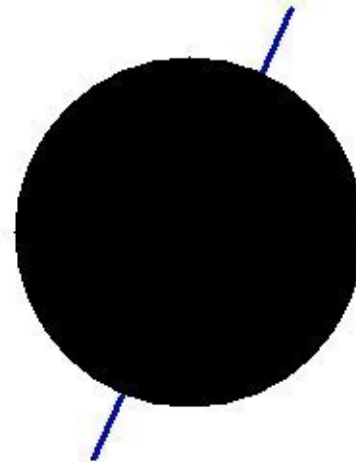
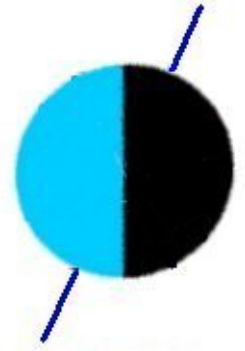


SUMMER
SOLSTICE
JUNE 21

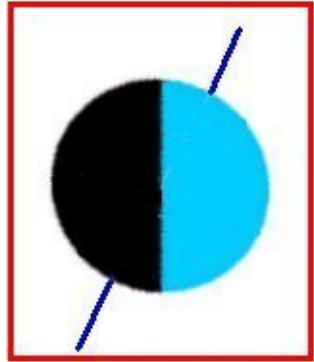
VERNAL EQUINOX (SPRING)
MARCH 21



AUTUMNAL EQUINOX (FALL)
SEPTEMBER 21

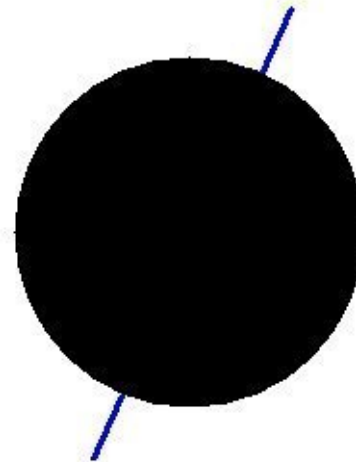


WINTER
SOLSTICE
DECEMBER 21

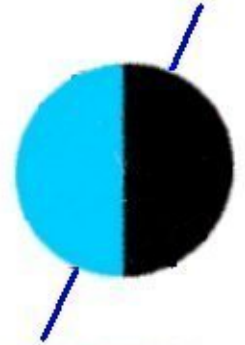


SUMMER
SOLSTICE
JUNE 21

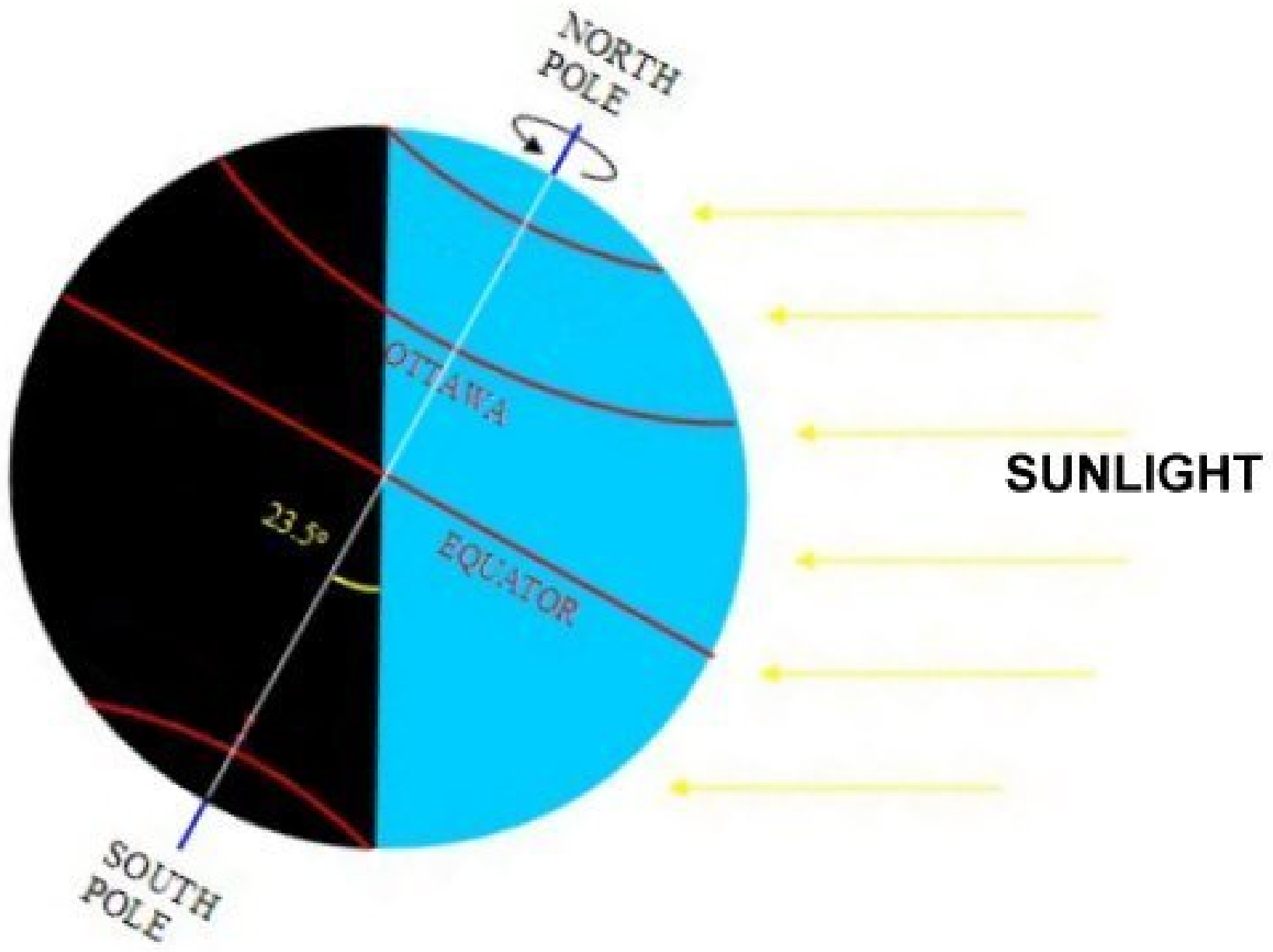
VERNAL EQUINOX (SPRING)
MARCH 21



AUTUMNAL EQUINOX (FALL)
