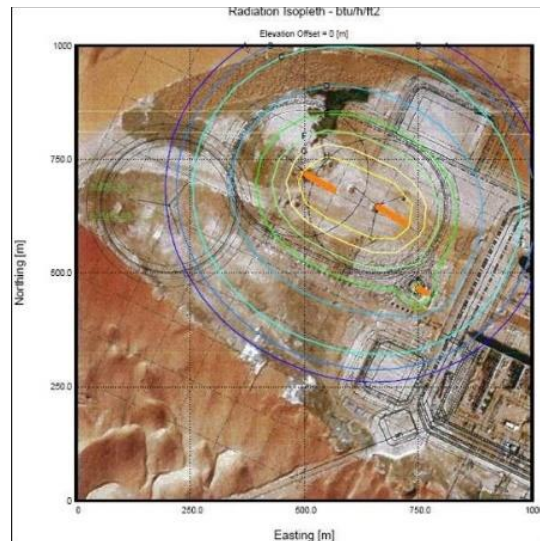


# Flaresim is Now Part of the Symmetry\* Process Software Platform

Angela Solano, P.Eng  
VMG, A Schlumberger Technology

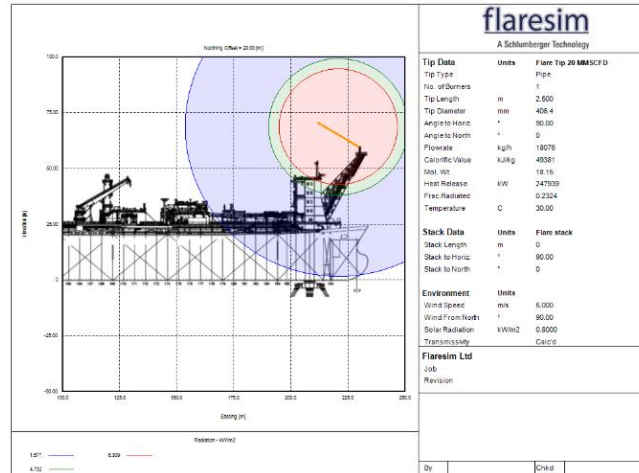


## Along with flare system design and radiation alerts, the new Symmetry Process platform offers detailed flare safety analysis with the built-in power of Flaresim

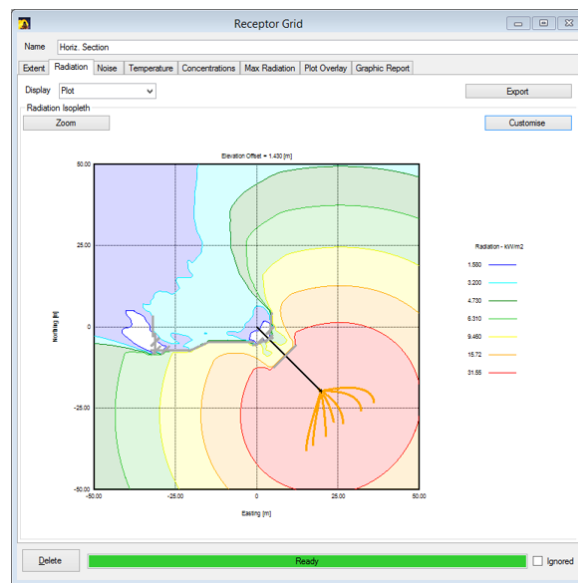
The Symmetry process platform has integrated Flaresim 6.0 as its newest component. This highly specialized software has been used for over 30 years onshore, offshore, and across the industry to ensure that flare operation does not have a significant impact on health, safety, and the environment.

The flare system is the last-resort emergency system of a plant. It is designed to relieve pressurized fluid during an emergency and transport it to the flare for safe disposal. However, combustion at the flare poses its own safety and environmental risks. Flaresim provides accurate modelling of safety concerns at the flare, including thermal radiation, noise, surface temperature, and dispersion of pollutants.

Flare safety modeling can be used to inform high-level design decisions. For example, an appropriate stack design must prevent thermal radiation injuries by creating a safe distance between the flame and personnel. Rigorous modelling can also be used to inform more detailed decisions, like an appropriate flare tip type and numbers of burners.



Existing flares should be re-evaluated to reflect plant revamps and changes in operating conditions. Several mitigation options can be modelled in Flaresim if safety issues are found, including solid radiation shields, water curtains, assist fluids, and configuration changes.



Flare safety issues can be detected and managed more efficiently than ever before. Key Flaresim calculations are available directly within the Symmetry process platform, including radiation and noise alarms, stack sizing, and integration with the Flare Scenario Manager. The full complexity of a Flaresim model can be solved simultaneously with the flare header network, especially as the Symmetry process platform can import and export Flaresim cases. Flaresim 6.0 also shares the Symmetry process platform's thermodynamics package, so fluid properties are calculated rigorously and consistently across these applications.

