

# Area #1 EXFOR Report 2013

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# General Information for Area #1

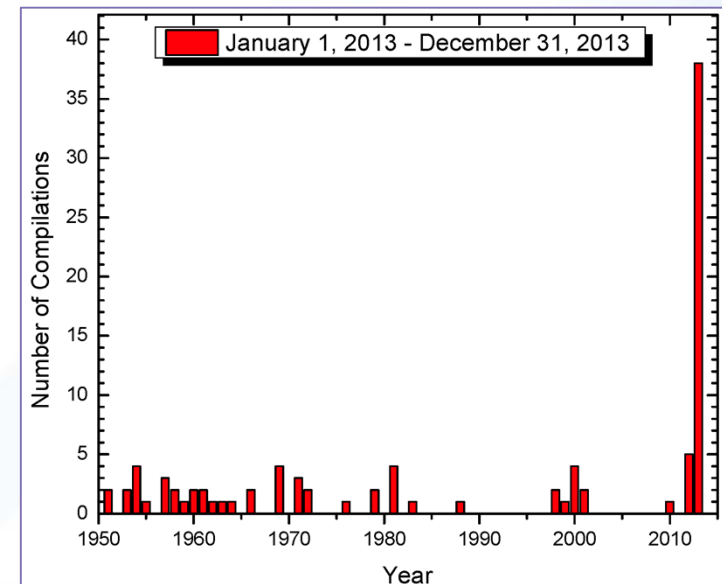
- Total Statistics for April 21, 2014:
  - Neutron: 4,094; 1\* Entries
  - Charged Particles: 1,873; C\* Entries
  - Photon: 97; L\* entries
  - IAEA official count: 6,566 out of 21,254
- Current Staff:
  - B. Pritychenko, project manager
  - S. Hlavac, contractor
  - O. Schwerer, contractor

# 2013 Compilation Statistics

- It is very difficult to properly count compilations:
  - Finished compilation → Prelims → Final Transmission
  - Fiscal/Calendar Year
  - Existing entries updates can be bigger than original compilations
- We decided to use official IAEA system for new entries and verified it with the Web Interface for publication, compilation date and 1\*;C\*;L\*;V\*:
  - 75 in 2010 Calendar Year
  - 78 in 2011 Calendar Year
  - 124 in 2012 Calendar Year
  - 116 in 2013 Calendar Year, as of April 21, 2014
  - 117 in 2013 Calendar Year, as of April 25, 2014
  - [https://www-nds.iaea.org/exfor-master/x4compil/exfor\\_input.htm](https://www-nds.iaea.org/exfor-master/x4compil/exfor_input.htm)

# 2013 Contribution Analysis

- Selection is not perfect, just components analysis for April 21, 2014; not absolute values.
- New compilations in 2013: 95
  - Neutrons: 13
  - Charged Particles: 80
  - Photons: 2
- Annual distribution:
  - 2010-2013: 45
  - 1953-2008: 51
  - Missing Data is a serious issue



