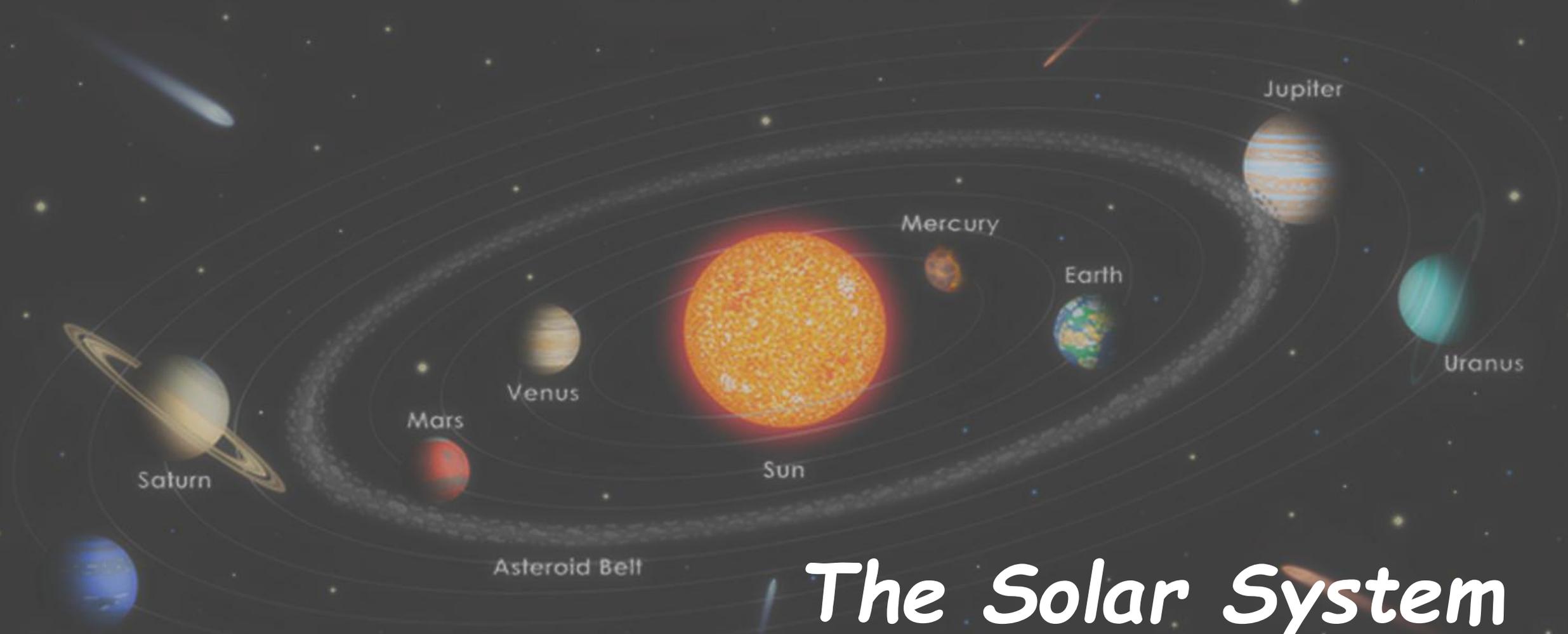


# SOLAR SYSTEM



*The Solar System  
by Min Qi Lee*

Neptune

Saturn

Asteroid Belt

Sun

Mars

Venus

Mercury

Earth

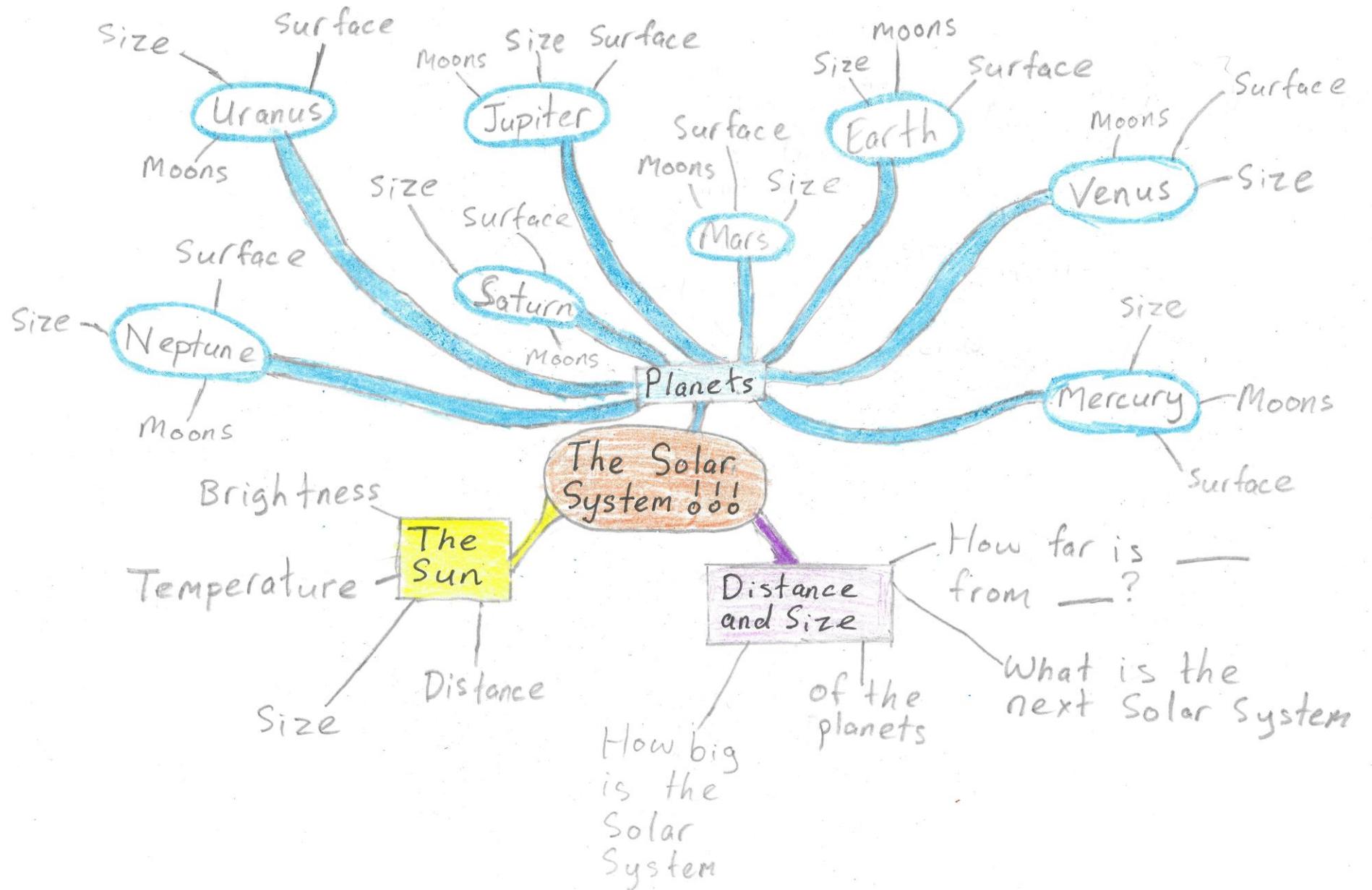
Jupiter

Uranus

## - Contents -

- My mind map
- Introduction
- The Sun
- The Planets
- Distance and size
- Pictures
- Solar system code cracker !!!

# My Mind Map



# - Introduction -

Let's get to know a bit about the Solar System !!!

The **Solar System** is the gravitationally bound system of the Sun and the objects that orbit it, either directly or indirectly. Of the objects that orbit the Sun directly, the largest are the eight planets with the remainder being smaller objects, the dwarf planets and small Solar System bodies. Of the objects that orbit the Sun indirectly—the moons—two are larger than the smallest planet, Mercury.



# The Sun

Distance from the Sun to....

- Neptune: 4.48 billion km.
- Mercury: 46.34 million km.
- Earth: 151.14 million km.
- Uranus: 2.9622 billion km.
- Venus: 108.28 million km.

Brightness: -26.74 (V)

