

= Nibiru cataclysm =

The Nibiru cataclysm is a supposed disastrous encounter between the Earth and a large planetary object (either a collision or a near @-@ miss) which certain groups believe will take place in the early 21st century . Believers in this doomsday event usually refer to this object as Planet X or Nibiru . The idea that a planet @-@ sized object will collide with or closely pass by Earth in the near future is not supported by any scientific evidence and has been rejected as pseudoscience and an internet hoax by astronomers and planetary scientists .

The idea was first put forward in 1995 by Nancy Lieder , founder of the website ZetaTalk . Lieder describes herself as a contactee with the ability to receive messages from extraterrestrials from the Zeta Reticuli star system through an implant in her brain . She states that she was chosen to warn mankind that the object would sweep through the inner Solar System in May 2003 (though that date was later postponed) causing Earth to undergo a physical pole shift that would destroy most of humanity . The prediction has subsequently spread beyond Lieder 's website and has been embraced by numerous Internet doomsday groups , most of which linked the event to the 2012 phenomenon . Since 2012 , the Nibiru cataclysm has frequently reappeared in the popular media ; usually linked to newsmaking astronomical objects such as Comet ISON or Planet Nine . Although the name " Nibiru " is derived from the works of the ancient astronaut writer Zecharia Sitchin and his interpretations of Babylonian and Sumerian mythology , he denied any connection between his work and various claims of a coming apocalypse .

= = Origins = =

The idea of the Nibiru encounter originated with Nancy Lieder , a Wisconsin woman who claims that as a girl she was contacted by gray extraterrestrials called Zetas , who implanted a communications device in her brain . In 1995 , she founded the website ZetaTalk to disseminate her ideas . Lieder first came to public attention on Internet newsgroups during the build @-@ up to Comet Hale Bopp 's 1997 perihelion . She stated , claiming to speak as the Zetas , that " The Hale @-@ Bopp comet does not exist . It is a fraud , perpetrated by those who would have the teeming masses quiescent until it is too late . Hale @-@ Bopp is nothing more than a distant star , and will draw no closer . " She claimed that the Hale @-@ Bopp story was manufactured to distract people from the imminent arrival of a large planetary object , " Planet X " , which would soon pass by Earth and destroy civilization . After Hale @-@ Bopp 's perihelion revealed it as one of the brightest and longest @-@ observed comets of the last century , Lieder removed the first two sentences of her initial statement from her site , though they can still be found in Google 's archives . Her claims eventually made the New York Times .

Lieder described Planet X as roughly four times the size of the Earth , and said that its closest approach would occur on May 27 , 2003 , resulting in the Earth 's rotation ceasing for exactly 5 @. @ 9 terrestrial days . This would be followed by the Earth 's pole destabilising in a pole shift (a physical pole shift , with the Earth 's pole physically moving , rather than a geomagnetic reversal) caused by magnetic attraction between the Earth 's core and the magnetism of the passing planet . This in turn would disrupt the Earth 's magnetic core and lead to subsequent displacement of the Earth 's crust .

After Lieder , the first person to propagate her Planet X idea was Mark Hazlewood , a former member of the ZetaTalk community , who in 2001 published a book titled Blindsided : Planet X Passes in 2003 . Lieder would later accuse him of being a confidence trickster . A Japanese cult called the Pana Wave Laboratory , which blocked off roads and rivers with white cloths to protect itself from electromagnetic attacks , also warned that the world would end in May 2003 after the approach of a tenth planet .

Roughly a week before the supposed arrival of Planet X in May 2003 , Lieder appeared on KROQ @-@ FM radio in Los Angeles , and advised listeners to euthanize their pets in anticipation of the event as she had done . This led the Fortean Times to conclude that she had put down her dog (s) to save them from further suffering during the Pole Shift . Later , in a 2004 interview she said that

she had euthanized her dog because it was acting aggressively . After the 2003 date passed without incident , Lieder said that it was merely a " white lie ... to fool the establishment . " She refused to disclose the true date , saying that to do so would give those in power enough time to declare martial law and trap people in cities during the shift , leading to their deaths . Though Lieder herself has not specified a new date for the object 's return , many groups have taken up her idea and cited their own dates . One frequently cited date was December 21 , 2012 . This date had many apocalyptic associations , as it was the end of a cycle (baktun) in the long count in the Mayan calendar . Several writers published books connecting the encounter with 2012 . Despite that date having passed , many websites still contend that Nibiru / Planet X is en route to Earth .

