

**Nuclear Data Section  
International Atomic Energy Agency  
P.O.Box 100, A-1400 Vienna, Austria**

**Memo CP-D/894 (Rev)**

**Date:** 16 March 2016  
**To:** Distribution  
**From:** N. Otsuka, S. Dunaeva

**Subject:** Non-informative descriptions under ERR-ANALYS

**Reference:** CP-D/522 (Rev.)

There exist many non-informative ERR-ANALYS descriptions in EXFOR. We encourage compilers

- (1) to give detailed information on the sources of the uncertainties, especially for those in the dependent variable in free text, and
- (2) to omit explanations on the other error headings if the free text just gives general explanation of the error headings.

Such omission would make important ERR-ANALYS lines more visible.

**What can we consider as “Non-informative” description?  
“Non-informative” for whom?**

**Example 1**

```

SUBENT C 00345003 20151202 00345 3 1
BIB 6 9 00345 3 2
REACTION (79-AU-197(P,N+P)79-AU-196-G,(M),SIG) 00345 3 3
...
ERR-ANALYS (DATA-ERR) The uncertainty is reported by authors. 00345 3 8
      (EN-ERR-DIG) Digitizing uncertainty of energy 00345 3 9
      (ERR-DIG) Digitizing uncertainty of data 00345 3 10
...
ENDBIB 9 0 00345 3 12
COMMON 2 3 00345 3 13
EN-ERR-DIG ERR-DIG 00345 3 14
MEV MB 00345 3 15
      0.6 2.3 00345 3 16
ENDCOMMON 3 0 00345 3 17
DATA 3 10 00345 3 18
EN DATA DATA-ERR 00345 3 19
MEV MB MB 00345 3 20
      35.2 44.5 00345 3 21
      42.4 61.3 3.3 00345 3 22
.....

```

**DATA-ERR “The uncertainty is reported by authors”**

It is not a purpose of the keyword to describe where the compiler found the uncertainty values. If the compiler cannot find any description on the sources propagated to the reported uncertainty, we encourage the compilers to describe the situation in free text (e.g., “No information on source of uncertainties.”).

**EN-ERR-DIG “Digitizing uncertainty of energy”**

**ERR-DIG “Digitizing uncertainty of data”**

These are general explanations of these headings, and similar explanations are automatically added in the X4+ output. Better to omit.

**We work for users not for compilers!**

## Two types of codes\_

### “Self-explanatory”

ERR-ANALYS (EN-ERR)

(Uncertainty in incident projectile energy)\_

### Not “self-explanatory”

- ERR-ANALYS (ERR-S)      What does S mean?
- (ANG-ERR-D)      What does D mean?
- (ERR-DIG)      What does DIG mean?

Look at the problem from the point of view of a user\_

- working on-line: **X4** → **X4+**

- working off-line: **X4** ~~→~~ **X4+**

----- Original Message -----

From: [Лебедев Виктор](#)

To: [Селянкина Светлана](#)

Sent: Wednesday, September 10, 2014 4:52 PM

Subject: Re: Data from IZV,78,(5),580,2014, YF,76,(11),1496,2014

XXXXXXXXXXXXXXXXXX!

XX F1228:

1. XXX

## 2. We don't understand what

**ERR-ANALYS (ERR-1,,5.)** means.

3. XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XX

XXXXXXXXXXXXXXXXXX, XXXXXXXXXXXXXXX.

----- Original Message -----

From: "utyonkov" <[utyonkov@jinr.ru](mailto:utyonkov@jinr.ru)>

To: <[selyankina@expd.vniief.ru](mailto:selyankina@expd.vniief.ru)>

Sent: Thursday, January 21, 2016 4:52 PM

Subject: Re: Data from Physical Review C, 92, 034609, 2015

> XXXXXXXXXXXXXXXXXXXX!

> XXX

> XXX

> XXXXXXXXXXXXX. **No more comments, although not all numbers are clear to me. For example,**

ENDBIB	38	0	F1273 1 41
COMMON	1	3	F1273 1 42
EN-ERR			F1273 1 43
MEV			F1273 1 44
1.			F1273 1 45
ENDCOMMON	3	0	F1273 1 46
ENDSUBENT	45	0	F1273 199999

> XXXXXXXXXXXXX,



# InpGraph

**Processing Result** ✕

Everything is OK!
Save

Diagnostic Message	EXFOR File																					
<pre>file name: -999 -999       1 -0.6000000 0.0000000E+00  0.6000000 ipr_xlin=      1 ipr_ylin=   0   30.00000      212.0000 32.00000      14.00000      30.00000        212.0000      32.00000 115.0000      33.00000      16.00000</pre>	<pre>ENTRY          F8882      201605 SUBENT         F8882001 BIB            6          6 TITLE AUTHOR INSTITUTE REFERENCE FACILITY HISTORY (20160518C) ENDBIB NOCOMMON ENDSUBENT SUBENT         F8882002 BIB            4          4 REACTION ERR-ANALYS (COS-ERR-D) Digitizing error               (ERR-DIG) Digitizing error               (DATA-ERR) STATUS (CURVE) FIG.1 ENDBIB COMMON          2          3 COS-ERR-D ERR-DIG ARB-UNITS MB*MILLIEV</pre>																					
<div style="background-color: #d9ead3; padding: 2px; border: 1px solid #ccc;">Quantization Errors</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d9ead3;"> <th style="width: 20%;">Axis Name</th> <th style="width: 60%;">Error Value</th> <th style="width: 20%;"></th> </tr> </thead> <tbody> <tr> <td>X Axis 1</td> <td>0.0051 ARB-UNITS</td> <td></td> </tr> <tr> <td>Y Axis 1</td> <td>0.0051 MB*MILLIEV</td> <td></td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Axis Name	Error Value		X Axis 1	0.0051 ARB-UNITS		Y Axis 1	0.0051 MB*MILLIEV														
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.....ERR-S, E-ERR, ERR-IDD, SUM-ERR, E-DN-ERR, E-GAIN-ERR, KT-K-ERR, .....



**Don't be afraid of being redundant. It is better than to be insufficient.**

(For Exfor compilers only!)

**Let us try to keep under ERR-ANALYS all information which may be helpful for the users!**