**Nuclear Data Section**

**International Atomic Energy Agency**

**P.O.Box 100, A-1400 Vienna, Austria**

**Memo CP-D/1017**

**Date:** 1 July 2021

**To:** Distribution

**From:** N. Otsuka

**Subject: Suspicious use of REACTION SF3=X for production cross sections**

REACTION SF3=X should not be used when the process is uniquely determined (exclusive).

***Example*** (EXFOR A0523.005)

(23-V-51(A,**N**)25-MN-54,,SIG) rather than (23-V-51(A,X)25-MN-54,,SIG).

To find use of SF3=X for a quantity of an exclusive reaction, I extracted the REACTION codes satisfying the following conditions from EXFOR Master Ver. 2021-06-15:

1. SF3 = X,
2. Nonzero values are given for the mass and atomic numbers of SF1 (target), SF2 (incident particle) and SF4 (reaction product), and
3. SF3 should be neutral (*i.e.*, charge is conserved without SF3).

The table appended to this memo lists all datasets satisfying these conditions. I consider SF3=X is suspicious unless

* CUM is coded in SF5, or
* the incident energy is higher than the threshold of a mesonic process (*e.g.*, (p,pπ-) in addition to (p,n) reaction),

and summarized proposed corrections in the appended table. SF5=CUM is questionable (*i.e.*, no precursor exists) for a few cases, and I added my proposals for such cases, too.

**Datasets coded with SF3=X and Z(SF1)+Z(SF2)=Z(SF4) in EXFOR Master 2021-06-15**Et: Threshold energy for production
Et,π: Threshold energy for mesonic process,
Emax: Maximum energy of the dataset