SEPTEMBER 21



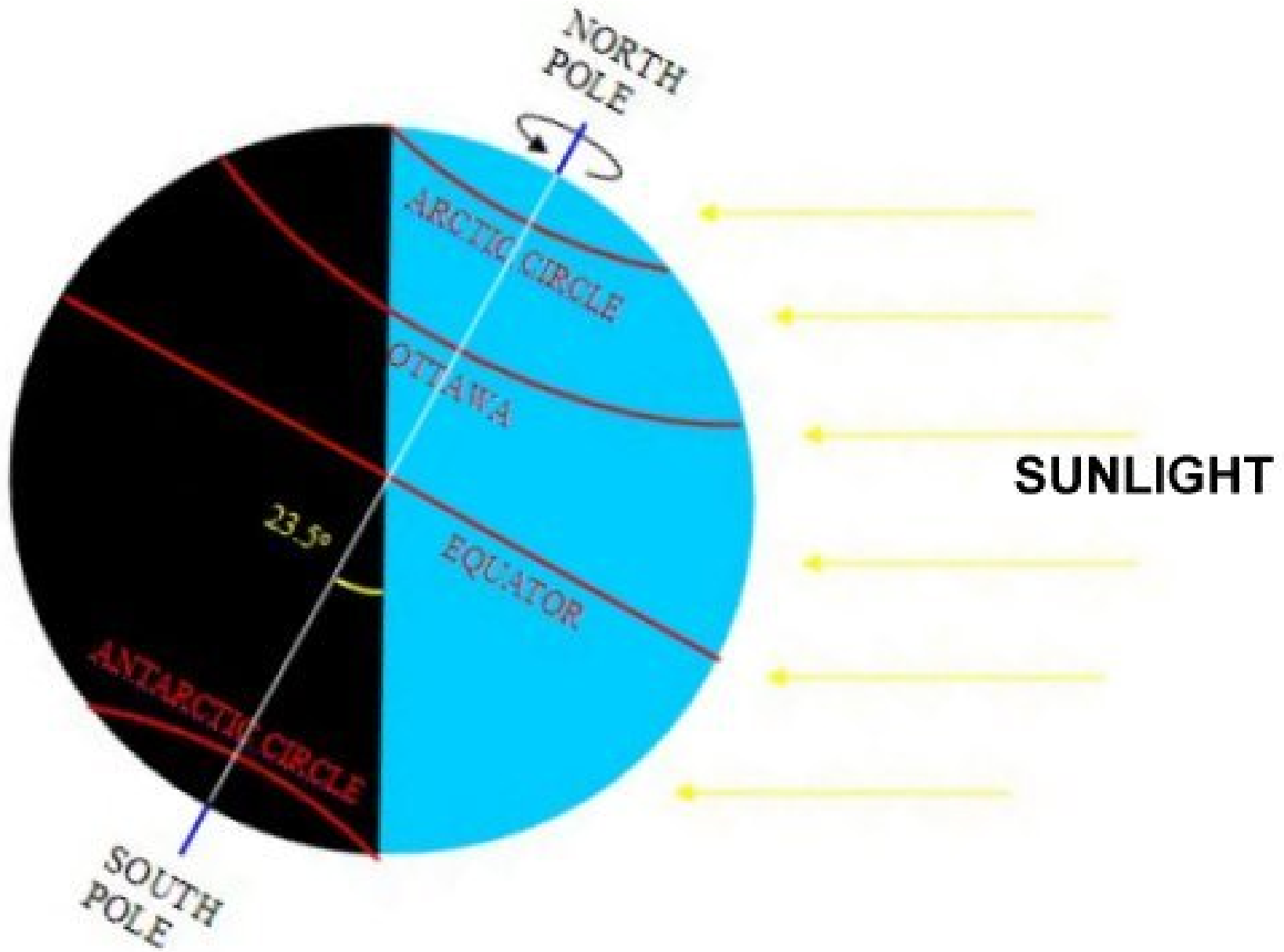
WINTER
SOLSTICE
DECEMBER 21





A globe of the Earth is shown on a stand against a dark background. A white circle is drawn around the North Pole area. Inside this circle, the text "24 HOUR SUN" is written in white, bold, capital letters. The globe is tilted, and the colors of the continents and oceans are visible. The text is positioned in the upper left quadrant of the globe's visible surface.

