PRODUCT OVERVIEW

Vflo™ Distributed Hydrologic Model

Key Applications

- Real-time and predictive hydrologic simulation of watersheds, including reservoirs and diversions

- Landslide and debris flow analysis and prediction

- Post wildfire burn area monitoring and alerts

- Reservoir inflow modeling

- Subsurface flow analysis for RDII and/or collection systems capacity using continuous precipitation

Fast and efficient watershed modeling

Vflo is a physics-based, distributed, gridded hydrologic model that can deliver real-time and predictive model outputs in a fast and efficient manner. It's innovative approach simulates both surface and subsurface runoff to provide outputs of stage, discharge, and inundation for use in watershed planning, high resolution flood prediction, and more. Designed to be compatible with gridded rainfall inputs, including Gauge-Adjusted Radar Rainfall, Vflo provides an efficient, powerful, and cost-effective modeling solution.

VFLO SOLVES EACH GRID CELL FOR MULTIPLE HYDROLOGIC WATER BALANCE COMPONENTS:

- Infiltration rate excess
- Saturation excess
- Subsurface runoff in the watershed
- Evapotranspiration
- Soil moisture
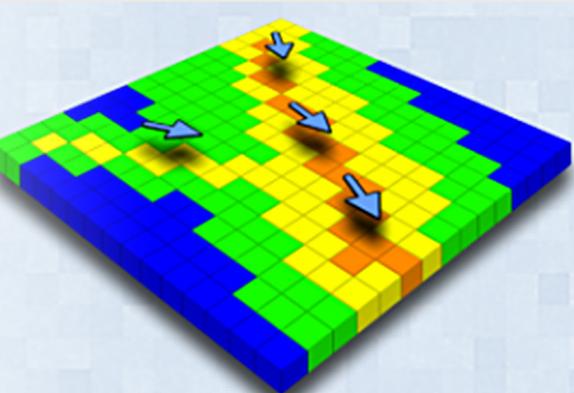
KEY FEATURES

- Integrates watershed hydrology and hydraulics to generate discharge, stage, and mapped inundation within a single modeling platform

- Designed for use with gridded rainfall inputs, including GARR, for a more complete understanding of complex watershed processes

- Provides gridded and rate-driven runoff from both groundwater and surface water for increased accuracy