In 2012 , Lieder claimed that U.S. President Barack Obama futilely attempted to announce the presence of Nibiru near the sun . After 2012 , she claimed that several world leaders had intended to announce the presence of Nibiru near the sun on October 20 , 2014 . Two weeks after the supposed date of announcement , she claimed that it did not occur because of consternation amongst the establishment .

= = = Zecharia Sitchin and Sumer = = =

Although Lieder originally referred to the object as " Planet X " , it has become deeply associated with Nibiru , a planet from the works of ancient astronaut proponent Zecharia Sitchin , particularly his book *The 12th Planet* . According to Sitchin 's interpretation of Babylonian religious texts , which contradicts conclusions reached by credited scholars on the subject , a giant planet (called Nibiru or Marduk) passes by Earth every 3 @, @ 600 years and allows its sentient inhabitants to interact with humanity . These beings , which Sitchin identified with the Annunaki of Sumerian myth , would become humanity 's first gods . Lieder first made the connection between Nibiru and her Planet X on her site in 1996 (" Planet X does exist , and it is the 12th Planet , one and the same . ") .

However , Sitchin , who died in 2010 , denied any connection between his work and Lieder 's claims . In 2007 , partly in response to Lieder 's proclamations , Sitchin published a book , *The End of Days* , which set the time for the last passing of Nibiru by Earth at 556 BC , which would mean , given the object 's supposed 3 @, @ 600 @-@ year orbit , that it would return sometime around AD 2900 . He did however say that he believed that the Annunaki might return earlier by spaceship , and that the timing of their return would coincide with the shift from the astrological Age of Pisces to the Age of Aquarius , sometime between 2090 and 2370 .

= = Scientific rejection = =

Astronomers reject the idea of Nibiru , and have made efforts to inform the public that there is no threat to Earth . They point out that such an object so close to Earth would be easily visible to the naked eye . A planet such as Nibiru would create noticeable effects in the orbits of the outer planets . Some counter this by claiming that the object has been concealed behind the Sun for several years , though this would be geometrically impossible . Most photographs showing " Nibiru " by the Sun are in fact of lens flares , false images of the Sun created by reflections within the lens .

Astronomer Mike Brown notes that if this object 's orbit were as described , it would only have lasted in the Solar System for a million years or so before Jupiter expelled it , and that there is no way another object 's magnetic field could have such an effect on Earth . Lieder 's assertions that the approach of Nibiru would cause the Earth 's rotation to stop or its axis to shift violate the laws of physics . In his rebuttal of Immanuel Velikovsky 's *Worlds in Collision* , which made the same claim that the Earth 's rotation could be stopped and then restarted , Carl Sagan noted that , " the energy required to brake the Earth is not enough to melt it , although it would result in a noticeable increase in temperature : The oceans would [be] raised to the boiling point of water ... [Also ,] how does the Earth get started up again , rotating at approximately the same rate of spin ? The Earth cannot do it by itself , because of the law of the conservation of angular momentum . "

In a 2009 interview with the Discovery Channel , Mike Brown noted that , while it is not impossible that the Sun has a distant planetary companion , such an object would have to be lying very far from

the observed regions of the Solar System to have no detectable gravitational effect on the other planets . A Mars @-@ sized object could lie undetected at 300 AU (10 times the distance of Neptune) ; a Jupiter @-@ sized object at 30 @,@ 000 AU . To travel 1000 AU in two years , an object would need to be moving at 2400 km / s ? faster than the galactic escape velocity . At that speed , any object would be shot out of the Solar System , and then out of the Milky Way galaxy into intergalactic space .

= = Conspiracy theories = =

Many believers in the imminent approach of Planet X / Nibiru accuse NASA of deliberately covering up visual evidence of its existence . One such accusation involves the IRAS infrared space observatory , launched in 1983 . The satellite briefly made headlines due to an " unknown object " that was at first described as " possibly as large as the giant planet Jupiter and possibly so close to Earth that it would be part of this Solar System " . This newspaper article has been cited by proponents of the Nibiru cataclysm , beginning with Lieder herself , as evidence for the existence of Nibiru . However , further analysis revealed that of several initially unidentified objects , nine were distant galaxies and the tenth was " galactic cirrus " ; none were found to be Solar System bodies .

