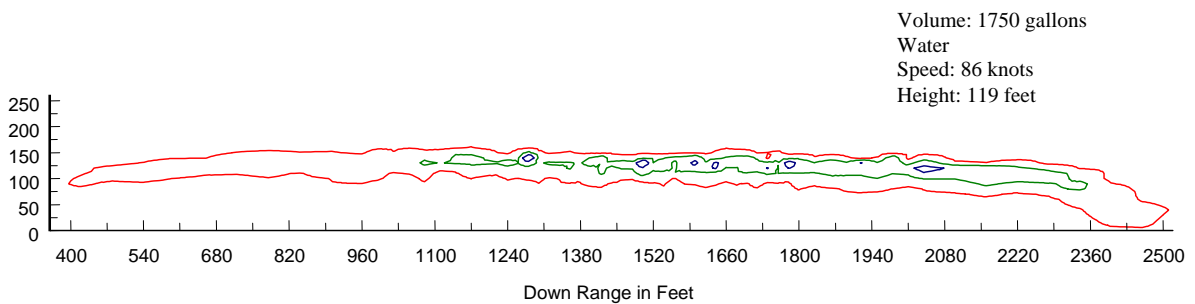
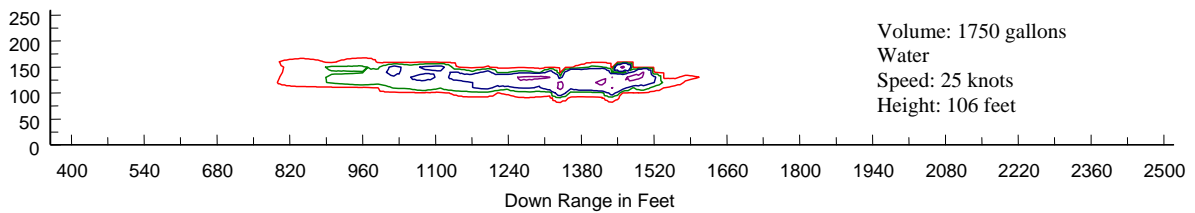




## Drop Speed

Ann Suter, Wildland Fire Chemical Systems – MTDC

Several factors can affect the ground distribution pattern of aerially delivered fire chemicals. These include drop height, drop speed, wind speed and wind direction. The graphs and description below illustrate the effect of drop speed on the ground distribution pattern.



When other factors are held constant or similar, higher speeds will produce longer lengths of lower coverage levels. Increasing drop speed also reduces the areas of higher coverage levels within the drop and increases momentum of the retardant cloud which may make the cloud less susceptible to wind erosion and drift.