Temperature: 5505°C

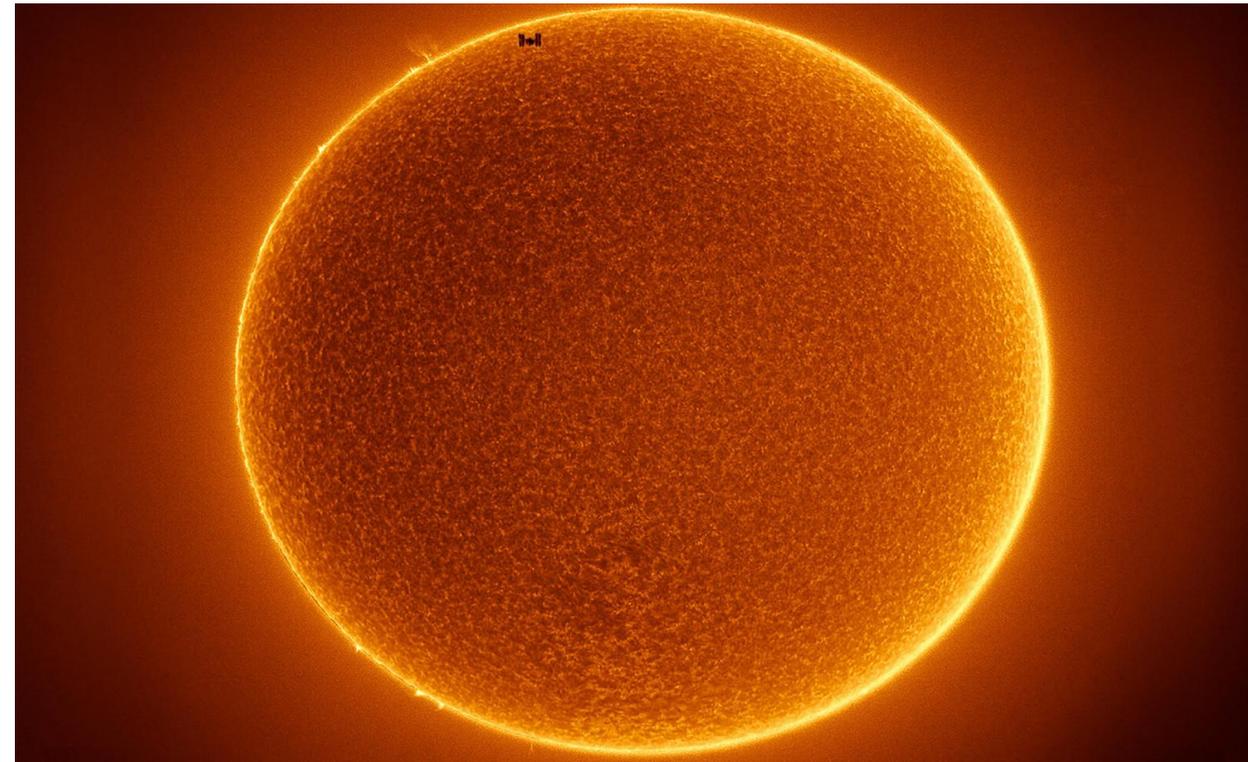
The Sun has a diameter of 1.3927 million km.

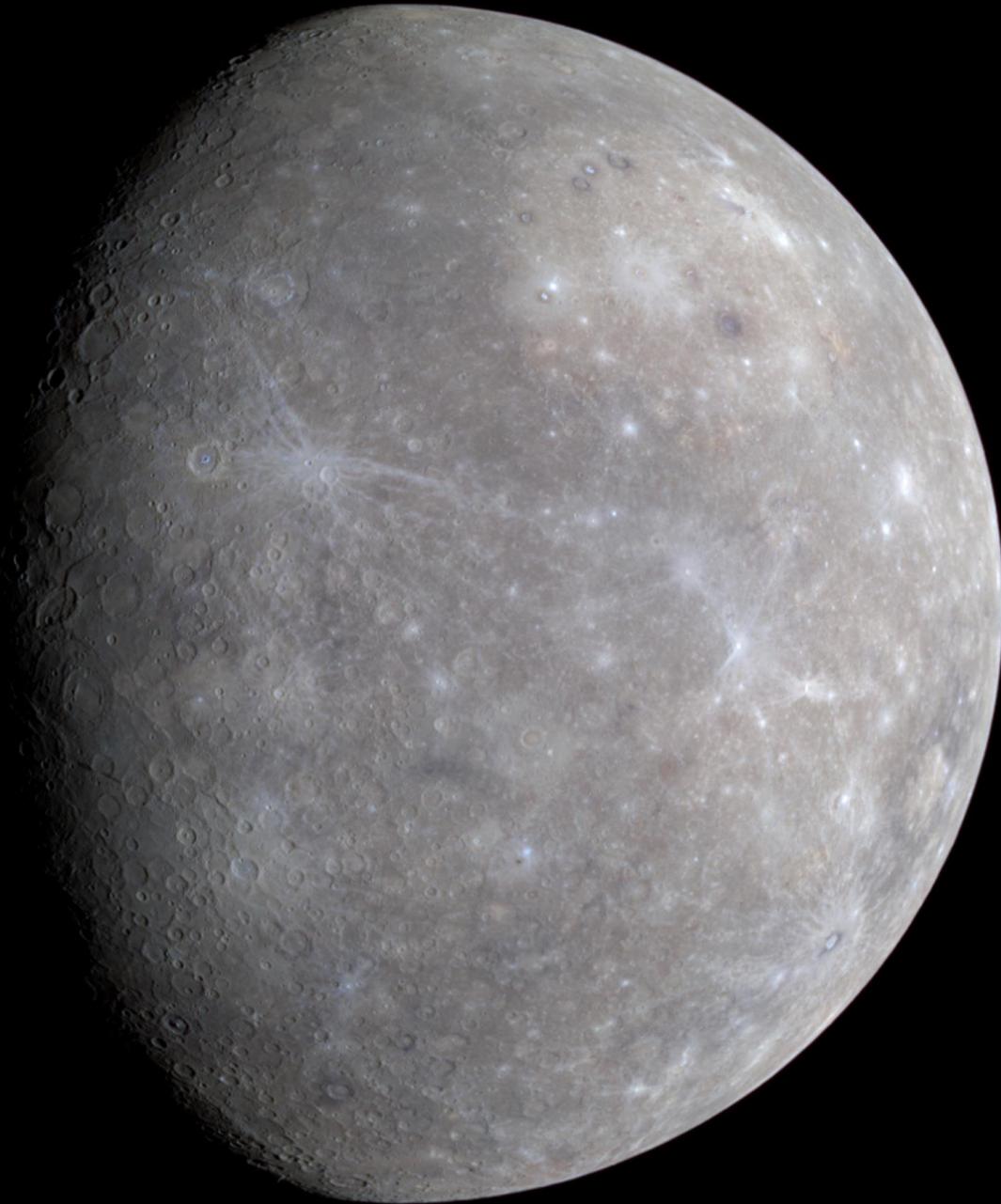
It takes 8 minutes and 20 seconds for the Sun's visual light to reach Earth. ? ?

