

It was not "the comet of the century experts predicted it might be .

Nevertheless, Kohoutek had provided a bonanza of scientific information .

It was first spotted 370 million miles from Earth, by an astronomer who was searching the sky for asteroids, and after whom the comet was named .

Scientists who tracked Kohoutek the ten months before it passed the Earth predicted the comet would be a brilliant spectacle .

But Kohoutek fell short of these predictions, disappointing millions of amateur sky watchers, when it proved too pale to be seen with the unaided eye .

Researchers were delighted nonetheless with the new information they were able to glean from their investigation of the comet .

Perhaps the most significant discovery was the identification of two important chemical compounds-methyl cyanide and hydrogen cyanide-never before seen in comets, but found in the far reaches of interstellar space .

This discovery revealed new clues about the origin of comets .

Most astronomers agree that comets are primordial remnants from the formation of the solar system, but whether they were born between Jupiter and Neptune or much farther out toward interstellar space has been the subject of much debate .

If compounds no more complex than ammonia and methane, key components of Jupiter, were seen in comets, it would suggest that comets form within the planetary orbits .

But more complex compounds such as the methyl cyanide found in Kohoutek, point to formation far beyond the planets where the deep freeze of space has kept them unchanged .