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Dataset #** | **REACTION** | **Et** | **Et,π** | **Emax** | **Remark** |
| 10214.016 | 50-SN-124(N,X)50-SN-123-M,CUM,SIG | 8.56E+06 | 1.49E+08 | 1.40E+07 | (Ok) |
| 22735.004 | 76-OS-192(N,X)76-OS-190-M,CUM,SIG | 1.34E+07 | 1.53E+08 | 2.00E+07 | (Ok) |
| 22794.030 | 27-CO-59(N,X)27-CO-55,,SIG,,,DERIV | 4.12E+07 | 1.83E+08 | 1.80E+08 | Use SF3=5N. |
| 22794.031 | 27-CO-59(N,X)27-CO-56,,SIG,,,DERIV | 3.09E+07 | 1.72E+08 | 1.80E+08 | (Ok) |
| 22794.032 | 27-CO-59(N,X)27-CO-57,,SIG,,,DERIV | 1.94E+07 | 1.61E+08 | 1.80E+08 | (Ok) |
| 22794.033 | 27-CO-59(N,X)27-CO-58,,SIG,,,DERIV | 1.06E+07 | 1.52E+08 | 1.80E+08 | (Ok) |
| 22951.002 | 1-H-2(N,X)1-H-1,,DE,,RAW | 3.34E+06 | 2.17E+08 | 1.70E+07 | Use SF3=2N.Add SF7=P. |
| 23494.002 | 69-TM-169(N,X)69-TM-170-L,,SIG,,MXW | 0.00E+00 | 2.65E+08 | 2.50E-02 | Use SF3=G. |
| 31784.014 | 23-V-51(N,X)23-V-48,,SIG | 3.26E+07 | 1.74E+08 | 3.40E+07 | Use SF3=4N. |
| 41038.008.2 | 63-EU-151(N,X)63-EU-152-G+M2,,SIG,,FIS | 0.00E+00 | 2.66E+08 | 1.42E+06 | Use SF3=G. |
| 41639.002 | 51-SB-124(N,X)51-SB-125,,SIG,,SPA | 0.00E+00 | 2.64E+08 | 1.00E+06 | Use SF3=G.EN-DUMMY=0.0253 eV? |
| A0068.064.1 | 24-CR-52(P,X)25-MN-52,,SIG,,,DERIV | 5.60E+06 | 1.47E+08 | 2.20E+07 | Use SF3=N. |
| A0068.065.1 | 26-FE-56(P,X)27-CO-56,,SIG,,,DERIV | 5.45E+06 | 1.47E+08 | 2.20E+07 | Use SF3=N. |
| A0068.069.1 | 40-ZR-91(P,X)41-NB-91,,SIG,,,DERIV | 2.06E+06 | 1.43E+08 | 2.20E+07 | Use SF3=N. |
| A0068.070.1 | 40-ZR-94(P,X)41-NB-94,,SIG,,,DERIV | 1.70E+06 | 1.42E+08 | 2.20E+07 | Use SF3=N. |
| A0068.070.2 | 40-ZR-94(P,X)41-NB-93,,SIG,,,DERIV | 9.01E+06 | 1.49E+08 | 2.20E+07 | Use SF3=2N. |
| A0068.071.1 | 49-IN-115(P,X)50-SN-115,,SIG,,,DERIV | 2.87E+05 | 1.40E+08 | 2.20E+07 | Use SF3=N. |
| A0068.071.2 | 49-IN-115(P,X)50-SN-114,,SIG,,,DERIV | 7.90E+06 | 1.48E+08 | 2.20E+07 | Use SF3=2N. |
| A0068.072.1 | 73-TA-181(P,X)74-W-181,,SIG,,,DERIV | 9.93E+05 | 1.41E+08 | 2.20E+07 | Use SF3=N. |
| A0100.009.1 | 27-CO-59(P,X)28-NI-57,IND,SIG | 2.35E+07 | 1.65E+08 | 2.00E+08 | (Ok) |
| A0145.006  | 23-V-51(P,X)24-CR-51,,SIG | 1.57E+06 | 1.43E+08 | 1.60E+07 | Use SF3=N. |
| A0236.008  | 15-P-31(A,X)17-CL-34-M,,TTY,,PHY | 6.38E+06 | 1.63E+08 | 4.40E+07 | Use SF3=N. |
| A0294.007.2 | 41-NB-93(A,X)43-TC-95-M,,TTY,,(PHY) | 1.56E+07 | 1.60E+08 | 4.50E+07 | Use SF3=2N. |
| A0294.007.3 | 41-NB-93(A,X)43-TC-96,,TTY,,(PHY) | 7.34E+06 | 1.52E+08 | 4.50E+07 | Use SF3=N. |
| A0322.006  | 93-NP-237(D,X)94-PU-236,CUM,SIG | 9.19E+06 | 1.49E+08 | 2.50E+07 | (Ok) |
| A0322.008  | 93-NP-237(D,X)94-PU-238,CUM,SIG | 0.00E+00 | 1.36E+08 | 2.50E+07 | (Ok) |
| A0471.086  | 65-TB-159(D,X)66-DY-155,CUM,SIG | 3.61E+07 | 1.77E+08 | 7.30E+09 | (Ok) |
| A0471.087  | 65-TB-159(D,X)66-DY-157,CUM,SIG | 1.95E+07 | 1.60E+08 | 7.30E+09 | (Ok) |
| A0477.007  | 25-MN-55(P,X)26-FE-52-G,IND,SIG | 3.50E+07 | 1.77E+08 | 3.70E+09 | (Ok) |
| A0485.002  | 3-LI-7(P,X)4-BE-7,,SIG | 1.88E+06 | 1.62E+08 | 1.00E+08 | Use SF3=N. |
| A0497.005  | 25-MN-55(P,X)26-FE-52,,TTY,,PHY | 3.50E+07 | 1.77E+08 | 9.90E+07 | Use SF3=4N. |
| A0497.006  | 25-MN-55(P,X)26-FE-55,,TTY,,PHY | 1.03E+06 | 1.43E+08 | 9.90E+07 | Use SF3=N. |
| A0523.004  | 9-F-19(A,X)11-NA-22,,SIG | 2.36E+06 | 1.71E+08 | 3.20E+07 | Use SF3=N. |
| A0523.005  | 23-V-51(A,X)25-MN-54,,SIG | 2.47E+06 | 1.52E+08 | 3.70E+07 | Use SF3=N. |
| A0523.006  | 23-V-51(A,X)25-MN-52-G,M+,SIG | 2.51E+07 | 1.75E+08 | 5.80E+07 | Use SF3=3N. |
| A0523.020  | 75-RE-187(A,X)77-IR-190-G,M+,SIG | 1.03E+07 | 1.52E+08 | 6.00E+07 | Use SF3=N. |
| A0523.021  | 75-RE-187(A,X)77-IR-189,CUM,SIG | 1.68E+07 | 1.59E+08 | 6.00E+07 | Use SF3=2N.Delete SF5=CUM. |
| A0528.005  | 93-NP-237(P,X)94-PU-236,CUM,SIG | 6.91E+06 | 1.46E+08 | 1.80E+07 | (Ok) |
| A0901.058  | 26-FE-56(P,X)27-CO-57,IND,SIG | 0.00E+00 | 2.69E+08 | 2.60E+09 | (Ok) |
| A0901.059  | 26-FE-56(P,X)27-CO-56,IND,SIG | 5.45E+06 | 1.47E+08 | 2.60E+09 | (Ok) |
| A0901.060  | 26-FE-56(P,X)27-CO-55,IND,SIG | 1.57E+07 | 1.57E+08 | 2.60E+09 | (Ok) |
| A0906.122  | 41-NB-93(P,X)42-MO-93-M,IND,SIG | 1.20E+06 | 1.42E+08 | 2.60E+09 | (O) |
| A0906.123  | 41-NB-93(P,X)42-MO-91,IND,SIG | 2.22E+07 | 1.63E+08 | 4.60E+07 | Use SF3=3N. |
| A0914.003  | 83-BI-209(P,X)84-PO-209,IND,SIG | 2.69E+06 | 1.42E+08 | 6.60E+08 | (Ok) |
