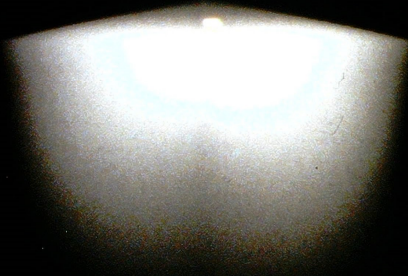
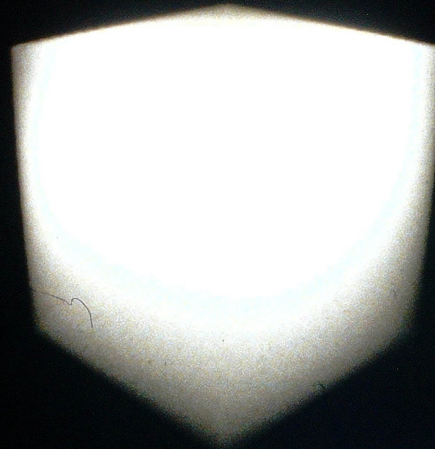


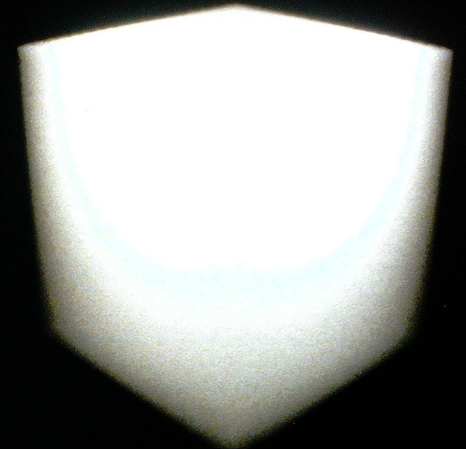
CONSTANT DENSITY



first scatter



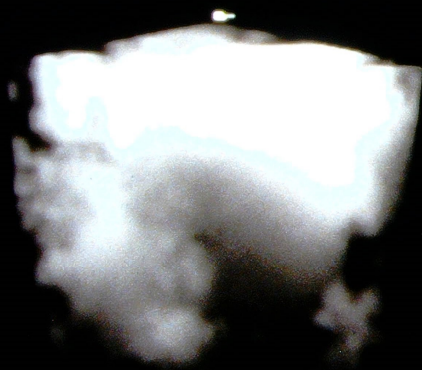
discrete ordinates



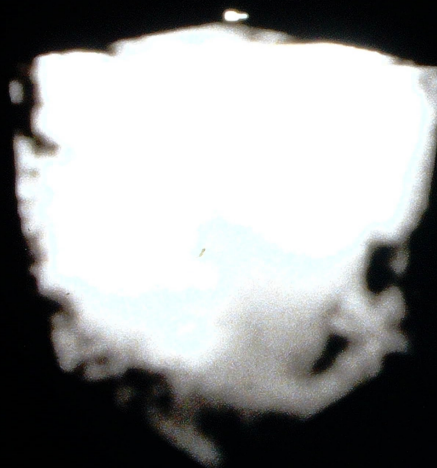
diffusion
approximation

resolution: 32x32x32
density: 0.5
albedo: 0.998
extinction cross-section: 5
size of density: 2

