



High-Velocity Molecular Clouds (HVMCs)

- high galactic latitude (~kpc), high velocity (~200 km/s), high mass (~400 M_{\odot})
- Correlated with HVCs, and symmetric along the Galactic plane

Starburst model to explain HVMCs

- Multiple random supernovae explosions in the inner 10 x 35 x 35 pc region
- One initial molecular cloud with a central density of ~ 1500 cm^{-3} above the supernovae region

MHD Simulation result and conclusion

- reach a latitude ~ 1 kpc at 7 Myr, mass-weighted velocity ~ 190 km/s, molecular mass ~ 850 M_{\odot}
- MCs can be accelerated to high latitude and high velocity by the shock of multiple supernovae without disruption, in which the magnetic field and cooling process can well protect the MCs

