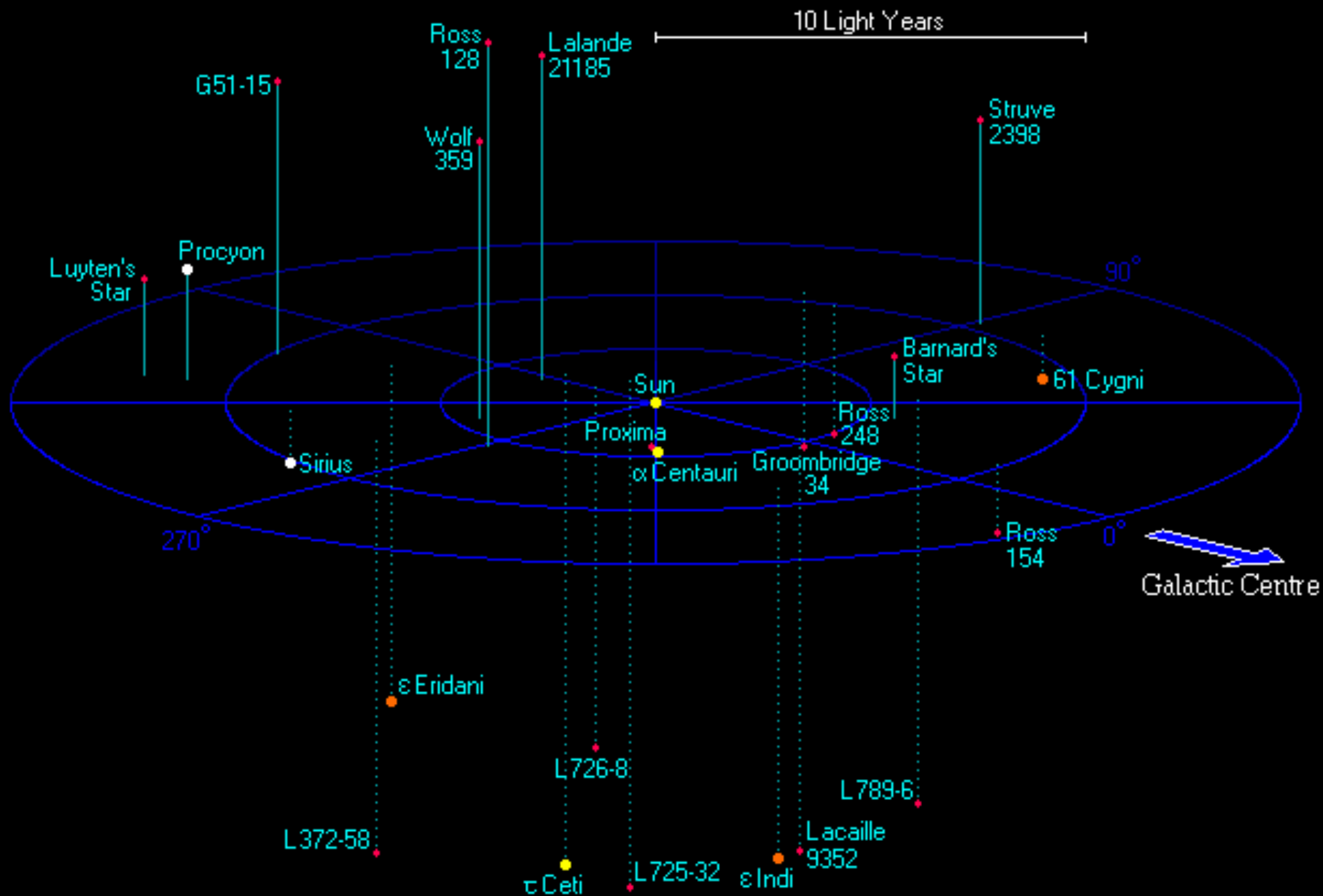
