

AASPP Workshop
the 1st Asian nuclear reaction database
development workshop

EXFOR Compilation Training
1st day

Hokkaido University JCPRG
Ayano Makinaga

- **Schedule**
- **EXFOR Compilation**
 - **EXFOR editor**
 - **HENDEL editor**
 - **How to compile**



EXFOR Compilation Schedule

Mon	Tue	Wed	Thu
Presentation	Presentation	Presentation	Check the EXFOR file
Editor (Introduction)	Compilation →Noto-san	GSYS.Digitizer →Furutachi-san	
Practice And compile EXFOR	Practice And compile EXFOR	Practice And compile EXFOR	

**Please copy the electric data from USB to your PC.
(*We prepare the some laptops. Please use.)**

Please check your paper for compilation .

EXFOR Compilation process



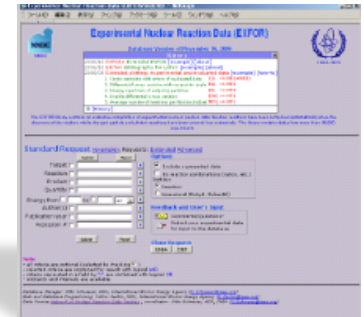
From paper



From experimentalist



**Compiler
@Data center**



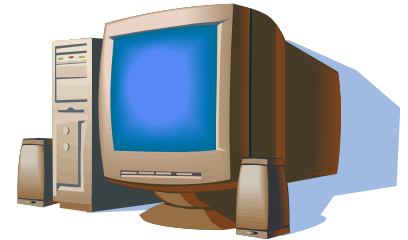
IAEA EXFOR



<http://www-nds.iaea.org/exfor/exfor.htm>

How to compile

- **Tools for EXFOR compilation**
 - **EXFOR editor**
 - **HENDEL editor**
 - **Digitizing software**
 - **Other(CHEX etc...)**
- **Manuals for EXFOR compilation**
- **EXFOR compilation**



Prepare Tools

The screenshot shows the Nuclear Data Services website with the NRDC Software section highlighted. The page lists software for Windows, Linux, and Macintosh, including EXFOR Editor, EXFOR Digitizer, GSYS, JANIS TRANS Checker, danlo, xtract, zchex, and zorder. The website also features a search bar, navigation links, and a sidebar with various resources.

NRDC Software
Checking code, digitizers, editors etc.

Current version - Windows

Software	Centre	Size (kb)	Registered
EXFOR Digitizer ver.2.1	CNPD	5467	2010-09-01
EXFOR Editor ver.1.9	CNPD	47865	2010-09-01
GSYS ver.2.4.0	JCPRG	-	2010-05-06
JANIS TRANS Checker	NEA DB	-	2010-05-06
danlo	NDS	165	-
xtract ver.2000-1	NDS	210	2007-10-02
zchex ver.2010-04-05	NDS	1159	2010-04-08
zorder ver.2010-1	NDS	179	2010-04-08

Current version - Linux

Software	Centre	Size (kb)	Registered
GSYS ver.2.4.0	JCPRG	-	2010-05-06
JANIS TRANS Checker	NEA DB	-	2010-05-06
danlo	NDS	371	-
xtract ver.2000-1	NDS	423	2007-10-02
zchex ver.2010-04-05	NDS	1461	2010-04-08
zorder ver.2010-1	NDS	270	2010-04-08

Current version - Macintosh

Software	Centre	Size (kb)	Registered
GSYS ver.2.4.0	JCPRG	-	2010-05-06
JANIS TRANS Checker	NEA DB	-	2010-05-06
zchex ver.2010-04-05	NDS	625	2010-04-08

Archive version

Software	Centre	OS	Size (kb)	Registered
----------	--------	----	-----------	------------

Software

- ✚ EXFOR Editor Ver.1.9
- ✚ EXFOR Digitizer Ver.2.1
- ✚ HENDEL (JCPRG)
- ✚ GSYS ver. 2.4

