# Kerbal Space Program - Bug #16808

## Wrong calculation of closest encounter and missing SOI intersect

12/01/2017 11:02 PM - Kasuha

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| **Status:** | New | **Start date:** | 12/01/2017 |
| **Severity:** | High | **% Done:** | 0% |
| **Assignee:** | | | |
| **Category:** | Map and Planetarium | | |
| **Target version:** | | | |
| **Version:** | 1.3.1 | **Language:** | English (US) |
| **Platform:** | Windows | **Mod Related:** | No |
| **Expansion:** | | | |

### Description

The game often calculates closest encounter wrong, shows it in places where there isn't actual closest encounter while the real closest encounter will appear later in orbit (the same orbit, not next orbit). That occurs quite frequently, typically when transferring to Minmus from Kerbin orbit without inclination change, or when transferring from Minmus to Mun.

In this case, however, the closest encounter is completely missing and often doesn't appear even if I place a maneuver on the orbit, even if I manipulate the maneuver.

The serious part here is, the game doesn't even calculate SOI intersect for the orbit, neither when it is in maneuver stage, nor when it is actual orbit of the ship. The ship goes crashing to Ike and the game won't tell the player until the ship is in the SOI.

Attached find a quicksave with the ship in resource scanning orbit and with a maneuver planned to transfer to Ike.

Reproduction steps:

- load the quicksave
- play with the maneuver, check there's no closest encounter indicator even when changing the maneuver
- load the quicksave again (to restore the maneuver)
- execute the maneuver
- time warp around the ship's new orbit

Here's a link to a video illustrating the problem: https://youtu.be/bZE7_7RKsDU
The mouse cursor is out of place in the video, my capturing software has probably problems with the resolution I use in the game.

### Files

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| quicksave.sfs | 1.58 MB | 12/01/2017 | Kasuha |