| A0914.004  | 83-BI-209(P,X)84-PO-208,IND,SIG | 9.69E+06 | 1.49E+08 | 6.60E+08 | (Ok) |
| A0914.005  | 83-BI-209(P,X)84-PO-207,IND,SIG | 1.81E+07 | 1.58E+08 | 1.40E+08 | Use SF3=3N. |
| A0914.008  | 83-BI-209(P,X)84-PO-206,IND,SIG | 2.52E+07 | 1.65E+08 | 6.60E+08 | (Ok) |
| A0914.010  | 83-BI-209(P,X)84-PO-205,IND,SIG | 3.40E+07 | 1.74E+08 | 6.60E+08 | (Ok) |
| A0914.013  | 83-BI-209(P,X)84-PO-204,IND,SIG | 4.13E+07 | 1.81E+08 | 6.60E+08 | (Ok) |
| A0914.015  | 83-BI-209(P,X)84-PO-203,IND,SIG | 5.04E+07 | 1.90E+08 | 6.60E+08 | (Ok) |
| A0914.017  | 83-BI-209(P,X)84-PO-202,IND,SIG | 5.79E+07 | 1.97E+08 | 6.60E+08 | (Ok) |
| A0914.019  | 83-BI-209(P,X)84-PO-201,IND,SIG | 6.74E+07 | 2.07E+08 | 4.80E+08 | (Ok) |
| A0914.025  | 83-BI-209(P,X)84-PO-199,IND,SIG | 8.49E+07 | 2.25E+08 | 6.60E+08 | (Ok) |
| A0916.017  | 52-TE-125(P,X)53-I-126,,SIG | 0.00E+00 | 2.66E+08 | 6.60E+08 | (Ok) |
| A0927.002  | 82-PB-208(P,X)83-BI-207,IND,SIG | 1.06E+07 | 1.50E+08 | 5.00E+08 | (Ok) |
| A0927.003  | 82-PB-208(P,X)83-BI-206,IND,SIG | 1.87E+07 | 1.58E+08 | 5.00E+08 | (Ok) |
| A0927.004  | 82-PB-208(P,X)83-BI-205,IND,SIG | 2.58E+07 | 1.65E+08 | 5.00E+08 | (Ok) |
| A0927.005  | 82-PB-208(P,X)83-BI-204,IND,SIG | 3.43E+07 | 1.74E+08 | 5.00E+08 | (Ok) |
| A0927.006  | 82-PB-208(P,X)83-BI-203,IND,SIG | 4.16E+07 | 1.81E+08 | 5.00E+08 | (Ok) |
| A0927.007  | 82-PB-208(P,X)83-BI-202,IND,SIG | 5.05E+07 | 1.90E+08 | 5.00E+08 | (Ok) |
| C0336.002  | 24-CR-52(P,X)25-MN-52-G,,SIG | 5.60E+06 | 1.47E+08 | 2.70E+07 | Use SF3=N. |
| C0481.020  | 26-FE-56(P,X)27-CO-56,PAR,SIG,G,AV | 5.45E+06 | 1.47E+08 | 2.40E+07 | Use SF3=N. |
| C0709.012  | 92-U-238(A,X)94-PU-241,CUM,SIG | 1.15E+07 | 1.53E+08 | 4.30E+07 | (Ok) |
| C0709.014  | 92-U-238(A,X)94-PU-239,CUM,SIG | 2.35E+07 | 1.65E+08 | 4.30E+07 | (Ok) |
| C0709.015  | 92-U-238(A,X)94-PU-238,CUM,SIG | 2.92E+07 | 1.70E+08 | 4.30E+07 | (Ok) |
| C0944.002  | 26-FE-58(P,X)27-CO-58-G/M,,SIG/RAT | 3.14E+06 | 1.45E+08 | 6.30E+06 | Use SF3=N. |
| C0944.003  | 26-FE-58(P,X)27-CO-56,,SIG | 2.34E+07 | 1.65E+08 | 6.30E+06 | Use SF3=3N. |
| C0944.003  | 26-FE-58(P,X)27-CO-58-M,,SIG | 3.14E+06 | 1.45E+08 | 6.30E+06 | Use SF3=N. |
| C0967.002  | 53-I-127(P,X)54-XE-121,,SIG | 5.62E+07 | 1.96E+08 | 6.70E+07 | Use SF3=7N. |
| C0967.003  | 53-I-127(P,X)54-XE-122,,SIG | 4.51E+07 | 1.85E+08 | 6.70E+07 | Use SF3=6N. |
| C0967.004  | 53-I-127(P,X)54-XE-123,,SIG | 3.71E+07 | 1.77E+08 | 6.70E+07 | Use SF3=5N. |
| C0967.005  | 53-I-127(P,X)54-XE-125,,SIG | 1.89E+07 | 1.59E+08 | 6.70E+07 | Use SF3=3N. |
| C1047.004  | 53-I-127(D,X)54-XE-128,,SIG | 0.00E+00 | 1.35E+08 | 1.80E+07 | Use SF3=N. |
| C1094.004  | 67-HO-165(P,X)68-ER-153,,SIG | 1.03E+08 | 2.43E+08 | 4.80E+08 | (Ok) |
| C1094.005  | 67-HO-165(P,X)68-ER-152,,SIG | 1.11E+08 | 2.51E+08 | 4.80E+08 | (Ok) |
| C1094.006  | 67-HO-165(P,X)68-ER-151,,SIG | 1.21E+08 | 2.61E+08 | 4.80E+08 | (Ok) |
| C1094.014  | 69-TM-169(P,X)70-YB-155,,SIG | 1.25E+08 | 2.65E+08 | 4.80E+08 | (Ok) |
| C1094.048  | 79-AU-197(P,X)80-HG-183,,SIG | 1.22E+08 | 2.61E+08 | 4.80E+08 | (Ok) |
| C1159.005  | 39-Y-89(D,X)40-ZR-87,,SIG | 2.81E+07 | 1.70E+08 | 3.90E+07 | Use SF3=4N. |
| C1183.007  | 24-CR-54(P,X)25-MN-54,,TTY,,EOB/MSC | 2.20E+06 | 1.44E+08 | 2.00E+07 | Use SF3=N. |
| C1183.008  | 25-MN-55(D,X)26-FE-55,,TTY,,EOB/MSC | 3.36E+06 | 1.47E+08 | 1.50E+07 | Use SF3=2N. |
| C1183.024  | 25-MN-55(P,X)26-FE-55,,TTY,,EOB/MSC | 1.03E+06 | 1.43E+08 | 2.00E+07 | Use SF3=N. |
| C1465.025  | 16-S-42(D,X)17-CL-42,,SIG | 0.00E+00 | 1.41E+08 | 1.00E-01 | Use SF3=2N. |
| C1610.005  | 2-HE-3(A,X)4-BE-7,,SIG,,SFC,DERIV | 0.00E+00 | 6.37E+08 | 0.00E+00 | Use SF3=G. |
| C1956.011  | 2-HE-4(A,X)4-BE-7,PAR,SIG | 3.80E+07 | 3.19E+08 | 2.00E+08 | Use SF3=N. |
| C1997.005  | 56-BA-138(A,X)58-CE-141,(CUM),SIG | 8.72E+06 | 1.52E+08 | 4.10E+07 | (Ok) |
| C1997.007  | 56-BA-138(A,X)58-CE-141,,SIG | 8.72E+06 | 1.52E+08 | 4.10E+07 | Use SF3=N. |
| C2149.008  | 23-V-51(PIN,X)22-TI-48,PAR,SIG,G | 0.00E+00 | 2.72E+07 | 2.20E+08 | (Ok) |
| C2200.012  | 65-TB-159(P,X)66-DY-153,CUM,SIG | 4.99E+07 | 1.90E+08 | 8.70E+07 | Use SF3=7N? SF5=CUM is suspicious. |
| C2200.013  | 65-TB-159(P,X)66-DY-155,CUM,SIG | 3.37E+07 | 1.73E+08 | 2.00E+08 | SF5=CUM is suspicious? |
| C2200.014  | 65-TB-159(P,X)66-DY-157,CUM,SIG | 1.71E+07 | 1.57E+08 | 1.40E+08 | Use SF3=3N? SF5=CUM is suspicious. |
