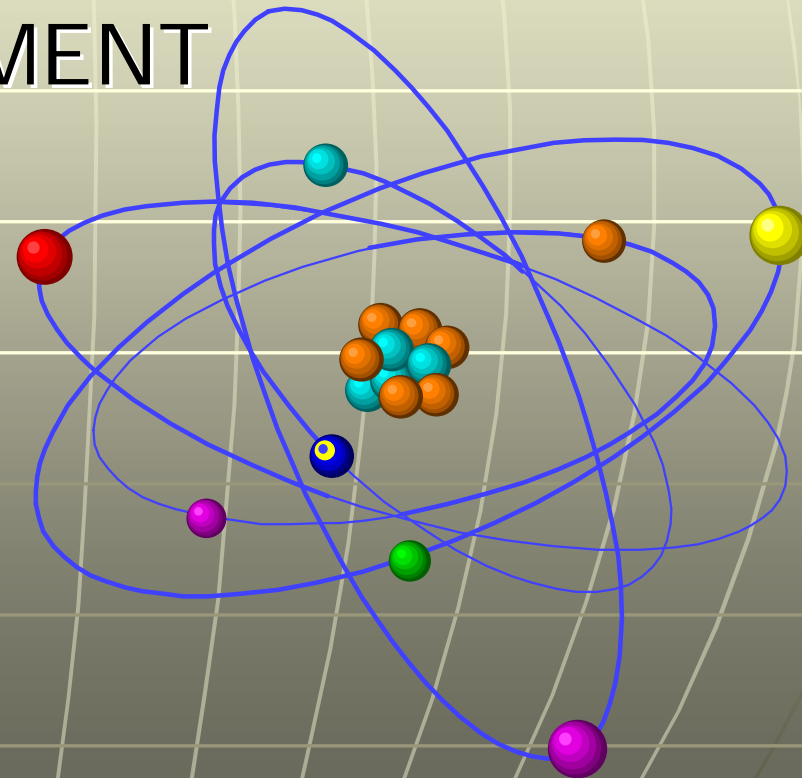
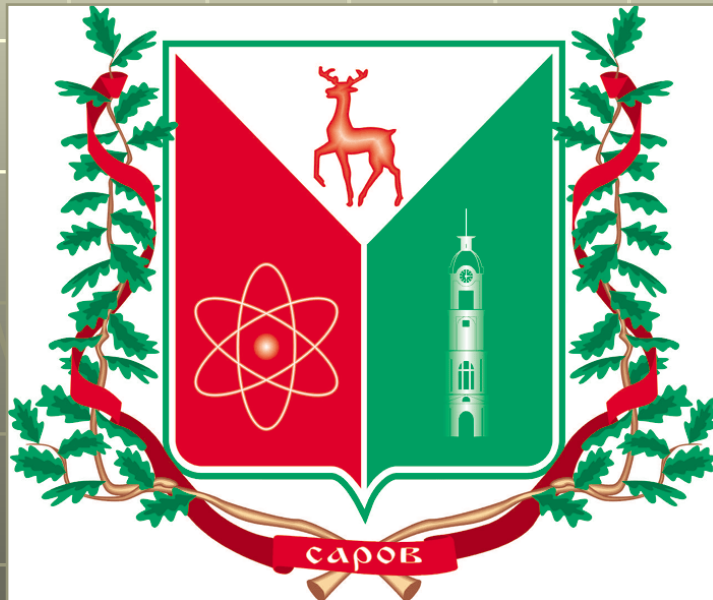