Another accusation frequently made by websites predicting the collision is that the U.S. government built the South Pole Telescope (SPT) to track Nibiru 's trajectory , and that the object has been imaged optically . However , the SPT (which is not funded by NASA) is a radio telescope , and cannot take optical images . Its South Pole location was chosen due to the low @-@ humidity environment , and there is no way an approaching object could be seen only from the South Pole . The " picture " of Nibiru posted on YouTube was revealed , in fact , to be a Hubble image of the expanding light echo around the star V838 Mon .

Another conspiracy claim regards a patch of missing data in Google Sky near the constellation of Orion , which has often been cited as evidence that Nibiru has been redacted . However , the same region of sky can still be viewed by thousands of amateur astronomers . A scientist at Google said that the missing data is due to a glitch in the stitching software used to piece the images together .

Another piece of claimed evidence drawn from Google Sky is the carbon star CW Leonis , which is the brightest object in the 10 ?m infrared sky and is frequently claimed to be Nibiru .

= = Misappellations = =

Believers in Planet X / Nibiru have given it many names since it was first proposed . All are , in fact , names for other real , hypothetical or imaginary Solar System objects that bear little resemblance either to the planet described by Lieder or to Nibiru as described by Sitchin .

= = = Planet X = = =

Lieder drew the name Planet X from the hypothetical planet once searched for by astronomers to account for discrepancies in the orbits of Uranus and Neptune . In 1894 , Bostonian astronomer Percival Lowell became convinced that the planets Uranus and Neptune had slight discrepancies in their orbits . He concluded that they were being tugged by the gravity of another , more distant planet , which he called " Planet X " . However , nearly a century of searching failed to turn up any evidence for such an object (Pluto was initially believed to be Planet X , but was later determined to be too small) . In 1992 , astronomer Myles Standish showed that the supposed discrepancies in the planets ' orbits were illusory , the product of overestimating the mass of Neptune . Today astronomers accept that Planet X , at least as originally defined , does not exist .

= = = Hercolubus = = =

In 1999 , New Age author V. M. Rabolu wrote in Hercolubus or Red Planet that Barnard 's star is actually a planet known to the ancients as Hercolubus , which purportedly came dangerously close

to Earth in the past , destroying Atlantis , and will come close to Earth again . Lieder subsequently used Rabolu 's ideas to bolster her claims .

Barnard 's star has been directly measured to be 5.98 ± 0.003 light years from Earth (35 @.@ 15 trillion miles) . While it is approaching Earth , Barnard 's Star will not make its closest approach to the Sun until around 11 @,@ 700 AD , when it will approach to within some 3 @.@ 8 light @-@ years . This is only slightly closer than the closest star to the Sun (Proxima Centauri) lies today .

== Nemesis ==

Believers in Planet X / Nibiru have often confused it with Nemesis , a hypothetical star first proposed by physicist Richard A. Muller . In 1984 , Muller postulated that mass extinctions were not random , but appeared to occur in the fossil record with a loose periodicity that ranged from 26 to 34 million years . He attributed this supposed pattern to a heretofore undetected companion to the Sun , either a dim red dwarf or a brown dwarf , lying in an elliptical , 26 @-@ million @-@ year orbit . This object , which he named Nemesis , would , once every 26 million years , pass through the Oort cloud , the shell of over a trillion icy objects believed to be the source of long @-@ period comets that orbit at thousands of times Pluto 's distance from the Sun . Nemesis 's gravity would then disturb the comets ' orbits and send them into the inner Solar System , causing the Earth to be bombarded . However , to date no direct evidence of Nemesis has been found . Though the idea of Nemesis appears similar to the Nibiru cataclysm , they are , in fact , very different , as Nemesis , if it existed , would have an orbital period thousands of times longer , and would never come near Earth itself .

== Sedna or Eris ==

Still others confuse Nibiru with Sedna (90377 Sedna) or Eris (136199 Eris) , trans @-@ Neptunian objects discovered by Mike Brown in 2003 and 2005 respectively . However , despite having been described as a " tenth planet " in an early NASA press release , Eris (Then known only as 2003 UB313) is now classified as a dwarf planet . Only slightly more massive than Pluto , Eris has a well @-@ determined orbit that never takes it closer than 5 @.@ 5 billion km from the Earth . Sedna is slightly smaller than Pluto , and never comes closer to Earth than 11 @.@ 4 billion km . Mike Brown believes the confusion results from both the real Eris and the imaginary Nibiru having extremely elliptical orbits .

