

# IMPORTANT NEWS

## Special Parliamentary Sessions: Initiation, Timing, and Authorities

### Inside Story of the News:

On August 31<sup>st</sup>, Pralhad Joshi, the Union Minister for Parliamentary Affairs, declared **the scheduling of a "special session" of Parliament**, set to take place between September 18<sup>th</sup> and 22<sup>nd</sup>.

- The authority to convene a parliamentary session in India is vested in the government.
- This decision is made by the Cabinet Committee on Parliamentary Affairs, currently consisting of nine ministers, including those responsible for Defense, Home Affairs, Finance, and Law.
- The President, on behalf of whom Members of Parliament are summoned to assemble for a session, executes the decision of this Committee.
- India lacks a fixed parliamentary calendar, and traditionally, Parliament holds three sessions each year.
- The longest session, known as the Budget Session, typically commences in late January and concludes by the end of April or the beginning of May, featuring a recess during which Parliamentary Committees deliberate on budgetary proposals.
- The Monsoon Session, lasting three weeks, typically takes place from July to August.
- The parliamentary year concludes with the Winter Session, lasting three weeks, held from November to December.
- In 1955, the General-Purpose Committee of Lok Sabha recommended a general schedule of sittings, which was accepted by Prime Minister Jawaharlal Nehru's government but remained unimplemented.
- Before gaining independence, the central assembly met for slightly over 60 days annually.
- This number increased to 120 days per year in the first two decades following Independence.
- However, since then, the number of sitting days for the national legislature has declined.
- From 2002 to 2021, the Lok Sabha averaged 67 working days per year.

### Special Session of Parliament: When and How It's Convened:

- **The term "special session" is not explicitly mentioned in the Constitution.**
- Occasionally, this term is used to describe sessions that the government convenes for particular events, such as commemorating significant parliamentary or national milestones.
- For both Houses of Parliament to be considered in session, their presiding officers must oversee the proceedings.
- The presiding officers also have the authority to stipulate that the proceedings in their respective Houses will be limited, and procedural tools like the question hour may not be available to Members of Parliament during such sessions.
- Nevertheless, it's worth noting that Article 352 of the Constitution, which pertains to the Proclamation of Emergency, does make a reference to a "special sitting of the House."

#### 44<sup>th</sup> Constitutional Amendment Act –

- The provision regarding the special sitting was incorporated into the Constitution through the Constitution (Forty-fourth Amendment) Act of 1978.
- The intention behind this addition was to introduce safeguards to the authority to declare a state of Emergency within the country.
- It outlines that in the event of a Proclamation of Emergency being issued when Parliament is not in session, a request from one-tenth of Lok Sabha Members of Parliament can be made to the President to convene a special session for the purpose of reviewing and disapproving the Emergency declaration.

## India's Gross Domestic Product (GDP) Growth Trajectory

### Inside Story of the News:

India's Gross Domestic Product (GDP) and Gross Value Added (GVA) in the economy **both surged to 7.8% in the initial quarter of this year**, as indicated by the statistics published by the National Statistical Office (NSO).

- The Ministry of Statistics and Programme Implementation comprises two divisions: one focusing on Statistics and the other on Programme Implementation.
- The **Statistics Wing** is known as the **National Statistical Office (NSO)**.
- The NSO encompasses the Central Statistical Office (CSO), the Computer Center, and the National Sample Survey Office (NSSO).
- The NSO plays various roles, such as:
  - Publishing quarterly GDP data on the last working day of the second month after the reporting quarter.
  - Releasing the Index of Industrial Production (IIP) in the form of monthly quick estimates. Conducting periodic all-India Economic Censuses.
  - Maintaining connections with international statistical organizations, including the United Nations Statistical Division (UNSD) and the Economic and Social Commission for Asia and the Pacific (ESCAP).
  - Preparing national accounts and publishing annual estimates of national product, government and private consumption expenditure, capital formation, savings, capital stock estimates, and consumption of fixed capital.
- GDP and GVA are the two primary metrics used to assess a country's economic performance, measuring national income.
- **GDP:**
  - GDP is a monetary measure encompassing all final products and services produced in a country within a specific period.
  - It calculates total expenditures in the economy to gauge overall "demand."