NUCLEAR DATA COMPILATION INTO DATABASE EXFOR

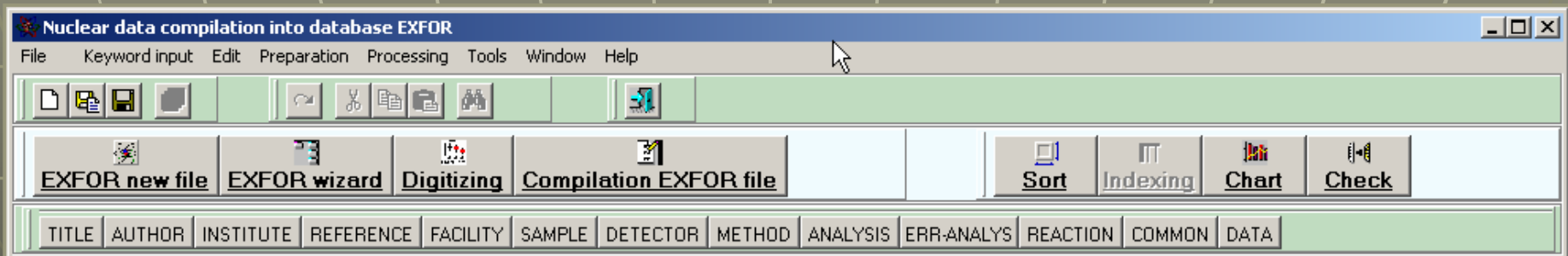
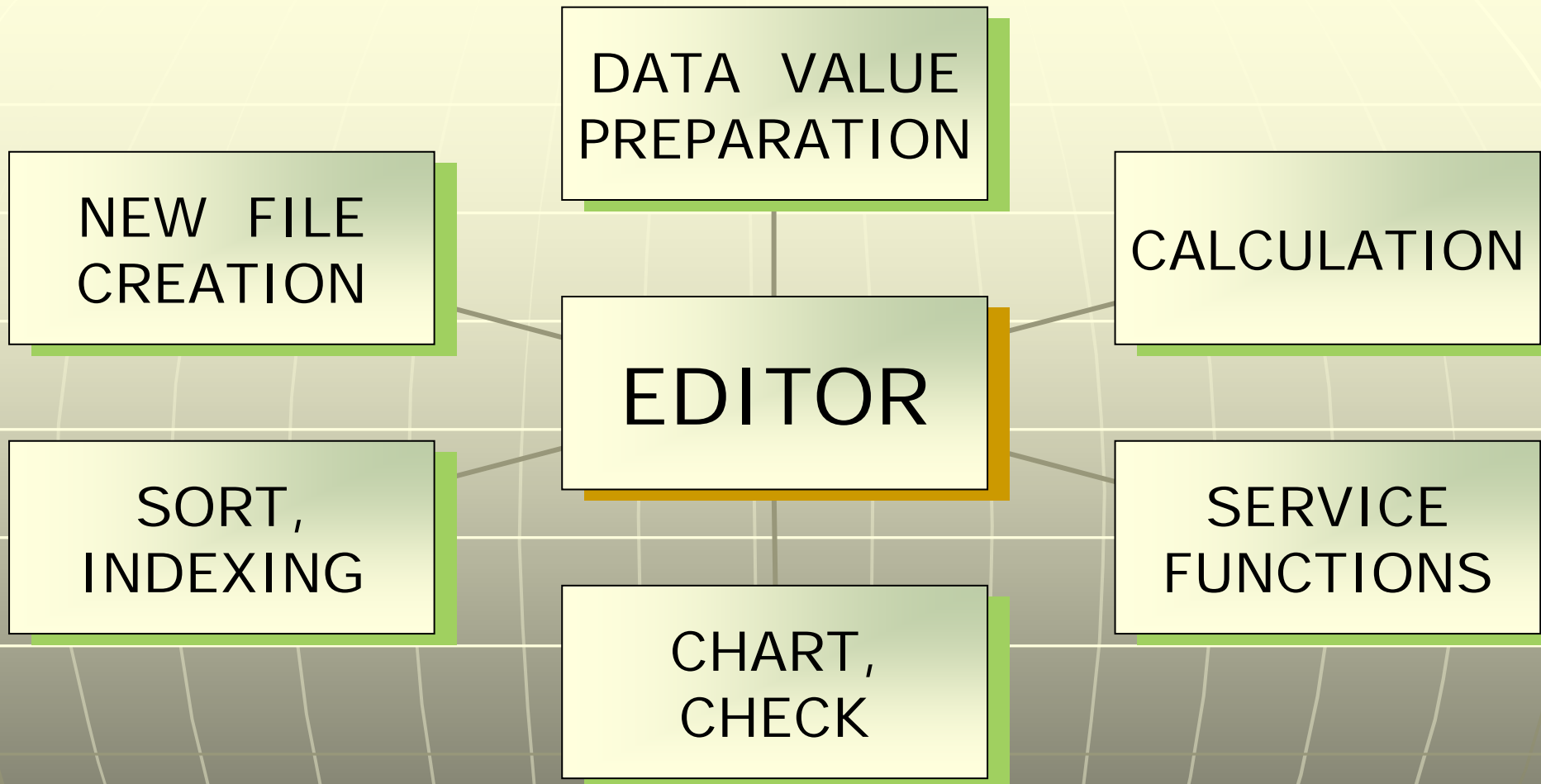


