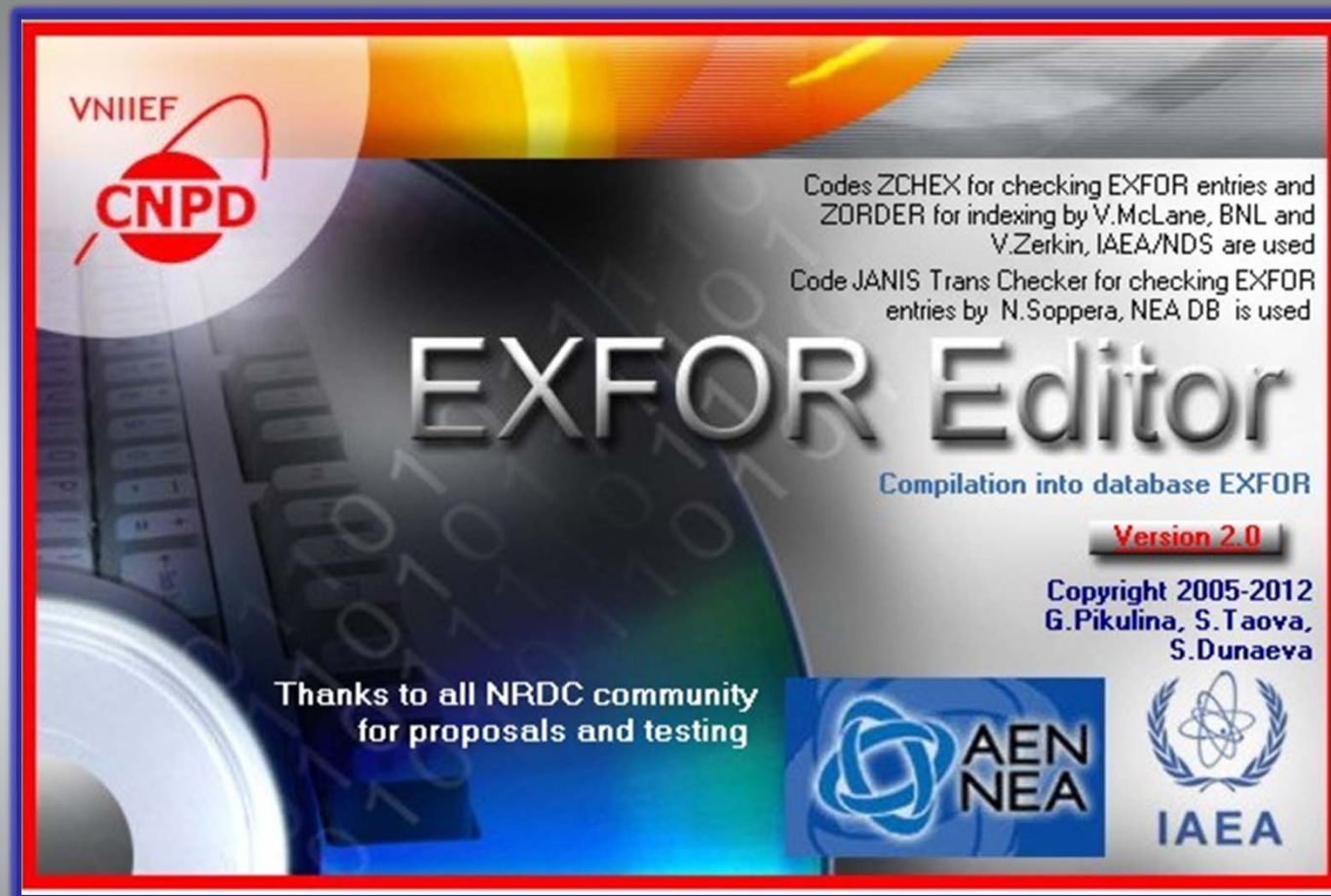
Insert

Copy

Delete

| | | | | | | |
|-----------|-----------|----------|-----------|----------|-----------|---|
| DATA | 1DATA-ERR | 1DATA | 2DATA-ERR | 2DATA | 3DATA-ERR | 3 |
| ASSUM | | | | | | |
| MEV | MEV | MILLI-EV | MILLI-EV | MILLI-EV | MILLI-EV | |
| MILLI-EV | | | | | | |
| 1.179E-04 | 3.E-07 | 1.51E-01 | 1.2E-02 | 200. | 120. | |
| 2.179E-04 | 4.E-07 | 1.10 | 1.1E-01 | | | |
| 2.457E-04 | 6.E-07 | 5.2E-01 | 5.E-02 | | | |
| 2.637E-04 | 7.E-07 | 1.2 | 3.E-01 | | | |
| 3.312E-04 | 1.0E-06 | 2.6 | 1.2 | | | |
| 4.680E-04 | 1.2E-06 | 9. | 2. | | | |

- Creation of EXFOR files on the basis of existing patterns
- Automatic control of input and editing of data
- Implementation of the changing rules for EXFOR data input.