## Did you know?

1 million Earths could fit inside the Sun.

WOW 😁 😁 !!!!!!!!





# MERCURY

## PLACE

1st from the Sun

## SURFACE AREA

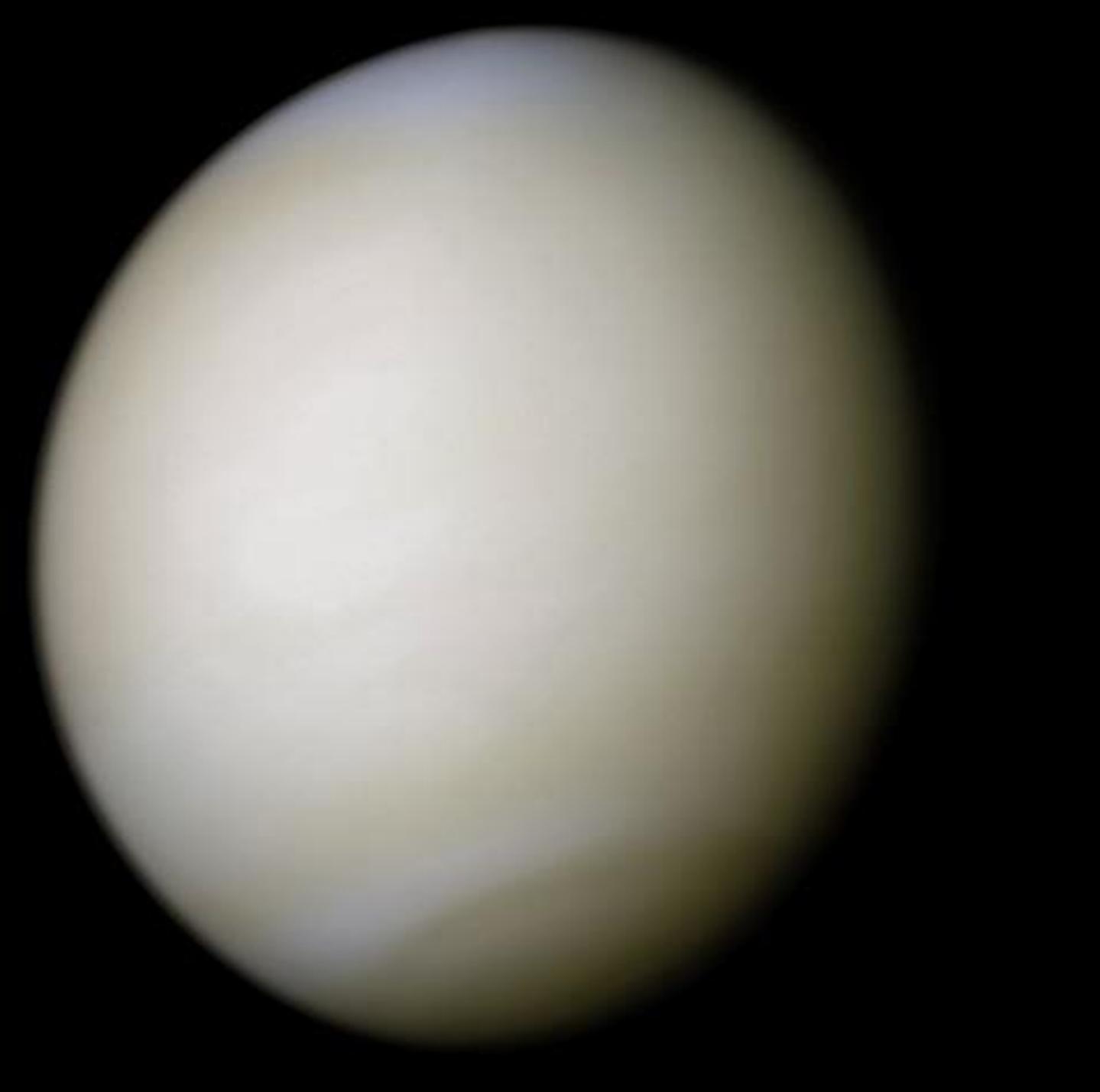
$74.8 \times 10^7$  million km<sup>2</sup>

