

THE PIONEER ANOMALY: PROBE
TRAVEL 'DEFICIT' OF
240,000 MILES MATCHES
TRAVEL DEFICIT OF SLOWING
10-HOUR RADIO SIGNAL.

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C-MINUS

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ABOUT THE PIONEER SPACE PROJECT.....

In 1972 the Pioneer 10 deep-space probe was launched. This was followed in 1973 by Pioneer 11. The probes flew past Jupiter and Saturn, and then continued into deep space to gather information.

THE PIONEER ANOMALY....WHAT IS IT ?

The probes' courses had been rigorously computed beforehand. So that their present distances should be exactly known!

However, radio signals from the probes appear to indicate that the probes are 240,000 miles CLOSER THAN THEY SHOULD BE !

This distance deficit has reportedly developed gradually. It has been closely monitored for the past decade.

PRESENT POSITION OF THE PIONEER CRAFT

The probes have now achieved some 6.5 BILLION MILES OF TRAVEL from the Earth.

Radio signals from the probes now take 10 hours to reach us! And radio signals travel at the speed of light!

SLOWING LIGHT - SPEED: AN ANSWER TO THE MYSTERY OF THE MISSING MILES ?.

Over the last few years, a group of New Zealand researchers have been doing some innovative thinking about astronomy and the speed of light.

Our researchers have demonstrated pretty conclusively that the speed of light is slowing down. It has been slowing for just over 6,200 years !

Before this, light travelled very fast indeed!! This is not a new idea, nor is the team alone in arguing for a faster light-speed in the past.

LOLLO ASTROPHYSICS.

But what is new, and what is original is a clear physical concept of the process of slowing light-speed: the 'lollo' concept.

This clear concept is used to think out what should be the real, physical 'side-effects' of slowing light speed.

These expected side-effects can then be used to explain some pretty tricky astronomy mysteries.

ONE SIDE-EFFECT OF SLOWING LIGHT-SPEED

Slowing light loses effective travel-distance. The further the light travels, the more the miles of travel-distance 'lost'.

Think of it this way.....

Two cars start together on a certain journey at the same speed. One car moves at a steady speed. The other car loses a tiny bit of speed each minute. This slowing car will not have the effective travel-distance of the car travelling steadily.

The steady-speed car will arrive as predicted. And meanwhile, the slowing-speed car will show a travel-distance deficit. A shortfall in distance.

SLOWING LIGHT-SPEED IS IGNORED!

In the case of light, it is supposed that light is the steady-speed car.

But really, light is behaving like the slowing-speed car.

Light will show a travel-distance deficit.

SLOWING RADIO SIGNALS

Light and radio waves are both 'electromagnetic radiation'.

Radio signals slow down at exactly the same rate as light does!

Radio signals will show a travel-distance deficit!

RADIO SIGNAL TRAVEL DEFICIT

What is the distance deficit for a 10-hour-travel radio signal from the Pioneer probes?

It will be shown in the calculations section of this bulletin, that the distance deficit is near enough to 240,000 miles!

The radio signal travel-distance deficit, and the (supposed) probe travel-distance deficit, appear to be ONE AND THE SAME!

THE PIONEER ANOMALY SOLVED?

It seems likely that the supposed 'probe proximity' of some 240,000 miles is A MISINTERPRETATION OF THE VERY REAL DISTANCE DEFICIT IN SOME 10 HOURS OF SLOWING-SPEED RADIO-SIGNAL TRAVEL!!!

HOW HAS THIS MISINTERPRETATION ARISEN?

Bill, one of our N.Z. researchers, believes that it has arisen from the use of atomic clocks.

"They have been around for fifty years or more," said Bill.

"A great idea: but there is a problem. This type of clock slows down in perfect time with slowing light and RADIO speed!

Light speed is slowing, but the clocks are slowing too, and the change in speed is NEVER picked up!"

"BUT WHAT ABOUT THE DISTANCE DEFICIT ?" I asked him.

Bill said that because the atomic clock is slowing, the atomic clock time is too short for the calculated, expected distance of probe travel.

"Since the atomic clocks are thought to be exactly accurate," said Bill, "The only possibility left is that the probe distance is less than what it should be. That a lesser distance is causing the 'quicker' signal. Really, it is just the atomic clock registering less time than the REAL time."

"WHAT IS THE ANSWER TO THE ANOMALY ?" I asked.

Bill's reply was instant!

"Get rid of the atomic clocks," he said.

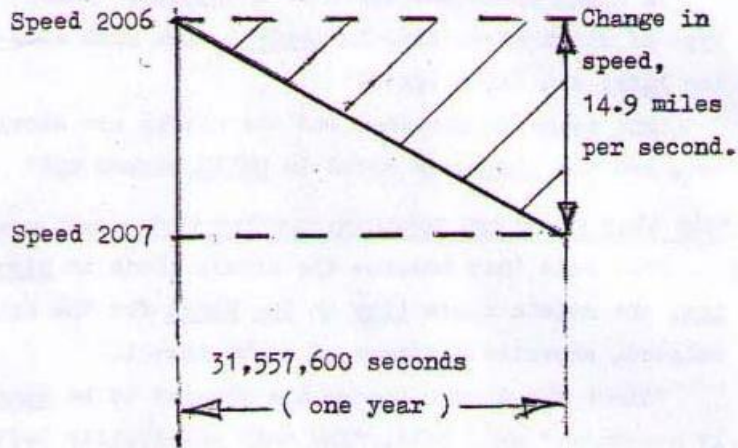
" And allow for slowing radio-signal speed. Then the travel time will be right for the actual probe distance."

Thanks Bill!

THE DREADED CALCULATIONS!

I asked Inky and Sparrow, two more of the 'lollo' researchers, to provide us with some EASY calculations. And they did !

INKY'S PICTURE:



Inky says: "The area of the shaded triangle gives the total distance deficit during one year of slowing light or RADIO travel."

NOTES. For the maths-motivated only!

Deceleration of 24 km/sec/year is calculated on page 4 of the bulletin, 'Some Calculations of the Speed and Deceleration of Light.' (CALCS.) See website. Note especially that deceleration for the last 36 years has been uniform. Calculate yourself using the speed equations and the examples on P4.

SPARROW'S SUMS:

Area of the triangle

= half the height times the base

OR half the speed times the time

OR 7.45 miles per second

times the time in seconds.

Total distance deficit of slowing light-travel in
one year

= 7.45 miles/second

times 31,557,600 seconds

(Quite a lot! We won't work it out!)

AVERAGED distance deficit for 10 hours of slowing
light-travel during the year

= 7.45 miles/second

times 36,000 seconds *

= 268,200 miles.

* (10 hours = 36,000 seconds)

Thank you Inky for the picture. Thank you Sparrow for the sums. Thanks again Bill for your comments. And thank you, the reader, for your attention.

Until next time.....the Editor.

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