| C2296.040  | 94-PU-242(A,X)96-CM-244,CUM,SIG | 1.77E+07 | 1.59E+08 | 4.40E+07 | (Ok) |
| C2305.002  | 88-RA-226(A,X)90-TH-226,CUM,SIG | 2.99E+07 | 1.71E+08 | 4.60E+07 | (Ok) |
| C2305.004  | 92-U-236(A,X)94-PU-236,CUM,SIG | 3.08E+07 | 1.72E+08 | 4.60E+07 | (Ok) |
| C2327.039  | 41-NB-93(P,X)42-MO-93-M,,SIG | 1.20E+06 | 1.42E+08 | 8.90E+07 | Use SF3=N. |
| C2370.022  | 53-I-127(PIP,X)54-XE-127,,SIG | 0.00E+00 | 1.31E+08 | 3.50E+08 | (Ok) |
| C2370.023  | 53-I-127(PIP,X)54-XE-125,,SIG | 0.00E+00 | 1.72E+07 | 3.50E+08 | (Ok) |
| C2370.024  | 53-I-127(PIP,X)54-XE-123,,SIG | 0.00E+00 | 3.53E+07 | 3.50E+08 | (Ok) |
| C2370.025  | 53-I-127(PIP,X)54-XE-122,,SIG | 0.00E+00 | 4.33E+07 | 3.50E+08 | (Ok) |
| C2370.026  | 53-I-127(PIP,X)54-XE-121,,SIG | 0.00E+00 | 5.42E+07 | 3.50E+08 | (Ok) |
| C2413.014  | 42-MO-94(P,X)43-TC-94-G,,SIG | 5.09E+06 | 1.45E+08 | 1.90E+07 | Use SF3=N. |
| C2481.003  | 92-U-235(A,X)94-PU-236,CUM,SIG | 2.42E+07 | 1.65E+08 | 2.80E+07 | (Ok) |
| D0114.007  | 81-TL-203(P,X)82-PB-201,,TTY/DEN,,PHY | 1.75E+07 | 1.57E+08 | 3.60E+07 | Use SF3=3N. |
| D0114.008  | 81-TL-203(P,X)82-PB-202-M,,TTY/DEN,,PHY | 8.72E+06 | 1.48E+08 | 3.60E+07 | Use SF3=2N. |
| D0114.009  | 81-TL-203(P,X)82-PB-203,,TTY/DEN,,PHY | 1.77E+06 | 1.41E+08 | 3.60E+07 | Use SF3=N. |
| D0114.010  | 80-HG-202(P,X)81-TL-199,,TTY/DEN,,PHY | 2.44E+07 | 1.64E+08 | 2.70E+07 | Use SF3=4N. |
| D0114.012  | 80-HG-202(P,X)81-TL-201,,TTY/DEN,,PHY | 9.06E+06 | 1.49E+08 | 2.70E+07 | Use SF3=2N. |
| D0114.013  | 80-HG-202(P,X)81-TL-202,,TTY/DEN,,PHY | 2.16E+06 | 1.42E+08 | 2.70E+07 | Use SF3=N. |
| D0664.002  | 41-NB-93(P,X)42-MO-93-M,,TTY,,PHY | 1.20E+06 | 1.42E+08 | 1.20E+07 | Use SF3=N. |
| D0802.003  | 28-NI-64(P,X)29-CU-64,,SIG | 2.50E+06 | 1.44E+08 | 4.00E+06 | Use SF3=N. |
| D0802.006  | 28-NI-64(P,X)29-CU-64,,SIG | 2.50E+06 | 1.44E+08 | 1.60E+07 | Use SF3=N. |
| D4055.002.1 | 62-SM-147(HE3,X)64-GD-147,,SIG | 1.35E+07 | 1.55E+08 | 3.40E+07 | Use SF3=3N. |
| D4055.002.2 | 62-SM-147(HE3,X)64-GD-149,,SIG | 0.00E+00 | 1.39E+08 | 3.40E+07 | Use SF3=N. |
| D4055.003.1 | 62-SM-147(HE3,X)64-GD-146,,SIG | 2.10E+07 | 1.63E+08 | 3.40E+07 | Use SF3=4N. |
| D4055.005.1 | 62-SM-144(A,X)64-GD-147,,SIG | 1.26E+07 | 1.55E+08 | 2.50E+07 | Use SF3=N. |
| D4055.005.2 | 62-SM-144(A,X)64-GD-146,,SIG | 2.01E+07 | 1.63E+08 | 2.50E+07 | Use SF3=2N. |
| D4056.009  | 28-NI-64(D,X)29-CU-61,,TTY,,PHY/MSC | 3.34E+07 | 1.77E+08 | 1.90E+07 | Use SF3=5N. |
| D4073.016  | 55-CS-133(P,X)56-BA-133-M,,SIG | 1.31E+06 | 1.41E+08 | 1.90E+07 | Use SF3=N. |
| D4104.009  | 13-AL-27(P,X)14-SI-26,,SIG | 1.96E+07 | 1.64E+08 | 2.70E+07 | Use SF3=2N. |
| D4104.010  | 13-AL-27(P,X)14-SI-27,,SIG | 5.80E+06 | 1.50E+08 | 2.70E+07 | Use SF3=N. |
| D4104.024  | 13-AL-27(D,X)14-SI-27,,SIG | 8.40E+06 | 1.58E+08 | 1.70E+07 | Use SF3=2N. |
| D4127.002.1 | 37-RB-85(P,X)38-SR-85-G,,SIG | 1.87E+06 | 1.42E+08 | 9.40E+07 | Use SF3=N. |
| D4127.002.2 | 37-RB-85(P,X)38-SR-85-M,,SIG | 1.87E+06 | 1.42E+08 | 9.40E+07 | Use SF3=N. |
| D4154.003  | 78-PT-198(D,X)79-AU-199,,SIG | 0.00E+00 | 1.36E+08 | 2.00E+07 | Use SF3=N. |
| D4154.006.2 | 78-PT-198(D,X)79-AU-199,,TTY,,PHY,DERIV | 0.00E+00 | 1.36E+08 | 1.50E+07 | Use SF3=N. |
| D4156.002  | 41-NB-93(D,X)42-MO-93-M,,SIG | 3.49E+06 | 1.45E+08 | 3.80E+07 | Use SF3=2N. |
| D4175.002.2 | 70-YB-176(D,X)71-LU-177-G,CUM,SIG | 0.00E+00 | 1.36E+08 | 2.00E+07 | (Ok) |
| D4175.003.2 | 70-YB-176(D,X)71-LU-177-G,CUM,TTY,,PHY,DERIV | 0.00E+00 | 1.36E+08 | 2.00E+07 | (Ok) |
| D4180.002  | 69-TM-169(D,X)70-YB-169,,SIG | 3.95E+06 | 1.44E+08 | 2.10E+07 | Use SF3=2N. |
| D4232.007  | 27-CO-59(D,X)28-NI-57,,SIG | 2.62E+07 | 1.70E+08 | 3.90E+07 | Use SF3=4N. |
| D4249.002  | 81-TL-203(D,X)82-PB-204-M,,SIG | 0.00E+00 | 1.36E+08 | 2.10E+07 | Use SF3=N. |
| D4249.003  | 81-TL-203(D,X)82-PB-203,CUM,SIG | 4.02E+06 | 1.44E+08 | 2.10E+07 | Use SF3=2N.(Confirmed by Sandor.) |
| D4249.004  | 81-TL-203(D,X)82-PB-202-M,,SIG | 1.10E+07 | 1.51E+08 | 2.10E+07 | Use SF3=3N. |
| D4255.006  | 27-CO-59(P,X)28-NI-57,,SIG | 2.35E+07 | 1.65E+08 | 7.00E+07 | Use SF3=3N. |
| D4334.002  | 55-CS-133(D,X)56-BA-133-M,,SIG | 3.58E+06 | 1.45E+08 | 3.90E+07 | Use SF3=2N. |
| D4334.003  | 55-CS-133(D,X)56-BA-133-G,M+,SIG | 3.58E+06 | 1.45E+08 | 3.00E+07 | Use SF3=2N. |
| D4334.004  | 55-CS-133(D,X)56-BA-131-G,M+,SIG | 2.09E+07 | 1.62E+08 | 3.90E+07 | Use SF3=4N. |
