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Indian Astropolitics and South Asian Security: A Deep Strategic Culture Perspective

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Abstract

Outer Space has become a realm of competition since Sputnik-1, with states incorporating space technologies into their broader security and military doctrines. Space has become (is) the final (significant) frontier in South Asia, where a fragile balance of power prevails between the nuclear states. This paper explores Indian astropolitics through the lens of its deep strategic culture and its implications for South Asian stability and security. Rajesh Basrur's conceptualization of deep strategic culture has two elements, strategic autonomy and the pursuit of status, that drive its expanding military use of outer space. This is evident from the development of dual-use technologies for intelligence, surveillance, and reconnaissance (ISR), early warning systems, and precision-strike capabilities. Moreover, dedicated spy satellites, enhanced space situational awareness, and the 2019 anti-satellite (ASAT) test demonstrate India's space militarization. India's selective engagement in international space frameworks and multi-alignment strategy further reinforces its pursuit of autonomy and global recognition. This paper finds that India's growing reliance on space-enabled military capabilities poses serious challenges to strategic stability in South Asia. Space-based surveillance and targeting systems enhance counterforce and pre-emptive strike options, give operational warfighting advantages, threaten Pakistan's space assets, and undermine deterrence. The study concludes that Indian astropolitics, shaped by deep strategic culture rather than short-term threat perceptions, has the potential to disturb the regional peace and intensify security rivalry in South Asia. In response, Pakistan must develop a comprehensive national space security strategy, strengthen indigenous space capabilities, pursue selective space cooperation, and continue supporting the peaceful use of outer space at international forums.

Key Words: Astropolitics, Deep Indian Strategic Culture, Anti-Satellite (ASAT), Dual-Use Technologies, Mission Shakti, ISR, Precision Doctrine.

1. Introduction

The militarization of outer space, which began with Sputnik-1, is no longer a geopolitical competition limited to great powers.¹ Space-based assets are deeply embedded in Intelligence, Surveillance and Reconnaissance (ISR), precision targeting, communication, and navigation by all states. Thus, space is the fourth domain of military contest, along with land, sea, and air.² States with space capability have a structural advantage over others, which translates into an edge in information and operational effectiveness.³

The ability to operate in space and be dependent on space-based systems for military operations has now become a key factor in regional security. One of the most significant theaters where this is happening is in South Asia.⁴ The subcontinent is already home to a fragile nuclear weapons powers based on deterrence. Two nuclear powers, Pakistan and India, are in a state of unresolved territorial dispute with borders that have seen four wars and low-intensity conflict.⁵ On top, India's increasingly militarised space programme is growing at a rapid pace and changing the nature of the regional security environment.

India's space program is not motivated by only technological advancement, but it is rooted in its strategic culture. This ushers India's civilian space program to a strategic tool for militarizing space. India is using the civilian technology of its space program towards its goal of becoming a major power in the region. Its civilian space program has been a legitimating device for access to technologies, avoidance of arms-control treaties, and creation of an international image. Behind the camouflage of the civilian program, India built its anti-satellite weapon that was tested in 2019 as Mission Shakti. However, in this context, the muted response by the international community spoke volumes about the eroding space governance program.

¹ 'Sputnik: The Space Race Begins', History, U.S. Department of State, 2023, <https://history.state.gov/milestones/1953-1960/sputnik>.

² Philip Citowicki, 'Dogfighting between Satellites? Recognising Space as a Domain of War', The Lowy Institute, Lowy Institute, 23 September 2025, <https://www.loyyinstitute.org/the-interpreter/dogfighting-between-satellites-recognising-space-domain-war>.

³ 'The Fight for Military Advantage Is Increasingly Moving into Space', KRXI2, 16 September 2026, <https://foxbaltimore.com/news/nation-world/the-fight-for-military-advantage-is-increasingly-moving-into-space-satellites-space-force-military-national-security-pentagon>.

⁴ Abbas Hashemite, 'Pakistan and India's Space Race', New Eastern Outlook, 9 October 2023, <https://journal-neo.su/2023/10/09/pakistan-and-indias-space-race/>.

⁵ Gaby Tejeda, 'Two Nuclear-Armed Rivals on the Brink in South Asia', The Soufan Center, 9 May 2025, <https://thesoufancenter.org/intelbrief-2025-may-9/>.

2. Methodological and Conceptual Framework

Existing scholarship has not studied Indian astropolitics through the lens of Indian strategic culture. This study employs qualitative methods. Data collection for this paper is based mostly on primary sources such as some official statements, press releases of ministries, and first-hand information from government websites, as well as secondary data for example books, research articles, newspapers, magazines, and reports. Data is analyzed according to themes generated after coding.⁶ This is a deductive study that applies the conceptual model of deep Indian strategic culture by Rajesh Basrur.

