Tracing the Path Of Light in RIG VEDA

Accurate Calculation of Speed of Light

One of the Pundits employed by Sayan for translating the Rigveda explains at what speed the sun light spreads on the earth. Rig Veda (I, 50-4) following sloka's state about the speed of light

"Yojananam Dwe Dwe Shate Dwe Cha Yojane Aken Nimishardhena Krammana Namostute" (Rig-veda I,50-4)

In this verse, the speaker pays respect to the Sun Light which moves "*2202 yojans* in *half of the Nimish (Nimisharda)*". This represent how far light travels in half of the blink of an eye i.e. "within the blink of an eye".

In Vedas,

Nimish = **unit of time =** "blink of an eye"

Nimisharda = "half a nimish"

Yojana = **unit of distance**

The Moksha Dharma Parva of Shanti Parva in Mahabharata describes Nimish as follows:

15 Nimisha = 1 Kastha

30 Kashta = 1 Kala

30.3 Kala = 1 Muhurta

30 Muhurtas = 1 Diva-Ratri (Day-Night)

We know Day-Night is 24 hours

*So, we get 24 hours = 30 x 30.3 x 30 x 15 nimish = **409050 nimish***

We know 1 hour = 60 x 60 = 3600 seconds; **So *24 hours = 24 x 3600 seconds = 409050 nimish***

409050 nimesh = 86,400 approx seconds

1/2 nimesh = 0.1065 approx seconds

Yojana is defined in Chapter 6 of Book 1 of the ancient vedic text "Vishnu Purana" as follows:

10 Paramáńus = 1 Parasúkshma

10 Parasúkshmas = 1 Trasareńu

10 Trasareńus = 1 Mahírajas (particle of dust)

10 Mahírajasas = 1 Bálágra

10 Bálágras = 1 Likhyá

10 Likhyás= 1 Yúka

10 Yúkas = 1 Yavodara

10 Yavodaras = 1 Yava

10 Yava = 1 Angula (1.89 cm or approx 3/4 inch)

6 fingers = 1 Pada (the breadth of it)

2 Padas = 1 Vitasti(span)

2 Vitasti = 1 Hasta (cubit)

4 Hastas = a Dhanu, a Danda, or pauruSa (a man's height), or 2 Nárikás = 6 feet

2000 Dhanus = 1 Gavyúti (distance to which a cow's call or lowing can be heard)= 12000 feet

4 Gavyútis = 1 Yojana = 9.09 miles

Calculation of the Speed of Light:

Thus, we can now calculate what is the value of the speed of light in modern units based on the value given as *2202 yojanas in 1/2 nimesh*.

= 2202 x 9.09 miles per 0.1065 seconds

= 20016.18 miles per 0.1065 seconds
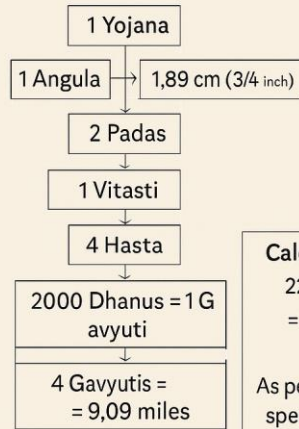
= 187945 miles per second

As per the modern science speed of light is **186000 miles per second**. The inconsistency occurs due to the inability to convert the Units correctly.

The above example proves the great scientific capability of the Rishis of yonder times.

"Yojananam Dwe Dwe Shate Dwe Cha Yojane Aken Nimishardhena Krammana Namostute" (Rig-veda 1,50–4)

Units

- **Nimish** = unit of time = 'blink of an eye'
- **Nimisharda** = haif a nimish
- **Yojana** = unit of distance

Moksha Dharma Parva (Mahabharata)	
15 Nimisha =	1 Kastha
30 Kashta =	1 Kala
30.3 Kala =	1 Muhurta
30 Muhurtas	1 Diva-Ratri

24 hours = $\dfrac{30 \times 30.3 \times 30}{15}$ Nimish

= 409,050 Nimish

24 hours = 14,300 × 1,3605

= 409,050 g

1-360 × 3600 = 1,065 secods

1/2 Nimisch = 0.1

```
1 Yojana
  │
1 Angula ──→ 1,89 cm (3/4 inch)
  │
2 Padas
  │
1 Vitasti
  │
4 Hasta
  │
2000 Dhanus = 1 G avyuti
  │
4 Gavyutis = = 9,09 miles
```

Calculation of the Speed of Light

2202 × 9.09 miles per 0.1065 s

= 20016.18 miles per 0.1065 s

= 187945 miles per second

As per the modern science significant speed of light is 18600 miles/sec d.

The inconsistency occurs due to imability to convert the units correctly. No inconsistency occurs to

Calculation of the Speed of Light:

$$= \frac{2202 \times 9{,}09 \text{ miles per } 0{,}1065 \text{ s}}{20016{,}18 \text{ miles per } 0{,}1065 \text{ s}} = 187945 \text{ miles per second}$$