REACTION Edit

REACTION

(20-CA-40 (D, P) 20-CA-41, PAR, DA)

Compress
Clear

Reaction Fields: SF1 - SF4

Pointer
☐ Use
1

Target Nucleus - SF1

CA-40

Search

Incident Particle - SF2

D - Deuterons

Search

Process - SF3

P - Protons

Search

Reaction Product - SF4

CA-41

Search

Add

Reaction Type

Text to Find

Ang

Find

Search Reaction Examples

| | |
|---|-----|
| <input type="checkbox"/> Differential d/dAngle | TRA |
| <input type="checkbox"/> Special quantity, d/dAngle | OBS |
| <input type="checkbox"/> Double differential dAngle1/dAngle2 | TRA |
| <input type="checkbox"/> Double differential dAngle/dE` | TRA |
| <input checked="" type="checkbox"/> Partial differential d/dAngle | TRA |
| <input type="checkbox"/> Differential d/dAngle/dE` * 4pi | OBS |

Quantity Fields SF5-SF8

NN/PAR,DA,,NSF -
NN/PAR,DA,,SF -
PAR,DA -
PAR,DA,,RS -
PAR,DA,,RS/TT -
PAR,DA,,RS0 - Partial cross section, diff.siq/siq(0deg))
PAR,DA,,RSD -
PAR,DA,,RSD0 -

Data Type SF9

Add
New Record

Help

Check Order Checker Spell Check **Numer.Check** New Entry Number F1094 Set New Entry Date 20120410 Set

Data Table Check For Equal Abscissa

T0242.EXF OK

Options

Choose SUBENTRY for data check: SUBENTRY 002

Check Check Options ☒ Add Flag Column For Equal Abscissa


Choose Table Columns for Equal Abscissa Checking

Abscissa axis (X) EN

Invariable parameter 1 ANG-CM

Invariable parameter 2

Error

 ATTENTION! Equal X-values were found.

