

SubFrame Velocities – Tip for solving fast moving Flip Collision Object

Paraphrased idea from James Charles below – hip file provided by James as well.

Solution for when you have a flip collision object moving very quickly that even turning up substeps does not resolve the issue (character running thru water or a cup being carried). Turning up substeps on the dopnet will not calculate subframe velocities on your collider so you must set this up in sops first. After you read in the object, add a time blend that feeds into a trail node set to compute velocity and it will evaluate the subframe velocity data. You will still need substeps to calculate the movement inbetween frames, but now the subframes will actually have velocity data to calculate with.

Comment: James has an excellent sample file and if you dive into the object there is a switch node where you can see the difference. Set it to 0 to see what it looks like and step two frames – there are gaps in the “water path” but with the velocity information (switch set to 1) the water behaves intuitively. Thank you James!

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