- **GVA:**
  - GVA computes national income from the supply side by summing up the value added across different sectors.
  - This value added is distributed among primary production factors: labor and capital.
  - GVA growth helps identify the strength or weakness of various economic sectors.
- In the April-June quarter of FY24, India's GDP expanded by 7.8%.
- Previously, GDP growth stood at 6.1% in the January to March 2023 quarter and 13.1% in the first quarter of 2022-23.
- Real GDP in Q1 2023-24 is estimated at ₹40.37 lakh crore, compared to ₹37.44 lakh crore in Q1 2022-23.
- Real GDP adjusts for price level changes.
- Nominal GDP in Q1-FY24 grew by 8%, contrasting with 27.7% in Q1-FY2022-23.
- Nominal GDP is measured in current market prices.
- Manufacturing GVA expanded for the second consecutive quarter, growing slightly to 4.7% in Q1 of 2023-24 from 4.5% in the prior quarter.
- Agriculture, Forestry, and Fishing GVA increased by 3.5% from April to June.
- Services sectors demonstrated robust growth: Financial, Real Estate, and Professional Services
- GVA expanded by 12.2% in Q1. GVA from Trade, Hotels, Transport, Communication, and Services related to broadcasting rose by 9.2%.
- GVA from Public Administration, Defense, and Other Services, as well as the labor-intensive Construction sector, increased by 7.9% each.
- GVA from Electricity, Gas, Water Supply, and other services grew by 2.9%, while Mining and Quarrying GVA rose by 5.8%.
- India's growth rate is anticipated to moderate in the upcoming quarters due to several factors:
  - The impact of El Nino on the monsoon.
  - Weakness in mining output.
  - Sluggish exports. A potential slowdown in government capital expenditure as Lok Sabha elections approach.

## One Nation, One Election: The Proposal and Its Implications

### Inside Story of the News:

A committee chaired by former President of India, Ram Nath Kovind, has been formed by the government to investigate the feasibility of implementing the concept of "one nation, one election." Scheduled for November-December 2023, assembly elections in five states will be succeeded by the Lok Sabha elections in May-June of the following year. Nevertheless, recent actions by the government have raised the prospect of moving up the general elections and certain state polls originally planned to coincide with the Lok Sabha contest.

- The core concept behind "One Nation, One Election" is to align the timing of Lok Sabha and State Assembly elections across all states, thereby reducing the frequency of elections throughout the country.
- The proposal for conducting simultaneous elections was **first put forth in 1999 by the Law Commission, which was chaired by BP Jeevan Reddy.**
- **The "One Nation, One Election" idea envisions a system where all state and Lok Sabha elections are held concurrently.**
- This would mean that voters would cast their votes for both Lok Sabha and state assembly members on the same day and at the same time (or in a staggered manner, depending on the circumstances).

### Elections in India: A Historical Perspective:

- The inaugural general elections of independent India, held in 1951, marked the first instance of simultaneous elections for both the Lok Sabha and the State Legislative Assemblies.
- The **subsequent three electoral cycles** also witnessed simultaneous Lok Sabha and Legislative Assembly elections, with only a few exceptional cases.
- **The last occurrence of nearly concurrent elections** took place in 1967.
- The dissolution of **the fourth Lok Sabha in 1971 marked the commencement of the decline in simultaneous elections.**
- During the National Emergency declared in 1975, the extension of the Lok Sabha's term and the dissolution of several State Assemblies following the 1977 Lok Sabha election further disrupted the pattern of concurrent elections.

### A Revisiting the Concept of Simultaneous Elections:

- The concept of reinstating simultaneous elections was initially brought up in the Election Commission's annual report in 1983 and was also mentioned in the Law Commission's report in 1999.
- In 2016, the Prime Minister of India reintroduced the idea, prompting the NITI Aayog to prepare a working paper on the subject in 2017.
- The Law Commission, in its 2018 working paper, indicated that implementing simultaneous elections in India would necessitate at least "five Constitutional recommendations."
- In June 2019, Prime Minister Modi announced the formation of a committee to examine the issue and expressed intentions to convene a meeting with leaders of political parties to discuss the matter.

### Advantages of Simultaneous Elections: Streamlining India's Electoral Process:

- **Focused Governance:**
  - Simultaneous elections allow the government to concentrate on governing once the election cycle is over.
  - Currently, elections occur frequently, every few months.