## SURFACE

A large core of liquid metal surrounded by a mantle of silica and a solid outer crust.

## MOON

None



# VENUS

## PLACE

2nd from the Sun

## SURFACE AREA

$4.6023 \times 10^8$  million km<sup>2</sup>

## SURFACE

Venus's surface is a dry desertscape interspersed with slab - like rocks and is periodically resurfaced by volcanism.

## MOON

None



# EARTH

## PLACE

3rd from the Sun

## SURFACE AREA

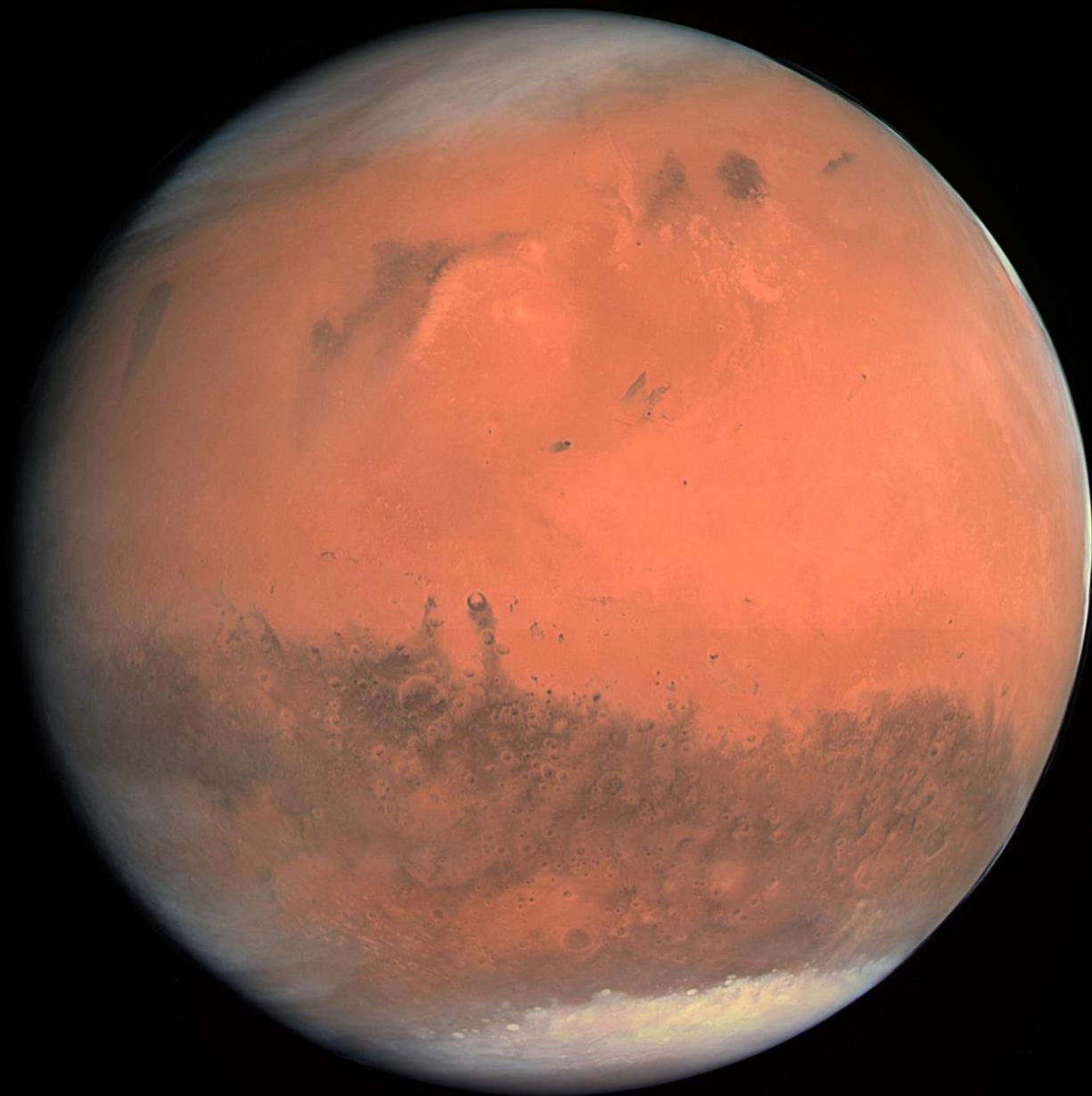
510 072 000 km<sup>2</sup>

## SURFACE

About 29% of the Earth's surface is consisting of continents and islands. The remaining 71% is covered in water.

## MOON

1 moon



# MARS

## PLACE

4th from the Sun

## SURFACE AREA

144 798 500 km<sup>2</sup>

## SURFACE

Iron oxide is prevalent, and has features reminiscent of the impact craters of the Moon and the valleys, deserts and polar ice caps of Earth.

## MOON

2 moons



# JUPITER

## PLACE

5th from the Sun

## SURFACE AREA

$6.1419 \times 10^{10} \text{ km}^2$

## SURFACE

Primarily composed of hydrogen with a quarter of its mass being helium, though helium comprises only about a tenth of the number of molecules. It may also have a rocky core of heavier elements, but lacks a well-defined solid surface.

## MOON

79 moons



# SATURN

## PLACE

6th from the Sun

## SURFACE AREA

$4.27 \times 10^{10}$  million km<sup>2</sup>

## SURFACE

Saturn is a gas giant because it is predominantly composed of hydrogen and helium. It lacks a definite surface, though it may have a solid core. Saturn's rotation causes it to have the shape of an oblate spheroid; that is, it is flattened at the poles and bulges at its equator.

