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Aliyar, TN, IN

Introduction to SIDHAR IYAL

Introduction

Sidhar Iyal (Sidhar Means Knowledgable Person, Iyal Means nature in Tamil).

Observing the Sky, Planet Movements is a way of life traditionally in Tamil culture for ages. On every festival and occassion the auspisious time will be fixed based on the planet movements with the reference to planets movement including Earth, SUN & Moon. Even today for every festival or start up of important events in life a pole will be erected first to see the sun & moon movements. It is made as a custom and part of very basic ceremony so that, it reaches to the grass root of common man's daily life.

Also, most of the ancient temples will have a pole facing the east or west which gives sun, moon movement and all kind of astronomy and astrogical datas including Rasi and Nakshatras, a place which created to discuss astronomy is later called temples. Few temples can be seen facing North which takes reference from North Polaris Star.

From daily simple calendar to complicated literatures our Solar system calculations can be seen abundantly. Massive information is available which is developed almost twenty years and transferred knowledge through literatures and practical. This is evident with Sangam literatures & 18 Thirumaraigal through texts and songs

Temples and monuments in olden days serves the purpose of place where eminent scholars observe the sky every day as well as night and transferred the knowledge to the group of people who takes various role in recording the events and the knowledge in scripts as well as materials for knowledge transfers.

These groups were selfless and worked tireless for thousands of years to ensure the time, direction and seasons are predicted accurately. They guide the rest of the people who do agriculture, Astrology and direction for all kinds of travel specially sailing etc.,

This huge treasure was lost due to various factors due to invasions and natural calamities. Now, we are a small group of people try to retrieve these treasures back and share it to the world without any financial profit.

Aim & Purpose

Our aim is to create a sustainable, accurate and reliable source of information available to the interested communities. Our aim is not debate or challenge other systems or practices but to make the traditional resources disappeared in recent times. We are in the process of bringing the traditional method of observing the sky and calculation the movement and the positions which will help the world to predict seasons, upcoming disasters, difference between the calendars.

Background

There is a group called Vinniyalum Valviyalum (*விண்ணியலும் வாழ்வியலும்*) formed a community which involves in retrieving the age-old process of astronomical activities and collects evidents/data from manuscripts and literatures. The team then compare the study with facts and data both in modern methods as well as other traditional available data.

During the process, the team got introduction to Stellarium and found it as an effective platform to handle the technical aspects of comparative study and reference.

Key Findings:

1. Lunar Day (Thithi or **திதி** in tamil) is actually the precise method of calculating Lunar Month and Moons rotation compare to normal calendar day.
    a. When moon moves 13 degree equals one moon day and also called Thithi. 30 Thithi is 390 degrees movement of moon. The excess 30 degrees is actually the overlap due to the "spiral movement overlap" [360+30 degrees] in the same rotation direction of Moon and Earth.
    b. Moon's shadow is 369 Km diameter on earth during solar eclipse and it is called "ONE PATHAM" (பாதம்). Which gives the circumference of the earth (108 Patham X 369KM = 39,852 KMs)
    c. Moon rotation around the earth is 360 degree = 108 Patham. Hence, 1 Patham = 360degree/108 = 3.33 degrees or "3 degree and 20 mins"

2. Month & Year is calculated in 3 different calculation unlike Normal Calendar days.
    a. Month (Thingal, Madham and Maasam)
        i. Between Full moon to full moon, it takes 30 Thithis or 390 degrees rotation around earth from observation point on earth is called Madham in Tamil (மாதம்).
        ii. 27 Thithi = 108 Pathams = 360 degrees is called Thingal in Tamil (திங்கள்)
        iii. 30.86 Thithis makes one Maasam (மாசம்)
    b. Year (Varudam, Aandu and Varusam)
        i. Varudam or வருடம்: 27 Thithi X 12 Thingal (திங்கள்) = 324 Thithis = one Varudam
        ii. Aandu or ஆண்டு: 30 Thithis X 12 Maadham (மாதம்) = 360 Thithis = one Aandu
        iii. Varusam or வருசம்: 370.37 Thithis or 365.25 days
            1. *Earth and Sun rotate in Opposite direction. Hence, 360 degrees = 370.37 Thithis or 365.25 days. Earth moves one degree per day. So, an additional of 5.25 Days instead of 360 days is due to the eleptical rotation since Sun and Earth rotates in opposite direction.*
3. Like our Solar System all the other Solar Systems will have one or more SUN which rotates towards the centre point which is called "SAKTHI MAYYAM" (சக்தி மையம்) or "KARU MAIYAM" (கரு மையம்) in tamil. The representation of Karu Maiyam can be found in ancient temples which is called Karuvarai (கருவறை)
4. Sun rotates around the Sakthi Maiyam in opposite direction in eliptical path. The difference between Aandu, Varudam and Varusam are as follows:
    a. Sun takes 24000 Aandu or 86,40,000 Thithis to complete one rotation around Sakthi Maiyam
        i. 24000/360 Degree = 66.666 Aandu (For SUN to move one degree around Sakthi Maiyam)
    b. 86,40,000 Thithis / 1 Varudam or 324 Thithis = 26,666.6666 Varudam to complete one rotation around Sakthi Maiyam
    c. 86,40,000 Thithis / 1 Varusam or 370.37 Thithis = 23,328.023 Varusam to complete one rotation around Sakthi Maiyam
5. SUN takes 66.666 Aandu to move 1 degree around SakthiMaiyam.
    a. In Tamil tradition, 60 SulalAndu is called one DAY of SUN
    b. 86,40,000 Thithis / 60 Sulal Aandu = 400 Days of SUN
        i. Sun roates Sakthi Maiyam in opposite direction which Casue "Eliptical expansion" and hence it takes additional 40 days of the Sun to complete 360 degrees.