OK

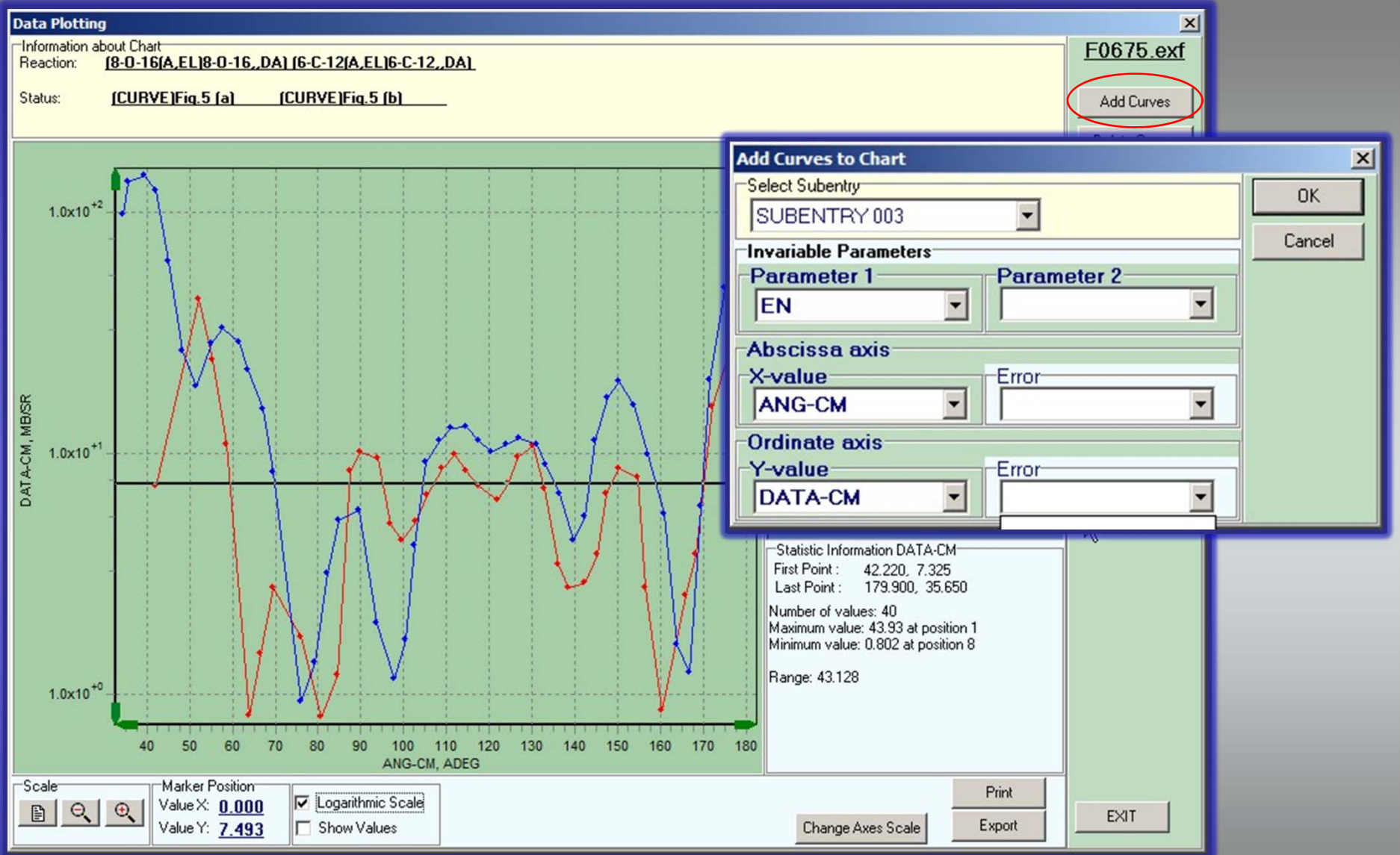
Data Table Check For Equal Abscissa

T0242.EXF OK

Options Data Table

| | ANG-CM | EN | DATA-CM | FLAG |
|----|--------|------|---------|--------|
| 1 | ANG-CM | EN | DATA-CM | FLAG |
| 2 | ADEG | MEV | MB/SR | NO-DIM |
| 3 | 90.0 | 6.90 | 36. | |
| 4 | 90.0 | 6.92 | 35. | |
| 5 | 90.0 | 6.95 | 32. | |
| 6 | 90.0 | 6.96 | 32. | |
| 7 | 90.0 | 6.98 | 25. | 1 |
| 8 | 90.0 | 6.98 | 18. | 1 |
| 9 | 90.0 | 7.02 | 16. | |
| 10 | 90.0 | 7.06 | 13. | |
| 11 | 90.0 | 7.10 | 10. | |
| 12 | 90.0 | 7.13 | 4. | |
| 13 | 90.0 | 7.15 | 5. | |
| 14 | 90.0 | 7.17 | 5. | |
| 15 | 90.0 | 7.19 | 5. | |
| 16 | 90.0 | 7.23 | 3. | |
| 17 | 90.0 | 7.89 | 21. | |
| 18 | 90.0 | 7.91 | 25. | |
| 19 | 90.0 | 7.93 | 30. | |
| 20 | 90.0 | 7.94 | 33. | |
| 21 | 90.0 | 7.97 | 31. | |
| 22 | 90.0 | 7.99 | 31. | 2 |
| 23 | 90.0 | 7.99 | 37. | 2 |
| 24 | 90.0 | 8.01 | 39. | |
| 25 | 90.0 | 8.03 | 34. | |

☐ Save Flag Save Rewrite so



| | | | | | | | |
|-----------|---|----------|--|--|-------|---|---|
| ENTRY | D0997 | 20120330 | | | D0997 | 0 | 1 |
| SUBENT | D0997001 | 20120330 | | | D0997 | 1 | 1 |
| BIB | 11 | 28 | | | D0997 | 1 | 2 |
| TITLE | Consistent analysis of peripheral reaction channels | | | | D0997 | 1 | 3 |
| | and fusion for the 16,180+ 58Ni systems | | | | D0997 | 1 | 4 |
| AUTHOR | (J.J.S.Alves,P.R.S.Gomes,J.Lubian,L.C.Chamon, | | | | D0997 | 1 | 5 |
| | D.Pereira,R.M.Anjos,E.S.Rossi Jr.,C.P.Silva, | | | | D0997 | 1 | 6 |
| | M.A.G.Alvarez,G.P.A.Nobre,L.R.Gasques) | | | | D0997 | 1 | 7 |
| INSTITUTE | (3BZLUFF,3BZLUSP,1USANOT) | | | | D0997 | 1 | 8 |
| REFERENCE | (J,NP/A,748,59,2005) | | | | D0997 | 1 | 9 |

New Entry Date

20120410 ▼ Set

| | | | | | | | |
|--------|---|----------|--|--|--|--|--|
| ENTRY | D0997 | 20120410 | | | | | |
| SUBENT | D0997001 | 20120410 | | | | | |
| BIB | 11 | 28 | | | | | |
| TITLE | Consistent analysis of peripheral reaction channels | | | | | | |
| | and fusion for the 16,180+ 58Ni systems | | | | | | |
| AUTHOR | (J.J.S.Alves,P.R.S.Gomes,J.Lubian,L.C.Chamon, | | | | | | |
| | D.Pereira,R.M.Anjos,E.S.Rossi Jr.,C.P.Silva, | | | | | | |

- The maintenance and improvement of the EXFOR-Editor.
- The development of software for control of input information.
- The creation of updated version of the EXFOR-Digitizer.



Thank you!

