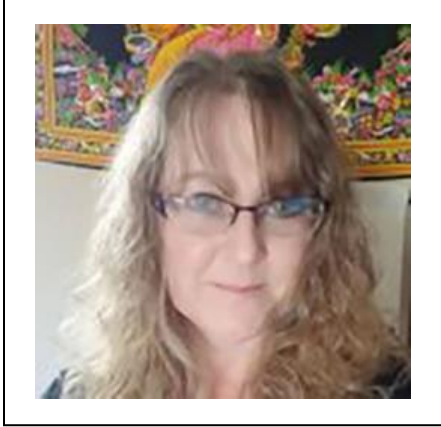


GOLA - Winter 2023/2024

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Gola is the observational astronomy limb of Jyotish. Throughout winter we can observe Shukra in the morning sky and Guru in the evening sky. Shani is visible in the evening until mid-February and then undergoes a period of invisibility around its conjunction with Surya on February 28th. Mangala becomes visible in the morning sky in January but remains low to the horizon making the dim graha difficult to locate at first. Budha begins the season invisible due to its inferior conjunction with Surya on December 22nd. It will become a morning planet in late December. Budha will then disappear before its superior conjunction with Surya on February 28th. It will appear in the evening sky in mid-March.

Winter commences with **Guru** visible in the southeast and **Shani** visible in the south-southwest as sunset darkens the sky. Guru is travelling through Mesha rashi with Hamal and Sheratan (above) marking Ashwini nakshatra. Guru will remain in Mesha rashi throughout the season and enters Bharani nakshatra in February. Shani is travelling through Kumbha rashi between Sadalmelik (above and west) and Formalhuat (below and east) marking Shatibisha nakshatra. Shani will remain in this rashi and nakshatra throughout winter.

Meanwhile, in the morning Sky, **Shukra** begins winter above the southeast horizon at dawn. Shukra is travelling through Tula rashi east of Zuben Eschamali and Zuben Elgenubi marking Vishaka nakshatra. Throughout winter Shukra will travel through five rashis and nine nakshatras, ending the season in Kumbha rashi and Shatabisha nakshatra. **Budha** becomes visible in late-December in Vrishchika rashi near the star Antares that marks Jyestha nakshatra. Throughout winter Budha will travel through five rashis and ten nakshatras, ending the season in Mina rashi and Revati nakshatra. Due to two periods of invisibility during Budha's 88-day orbit around Surya, we will not observe the graha in all of these. When **Mangala** becomes visible in January's morning sky it will be in Dhanus rashi and Mula nakshatra. The graha will travel through four nakshatras and two rashis, entering a third. Mangala ends the season in Kumbha rashi and Dhanistha nakshatra.

Each month, Chandra's 27.5-day cycle through the zodiac provides opportunities to witness conjunctions with each visible graha and helps you to locate them. Go out and observe the grahas in the night sky as they travel through rashis and pass the primary stars of nakshatras. Commune with them in the heavens and experience a level of Seeing, beyond a computer screen, that deepens your understanding and practice of Jyotish.

Before dawn on the morning of January 1st locate Shukra and Budha in Vrishchika rashi. Shukra will be atop the set of three vertical stars (Acrab, Dschubba, and Fang) that mark Anuradha nakshatra. Look below and east of Shukra to locate Budha. The bright red star to the right of Budha is Antares which marks Jyestha nakshatra.

Fig. 1: USA west coast, dawn, January 1, 2024



Fig. 2: India, dawn, January 1, 2024



Chandra joins the morning planets the second week of January. Observers in the USA can locate Shukra slightly above and east of Chandra on January 8th. On January 9th they can locate Budha above and slightly east of Chandra. Mangala, directly east of Chandra will be difficult to locate the glow of dawn. Observers in India can locate Shukra directly east of Chandra on the morning of January 8th, Budha directly east of Chandra on January 9th, and Mangala east and slightly above Chandra on January 10th. On January 15th, Shukra will be directly left of Antares marking Jyestha nakshatra.