24 HOUR
SUN







Welcome

COMPLIMENTS OF
BETTLES LODGE

BETTLES FIELD, ALASKA

66°-54' N. • 151°-31' W.

35 MILES NORTH OF ARCTIC CIRCLE

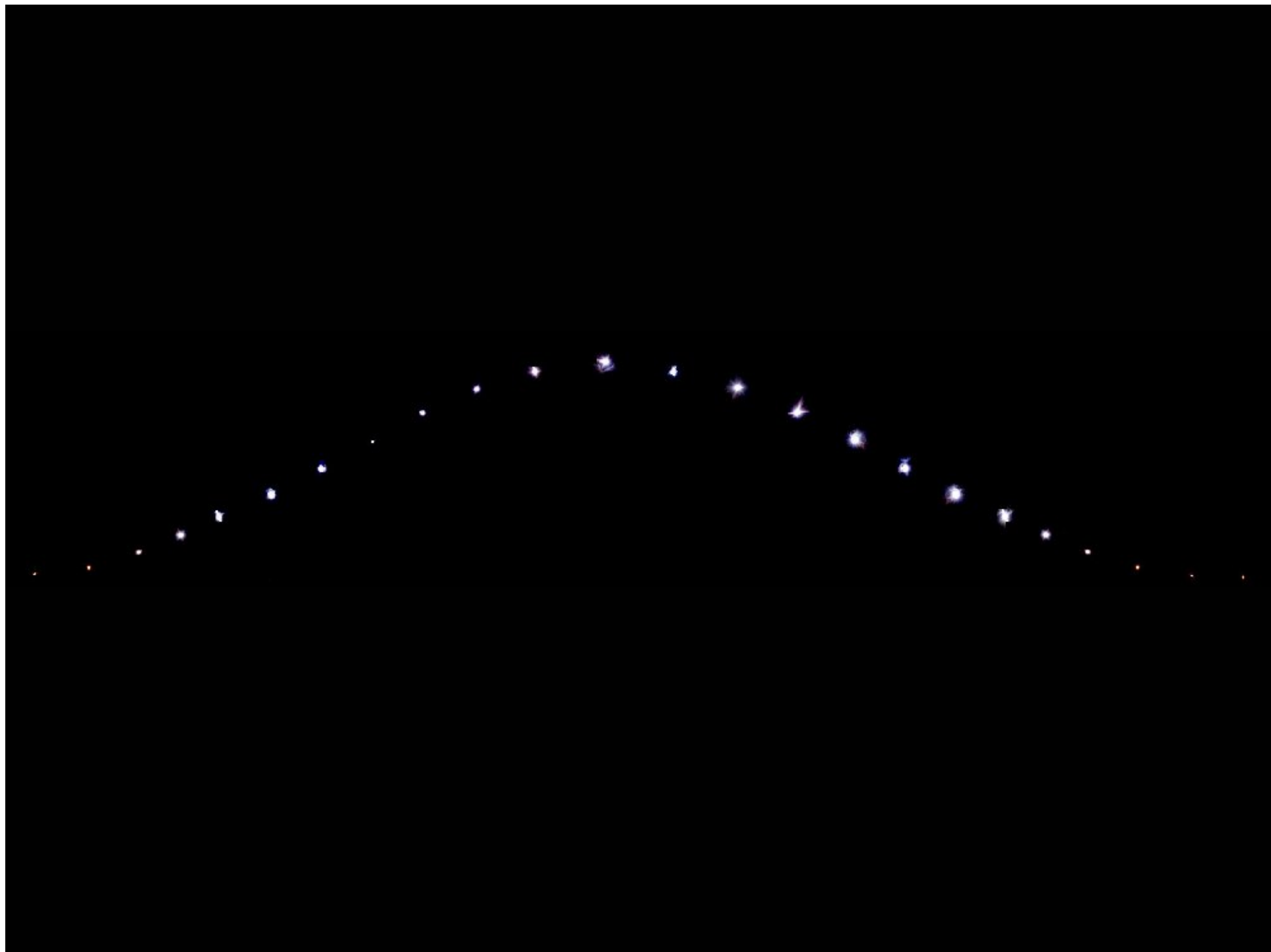
POPULATION 63

ELEVATION 643'

COLDEST DAY -70° 1-4-75 • HOTTEST DAY +93° 7-6-86

MOST SNOW ON GRD. 71" 1971 • MOST SNOW FOR YR. 207" 1993

AVERAGE ANNUAL MEAN TEMP. 21°









Anchorage Light Speed Planet Walk

Station #7
URANUS
Unusual

Unusual:

Discovery— Found accidentally by William Herschel in 1781. Uranus was the first planet discovered with a telescope.