- The entire country's attention is often fixated on these elections, involving everyone from the Prime Minister to local representatives.
- The Model Code of Conduct (MCC) imposed during election periods can lead to policy paralysis.
- **Reduced Cost of Elections:**
  - Frequent elections contribute to political corruption as significant funds must be raised for each election.
  - Holding elections simultaneously can significantly reduce election expenses for political parties by eliminating the need for duplicated fundraising efforts.
  - This would alleviate pressure on the public and the business community for election donations, which can be substantial.
- **Resource Savings:**
  - Simultaneous elections would result in savings in terms of human resources and the deployment of the Central Police Force.
  - It can streamline the allocation of resources and administrative efforts.
- **Increased Voter Turnout:**
  - The Law Commission suggests that holding simultaneous elections could boost voter turnout by ensuring elections occur less frequently.

#### Challenges in Implementing Simultaneous Elections in India:

- **Constitutional Provisions:**
  - The Indian Constitution allows for the dissolution of legislatures if the ruling party loses majority through a vote of no confidence.
  - Extending the terms of legislatures or curtailment would be necessary to synchronize their schedules, which may require changes in constitutional provisions.
- **Reduced Accountability:**
  - Holding elections only once every five years could potentially reduce the government's accountability to the people, as frequent elections often keep legislators on their toes and enhance accountability.
- **Legal Provisions for 'No-Confidence Motion':**
  - Some countries maintain electoral cycles by requiring that a 'no-confidence motion' against the government also include a constructive 'vote of confidence' in an alternative government with a named leader to head it.
- **Resource Allocation Challenge:**
  - The Election Commission of India (ECI) would face challenges in resource allocation, including manpower and preparing electoral rolls, to manage the logistics of conducting simultaneous elections.

## ISRO's Triumph: Aditya L1 Successfully Positioned in Orbit

### Inside Story of the News:

The Indian Space Research Organisation (ISRO) achieved a successful launch of an observatory designed to study the Sun from a distance of 1.5 million kilometers. This mission **marks ISRO's inaugural venture into solar research and represents its second foray into astronomy observatory-class missions following AstroSat in 2015.** The spacecraft was meticulously placed into a **precise elliptical orbit** of approximately 235 km x 19,500 km **by one of the heaviest configurations of the PSLV, a process that spanned nearly 63 minutes.**

- Aditya-L1 represents India's inaugural space-based observatory-class solar mission, tasked with **studying the Sun from a significant distance of 1.5 million kilometers.**
- It will take approximately 125 days to reach its destination at the L1 point.
- This mission entails positioning the spacecraft in a halo orbit around Lagrange point 1 (L1) within the Sun-Earth system.
- In NASA's nomenclature, Lagrange points are locations in space where the gravitational forces between two celestial bodies, such as the Sun and Earth, create enhanced regions of attraction and repulsion.
- There are five Lagrange points in total: L1, L2, L3, L4, and L5.
- Placing the satellite in a halo orbit around L1 ensures uninterrupted observation of the Sun, free from eclipses or obstructive interferences.
- **The mission is slated to span five years** and will carry seven specialized payloads tailored for the observation of various facets of solar activity.
- The spacecraft is designed to be situated in a **halo orbit around Lagrange point 1 (L1) within the Sun-Earth system.**

### Aditya L1's Payloads: Scientific Instruments for Solar Exploration:

- The spacecraft is equipped with seven payloads, comprising four remote sensing instruments dedicated to the study of the Sun and three instruments designed for in situ observations at the L1 point.
- Remote Sensing Payloads for Solar Study:
  - **Visible Emission Line Coronagraph (VELC):** VELC is used for capturing images and conducting spectroscopy of the solar corona.
  - **Solar Ultraviolet Imaging Telescope (SUIT):** SUIT is employed for imaging the photosphere and chromosphere of the Sun.
  - **Solar Low Energy X-ray Spectrometer (SoLEXS):** SoLEXS serves as a soft X-ray spectrometer, enabling Sun-as-a-star observations.
  - **High Energy L1 Orbiting X-ray Spectrometer (HEL1OS):** HEL1OS functions as a Hard X-ray spectrometer for Sun-as-a-star observations.
- Payloads for In Situ Study at the L1 Point:
  - **Aditya Solar wind Particle Experiment (ASPEX):** ASPEX is used to analyse solar wind and particles, including protons and heavier ions, along with their directions.

- **Plasma Analyser Package for Aditya (PAPA):** PAPA is dedicated to analysing solar wind and particles, including electrons and heavier ions, along with their directions.
- **Advanced Tri-axial High-Resolution Digital Magnetometers:** These magnetometers are employed for in situ magnetic field studies.