Fig.3: USA, west coast, dawn, January 9, 2024

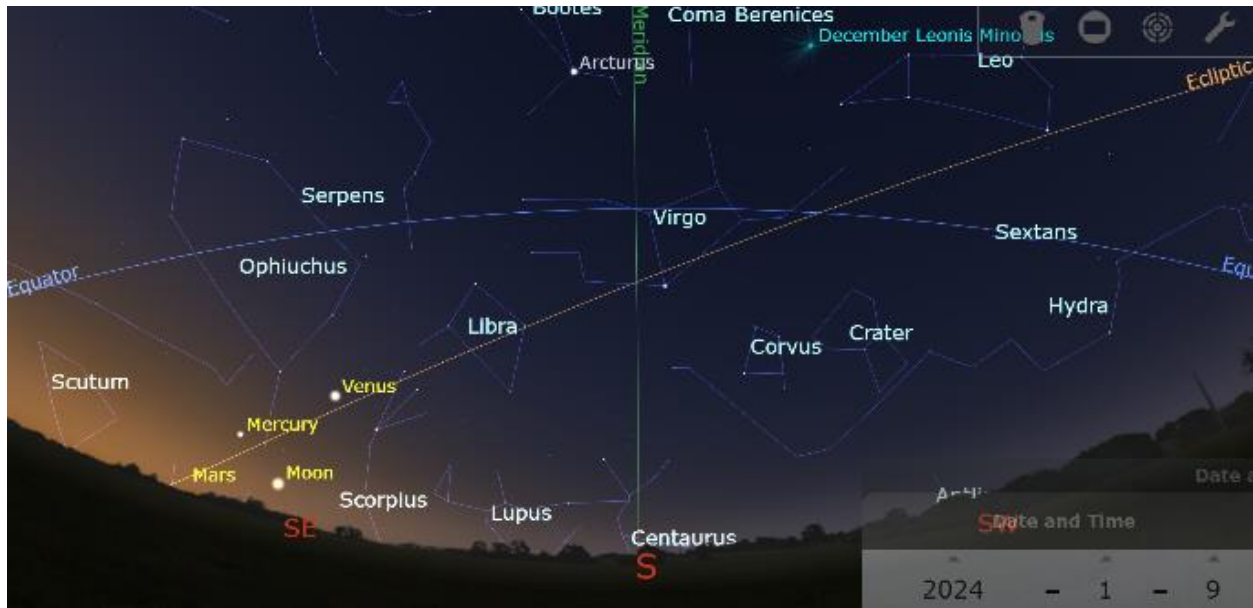


Fig. 4: India, dawn, January 10, 2024



On the evening of January 13th, observers in the USA can locate Shani above and slightly left Chandra in the southwest at sunset. The following evening Shani will be below and west of Chandra. Observers in India can locate Shani slightly above and right of Chandra on the evening of January 14th.

Fig. 5: USA, west coast, dusk, January 13, 2024



Fig. 6: India, dusk, January 14, 2024



On the evening of January 17th USA observers can locate Guru east of Chandra. The following evening Guru can be located slightly below and west of Chandra. Observers in India can

locate Guru slightly below and east Chandra on January 18th. The following evening, Guru will be below and west of Chandra.

Fig. 7: India, dusk, January 18, 2024



Fig. 8: USA, west coast, dusk, January 18, 2024



At the end of January, Budha forms a yuti with Mangala in Dhanus rashi and Purva Ashada nakshatra marked by the three bow stars Kaus Borealis, Kaus Media and Kaus Australis. They will

be low to the horizon below and left of Shukra (in Mula nakshatra marked by the tail stars of Vrishchika rashi, Shaula and Lesath). Observers in the USA can locate Mangala slightly below Budha on January 26th. The following morning Budha will appear to touch the top of Mangala. For Indian observers, Budha will appear to touch the top of Mangala on January 27th. The following morning Budha will appear to touch the left side of Mangala.

Fig. 9: USA, west coast, dawn, January 26, 2024



Fig. 10: India, dawn, January 27, 2024



In early February, Chandra joins the morning planets. Mangala will be easier to locate, but Budha will not be seen due to its late January conjunction with Surya. Observers in the USA can locate Shukra directly left of Chandra on February 6th. Shukra will be in Dhanus rashi left of the three bow stars marking Purva Ashada nakshatra. On the morning of February 7th, USA observers will find Mangala directly left of Chandra in Uttara Ashada nakshatra. Observers in India can locate Shukra left of Chandra on February 7th with Mangala below and east. The following morning Shukra will be directly above Chandra and Mangala will be above and east.