Magnetic field— Uranus's magnetic field is not aligned with its poles, nor does it appear to emanate from the center of the planet. This causes its magnetic field to wobble like a corkcandle!

Axis— Uranus is the only planet that rotates on its side. Its 98° tilt may be the result of a collision with another large object during the formation of the Solar System.

Seasons— Its unusual tilt produces the longest seasons of any planet in the Solar System. During its 84-year orbit of the Sun, each pole experiences 42 years of continuous daylight, followed by 42 years of continuous darkness.

Rings— Uranus has 19 narrow rings made up of carbon particles, pink black ice, and 1.6 billion tiny dark grains of ice and dust.

Moons— 20 moons, each named after Shakespeare characters, orbit Uranus. From Earth, they appear to orbit either vertically or in a large pattern, depending on Uranus' location in its orbit.

Atmosphere— Uranus' beautiful blue-green color is due to small amounts of methane in its atmosphere. Puffing into its virtually featureless cloud surface would be like looking into a 16-foot, hollowed-out barrel.

© 2008 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is unred.



Uranus' Interior



Hydrogen, Helium, and Methane gas

Ice

Core

© 2008 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is unred.

© 2008 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is unred.

© 2008 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is unred.

© 2008 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is unred.

© 2008 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is unred.

© 2008 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is unred.

Uranus Sponsored by
Chilkoot Charlie's

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Remson Foundation
Anchorage Rotary Club



Miranda, an Unusual Moon

A mere 469 miles wide, Miranda has the most bizarre geology of any world in the Solar System. It appears to have been blown apart and then reassembled. But many think its features are the result of an unusual episode of an unknown force called a "thermal pulse" triggered by comets.

Anchorage Light Speed Planet Walk

Walk across
the Solar System
at the speed of light!



The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (180,000 kilometers or 108,000 miles). It should take you about 8 minutes to walk from the Sun station at 1st and G to the Earth station at 5th and F. Just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or skis, and travel the distance at waltz speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.



The Sun and 4 inner planets are lined up along 5th Avenue.



The 5 outer planets are along the Coastal Trail.

To Neptune: 1hr 30min
To Pluto: 2hrs 48min
To Saturn: 1hr 22min
To the Sun: 2 hr 42min











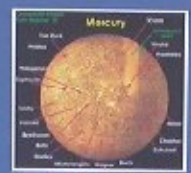
Anchorage Light Speed Planet Walk

Station #1
MERCURY
A World of Extremes



Extremely

- Fast** - Mercury orbits the Sun faster than any other planet; its year is a mere 88 Earth days.
- Slow** - Mercury rotates so slowly on its axis that sunrise to sunset takes 177 Earth days. This means that Mercury's day is longer than its year!
- Hot** - Cooked by day to 800° F, lead would run like water over Mercury's surface.
- Cold** - Frozen by night, temperatures plunge to -280° F!
- Small** - Mercury is only one-third the size of Earth.
- Close** - The Sun appears almost three times larger in Mercury's sky than in Earth's sky.
- Lonely** - Mercury has no moons.
- Dense** - Mercury's iron core is roughly 75% of its volume.
- Whittled** - When Mercury's molten interior cooled, the planet shrank, producing wrinkles in its crust similar to the skin of a dried apple.



The crust on Mercury is cracked after it formed orbits and cooled.

Standing on Mercury, you could experience a crusted world similar to our Moon. Since there is no atmosphere, the sky would always be black and the stars would always be visible. As you gaze out into space, you might see two bright objects: one is cream-colored Venus and the other is blue Earth!



Mercury's Interior

Mercury has an unusually large iron core. In fact, the core is about the size of our own Moon.



Mercury Sponsored by
David and Linda Garrison
In loving Memory of David's Father
Gilbert Franklin Garrison
1910 - 2005

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Rasmuson Foundation
Anchorage Rotary Club

Anchorage Light Speed Planet Walk

Walk across the Solar System at the speed of light!



The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (186,000 kilometers or 116,000 miles). It should take you about 8 minutes to walk from the Sun station at 5th and Q to the Earth station at 5th and K, just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or skis, and travel the distance at waltz speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The 5 outer planets are along the Coastal Trail



To Venus: 3min
To Pluto: 18min 27min
To the Sun: 0min



Anchorage Light Speed Planet Walk

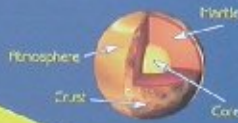
Station #2
VENUS
She's Hot!