### Exploring the Objectives of Aditya L-1 Mission:

- To advance our comprehension of the Sun and its influence on us, encompassing its radiation, heat, particle flow, and magnetic fields.
- To investigate the Sun's upper atmospheric layers, specifically the chromosphere and corona, with the corona being the outermost layer and the chromosphere situated just beneath it.
- To scrutinize coronal mass ejections (CMEs), which are substantial discharges of plasma and magnetic fields emanating from the Sun's corona.
- To analyze the magnetic field of the corona and its role in driving space weather phenomena.
- To unravel the mystery of why the Sun's seemingly faint corona boasts a scorching temperature of approximately one million degrees Celsius, whereas the Sun's surface temperature is a mere 5,500 degrees Celsius.
- To provide valuable insights into the mechanisms responsible for the acceleration of particles on the Sun, leading to the continuous stream of particles known as the solar wind.

### The Significance of Solar Exploration: Unravelling the Mysteries of the Sun:

- This marks India's inaugural space-based mission dedicated to studying the Sun.
- So far, only two other space agencies, namely NASA (the United States' National Aeronautics and Space Administration) and ESA (the European Space Agency), have achieved the feat of deploying spacecraft to reach L1, or the Lagrange point.
- **Enhancing Our Solar System Understanding:**
  - The Sun serves as the central anchor of our solar system, and its characteristics profoundly impact the behavior of all other celestial bodies within it.
  - A comprehensive study of the Sun contributes to a deeper comprehension of the dynamics governing our immediate cosmic vicinity.
- **Fostering Space Weather Comprehension:**
  - Every celestial body, including Earth and even exoplanets beyond our Solar System, undergoes evolutionary processes governed by their parent star.
  - Solar weather and environmental factors exert a pervasive influence, affecting the entire system.
  - Fluctuations in this solar weather can lead to alterations in satellite orbits, shortening their operational lifespans, causing interference or damage to onboard electronics, and triggering power outages and other disruptions on Earth.
  - An in-depth understanding of solar events is crucial for effectively grasping the intricacies of space weather.

## Understanding Autonomous Hill (or District) Councils: Local Governance in Hilly Regions

### Inside Story of the News:

In an effort to address the ongoing strife in Manipur and alleviate concerns among the Kuki community, the state has suggested to the Central government that the current autonomous hill councils should be granted increased autonomy. The state administration opposes the Kuki community's request for a separate administration, which has been put forth since the outbreak of violence on May 3, and is presenting this proposal as an alternative solution.

- During the British colonial rule over the region that is now Assam, the imposition of formal laws on the land faced fierce resistance from the tribal communities residing in the hills.
- These tribal populations adhered to their own customary laws.
- In an effort to prevent confrontations, the British authorities delineated the hill regions of Assam into two categories: excluded and partially excluded areas, as stipulated by the Government of India Act, 1935.
- Within these designated areas, the application of federal or provincial laws was withheld until the governor deemed it necessary for the purposes of maintaining peace and promoting development.
- Upon India's attainment of independence, this provision was incorporated **into the Sixth Schedule of the Constitution** with enhancements.
  - This adoption of the provision was the result of recommendations put forth by a **committee chaired by Gopinath Bordoloi**, who served as the **premier of Assam** at the time.
  - The committee advocated for the establishment of autonomous district councils (ADCs) within the six hill districts of Assam, aiming to enable tribal communities to safeguard their cultural identity and resources.
  - Additionally, the committee proposed the creation of regional councils under ADCs, specifically tasked with addressing the needs of minor tribal groups falling within the jurisdiction of those ADCs.
- The Sixth Schedule of the Indian Constitution designates ten tribal areas, which are distributed across Assam (3), Meghalaya (3), Tripura (1), and Mizoram (3).
- Each of these tribal areas serves as an autonomous district, and within each autonomous district, there exists an Autonomous District Council (ADC).
- Despite undergoing a similar process of governance division when the British assumed control of the region in 1891, Manipur's hill areas were not included under the purview of the Sixth Schedule.
- In 1939, the Maharaja of Manipur entered into an agreement with the British, excluding the hill areas from his direct governance and control.



