

# Effets de la teneur en eau du combustible sur la propagation d'un feu de surface



**Dominique MORVAN, Aymeric LAMORLETTE**  
**Aix-Marseille Université / M2P2 UMR CNRS 7340**  
**[dominique.morvan@univ-amu.fr](mailto:dominique.morvan@univ-amu.fr)**

# Paramètres affectant le comportement des feux de nature

## Topography

- Flat or slopes
- Aspect



## Weather

- Wind
- Temperature
- Relative Humidity
- Precipitation

## Fuel

- Fine or Heavy
- Arrangement & continuity
- Fuel Moisture

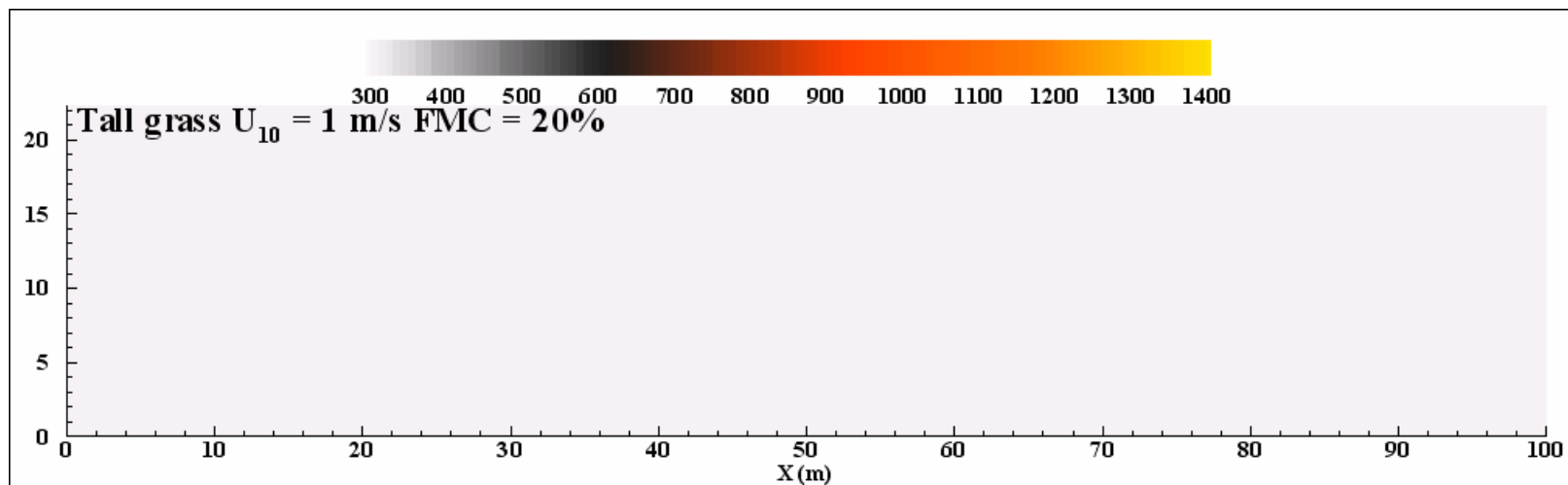
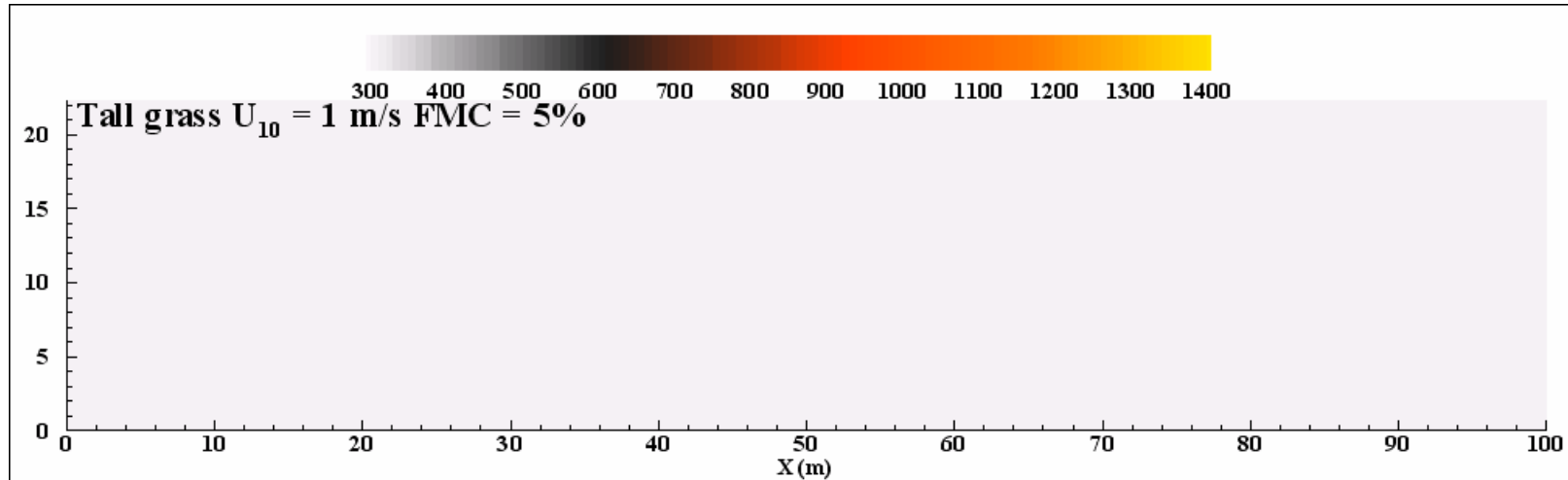