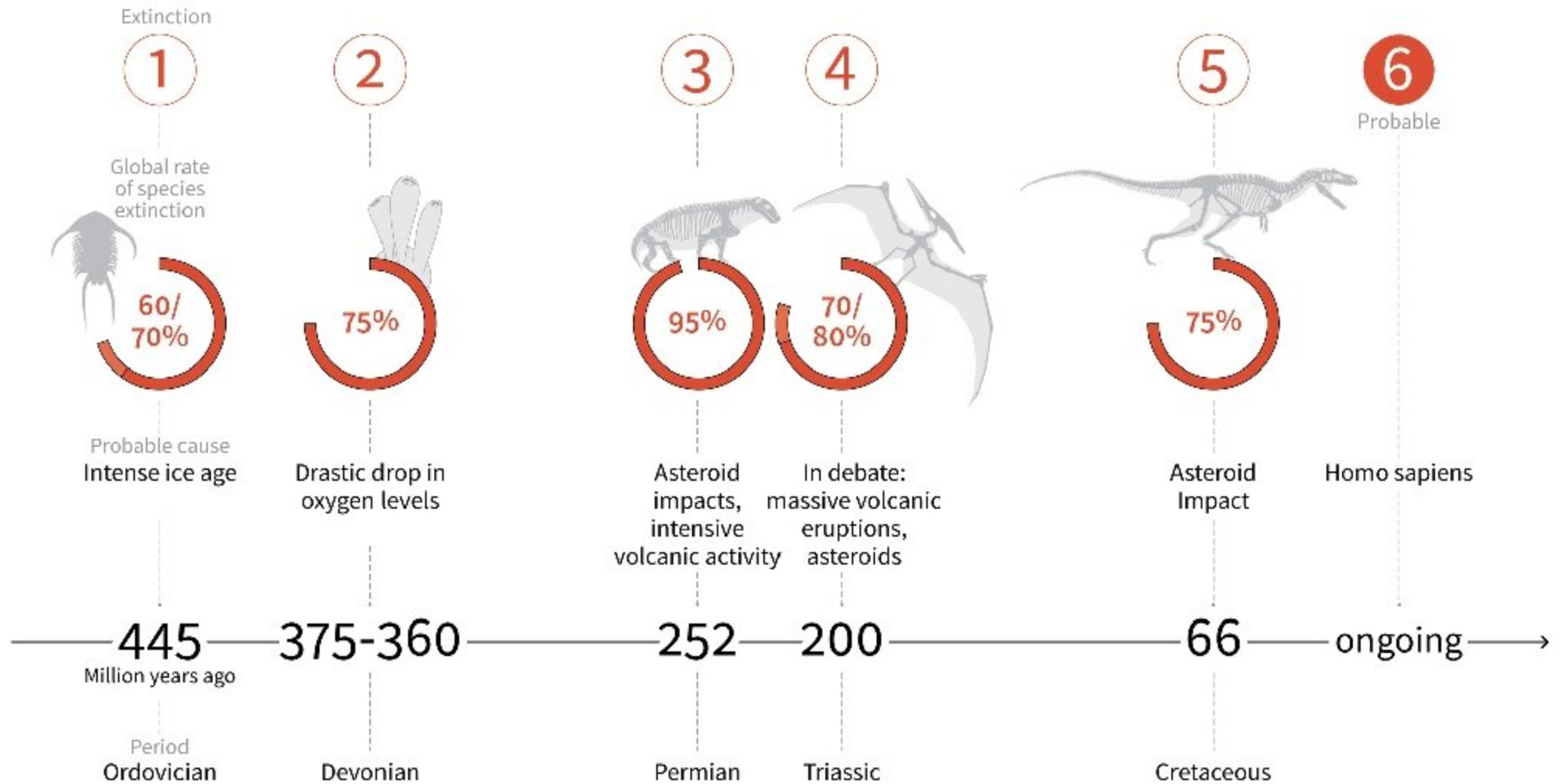