- In December 1971, Parliament passed The Manipur (Hill Areas) District Council Act, a significant development that occurred while Manipur was a Union Territory.
- The primary objective of this legislation was to provide the hill communities with opportunities for self-governance, safeguard their cultural identity, and grant them rights over the management of local resources.
- This legislative move paved the way for the establishment of Autonomous District Councils (ADCs) in Manipur's hill areas, which encompassed a vast majority, approximately 90%, of the state's total geographical area and were inhabited by various tribes such as Nagas, Kukis, Zomis, Hmars, and others.

## Exploring the G20 'Workstreams': Areas of Global Focus and Collaboration

### Inside Story of the News:

The 18<sup>th</sup> annual G20 Heads of State and Government Summit is just around the corner, scheduled to occur at **Bharat Mandapam, Pragati Maidan, New Delhi**, on September 9<sup>th</sup> and 10<sup>th</sup>, in less than a week.

- The G20 originated as a gathering of **finance ministers and central bank governors from 19 individual countries and the European Union.**
- Its inception took place in 1999.
- In response to the global financial crisis of 2008, the G20 was elevated to a forum of Heads of State/Government in 2008, with the aim of effectively addressing the crisis.
- The G20 operates as a forum rather than a legislative body.
- While its agreements and decisions lack legal binding, they hold sway over the policies of nations and global cooperation.
- G20 members collectively represent approximately 85% of the global GDP, over 75% of global trade, and two-thirds of the world's population.
- G20 member countries are responsible for 79% of global carbon emissions, making this platform influential in shaping discussions on climate change.
- Initially focused on broad macroeconomic policy, the G20 has expanded its scope to include areas such as trade, sustainable development, energy, environment, climate change, and anti-corruption.
- The 2021 summit committed to discontinuing funding for coal-fired power plants in impoverished nations by the end of 2021 and pledged to aim for carbon neutrality "by or around mid-century."
- The 2021 summit endorsed the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy.
- **India's chosen theme for its G20 presidency is "Vasudhaiva Kutumbakam" (The world is one family).**
- India's G20 leadership has aimed to prioritize the Global South in global conversations.

- Throughout its year-long presidency, New Delhi has put forth extensive efforts to showcase India's global leadership aspirations.
- This endeavor is evident in its inclusive approach.
- During the inauguration of the 17<sup>th</sup> Pravasi Bharatiya Diwas Convention in Indore in January 2023, Prime Minister Modi emphasized the importance of making the G20 more than just a diplomatic event but a historic event involving the participation of the people.
- India has envisioned "janbhagidari" (people's participation) in the G20 through various civic engagements and by hosting over 200 meetings across 50 cities and involving 32 working streams.
- New Delhi has emphasized issues of significance to emerging economies, including digital public infrastructure, entrepreneurship and innovation, climate justice, and affordable access to healthcare.

### The Structure and Organization of the G20:

- The G20 operates through three primary tracks, consisting of two official tracks and one unofficial track.
- The official tracks encompass the Finance Track and the Sherpa Track, while the unofficial track encompasses engagement groups or civil society groups.
- The Finance Track, overseen by finance ministers and central bank governors, convenes typically four times a year, including two meetings held alongside the World Bank and International Monetary Fund (IMF) gatherings.
- Its primary focus revolves around fiscal and monetary policy matters, encompassing global economic conditions, infrastructure development, financial regulation, financial inclusivity, international financial structure, and global taxation issues.
- The Sherpa Track was established following the forum's transition into a summit for world leaders in 2008.
- It comprises representatives of heads of state, with each representative referred to as a Sherpa—a term borrowed from the realm of mountaineering, where Sherpas undertake the strenuous tasks or provide assistance to mountaineers.
- This track centers its attention on socio-economic concerns, including agriculture, anti-corruption measures, climate action, the digital economy, education, employment, energy, environmental conservation, healthcare, tourism, trade, and investment.
- The engagement groups encompass the following: Business20, Civil20, Labour20, Parliament20, Science20, SAI20, Startup20, Think20, Urban20, Women20, and Youth20.

## Chandrayaan-3 Lander: Vikram's Unexpected jump on the Moon

### Inside Story of the News:

Surpassing its intended mission goals, the lander Vikram of the Chandrayaan-3 mission has marked a noteworthy achievement by successfully **executing a hop experiment**.

