Using Blender 2.6 for Animation - Topics - Explosions

* Follow instructions for Fracture (see “Fracture” document file) BUT first name object “chunk”
* Make a smoke domain with a voxel data texture (see “Smoke” document file)
* Make each shard have smoke attributes (using my script):
  + You must make the domain named (with a space): “1.Smoke Domain” since the script uses that name.
  + In Notepad++, open “Python integration - SCG - for all separated city chunks, setup smoke starting at frame 200.py”
  + Change “find” criteria from “SCG\_city.” to “chunk” (without dot incase a shard is not numbered)
  + If you are ok with the explosion starting at frame 200, skip the next step
  + Find ob.particle\_systems['SmokeParticles'].**settings.frame\_start**=200.0 and change 200.0 to whatever frame when you want the explosion to start

Find ob.particle\_systems['SmokeParticles'].**settings.frame\_end**=320.0 and change 320.0 to whatever frame when you want the explosion to end (keep “.0” at the end)

Also change bpy.data.objects['1.Smoke Domain'].modifiers['Smoke'].domain\_settings.**point\_cache.frame\_start**=200

bpy.data.objects['1.Smoke Domain'].modifiers['Smoke'].domain\_settings.**point\_cache.frame\_end**=320

accordingly but without “.0” since they can only be whole numbers.

* + Click “Edit”, “Select All”, “Copy”
  + Go back to Blender and change the view to a Python Console view
  + Move the mouse over the Python Console
  + Paste, Enter, Enter
* It is also good to make a light in the middle with animated energy—go to the frame you want then right-click energy then Insert Keyframe (0, wait 2 frames, 1, wait 5 frames, .2, then if needed fade out to zero later).
* Click Blender Render & change to Blender Game
* Now would be a good time to Add Empty, put in the center, change Physics to Static, Actor, Radius about 1.5 (*this sets power of explosive force*), Collision Bounds, & change Bounds to Sphere.
* Make sure you go to frame 200 or whenever you want the explosion to start.
* Click Game, make sure Record Animation is checked (leave it if already checked), hit play, then when stops moving or you are ready for the objects to stop, hit Esc.
* Now the physics simulation is recorded for later rendering, starting at the frame you clicked before pressing ‘p’, so go back to Blender Render.

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| TIP: If you started the simulation too early & to prevent shards from drifting early, Go to Dopesheet [you may then want to hide other types of keyframes: click Filters then unpush all buttons except Object  ], hit ‘a’ to select all keyframes (or again to deselect all then ‘b’ & draw box around ALL chunk keyframes, & press ‘g’ then move them so they start at 200 or whatever frame you set as start frame above). |