<u>Swelling</u>

fission-->2 atoms-->3 times U vol.

Early studies found much higher swelling rate

(Figure)

<u>Temperature Dependence</u>

- **350-500 °C *-* Growth (tearing)**
- **500-600 °C -Aligned pores/Voids**
- **> 600°C - Gas Bubble Swelling**

Al, Mg, and Fe reduce cavitational swelling by reducing grain size and increasing σ_y

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Breakaway Swelling *(Figure)*