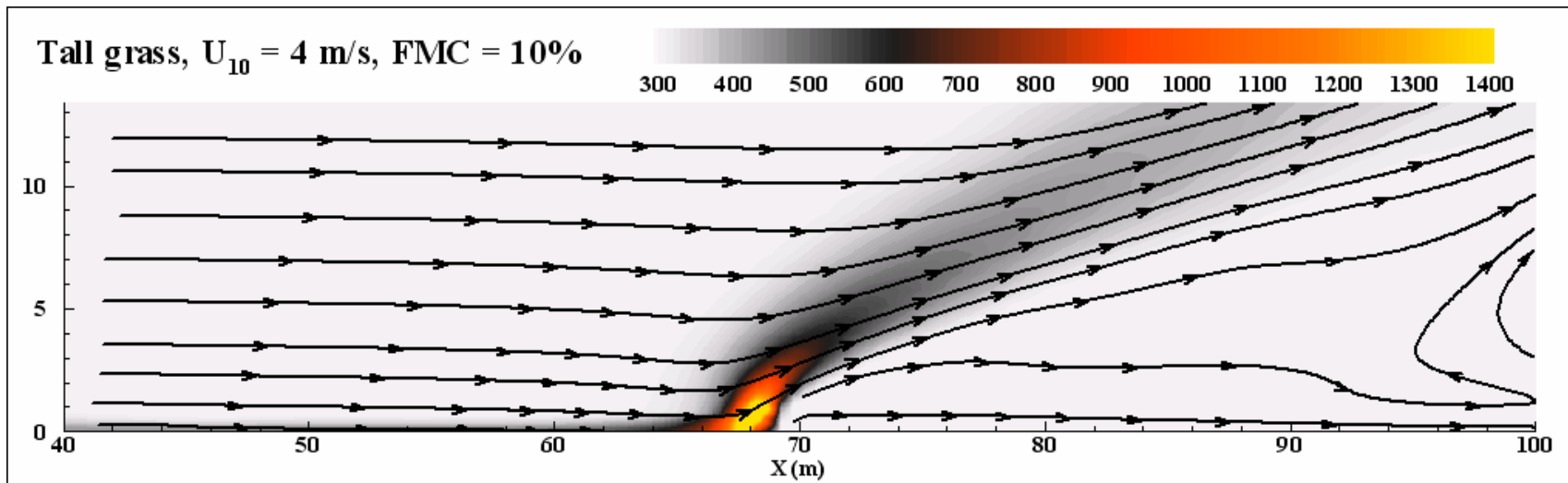
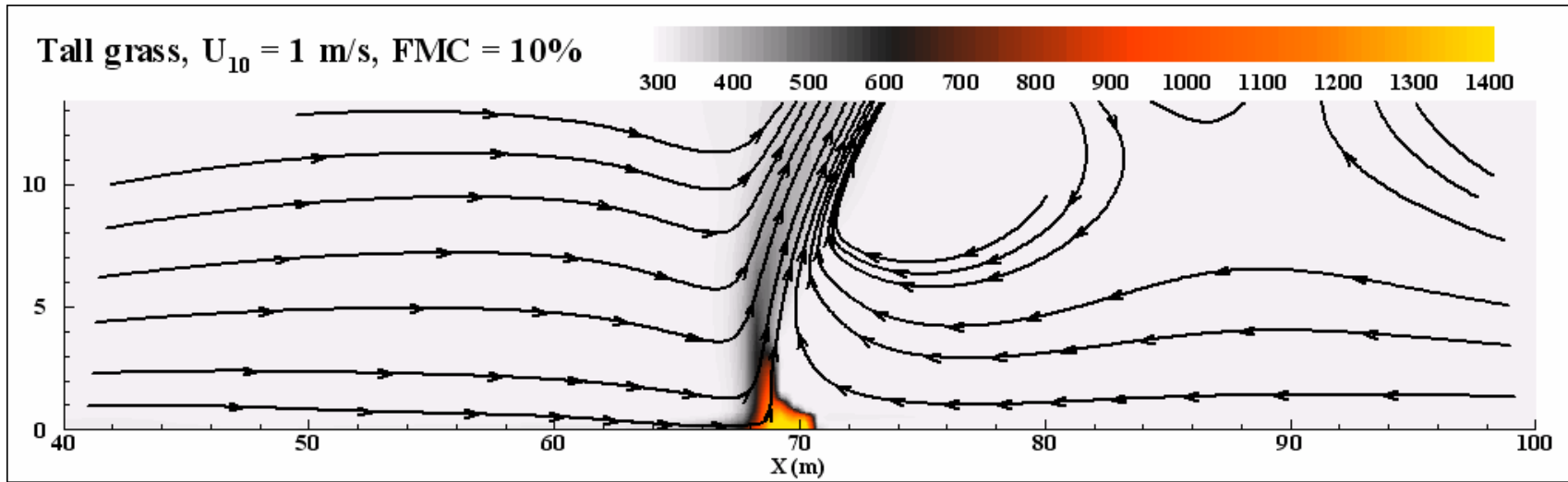
- 
- 
- 
- 