Manuals

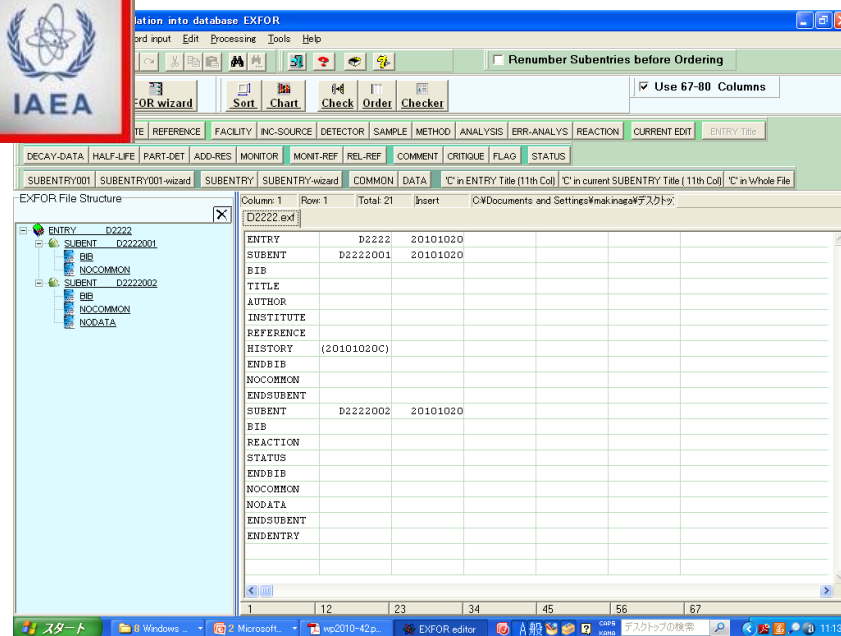
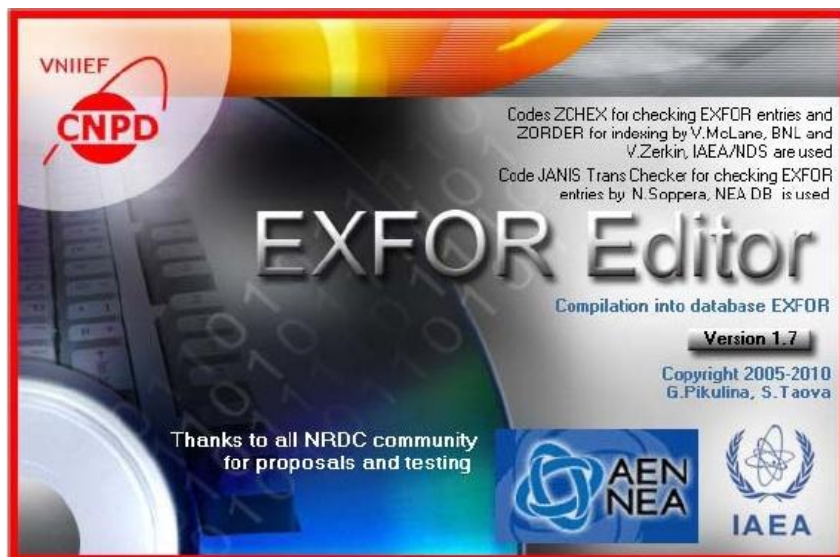
- ✚ Short Guide
- ✚ EXFOR Basics
- ✚ LEXFOR

http://www-nds.iaea.org/nrdc/nrdc_sft/

Please download if you need.