# Closest Stars



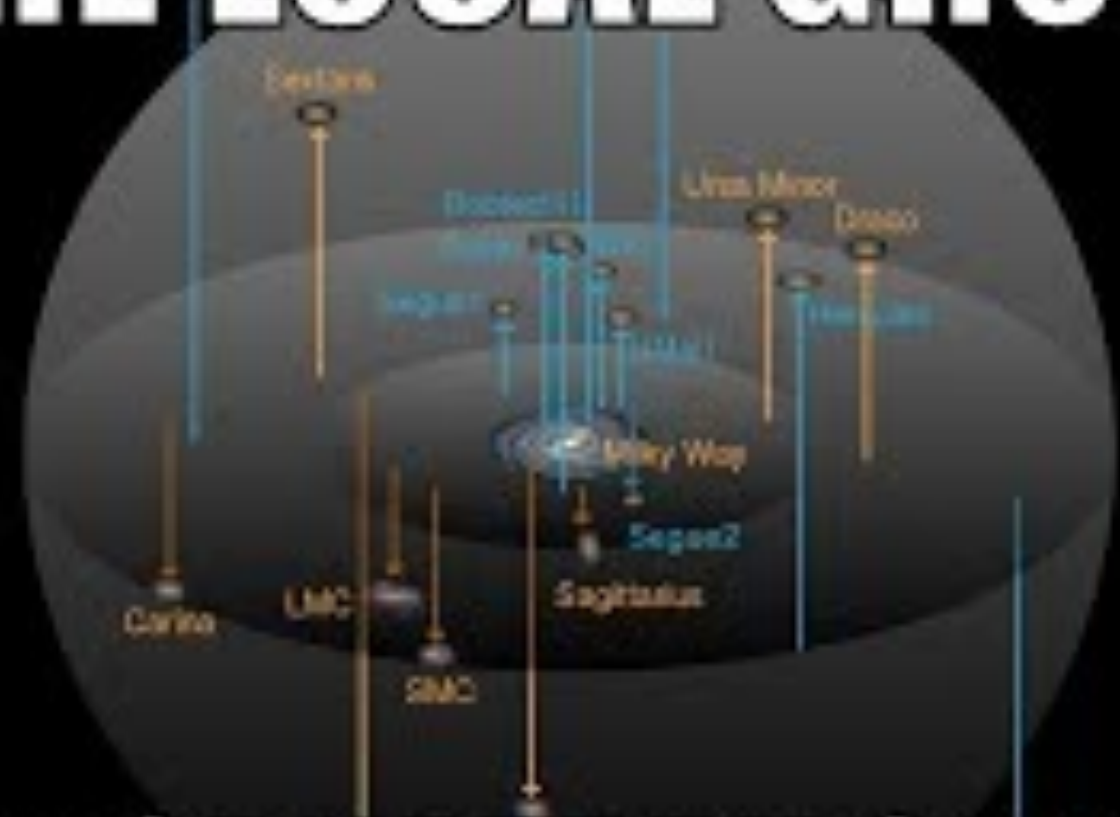
# Earth's "mass extinctions"

During the last 500 million years, Earth has experienced five periods when at least half the living creatures were wiped out



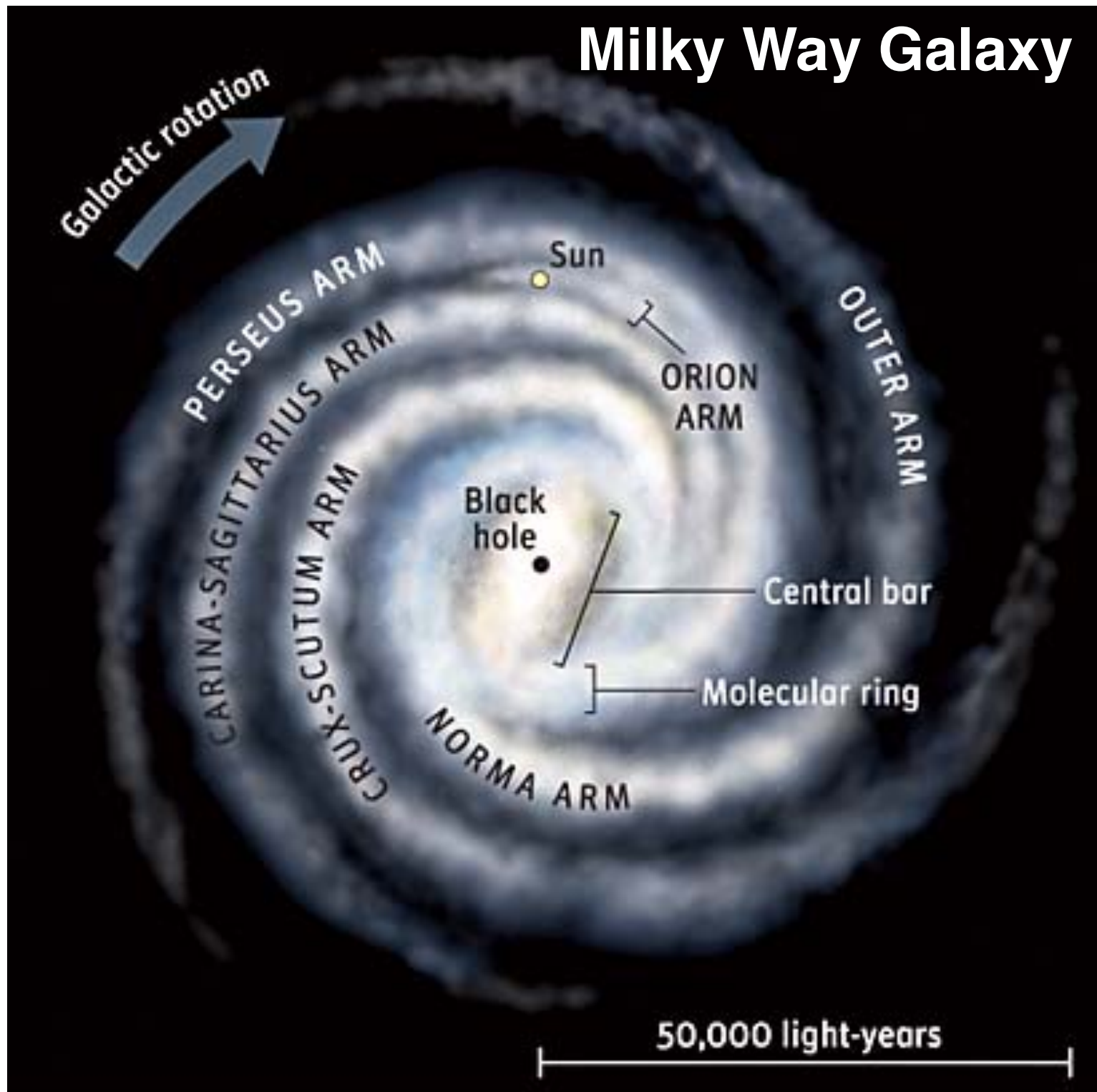
Sources: National Geographic, Encyclopedia Britannica, scientific studies