| D7014.002  | 39-Y-89(A,X)41-NB-89-M,,SIG | 3.86E+07 | 1.84E+08 | 4.30E+07 | Use SF3=4N. |
| D7014.003  | 39-Y-89(A,X)41-NB-89-G,,SIG | 3.86E+07 | 1.84E+08 | 4.30E+07 | Use SF3=4N. |
| D7014.005  | 39-Y-89(A,X)41-NB-91-M,,SIG | 1.55E+07 | 1.61E+08 | 4.30E+07 | Use SF3=2N. |
| D7014.006  | 39-Y-89(A,X)41-NB-92-M,,SIG | 7.22E+06 | 1.52E+08 | 4.30E+07 | Use SF3=N. |
| D7014.014  | 39-Y-89(A,X)41-NB-89-M,,TTY,,PHY,DERIV | 3.86E+07 | 1.84E+08 | 4.30E+07 | Use SF3=4N. |
| D7014.015  | 39-Y-89(A,X)41-NB-89-G,,TTY,,PHY,DERIV | 3.86E+07 | 1.84E+08 | 4.30E+07 | Use SF3=4N. |
| D7014.017  | 39-Y-89(A,X)41-NB-91-M,,TTY,,PHY,DERIV | 1.55E+07 | 1.61E+08 | 4.30E+07 | Use SF3=2N. |
| D7014.018  | 39-Y-89(A,X)41-NB-92-M,,TTY,,PHY,DERIV | 7.22E+06 | 1.52E+08 | 4.30E+07 | Use SF3=N. |
| D7020.002  | 39-Y-89(P,X)40-ZR-86,,SIG | 3.51E+07 | 1.76E+08 | 6.70E+07 | Use SF3=4N. |
| D7020.003  | 39-Y-89(P,X)40-ZR-88,,SIG | 1.31E+07 | 1.54E+08 | 6.70E+07 | Use SF3=2N. |
| D7020.004  | 39-Y-89(P,X)40-ZR-89-G,M+,SIG | 3.66E+06 | 1.44E+08 | 6.70E+07 | Use SF3=N. |
| D7020.015  | 39-Y-89(P,X)40-ZR-86,,TTY,,PHY,DERIV | 3.51E+07 | 1.76E+08 | 6.70E+07 | Use SF3=4N. |
| D7020.016  | 39-Y-89(P,X)40-ZR-88,,TTY,,PHY,DERIV | 1.31E+07 | 1.54E+08 | 6.70E+07 | Use SF3=2N. |
| D7020.017  | 39-Y-89(P,X)40-ZR-89-G,M+,TTY,,PHY,DERIV | 3.66E+06 | 1.44E+08 | 6.70E+07 | Use SF3=N. |
| E1868.002  | 53-I-127(P,X)54-XE-123,,SIG | 3.71E+07 | 1.77E+08 | 5.80E+07 | Use SF3=5N. |
| E1868.003  | 53-I-127(P,X)54-XE-125,,SIG | 1.89E+07 | 1.59E+08 | 5.80E+07 | Use SF3=3N. |
| E1868.004  | 53-I-127(P,X)54-XE-127,,SIG | 1.46E+06 | 1.41E+08 | 2.00E+07 | Use SF3=N. |
| E1893.022  | 3-LI-7(D,X)4-BE-7,,TTY,,PHY | 4.98E+06 | 1.85E+08 | 2.50E+07 | Use SF3=2N. |
| E1964.048.1 | 79-AU-197(P,X)80-HG-197-G,M+,TTY,,EOB/FCT | 1.39E+06 | 1.41E+08 | 1.60E+07 | Use SF3=N. |
| E1964.048.2 | 79-AU-197(P,X)80-HG-197-G,M-,TTY,,EOB/FCT | 1.39E+06 | 1.41E+08 | 1.60E+07 | Use SF3=N. |
| E2121.003  | 23-V-51(D,X)24-CR-49,,SIG | 2.71E+07 | 1.72E+08 | 4.70E+07 | Use SF3=4N. |
| E2533.002  | 69-TM-169(D,X)70-YB-169,,SIG | 3.95E+06 | 1.44E+08 | 2.40E+07 | Use SF3=2N. |
| E2589.002  | 41-NB-93(D,X)42-MO-93-M,,SIG | 3.49E+06 | 1.45E+08 | 2.30E+07 | Use SF3=2N. |
| E2592.002  | 40-ZR-96(A,X)42-MO-99,CUM,SIG | 5.33E+06 | 1.50E+08 | 3.40E+07 | (Ok) |
| E2592.012  | 40-ZR-96(A,X)42-MO-99,CUM,SIG | 5.33E+06 | 1.50E+08 | 2.80E+07 | (Ok) |
| F1226.003  | 79-AU-197(P,X)80-HG-195-M/G,,SIG/RAT | 1.71E+07 | 1.57E+08 | 3.20E+08 | (Ok) |
| F1226.005  | 79-AU-197(P,X)80-HG-193-M/G,,SIG/RAT | 3.33E+07 | 1.73E+08 | 3.20E+08 | (Ok) |
| F1244.003  | 92-U-235(HE3,X)94-PU-236,CUM,SIG | 3.24E+06 | 1.44E+08 | 4.20E+07 | (Ok) |
| F1298.002  | 24-CR-52(P,X)25-MN-52,,SIG | 5.60E+06 | 1.47E+08 | 1.30E+07 | Use SF3=N. |
| F1298.003  | 26-FE-56(P,X)27-CO-56,,SIG | 5.45E+06 | 1.47E+08 | 1.30E+07 | Use SF3=N. |
| F1299.008  | 79-AU-197(D,X)80-HG-193-M/G,,SIG/RAT | 3.57E+07 | 1.76E+08 | 4.40E+09 | (Ok) |
| F1299.010  | 79-AU-197(D,X)80-HG-197-M/G,,SIG/RAT | 3.64E+06 | 1.44E+08 | 4.40E+09 | (Ok) |
| F1315.014  | 55-CS-133(P,X)56-BA-131,IND,SIG | 1.85E+07 | 1.58E+08 | 1.00E+09 | (Ok) |
| F1322.002  | 3-LI-7(P,X)4-BE-7,,SIG | 1.88E+06 | 1.62E+08 | 1.00E+07 | Use SF3=N. |
| F1322.003  | 3-LI-7(P,X)4-BE-7,,SIG | 1.88E+06 | 1.62E+08 | 1.10E+07 | Use SF3=N. |
| F1322.006  | 3-LI-6(D,X)4-BE-7,,SIG | 0.00E+00 | 1.82E+08 | 7.40E+06 | Use SF3=N. |
| F1322.007  | 3-LI-6(D,X)4-BE-7,,SIG | 0.00E+00 | 1.82E+08 | 7.70E+06 | Use SF3=N. |
| F1322.008  | 3-LI-6(D,X)4-BE-7,,SIG | 0.00E+00 | 1.82E+08 | 9.80E+06 | Use SF3=N. |
| F1322.009  | 3-LI-7(D,X)4-BE-7,,SIG | 4.98E+06 | 1.85E+08 | 7.40E+06 | Use SF3=2N. |
| F1322.010  | 3-LI-7(D,X)4-BE-7,,SIG | 4.98E+06 | 1.85E+08 | 7.70E+06 | Use SF3=2N. |
| F1435.002  | 36-KR-82(HE3,X)38-SR-82,,SIG | 1.44E+07 | 1.58E+08 | 7.50E+07 | Use SF3=3N. |
| F1435.003  | 36-KR-83(HE3,X)38-SR-82,,SIG | 2.21E+07 | 1.66E+08 | 7.50E+07 | Use SF3=4N. |
| F1435.004  | 36-KR-84(HE3,X)38-SR-82,,SIG | 3.30E+07 | 1.77E+08 | 7.50E+07 | Use SF3=5N. |
| J0102.002  | 4-BE-9(PIN,X)3-LI-8,,DA,,REL | 0.00E+00 | 1.72E+07 | 9.00E+09 | (Ok) |
| J1880.002  | 4-BE-9(PIN,X)3-LI-8,,SIG | 0.00E+00 | 1.72E+07 | 1.80E+09 | (Ok) |
| J1880.005  | 6-C-12(PIN,X)5-B-8,,SIG | 0.00E+00 | 5.52E+07 | 1.90E+09 | (Ok) |
