Release notes for ENDF/B Development p-074_W_182 evaluation

December 2, 2016

- `checkr` Warnings:

  1. A previous error halted parsing of the current section
     MAT=7431, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=7431, MF= 1, MT=451
   SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      158 TO     163
```

- `checkr` Errors:

  1. A variable is outside the allowed ENDF range
     MAT=7431, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=7431, MF= 1, MT=451
   MOD =     1 OUT OF RANGE     0 -     0           RECORD NUMBER     158
```

  2. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=7431, MF= 3, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=7431, MF= 3, MT=  2
   SECTION  3/  2 NOT IN DIRECTORY                 RECORD NUMBER     165
```

  3. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=7431, MF= 3, MT= 5 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=7431, MF= 3, MT=  5
   SECTION  3/  5 NOT IN DIRECTORY                 RECORD NUMBER     182
```

  4. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=7431, MF= 6, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=7431, MF= 6, MT=  2
   SECTION  6/  2 NOT IN DIRECTORY                 RECORD NUMBER     250
```

  5. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=7431, MF= 6, MT= 5 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=7431, MF= 6, MT=  5
   SECTION  6/  5 NOT IN DIRECTORY                 RECORD NUMBER     751
```

- `fizcon` Errors:

  1. The mass field (AWI) is incorrectly set.
     MAT=7431, MF= 1, MT=451 (1): Bad mass

```
ERROR(S) FOUND IN MAT=7431, MF= 1, MT=451
    AWI SHOULD BE SET TO  9.98623E-01
```

- `linear` Errors:

1. Negative cross section found
   0: Neg. Sig(E)

```
  Linearize ENDF/B Cross Sections (LINEAR 2015-1)
  -------------------------------------------------------------------------------
  Retrieval Criteria-----------        MAT
  Monitor Mode-----------------        Off
  Minimum Cross Section-------- 1.0000E-10 (Default Option)
... [42 more lines]
```