1

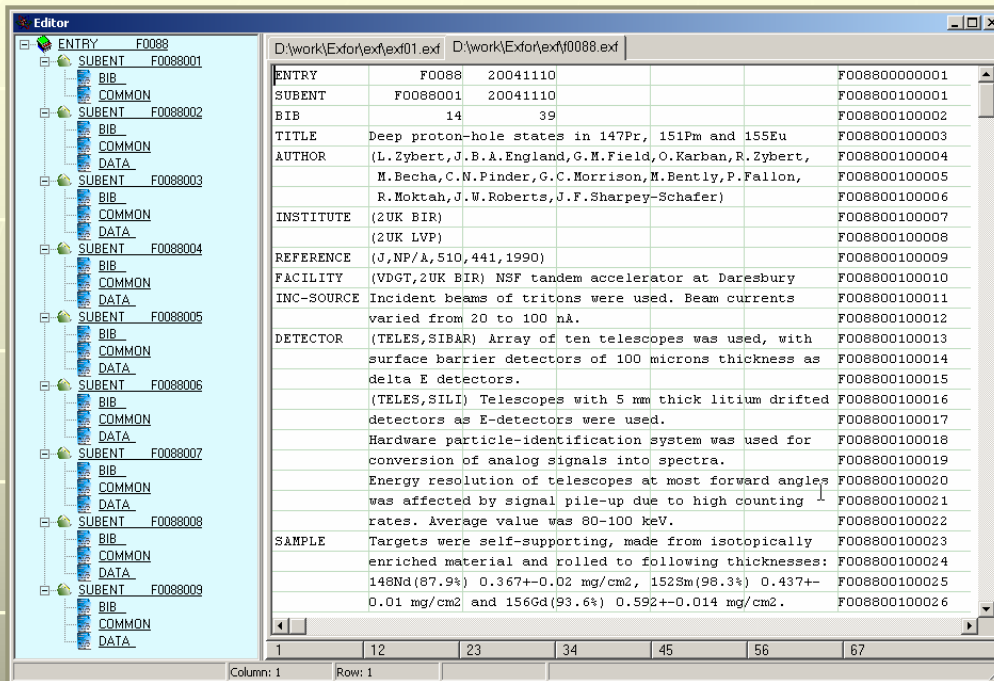
INTEGRATED ENVIRONMENT



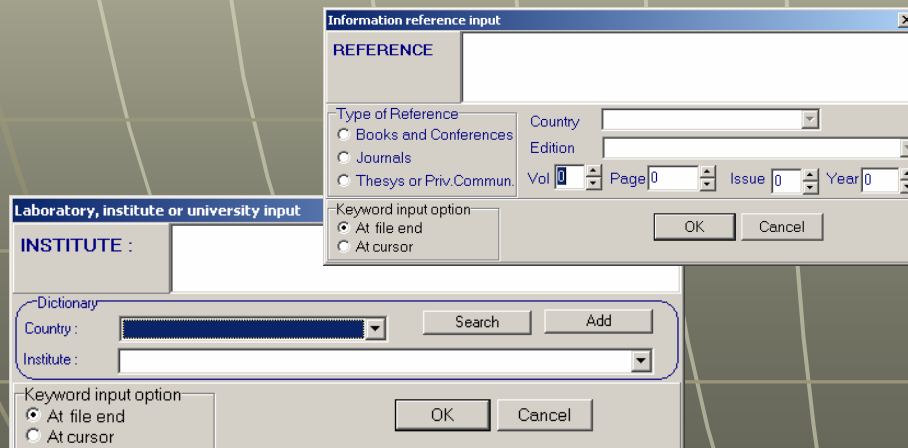
INTEGRATED SOFTWARE STRUCTURE



EDITOR FUNCTIONS

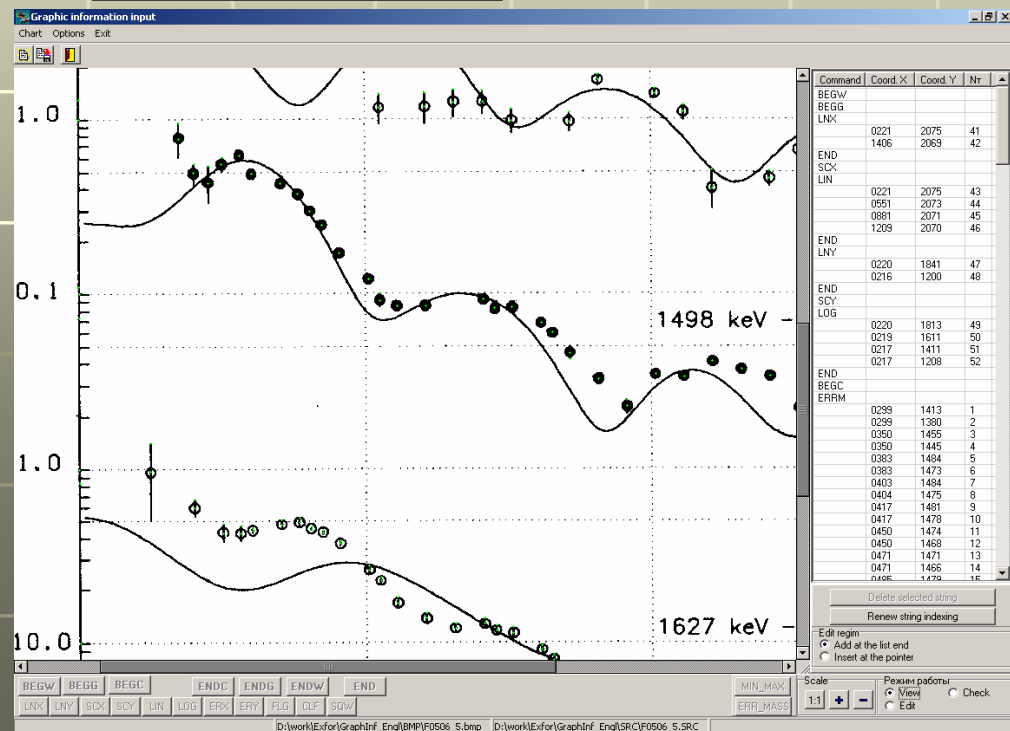
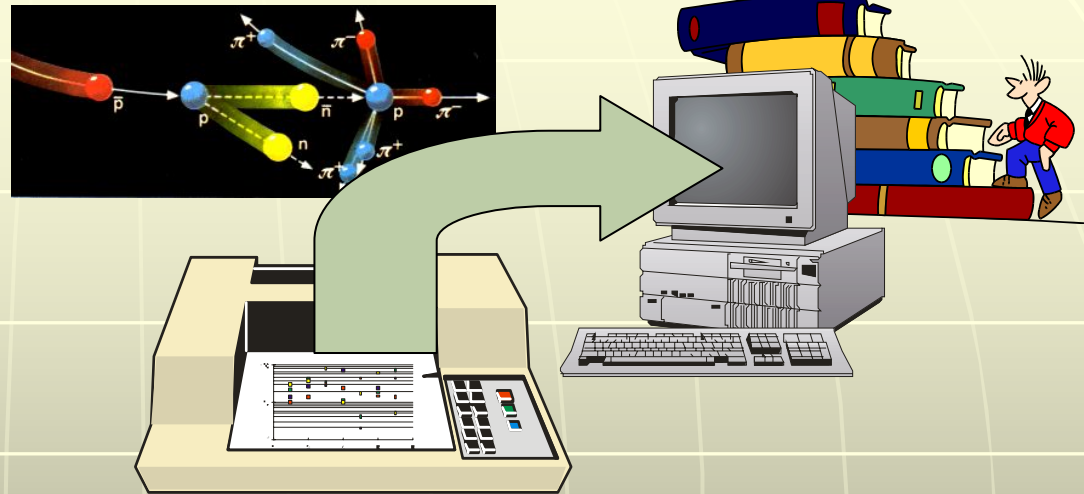


- Standard editor functions
- Window with a keyword tree
- Grid in the editor area
- Special ruler with the column numbers
- Automation search and input of the keywords and codes in the dictionaries
- Input limitation on the 67th position



