

## #1297: Radioss – Animation Output Best Practice

**Product:** Radioss

**Product Version:** Radioss 12.0 or above

### Topic Objective

Animation output best practice with Radioss.

### Topic Details

Around 20 to 50 animations are necessary to analyze correctly the model behavior.

- e.g.  $T_{\text{freq}} = \text{Final time} / 20$

Recommended requests in the animation files include

#	
/ANIM/DT	
0.000000e+000 5.000000e-003	← Animation file output frequency, $T_{\text{freq}}$
/ANIM/VECT/VEL	← Node translational velocity (displacements on by default)
/ANIM/ELEM/ENER	← Specific energy on elements
/ANIM/ELEM/EPSP	← Plastic strain on elements
/ANIM/ELEM/HOURG	← Hourglass energy on elements
/ANIM/ELEM/VONM	← Von Mises stress on elements
/ANIM/NODA/DMAS	← Mass added on nodes due to mass scaling
/ANIM/VECT/CONT	← Contact force (global for all contacts)

Additional outputs can be set to get more information for shell elements.

#	
/ANIM/SHELL/EPSP/UPPER	} ← Plastic strain on the upper and lower fiber
/ANIM/SHELL/EPSP/LOWER	
/ANIM/SHELL/TENS/STRESS/UPPER	} ← Stress tensor on the upper and lower fiber
/ANIM/SHELL/TENS/STRESS/LOWER	

Additional outputs can be set to get more information for solid elements.

#	
/ANIM/BRICK/TENS/STRESS	} ← Average strain and stress tensor on solid elements*
/ANIM/BRICK/TENS/STRAIN	
/ANIM/GPS/TENS	← Bilinear extrapolated grid point stress data, useful in calculating surface stress in Solid elements