She's—

- Hot**— Her greenhouse effect makes her the hottest planet. Temperatures reach 900° F.
- Mysterious**— Her veil of carbon dioxide and sulfuric acid clouds hides her surface from our view.
- Breathtaking**— Her air pressure is a crushing 90 times greater than Earth's.
- Dry**— She has no liquid water. The rain on Venus is sulfuric acid.
- Bright**— Her clouds reflect more sunlight than any other planet.
- Comes**— She rotates opposite to the other planets. The Sun rises in the west and sets in the east!
- Lady**— All her features except one. Mt. Maxwell, an unnamed fire volcano.
- Star**— Earth's morning and evening "star" size is the brightest object in our sky except for our Sun and Moon.
- Breeze**— On some parts of her planet, winds blow steadily at 210 mph.
- Historic**— The United States and the Soviet Union have sent numerous spacecraft to Venus. Some flew by the planet, some orbited it, and some landed on its surface.
- Hotter**— Over 100,000 volcanoes are scattered on her surface, more than any other planet.

Standing on Venus, you would experience the optical illusion of being in a crater. Her dense atmosphere bends light, making the ground appear to curve upward. The crackling atmosphere is so thick, you could almost swim through it. One day would last 117 Earth days.

Venus' Interior: Similar to Earth's, it is composed of a metallic core, a rocky mantle, and a rocky crust. Unlike Earth, Venus shows no signs of plate tectonics. We do not know whether its core is solid or liquid. Venus does not have a magnetic field.



Love and beauty, virginity and fertility were Roman names for Venus, the Roman goddess of love. When Venus appeared in the night sky, it was called "Venus morning" or "Venus evening."



Radial image of Venus' surface.



Lightning bolts in Venus' atmosphere.

Venus Sponsored by
Hotel Captain Cook

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Rasmuson Foundation
Anchorage Rotary Club

Anchorage Light Speed Planet Walk

Walk across
the Solar System
at the speed of light!

The Anchorage Light Speed Planet Walk is a scale model of our Solar System. By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 180,000 miles). It should take you about 8 minutes to walk from the Sun station at 9th and G to the Earth station at 3rd and K, just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 3 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or skis, and travel the distance at warp speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The Solar planets are along the Coastal Trail.



- To Earth: 2min
- To Pluto: 5hrs 24min
- To Mercury: 3min
- To the Sun: 6min



**PUBLIC
PARKING**

PARKING
DIAMOND
SERVICE

SINCE 1922

ONLY ONLY ONLY

Anchorage Light Speed Planet Walk

Station #3 EARTH The Right Stuff

The Right...

Distance - Earth stays within the Sun's ecosystem, or habitable zone, where temperatures never get too high nor too low to support life.

Orbit - Earth's orbit is nearly a perfect circle, so our distance from the Sun remains almost constant. If our orbit were slightly closer to the Sun our water would evaporate; if farther, it would freeze.

Tilt - Earth's tilt causes our seasons. When the northern hemisphere leans toward the Sun, we have summer. When it tilts away from the Sun, we have winter.

Atmosphere - Extending 600 miles into space, it acts as a shield by day to filter the harmful effects of solar radiation and as a blanket by night to prevent our heat from escaping. Most importantly, it has the oxygen necessary for human life.

Temperature - Earth is the only planet in our Solar System where water exists in its three states: solid, liquid, and gas.

Spin - Earth spins on its axis in 23 hours 56 minutes, creating our day and the wind system that drives our climate.

Amount of Water - Earth is the only planet in our Solar System whose surface has liquid water. It is the essential substance for life as we know it. Water covers 71% of Earth's surface; 97% is seawater and 3% is fresh water.

Magnetic Field - Earth's strong magnetic field protects us from harmful solar radiation.

Earth's Interior

The core is extremely hot, near 9000° F. This intense heat causes convection currents in the outer core and mantle.

The currents in turn cause plate tectonics, the slow movement of continents over the Earth's surface.



Formation of the Moon The impact theory

A Mars-sized object may have crashed into primitive Earth, ripping it apart and sending pulverized crust material into orbit around the Earth.

These particles eventually condensed to form the Moon. Meteor and asteroid activity on the Moon continued for nearly one billion years. Since then, our Moon has remained relatively unchanged.



The present International Space Station above Earth.



Earth
Sponsored by
**Wildier Construction and
The Alaska Railroad**

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
**Rasmussen Foundation
Anchorage Rotary Club**

Anchorage Light Speed Planet Walk

Walk across
the Solar System
at the speed of light!

The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 186,000 miles). It should take you about 8 minutes to walk from the Sun station at 5th and G to the Earth station at 5th and K, just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or skis, and travel the distance at warp speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The 5 outer planets are along the Coastal Trail.



- To Mars: 4.5min
- To Pluto: 5hrs 22min
- To Venus: 2min
- To the Sun: 8min





Anchorage Light Speed Planet Walk

Station #1
MARS
Less than Ideal



Less than Ideal...

Water supply - Mars has no liquid water; however, it can be extracted from ice in the soil.

Atmosphere - Mars' thin atmosphere is mainly carbon dioxide. Humans would need to extract oxygen from compounds in the ground to survive.

Gravity - Less than 1/3 of Earth's, it is not strong enough to hold oxygen in its atmosphere.