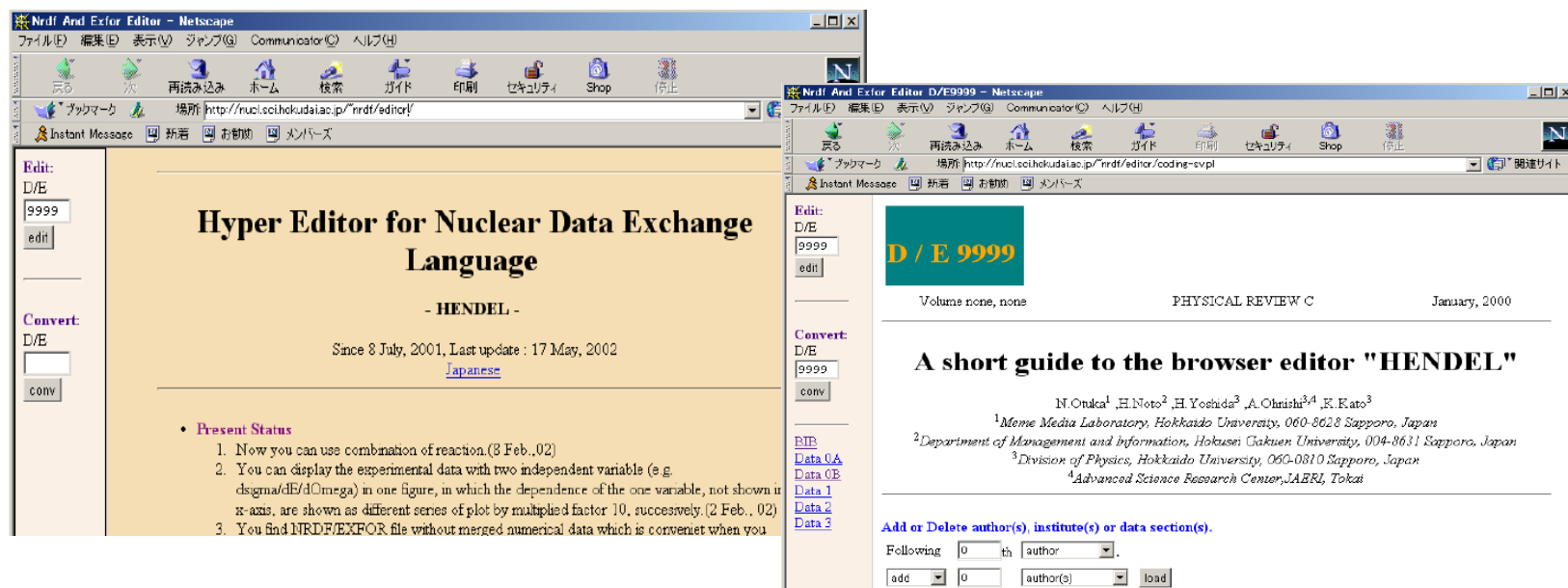
EXFOR editor

G.Pikulina, S.Taova, CNPD



HENDEL editor

(Hyper Editor for Nuclear Data Exchange Language)



- **Web-based editor**
- **EXFOR file & NRDF file**
- **Made by N.Otsuka(2001~)**
- **Plotting system**
- **Perl lang.**

<http://www.jcprg.org/hendel/>

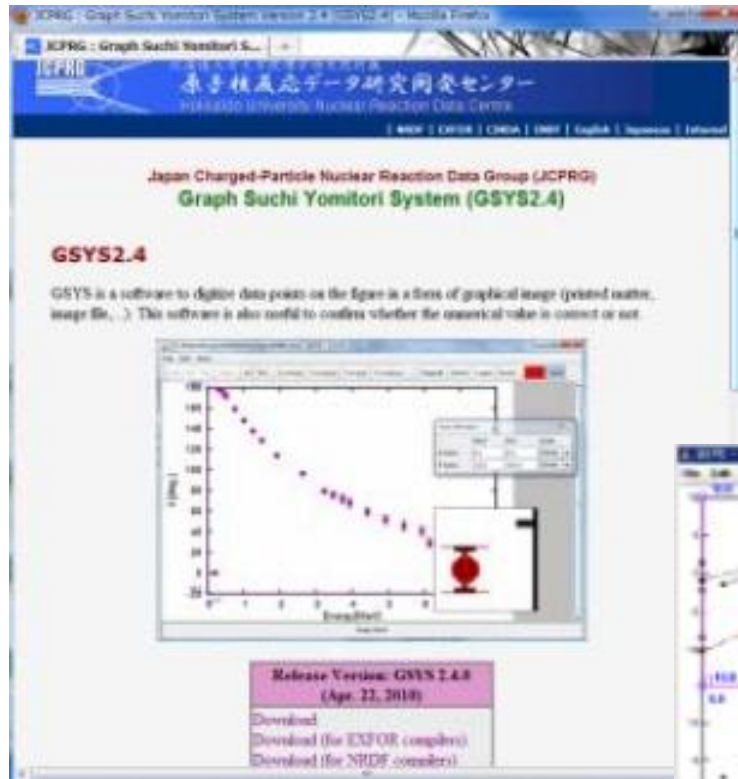
If you want to try,
ID: guest
PASS: guest