•

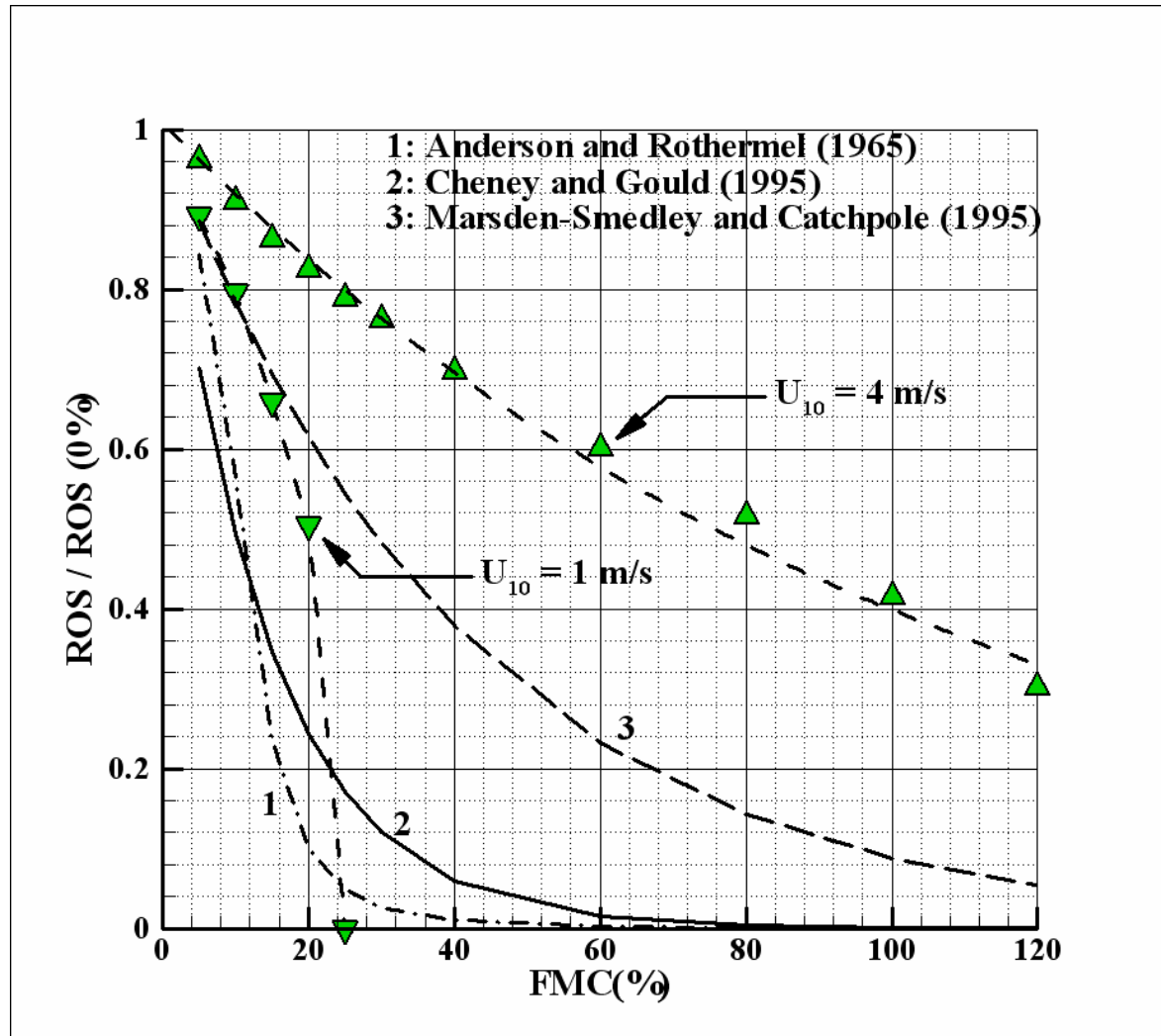


- 
- 
- 
- 
- 
- 
-

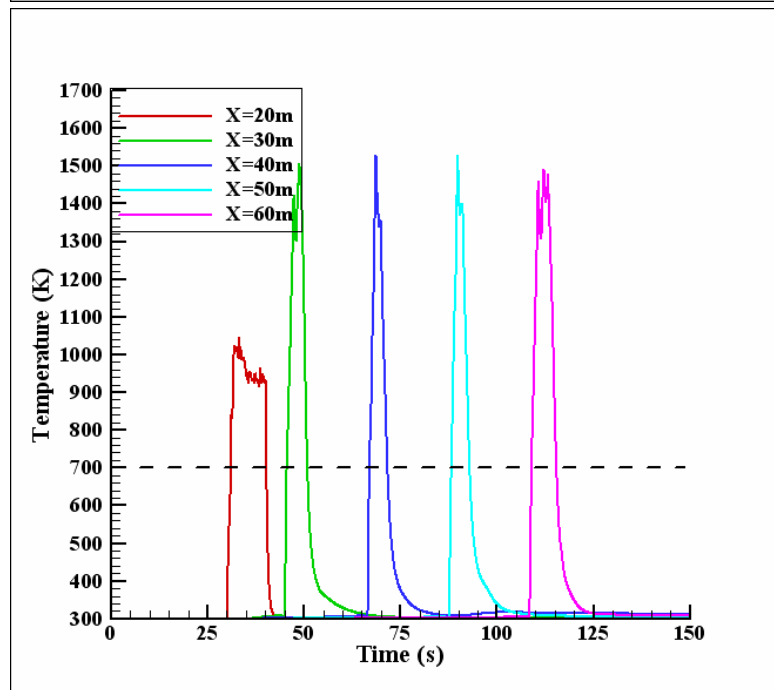
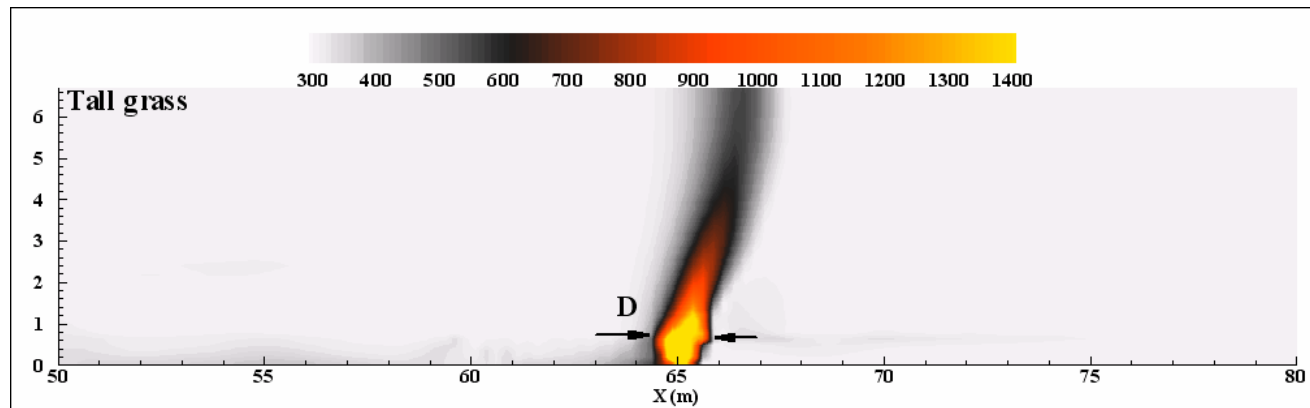




