
CDA


Sessão Astronomia

Além de Netuno

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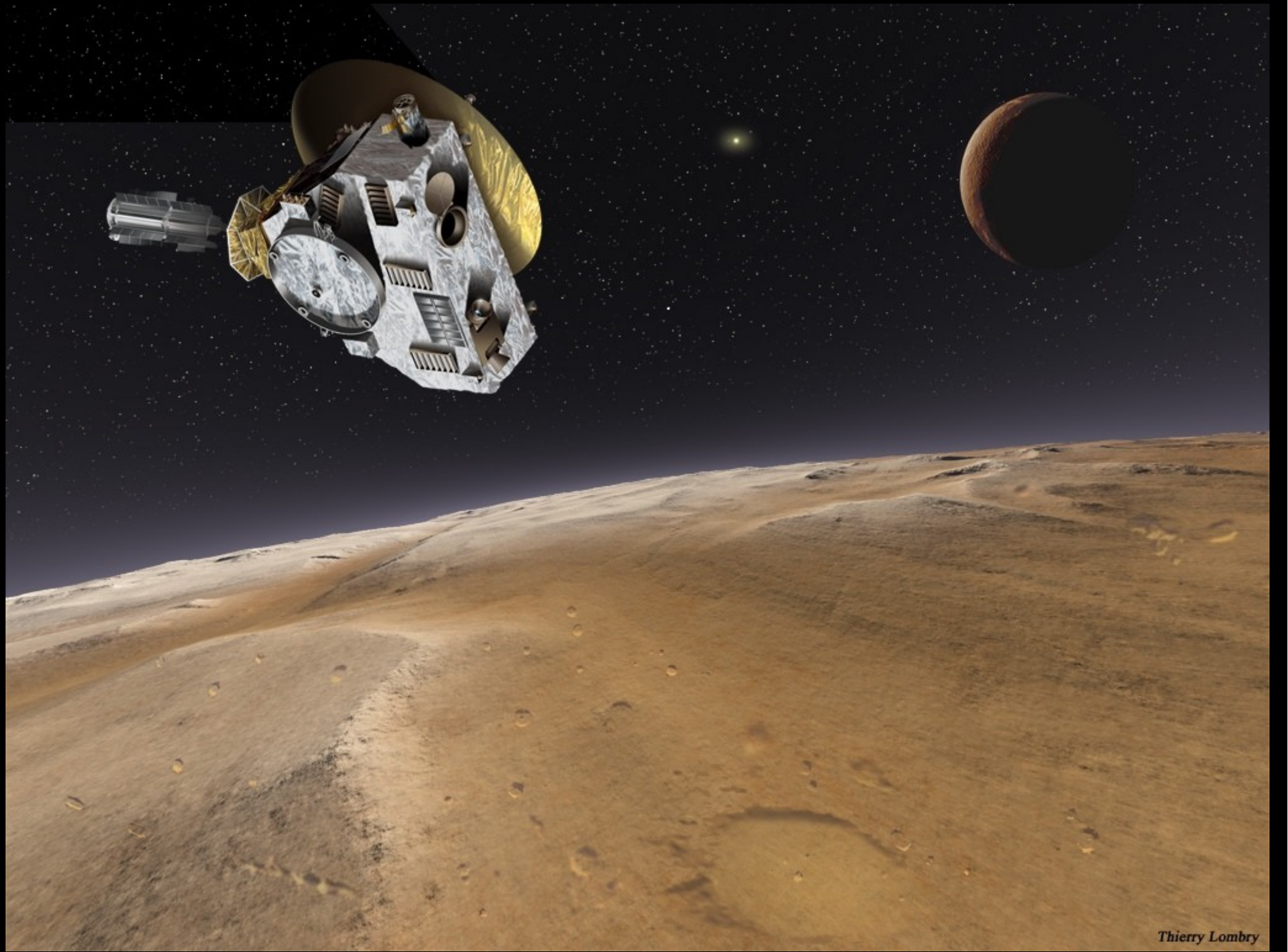
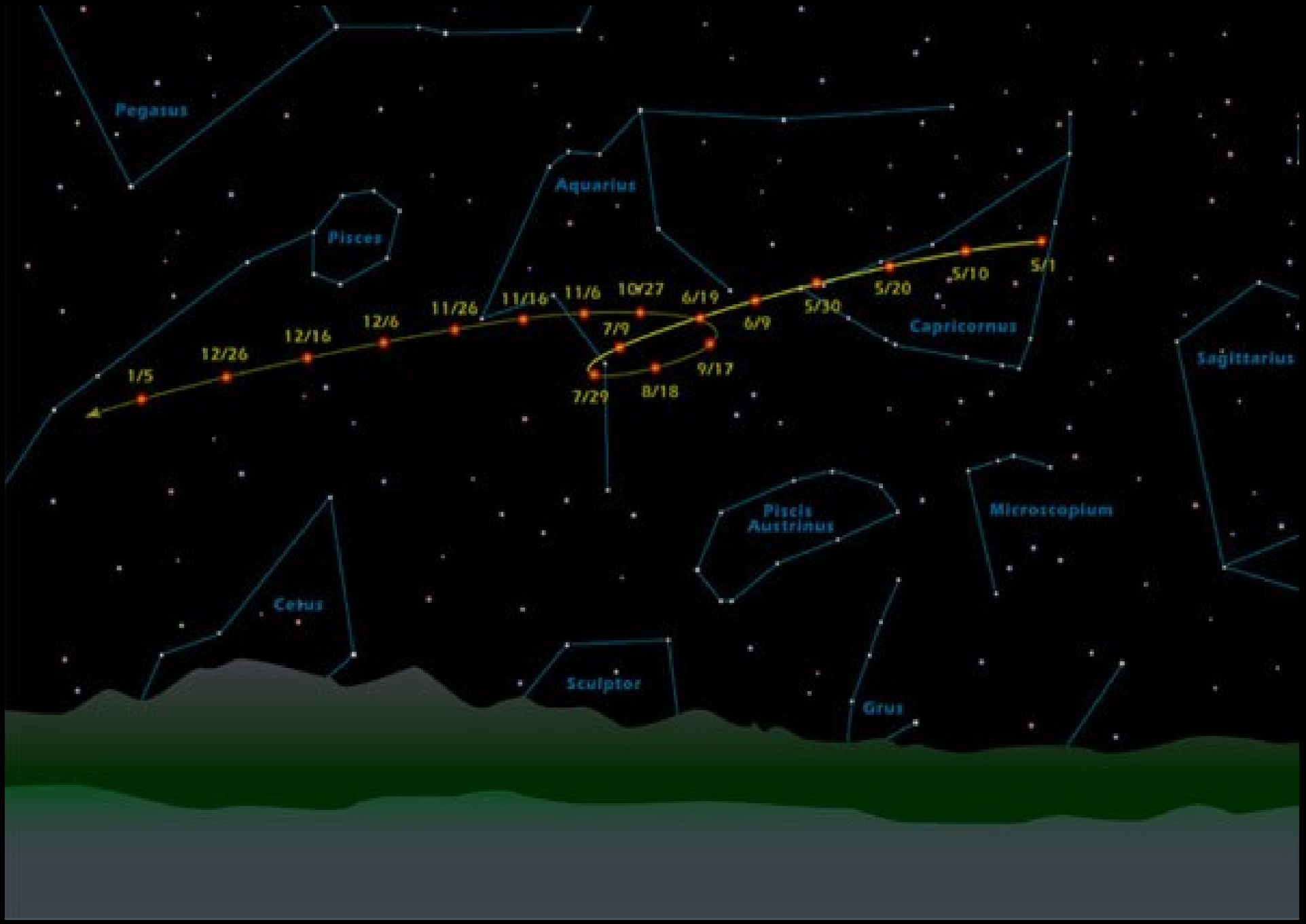
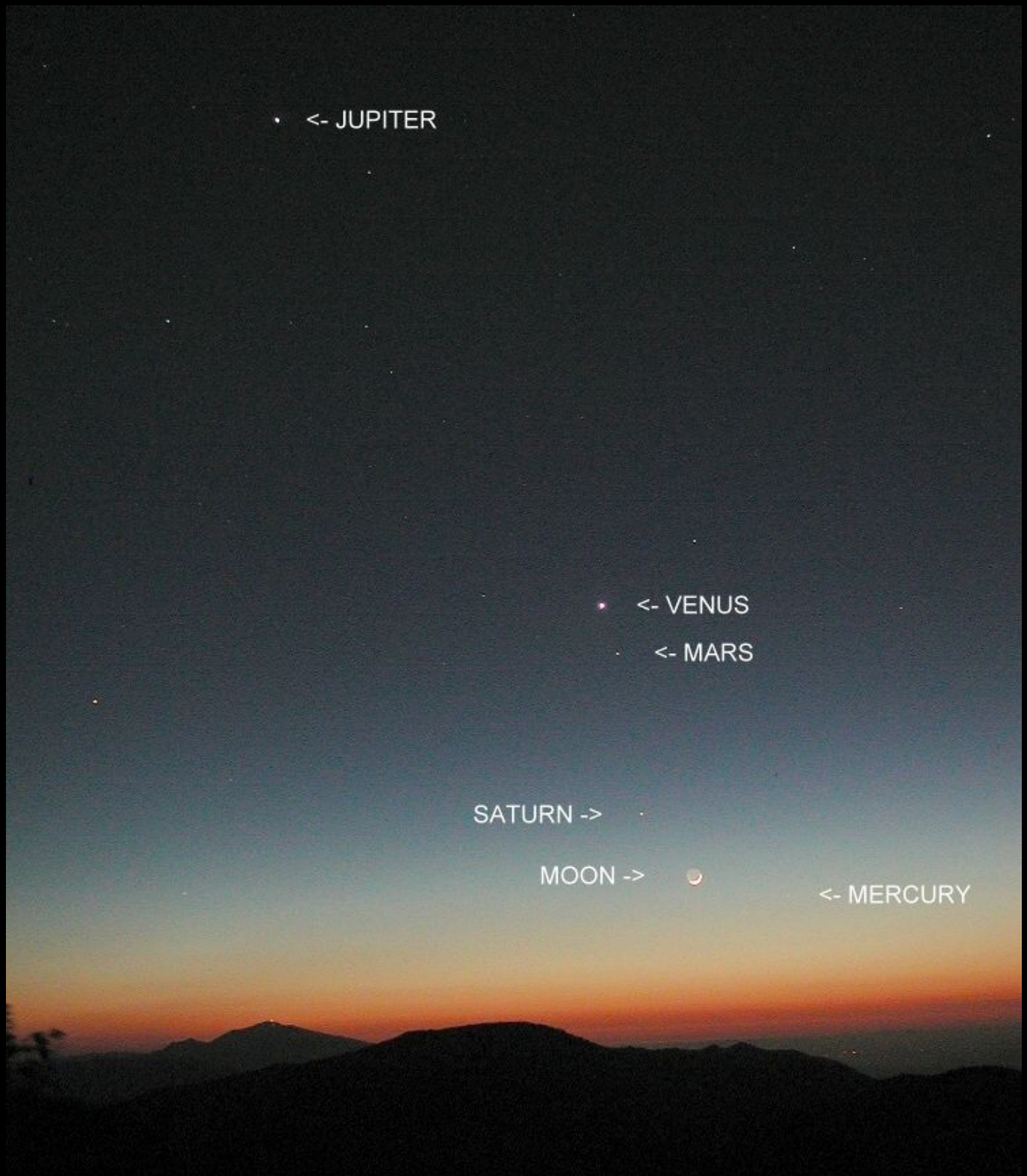
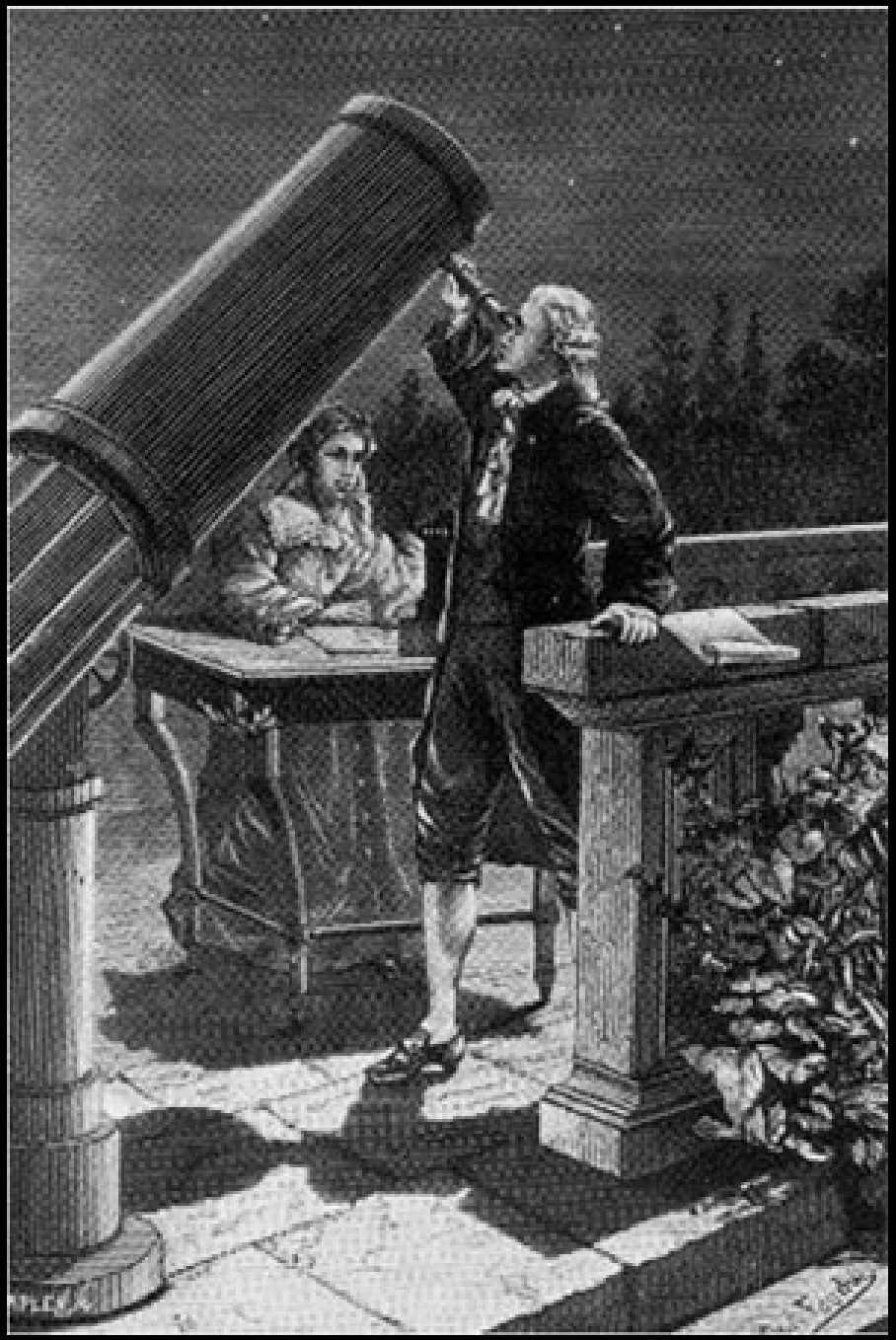