DATA VALUE PREPARATION

- Graphic data digitizing
- Calculation of the physics process values in the experiment coordinate scale
- Inserting the obtained digitized data into the EXFOR file



NEW FILE CREATION

- Creation of the EXFOR new file with the help of pattern
- Creation of the EXFOR new file by means of a wizard using the EXFOR dictionaries

New EXFOR file

ENTRY : F0998 Empty lines in DATA и COMMON sections

Subentry number : 4

OK Cancel

SUBENTRY 1 contents

BIB section: TITLE FACILITY MONITOR
 AUTHOR SAMPLE INC-SOURCE
 INSTITUTE DETECTOR ANALYSIS
 REFERENCE METHOD ERR-ANALYS

COMMON section: Availability
Column number : 3

SUBENTRY 2 | SUBENTRY 3 | SUBENTRY 4

BIB section: REACTION SAMPLE DETECTOR FLAG ERR-ANALYS STATUS

COMMON section: Availability
Column number : 1

DATA section: Column number : 3
Row number : 3

EXFOR file wizard

Obligatory information

ENTRY : Subentry number :

TITLE :
AUTHOR :
INSTITUTE :

Country :
Institute :

REFERENCE

Type of Reference: Country: Edition: Page:
 Books and Conferences
 Journals
 Theses or Priv. Comm.

Add SUBENTRY BACK NEXT

EXFOR file wizard

Obligatory information

SUBENTRY

Subentry information section (SIB)

FACILITY
 INC-SOURCE
 SAMPLE
 DETECTOR
 METHOD
 ANALYSIS
 ADD-RES
 ERR-ANALYS
 Miscellaneous data

Add SUBENTRY

EXFOR file wizard

Obligatory information

SUBENTRY1

SUBENTRY2

REACTION field

Pointer: Pointer number: Add pointer

Target Nucleus (SF1) Incident Projectile (SF2) Process (SF3)

Reaction Product (SF4) Quantity Field Quantity Field (in detail)

Reaction Types:

<input type="checkbox"/> Angular correlation	<input type="checkbox"/> Nuclear quantities
<input type="checkbox"/> Angular distributions, general	<input type="checkbox"/> Outgoing energy spectra
<input type="checkbox"/> Angular distributions, partial reactions	<input type="checkbox"/> Polarization of outgoing particle
<input type="checkbox"/> Double differential data	<input type="checkbox"/> Product yields
<input type="checkbox"/> Energy/momentum/flux correlation (photoneuclear)	<input type="checkbox"/> Resonance parameters
<input type="checkbox"/> Fission fragment data	<input type="checkbox"/> Special quantities
<input type="checkbox"/> Filling coefficient	<input type="checkbox"/> Special quantities for scattering
<input type="checkbox"/> Integral cross sections, general	<input type="checkbox"/> Thick target yields
<input type="checkbox"/> Integral cross sections, partial	<input type="checkbox"/> Triple differential data

Reaction type (refinement): Add

Add SUBENTRY BACK NEXT CREATE CANCEL

FILE PROCESSING

- Sort of the entered numerical data
- Indexing the edited file records according to the rules of the EXFOR record identification