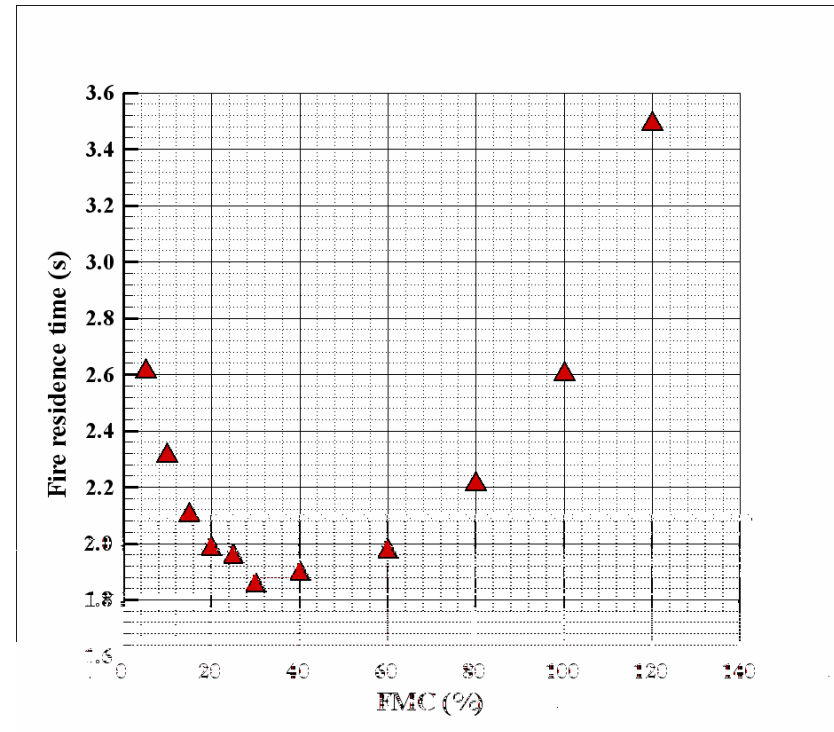
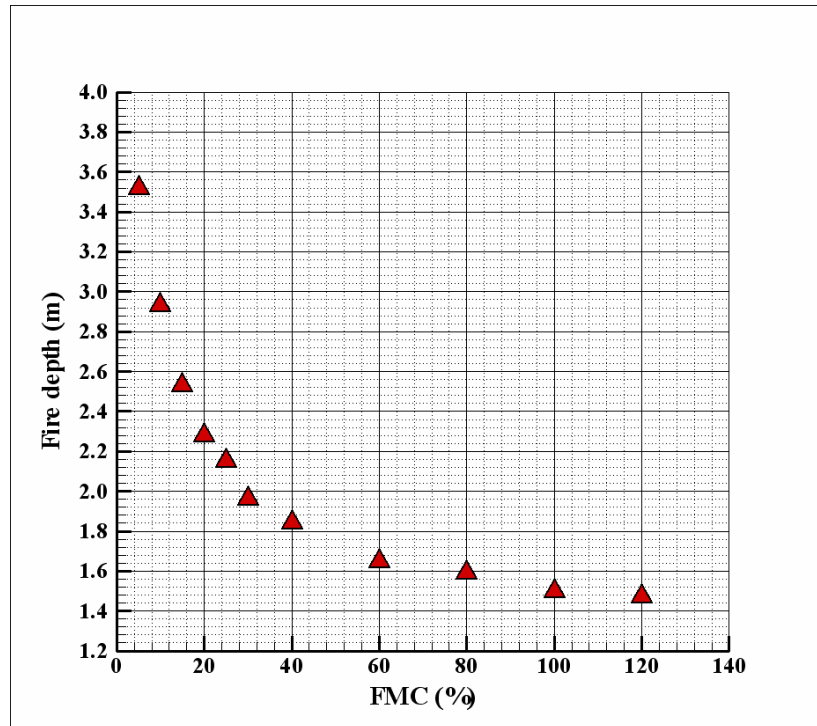




