

US Stock Express

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F16 shooting missile at KK Park



"BGF" Launches Fourth Strike on KK Park
Over 1,500 Foreign Nationals from 28 Countries Flee to Thailand

Royal Thai Air Force shoots missile at KK Park in Cambodia to destroy their communication tower, computer center, Starlink and Wifi facilities, for they hurt the Thai tourism industry. A lot of workers were kidnapped from Thailand to Cambodia and Myanmar centers to have scamming. KK Park accounts for 50% of GDP in Cambodia, and the government collect 20% tax from the park. The action of Royal Thai Air Force is in breach of Geneva Agreement of not to attack civil facilities, but no one dares to complain for it is guided by US satellites for precise attack. Crypto dropped for a lot of black money were frozen in such series of action.

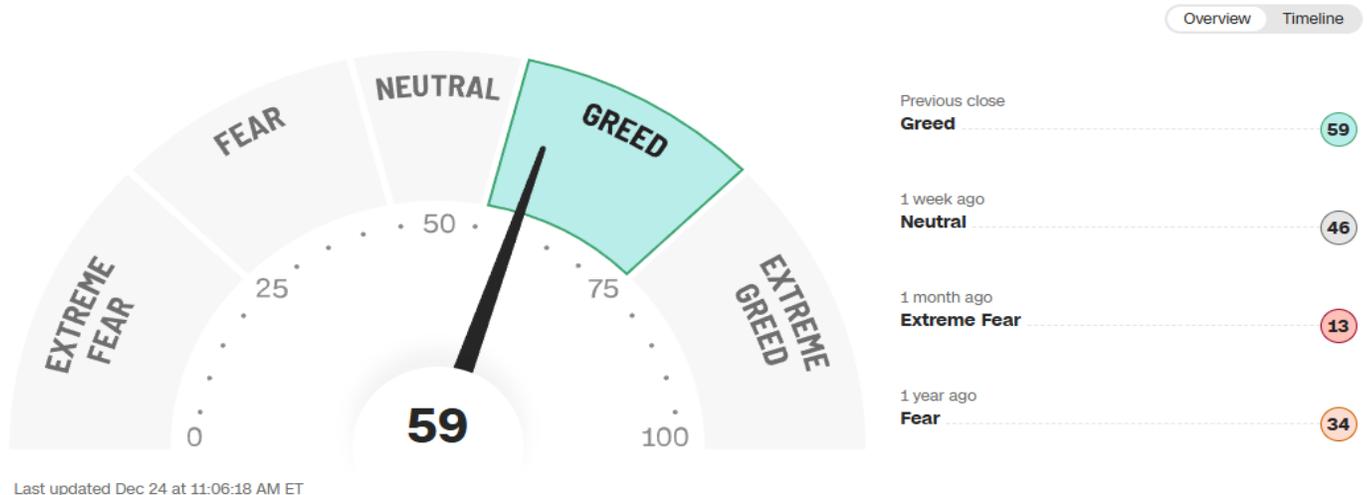


*Risk disclosure: Price can go up and down at any moment, use free money to trade and bear the risk according to your own capital;
Never trade with money that has a deadline for withdrawal.
All suggestions are for reference only, even AI cannot be 100% reliable, final decision still lies upon investors.
Copy trading cannot replicate another trader's background or psychological state.*

Fear & Greed Index

What emotion is driving the market now?

[Learn more about the index](#)



North East West South is NEWS

Safe-haven demand and expectations of further US interest rate cuts next year have fueled speculative interest in precious metals. Gold has risen over 70% this year, reaching a record high of \$4,555 per ounce on Wednesday, while silver and platinum prices also hit record highs.

Google has compiled and shared 40 practical AI usage tips to help ordinary users transform AI from a "seemingly impressive" technology into a "daily life assistant."

Initial jobless claims in the US on December 20 were 214,000, down from the previous day's 224,000. The forecast was 223,000.

According to *Fortune*, Nvidia CEO Jensen Huang rose from humble beginnings to become a multi-billionaire, but that doesn't mean he's unwilling to do small tasks. The 62-year-old CEO, who heads the world's most valuable publicly traded company, said his humble beginnings as a dishwasher taught him not to look down on any job. "I've cleaned so many toilets, more than all of you combined, and some of those scenes you'll never forget."

Israeli Defense Minister Katz vowed that Israeli troops would not withdraw from Gaza and pledged to establish an outpost in northern Gaza, statements that contradict the peace plan and have raised concerns.



Japan increases interest rate but US cuts interest rate. This is a rare case and aroused arbitrage trade. Bitcoin fell from 126K of October to 87K now. Nikkei Stock Index rose to 50,344.10, the highest level in the world.