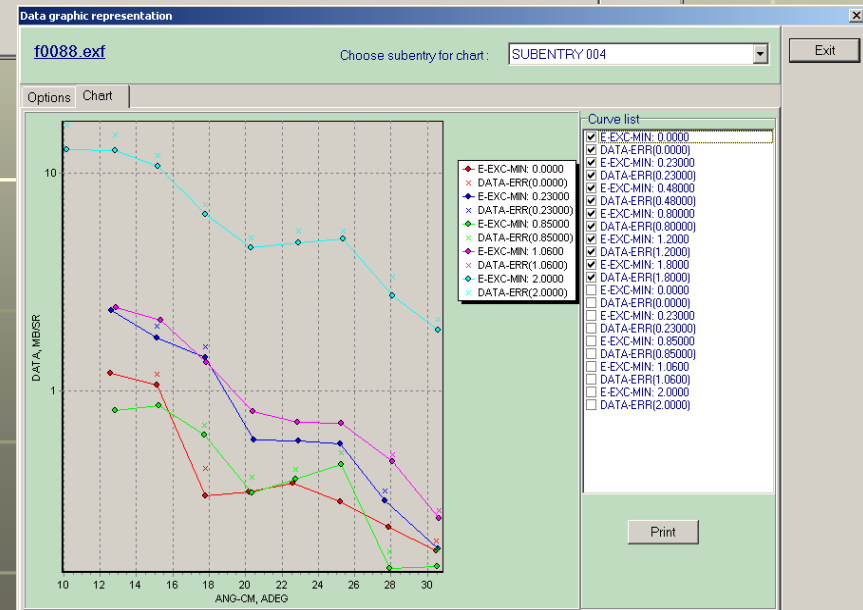
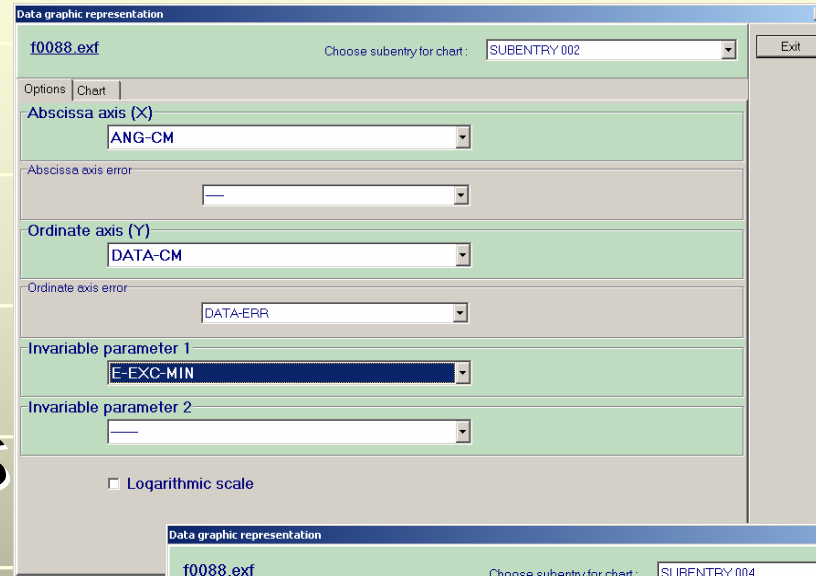
The 'Data sort' dialog box is titled 'f0088.exf'. It features a dropdown menu for 'Choose subentry for sort:' set to 'SUBENTRY 002'. Below this are 'BEFORE' and 'NEXT' buttons. The 'Options' tab is active, showing 'Choose table columns to sort'. The 'PRIMARY SORT KEY:' is set to 'E-EXC-MIN', the 'SECONDARY SORT KEY:' is 'ANG-CM', and the 'LAST SORT KEY:' is empty. 'SORT' and 'SAVE' buttons are visible on the right side.

The 'Data sort' dialog box is titled 'f0088.exf'. It features a dropdown menu for 'Choose subentry for sort:' set to 'SUBENTRY 002'. Below this are 'BEFORE' and 'NEXT' buttons. The 'Options' tab is active, showing a data table with columns: 'E-EXC-MIN', 'E-EXC-MAX', 'ANG-CM', 'DATA-CM', and 'DATA-EI'. The table contains 25 rows of numerical data. 'SORT' and 'SAVE' buttons are visible on the right side.