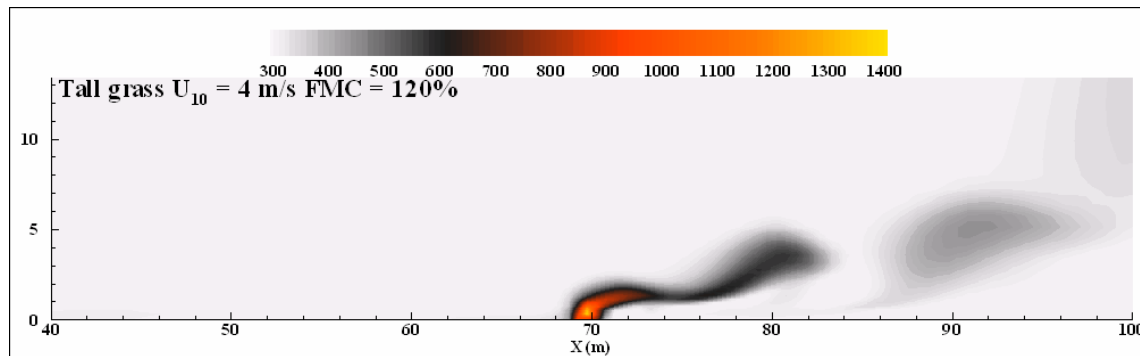
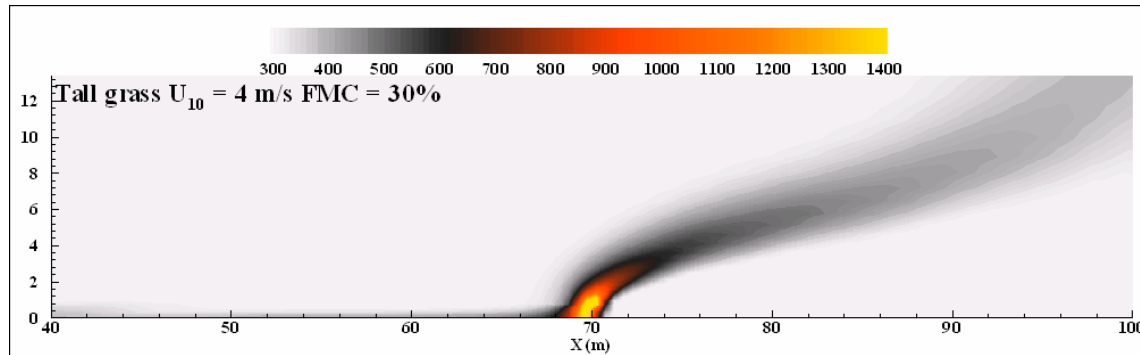
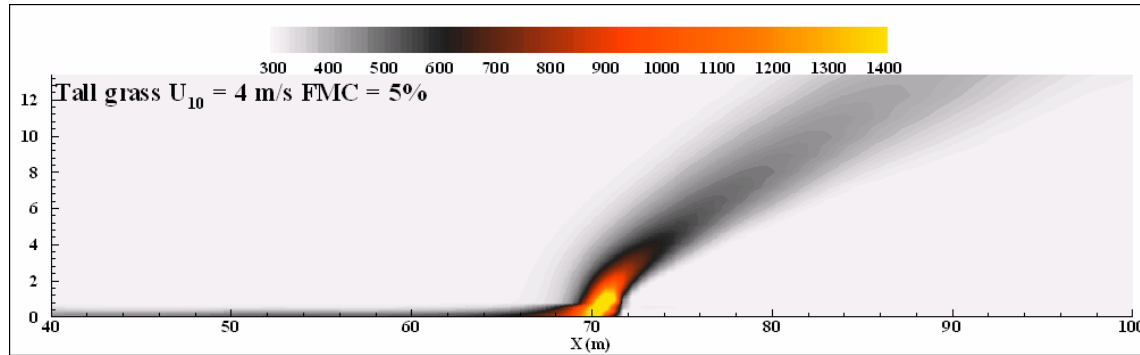