Thierry Lombry


Pegasus
Aquarius
Pisces
Capricornus
Sagittarius
Piscis Austrinus
Microscopium
Cetus
Sculptor
Grus
1/5
12/26
12/16
12/6
11/26
11/16
11/6
10/27
7/9
6/19
6/9
5/30
5/20
5/10
5/1
7/29
8/18
9/17


<- JUPITER
<- VENUS
<- MARS
SATURN ->
MOON ->
<- MERCURY

Urano

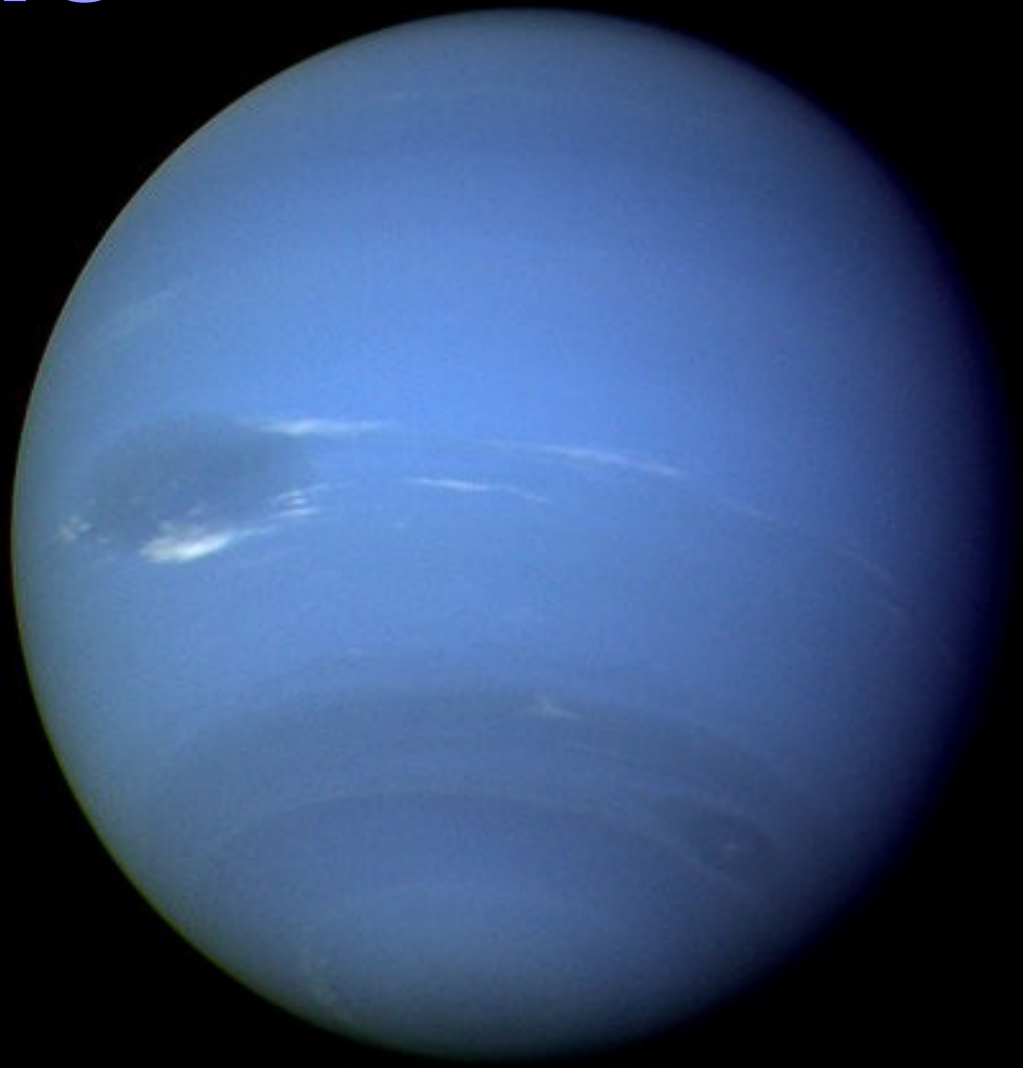


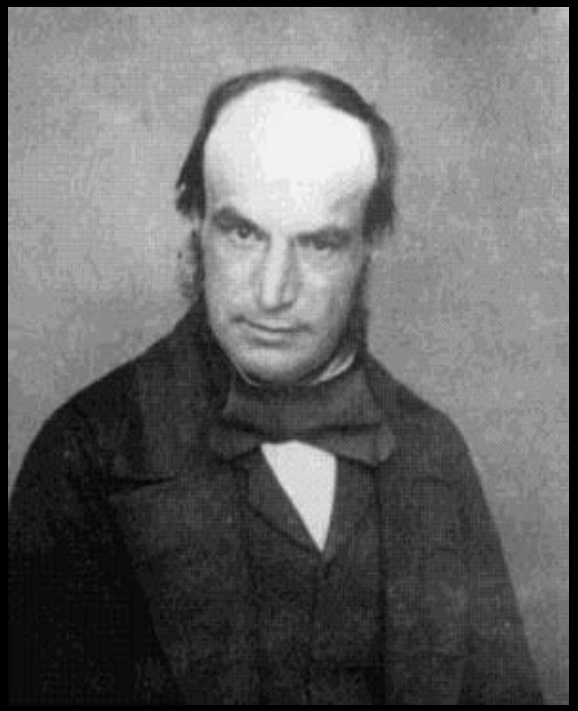
Urano foi observado diversas vezes, mas sempre confundido com uma estrela.

William Herschel observou o movimento de Urano em 1781 e acreditou que se tratava de um cometa.

Oficializado como planeta em 1783.

Netuno





Perturbações na órbita de Urano indicavam a presença de um corpo massivo na proximidade.

John C. Adams e Urban Le Verrier estimaram a posição em que o corpo deveria ser encontrado, o que foi confirmado com observações em 1846. Netuno foi o primeiro planeta encontrado com previsões matemáticas.

Plutão

Perturbações na órbita de Netuno indicavam a presença de algo além, chamado de Planeta X.

Percival Lowell procurou por 10 anos este planeta sem o encontrar. Na verdade o fotografou duas vezes, mas não o reconheceu.

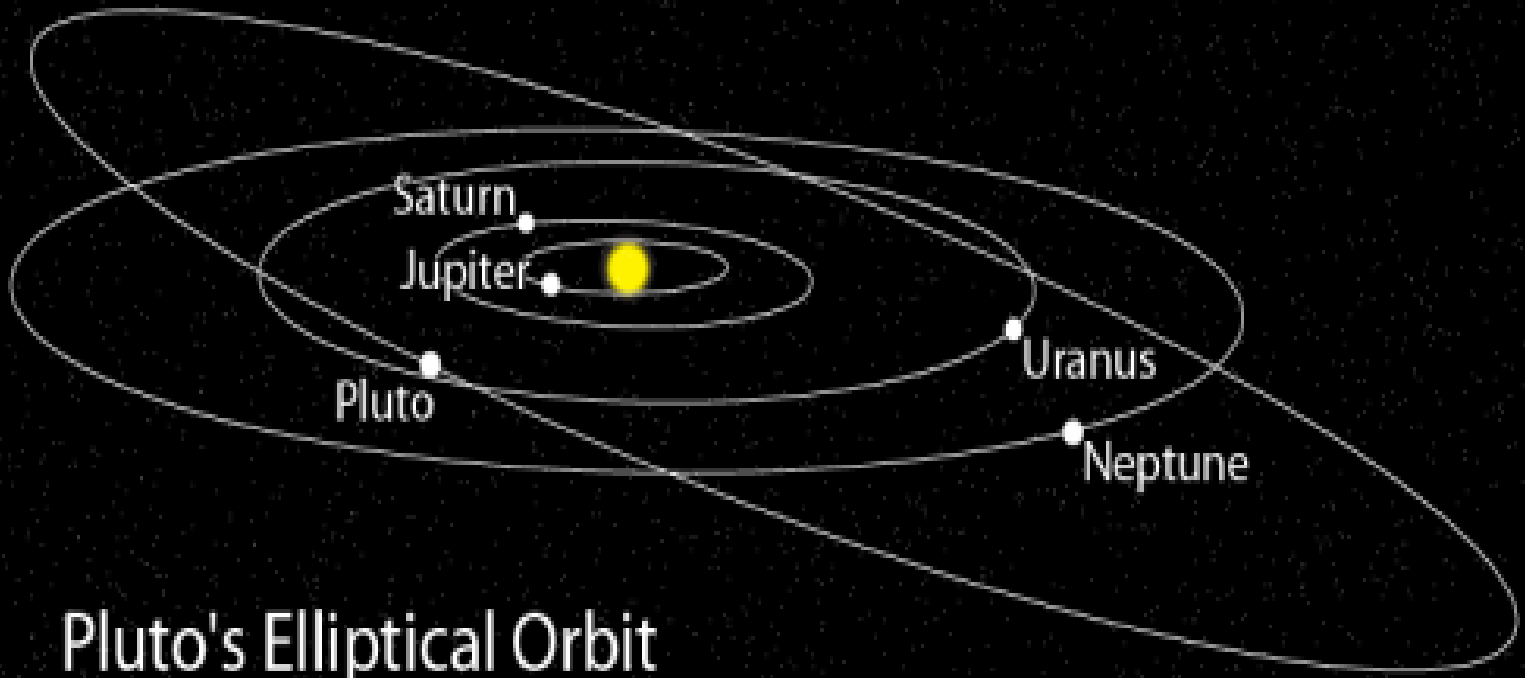
Clyde Tombaugh começou a busca pelo planeta X em 1929, encontrando-o em 1930.

O nome Plutão foi sugestão de uma menina de 10 anos.