Rajesh Basrur, an Indian scholar, has proposed a concept of 'Deep Indian strategic Culture' in a book, *Routledge Handbook of the International Relations of South Asia*.⁷ This study applies the conceptual framework of Basrur on Indian strategic culture. According to him, strategic culture is divided into two types: 'mutable strategic culture, which may change over time, and 'deep strategic culture', which is a set of core strategic preferences based on historical experiences. He argued that "patterns that are maintained over a long period of time, in the present context, since independence, regardless of changing circumstances." Furthermore, he also states that deep strategic culture is "tricky, perhaps tautological since it is a recognition that is post facto (a long-term attribute is deep until it is not!)." He identified two pillars of deep Indian strategic culture: strategic autonomy and an enduring struggle for status in global affairs. Since independence, India has been on a quest for independence and prestige: its space odyssey is also a testimony to this.⁸

Basrur's concept emerges after studying the post-colonial pattern of strategic preference of ideologically polar governments of Nehru, Vajpayee and Modi. He argued that from Non-alignment (NAM) during the Cold War to post-Cold War realignment tensions, the quest for strategic autonomy is structurally embedded and not situationally determined. There was a deeply entrenched aversion to constraints on India's strategic autonomy, whether imposed by alliances, agreements, multilateral treaties, or arms reduction programs that would put India's capabilities under external scrutiny. Thus, India's foreign relations were a continual push for strategic autonomy.

The second pillar of Indian deep strategic culture is a longing for recognition and prestige as a major power. In India, these two elements are structurally linked; capability is the means of establishing status. Non-alignment depicted India's desire to stand out differently. Meanwhile, multi-alignment and loose alignments are a means of joining various pacts, treaties, and agreements that elevate India's status as a responsible and aspiring major power. In this context, technology plays a

⁶ Sandra Halperin and Oliver Heath, *Political Research: Methods and Practical Skills* (Oxford University Press, 2025), <https://global.oup.com/academic/product/political-research-9780192846068?lang=en&cc=be>.

⁷ Rajesh Basrur, 'Indian Strategic Culture', in *Routledge Handbook of the International Relations of South Asia*, ed. Sumit Ganguly and Frank O'Donnell (Routledge, 2022), 63–79, <https://doi.org/10.4324/9781003246626>.

⁸ Ibid.

significant role as it is a symbol of the advancement of civilization as well as an indicator of great-power credentials.⁹

Evolution of Indian Astropolitics from Deep Strategic Culture Perspective

Astropolitics is the geopolitics of space in simplest terms. A state exercises its resources in space and for space to attain certain political objectives. India's astropolitics is manifested through its space program that started as a civilian program under the Indian Space Research Organization (ISRO). It was dual-use from the beginning; the civilian face of the program was tapped to gain technology transfer deals from spacefaring nations. Then, these technologies were used for military purposes. India formally institutionalized the militarization of space and also developed and send its anti-satellite weapons into space. India's space trajectory is further analyzed in detail through the lens of deep strategic culture.

1) Dual-Use of Space Program

India's satellite constellation i.e. combination of more than 130¹⁰ active satellites is a dual-use system that has always served military applications alongside civilian ones. Its architecture is more aptly described as military-oriented, with a civilian face. Various satellites launched by ISRO, such as the GSAT communication series, NavIC (Navigation with Indian Constellation) navigation satellites, and the Earth Observation platform, are dual-use.^{11,12} NavIC has a coverage of 1,500 kilometres outside India, including the Pakistani area.¹³ The satellites capabilities of Positioning, Navigation and Timing (PNT) is a dual-use technology. This navigation system provides precision navigation for ballistic and cruise missiles and provides support for naval operations. By any analysis, an adversary-independent navigation system in wartime is a warfighting asset. India launched the Space-Based Surveillance (SBS) program under which the Indian Armed Forces (IAF) operate satellite constellations of 52 spy satellites.¹⁴ SBS has three phases, which span over two and a half centuries. Its third phase is underway at a fast pace after false-flag

⁹ Ibid.

¹⁰ "Indian Satellites in Orbit — ISRO's Space Fleet," July 26, 2026, <https://orbitalradar.com/satellites/country/india>.

¹¹ ISRO, 'GSAT-N2 Mission', ISRO, 2024, https://www.isro.gov.in/GSAT-N2_mission.html.

¹² M. Fazal, 'The Indian Space Research Organisation (ISRO) and NavIC', *Stratheaia*, 3 July 2025, <https://stratheaia.com/the-indian-space-research-organisation-isro-and-navic/>.