# THE LOCAL GROUP

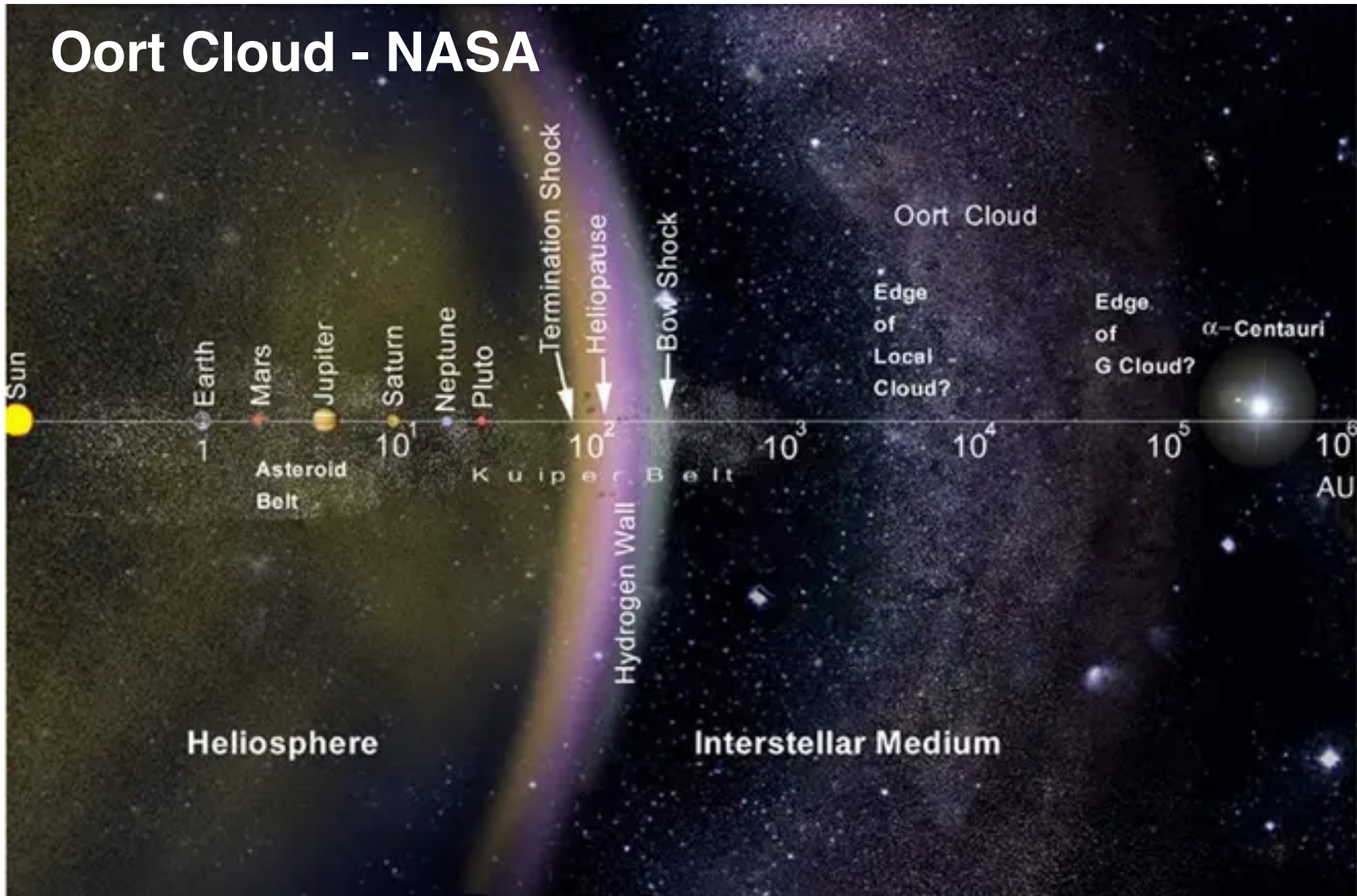


# MAP OF NEARBY GALAXIES

# Milky Way Galaxy



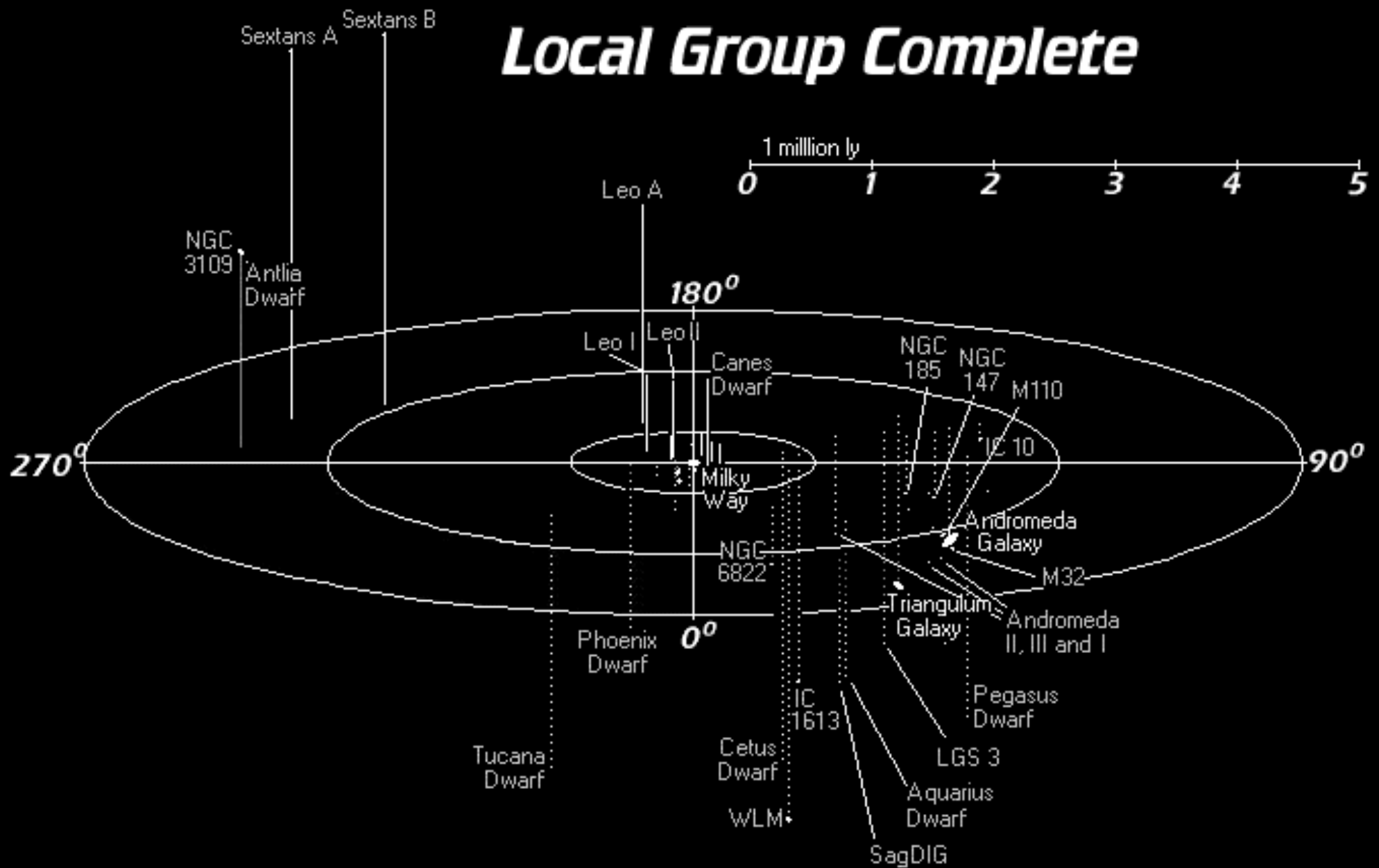
# Oort Cloud - NASA



## Solar System Fact Sheet

	MERCURY	VENUS	EARTH	MARS	JUPITER	SATURN	URANUS	NEPTUNE	CERES	PLUTO	ERIS	COMET HALLEY
<b>Average Distance from Sun (km)</b>	$57.9 \times 10^6$	$108.2 \times 10^6$	$149.6 \times 10^6$	$227.9 \times 10^6$	$778.6 \times 10^6$	$1,434 \times 10^6$	$2,873 \times 10^6$	$4,495 \times 10^6$	$414 \times 10^6$	$5,906 \times 10^6$	$10,166 \times 10^6$	$2,678 \times 10^6$
<b>perihelion (km)</b>	$46.0 \times 10^6$	$107.5 \times 10^6$	$147.1 \times 10^6$	$206.6 \times 10^6$	$740.5 \times 10^6$	$1,352 \times 10^6$	$2,741 \times 10^6$	$4,445 \times 10^6$	$383 \times 10^6$	$4,436 \times 10^6$	$5,723 \times 10^6$	$87.7 \times 10^6$