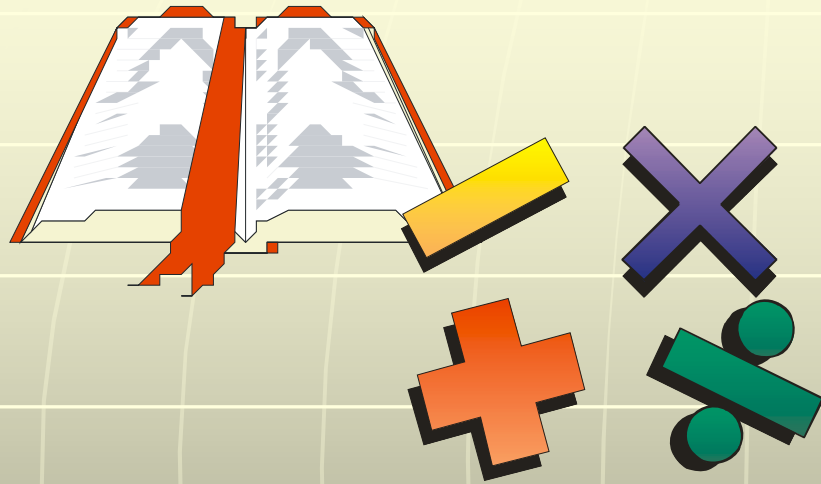
	E-EXC-MIN	E-EXC-MAX	ANG-CM	DATA-CM	DATA-EI
1	MEV	MEV	ADEG	MB/SR	MB/SR
2					
3	0	0,23	10,174	1,1518	
4	0	0,23	11,97	1,105	
5	0	0,23	13,888	0,97795	
6	0	0,23	15,505	0,81622	
7	0	0,23	16,957	0,55295	
8	0	0,23	18,883	0,4727	
9	0	0,23	20,479	0,43275	
10	0	0,23	25,412	0,27606	
11	0	0,23	27,515	0,17078	0,02
12	0	0,23	29,4	0,10932	0,
13	0	0,23	30,929	0,13518	0,02
14	0	0,23	32,553	0,10898	0,01
15	0	0,23	34,482	0,09209	0,01
16	0,23	0,48	10,142	3,1084	
17	0,23	0,48	11,752	2,6604	
18	0,23	0,48	13,762	2,497	
19	0,23	0,48	15,247	2,3405	
20	0,23	0,48	16,837	2,1944	
21	0,23	0,48	18,936	1,3511	
22	0,23	0,48	20,48	0,95253	
23	0,23	0,48	25,678	0,75946	
24	0,23	0,48	27,438	0,52363	
25	0,23	0,48	29,56	0,28769	0,04
26	0,23	0,48	29,735	0,26399	0,02

EXFOR FILE CHECKING

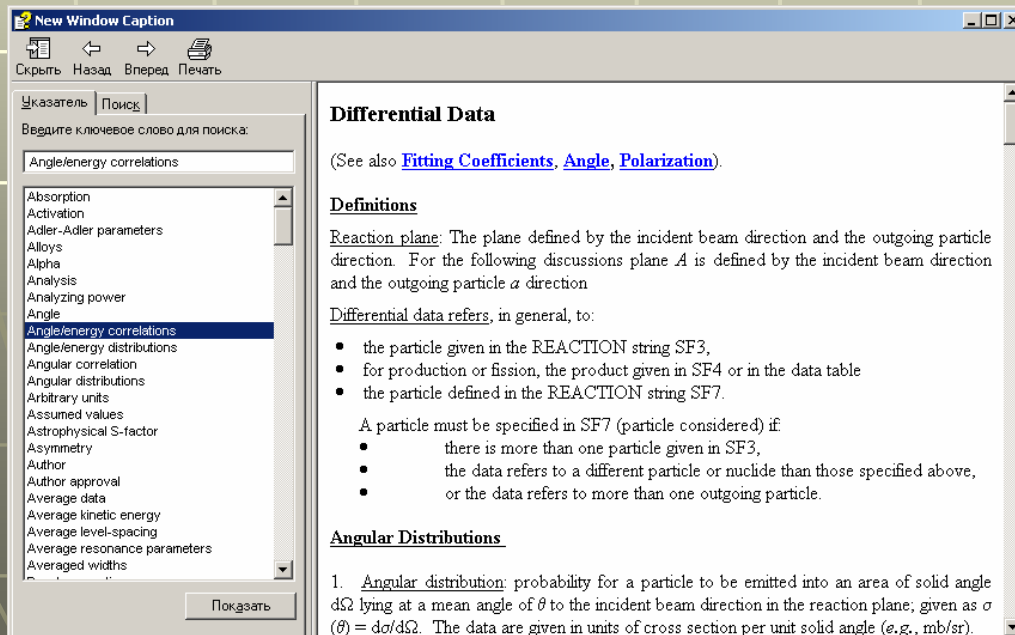
- Plotting data section tables
- Checking the edited file for its correspondence to the EXFOR format



ADDITIONAL SERVICE



- Direct access to the EXFOR dictionaries
- Additional calculations
- Extended help system



CONCLUSIONS

- At present we work on realization of the listed functions.
- We are glad to improve the program structure taking into account the users' requests and to consider any critical comments and proposals.
- The developed integrated software meets the requirements of experimental cross-section data processing.