## MOON

82 moons



# URANUS

## PLACE

7<sup>th</sup> from the Sun

## SURFACE AREA

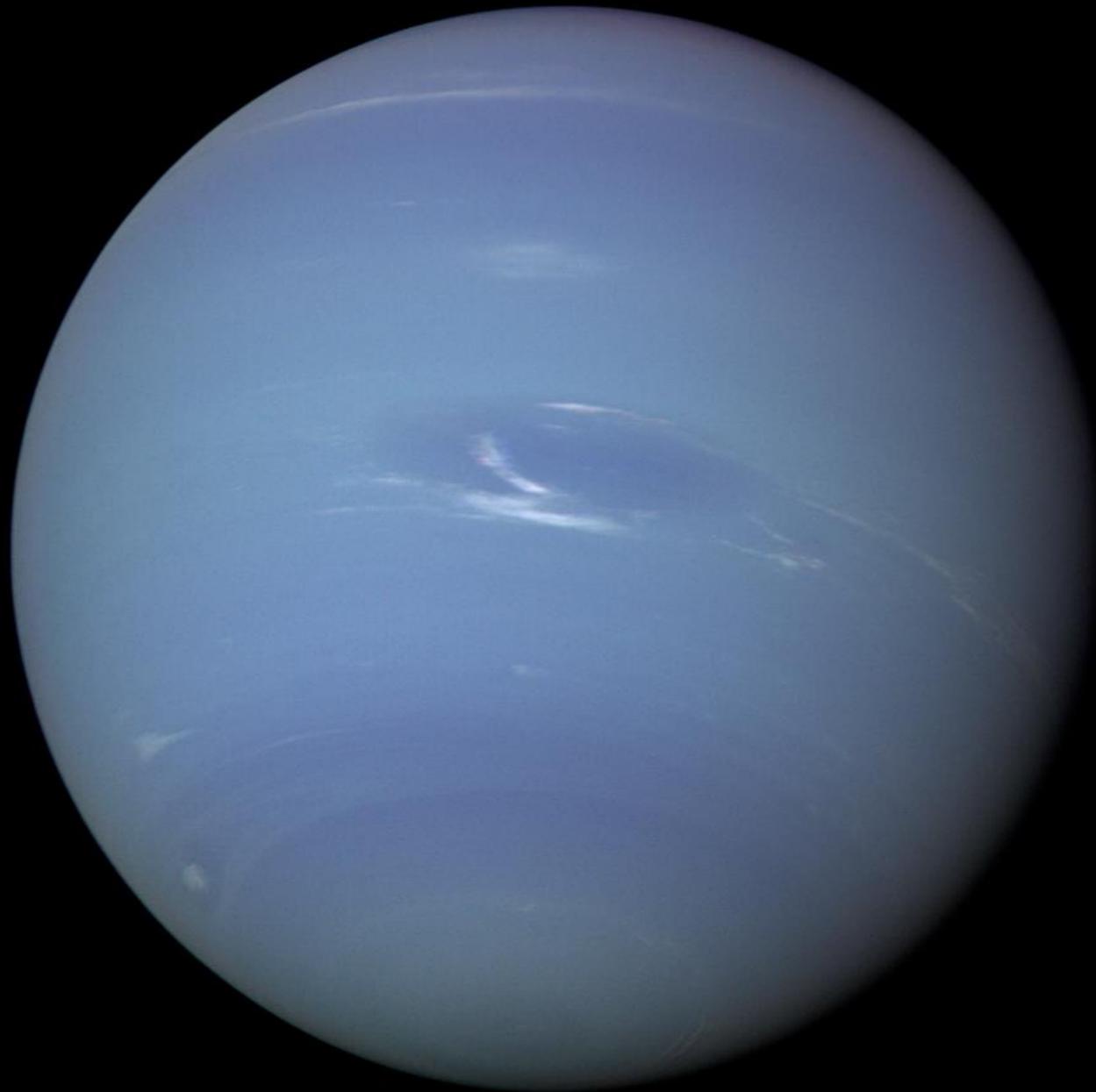
$8.1156 \times 10^9 \text{ km}^2$

## SURFACE

The fluid interior structure of Uranus means that it has no solid surface. It has a complex, layered cloud structure with water thought to make up the lowest clouds and methane the uppermost layer of clouds. The interior of Uranus is mainly composed of ices and rock.

## MOON

27 moons



# NEPTUNE

## PLACE

8<sup>th</sup> from the Sun

## SURFACE AREA

$7.6183 \times 10^9 \text{km}^2$