<b>aphelion (km)</b>	$69.8 \times 10^6$	$108.9 \times 10^6$	$152.1 \times 10^6$	$249.2 \times 10^6$	$816.6 \times 10^6$	$1,514 \times 10^6$	$3,003 \times 10^6$	$4,546 \times 10^6$	$445 \times 10^6$	$7,376 \times 10^6$	$14,602 \times 10^6$	$5,251 \times 10^6$
<b>Mean equatorial radius (km)</b>	2,440	6,052	6,371	3,390	69,911	58,232	25,362	24,624	467	1,150	~1,200	15x8
<b>Mass (kg)</b>	$3.3 \times 10^{23}$	$48.7 \times 10^{23}$	$59.7 \times 10^{23}$	$6.4 \times 10^{23}$	$18,990 \times 10^{23}$	$5,684 \times 10^{23}$	$868 \times 10^{23}$	$1,024 \times 10^{23}$	$.008 \times 10^{23}$	$0.13 \times 10^{23}$	$0.166 \times 10^{23}$	$2.2 \times 10^{14}$
<b>Rotation period (Earth days)</b>	58.6	-243.02	1	1.03	0.41	0.44	-0.72	0.67	0.38	-6.39	1.08	2.2
<b>Orbital period (Earth years)</b>	0.24	0.62	1	1.88	11.9	29.5	84.02	164.8	4.6	247.9	560	76.1
<b>Axial tilt (degrees)</b>	0	177.3	23.4	25.2	3.1	26.7	97.8	28.3	4	119.6	?	45
<b>Min/Max surface temperature</b>	-173°C/427°C	462°C	-88°C /58°C	-153°C /20°C	N/A	N/A	N/A	N/A	-105°C /-38.2°C	-240.2°C /-218.2°C	-243.2°C /-217.2°C	30°C /130°C
<b>Atmosphere</b>	He, Na, O <sub>2</sub>	CO <sub>2</sub> , N <sub>2</sub>	N <sub>2</sub> , O <sub>2</sub>	CO <sub>2</sub> , N <sub>2</sub> , Ar	H <sub>2</sub> , He	H <sub>2</sub> , He	H <sub>2</sub> , He, CH <sub>4</sub>	H <sub>2</sub> , He, CH <sub>4</sub>	?	N <sub>2</sub> , CH <sub>4</sub> , CO	?	Dust and gas around nucleus
<b>Number of known moons</b>	0	0	1	2	67	62	27	14	0	5	1	0

# Local Group Complete



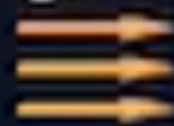
# TIDES

Low tide

High tide



High tide



Moon

Low tide