- The Indian Space Research Organisation (ISRO) has reported that the lander, under commanded control, executed a successful engine firing, elevating itself by approximately 40 cm as intended, and safely landed at a distance of 30-40 cm away.
- This accomplishment serves as a demonstration of ISRO's capability to initiate engine firing on the lander and generate the necessary thrust for liftoff from the lunar surface.
- While ISRO has yet to unveil subsequent lunar missions, experts believe that a sample return mission represents the logical progression beyond Chandrayaan-3.
- In fact, had Chandrayaan-2 succeeded in 2019, Chandrayaan-3 would have been designed as a sample return mission.
- The human lander mission is also expected to follow at a later stage.
- Consequently, the hop test assumes critical importance for forthcoming lunar missions.
- In scenarios such as return missions or human lander missions, the lander must ascend from the lunar surface and journey back to Earth, requiring significantly greater thrust.
- Nonetheless, as a technology demonstration, the "hop experiment" remains a noteworthy achievement within the Chandrayaan-3 mission.
- ISRO has confirmed that all spacecraft and the instruments onboard are functioning properly following the hop experiment.
- The deployed ramp, ChaSTE, and ILSA (instruments) were successfully folded back and redeployed after the experiment.
- Subsequently, the instruments onboard the lander were deactivated in preparation for the onset of lunar nighttime.
- Solar-powered instruments are not designed to endure the extreme low temperatures of lunar nights, which plummet to below -120 degrees Celsius.
- Consequently, the instruments on the rover were placed in a sleep mode a few days before the commencement of lunar nighttime.
- During this period, which lasts for 14 Earth days, the remaining battery will attempt to maintain the instruments' temperature.
- If the battery does not fully deplete during this period, the instruments can be reactivated when sunlight becomes available once again.
- Following the launch of the Aditya-L1 mission, the ISRO Chairman also unveiled plans to extend the mission duration for both the lander and the rover.
- Initially, the mission's expected lifespan for both the lander and the rover was limited to just one lunar day, equivalent to 14 Earth days.

### Chandrayaan-3 Mission Achievements to Date

- Throughout its operational phase, the Vikram Lander and Pragyan rover conducted a multitude of lunar experiments.
- **Rover Exploration:**
  - Before transitioning into sleep mode, the Pragyan rover covered a substantial distance of more than 100 meters.
  - It's important to note that the rover's communication range is limited to 500 meters from the Vikram lander.
- **Noteworthy Sulphur Discovery:**
  - The Laser-Induced Breakdown Spectroscopy (LIBS) instrument aboard the rover definitively confirmed the presence of Sulphur (S) in the lunar surface near the south pole, representing a pioneering in-situ measurement.
  - Additionally, LIBS identified Al, Ca, Fe, Cr, Ti, Mn, Si, and O.
- **Groundbreaking Plasma Measurements:**
  - The Radio Anatomy of Moon Bound Hypersensitive Ionosphere and Atmosphere - Langmuir Probe (RAMBHA-LP) payload on Chandrayaan-3 Lander conducted revolutionary measurements of the near-surface lunar plasma environment in the south polar region.
  - Preliminary assessments indicate a relatively sparse plasma presence near the lunar surface.
  - These quantitative measurements hold promise for mitigating radio wave communication interference and enhancing future lunar mission designs.
- **Recording Seismic Activity:**
  - The Instrument for the Lunar Seismic Activity (ILSA) payload on Chandrayaan-3 Lander, the first Micro Electromechanical Systems (MEMS) technology-based instrument on the moon, recorded the movements of the rover and other payloads.
  - Furthermore, it captured an event on August 26, deemed to have a natural origin, which is currently undergoing investigation.
- **Exploring Thermal Behavior:**
  - The ChaSTE (Chandra's Surface Thermophysical Experiment) instrument measured the temperature profile of the lunar topsoil near the pole to gain a deeper understanding of the thermal properties of the moon's surface.
  - Equipped with a controlled penetration mechanism capable of reaching a depth of 10 cm beneath the surface and featuring 10 individual temperature sensors, the probe generated a temperature variation graph for the lunar surface/near-surface at various depths during its penetration.
  - This marked the first such profile for the lunar south pole, with ongoing detailed observations.

- **Alternative Sulphur Confirmation:**
  - Another instrument onboard the rover affirmed the presence of Sulphur (S) in the region using a different technique.
  - The Alpha Particle X-ray Spectroscopy (APXS) detected S alongside other minor elements.
  - This discovery has prompted scientists to explore fresh theories regarding the origin of Sulphur (S) in the area, including intrinsic, volcanic, meteoritic, and other potential sources.