| K2023.032  | 11-NA-23(G,X)11-NA-22,CUM,SIG,,BRA | 1.24E+07 | 1.52E+08 | 1.00E+09 | (Ok) |
| K2027.002  | 23-V-51(G,X)23-V-48,CUM,SIG,,BRA | 3.19E+07 | 1.71E+08 | 1.00E+09 | (Ok) |
| K2027.024  | 27-CO-59(G,X)27-CO-58,,SIG,,BRA | 1.05E+07 | 1.49E+08 | 1.00E+09 | (Ok) |
| K2027.025  | 27-CO-59(G,X)27-CO-57,,SIG,,BRA | 1.90E+07 | 1.58E+08 | 1.00E+09 | (Ok) |
| K2027.026  | 27-CO-59(G,X)27-CO-56,IND,SIG,,BRA | 3.04E+07 | 1.69E+08 | 1.00E+09 | (Ok) |
| K2027.027  | 27-CO-59(G,X)27-CO-55,IND,SIG,,BRA | 4.05E+07 | 1.80E+08 | 1.00E+09 | (Ok) |
| K2027.051  | 39-Y-89(G,X)39-Y-88,IND,SIG,,BRA | 1.15E+07 | 1.50E+08 | 1.00E+09 | (Ok) |
| K2027.052  | 39-Y-89(G,X)39-Y-87-M,IND,SIG,,BRA | 2.08E+07 | 1.60E+08 | 1.00E+09 | (Ok) |
| K2027.053  | 39-Y-89(G,X)39-Y-87-G,CUM,SIG,,BRA | 2.08E+07 | 1.60E+08 | 1.00E+09 | (Ok) |
| K2027.054  | 39-Y-89(G,X)39-Y-86-M,IND,SIG,,BRA | 3.26E+07 | 1.72E+08 | 1.00E+09 | (Ok) |
| K2027.055  | 39-Y-89(G,X)39-Y-86-G,CUM,SIG,,BRA | 3.26E+07 | 1.72E+08 | 1.00E+09 | (Ok) |
| K2027.056  | 39-Y-89(G,X)39-Y-85-M,IND,SIG,,BRA | 4.22E+07 | 1.81E+08 | 9.00E+08 | (Ok) |
| K2027.057  | 39-Y-89(G,X)39-Y-85-G,IND,SIG,,BRA | 4.22E+07 | 1.81E+08 | 1.00E+09 | (Ok) |
| K2027.058  | 39-Y-89(G,X)39-Y-84-G,IND,SIG,,BRA | 5.42E+07 | 1.93E+08 | 1.00E+09 | (Ok) |
| K2027.082  | 53-I-127(G,X)53-I-126,,SIG,,BRA | 9.14E+06 | 1.48E+08 | 1.00E+09 | (Ok) |
| K2027.083  | 53-I-127(G,X)53-I-124,IND,SIG,,BRA | 2.58E+07 | 1.65E+08 | 1.00E+09 | (Ok) |
| K2027.084  | 53-I-127(G,X)53-I-121,IND,SIG,,BRA | 5.12E+07 | 1.90E+08 | 1.00E+09 | (Ok) |
| K2027.085  | 53-I-127(G,X)53-I-120-G,IND,SIG,,BRA | 6.18E+07 | 2.01E+08 | 1.00E+09 | (Ok) |
| K2027.086  | 53-I-127(G,X)53-I-120-M,IND,SIG,,BRA | 6.18E+07 | 2.01E+08 | 1.00E+09 | (Ok) |
| K2027.087  | 53-I-127(G,X)53-I-119,IND,SIG,,BRA | 6.98E+07 | 2.09E+08 | 1.00E+09 | (Ok) |
| K2027.110  | 55-CS-133(G,X)55-CS-132,CUM,SIG,,BRA | 8.99E+06 | 1.48E+08 | 1.00E+09 | (Ok) |
| K2027.112  | 55-CS-133(G,X)55-CS-129,,SIG,,BRA | 3.29E+07 | 1.72E+08 | 1.00E+09 | (Ok) |
| K2027.113  | 55-CS-133(G,X)55-CS-127,IND,SIG,,BRA | 5.03E+07 | 1.89E+08 | 1.00E+09 | (Ok) |
| K2027.114  | 55-CS-133(G,X)55-CS-125,IND,SIG,,BRA | 6.86E+07 | 2.08E+08 | 1.00E+09 | (Ok) |
| K2027.154  | 57-LA-139(G,X)57-LA-135,CUM,SIG,,BRA | 3.29E+07 | 1.72E+08 | 1.00E+09 | (Ok) |
| K2027.155  | 57-LA-139(G,X)57-LA-133,IND,SIG,,BRA | 5.02E+07 | 1.89E+08 | 1.00E+09 | (Ok) |
| K2027.156  | 57-LA-139(G,X)57-LA-132-M,IND,SIG,,BRA | 6.00E+07 | 1.99E+08 | 1.00E+09 | (Ok) |
| K2027.157  | 57-LA-139(G,X)57-LA-132-G,CUM,SIG,,BRA | 6.00E+07 | 1.99E+08 | 1.00E+09 | (Ok) |
| K2027.158  | 57-LA-139(G,X)57-LA-131,IND,SIG,,BRA | 6.80E+07 | 2.07E+08 | 1.00E+09 | (Ok) |
| K2027.206  | 79-AU-197(G,X)79-AU-196,,SIG,,BRA | 8.07E+06 | 1.47E+08 | 1.00E+09 | (Ok) |
| K2027.207  | 79-AU-197(G,X)79-AU-195,IND,SIG,,BRA | 1.47E+07 | 1.54E+08 | 1.00E+09 | (Ok) |
| K2027.208  | 79-AU-197(G,X)79-AU-194,IND,SIG,,BRA | 2.31E+07 | 1.62E+08 | 1.00E+09 | (Ok) |
| K2027.209  | 79-AU-197(G,X)79-AU-193,IND,SIG,,BRA | 3.00E+07 | 1.69E+08 | 1.00E+09 | (Ok) |
| K2027.210  | 79-AU-197(G,X)79-AU-192,IND,SIG,,BRA | 3.87E+07 | 1.78E+08 | 1.00E+09 | (Ok) |
| K2027.211  | 79-AU-197(G,X)79-AU-191,IND,SIG,,BRA | 4.58E+07 | 1.85E+08 | 1.00E+09 | (Ok) |
| K2027.213  | 79-AU-197(G,X)79-AU-189,IND,SIG,,BRA | 6.21E+07 | 2.01E+08 | 1.00E+09 | (Ok) |
| K2027.214  | 79-AU-197(G,X)79-AU-188,IND,SIG,,BRA | 7.14E+07 | 2.10E+08 | 1.00E+09 | (Ok) |
| K2027.215  | 79-AU-197(G,X)79-AU-187,IND,SIG,,BRA | 7.88E+07 | 2.18E+08 | 1.00E+09 | (Ok) |
| K2027.216  | 79-AU-197(G,X)79-AU-186,IND,SIG,,BRA | 8.82E+07 | 2.27E+08 | 1.00E+09 | (Ok) |
| K2027.251  | 39-Y-89(G,X)39-Y-87-M/G,,SIG/RAT,,BRA | 2.08E+07 | 1.60E+08 | 1.00E+09 | (Ok) |
| K2027.252  | 39-Y-89(G,X)39-Y-86-M/G,,SIG/RAT,,BRA | 3.26E+07 | 1.72E+08 | 1.00E+09 | (Ok) |
| K2027.253  | 39-Y-89(G,X)39-Y-85-M/G,,SIG/RAT,,BRA | 4.22E+07 | 1.81E+08 | 9.00E+08 | (Ok) |
| K2027.273  | 57-LA-139(G,X)57-LA-132-M/G,,SIG/RAT,,BRA | 6.00E+07 | 1.99E+08 | 1.00E+09 | (Ok) |
| K2191.005  | 6-C-12(G,X)6-C-11,,SIG,,BRA | 1.87E+07 | 1.59E+08 | 7.20E+08 | (Ok) |
| K2191.010  | 6-C-12(G,X)6-C-11,,INT,,BRA | 1.87E+07 | 1.59E+08 | 4.00E+08 | (Ok) |
| M0159.009  | 41-NB-93(E,X)40-ZR-89,CUM,SIG | 3.41E+07 | 1.73E+08 | 2.80E+08 | (Ok) |
| M0159.011  | 41-NB-93(E,X)40-ZR-86,CUM,SIG | 6.53E+07 | 2.04E+08 | 2.80E+08 | (Ok) |