¹³ ISRO, 'Satellite Navigation Services', *Www.Isro.Gov.In*, accessed 14 March 2026, <https://www.isro.gov.in/SatelliteNavigationServices.html>.

¹⁴ Usman Haider, 'India's New Space-Based Spy Network', *The Diplomat.Com*, *The Diplomat*, 22 January 2025, <https://thediplomat.com/2025/01/indias-new-space-based-spy-network/>.

Operation Sindoor 2025.¹⁵ The Cartosat series data offers sub-metre optical imaging data for direct ISR application on Pakistani military apparatus and strategic locations, while the RISAT series data provides all-weather and day-and-night synthetic aperture radar imaging data, which can penetrate cloud cover and is independent of light conditions.¹⁶ These space technologies enhance India's ISR capabilities.

Table 1: *Cartosat Series Remote Sensing Satellites (in operation)*

Satellite	Type	Sensor	Resolution	Purpose / Features
Cartosat-1	Remote sensing	PAN Cameras	2.5 meter	Stereoscopic Earth observation; Generates 3D Maps
Cartosat-2	Remote sensing	—	Less than 01 m	Scene-specific spot imagery
Cartosat-2A	Remote sensing	—	0.8 meter	Dedicated for military use; Highly agile 45 degree steering
Cartosat-2B	Remote sensing	—	Less than 01 m; 9.6 Km swath	Scene-specific spot imagery; 26 degree steerable
Cartosat-2C, D, E & F	Remote sensing	Multispectral camera	0.6 meter (Cartosat-2D)	Better resolution; Highly agile 45 degree steering
Cartosat-3	Remote sensing	PAN, Multispectral & Hyperspectral	0.25 m with a 16 Km swath	World's highest resolution; Highly agile/dual gimble; High rate data handling & transmission

Source: *Amjad Mahmood and Adil Sultan, Impact of India's ISR Capabilities on South Asian Security Dynamics, Strategic Studies.*

The combination of these systems represents the ability of continuous monitoring of borders, track movements, and gather intelligence. India has effectively used its

¹⁵ Rajat Pandit, 'Post Op Sindoor, India to Fast-Track Launch of 52 Defence Surveillance Satellites', *Indiatimes.Com*, 2025, <https://timesofindia.indiatimes.com/india/post-op-sindoor-india-to-fast-track-launch-of-52-defence-surveillance-satellites/articleshow/122149971.cms>.

¹⁶ 'Space Based Surveillance (SBS) Phase III Mission', *Strategic Front Forum - Indian Defence and Strategic Forum*, 11 October 2024, <https://www.strategicfront.org/forums/threads/space-based-surveillance-sbs-phase-iii-mission.5320/>.

civilian space program to develop ISR and PNT capabilities for military applications. The civil-military fusion and intentional ambiguity helped India to ensure access to civilian technology partnerships and to be able to build up military capability under the civilian guise. The ultimate rationale behind this fusion is achieving strategic autonomy in case of war through its national ISR and PNT systems.

2) IndianSpace Technology and Precision Strike Weaponry Systems

The crucial part of the military applications of civilian space infrastructure is the integration of an ISR system within early warning, detection, and precision strike. India is adopting missile and satellite technology for precision strikes, as seen in the false-flag Operation Sindoor.¹⁷ India's satellite navigation system, NavIC, is being utilized in missile navigation systems like the Agni series and BrahMos cruise missile for boosting the strike accuracy of missiles and pre-emptive strikes during crises. Space-based sensors provide additional early warning capability that will bolster India's ballistic missile defence capabilities. Defence officials state that integrated battle networks connecting land, sea and air platforms are at the heart of the ISR system's role in modernising them.¹⁸ The integration showcases India's space infrastructure being used for dual purposes.

This integration of space into precision-strike doctrine is aimed at boosting India's strategic autonomy. In case of war or conflict, India can use its own ISR system that decreases its dependence on other states.

3) India's Institutional Militarization of Space

As discussed earlier, Indian space program was launched with an outlook of civilian applications (satellite communication, agricultural remote sensing, weather forecasting under the ISRO in 1969.¹⁹ India's space infrastructure has always been dual-use, serving both civilian and military needs. However, the civilian face of the Indian space program fulfilled its international interests of technology access²⁰ and protected space militarization activities from scrutiny for several decades.

