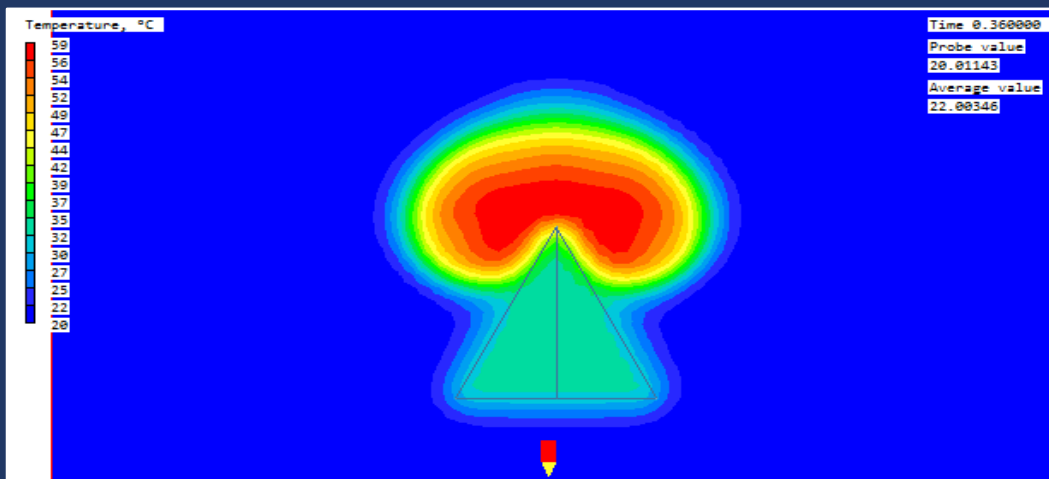
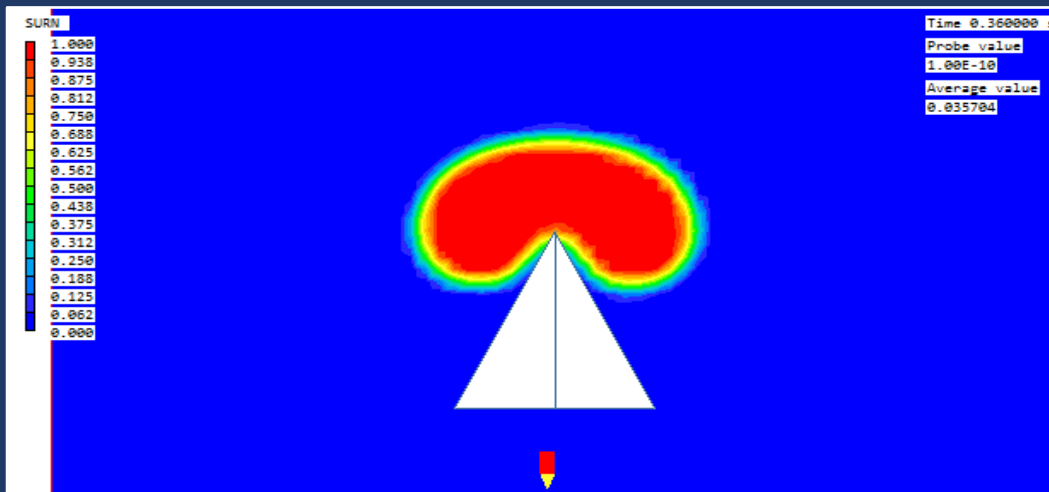


## Extensions to Volume-Of-Fluid Method (VOF)

THINC-WLIC is implemented as an additional VOF method. THINC (Tangent of Hyperbola for Interface Capturing) uses hyperbolic tangent functions to devise a conservative, oscillation-less, smearing-less scheme which is competitively accurate compared to most existing methods with no geometry reconstruction. Multi-dimensional computing is conducted by the WLIC (Weighted Line Interface Calculation) method.

All VOF methods can solve temperature-dependent cases, with proper treatment of temperature in each phase and in immersed solids. The images show a drop of hot fluid falling over a solid obstacle.



Options have been added to make surface tension a linear function of temperature, or to use the Langmuir equation of state which includes a scalar as well as temperature. A constant static contact angle can be specified to model wall adhesion effects.