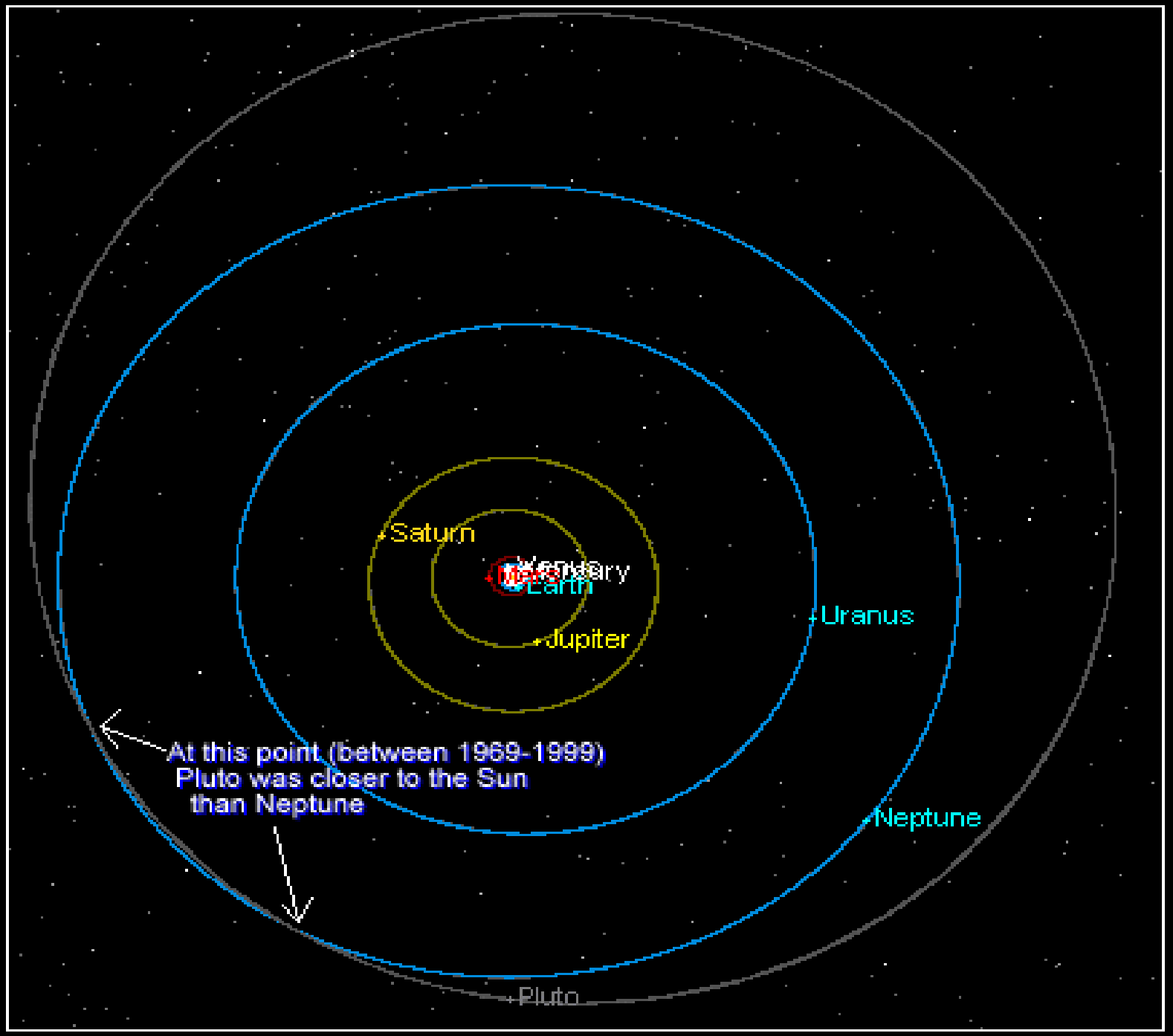
DISCOVERY OF THE PLANET PLUTO

January 23, 1930

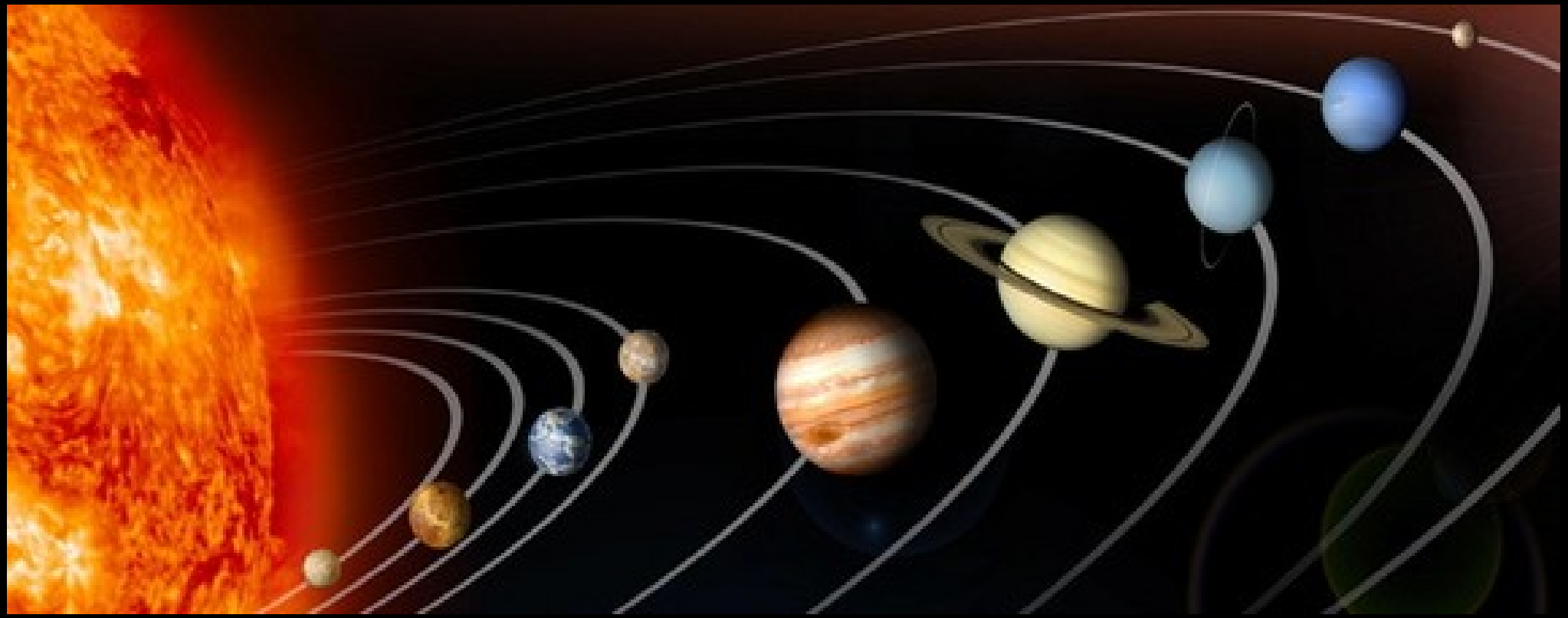
January 29, 1930

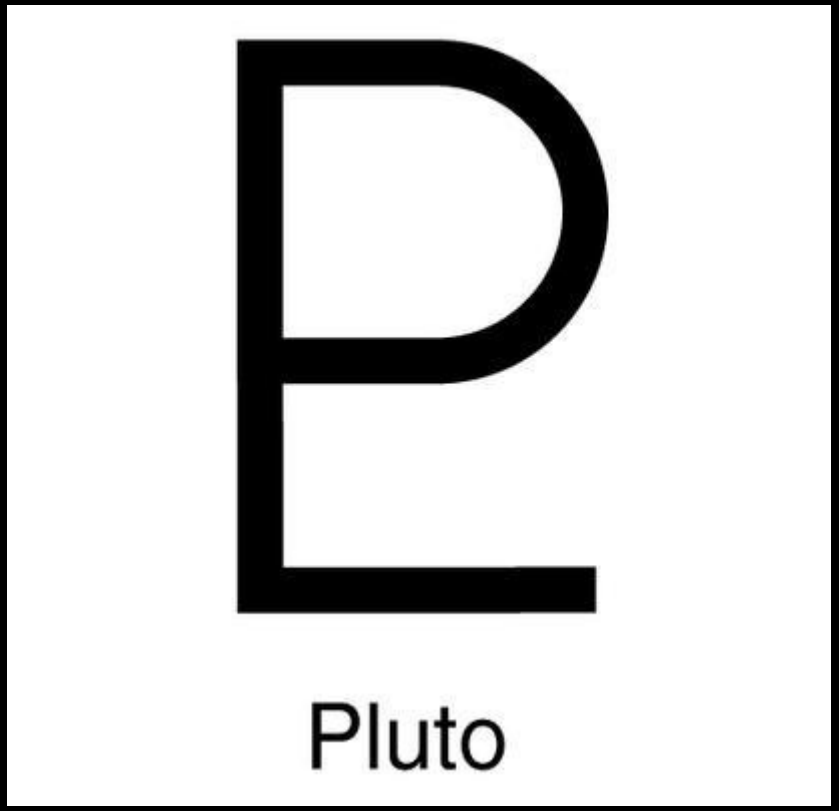


Pluto's Elliptical Orbit



The positions of the planets in this diagram show where they will be in July 2008