Digitizing software

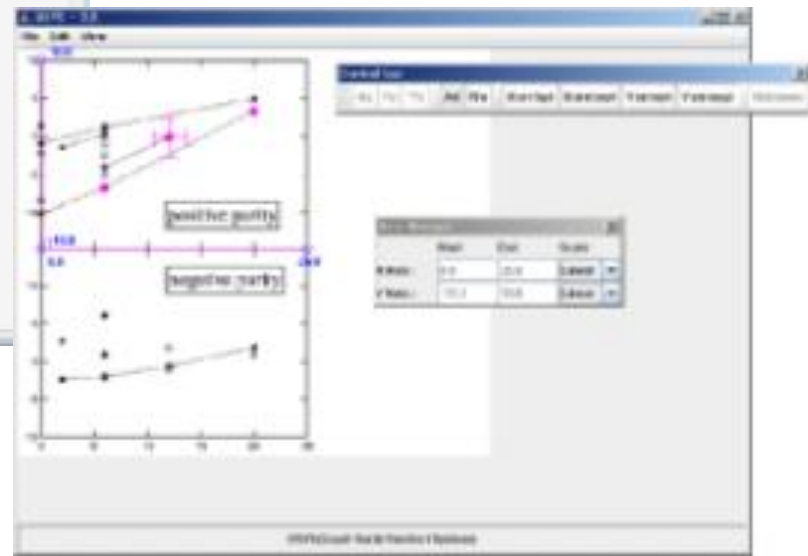
GSYS Ver. 2.4 was released by Suzuki, Ito 2010

**If you need, please download
<http://www.jcprg.org/gsys/gsys-j.html>**

PNG, GIF, and JPEG image can be digitized.



you need JRE.(JAVA)



- → **Furutachi-san 's presentation**

EXFOR Manuals



INTERNATIONAL ATOMIC ENERGY AGENCY

NUCLEAR DATA SERVICES

DOCUMENTATION SERIES OF THE IAEA NUCLEAR DATA SECTION

IAEA-NDS-208
February 2008

LEXFOR (EXFOR Compiler's Manual)

Revision 2008 edited by

Otto Schwerer
IAEA Nuclear Data Section
Vienna, Austria

based on earlier work by

Victoria McLane
National Nuclear Data Center
Brookhaven National Laboratory, USA

Issued on behalf of the
Nuclear Reaction Data Centers Network



INTERNATIONAL ATOMIC ENERGY AGENCY

NUCLEAR DATA SERVICES

DOCUMENTATION SERIES OF THE IAEA NUCLEAR DATA SECTION

IAEA-NDS-206
June 2008

EXFOR Formats Description for Users (EXFOR Basics)

edited by

Otto Schwerer
IAEA Nuclear Data Section
Vienna, Austria

on behalf of the
Nuclear Reaction Data Centres Network

June 2008



INTERNATIONAL ATOMIC ENERGY AGENCY

NUCLEAR DATA SERVICES

DOCUMENTATION SERIES OF THE IAEA NUCLEAR DATA SECTION

IAEA-NDS-206
June 2008

EXFOR Formats Description for Users (EXFOR Basics)

edited by

Otto Schwerer
IAEA Nuclear Data Section
Vienna, Austria

on behalf of the
Nuclear Reaction Data Centres Network

June 2008

EXFOR compilation: main steps.
(on the base of Guide for EXFOR compilers)

