

Kerbal Space Program - Bug #9392

Asteroids now spawn with a mass of 150t, regardless of class.

04/21/2016 11:31 PM - ikzann

Status:	Closed	Start date:	04/21/2016
Severity:	Normal	% Done:	100%
Assignee:			
Category:	Gameplay		
Target version:			
Version:	1.1.0	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:			

Description

Title says it all. I've tested class E but it seems like others on the forums have tested others.

History

#1 - 04/22/2016 12:35 PM - Squelch

- Status changed from New to Need More Info

Please could some evidence and examples be provided? How is this phenomenon being presented? Does it manifest in any particular game type, or all?

#2 - 04/22/2016 05:11 PM - TrekkieTechie

Please could some evidence and examples be provided?

What do you need? Screenshots? Save files?

For what it's worth, I can offer up into "evidence" my own testimonial -- the three E-class asteroids I've intercepted after upgrading to 1.1 have been exactly 150 tons, which should put them square in the C class. Here are other user testimonials:

<http://forum.kerbalspaceprogram.com/index.php?/topic/137641-ksp-11-asteroid-mass/>

How is this phenomenon being presented?

E-class asteroids appear their expected size, but only mass 150 tons (per the right-click context menu). This low mass is confirmed both by mining (resources are depleted quickly) and maneuverability (the asteroids are much easier to control).

Does it manifest in any particular game type, or all?

I have only played sandbox, so I can vouch for the issue appearing there. I haven't checked other modes, or other classes of asteroid.

#3 - 04/22/2016 07:21 PM - Kron

- File *alcass.jpg* added

- File *eclass.jpg* added

Here are images for an A and an E class asteroid. I checked this for most of the asteroid classes on an unmodded 1.1 install (steam win64) in sandbox mode. The spatial dimensions seem correct, but the mass is always 150t. I think the mass is coming directly from the potatoroid config file. The 150t mass plus the vessel mass is shown in the vessel information tab so its not just the right click menu.

The bug is fairly easy to recreate. You just need to track an asteroid and then send a vessel with a claw to catch it and check its mass.

#4 - 04/29/2016 11:41 PM - ikzann

Can confirm it also happens in career mode. Seems like this should be a pretty easy fix... I would make a mod to fix it but don't want to unless it's going to be a long time before Squad fixes.

#5 - 04/30/2016 07:03 PM - babyaaronman

Confirmed as well. Class A asteroid is 150 tons in Career Mode.

#6 - 05/29/2016 10:21 PM - achurch

Just for the record, this is still present in 1.1.2 (Linux 64-bit, though I doubt it's a platform-specific issue).

Upgraded the Tracking Station to level 3, got 7 asteroids (1 class B, 3 class C, 1 class D, 2 class E), checked the save file and all had a mass of exactly 150 tons.

#8 - 06/09/2016 06:09 AM - LimB

- Status changed from *Need More Info* to *Updated*

- % Done changed from 0 to 10

In my career game started after 1.1.2 was released I have encountered three asteroids, one each of class A, C, and E. All were exactly 150.00000t

#9 - 06/26/2016 05:35 AM - achurch

This was listed as fixed in the version 1.1.3 release notes, but unfortunately it's not. I took the same save I tested in my comment above, tracked all untracked asteroids, waited for a new one to spawn, tracked that one (to see its name), checked its mass in the save file, and the mass was exactly 150t despite being class A.

#10 - 07/10/2016 09:53 AM - TriggerAu

- Status changed from *Updated* to *Closed*

- % Done changed from 10 to 100

Resolved in 1.1.3

#11 - 07/10/2016 09:53 AM - TriggerAu

- Status changed from *Closed* to *Updated*

- % Done changed from 100 to 10

Woops - wrong ticket. apologies

#12 - 07/10/2016 09:54 AM - TriggerAu

Mind sharing the save file AChurch?