Temperature - Similar to Antarctica's, the average Martian temperature is -70°F, with a range of -225° to 60° F. Mars receives only half as much solar heat as Earth.

Land area - Mars is half the size of Earth, but its land surface area is about the same. What? Not even!

Weather - The air on Mars is dry with occasional wispy clouds. Seasonal winds blow great volumes of powdery red dust sometimes causing the entire planet to be shrouded.

Moons - Phobos and Deimos, named after Mars' mythical dogs, are tiny and most likely captured asteroids.

Standing on Mars

Viewing the images from Mars Rover, it's easy to imagine hiking across the Mars landscape. Mars is the only other planet on which humans can live, but it has a harsh environment. Temperatures are a frigid 70° F, and there is no oxygen to breathe. You would need an oxygen tank and an oxygen tank for your tank.



NOVA - Over billions of years, Mars' atmosphere thinned, causing its water to evaporate. Dry creeks, dry basins and even shorelines remain as a testament to the rivers, lakes and oceans that may have once existed. This drawing is of Valles Marineris, the deepest canyon in the Solar System. It is ten times longer and three times deeper than the Grand Canyon.

Planet Mars

In Memory of Our Mother:
Carol Walsh Treadwell (1958 - 2002)
Advocater, Pioneer and Advocate
for Science Education
- Timothy, William and Natalie Treadwell

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Rasmussen Foundation
Anchorage Rotary Club

Anchorage Light Speed Planet Walk

Walk across
the Solar System
at the speed of light!

The Anchorage Light Speed Planet Walk is a scale model of our Solar System

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 186,000 miles). It should take you about 8 minutes to walk from the Sun station at 9th and G to the Earth station at 5th and B, just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or skis, and travel the distance at warp speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The 5 outer planets are along the Coastal Trail



To Jupiter: 30min
To Pluto: 5 1/2 hrs

To Earth: 4.5min
To the Sun: 13secs

Anchorage Light Speed Planet Walk



Station #5 JUPITER Super-Sized



Super...

Big - Jupiter is eleven times the diameter of Earth. 1,300 Earths could fit inside.

Heavy - Jupiter is 2 1/2 times more massive than all the other planets combined.

Only - 51 moons and small asteroids orbit Jupiter, the most of any planet.

Fast - Jupiter spins so fast that it bulges at the equator. A day on Jupiter lasts only 10 hours, the shortest day in the solar system.

Temperature - Jupiter produces almost as much energy from its interior as it receives from the Sun. This heat is generated by gravitational contraction. Jupiter is actually shrinking by a few millimeters each year!

The Rings - Discovered by Voyager, they are one hundred times fainter than Saturn's rings.

Colorful - Jupiter's bands give it the appearance of a faded Easter egg. Beautiful orange, brown and white cloud patterns are produced by Jupiter's extreme winds.

Storms - The Great Red Spot is a gigantic rotating storm, three times Earth's diameter. First discovered in 1666 by Robert Hooke, it will likely last for hundreds of thousands of years.

Voyager 1 captured this dramatic view of Jupiter's Great Red Spot.



Jupiter's Moons

The four Galilean moons of Jupiter, using the model below as a guide, are the Solar System's largest moons.



Io - Io orbits in almost an exact plane of Jupiter's equator and experiences tidal heating as it orbits. This has led to the discovery of volcanoes on the surface because the heat is so intense.



Europa - The Galilean Moons in the solar system have the most water. Europa and Ganymede are thought to be the only moons in the solar system that have liquid water on their surfaces.



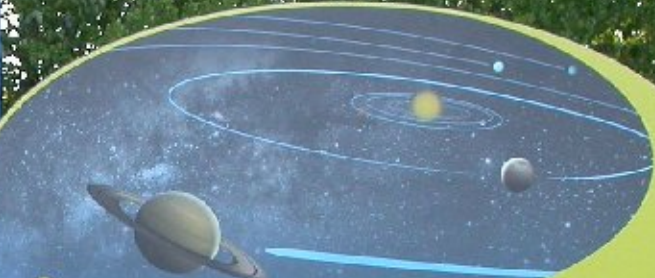
Ganymede - Europa's icy surface resembles a cracked egg. The surface is covered in ice and is thought to have a subsurface ocean. The moon's surface is covered in impact craters, suggesting it is made of the same material as the rest of the system.



Callisto - About the size of our Moon, it is the most volcanically active body in the solar system. It has a surface of impact craters and is thought to be made of the same material as the rest of the system.

Jupiter
Sponsored by
Westchester Neighborhood Rotarians

Primary Sponsors
of the Anchorage Light Speed Planet Walk:
Rasmuson Roundtable Anchorage Rotary Club



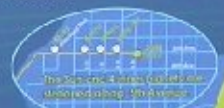
Anchorage Light Speed Planet Walk

Walk across the Solar System at the speed of light!

The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 186,000 miles). It should take you about 8 minutes to walk from the Sun station at 5th and G to the Earth station at 5th and R. Just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto. Of course, you can keep on your bike, roller blades or skis, and travel the distance at any speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.



