TRIAC-BATAN
TRISO Analysis Code of BATAN
"Developed by Computational Laboratory, Center for Nuclear Reactor Technology and Safety, BATAN"

Case Title: (describe your problem case here)

TRISO Geometry:

| Outer radius | CFP | SiC | IPyC | buffer | kernel | center |
|---|---|---|---|---|---|---|
| [m] | 4.60E-04 | 4.20E-04 | 3.85E-04 | 3.45E-04 | 2.50E-04 | 0 |

Properties and Operation Parameters:

| SiC Tensile Strength [Pa] | Weibull Modulus | Burnup [FIMA] | "Fission Yield of stable fission gasses, Ff" | Fast Neutron Fluence | Weight ratio of th to U-235 in kernel |
|---|---|---|---|---|---|
| 8.34E+08 | 8.02 | 0.09 | 0.31 | 2.4 | |

Properties and Operation Parameters related with thermal decomposition:

| Alpha | Beta | | | |
|---|---|---|---|---|
| 0.0001 | 4 | | | |
| | -1 | 1401.6 | 0.1 | 10 |

INPUT: Irradiation Temp. Hystory

| | | |
|---|---|---|
| 1 | 0 | 593 |
| 2 | 17 | 833 |
| 3 | 34 | 1023 |
| 4 | 51 | 1093 |
| 5 | 68 | 1123 |
| 6 | 85 | 593 |
| 7 | 102 | 833 |
| 8 | 119 | 1023 |
| 9 | 136 | 1093 |
| 10 | 153 | 1123 |
| 11 | 170 | 593 |
| 12 | 187 | 833 |
| 13 | 204 | 1023 |
| 14 | 221 | 1093 |
| 15 | 238 | 1123 |
| 16 | 255 | 593 |
| 17 | 272 | 833 |
| 18 | 289 | 1023 |
| 19 | 306 | 1093 |
| 20 | 323 | 1123 |
| 21 | 340 | 593 |
| 22 | 357 | 833 |
| 23 | 374 | 1023 |
| 24 | 391 | 1093 |
| 25 | 408 | 1123 |
| 26 | 425 | 593 |
| 27 | 442 | 833 |
| 28 | 459 | 1023 |
| 29 | 476 | 1093 |
| 30 | 493 | 1123 |
| 31 | 510 | 593 |
| 32 | 527 | 833 |
| 33 | 544 | 1023 |
| 34 | 561 | 1093 |
| 35 | 578 | 1123 |
| 36 | 595 | 593 |
| 37 | 612 | 833 |

```
38    629   1023
39    646   1093
40    663   1123
41    680   593
42    697   833
43    714   1023
44    731   1093
45    748   1123
46    765   593
47    782   833
48    799   1023
49    816   1093
50    833   1123
51    850   593
52    867   833
53    884   1023
54    901   1093
55    918   1123
56    935   593
57    952   833
58    969   1023
59    986   1093
60    1003  1123
61  1020    593

      0
      -1    180   1
INPUT: Accident Temp. Hystory

1     0     1033
2     0.0271      1033
3     0.2208      1068
4     1     1160
5     10    1571
6     20    1728
7     30    1752
8     35    1749
9     60    1690
10    90    1605
11    120   1526
12    180   1395

      0
```