# 2013 Accession Numbers Assigned

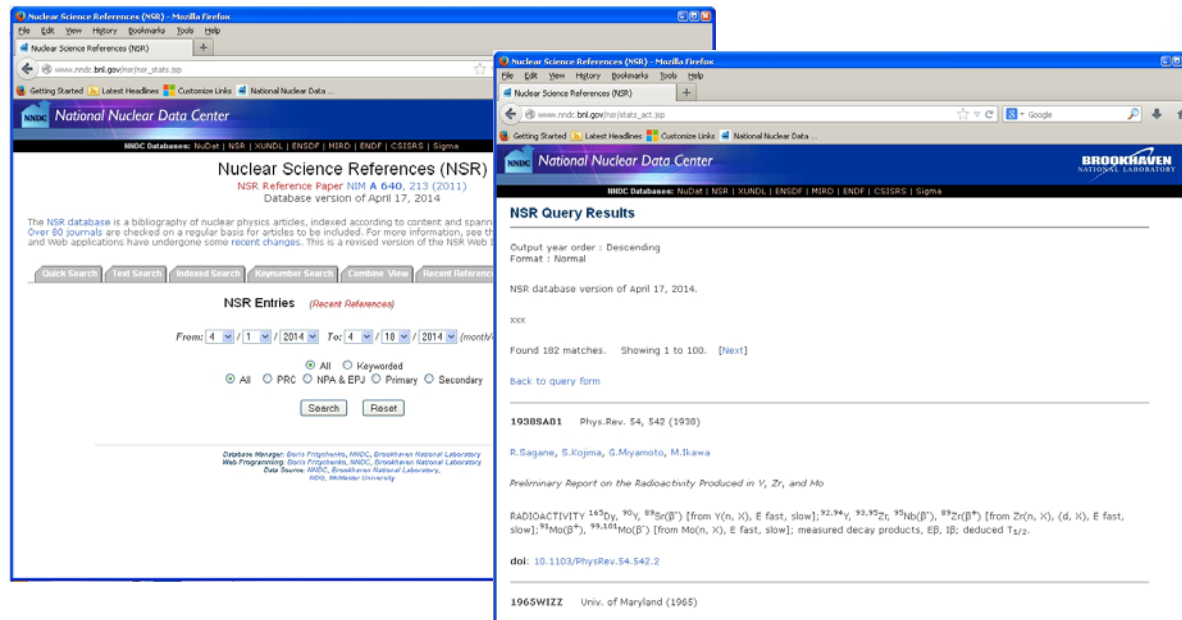
- Neutrons: 25
- Charged Particles: 110
- Photons: 8
- Evaluated (V): 2
- EXFOR Web System/Assigned:  $95/145 = 66\%$ , as of April 21, 2014.
- Perhaps we have to report ranges instead of numbers.
- Recompile of existing entries, and bug fixes were not counted.

# 2013 Prelims

- New:  $92 + 41 + 4 = 137$
- Existing, often recompilations:  $6 + 48 = 54$
- Other corrections (Otto + Naohiko):  $21 + 23 = 44$
- Area #1 is very active, plenty of numbers!!!

# Miscellaneous Items

- Too many memos, plenty of paperwork and Emails, should we read all of them???
- EXFOR News ??? We have just a simple NSR interface:



- EXFOR Web Interface bug on NNDC site, last updated date is cashed in spite of the database regular updates

# Miscellaneous Items

- EXFOR error list
- Bugs severity
  - U.S. computer industry (Show stoppers, Serious problem, Regular problem, Minor or UI issue)
  - EXFOR (pink: very urgent (Data, Common, Heading, Unit); yellow: urgent (REACTION, pointer); green: other ). Why Unit is more important than Reaction???
- UNOBT is not a bug???
- Any old compilation will fail the present quality requirements
- Area #1 data that were compiled by other centers: O0137, O0149 were digitized and submitted in March of 2013, they got in to EXFOR on April 24, 2014. Articles should not be transferred to other areas, maintenance is a nightmare.



# Miscellaneous Items

- EXFOR entry: C2097, N.H. Prochnow et al., J,NP/A,194,(2),353,1972 contains spins.
- $\vec{J} = \vec{L} + \vec{S}$ ?
- We have to compile spin values besides the total and orbital momenta; another solution is keep them under MISC.
- NRDC needs a broad vision of nuclear physics, we just jump from one small project to another.
- We need EXFOR compilers at or near experimental facilities (More UN countries should be included in EXFOR effort).
- Did we missed an elephant in the room???
- **CIELO!!!** More on Friday.

# Conclusions & Outlook

- Cover current publications.
- Keep working on missing older references.
- Keep updating existing entries with missing or UNOBT data.
- CIELO strategies.
- Maintain compilation level above 120 new entries.
- Continue interact with physics and evaluation communities and proactively respond to their needs.

# NRDC 2014 Meeting

- We have to acknowledge a great effort of Stanislav Hlavacs, Emil Betak, and Lucia Kuchtova, Institute of Physics, Bratislava in organizing this meeting.
- We could not have such a wonderful meeting without their work.
- We should give a round of applause to the meeting organizers.