

Kerbal Space Program - Bug #25964

Vessel.GetTotalMass() does not return the correct mass of unloaded vessels

08/15/2020 04:29 PM - linuxgurugamer

Status:	New	Start date:	08/15/2020
Severity:	Low	% Done:	0%
Assignee:			
Category:	Physics		
Target version:			
Version:	1.10.1	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Core Game		

Description

I have no idea what it's actually returning, but it's wrong, based on comparing the values for a vessel when it is loaded and then when it is unloaded

This has been an error for a long time

The following code does return the correct values, feel free to use it or just to compare to what you have:

```
private double GetUnloadedVesselMass(string name, ProtoVessel protoVessel)
{
    double num = 0.0;
    for (int i = 0; i < protoVessel.protoPartSnapshots.Count; i++)
    {
        ProtoPartSnapshot protoPartSnapshot = protoVessel.protoPartSnapshots[i];
        num = (double)protoPartSnapshot.mass;
        for (int j = 0; j < protoPartSnapshot.resources.Count; j++)
        {
            ProtoPartResourceSnapshot protoPartResourceSnapshot = protoPartSnapshot.resour
ces[j];
            if (protoPartResourceSnapshot != null)
            {
                if (protoPartResourceSnapshot.definition != null)
                {
                    num += protoPartResourceSnapshot.amount * (double)protoPartResourceSna
pshot.definition.density;
                }
                else
                {
                    Debug.Log("Vessel: " + name + ", resource: " + protoPartResourceSnapsh
ot.resourceName + ", no definition");
                }
            }
        }
    }
    return num;
}
```

History

#1 - 08/15/2020 11:49 PM - linuxgurugamer

Please note that the seventh line is being displayed badly.

The plus equals seemed to turn into an underline.

This is what it should be:

```
num = num + (double)protoPartSnapshot.mass;
```