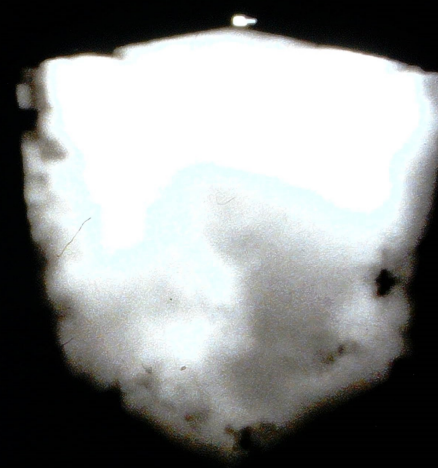
NON CONSTANT DENSITY



first scatter



discrete ordinates



diffusion
approximation

resolution: 32x32x32

average density: 0.5

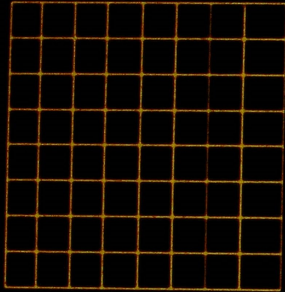
albedo: 0.8

extinction cross-section: 5

size of density: 2

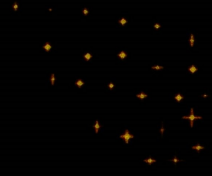
BLOB ELEMENTS versus MULTI-GRID

512 x 512



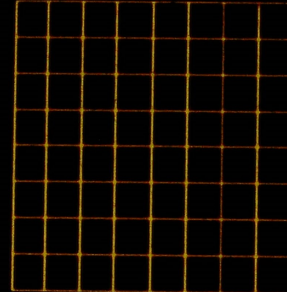
multi-grid

24 blobs



finite elements

512 x 512



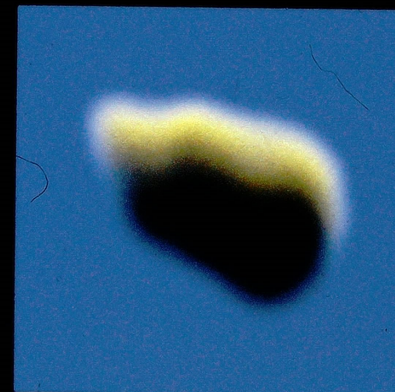
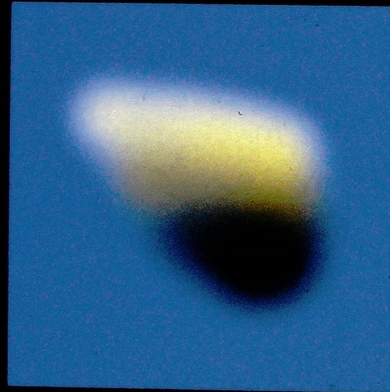
multi-grid

76 blobs

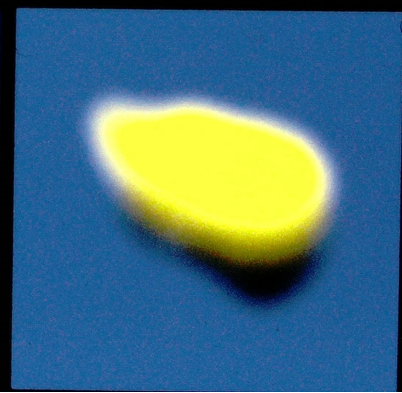
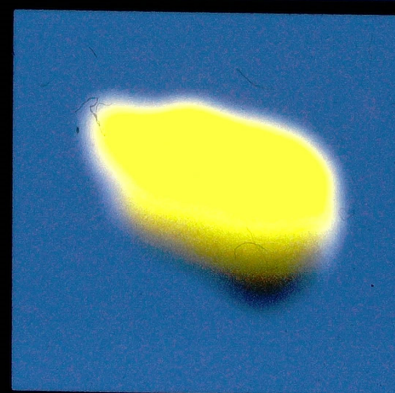
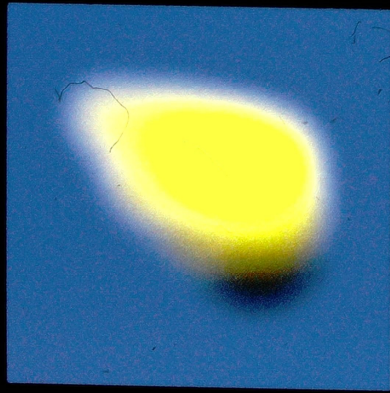