More importantly, over the years, the institutional structure of the Indian space agency has evolved from civilian to defence-centred. India has given a formal identity to the institutionalization of an operational military space wing. India created the Defence Space Agency (DSA) and the Defence Space Research

¹⁷ Amy Wonnacott, 'From Surveillance to Strike: Operation Sindoor and the Role of Space in Himalayan Regional Security', *International Centre for Sustainability - Ex Oriente Lux*, 21 July 2025, <https://icfs.org.uk/from-surveillance-to-strike-operation-sindoor-and-the-role-of-space-in-himalayan-regional-security/>.

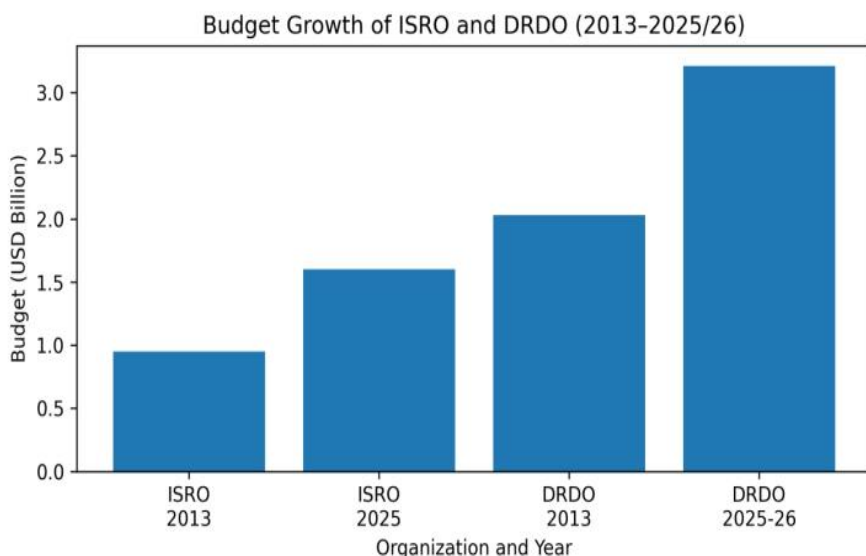
¹⁸ Ibid.

¹⁹ 'Indian Space Research Organisation', *Www.Isro.Gov.In*, accessed 23 February 2026, <https://www.isro.gov.in/profile.html>.

²⁰ Tobias Scholz, 'India's Space Policy', *Stiftung Wissenschaft Und Politik (SWP)*, ahead of print, 2024, <https://doi.org/10.18449/2026RP09>.

Organisation (DSRO) in 2019.²¹ The DSA is a central body for coordination of space operations of the three services under a single military command.²² On the other hand, the DSRO includes a specific counter-space remit for space-based directed energy weapons, electronic jamming and advanced anti-satellite systems.²³ They are not merely institutional instruments of development that have grown organically, but the architecture of a state that has officially identified space as an arena.

Figure.1: Budget Growth of ISRO and DRDO



Source: Created by Author

Moreover, a self-reliant space infrastructure built for military purposes was in the disguise of civilian uses is the long-term objective of the Indian Space Program. The Defence Research and Development Organization (DRDO) works closely with ISRO to modernize the militarization of space. There has been a subsequent increase in budget for both organizations during the last decade shown in Figure 1. There is a 69% increase in the budget of ISRO from 950 million USD in 2013 to 1.6

²¹ Vivek Raghuvanshi, 'India to Launch a Defense-Based Space Research Agency', Defense News, 12 June 2019, <https://www.defensenews.com/space/2019/06/12/india-to-launch-a-defense-based-space-research-agency/>.

²² Rajat Pandit, 'Agencies Take Shape for Special Operations, Space, Cyber War | India News - Times of India', The Times of India, 30 May 2019, <https://timesofindia.indiatimes.com/india/india-begins-setting-up-new-tri-service-agencies-to-handle-special-operations-space-and-cyberspace/articleshow/69346012.cms>.

²³ Jessica Zeitz, *India Creates a New Agency to Fight Its Star Wars*, 13 June 2019, <https://asgardia.space/en/news/India-Creates-a-New-Agency-to-Fight-Its-Star-Wars>.

billion USD in 2025.²⁴ DRDO is allocated 3.21 billion USD for the fiscal year 2025-26.²⁵ There is a parallel increase in the budget of both organizations that demonstrates close integration between military and civilian space programs. This suggests India is increasing spending on defence research in general that is consistent with its military space architecture as well. The increase in the growth of dual capability of space technology not only increase the power of Indian military but it will also help in modernizing its kinetic military operations. Hence, it will give Indian Army a freedom of choices for its military strategies against its adversaries. This will increase the instability and danger of conflict escalation in the region by risking peace.

