Release notes for ENDF/B Development e-021_Sc_000 evaluation

October 13, 2016

- `fudge-4.0` Warnings:
  1. Mislabled emitted particle
     Reading ENDF file: ../e-021_Sc_000.endf (Error # 0): ZAP messed up

     ```
     WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
     ```
  2. FIXME: Generic fudge unimplemented message
     reaction label 1: e- + Sc + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

     ```
     WARNING: Checking not yet implemented for energyLoss type data
     ```
  3. FIXME: Generic fudge unimplemented message
     reaction label 2: e- + Sc [excitation] / Product: e- (Error # 0): Generic unimp (c)

     ```
     WARNING: Checking not yet implemented for energyLoss type data
     ```
- `fudge-4.0` Errors:
  1. Calculated and tabulated thresholds don't agree
     reaction label 0: e- + Sc [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

     ```
     WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
     ```
  2. Calculated and tabulated thresholds don't agree
     reaction label 1: e- + Sc + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

     ```
     WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
     ```
  3. Calculated and tabulated thresholds don't agree
     reaction label 2: e- + Sc [excitation] / Cross section: (Error # 0): Threshold mismatch

     ```
     WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
     ```
  4. Calculated and tabulated thresholds don't agree
     reaction label 3: e- + e- + Sc1s1/2 / Cross section: (Error # 0): Threshold mismatch

     ```
     WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4465.8 eV!
     ```
  5. Calculated and tabulated thresholds don't agree
     reaction label 4: e- + e- + Sc2s1/2 / Cross section: (Error # 0): Threshold mismatch

     ```
     WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 494.29 eV!
     ```
  6. Calculated and tabulated thresholds don't agree
     reaction label 5: e- + e- + Sc2p1/2 / Cross section: (Error # 0): Threshold mismatch

     ```
     WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 413.68 eV!
     ```
  7. Calculated and tabulated thresholds don't agree
     reaction label 6: e- + e- + Sc2p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 408.86 eV!
```

8. Calculated and tabulated thresholds don't agree
   reaction label 7: e- + e- + Sc3s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 60.91 eV!
```

9. Calculated and tabulated thresholds don't agree
   reaction label 8: e- + e- + Sc3p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 39.6 eV!
```

10. Calculated and tabulated thresholds don't agree
    reaction label 9: e- + e- + Sc3p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 39.06 eV!
```

11. Calculated and tabulated thresholds don't agree
    reaction label 10: e- + e- + Sc3d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7.08 eV!
```

12. Calculated and tabulated thresholds don't agree
    reaction label 11: e- + e- + Sc3d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7.04 eV!
```

13. Calculated and tabulated thresholds don't agree
    reaction label 12: e- + e- + Sc4s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.9 eV!
```

- `xsectplotter` Warnings:

  1. Mislabled emitted particle
     Error: ZAP messed up

```
stderr while processing crossSection

      WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
... [2 more lines]
```