Re: Interstellar Propulsion idea using an Asteroid and a few comets!

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From: AA Institute (*abdul.ahad_at_ntlworld.com*)
Date: 08/21/04

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Ian Stirling <root@mauve.demon.co.uk> wrote in message
news:<411e4269$0$7250$ed2619ec@ptn−nntp−reader03.plus.net>...
> In sci.space.policy Alfred A. Aburto Jr. <aburto@sbcglobal.net> wrote:
> <snip>
> > Yes, there is reason. The Oort Cloud of comets go well beyond the
> > heliopause.
> > The Oort Cloud of comets may extend out to 100,000 AU −−− maybe 3 light
> > years from the Sun. This is a good fraction of the way to the nearest star.
>
> How are you going to find dark bodies at such great distances?

That's a very interesting point. The theoretical Oort cloud is thought to exist at some 30,000 to 50,000 AUs out from the Sun. This is way way beyond the 11,500 AUs (the "Ahad radius"!) determined as a limiting distance for *solar* illumination of objects.
Technically, as I've determined in my recent paper, any obect existing at the distance of the Oort cloud would only be illuminated by "star light", with a miniscule flux of approx. 14 milli−Watt / m^2 of flux coming from the interstellar night sky.

This is one of the reasons why I feel we might never be able to visually detect debris floating around in the Oort cloud using solar system based telescopes, unless the optical sensitivity of current detectors improves beyond all proportions.

However, since we are talking futuristic technology here, a generation starship could be kitted up with powerful, wide beam lasers mounted on its exterior body, which could be used to temporarily act as long range "flash lights" that selectively light up the AsterCom starship's forward path and illuminate any oncoming target comets / ice balls. Since these objects are likely to be "icy" in their compositions at that distance, away from any star (with high albedos) they would show up for thousands of miles up a ahead in the torch beam, lighting up the ship's path like an airport runway lit at night for an aircraft coming into land.

Abdul Ahad