

Oort cloud and Scattered Disc formation during an episode of giant planet instability

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I discuss how the proposed instability of the giant planets that sculpted the Kuiper Belt and Scattered Disc also formed the Oort comet cloud. I show the results of numerical simulations of this problem and discuss formation efficiency, number of comets in the cloud and the Oort cloud to Scattered Disc population ratios. I compare these with observations and give an updated estimate based on the fading of Jupiter-family comets. These results indicate that the Oort cloud and Scattered Disc formed simultaneously and that the observed population ratio matches numerical simulations.

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