Review of NSTXU-CALC-133-002-00 (Thermal Stresses on the OH-TF Coils)

The document is not very clear to me.

1. It is mentioned in the summary that “The objective of this analysis was to estimate the anticipated hoop stresses”, but there is no figure to show hoop stress. And what is the allowable for this hoop stress?
2. Page 6, in Table 3, the thermal expansion coefficient is set to 1.6667E-5/F for epoxy-fibre glass insulation. My number for G10 (warp) is 1.36E-5/degree C, i.e., 0.76E-5/F, quite different. If this thermal expansion coefficient is not as high as 1.6667E-5/F, the max stress in Figure 4 may be lower.
3. Figure 4 and 5 plot Von Mises stress. It is better to create a local cylindrical coordinate system and plot Stheta for the hoop stress of OH coil.
4. Below Figure 4, it is mentioned that “The max stress occurs at the interface between the insulation and the OH coil. This is due to the bonded contact between the two surfaces and can be ignored.”. From Figure 1, the mesh seems TF and OH are not bonded. If there is contact elem between them, can change the setting to allow sliding to avoid this high stress. If the TF inner coil and OH coil are really bonded by epoxy-fibre glass layer, this high thermal stress is a problem.
5. No ENG-033 form.