Furthermore, materializing institutional architecture focused on space militarization is rooted in a quest for strategic autonomy, military modernization and prestige. It is a step towards strategic autonomy, as it shows institutional capacity for militarization of space. Despite the global space governance framework that declares space as a global common, some states like India consider militarization of space as a symbol of prestige.

4) Mission Shakti

India's military march towards space has extended to the development of anti-satellite weapons. India conducted an Anti-Satellite Test, called Mission Shakti, in March 2019, in which India's Microsat-R was destroyed at an altitude of ~283 km using a kinetic kill vehicle.²⁶ A ground-based interceptor missile, Prithvi Defence Vehicle Mark II, is part of the Indian Ballistic Missile Defence system. It was launched by the Polar Satellite Launch Vehicle-C44, developed by ISRO for so-called civilian uses.²⁷ During the test, some 400 debris items were created that were tracked and posed a threat to assets in LEO. India thus became the fourth country after the US, Russia, and China to have an anti-satellite capability, which increases India's international clout.²⁸ Indian Prime Minister Modi, in a televised address,

²⁴ Surendra Singh, 'With Big-Ticket Space Missions Lined up, ISRO Gets a Budget Boost', *The Times of India*, February 2025, <https://timesofindia.indiatimes.com/science/with-big-ticket-space-missions-lined-up-isro-gets-a-budget-boost/articleshow/117837166.cms>.

²⁵ 'A Record over Rs 6.81 Lakh Crore Allocated in Union Budget 2025-26 for MoD, an Increase of 9.53% From Current Financial Year', *Press Information Bureau (PIB)*, 2025, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2098485>.

²⁶ 'Secure World Foundation: Indian Direct Ascent Anti-Satellite Testing Fact Sheet', Swfound.Org, 2026, <https://www.swfound.org/publications-and-reports/indian-direct-ascent-anti-satellite-testing-fact-sheet>.

²⁷ ISRO, 'PSLV-C44', Isro.Gov.In, 2019, https://www.isro.gov.in/mission_PSLV_C44.html.

²⁸ A. Manzoor, 'India's Outer Space Politics: A Security Dilemma for Pakistan', in *Critical Issues Facing South Asia*, ed. Khurram Abbass (Institute of Strategic Studies, Islamabad, 2024), 119–35, 275

declared that the test was a sign of India becoming a space superpower.²⁹ India did not get any notable international reaction, including from the United States, to its ASAT test.³⁰ However, Pakistan raised its voice and expressed deep concern over the Indian ASAT test by releasing a statement from its Ministry of Foreign Affairs (MOFA). The statement highlighted the impact of such an ASAT test on the militarization of space, sustainable practices in space, and debris generation that can affect the International Space Station (ISS) and other satellites, calling for an international response.³¹

The name of the Mission Shakti, which means ‘Power’ in Sanskrit, is rooted in a deep Indian strategic culture. Anti-satellite was not a response to an immediate threat to India but a proof of desire to have great power credentials. As mentioned earlier, Prime Minister Modi’s statement after the test mentioned that India became a space superpower. This official discourse suggests that the ASAT test was not a security-centered approach rather power and prestige centered. This reinforces Basrur’s second pillar, prestige of deep strategic culture.

https://issilibrary.org.pk/view/book_detail/25793_Critical-Issues-Facing--South-Asia/d346383d6430107c6a6da16e24d76ae2.

²⁹ ‘Speech by Prime Minister on ““Mission Shakti” “, India’s Anti-Satellite Missile Test Conducted on 27 March, 2019’, Ministry of External Affairs, Government of India, 2019, <https://www.mea.gov.in/Speeches-Statements.htm?dtl/31180>.

³⁰³⁰ Theresa Hitchens, ‘U.S.-India ASAT Test: React May Backfire, Experts Say’, Breaking Defense, April 2019, <https://breakingdefense.com/2019/04/u-s-india-asat-test-react-may-backfire-experts-say/>.

³¹ MOFA, ‘Pakistan Express Deep Concern at ASAT Test by India.’, Mofa.Gov.Pk, 2024, <https://mofa.gov.pk/pakistan-express-deep-concern-at-asat-test-by-india>.