#13 - 07/10/2016 04:13 PM - achurch

- File *classE-150t.sfs* added

That particular save has grown huge (>7MB), but it's easy to reproduce by starting a new sandbox save and going to the tracking station. I've attached one that gave me a class E with mass = 150.

#14 - 07/19/2016 12:43 PM - sal_vager

- File *screenshot858.png* added

- File *screenshot859.png* added

- File *quicksave #15.sfs* added

But did you actually go to the asteroid?

All new asteroids spawn with a 150 ton placeholder mass, and they update when the player enters physics range.

For example here's a roid that appeared in my save today:

```
VESSEL
{
  pid = 21633133bec84cbe97a2bec13fb89c91
  name = Ast. WPL-716
  type = SpaceObject
  sit = ORBITING
  landed = False
  landedAt =
  splashed = False
  met = 5807659.11671695
```

```

lct = 5807659.11671695
lastUT = -1
root = 0
lat = 0.200624179661383
lon = -109.647367331214
alt = 14629478014.6593
hgt = -1
nrm = 0,1,0
rot = -0.1706567,-0.2535166,-0.9518965,0.02233103
CoM = 0,0,0
stg = 0
prst = False
ref = 0
ctrl = False
ORBIT
{
  SMA = 14660828627.4783
  ECC = 0.0746237337589231
  INC = 0.202173721774231
  LPE = 189.202052307985
  LAN = 327.166904287949
  MNA = 0.164141750262757
  EPH = 8880134.20216617
  REF = 0
}
PART
{
  name = PotatoRoid
  cid = 0
  uid = 1535361249
  mid = 1535361249
  launchID = 0
  parent = 0
  position = 0,0,0
  rotation = 0,0,0,1
  mirror = 1,1,1
  symMethod = Radial
  istg = 0
  dstg = 0
  sqor = 0
  sepI = 0
  sidx = 0
  attm = 0
  srfN = None, -1
  mass = 150
  temp = -1
  tempExt = 0
  tempExtUnexp = 0
  expt = 0.1
  state = 0
  connected = True
  attached = True
  flag =
  rTrf =
  modCost = 0
}

```

It's class A and 150 tons, note the details are incomplete.

And here's the same roid when I get within physics range:

```

VESSEL
{
  pid = 21633133bec84cbe97a2bec13fb89c91
  name = Ast. WPL-716
  type = SpaceObject
  sit = ORBITING
  landed = False
  landedAt =
  splashed = False
  met = 627794.751356091
  lct = 5807659.11671695
  lastUT = 6435346.45971576
  root = 0
  lat = 0.195543594712764

```

```

lon = -250.997274547316
alt = 14213829842.9684
hgt = -1
nrm = 0,1,0
rot = -0.4895314,-0.2301238,-0.8340202,0.1086848
CoM = 0,0,0
stg = 0
prst = False
ref = 0
ctrl = False
cPch = 0
cHdg = 0
cMod = -1
ORBIT
{
  SMA = 14660828627.4783
  ECC = 0.0746237337589231
  INC = 0.202173721774231
  LPE = 189.202052307985
  LAN = 327.166904287949
  MNA = 0.164141750262757
  EPH = 8880134.20216617
  REF = 0
}
PART
{
  name = PotatoRoid
  cid = 0
  uid = 1535361249
  mid = 1535361249
  launchID = 0
  parent = 0
  position = 0,0,0
  rotation = 0,0,0,1
  mirror = 1,1,1
  symMethod = Radial
  istg = 0
  dstg = 0
  sqor = 0
  sepI = 0
  sidx = 0
  attm = 0
  srfN = , -1
  mass = 8.417953
  temp = 254.264052112611
  tempExt = 254.264052022226
  tempExtUnexp = 254.264052112611
  expt = 0.1
  state = 0
  connected = True
  attached = True
  flag =
  rTrf = PotatoRoid (Ast. WPL-716)
  modCost = 0
  EVENTS
  {
  }
  ACTIONS
  {
  }
  PARTDATA
  {
  }
  MODULE
  {
    name = ModuleAsteroid
    isEnabled = True
    seed = 33206747
    AsteroidName = Ast. WPL-716
    prefabBaseURL = Procedural/PA_A
    currentState = 1
    stagingEnabled = True
    EVENTS
    {
      MakeTarget
    }
  }
}