finite elements

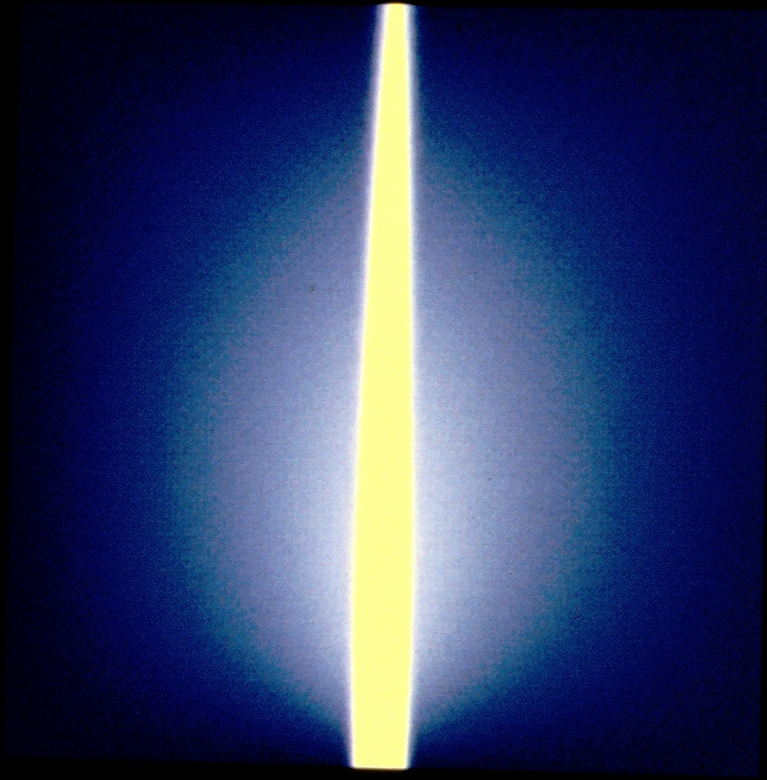
source
intensity



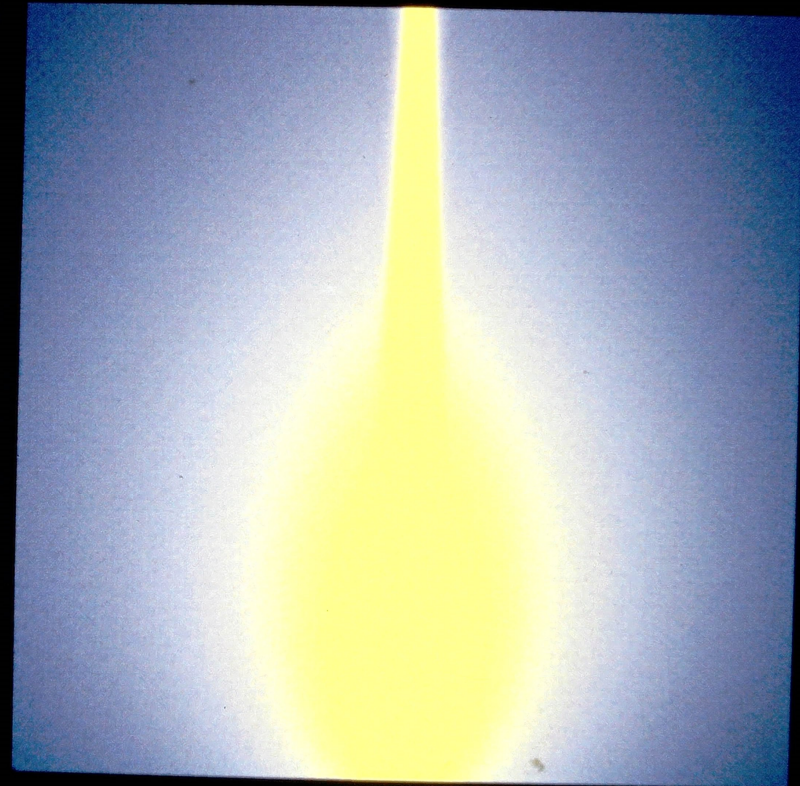
after
diffusion



BOUNDARY CONDITIONS



zero value



zero flux inwards