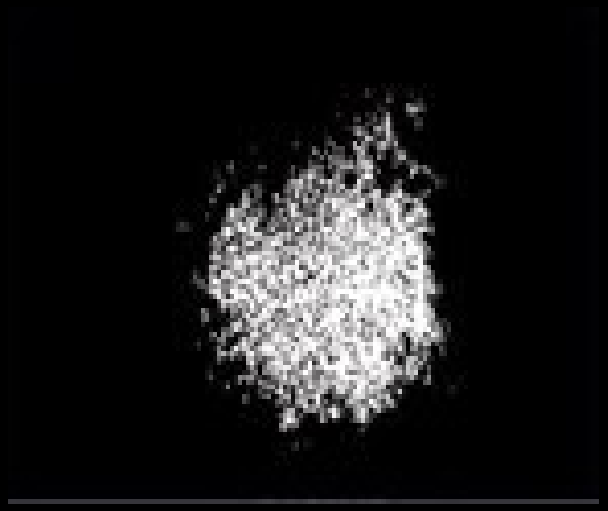



Pluto

94

Pu

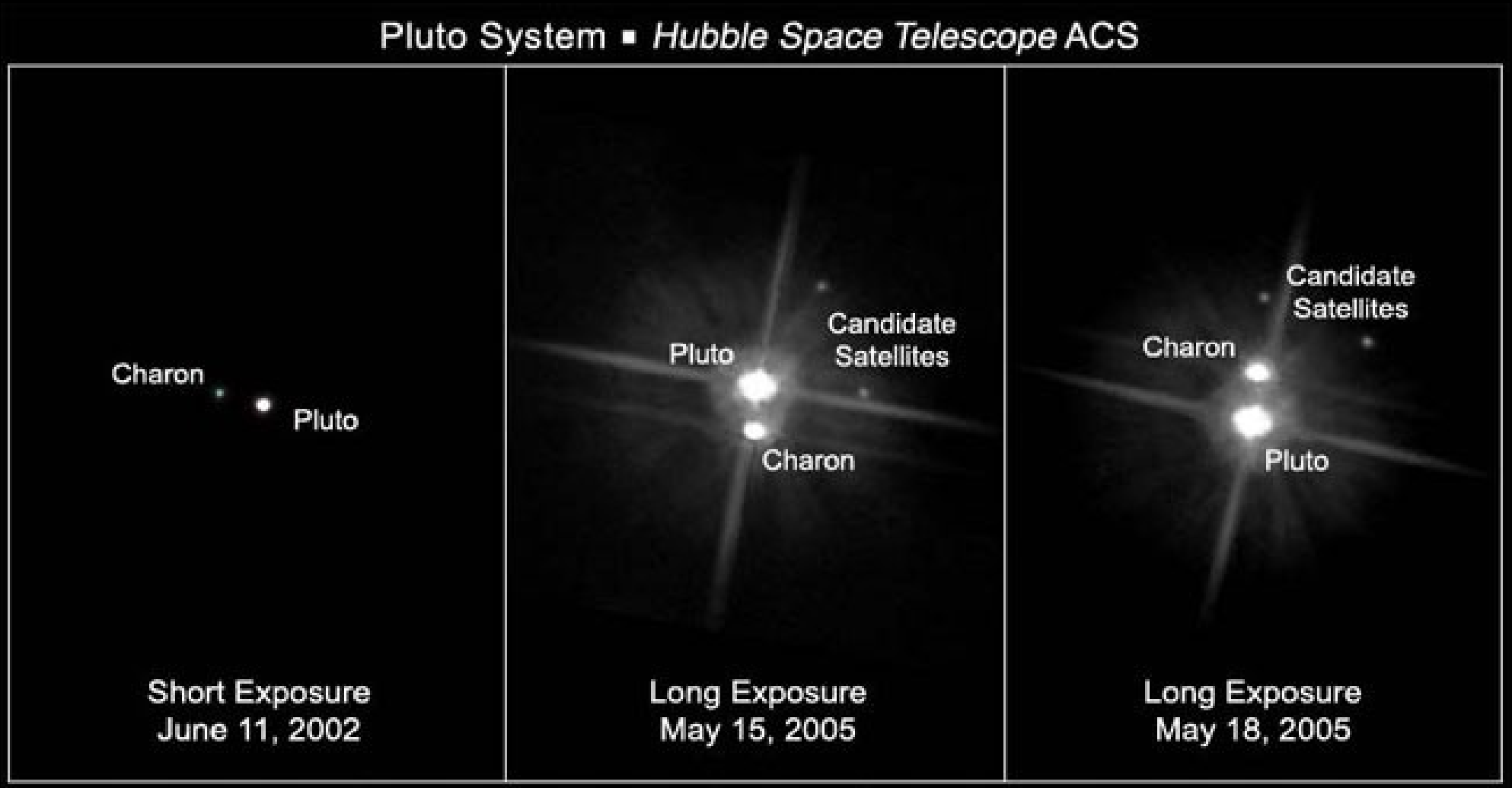
Plutônio

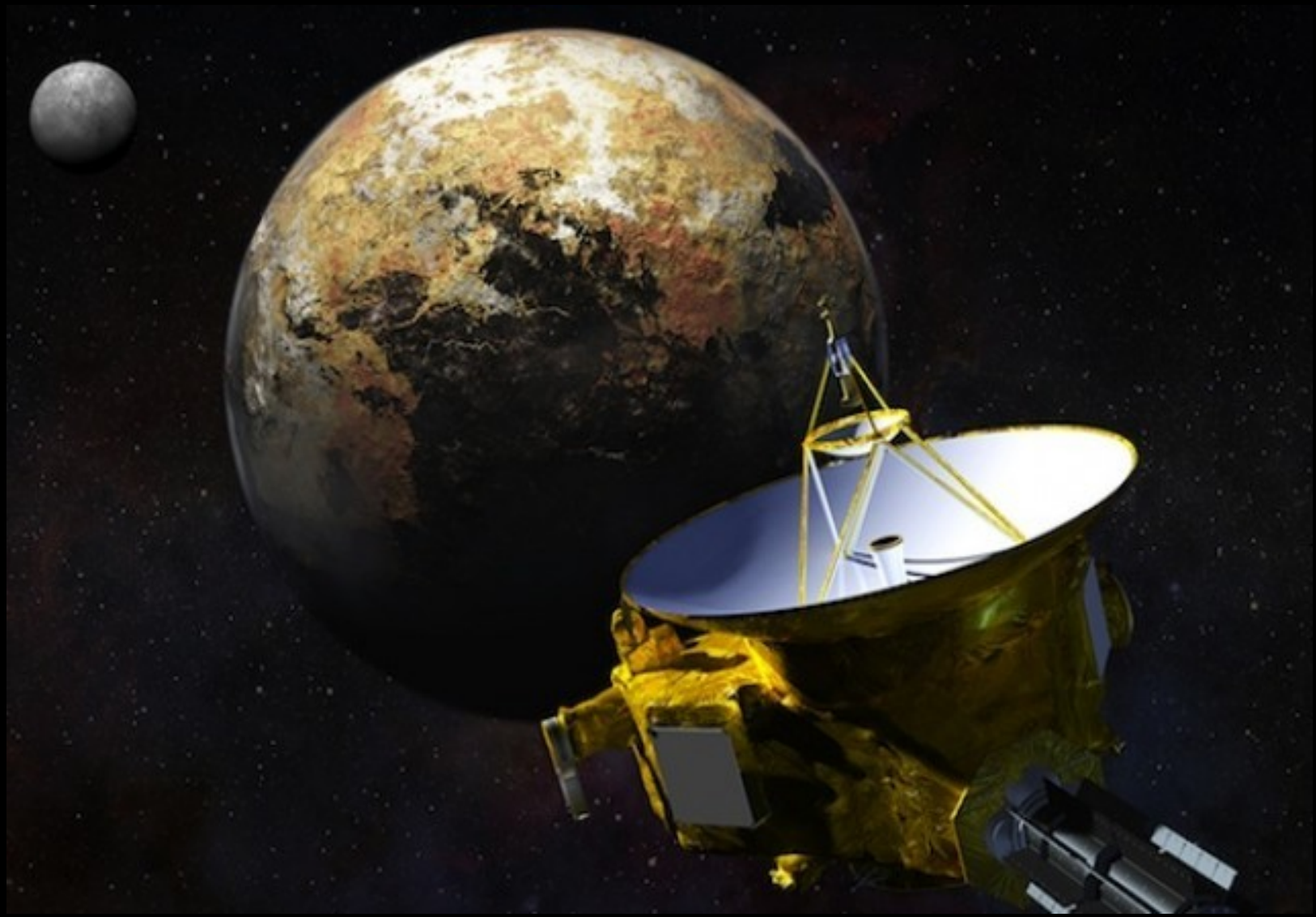


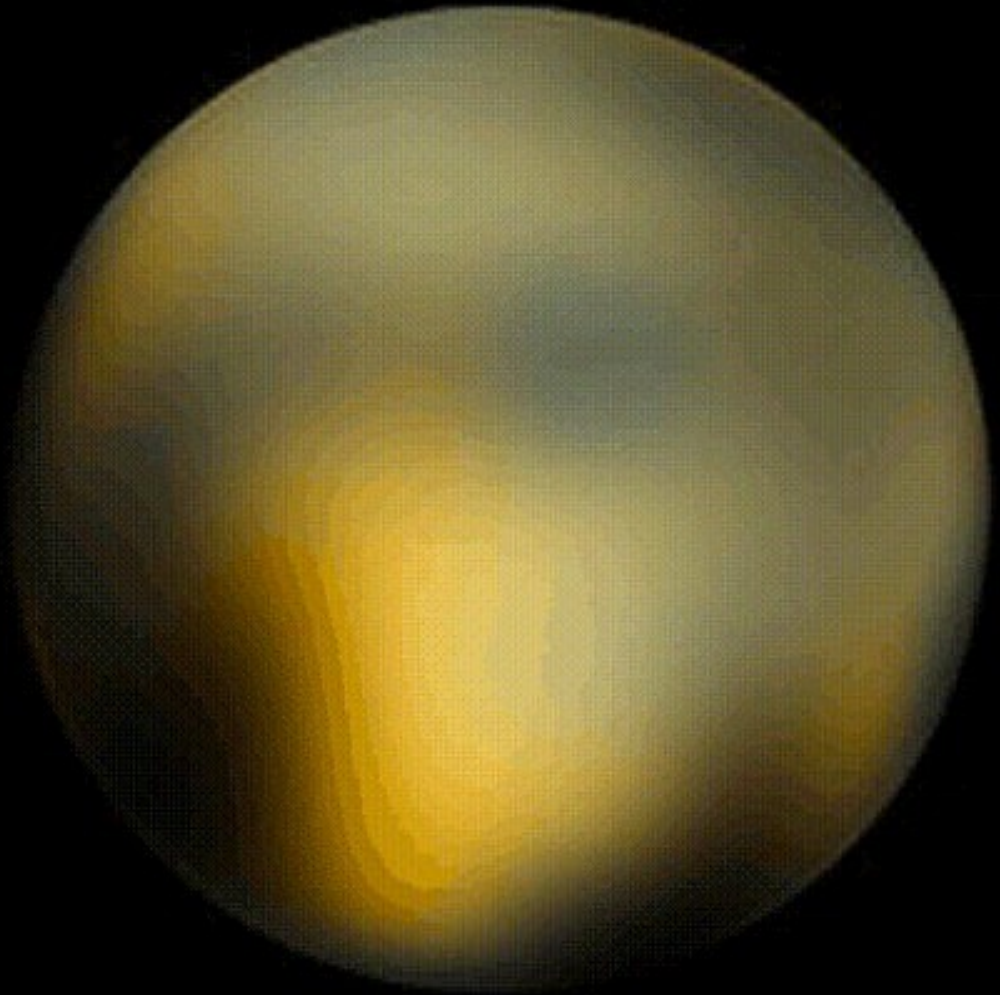
Caronte é descoberta em 1978

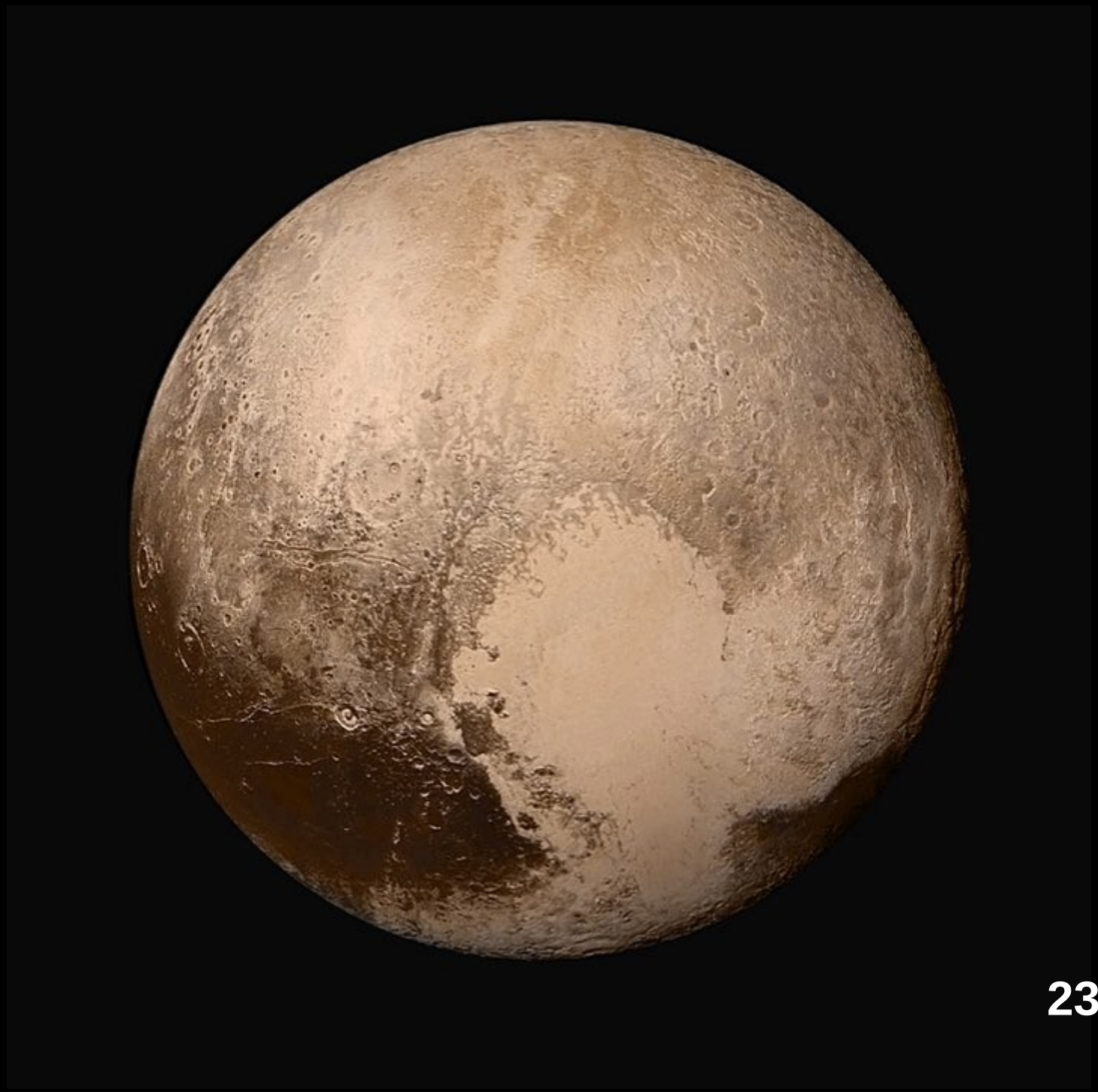
1200 km

Movimento de Plutão e Caronte

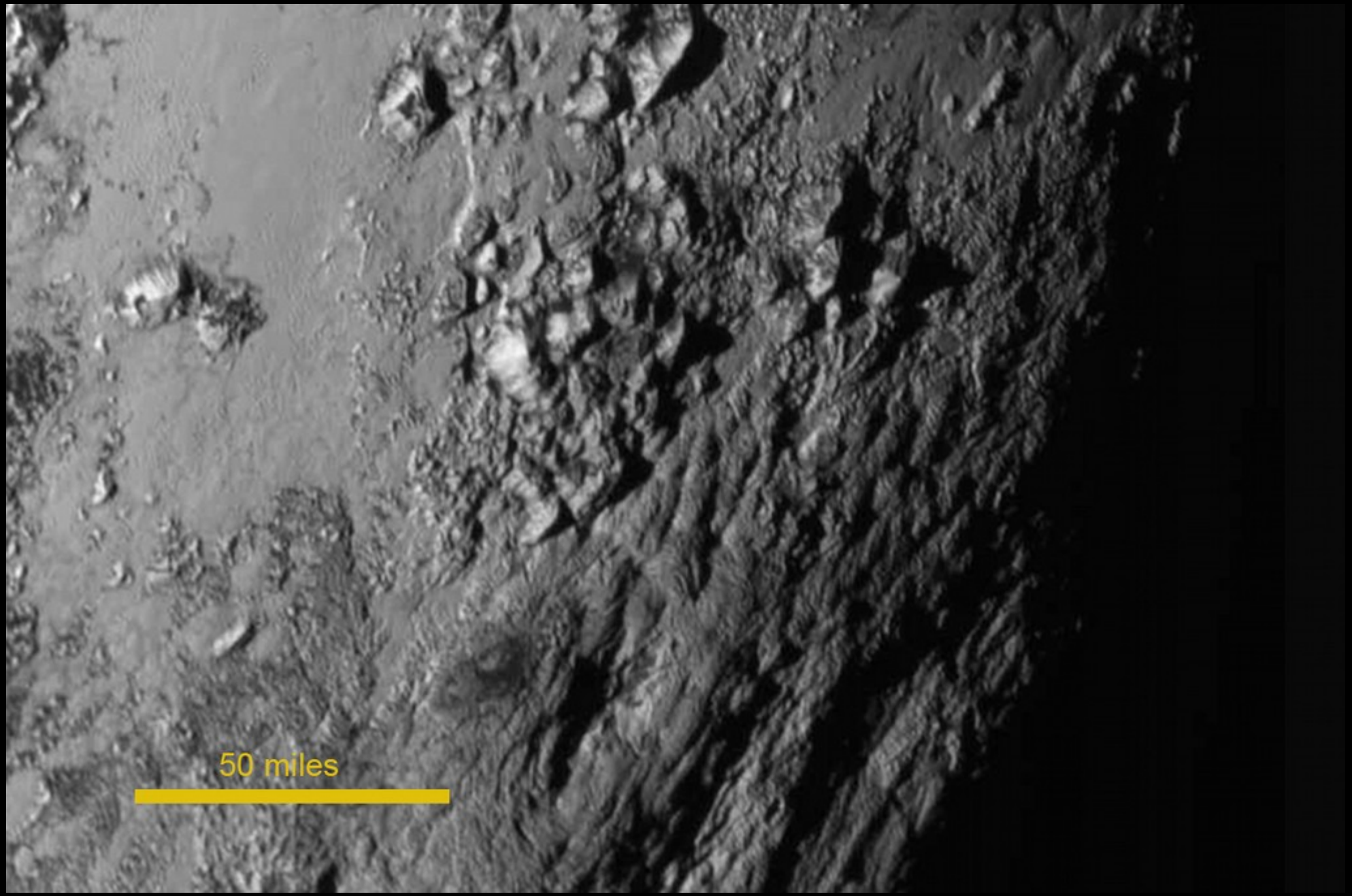

Pluto System ▪ *Hubble Space Telescope* ACS
Charon
Pluto
Short Exposure
June 11, 2002
Pluto
Candidate
Satellites
Charon
Long Exposure
May 15, 2005
Candidate
Satellites
Charon
Pluto
Long Exposure
May 18, 2005
NASA, ESA, H. Weaver (JHU/APL), A. Stern (SwRI), and the HST Pluto Companion Search Team