## SURFACE

Atmosphere is composed primarily of hydrogen and helium, along with traces of hydrocarbons and possibly nitrogen, though it contains a higher proportion of "ices" such as water, ammonia and methane.

## MOON

14 moons

# Distance And Size

## *Distance from:*

Mars to Venus: 190.68 million km.

Jupiter to Mars: 562.03million km.

Earth to Neptune: 4.55 billion km.

Mercury to Uranus: 2.92billion km.

Earth to Saturn: 1.44 billion km.

The radius of the solar system is 287.46 billion km.



## *It takes:*

Mercury 87.969 days to orbit the Sun.

Venus 225 days to orbit the Sun.

Earth 365.256 days to orbit the Sun.

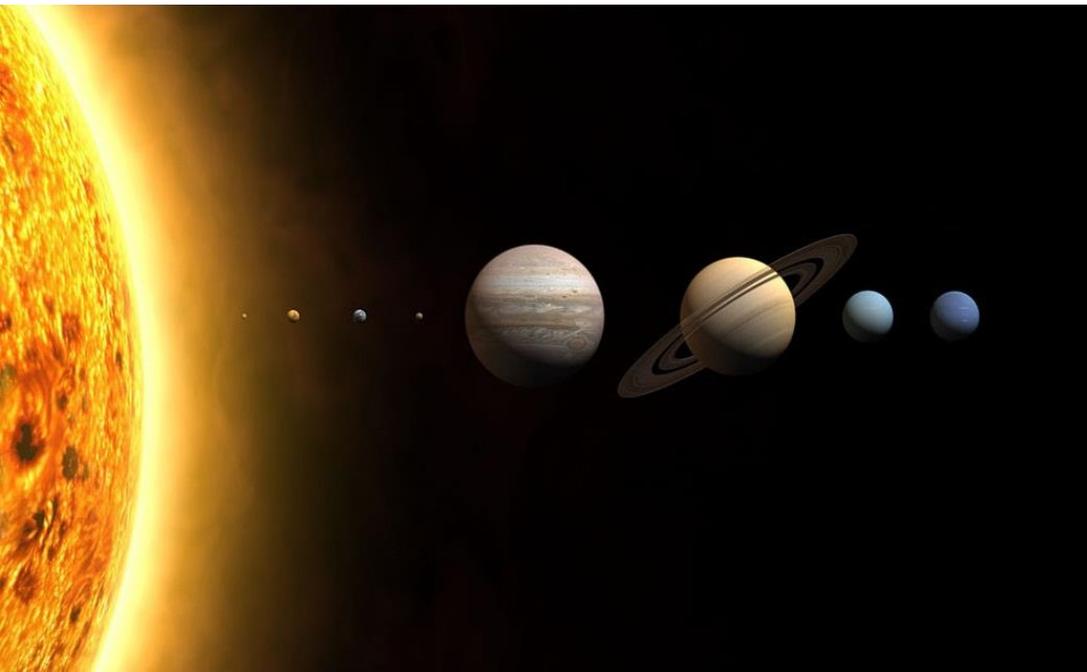
Mars 687 days to orbit the Sun.