M.Mikhaylyukova, V.Pronyaev

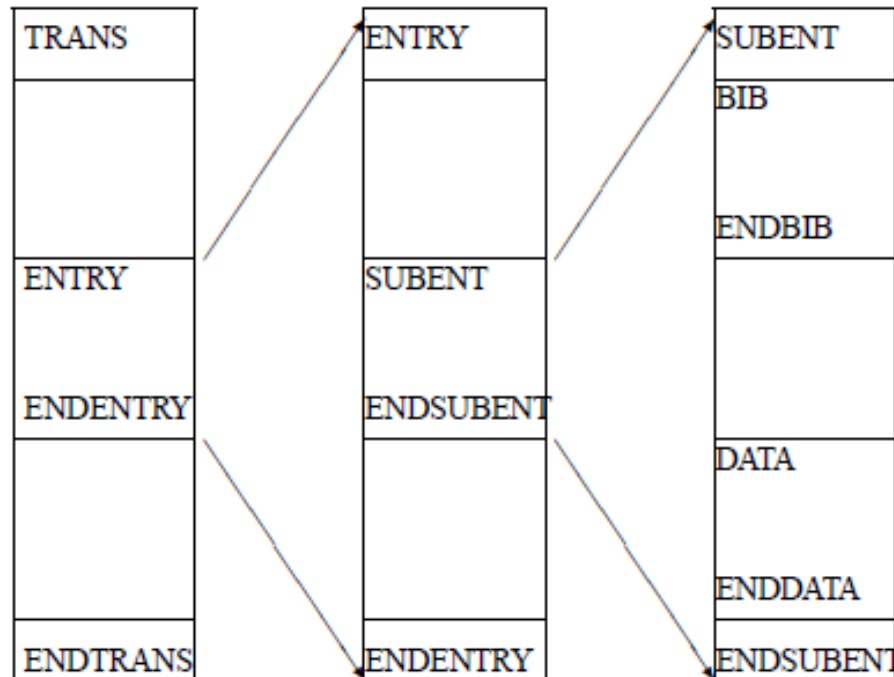
24 August 2010

If you need, please download
<http://www-nds.iaea.org/nrdc/basics/>

→ Noto-san's presentation

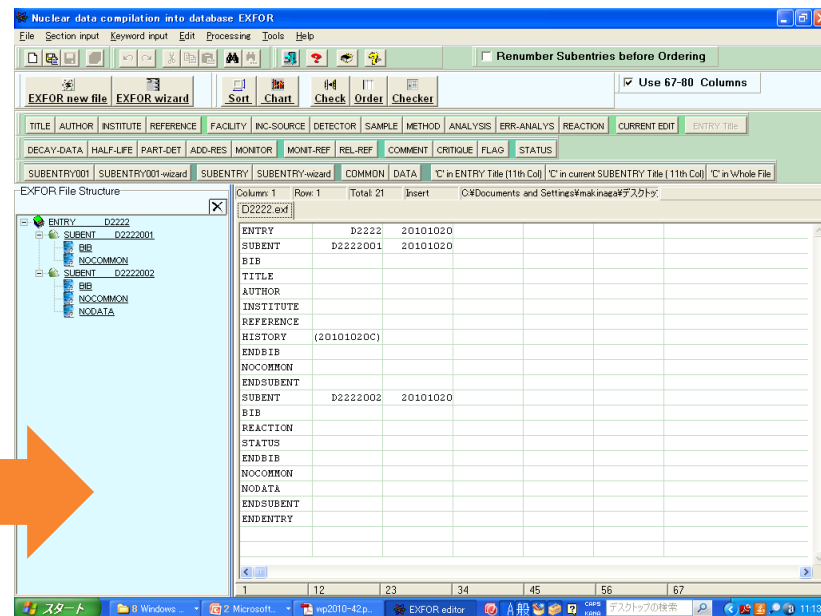
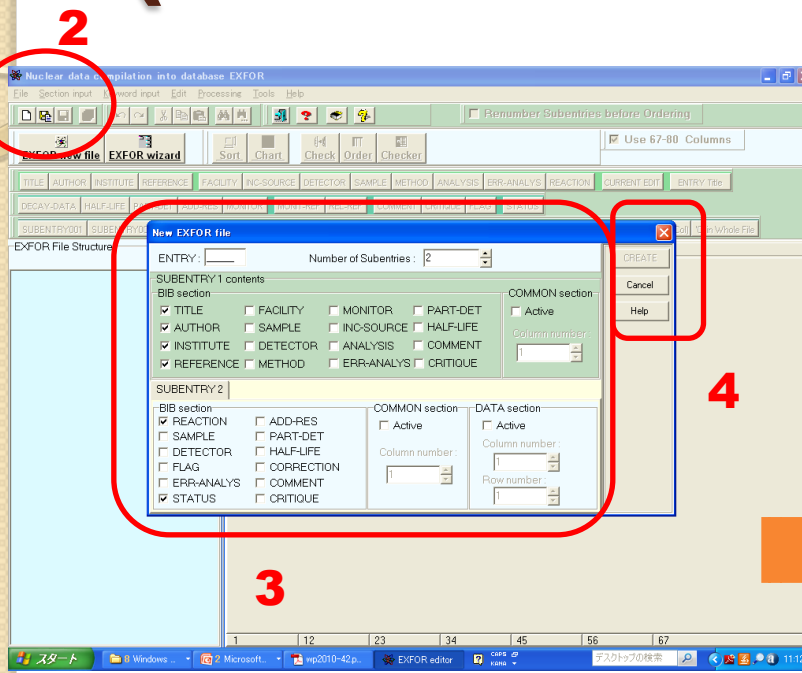
EXFOR Compilation (EXFOR editor)

- DATA File Structure



BIB
TITLE
AUTHOR
.
.
.
Facility
Detector
.
.
.
DATA
HEADER
Numerical Data

EXFOR Compilation (EXFOR editor)



1. Start software



icon

2. Create File

File → new → EXFOR file

3. Input basic info.

ENTRY no etc..

4. Select Create button

EXFOR Compilation (EXFOR editor)

**From Here,
Demonstration**

Please continue to compile

- **If you have any questions or comments, please ask us or discuss with participants each other.**
- **After you compiled given paper, please send EXFOR file by e-mail. We check the file.**

e-mail: sapnd@jcprg.org