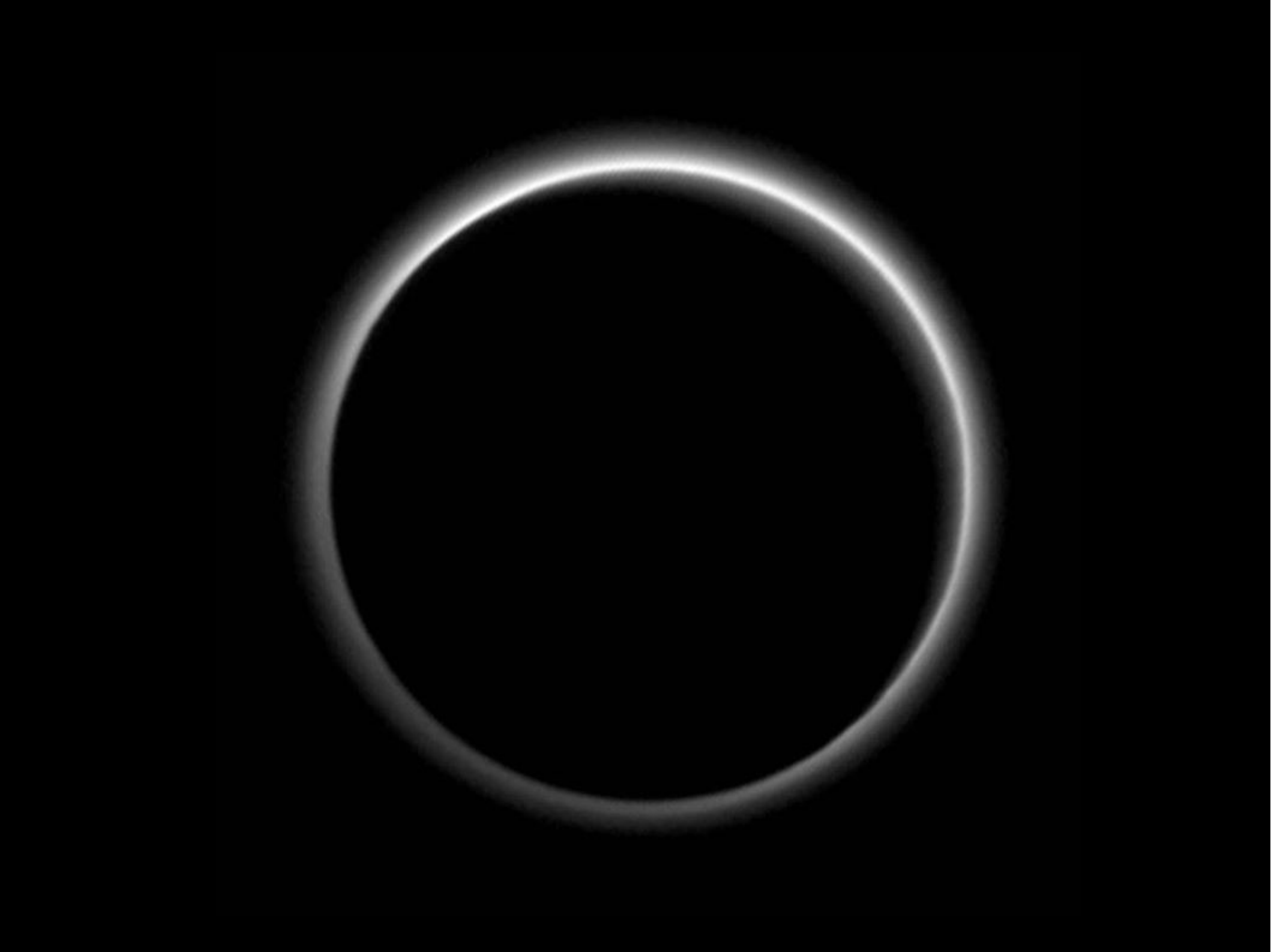




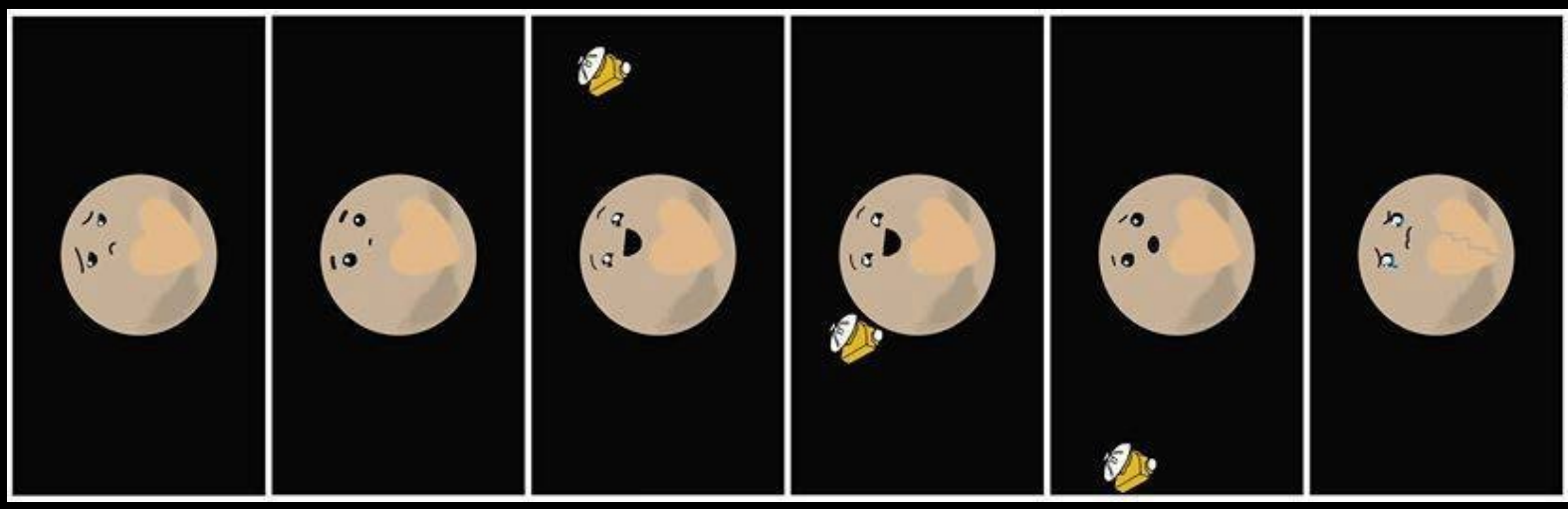

2370 km


NASA-JHUAPL-SWRI

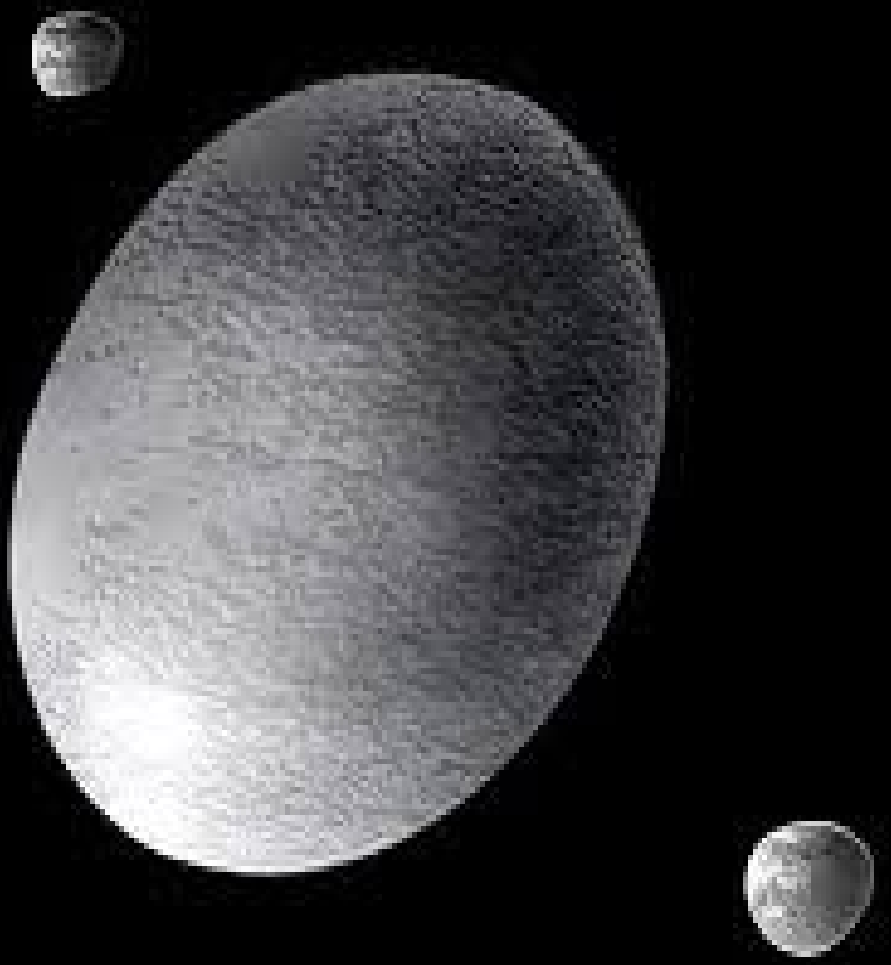

50 miles



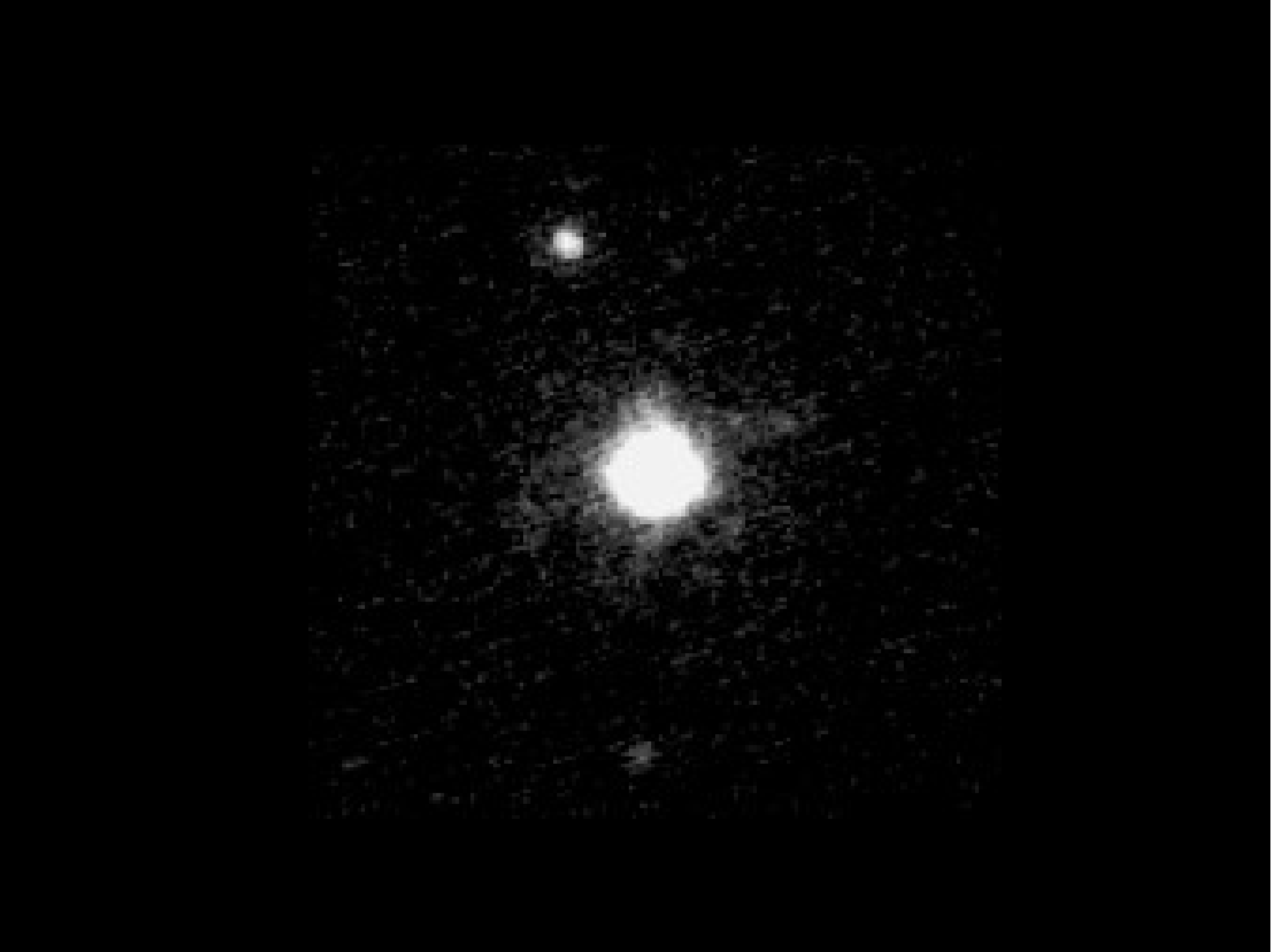
Vídeo New Horizons



Haumea

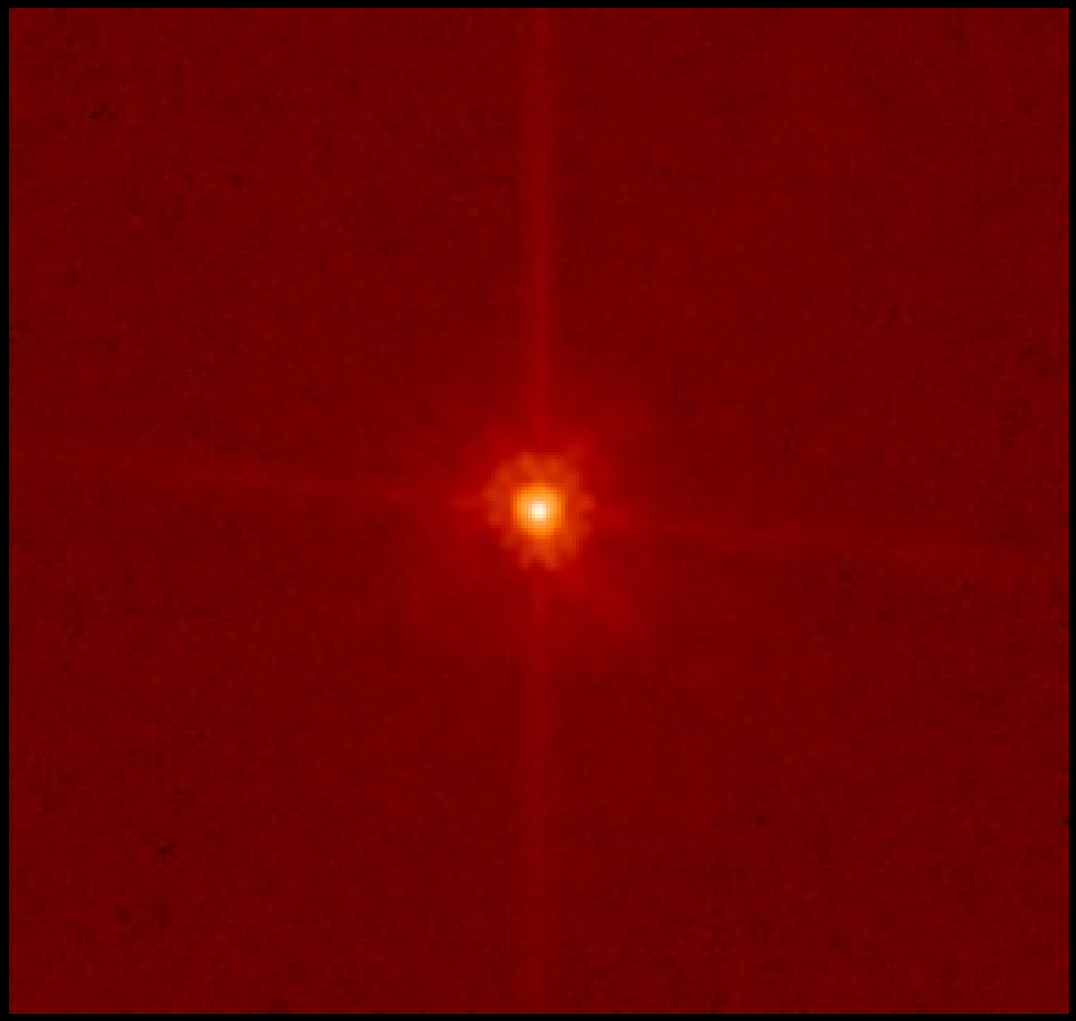


1600 km

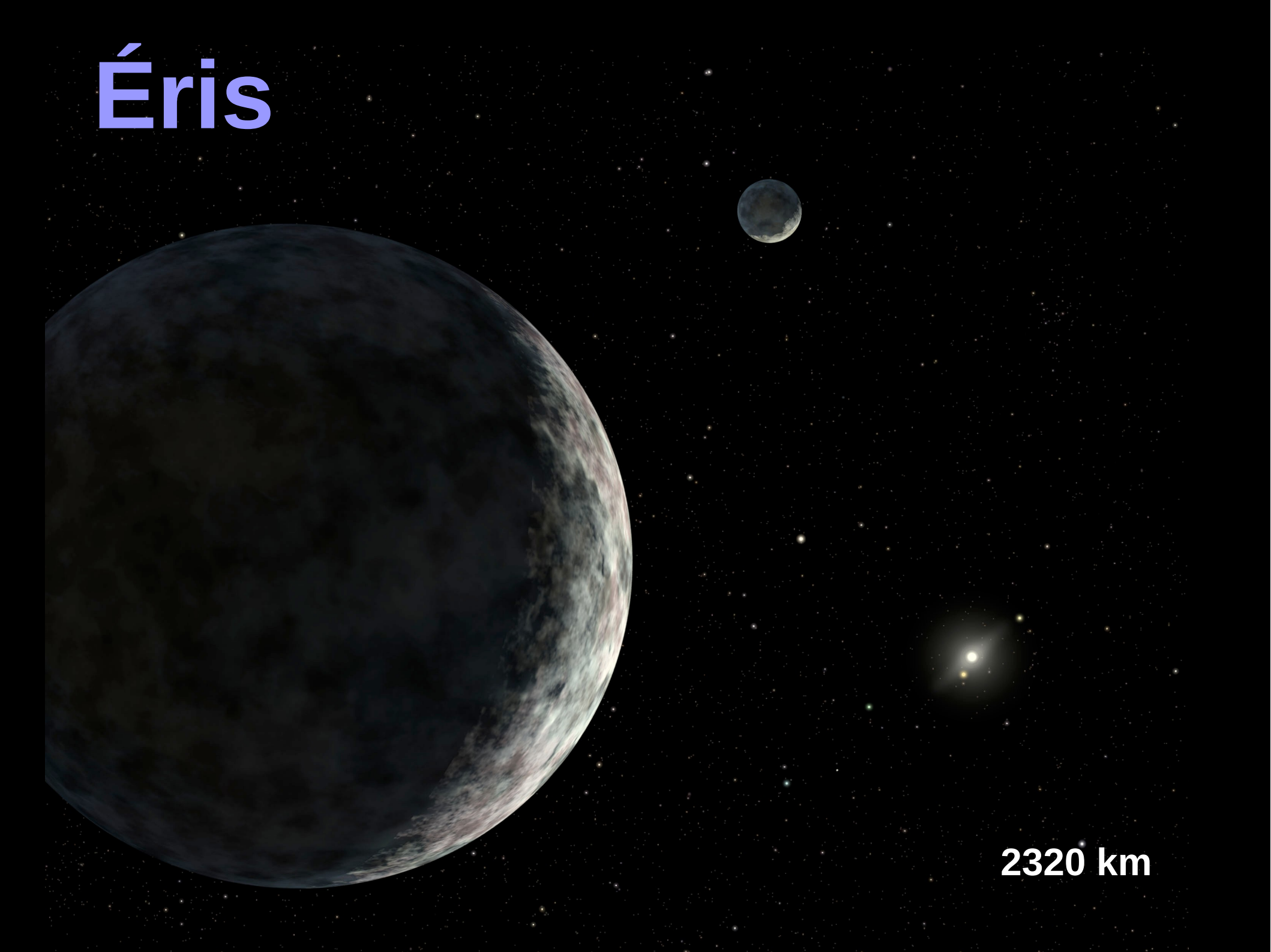


Makemake

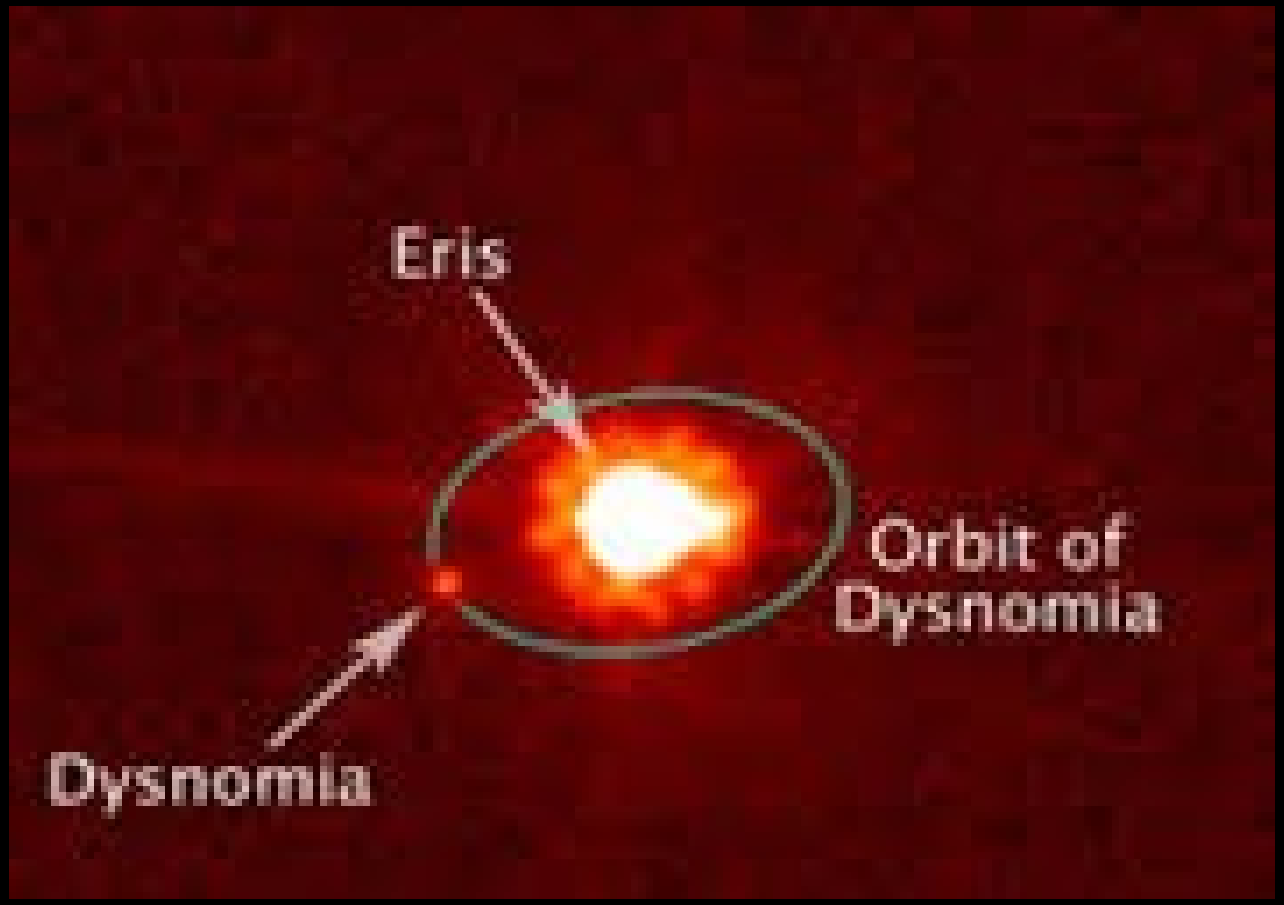
1430 km



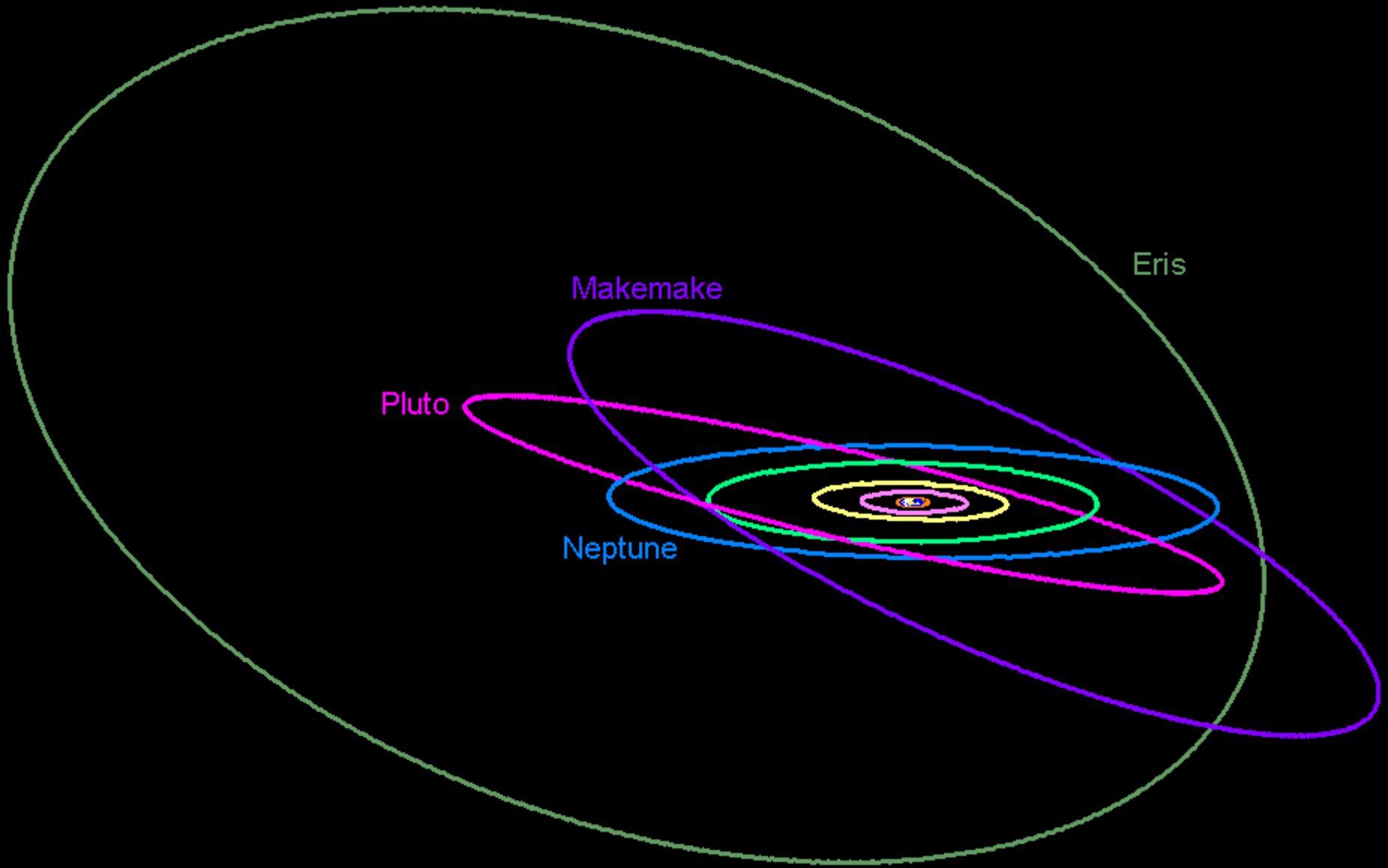
Éris



2320 km

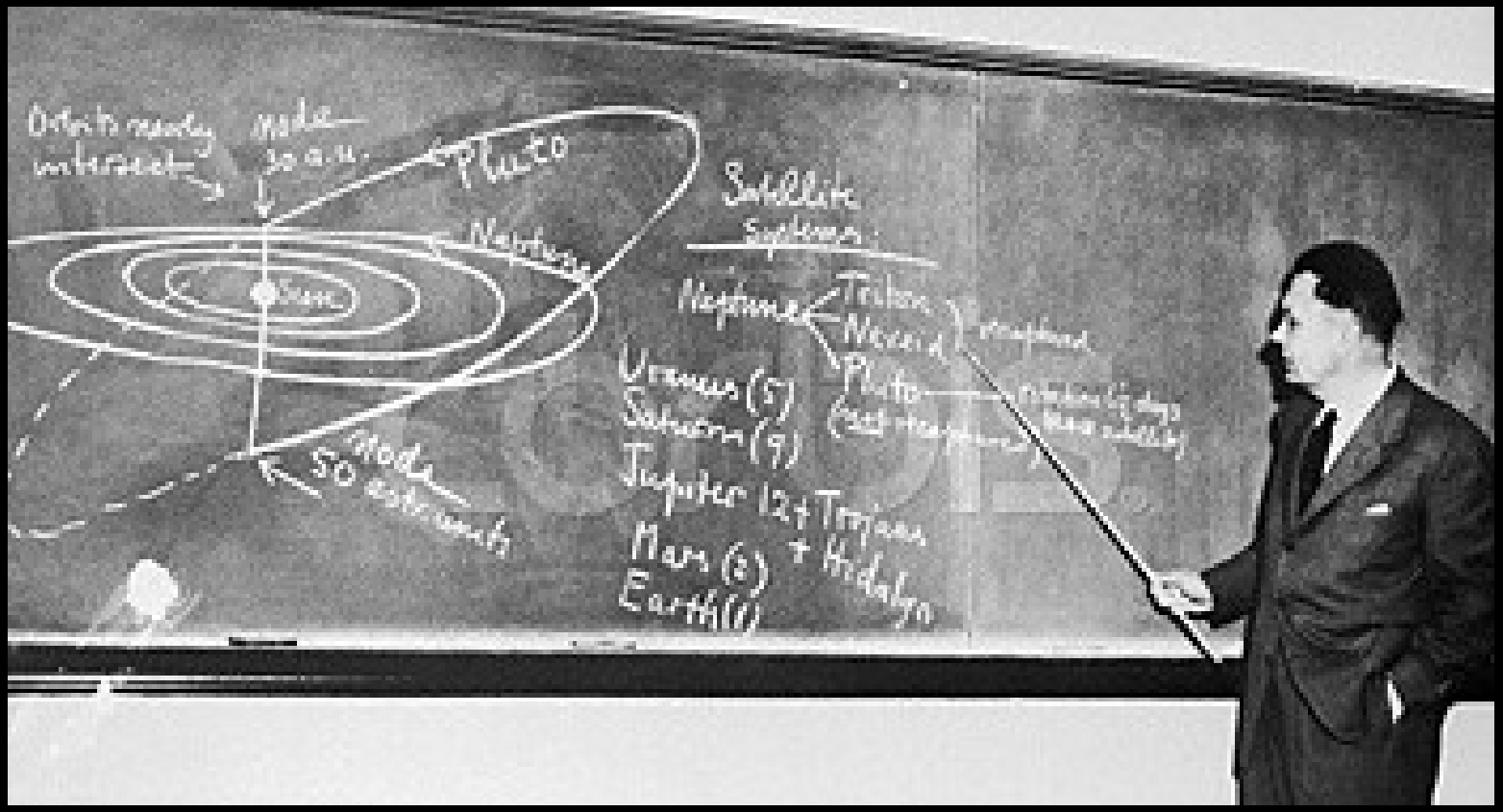

