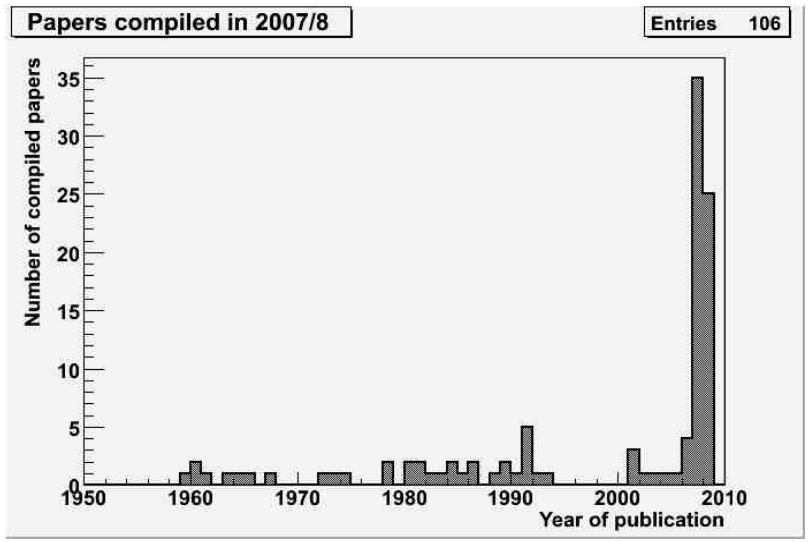
EXFOR Compilations and Issues

Stanislav Hlavac
Institute of Physics SAS, Bratislava, Slovakia

NNDC EXFOR compiler since November 2007

EXFOR/CSISRS compilations in 2007/8

Source	No. of papers
Phys. Rev.	57
Conf. Proc.	15
Nucl. Phys.	11
Nucl. Instr. Meth	10
Nucl. Sci. Eng.	3
Phys. Lett. B	3
Applied Rad. Isot.	3
Z. Physik	1
J. Physics G	1
Lab. Reports	1
Private comm.	1
Total	106



More than 1/3 of papers published before 2007

Most important journal in region of NNDC responsibility – Phys. Rev. C

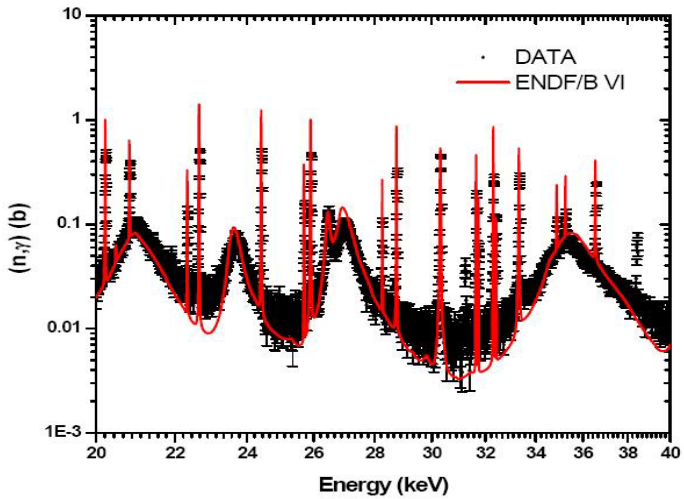
Distribution of entries according to incident particle

Incident particle	2006/7	2007/8
n	36	33
p	30	18
d	23	7
α	13	9
^{3}He	7	10
^{3}H	4	2
HI	32	24
γ	0	3
Total	145	106

Problems

High number of digitized entries

- old papers
- in new publications it is sometimes difficult to digitize data



Please send data on request

New activities in CSISRS/EXFOR

- Discrepancies in EXFOR data
- Advanced model codes (Empire, Talys) used for massive evaluations – discrepancies are more obvious
- WPEC SG-30 formed to establish EXFOR as an easy accessible and correct database
  - Solve the most obvious quantitative errors
  - Identify data which are stored incorrectly
  - Fill the gaps – include missing data
  - Consistently distinguish between systematical and statistical errors

EXFOR improvements

- Correct simple errors (incorrect units i.e. mb⇔b)
- Non-trivial errors – different possibilities are discussed
  - Flagging trusted data - proposal by D. Rochman (NNDC)
  - Correcting data
    - Inside EXFOR (STATUS RENORM and HISTORY)
    - Outside EXFOR - much easier to implement
- Filling the gaps – NDC (A. Mengoni, N. Otsuka) recently prepared list of missing papers published in Phys. Rev. C – some 50 papers are not compiled. Other journals will follow
- EXFOR status web page