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SUN suppose to take 60 Aandugal to Cross one degree and 1800 Aandugal to cross one Raasi. So, 1800X 12 Raasi = 21600 Aandugal if it is circle. However, due to Eliptical expansion it takes another 2400 Aandugal additionally and makes it to 24,000 Aandugal (6.66 Aandugal X 360 degrees = 2,400 Aandugal). So 24,000 Aandugal/12 Raasi = 2,000 Aandugal per Raasi or 30 Degrees around Sakthi maiyam.

6. Sky is divided in to 27 Natchathirams (நல்சித்திரம்) in Moon's path or 12 Raasis (ராச்சித்திரம்) in SUN's path. Also, 7 Planets in our solar system also in Celestial SKY which follows Sun Path.
   a. Each Natchathirams = 13.33 Degrees or 13.20 minutes or 4 Pathams (27 Natchathiram X 13.33 degress = 360Degrees)
   b. Each Raasi = 30 Degree or 9 Pathams (12 Raasi X 30 degree = 360 Degrees)

7. Sun takes 888.888 Aandugal to cross one Natchathiram. (2000 Aandugal/ 2.25 Natchithiram = 888.888 Aandugal). In Thithis Sun takes 3,20,000 Thithis to Complete One Natchathiram. (888.888 Aandugal X 360 Thithis = 3,20,000 Thithis).

8. Each Raasi madeup of 2.25 Natchathiram or 9 Pathams.
   a. Sun takes 888.888 Aandugal to cross on Natchathiram
   b. Sun takes 1,777.776 Aandugal to cross 2 Natchathirams or 8 Pathams or 6,40,000 Thithis.
   c. One Patham will be left over on each Raasi on every 1,777.776 Aandugal.
      i. 60 Sulal Aandugal called one Karanam.
      ii. 27 Yogam equals to one Karanam (60/27 = 2.222 Aandugal one Yogam).
      iii. 2.22 Aandugal X360 Thithis = 800 Thithigal Makes one yogam (In this 800 Thithis, First 400 Thithis called Sukilam and another 400 Thithis called Suronitham)
      iv. On 60th Karanam verification needs to be done in the SKY constillation and we need to shift the Raasi in the first Block (FIRST KATTAM) in Astrology
         1. Example: Mesham which was in the first Kattam is now shifted to Second Kattam and Meenam is moved from 12th Kattam to 01st Kattam after completion of 1800 Aandugal (60 Sulal Aandu X 30 Karanam = 1800 Aandugal)
   d. In Olden days group of Astrological and Astronomical Siddhars lead by the King will decide to move the Raasi Kattam after crossing two Natchathirams. Observation and Alignments will be done between the last 22.224 Aandugal (1800-1777.776=22.224 Aandugal)

9. Sakthi Mayyam also moving towards Sivam in an eliptical path.
   a. Sakthi Mayyam takes 1200 Aandugal to move One degree in this journey
      i. So, 1200 X 360 Degrees = 4,32,000 Aandugal known as "PERUNGAALAM"
      ii. If we convert 1200 Aandugal in to Varudangal We get 1333 (1200 X 360 = 4,32,000 Thithigal)
      iii. 4,32,000 Ththigal divided by 324 Thithis =1333 Varudangal
      iv. This reference can be seen in Thirukural as 1330 Verses of Kurals
   b. SUN takes 24000 Aandugal to revolve around Sakthi Maiyam
   c. Sun's rotation around Sakthi Maiyam is splitted in to 20 Parts called Veedu and each Veedu is 18 degrees also called 18 Padi (18 Padi X 20 Vedu = 360 Degrees)
   d. While Sun crosses 18 Padi, Sakthi Maiyam Cross 1 Degree which is 1200 aandugal. In other words, in 1200 Aandugal Sun moves 18 Padi or One Veedu and Sakthi Mayiam moves 1 degree.

References

Vinniyalum Valviyalum (*விண்ணியலும் வாழ்வியலும்*) group created a document which contains a detailed information on findings so far which includes deviation with the current calendars with actual references. This document link also contains the literature references and the calculations. All the documetns are available in tamil and somereaders may need translators. All the above resources can be found in telegram Channel.

Vinniyalum Valviyalum telegram: https://t.me/Vinniyalum_valviyalum/3291

Disclaimer

Vinniyalum Valviyalum (*விண்ணியலும் வாழ்வியலும்*) doesn't and will not either involve in any kind of arguments, debates or challenge other tradional or modern method of astronomical process. This community however, ready to interact, collaborate and share information openly with similar interest of people without any business or financial motivation.

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