Eris
Orbit of
Dysnomia
Dysnomia


ΕΡΙ


Eris
Makemake
Pluto
Neptune

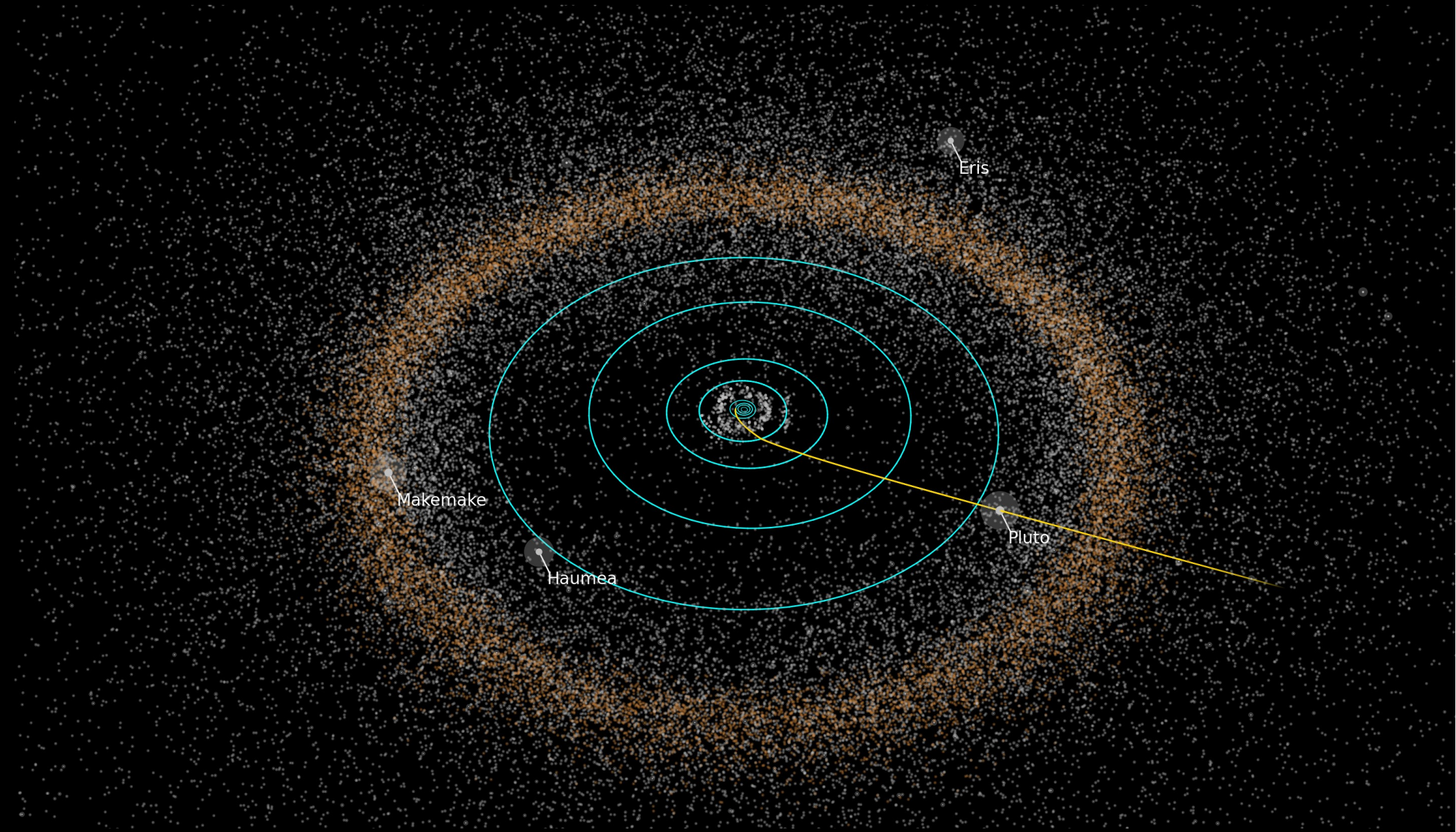
A Discórdia

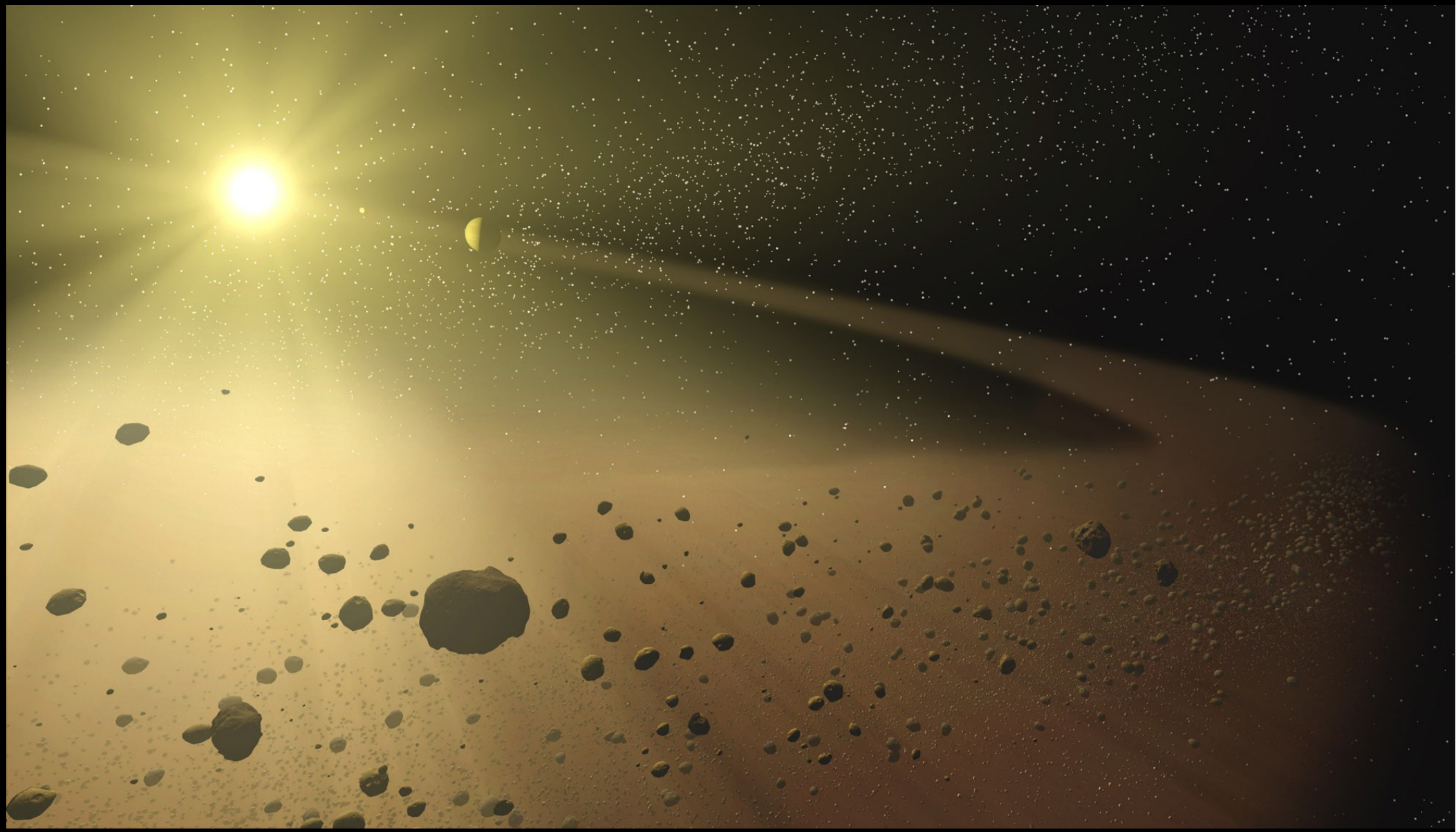
Cinturão de Kuiper



A ideia do Cinturão de Kuiper foi sugerida em 1951 Por Gerard Kuiper

Descoberta de diversos corpos na região desde a década de 90


Eris
Makemake
Haumea
Pluto



O que é um Planeta:

1 – Orbita o Sol antes de qualquer outra coisa

2 – É massivo o suficiente para ter formato aproximadamente esférico