The 5 outer planets are along the Coastal Trail.



To Saturn: 37min
To Pluto: 6hrs 47min

To Mars: 30 min
To the Sun: 43min

Anchorage Light Speed Planet Walk

Station #6 SATURN Extraordinary

Extraordinary...

Rings - Although Jupiter, Uranus, and Neptune all have rings, none compare to Saturn's enormous, complexing structure.

Spin - Spinning every 10.7 hours, Saturn rotates more at its equator than any other planet.

Storms - Saturn's magnetic field produces beautiful auroral displays above Saturn's poles.

Family - A family of 31 moons orbits Saturn.

Hydrogen-rich - Saturn's gaseous atmosphere is mostly hydrogen. Helium and methane are also present. As the heavier hydrogen falls past the hydrogen, heat is released through friction.

Mass orbits - Saturn is the only planet with three moons sharing the same orbit: Iphigeneia, Telesto, and Calypso.

Extremely dry - Saturn is the second largest planet, but it's mostly gas. It's so dry, Saturn would float if it could be placed in a large enough bathtub.

Light Speed - Saturn is the only planet with three moons sharing the same orbit: Iphigeneia, Telesto, and Calypso.

Enceladus - Saturn's smallest and closest icy moon reflects nearly all the light that strikes it from the sun. In the artist's conception, it would be just a speck in the sky.

Iapetus - About four times the size of our moon, Iapetus has a unique shape, with one side being much higher than the other.

Mimas - The planet's tiny, cratered moon, Mimas, gives Mars the appearance of the "Death Star".



Saturn
Sponsored by
Ed and Cathy Rasmuson

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Rasmuson Foundation
Anchorage Rotary Club

Anchorage Light Speed Planet Walk

Walk across
the Solar System
at the speed of light!

The Anchorage Light Speed Planet Walk is a scale model of our Solar System. By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 186,000 miles). It should take you about 8 minutes to walk from the Sun station to Earth. Similarly, it takes you and a light beam 3 1/2 hours to reach Pluto. Of course, you can loop on your bike, roller blades or skis, and travel the distance at warp speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The 5 outer planets are along the Coastal Trail.



To Uranus: 1 hr 22min
To Pluto: 4 hrs 10min

To Jupiter: 37 min
To the Sun: 1 hr 20min

Anchorage Light Speed Planet Walk

Station #7
URANUS
Unusual



Unusual:

Discovery— Found accidentally by William Herschel in 1781. Uranus was the first planet discovered with a telescope.

Magnetic field— Uranus's magnetic field is not aligned with its poles, nor does it appear to emanate from the center of the planet. This causes its magnetic field to wobble like a corkcandle!

Axis— Uranus is the only planet that rotates on its side. Its 98° tilt may be the result of a collision with another large object during the formation of the Solar System.

Seasons— Its unusual tilt produces the longest seasons of any planet in the Solar System. During its 84-year orbit of the Sun, each pole experiences 42 years of continuous daylight, followed by 42 years of continuous darkness.

Rings— Uranus has 19 narrow rings made up of carbon particles, pink black ice, and 140. Its sharp contrast to Saturn's bright white uncolored particles.

Moons— 26 moons, each named after Shakespearean characters, orbit Uranus' equator. From Earth, they appear to orbit either vertically or in a large pattern, depending on Uranus' location in its orbit.

Atmosphere— Uranus' beautiful blue-green color is due to small amounts of methane in its atmosphere. Puffing into its virtually featureless cloud surface would be like looking into a 16-foot, bottomless mine.

© 2009 NASA. This site and other images reproduced from Voyager 2 Photos. The real color of the rings is uncolored.



Miranda, an Unusual Moon

A mere 469 miles wide, Miranda has the most bizarre geology of any world in the Solar System. It appears to have been blown apart and then reassembled. But many think its features are the result of an unusual episode of an unknown force called a "thermal jet" triggered by compression.

Uranus' Interior



Uranus Sponsored by
Chilkoot Charlie's

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Remson Foundation
Anchorage Rotary Club

Anchorage Light Speed Planet Walk

Walk across
the Solar System
at the speed of light!



The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (180,000 kilometers or 100,000 miles). It should take you about 8 minutes to walk from the Sun station at 1st and G to the Earth station at 5th and F. Just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or skis, and travel the distance at waltz speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The 5 outer planets are along the Coastal Trail.



To Neptune: 1hr 30min
To Pluto: 2hrs 48min
To Saturn: 1hr 22min
To the Sun: 2 hr 42min



Anchorage Light Speed Planet Walk

Station #8
NEPTUNE
Surprise!

Surprising...

Discovery - Neptune was the first planet discovered by mathematics. Irregularities in Uranus' orbit suggested a more distant object was tugging on it. Calculations were made, and telescopes pointed to the predicted spot. Within hours, Neptune was discovered!

Fun Fact - Neptune could be Uranus' twin. Their diameters, color, atmosphere, and internal make-up are almost identical.