$$D_{Fire} = ROS \times \tau_{Fire}$$

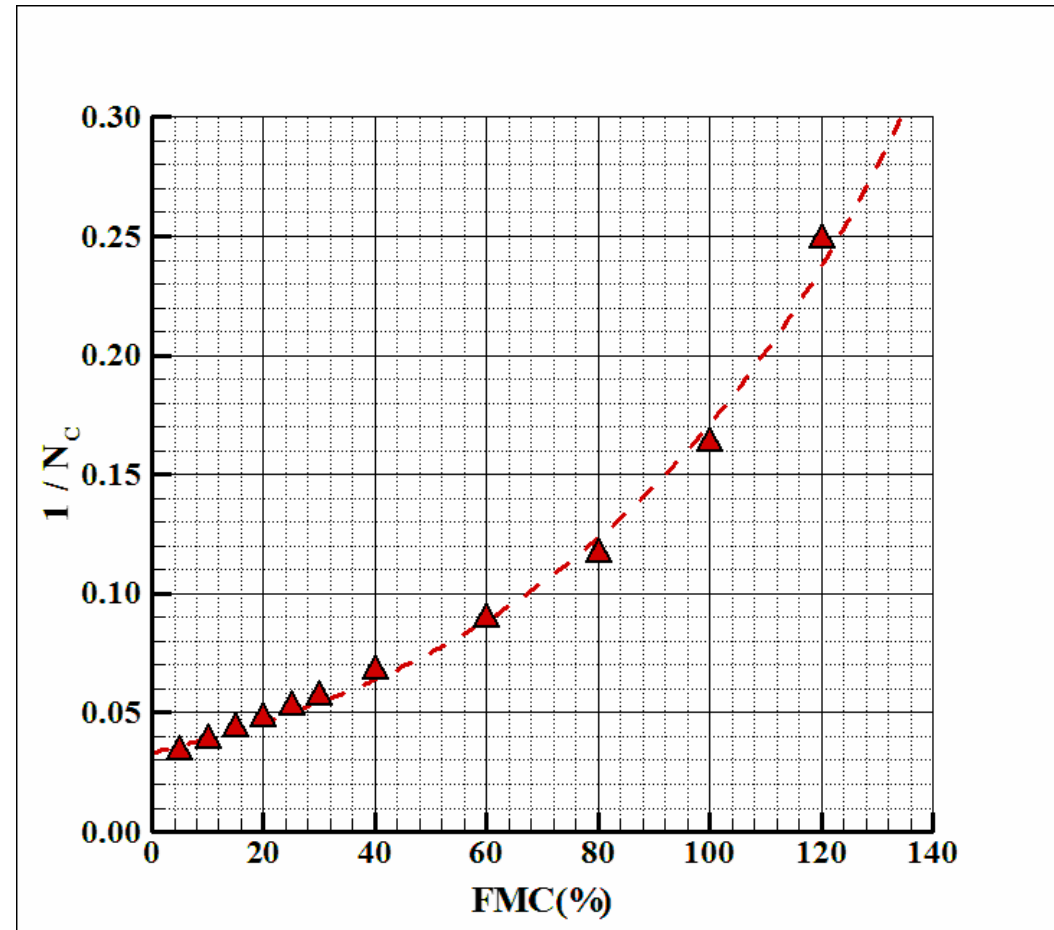


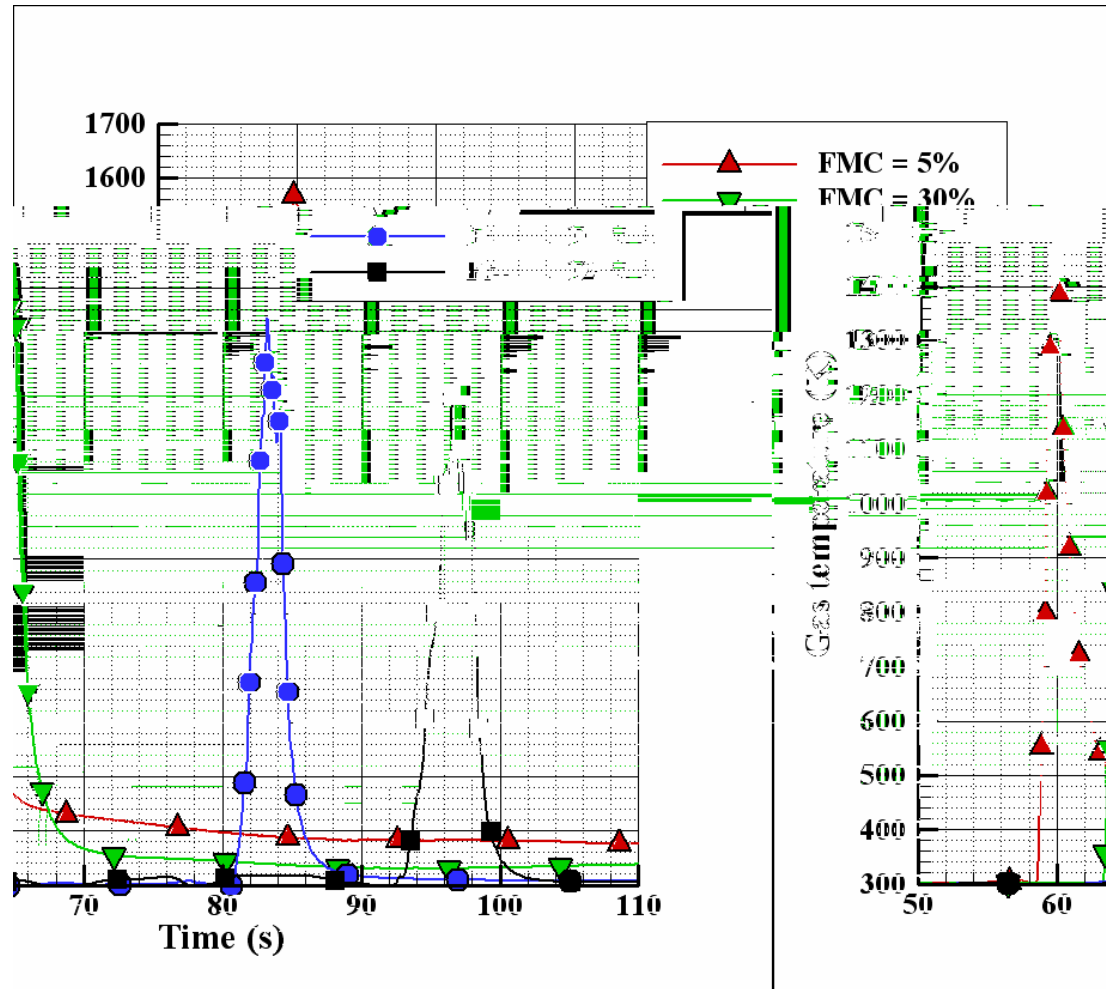
$$\tau_{Fire} = \frac{D_{Fire}}{ROS}$$

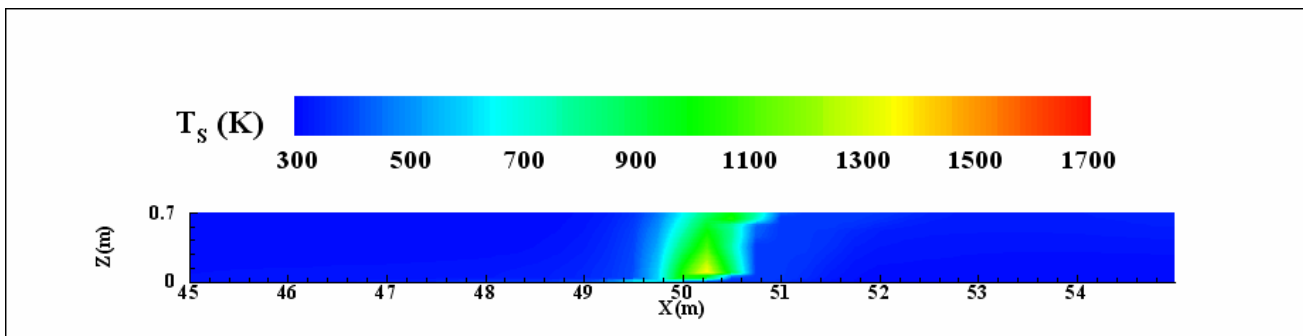