3 – Deve ser gravitacionalmente dominante em sua órbita.


POOR PLUTO
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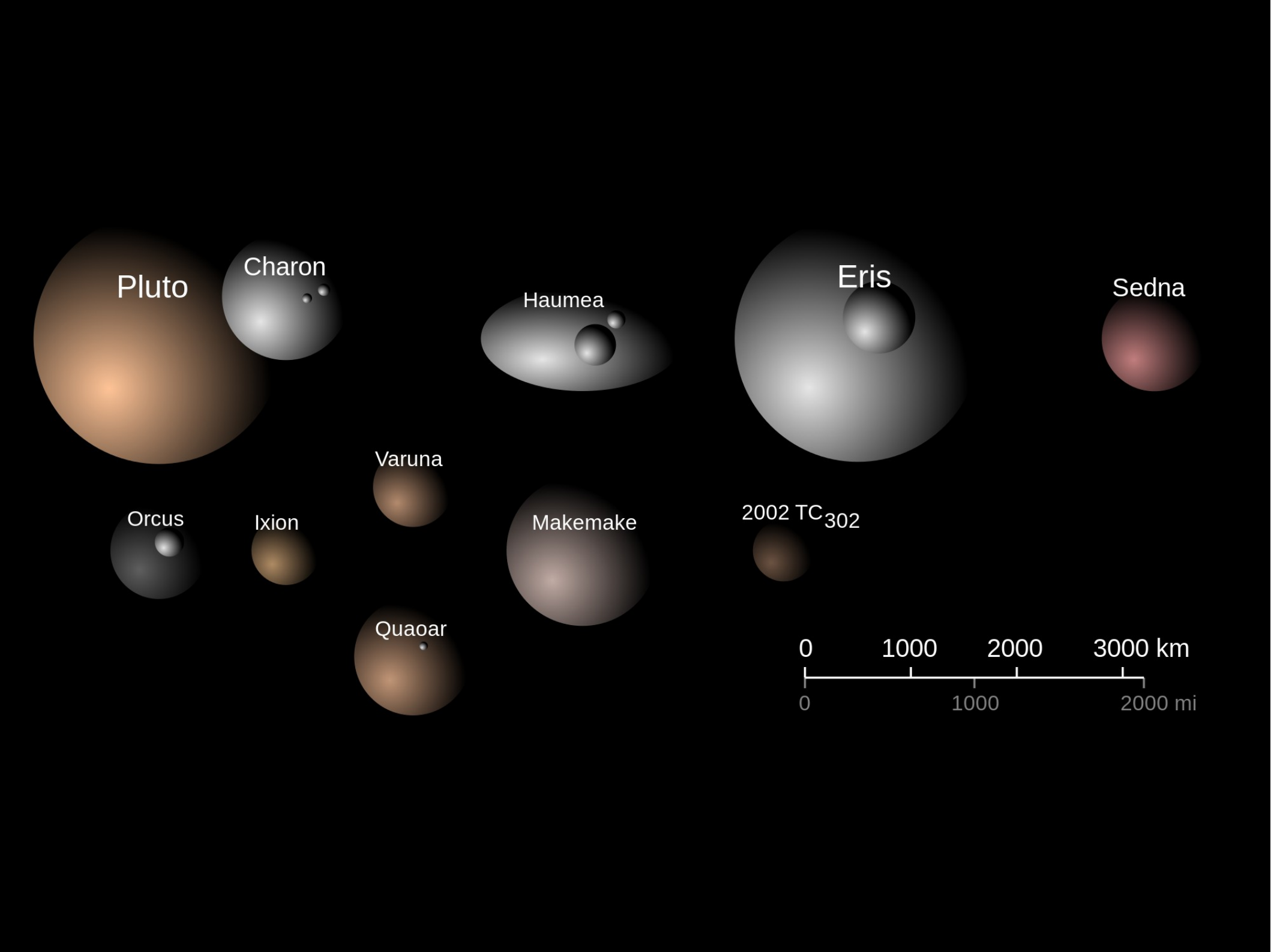
Plutão passa de Planeta para Planeta Anão

Ceres passa de Asteroide para Planeta Anão

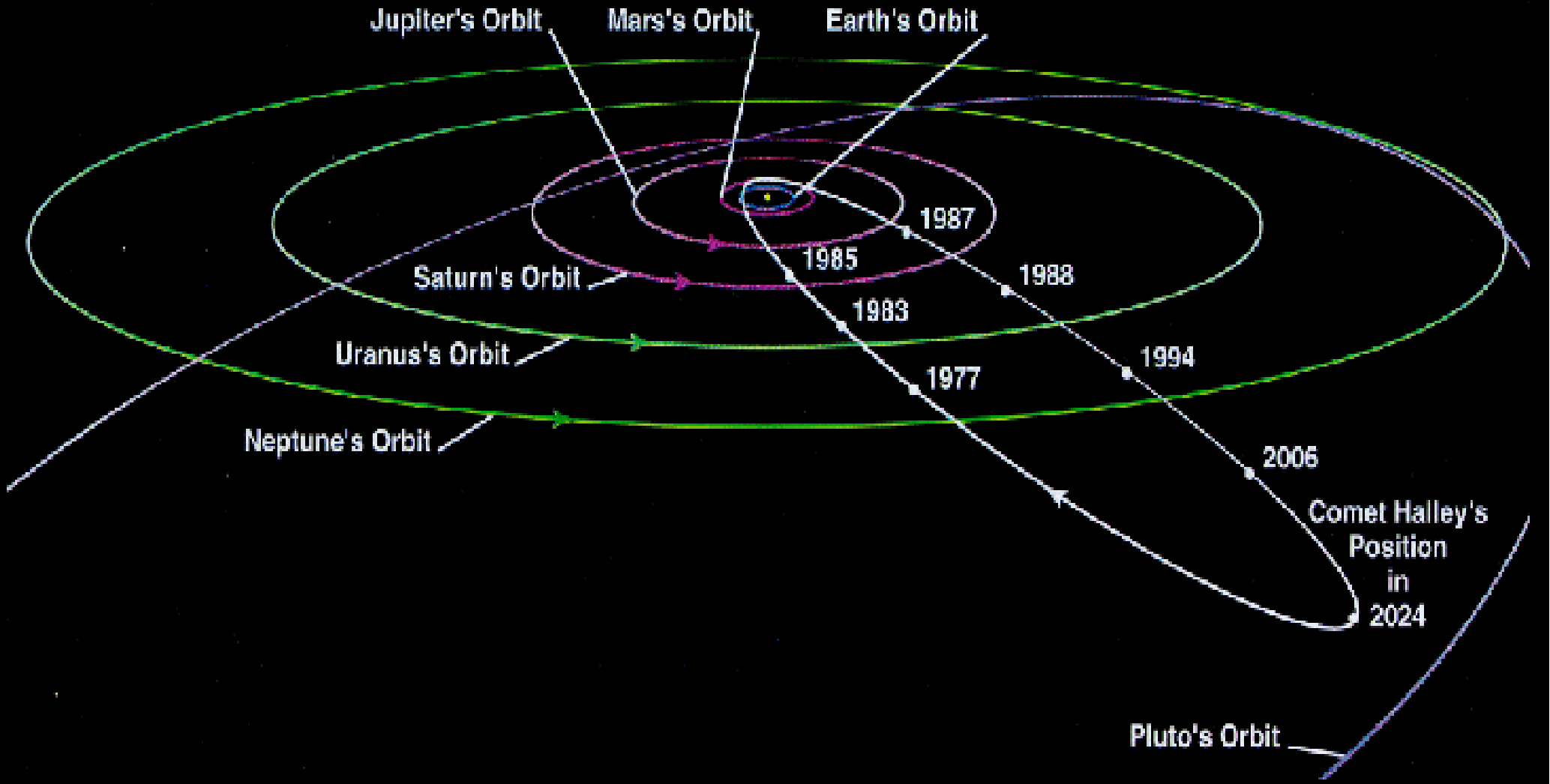

Namaka
Makemake
Luna
Hi'iaka
Dysnomia
Haumea
Eris
Charon
Earth
Ceres
Pluto


Pluto
Charon
Haumea
Eris
Sedna
Varuna
Orcus
Ixion
Makemake
2002 TC302
Quaoar
0
1000
2000
3000 km
0
1000
2000 mi

