

## TWENTY REASONS WHY PLUTO SHOULD STILL BE A PLANET

Demoting Pluto is unfair. The new definition of planet relies on information (mass, shape) that was not and could not be known in the 1930s.

The new definition requires that a planet be round. Heck. Is even the Earth *really* round?

Don't judge Pluto by the company it keeps. The new definition requires that a planet gravitationally clear its orbit. What about Trojan asteroids at Jupiter? What about NEARs at Earth? What about dust? That rule could reduce the number of planets to zero!

The new rule is circular, anyway. (No pun intended.) If an object really is massive enough to "clear" its orbit, it's going to be self-compressed round.

And the "playing field" is not level. A body's difficulty in clearing its orbit (really, the volume that it must clear) increases as a function of its distance from the Sun. Clearing is most difficult for Pluto, the furthest "planet."

Pluto is a product of a poor neighborhood. If Mars, like Pluto, lived in a cluttered region such as the Kuiper Belt, *it* would no longer be considered a planet.

Instead, Mars was brought up at a ritzy address. It's got massive Jupiter nearby to help clean up its orbit. Sure. Let the butler do it for you!

This upstart body called Eris (now known to be bigger than Pluto) has an orbit highly inclined to the ecliptic. There's not much to clear up there. No heavy lifting. If worlds were drafted back when Pluto was discovered, Eris would have gotten the National Guard.

The new planet definition is time dependent. We need to know the history of a body before we can assign its status. The waiting line for a planetary passport is a billion-years long!

We usually don't define things based on their location. We have "star clusters" not "cluster stars."

The new planet definition was not chosen through a transparent process. Despite the best efforts of the committee and its chairman, the story gives the impression that science is done in the backroom.

The International Astronomical Union planet definition vote was botched. Yes, it was even worse than Bush vs. Gore in 2000.

By the way, what's with that substitute "dwarf planet" thing? You mean a dwarf planet is not a planet? Where's a linguist when we need one?

The new planet definition might affect Pluto research funding. Would the recently launched space probe to Pluto have made it off the ground today? Would Congress fund a mission to a dismissed planet?

The word "dwarf" has negative connotations, at least among the public at large. Between Pluto and dwarfs, there's just too much Disney floating around

We are in danger of convincing people that scientific classification is real, and not a human construct.

Hey, Pluto-discoverer Clyde Tombaugh's story is too good to throw away. Can *Michael Brown* build a telescope out of a Model T Ford? (Well, to be honest, maybe he can . . .)

Kids like Pluto. It sounds cuter than "Uranus." Worse, some think Pluto has disappeared! These future taxpayers (and astronomers) will vote with their feet—or rather their toys, coloring books, and songs. We might as well rename Santa's reindeer . . .

The word "planet" is in popular usage—has been for millennia. Can astronomers hijack a word? Sounds pretty snooty to me.

Even if defining Pluto is capricious, what's wrong with a capricious definition? Astronomy already has such nonsensical items as planetary nebulae, the Large Magellanic Cloud, and asteroids (which aren't very "aster" at all). Deal with it.