| M0576.003  | 1-H-2(G,X)1-H-1,,DA | 2.23E+06 | 1.46E+08 | 4.20E+08 | (Ok) |
| M0594.003  | 1-H-2(G,X)1-H-1,,DA/DP | 2.23E+06 | 1.46E+08 | 5.90E+08 | (Ok) |
| M0869.002  | 22-TI-46(G,X)22-TI-45,,SIG,,BRS | 1.32E+07 | 1.52E+08 | 3.10E+07 | Use SF3=N. |
| O0078.011.7 | 23-V-51(P,X)24-CR-48,CUM,SIG | 3.51E+07 | 1.77E+08 | 6.00E+08 | (Ok) |
| O0078.011.0 | 23-V-51(P,X)24-CR-51,CUM,SIG | 1.57E+06 | 1.43E+08 | 6.00E+08 | (Ok) |
| O0078.022.3 | 27-CO-59(P,X)28-NI-57,IND,SIG | 2.35E+07 | 1.65E+08 | 6.00E+08 | (Ok) |
| O0078.031.0 | 39-Y-89(P,X)40-ZR-88,IND,SIG | 1.31E+07 | 1.54E+08 | 6.00E+08 | (Ok) |
| O0078.031.2 | 39-Y-89(P,X)40-ZR-89,IND,SIG | 3.66E+06 | 1.44E+08 | 6.00E+08 | (Ok) |
| O0177.003  | 92-U-238(D,X)93-NP-239,CUM,SIG | 0.00E+00 | 1.37E+08 | 1.30E+07 | (Ok) |
| O0286.004  | 26-FE-56(PIN,X)25-MN-54,,SIG | 0.00E+00 | 2.05E+07 | 2.80E+08 | (Ok) |
| O0464.002  | 83-BI-209(P,X)84-PO-196,,SIG | 1.11E+08 | 2.51E+08 | 1.60E+08 | Use SF3=14N. |
| O0770.005  | 93-NP-237(P,X)94-PU-236,CUM,SIG | 6.91E+06 | 1.46E+08 | 4.00E+07 | (Ok) |
| O0840.035.1 | 50-SN-124(P,X)51-SB-116-M,IND,SIG | 6.73E+07 | 2.07E+08 | 8.10E+09 | (Ok) |
| O0840.035.2 | 50-SN-124(P,X)51-SB-116-G,IND,SIG | 6.73E+07 | 2.07E+08 | 8.10E+09 | (Ok) |
| O0840.035.3 | 50-SN-124(P,X)51-SB-116-M/G,,SIG/RAT | 6.73E+07 | 2.07E+08 | 8.10E+09 | (Ok) |
| O1309.003  | 92-U-236(HE3,X)94-PU-238,(CUM),SIG | 0.00E+00 | 1.37E+08 | 5.60E+07 | (Ok) |
| O1309.004  | 92-U-236(HE3,X)94-PU-236,CUM,SIG | 9.86E+06 | 1.50E+08 | 5.90E+07 | (Ok) |
| O1631.024  | 12-MG-24(P,X)13-AL-24,PAR,SIG,G | 1.53E+07 | 1.60E+08 | 2.00E+07 | Use SF3=N. |
| O1631.030  | 12-MG-24(A,X)14-SI-27,PAR,SIG,G | 8.40E+06 | 1.71E+08 | 3.00E+07 | Use SF3=N. |
| O1631.068  | 12-MG-24(A,X)14-SI-27,PAR,DA,G,LEG/RS | 8.40E+06 | 1.71E+08 | 3.00E+07 | Use SF3=N. |
| O1877.005  | 70-YB-176(D,X)71-LU-177-G,CUM,SIG | 0.00E+00 | 1.36E+08 | 1.80E+07 | (Ok) |
| O1884.008  | 74-W-186(P,X)75-RE-186-G,,SIG | 1.37E+06 | 1.41E+08 | 2.20E+07 | Use SF3=N. |
| O2036.004  | 2-HE-4(A,X)4-BE-7,,DA | 3.80E+07 | 3.19E+08 | 1.00E+08 | Use SF3=N.Add SF7=RSD. |
| O2036.007  | 2-HE-4(A,X)4-BE-7,,SIG | 3.80E+07 | 3.19E+08 | 1.00E+08 | Use SF3=N. |
| O2038.002.1 | 37-RB-85(A,X)39-Y-87,,SIG | 1.35E+07 | 1.59E+08 | 5.40E+07 | Use SF3=2N. |
| O2038.002.2 | 37-RB-85(A,X)39-Y-87-M/G,,SIG/RAT | 1.35E+07 | 1.59E+08 | 5.40E+07 | Use SF3=2N. |
| O2038.003.1 | 37-RB-85(A,X)39-Y-86,,SIG | 2.58E+07 | 1.71E+08 | 5.40E+07 | Use SF3=3N. |
| O2038.003.2 | 37-RB-85(A,X)39-Y-86-M/G,,SIG/RAT | 2.58E+07 | 1.71E+08 | 5.40E+07 | Use SF3=3N. |
| O2038.004.1 | 37-RB-85(A,X)39-Y-85,,SIG | 3.58E+07 | 1.81E+08 | 5.40E+07 | Use SF3=4N. |
| O2038.004.2 | 37-RB-85(A,X)39-Y-85-M/G,,SIG/RAT | 3.58E+07 | 1.81E+08 | 5.40E+07 | Use SF3=4N. |
| O2038.005.1 | 37-RB-85(A,X)39-Y-84,,SIG | 4.84E+07 | 1.94E+08 | 5.40E+07 | Use SF3=5N. |
| O2038.005.2 | 37-RB-85(A,X)39-Y-84-M/G,,SIG/RAT | 4.84E+07 | 1.94E+08 | 5.40E+07 | Use SF3=5N. |
| O2052.008  | 53-I-127(P,X)54-XE-122,,SIG | 4.51E+07 | 1.85E+08 | 2.60E+09 | (Ok) |
| O2052.013  | 53-I-127(P,X)54-XE-125,,SIG | 1.89E+07 | 1.59E+08 | 2.60E+09 | (Ok) |
| O2052.015  | 53-I-127(P,X)54-XE-127,,SIG | 1.46E+06 | 1.41E+08 | 2.60E+09 | (Ok) |
| O2124.008  | 27-CO-59(D,X)28-NI-57,,SIG | 2.62E+07 | 1.70E+08 | 5.20E+07 | Use SF3=4N. |
| O2134.012  | 8-O-18(P,X)9-F-18,,SIG | 2.57E+06 | 1.50E+08 | 1.50E+08 | Use SF3=N. |
| O2178.002.1 | 70-YB-168(A,X)72-HF-171,CUM,SIG | 1.21E+07 | 1.54E+08 | 1.50E+07 | Use SF3=N.Delete SF5=CUM.(Confirmed by Kiss) |
| O2178.002.2 | 70-YB-168(A,X)72-HF-171,CUM,SIG | 1.21E+07 | 1.54E+08 | 1.50E+07 | Use SF3=N.Delete SF5=CUM.(Confirmed by Kiss) |
| O2178.003  | 70-YB-168(A,X)72-HF-172,CUM,SIG | 2.82E+06 | 2.79E+08 | 1.50E+07 | Use SF3=G.Delete SF5=CUM.(Confirmed by Kiss) |
| O2224.017  | 74-W-186(D,X)75-RE-186-G,,TTY,,PHY/A | 3.63E+06 | 1.44E+08 | 1.30E+07 | Use SF3=2N. |
| O2270.004  | 92-U-235(HE3,X)94-PU-236,CUM,SIG | 3.24E+06 | 1.44E+08 | 4.20E+07 | (Ok) |
| O2300.004  | 90-TH-232(D,X)91-PA-233,CUM,SIG | 0.00E+00 | 1.37E+08 | 3.00E+07 | (Ok) |
| O2482.004  | 30-ZN-67(P,X)31-GA-67,,SIG | 1.81E+06 | 1.43E+08 | 6.80E+07 | Use SF3=N. |
| O2482.005  | 30-ZN-67(P,X)31-GA-66,,SIG | 1.32E+07 | 1.54E+08 | 6.80E+07 | Use SF3=2N. |
| T0170.002  | 8-O-16(P,X)9-F-16,,DA/DE | 1.72E+07 | 1.66E+08 | 4.90E+08 | (Ok) |

