

Status Code NCHKD

(N. Otsuka, S. Dunaeva, 2019-03-14, Memo CP-D/973)

The status code NCHKD (original reference not checked) was approved in the NRDC 1991 meeting to complete conversion of Rider's fission product yield compilation to EXFOR. For example, there are many entries coded with NCHKD in TRANS.3082 (specialized for this conversion). After such conversion, the originating centre has been expected to replace NCHKD with TABLE when the data set taken from Rider's compilation is confirmed in a material published by the experimentalist.

This status code NCHKD is now mainly used by area 3 and 4 entries. NDS checked the situation for area 3 entries, and the result is appended to this memo. We propose CJD to check of the source article for the following area 4 entries, and replace NCHKD with TABLE (with the table number in free text etc.) when possible:

40185.001, 40240.001, 40259.001, 40454.001, 40469.001, 40478.001,
40481.001, 40491.001, 40492.001, 40500.001, 40515.001, 40546.001,
40582.001, 40595.001, 40608.001

A few revisions to LEXFOR "Status" are proposed in the next page of this memo.

Additional question – use NCHKD whenever the authenticity is not confirmed?

Some EXFOR entries do not provide any source information under STATUS. For example, the $^{235}\text{U}(n,f)$ cross sections (8077 data points) are compiled in 20483.002 with free text "X-section from NDCC-file verified by plots" only:

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STATUS      .X-SECTIONS FROM NDCC-FILE VERIFIED BY PLOTS.
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We may think about use of NCHKD for such a case, too, by changing the expansion of this status code to "authenticity not confirmed". We see both pros and cons:

- Pros: We can avoid wrong insertion of TABLE by a future compiler.
- Cons: One may misunderstand that the original compiler inserted the numerical data without knowing its authenticity. (For the 20483.002 case, one source article (J,NSE,51,130,1973) mentions "All the microscopic data described in this paper are available from the cross-section centers NNCSC at the Brookhaven National Laboratory , CCDN at Saclay , NDS-IAE A at Vienna , and CJD at Obninsk.").

Status

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Source of the Data

Note:

Older entries may have been labelled only under the keyword ~~comment~~ COMMENT or ~~history~~ HISTORY.

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Unobtainable Data

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The COMMON section should contain minimum and maximum of the incident-projectile energy, if known.

The status code CURVE replaces UNOBT when the unobtainable data set was digitized and compiled.

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Translation from Older Libraries

Data that have been converted from older data libraries are given a status code to indicate the library from which they were converted. Such data may not have all the required BIB information.

The status code TABLE replaces the status code indicating the library when the data set was confirmed in a table prepared by the experimentalist.

Appendix: Analysis of STAUTS=NCHKD in area 3 entries

EXFOR	Rider ID	Replace with TABLE?	Action suggested	Additional remark
30949	68LEE1	Yes	<ul style="list-style-type: none"> • Replace NCHKD with TABLE with free text “Text of IA-1168, p67 (1968)”. • Add IFY(⁹³Y)=5.40(50)% and IFY(⁹⁹MO)=4.90(50)% with STATUS=PRELM. 	
30952	69BRA2	Yes	<ul style="list-style-type: none"> • Replace NCHKD with TABLE with free text “Table 1 of IA-1218, p93 (1969)”. • Compile nu-d ratio in Table 4 of P,IA-1190,104,1968. • Add “divided by measured Pn value” under ANALYSIS. • Check if Pn values in Ref.[3] (S.Amiel+,C,69VIENNA,569,1969) is for addition in this EXFOR entry. 	
30956	70IZA1	No		Data reported in T.Izak’s thesis and cited in Table 6 of T.Izak,J,JIN,34,1469,1972. (i.e., we would trust its authenticity though we cannot check the source article.)
30957	70JAI1	No	Delete this yield?	Rider compiled CFY(¹³⁵ Cs)=7.7(2)% as the value published in ,BARC/I-62,1970. But this value is not in this BARC report.
30959	71RAM1	No	(No action)	Private communication to Rider.
30964	73VEN1	No	Replace the currently compiled fractional independent yields with the following independent yields in the thesis (in Hebrew)? IFY(^{136m} I)=1.44(31)%, IFY(^{136g} I)=1.75(40)%, IFY(¹³⁶ I)=3.19(71)%, IFY(¹³⁷ I)=1.81(40)%, IFY(¹³⁸ I)=0.84(21)%, IFY(¹³⁹ I)=0.47(25)%.	The thesis reports independent yields. The values compiled by Rider and also in this EXFOR entry are the original independent yields converted to the fractional independent yields in S.Amiel+, C,73ROCH,2,65,1973 (73AMI1).