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FINITE VOLUME METHOD FOR MODELING THE THERMAL ENVIRONMENT TO CARRY OUT  
THERMAL PROTECTION STRUCTURE COUPLING ANALYSIS

**Abstract**

The thermal environment is simulated using finite volume method and the temperature of the thermal structure is calculated using the finite element method. The results for coupling/decoupling of thermal environment and temperature are compared. The compare shows that the temperature of coupling calculation is lower than that of decoupling and the thermal stress of coupling calculation is lower also.

key words: coupling,thermal environment,thermal structure,temperature response,thermal stress