

Nuclear Data Section
International Atomic Energy Agency
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Memo CP-D/684

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To: Distribution

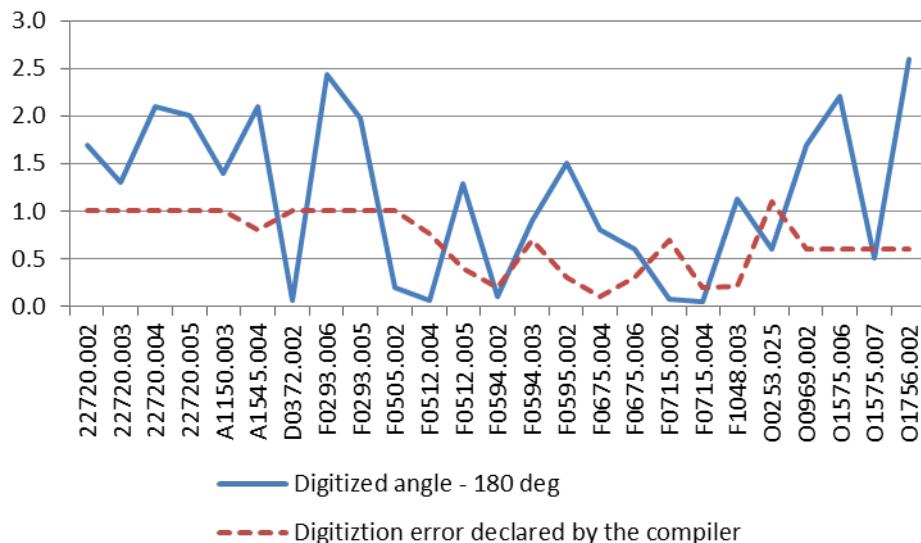
From: N.Otsuka

Subject: Angle larger than 180 deg

The list of subentries where some angle values exceeding 180 deg [1] was examined.
All angles were read from images except for E1208.099 and T0238.005.

Remarks (See also table of this memo)

- Many cases are probably due to an error in digitization of data points very close to 180 deg.
- However, the deviations from 180 deg often exceed the digitization errors declared by compilers (ANG-ERR-D).



- Articles were checked when angles are significantly larger than 180 deg:
 - o 30318.003, T0267.002
Data points are symmetric with respect to 180 deg. Therefore angle values larger than 180 deg are acceptable.
 - o A1493.002, F0484.003, F0567.015, F0608.002, O0443.008, O1033.003
Corrections are necessary. ("Not seen in fig." in the table).
 - o E1208.099, T0238.005
These large angles are given by authors. Reasons are unknown.

List of subentries where angles are larger than 180 deg

Subentry	Heading	Angle (max)	Declared digitize. error	Remark
22720.002	ANG-CM	181.7	1.	
22720.003	ANG-CM	181.3	1.0	
22720.004	ANG-CM	182.1	1.	
22720.005	ANG-CM	182.0	1.	
30318.003	ANG	223.34	0.5	As given in fig., Symmetric
A1150.003	AMG-CM	181.4	1.	
A1493.002	ANG-CM	496.	1.	Not seen in fig.
A1545.004	ANG	182.1	0.8	
C1282.003	ANG-CM	1.85E+02	Not given	
D0372.002	ANG-CM	180.06	1.0	
E1208.099	ANG-CM	5038.	N/A	
F0293.006	ANG-CM	182.4405	1.0	
F0293.005	ANG-CM	181.9734	1.0	
F0484.003	ANG-CM	269.9	0.5	Not seen in fig.
F0505.002	ANG-CM	180.2	1.0	
F0512.004	ANG-CM	180.06	0.76	
F0512.005	ANG-CM	181.29	0.4	
F0567.015	ANG-CM	252.87	0.3	Not seen in fig.
F0594.002	ANG-CM	180.10	0.2	
F0594.003	ANG-CM	180.90	0.7	
F0595.002	ANG-CM	181.50	0.3	
F0608.002	ANG-CM	264.90	0.2	Not seen in fig.
F0675.004	ANG-CM	180.80	0.1	
F0675.006	ANG-CM	180.60	0.3	
F0715.002	ANG-CM	180.07	0.7	
F0715.004	ANG-CM	180.05	0.2	
F1048.003	ANG-CM	181.12	0.211	
O0253.025	ANG-CM	180.6	1.1	
O0443.008	ANG-CM	195.9	0.8	Not seen in fig.
O0969.002	ANG-CM	181.7	0.6	
O1033.003	ANG	194.2	0.5	Not seen in fig.
O1575.006	ANG-CM	182.2	0.6	
O1575.007	ANG-CM	180.5	0.6	
O1756.002	ANG-CM	182.6	0.6	
T0238.005	ANG-CM	196.2	N/A	As given in fig.
T0267.002	ANG-CM	192.3	0.2	As given in fig., Symmetric

Reference

[1] V. Zerkin, E-mail to NRDC (10 Feb. 2011).

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