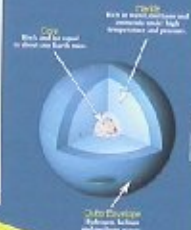
Orbit - Discovered in 1846, Neptune will not return to its discovery position until 2011. A section of Pluto's orbit crosses inside the orbit of Neptune, and so for 20 years of Pluto's 248-year orbit, Neptune becomes the furthest planet. This last occurred between 1979 and 1999 and will not occur again until 2226.

Winds - The Great Dark Spot, the windiest place in the Solar System, is an earth-sized cyclone generating winds up to 1,200 mph!

Heat - Neptune gives off more heat than it receives from the Sun. As a result, its atmosphere has more an Uranus' even though Neptune is much further from the Sun.

Not Surprising - Neptune is appropriately named for the god of the sea. Its interior consists largely of frozen water.

This photograph of Neptune taken by Voyager 2 shows The Great Dark Spot surrounded by bright white clouds. In the upper left the white feature resembles "Neptune's" hairier twin's "Dark Spot 2" which has a bright core. All these features are visible in Neptune's upper atmosphere.



Triton

Neptune's largest moon is one of only three moons with an atmosphere. At 44° E, it is one of the few of the major moons in the solar system. Astronomers believe Triton is a captured object because it orbits Neptune in a backward direction.



Neptune, in Memory of
Beth and Doctor Joe Deisher,
Alaskan Homesteaders
- Sponsored by the Deisher Children,
Joseph B. III, Jon (Chris), Philip H.,
and Tashna M. Deisher

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Rotmason Foundation
Anchorage Rotary Club

Anchorage Light Speed Planet Walk

Walk across
the Solar System
at the speed of light!

The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 186,000 miles). It should take you about 3 minutes to walk from the Sun station at S and G to the Earth station at 5th and K. Just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or skis, and travel the distance or warp speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The 5 outer planets are along the Coastal Trail



To Pluto: 5 1/2 hours
To Uranus: 1 hr 30 min
To Saturn: 1 hr 12 min
To Jupiter: 45 min
To Earth: 3 min

Anchorage Light Speed Planet Walk

Station #9
PLUTO
Last But Not Least



Last...

Planet - Pluto is the most distant planet and the last to be discovered.

Size - Pluto and its moon, Charon, may be leftover material from the formation of the Solar System and may hold secrets about how planets form.

Visited - Pluto is the only planet that has not been visited by a spacecraft. The New Horizons mission to Pluto and beyond is scheduled for launch in 2006 and will fly by Pluto in 2015.

Least...

Planet - At one-sixth the size of Earth, Pluto is smaller than all the other planets and seven of their moons, including ours.

Conventions, orbit - While most planets orbit in the same plane, Pluto's orbit is tilted 17° from the plane. Its orbit is also extremely elongated, causing its distance from the Sun to range between 30 and 50 Astronomical Units (one AU is the distance between the Earth and the Sun). For part of its year, Pluto is actually closer to the Sun than Neptune.

Known - Little is known about the distant planet. Astronomers hope the New Horizons mission will solve some of Pluto's mysteries.

Distance between planet and its Moon - Pluto and Charon are locked together. The two spinning bodies always face each other. Charon never changes position in Pluto's sky and vice versa.

Planet or Comet?

Pluto, like a comet, is composed of rock and ice. As this atmosphere forms in Pluto approaches the Sun, then it condenses to methane and nitrogen "ices" when farther away. This is typical behavior of comets as they approach and recede from the Sun. The International Astronomical Union, however, has voted and Pluto will keep its status as a planet.



Look out for the distant images of Pluto, showing the icy patches revealed against the background of distant stars from the spacecraft's camera perspective.

Discovering Pluto

Pluto was the only planet to be discovered by an American. Clyde Tombaugh, a 37-year-old high school grad by Lowell Observatory, searched for "Planet X," a presumed giant planet beyond Neptune.

Tombaugh painstakingly compared images of the sky taken several weeks apart. On February 18, 1930, Tombaugh discovered a tiny object that had changed position between two images. Although it was too small to be "Planet X," it was a new planet. We now know that there never was a "Planet X," and Pluto's discovery was serendipitous!



Pluto, Charon, and the USA
This image shows the approximate size of Pluto and Charon by overlaying them on a map of the United States. Pluto is 2,300 miles in diameter and Charon is 1,200.

Pluto Sponsored by
Julius J. and Lucy Brecht and
Jim and Marsha Fergusson

Primary Sponsors
of the Anchorage
Light Speed Planet Walk
Pittman Foundation
Anchorage Rotary Club

Anchorage Light Speed Planet Walk

Walk across the Solar System at the speed of light!



The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The scale was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 186,000 miles). It should take you about 8 minutes to walk from the Sun station at 5th and O to the Earth station at 5th and K, just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 5 1/2 hours to reach Pluto.

Of course, you can hop on your bike, roller blades or skis, and travel the distance at warp speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The 5 outer planets are along the Coastal Trail.



To Neptune: 1hr 18 min
To the Sun: 5hrs 30min