Figure 12: *PDV-MK II Interceptor Missile*

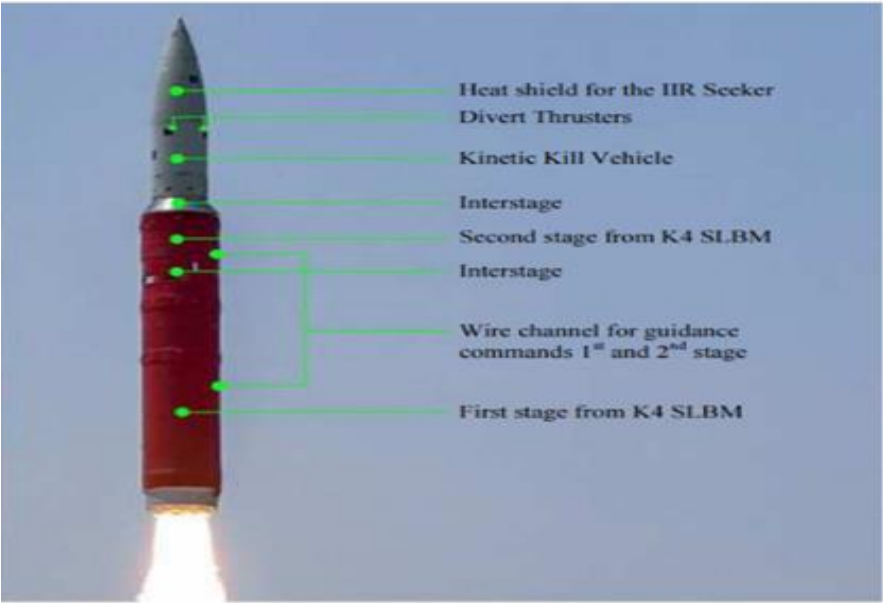
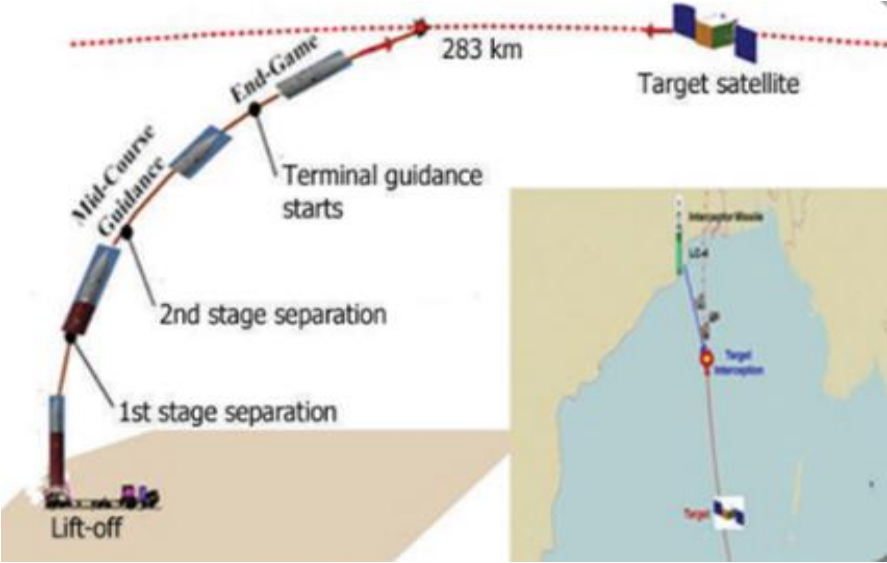


Figure 3: *ASAT Trajectory*



3. Implications of Indian Astropolitics for South Asia

1. Operational Warfighting and ISR Capabilities

The strategic importance of India's ISR capabilities through satellite technology is their ability to change the informational environment. It is a "force multiplier": it does not just augment the military capability, but transforms its nature and essence, producing a cumulative disadvantage to the state that is on the receiving end of the

asymmetry.³² With gradually increasing ISR capability, India can look into Pakistani forces' deployment with precision and can coordinate operations on multiple axes with coherent information that ground-based intelligence simply cannot match, and can guide precision munitions with an accuracy that conventional targeting simply couldn't match. With the growing maturity of India's ISR satellite constellation in terms of resolution, coverage, and revisit frequency, the operational advantage it will provide in targeting, damage assessment, and force monitoring will grow as well.³³ Thus, space-based ISR has added an operational asymmetry, and it is deepening into the conventional warfighting of India.

2. Threats to Deterrence Stability

Pakistan has adopted a full-spectrum deterrence (FSD) policy for India to ensure strategic stability in South Asia.³⁴ The increasing thrust on dual-use space technologies and weaponization of space by India directly challenges Pakistan's long-standing deterrence posture in South Asia. India's SBS will give it high-resolution pictures of border areas that will help it keep a constant watch on Pakistani military installations, missile deployment, and troop movements. The upcoming spy satellites to be launched in 2026 will be able to give India near-constant imagery of the region 24/7, which will improve India's surveillance against Pakistan. Indian ISR can be used for surgical strikes, drone warfare, false flag operations, and air campaigns, as it happened during false flag Operation Sindoor.³⁵ Integration of ISR with conventional military by India undermines the conventional deterrence established by Pakistan.