**Distribution:**

a.koning@iaea.org

abhihere@gmail.com

aloks279@gmail.com

bknayak@barc.gov.in

daniela.foligno@oecd-nea.org

dbrown@bnl.gov

draj@barc.gov.in

exfor@oecd-nea.org

franco.michel-sendis@oecd-nea.org

fukahori.tokio@jaea.go.jp

ganesan555@gmail.com

gezg@ciae.ac.cn

iwamoto.osamu@jaea.go.jp

jmwang@ciae.ac.cn

kaltchenko@kinr.kiev.ua

kenya.suyama@oecd-nea.org

kimdh@kaeri.re.kr

kimura.atsushi04@jaea.go.jp

l.vrapcenjak@iaea.org

manuel.bossant@oecd-nea.org

masaaki@nucl.sci.hokudai.ac.jp

michael.fleming@oecd-nea.org

mmarina@ippe.ru

nicolas.soppera@oecd-nea.org

n.otsuka@iaea.org

nrdc@jcprg.org

odsurenn@gmail.com

ogritzay@ukr.net

ogrudzevich@ippe.ru

otto.schwerer@aon.at

pikulina@expd.vniief.ru

pritychenko@bnl.gov

scyang@kaeri.re.kr

selyankina@expd.vniief.ru

sonzogni@bnl.gov

stakacs@atomki.mta.hu

stanislav.hlavac@savba.sk

sv.dunaeva@gmail.com

tada@nucl.sci.hokudai.ac.jp

taova@expd.vniief.ru

tarkanyi@atomki.hu

vvvarlamov@gmail.com

v.zerkin@iaea.org

vidyathakur@yahoo.co.in

vsemkova@inrne.bas.bg

yolee@kaeri.re.kr

zholdybayev@inp.kz