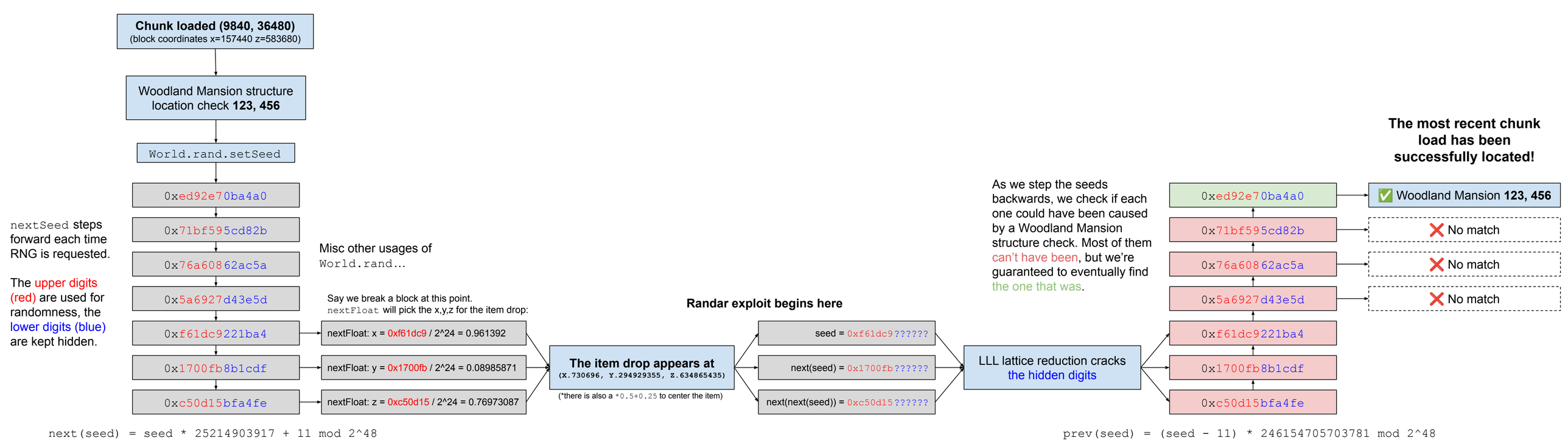
Chunk loaded (9840, 36480)
(block coordinates x=157440 z=583680)
Woodland Mansion structure location check 123, 456
World.rand.setSeed
0xed92e70ba4a0
0x71bf595cd82b
0x76a60862ac5a
0x5a6927d43e5d
0xf61dc9221ba4
0x1700fb8b1cdf
0xc50d15bfa4fe
nextSeed steps forward each time RNG is requested.
The upper digits (red) are used for randomness, the lower digits (blue) are kept hidden.
Misc other usages of World.rand...
Say we break a block at this point.
nextFloat will pick the x,y,z for the item drop:
nextFloat: x = 0xf61dc9 / 2^24 = 0.961392
nextFloat: y = 0x1700fb / 2^24 = 0.08985871
nextFloat: z = 0xc50d15 / 2^24 = 0.76973087
The item drop appears at
(x.730696, y.294929355, z.634865435)
(*there is also a *0.5+0.25 to center the item)
Randar exploit begins here
seed = 0xf61dc9??????
next(seed) = 0x1700fb??????
next(next(seed)) = 0xc50d15??????
LLL lattice reduction cracks the hidden digits
As we step the seeds backwards, we check if each one could have been caused by a Woodland Mansion structure check. Most of them can't have been, but we're guaranteed to eventually find the one that was.
0xed92e70ba4a0
0x71bf595cd82b
0x76a60862ac5a
0x5a6927d43e5d
0xf61dc9221ba4
0x1700fb8b1cdf
0xc50d15bfa4fe
✅ Woodland Mansion 123, 456
❌ No match
❌ No match
❌ No match
The most recent chunk load has been successfully located!
next(seed) = seed * 25214903917 + 11 mod 2^48
prev(seed) = (seed - 11) * 246154705703781 mod 2^48