

# Main Belt Comets

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We have identified objects which are physically comets but which occupy orbits within the main belt of asteroids. No dynamical routes from the Kuiper belt or Oort Cloud cometary reservoirs have been identified. Therefore, we conclude that these are true comets, formed in-place, and constituting a new type of comet from a previously unobserved reservoir. The 'main belt comets' (MBCs) are significant in several contexts. They show that the snow line was once closer than 3 AU from the sun. Most importantly, the MBCs occupy the region in the main-belt from which some believe earth's water was derived. We present the data and basic properties of the MBCs and address their significance to planetary science.