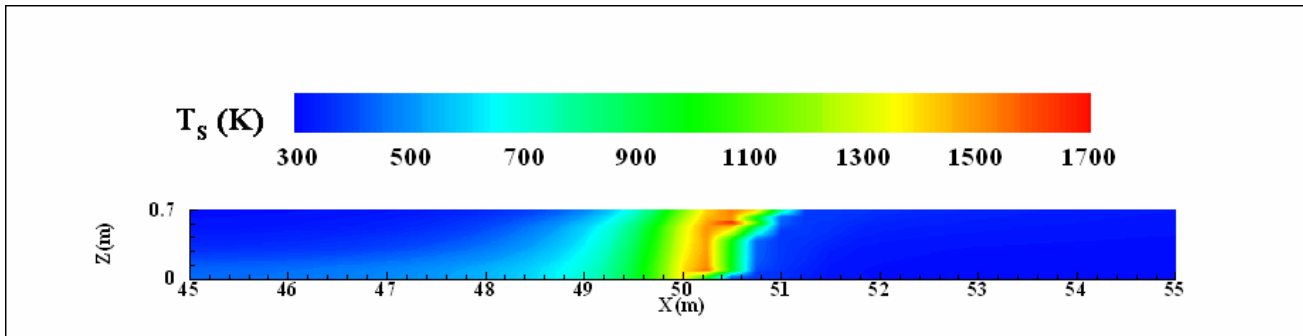
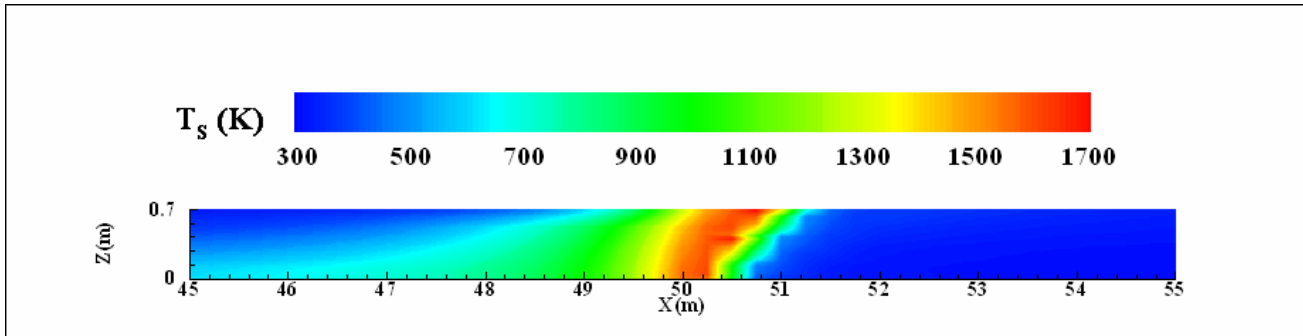


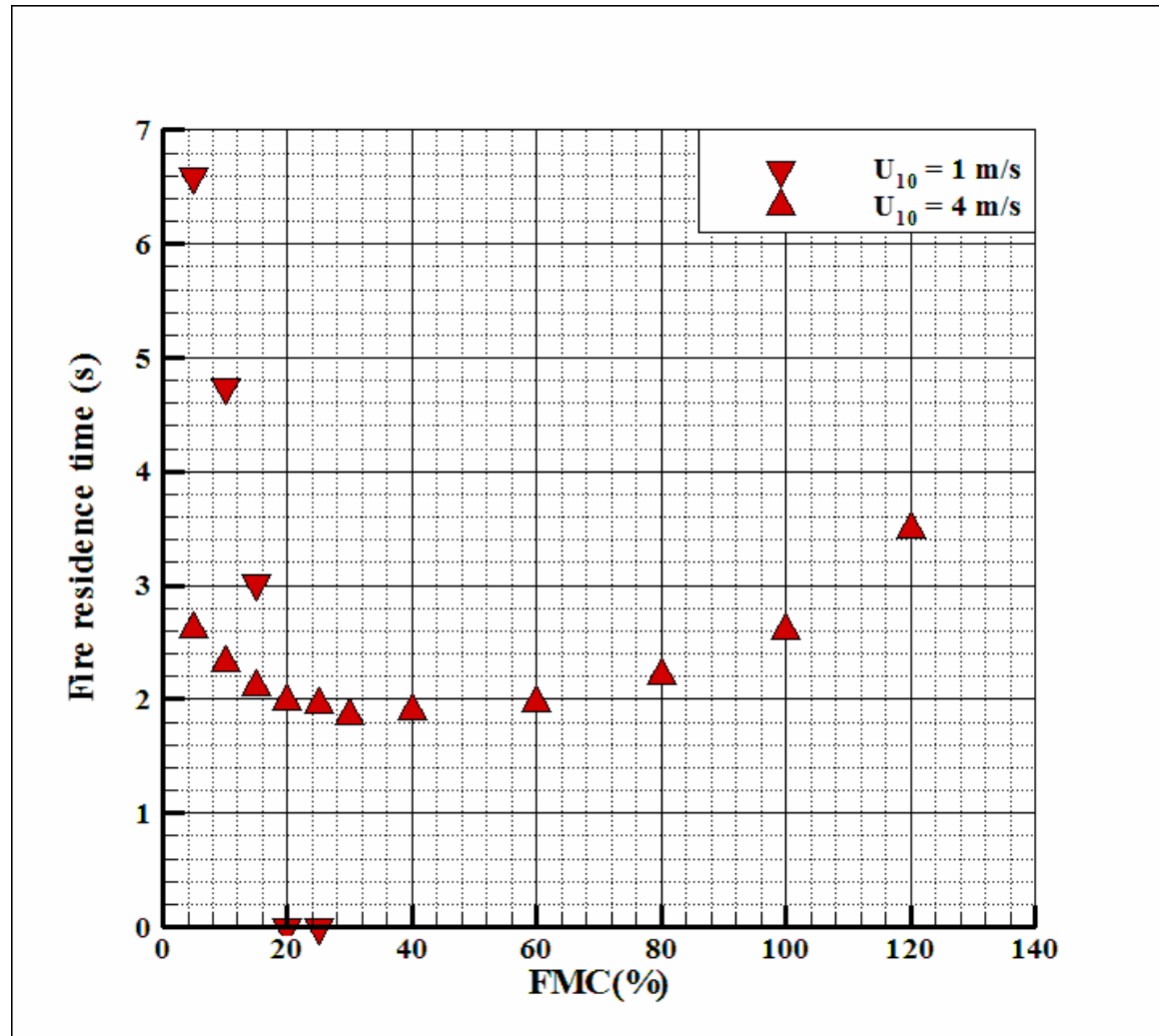
$$\frac{1}{N_C} = \frac{\rho C_P T_0 (U_{10} - ROS)^3}{2gI_B} \approx A \times \exp(B \times FMC)$$