```

```

    {
        active = True
        guiActive = True
        guiActiveUncommand = False
        guiIcon = Target Center of Mass
        guiName = Target Center of Mass
        category = Target Center of Mass
        guiActiveUnfocused = True
        unfocusedRange = 500
        externalToEVAOnly = False
    }
    TakeSampleEVAEvent
    {
        active = True
        guiActive = False
        guiActiveUncommand = False
        guiIcon = Take Sample
        guiName = Take Sample
        category = Take Sample
        guiActiveUnfocused = True
        unfocusedRange = 6.352762
        externalToEVAOnly = True
    }
    RenameAsteroidEvent
    {
        active = True
        guiActive = True
        guiActiveUncommand = False
        guiIcon = Rename Asteroid
        guiName = Rename Asteroid
        category = Rename Asteroid
        guiActiveUnfocused = True
        unfocusedRange = 6.352762
        externalToEVAOnly = True
    }
    ToggleStaging
    {
        active = True
        guiActive = False
        guiActiveUncommand = False
        guiIcon = Disable Staging
        guiName = Disable Staging
        category = Disable Staging
        guiActiveUnfocused = False
        unfocusedRange = 2
        externalToEVAOnly = True
    }
}
ACTIONS
{
}
}
MODULE
{
    name = ModuleAsteroidInfo
    isEnabled = True
    massThreshold = 1.17851442337036
    currentMass = 8.41796016693115
    stagingEnabled = True
    EVENTS
    {
        ToggleStaging
        {
            active = True
            guiActive = False
            guiActiveUncommand = False
            guiIcon = Disable Staging
            guiName = Disable Staging
            category = Disable Staging
            guiActiveUnfocused = False
            unfocusedRange = 2
            externalToEVAOnly = True
        }
    }
}
ACTIONS

```

```

    {
    }
}
MODULE
{
    name = ModuleAsteroidResource
    isEnabled = True
    abundance = 1
    displayAbundance = 0.86
    stagingEnabled = True
    EVENTS
    {
        ToggleStaging
        {
            active = True
            guiActive = False
            guiActiveUncommand = False
            guiIcon = Disable Staging
            guiName = Disable Staging
            category = Disable Staging
            guiActiveUnfocused = False
            unfocusedRange = 2
            externalToEVAOnly = True
        }
    }
    ACTIONS
    {
    }
}
}

```

Now it's 8.417953 tons and there's a lot more info in the save file.

All this extra data including the final mass is generated procedurally when the roid becomes 'real' in the game, so please have another check, this really *is* fixed :)

#15 - 07/19/2016 01:21 PM - achurch

You seem to be correct -- when I got within physics range, the mass changed to about 3300 tons. Thanks for pointing out my error, and sorry for the confusion!

#16 - 07/19/2016 10:20 PM - sal_vager

- Status changed from Updated to Resolved

- % Done changed from 10 to 100

Thanks for double checking, I was sure I tested this before 1.1.3 released, you had me sweating :)

Marking as resolved!

#17 - 07/20/2016 10:53 AM - TriggerAu

- Status changed from Resolved to Closed

nice guys, well done

Files

alcass.jpg	104 KB	04/22/2016	Kron
eclass.jpg	115 KB	04/22/2016	Kron
classE-150t.sfs	9.03 KB	07/10/2016	achurch
screenshot858.png	369 KB	07/19/2016	sal_vager
screenshot859.png	621 KB	07/19/2016	sal_vager
quicksave #15.sfs	1.82 MB	07/19/2016	sal_vager