== Tyche ==

Others have tied it to Tyche ; the name proposed by John Matese and Daniel Whitmire of the University of Louisiana at Lafayette for an object they believe to be influencing the orbits of comets in the Oort cloud . In February , 2011 , Whitmire and his colleagues took their hypothesis to the public in an article in The Independent , in which they named the object " Tyche " and claimed that evidence for its existence would be found once data from the WISE infrared telescope was collated , leading to a spike in calls to astronomers . The name , after the " good sister " of the Greek goddess Nemesis , was chosen to distinguish it from the similar Nemesis hypothesis as , unlike Nemesis , Matese and Whitmire do not believe that their object poses a threat to Earth . Also , this object , if it exists , would , like Nemesis , have an orbit hundreds of times longer than that proposed for Nibiru , and never come near the inner Solar System . In 2014 , NASA announced that the WISE survey had ruled out the existence of Tyche as its proponents had defined it .

== Comet Elenin ==

Some associated Nibiru with Comet Elenin , a long @-@ period comet discovered by Russian astronomer Leonid Elenin on December 10 , 2010 . On October 16 , 2011 , Elenin made its closest

approach to the Earth at a distance of 0 @. @ 2338 AU (34 @, @ 980 @, @ 000 km ; 21 @, @ 730 @, @ 000 mi) , which is slightly closer than the planet Venus . Nevertheless , in the leadup to its closest approach , claims spread on conspiracy websites concluded that it was on a collision course , that it was as large as Jupiter or even a brown dwarf , and even that the name of the discoverer , Leonid Elenin , was in fact code for ELE , or an Extinction Level Event .

Although the sizes of comets are difficult to determine without close observation , Comet Elenin is likely to be less than 10 km in diameter . Elenin himself estimates that the comet nucleus is roughly 3 ? 4 km in diameter . This would make it millions of times smaller than the supposed Nibiru . Comet hysteria is not uncommon . Attempts have been made to correlate Elenin 's alignments with the 2011 Japan earthquake , the 2010 Canterbury earthquake , and 2010 Chile earthquake ; however , even discounting Elenin 's tiny size , earthquakes are driven by forces within the earth , and cannot be triggered by the passage of nearby objects . In 2011 , Leonid Elenin ran a simulation on his blog in which he increased the mass of the comet to that of a brown dwarf (0 @. @ 05 solar masses) . He demonstrated that its gravity would have caused noticeable changes in the orbit of Saturn years before its arrival in the inner Solar System .

In August , 2011 , Comet Elenin began to disintegrate , and by the time of its closest approach in October 2011 the comet was undetected even by large ground @-@ based telescopes .

= = = Comet ISON = = =

On 21 September 2012 , Vitali Nevski and Artyom Novichonok , using the International Scientific Optical Network of telescopes (ISON) , discovered the comet C / 2012 S1 , popularly known as " Comet ISON " . Its orbit was expected to take it within 0 @. @ 429 AU (64 @, @ 200 @, @ 000 km ; 39 @, @ 900 @, @ 000 mi) of Earth on 26 December 2013 . Nonetheless , believers tied it to the Nibiru cataclysm , claiming it would hit the Earth on that date , or that it would fragment and pieces of it would hit the Earth . Images of the " fragments " of the comet circulating on the internet were shown to be camera artifacts . On April 30 , 2013 , the Hubble Space Telescope took three pictures of the comet over the course of 12 hours , which were published as a composite in Hubble 's archives . This led to speculation on conspiracy sites that the comet had split into 3 pieces , or even that it was a UFO . After ISON passed perihelion on 28 November , it rapidly began to fade , leaving many to suspect that it had been destroyed as it passed the Sun . While a dim remnant did eventually return round the Sun , it was generally accepted to be a cloud of dust , rather than a solid object . On 2 December 2013 , the CIOC (NASA Comet ISON Observing Campaign) officially announced that Comet ISON had fully disintegrated . The Hubble Space Telescope failed to detect fragments of ISON on 18 December 2013 . On 8 May 2014 , a detailed examination of the comet disintegration was published , suggesting that the comet fully disintegrated hours before perihelion .