Fig. 11: USA, west coast, dawn, February 7, 2024

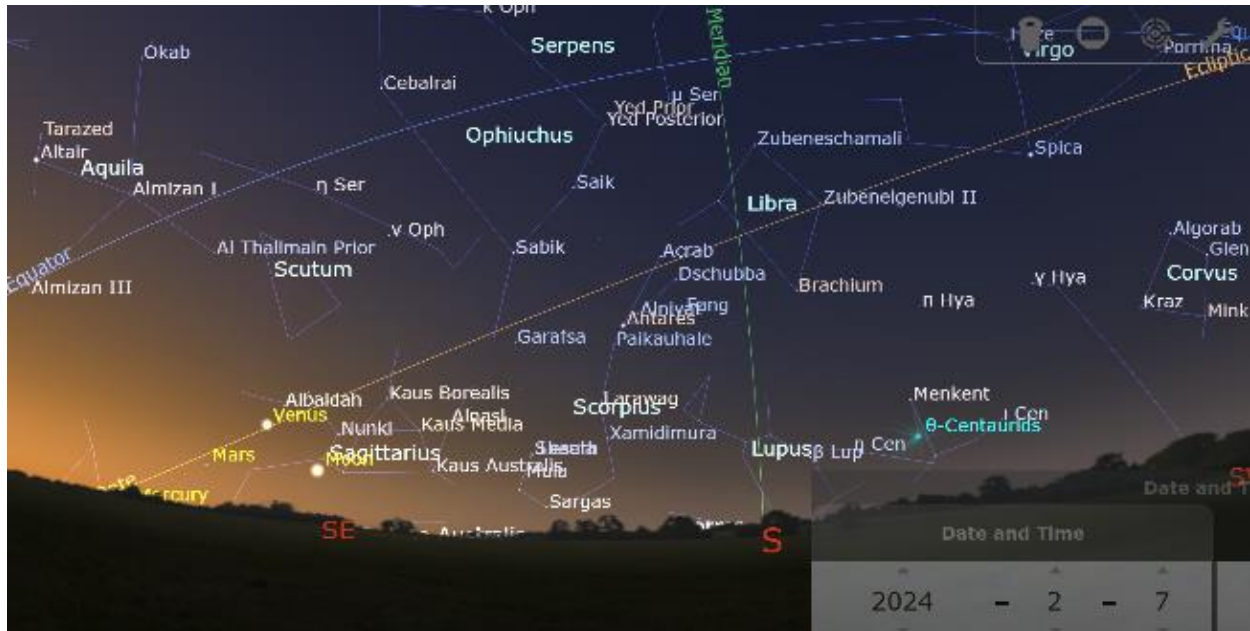


Fig. 12: India, dawn, February 8, 2024



Meanwhile in February's evening sky, Shani will be low to the western horizon at sunset. Guru will be above the southwest horizon at dusk nearing the star Menkar (below in Cetus) and Almach (above in Andromeda) marking Bharani nakshatra. On the evening of February 10th, observers in the USA can locate Shani slightly above and right of Chandra. Observers in India can locate Shani below and right of Chandra on February 11th.

Fig. 13: USA, west coast, dusk, February 10, 2024



Fig. 14: India, dusk, February 11, 2024



On the evening of February 14th, USA observers can locate Guru slightly left of Chandra. On February 15th, observers in India can locate Guru below Chandra. By this time Shani, travelling too close to Surya, will no longer be visible.

Fig. 15: USA west coast, dusk, February 14, 2024



Fig. 16: India, dusk, February 15, 2024



At the end of February Shukra passes Mangala in the morning sky. On the morning of February 21st, observers in the USA can locate Mangala just beneath Shukra in Dhanus rashi. The star above them, Dabih, marks Shravana nakshatra. On February 21st Mangala can be located at the lower right of Shukra. The following morning, Mangala will be slightly west or right of Shukra. For observers in India, Shukra will appear to sit atop Mangala on the morning of February 22nd. The following morning Shukra will appear to almost touch the upper left of Mangala. On February 23rd, Shukra will be slightly left or east of Mangala. The distance between the two grahas will then increase as Shukra pulls further east of Mangala.