A false sense of superiority and security may be constructed among Indian leadership by space-enabled intelligence and a precision-guided missile system. India's incorporation of space infrastructure in precision strike and early warning systems may tip the strategic balance in India's favor due to technological benefits.

³² 'ISR Operations: "Eye in the Sky"', U.S. Strategic Command, 23 March 2009, <https://www.stratcom.mil/Media/News/News-Article-View/Article/983515/isr-operations-eye-in-the-sky/>.

³³ Manish Kumar Jha, 'National Security: Why India Must Fast-Track SBS-III. Integrated ISR Dominance in Space', Times of India Voices, Times of India, 23 April 2026, <https://timesofindia.indiatimes.com/blogs/strategic-frontier/national-security-why-india-must-fast-track-ssb-iii-integrated-isr-dominance-in-space/>.

³⁴ Dr Ashfaq Ahmed Assistant Professor, Muhammad Jawad Hashmi Lecturer, and Saima Kausar Dept. of Politics and International Relations, University of Sargodha, Pakistan, 'Pakistan Nuclear Doctrine from Minimum Deterrence to Full Spectrum Credible Minimum Deterrence', Pssr.Org.Pk, 2019, <https://pssr.org.pk/article/pakistan-nuclear-doctrine-from-minimum-deterrence-to-full-spectrum-credible-minimum-deterrence-fscmd>.

³⁵ Surendra Singh, 'Operation Sindoor Gave Us Chance to Use Space Technologies on Pakistan Soil: Minister', The Times of India, The Times Of India, 24 August 2025, <https://timesofindia.indiatimes.com/india/operation-sindoor-gave-us-chance-to-use-space-technologies-on-pakistan-soil-minister/articleshow/123477995.cms>.

This sense of superiority may have a spillover effect on nuclear deterrence or any inadvertent conflict escalation. It can be serious danger for the peace and stability of the region. Furthermore, India's No First Use Policy is already shaky and ambiguous,³⁶ which increases the feasibility of a preemptive strike as noticed in the increase of abnormal behavior and patterns of Indian military operations escalating against Pakistan. India can trigger a nuclear war in South Asia.

3. The Dynamics of Balance of Power and Arms Race.

India has early warning systems, targeting and counter-force operations because of its space-based surveillance program, dual-use space technologies, precision-guided strike system, and anti-satellite weapons. India's space and defence expenditure is higher than Pakistan and top most in the world, which is also utilized for the development of military space technologies.³⁷ This disturbs the existing parity and results in a considerable imbalance in the conventional and strategic spheres not only in region but globally.

An imbalance of power or an unstable equilibrium is a threat to South Asian strategic stability and now, threat to the whole world with its Intercontinental Ballistic Missile (ICBM) Systems program, ranging more than 12000 kms. The security dilemma continues by India who is pushing the security boundaries of its neighbors and great powers, also with India's growing space-based military capability challenging the strategic stability of the region and international peaceful community. Indian military capabilities are not defensive, but rather offensive. India has fueled an arms race in South Asia and in the world, both on Earth and in space. Pakistan has to regain and maintain the balance of power and strategic stability.

4. The Persistent Threat of Indian Militarization of Space

The above-mentioned study shows that the militarisation of space in South Asia has been driven by India. The Indian tests, under the name Mission Shakti, are not merely symbolic tests of India's demonstration of space power. Rather, they are an aspiration to indicate the escalation of space militarization in the region. It shows India's desire to employ space weapons and be an active member of an arms race in outer space. Indian ASATs exploited the norms of legal loopholes in the Outer Space Treaty (OST),³⁸ as it only bans the placement of Weapons of Mass Destruction

³⁶ Arms Control Association, 'India Considers No-First-Use Changes | Arms Control Association', Armscontrol.Org, 2014, <https://www.armscontrol.org/act/2019-10/news-briefs/india-considers-no-first-use-changes>.

³⁷ Ajai Shukla, 'India's Defense Budget Jumps 15 Percent', TheDiplomat.Com, The Diplomat, 6 February 2026, <https://thediplomat.com/2026/02/indias-defense-budget-jumps-15-percent/>.

³⁸ Center for Ethics and the Rule of Law, 'India Just Launched an Anti-Satellite Weapon and the U.S. Is Unlikely to Do Anything about It - CERL', CERL, 2 April 2019, <https://www.penncerl.org/the-rule-of-law-post/india-just-launched-an-anti-satellite-weapon-and/>.