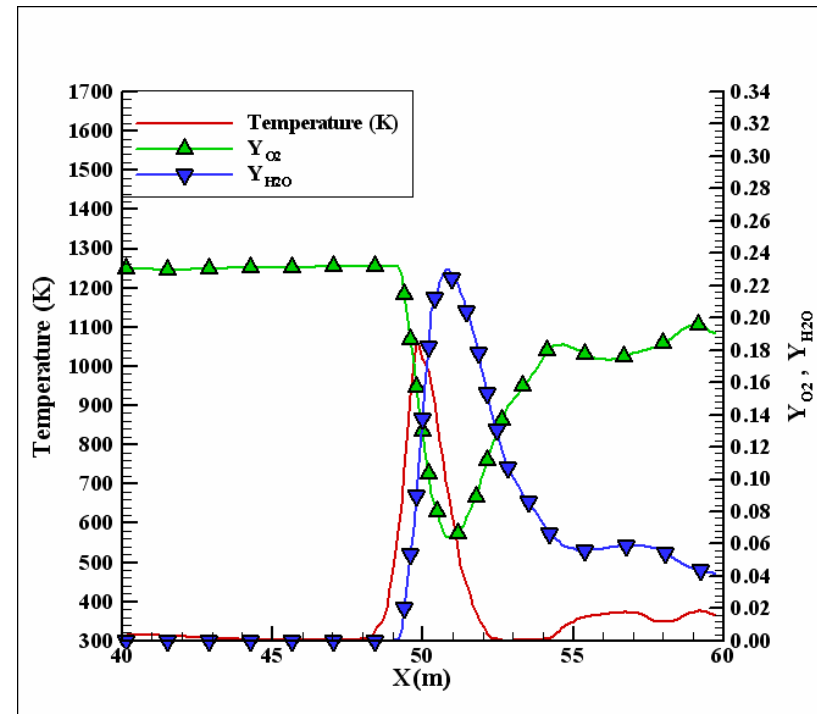
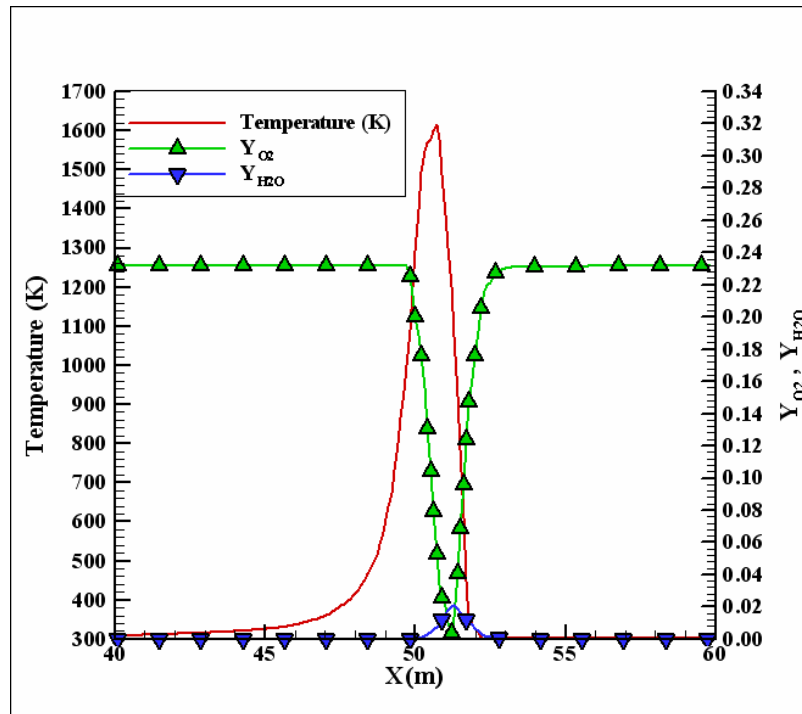
$$A = 0.033 \quad B = 0.016$$













•

•

•

•

•