Fig. 17: USA west coast, dawn, February 21, 2024



Fig. 18: India, dawn, February 22, 2024



Chandra joins the morning grahas in early March. On the morning of March 8th observers in the USA can locate Mangala above and west of Chandra in Dhanus rashi and Shukra above and east of Chandra in Kumbha rashi. On the same morning observers in India can locate Mangala above and east of Chandra and Shukra directly east of Chandra. The star above Shukra, Sadalsuud, marks Dhanistha nakshatra.

Fig. 19: USA west coast, dawn, March 8, 2024



Fig. 20: India, dawn, March 8, 2024

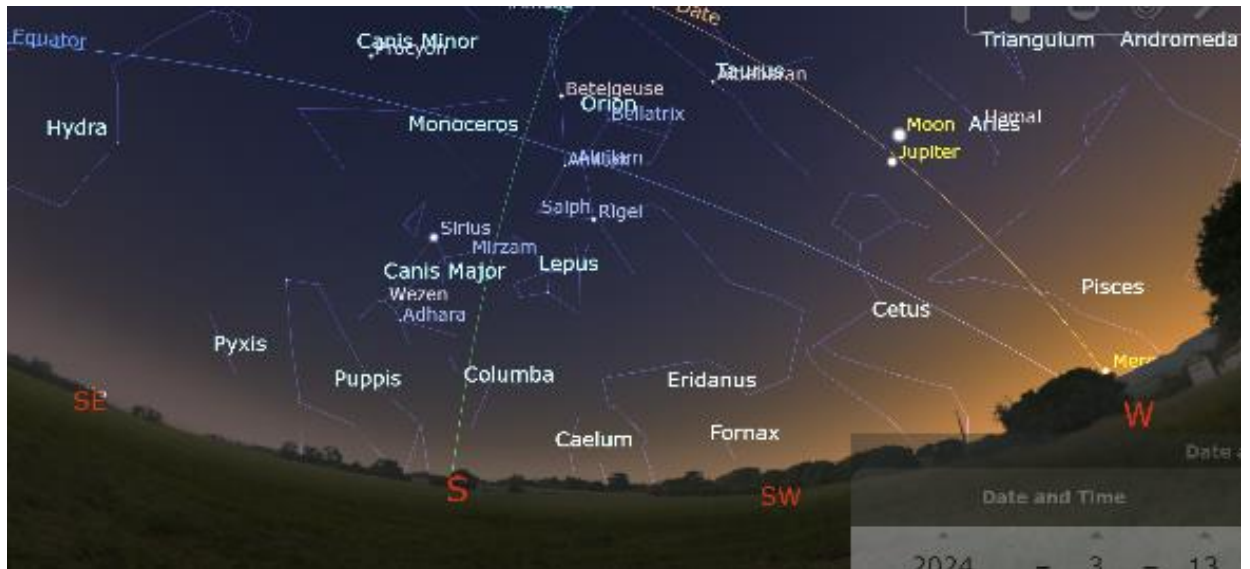


In the evening sky, on March 13th observers in India can locate Guru to the left of Chandra. On this same evening observers in the USA can locate Guru below Chandra. Begin watching for Budha to appear along the western horizon at sunset. Budha will climb higher into the night sky each night among the dim stars of Mina rashi.

Fig. 21: India, dawn, March 13, 2024



Fig. 22: USA, west coast, dusk, March 13, 2024



On the morning of March 16th, Mangala passes below Sadalsuud marking Danistha nakshatra and Shukra passes below Sadalmelik marking Shatabisha nakshatra.

Fig. 23: USA, west coast, dawn, March 16, 2024



Fig. 24: India, dawn, March 16, 2024



Happy stargazing and planet tracking! Tune in to the spring issue of *The Comet* for Shani's return to the morning sky.