Jupiter 12 years to orbit the Sun.

Saturn 29.5 years to orbit the Sun.

Uranus 84 years to orbit the Sun.

Neptune 165 years to orbit the Sun.



## *Did you know?*

The solar system was formed 4.6 billion years ago. The Sun's radius is 696,340 km!

**Mercury**

Messenger  
2011



**Venus**

Magellan  
1990-1992



**Earth**

S-NPP VIIRS  
2015



**Mars**

Viking/Mars Mosaiced  
Digital Image Model  
(MDIM)  
1975/2014



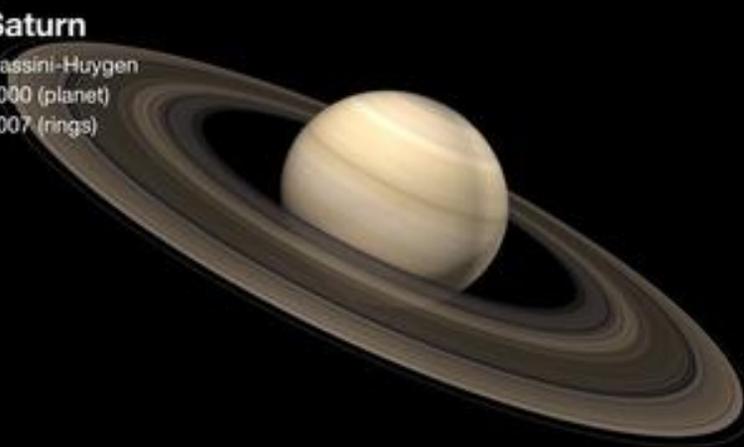
**Jupiter**

Hubble Space  
Telescope  
2015



**Saturn**

Cassini-Huygen  
2000 (planet)  
2007 (rings)



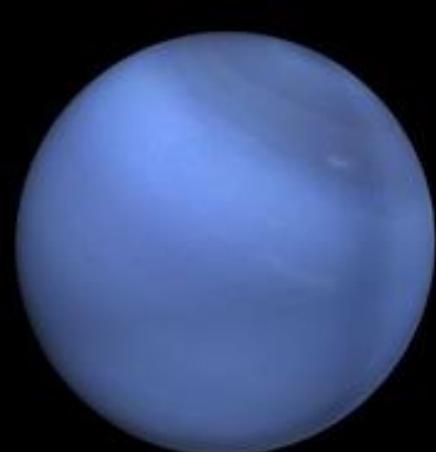
**Uranus**

W.M. Keck Observatory  
2004



**Neptune**

Voyager  
1989



**Pluto**

New Horizons  
2015



# - Solar System Puzzle -

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |
| <b>A</b>  | <b>B</b>  | <b>C</b>  | <b>D</b>  | <b>E</b>  | <b>F</b>  | <b>G</b>  | <b>H</b>  | <b>I</b>  |
|  |  |  |   |  |  |  |  |  |
| <b>J</b>  | <b>K</b>  | <b>L</b>  | <b>M</b>  | <b>N</b>  | <b>O</b>  | <b>P</b>  | <b>Q</b>  | <b>R</b>  |
|  |  |  |  |  |  |  |  |   |
| <b>S</b>  | <b>T</b>  | <b>U</b>  | <b>V</b>  | <b>W</b>  | <b>X</b>  | <b>Y</b>  | <b>Z</b>  |   |






















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*The End*