(WMDs) and remains silent on other conventional and sub-conventional space weapons.³⁹ Several hundred pieces of space debris were created by ASAT tests, which threaten other satellites and spacecraft by increasing the risk of collision. In addition to space debris, the explosions caused pollution in the upper atmosphere, which had long-term environmental effects. These space based tests further fueled an international arms race and raised regional powers' security concerns, especially Pakistan and China. The risk of miscalculations during a crisis is heightened by the presence of ASATs of one country. Other states' space infrastructure, which serves communication, navigation, and weather forecasting, is at risk. In fact, Indian defence doctrine refers to space as a “war-fighting domain”. , This indicates its desire to make space a contested space domain.

5. Policy Recommendations

Indian astropolitics, driven by its deep strategic culture, affects South Asia's strategic stability more and destabilize the peaceful environment of the region. Hence, Pakistan's space policy should be adjusted according to the new space threat. The following recommendations are presented in immediate, medium, and long-term intervals.

1. The immediate step is based on Pakistan's strength, which lies in its diplomatic posture in space-related matters. Pakistan has been consistently involved in the United Nations' Committee on the Peaceful Uses of Outer Space and supported peaceful uses of space. Co-sponsoring resolutions with other states on banning anti-satellite weapon, debris liability standards, and satellite transparency on dual uses would set Pakistan as a norm abider. In this regard, Pakistan must leverage its regional and multilateral relations to create a Global South forum. This forum needs to redefine South Asian space militarization as an issue of global governance and responsibility for all space-limited countries rather than just a bilateral issue with India. That way of framing is analytically correct and strategically useful in creating a coalition.
2. Pakistan needs to institutionalize space security: a dedicated inter-agency mechanism, namely the Space Security Cell in the National Security Division, with a precondition for policy coherence at all subsequent levels. It will give an institutional framework to protect its space assets and secure its national assets from India's ISR and precision strike capabilities.
3. In the coming years, Pakistan needs to have a National Space Security Policy. The lack of a space security doctrine is a sign of institutional lack of readiness towards international interlocutors and hinders coherent resource allocation on the domestic side. A published document sets the normative and institutional framework that enables the development of partnership agreements, decisions on resources, and diplomatic positions to be pursued in a strategic manner.
4. Pakistan should capitalize on its dual-capability space cooperation with China. Pakistan is using Chinese launch infrastructure but maintaining operational

³⁹ Shamil Abdullah, 'Outer Space Weaponization and Potential Gaps within PAROS', SVI - Strategic Vision Institute - Strategic Vision Institute, SVI - Strategic Vision Institute, 19 December 2024, <https://thesvi.org/outer-space-weaponization-and-potential-gaps-within-paros/>.

control and data sovereignty with Pakistan. This is the most financially sound route towards slowly decreasing the ISR asymmetry without an independent and expensive domestic space program compared to India. In the future, technology transfer shall be added to the cooperation between the two countries. It will lead to the development of indigenous launch capability that brings strategic autonomy.

5. Funding is one of the most crucial hurdles in a way to establish a robust space program. For this, besides international partnerships, Pakistan shall incentivize public-private partnerships. Commercialization of space in the whole world is supported as it leads to innovation, indigenization, and cost reduction.
6. Pakistan is against weaponization of space; however, it must protect its current and future space infrastructure. For this, Pakistan shall work on non-kinetic ways such as jamming, spoofing, etc to protect its space assets.
7. Track II discussions on space security with India via academic and think tank forums can start to develop a language for potential future confidence-building measures, such as the establishment of guidelines for accidental space debris interference to prevent it from being misinterpreted as an act of deliberate attack in a crisis.
8. Long-term space goal for Pakistan should be minimum sufficiency, not parity: resilient communications satellites, basic space situational awareness, and enough ISR capacity to narrow the impact on operations of the (currently) most important aspects of the asymmetry. This is minimum deterrence logic in space, Pakistan's most tested strategic logic in a new space competitive environment.

Conclusion

The Indian space program's deeper logic emerges from Rajesh Basur's deep strategic culture framework, which reflects a civilizational strategic disposition in the technological domain. It has consistently followed this logic across administrations, across Cold War and post-Cold War environments, and now into the space domain. India's strategic autonomy and struggle for prestige are two core principles of its deep strategic culture. Based on this logic, India is and will not operate in the space arena on principles of responsible engagement. Rather, it will be used as a tool for maximising the development of capabilities, while eschewing the norms of good governance. The security ramifications are complex and cumulative on South Asian stability. In India's ASATs, space-based ISR architecture, and integration of space technology in precision strike is destabilizing deterrence in South Asia.

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