= = = Planet Nine = = =

In March 2014 , astronomers Chad Trujillo and Scott Sheppard published a paper in Nature arguing that the apparent clustering of the arguments of perihelion of distant trans @-@ Neptunian objects suggested the existence of a large trans @-@ Neptunian planet . On January 20 , 2016 , Mike Brown and Konstantin Batygin announced that they had corroborated Trujillo and Sheppard 's findings , and that they believed the planet , which they dubbed " Planet Nine " , would have a mass roughly ten times that of the Earth , and a semimajor axis of approximately 400 ? 1500 AU (60 ? 225 billion km) . Believers in Nibiru and the Nibiru cataclysm immediately argued that this constituted evidence for their claims . However , astronomers pointed out that this planet , if it exists , would have a perihelion (closest approach to the Sun) of roughly 200 AU , or 30 billion km .

In March 2016 , believers in the Nibiru cataclysm began to suggest that the month marked the true date for Nibiru 's arrival and the destruction of Earth . That same month , the Monthly Notices of the Royal Astronomical Society published a paper by Daniel Whitmire (who had proposed the existence of Tyche) in which he reconsidered a modified version of the Nemesis model he had first proposed in 1985 in light of recent speculations concerning the possibility of a trans @-@ Neptunian planet .

The hypothesis argues that an object far closer to the Sun than Nemesis could have a similar effect if its orbit precessed at a rate thousands of times slower than its actual speed , which would mean it might only interact with the Kuiper belt every 27 million years , potentially sending comets into the inner Solar System and triggering mass extinctions . However , the paper had been initially published online in November 2015 , before Brown and Batygin went public with Planet Nine , and concerns a different object far closer to the Sun (100 AU vs. ~ 600 AU) ; Planet Nine , if it exists , is too far away , says Brown , to have such an effect on the Kuiper belt . Nonetheless , an article in the British tabloid The Sun (later republished in the New York Post) conflated the three ideas of Nibiru , Planet Nine and Whitmire 's planet to suggest that not only had Planet Nine been found , but that it would collide with Earth at the end of April , which resulted in Batygin receiving a spike in panicked calls .

= = Public reaction = =

The impact of the public fear of the Nibiru cataclysm has been especially felt by professional astronomers . In 2008 , Mike Brown said that Nibiru was the most common pseudoscientific topic he was asked about .

Before his retirement after 2012 , David Morrison , director of SETI , CSI Fellow and Senior Scientist at NASA 's Astrobiology Institute at Ames Research Center , said he received 20 to 25 emails a week about the impending arrival of Nibiru : some frightened , others angry and naming him as part of the conspiracy to keep the truth of the impending apocalypse from the public , and still others asking whether or not they should kill themselves , their children or their pets . Half of these emails are from outside the U.S. " Planetary scientists are being driven to distraction by Nibiru , " notes science writer Govert Schilling , " And it is not surprising ; you devote so much time , energy and creativity to fascinating scientific research , and find yourself on the tracks of the most amazing and interesting things , and all the public at large is concerned about is some crackpot theory about clay tablets , god @-@ astronauts and a planet that doesn 't exist . " In a similar vein , Professor Brian Cox Tweeted in 2012 that , " If anyone else asks me about " Nibiru " the imaginary bullshit planet I will slap them around their irrational heads with Newton 's Principia . " Prior to the 2012 date , Morrison stated that he hoped that the non @-@ arrival of Nibiru could serve as a teaching moment for the public , instructing them on " rational thought and baloney detection " , but doubted that would happen .

Morrison noted in a lecture recorded on FORA.tv that there was a huge disconnect between the large number of people on the Internet who believed in Nibiru 's arrival and the majority of scientists who have never heard of it . To date he is the only major NASA scientist to speak out regularly against the Nibiru phenomenon .

= = Cultural influence = =

A viral marketing campaign for Sony Pictures ' 2009 film 2012 , directed by Roland Emmerich , which depicts the end of the world in the year 2012 , featured a supposed warning from the " Institute for Human Continuity " that listed the arrival of Planet X as one of its doomsday scenarios . Mike Brown attributed a spike in concerned emails and phone calls he received from the public to this site . Danish filmmaker Lars von Trier drew inspiration from Nibiru for his 2011 apocalyptic film Melancholia .

The 2010 animated television series Scooby @-@ Doo ! Mystery Incorporated features Nibiru as a major plot point in its second season , tying the apocalyptic event with its mythological namesake .