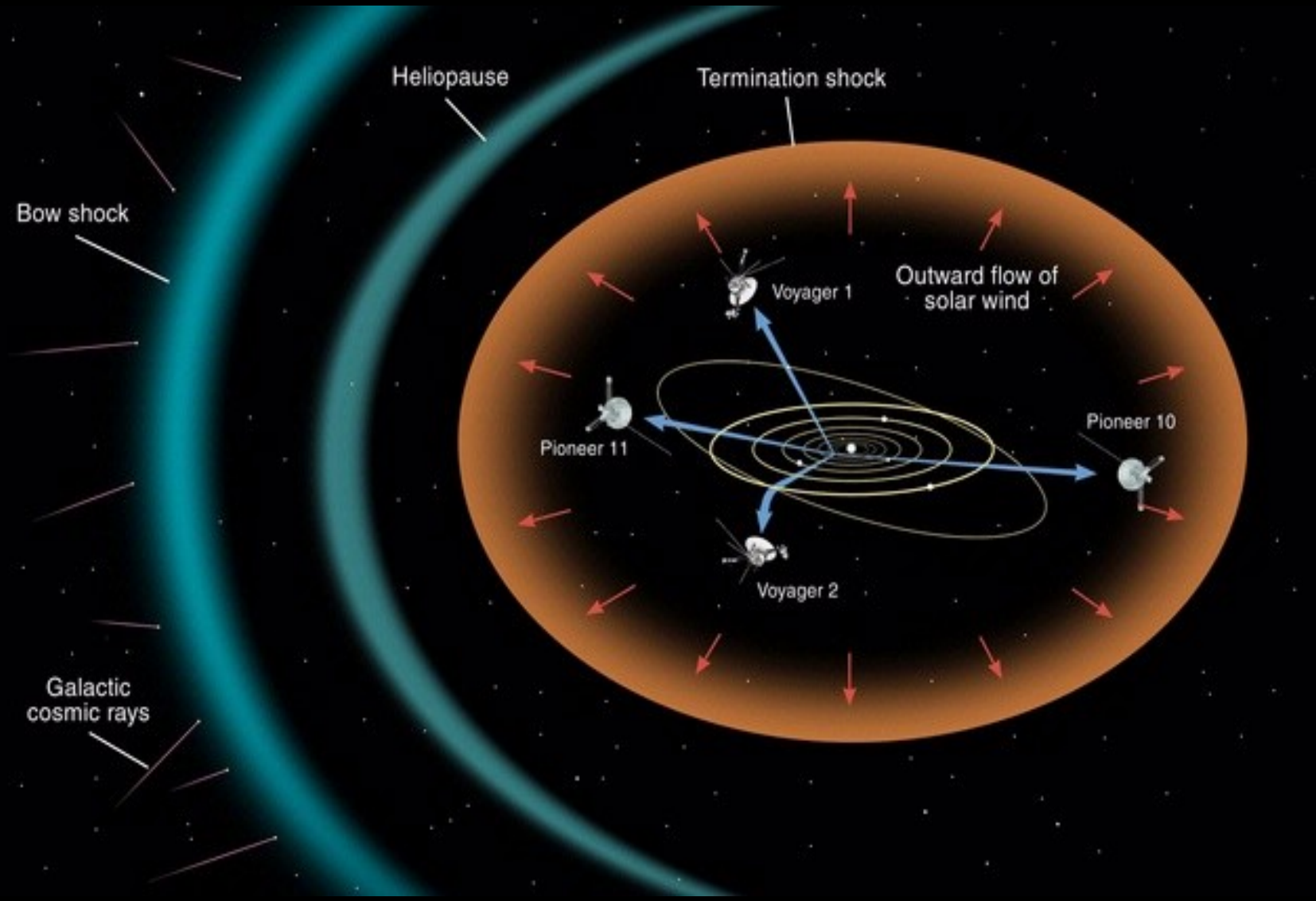
Cometas de Curto Período

Halley


Cometa di Halley
15 maggio 1910

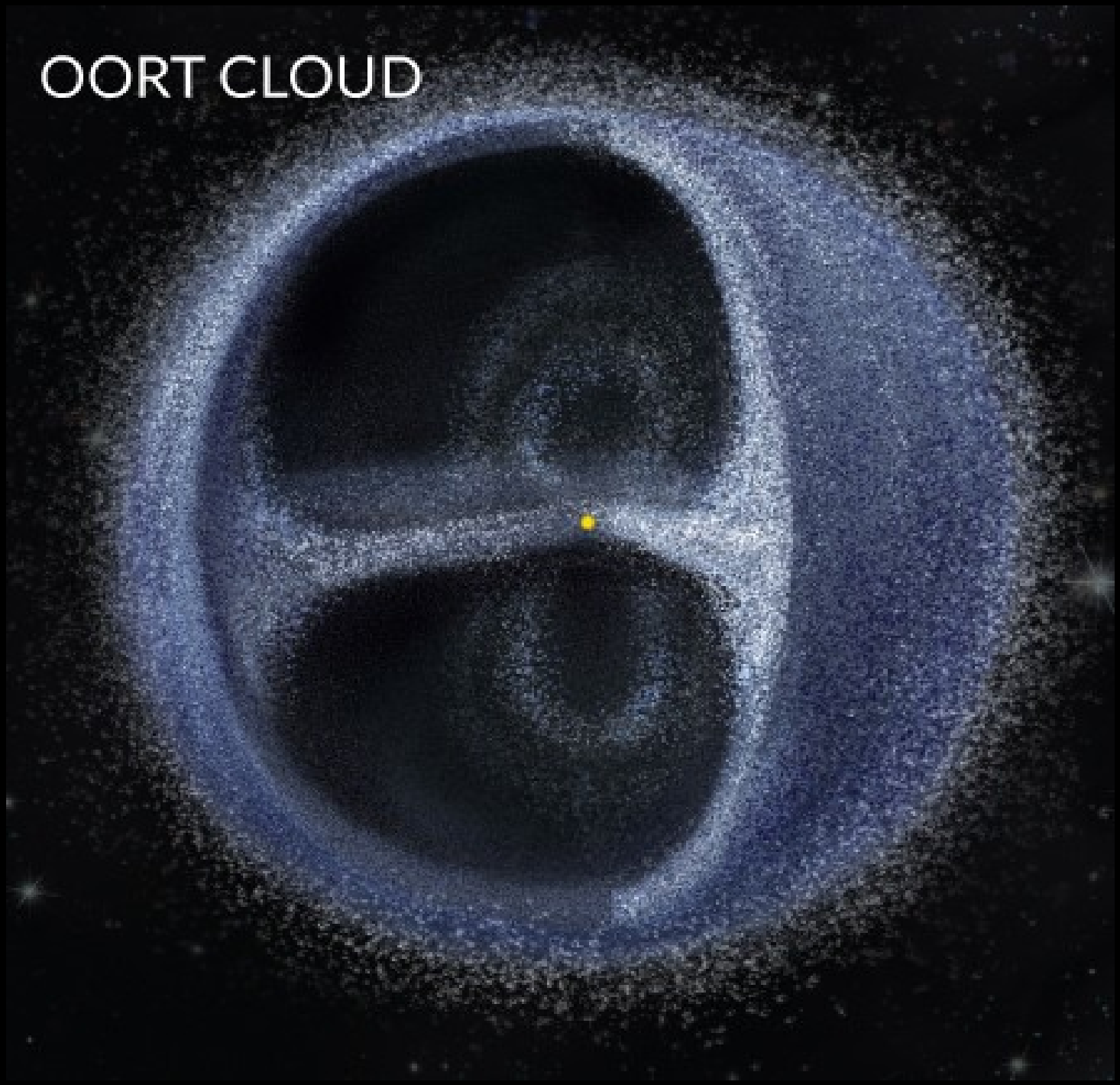

Jupiter's Orbit
Mars's Orbit
Earth's Orbit
1987
1985
Saturn's Orbit
1988
1983
Uranus's Orbit
1994
1977
Neptune's Orbit
2006
Comet Halley's Position in 2024
Pluto's Orbit

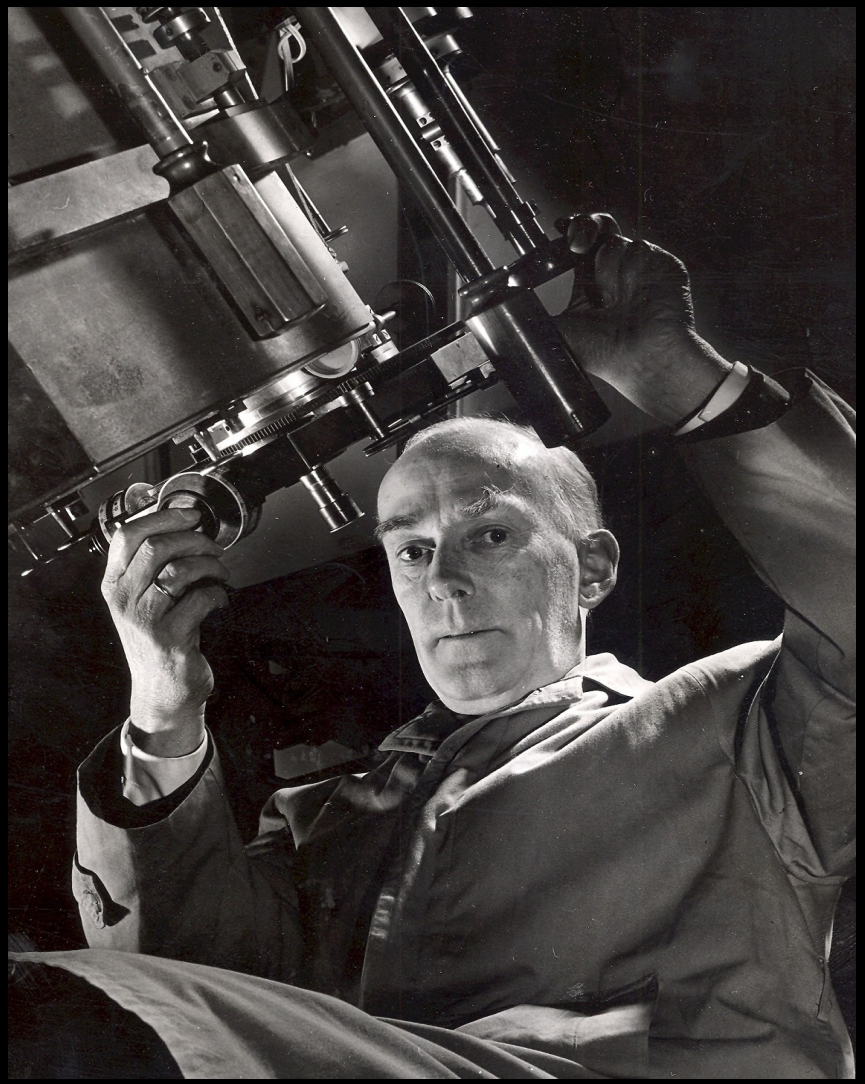
Heliosfera


Heliopause
Termination shock
Bow shock
Outward flow of
solar wind
Voyager 1
Pioneer 11
Pioneer 10
Voyager 2
Galactic
cosmic rays

Nuvem de Oort

Cometas de Longo Período


OORT CLOUD



Teorizada em 1950 por Jan H. Oort.

A nuvem de Oort seria o limite onde a gravidade do Sol consegue agir. Além dela estamos oficialmente fora do Sistema Solar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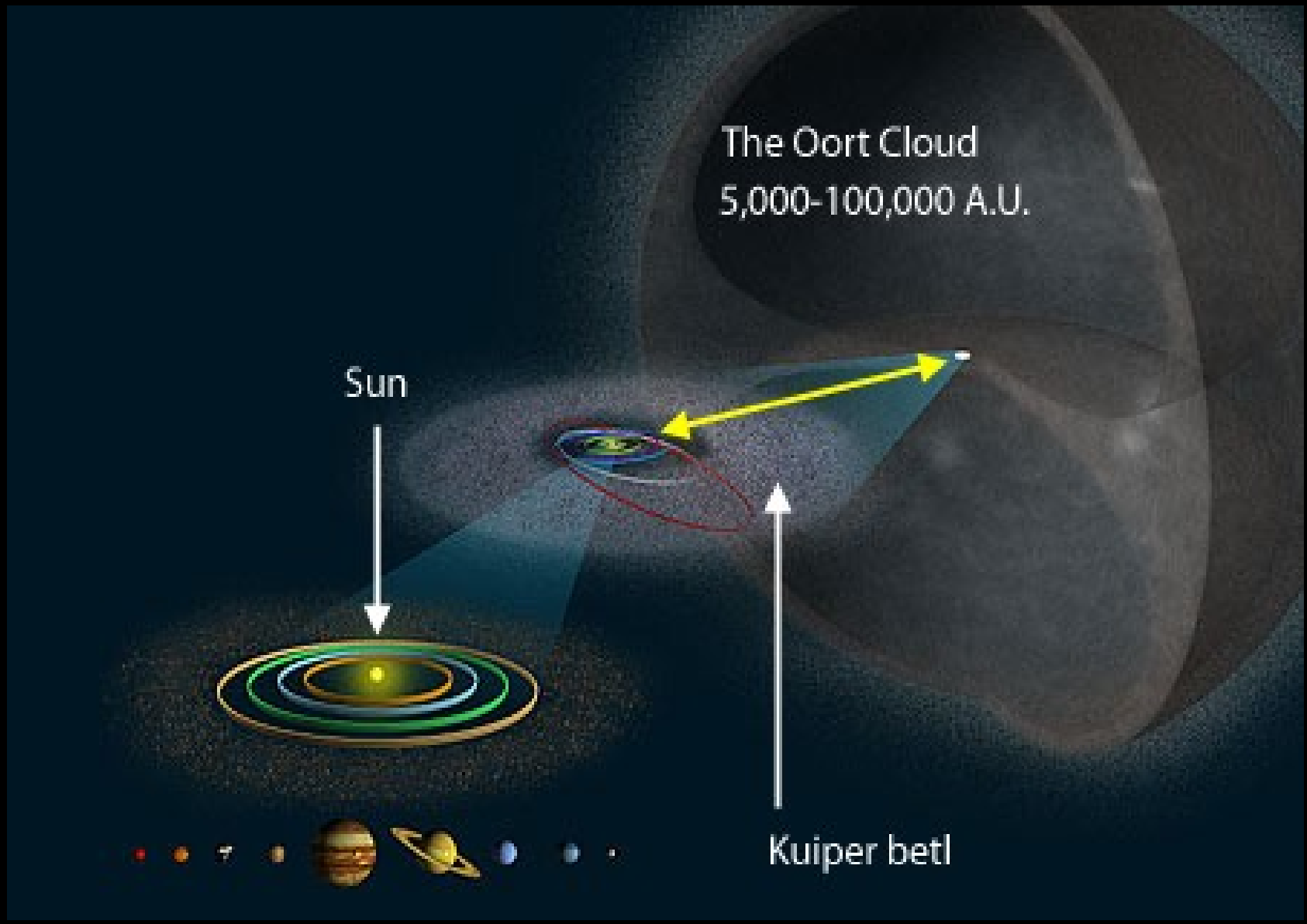
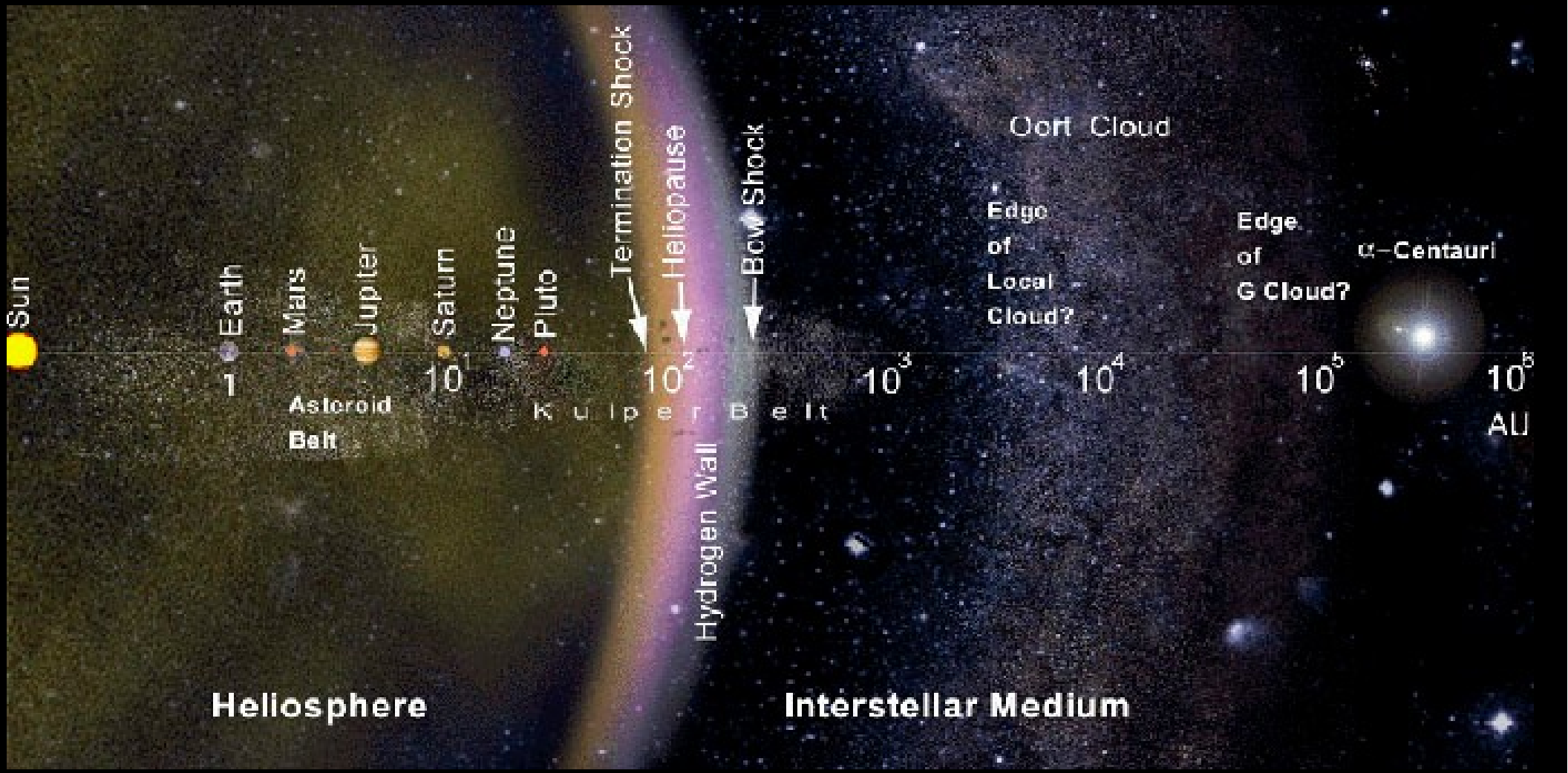
www.WilliamJosephGallery.com


The Oort Cloud
5,000-100,000 A.U.
Sun
Kuiper betl


Sun
Earth
Mars
Jupiter
Saturn
Neptune
Pluto
Termination Shock
Heliopause
Bow Shock
Oort Cloud
Edge of Local Cloud?
Edge of G Cloud?
α–Centauri
1
Asteroid Belt
10^1
10^2
Kuiper Belt
10^3
10^4
10^5
10^6
AU
Hydrogen Wall
Heliosphere
Interstellar Medium


Fim