A lot of ETFs are selling Bitcoin. Several governments are clearing up and arresting head of scammers in various KK Park. The amount of Bitcoin confiscated is as enormous as astronomical figures. When they are pushed out to the market will be horrible. So related crypto stocks are falling.



World Observation

Day 1402
Russia/Ukraine Conflict

Mars Landing 2030

(9) Why immigration to Mars?

On request of a reader, I have to jam in one special topic and put aside the Space Race. That is why we have to immigrate to Mars and not the Moon. Mars is 140 million miles away from earth on average; nearest is 35.8 miles and farthest 249.1 miles. It takes 6-7 months to reach but the Moon only 3-4 days, with an average distance of 238,855 miles only; nearest 225k miles and farthest 252k miles.

Both planets have a thin atmosphere, the Moon even thinner. On both planets we need to put on astronauts' helmet and pressurized suit in outdoors. So, Elon Musk aims at establishing a city up to 1 million population on Mars. It would be quite a large indoor city, much larger than the largest shopping mall on earth. But Mars can have plants grow in outdoors, no need to have green house like the earth. The water reserve in Mars under the crust in south pole in form of ice is much more than that in the Moon, and enough to supply a city of 1 million.

One day in Mars is 24.6 hours which is quite near the earth day and easily to be adopted by human being, while on the Moon one day equals to 29.5 earth days, for the moon's revolution around the sun and its rotation on its axis both take 29.5 days. To sum up its due to 3 major reasons that the immigration target is Mars and not the Moon. (1) Atmosphere structure can support plantation which can generate food chain, (2) abundant supply of water, (3) life habit cycle of a day at 24.6 hours is what human body can fit in and more beneficial to health.

Mars is well-known for its dust storms, which occur every Martian year during summer in the southern hemisphere. Every 3 Martian years (5 and a half Earth years), these storms grow so large that they are visible from Earth and will engulf

the entire planet for months. The highest mountain in Mars is Olympus up to 72,000 ft which is 3 times higher than Mt Everest on earth.

The detection of water on the Moon can be chased back to Luna 24 of Soviet Union in 1976 where they said have detection of water, but no confirmation and no follow up. The Apollo 14 project of US in 1971 which was the fourth Moon Landing project found vapor of water near their landing site, but no further confirmation of water and no follow up. In Oct 2007, Chinese Chang'e 1 orbiter took photos around areas in the pole where water was likely to be found but no confirmation for the time being which is Dec 2025.

India had a **Chandrayaan-1** program and confirmed the precise location there is water reserve in the Moon under the crest in form of ice in south pole, the confirmation time is 20:31 on 14th November 2008. NASA reconfirmed the exploration in 2009. In Oct 2025, China announced that they will shoot the Chang'e 7 in 2026, and will be the first country to detect water in the Moon.

This is the actual timeline. Investors must have a precise idea on their research and better take the time between Christmas and New Year for research on your own for it is a cooling down period and even the market goes up the transaction is very small. If you go for a tour to whatsoever places, the guide would always tell you that spot is the largest, longest, highest or etc in the world. It is just a means of making the tourists happy, whether it is accurate, the longest or second or third longest is not so important. Only if you can enjoy the trip is above all. But for investment, it is another story, sometimes unimportant and sometimes detrimental, it depends on various cases and will have various results.

The more data you get, the higher chance of success you can have and you will be in a better position than those that has less information and accuracy. What is analysis? Or what is precise and outstanding analysis? That is, you can know more than others. That is, you can have correct and accurate information than others from various sources. If the information you get is incorrect and limited, you can never have correct and comprehensive analysis.

Elon Musk prioritizes Mars over the Moon because Mars offers the potential for long-term, self-sustaining human civilization, while the Moon is better suited for short-term bases or scientific outposts. The key difference is that Mars, despite its challenges, has resources and conditions that could eventually support millions of people, whereas the Moon lacks many of those fundamentals. [1](#) [2](#) [3](#)

 **Why Mars, Not the Moon?**

 [GPT-5 is here - OpenAI](#)

| Factor | Moon | Mars | Musk's Reasoning |
|-----------------------------|--|--|---|
| Travel Time | ~4 days from Earth | 6–7 months | Moon is closer, but proximity alone doesn't guarantee sustainability. |
| Atmosphere | Extremely thin, almost none | Thin, mostly CO ₂ | Mars' atmosphere (though thin) allows shielding from radiation, potential for agriculture with engineering. |
| Gravity | 1/6 Earth | 1/3 Earth | Mars' gravity is closer to Earth's, better for long-term health and reproduction. |
| Day/Night Cycle | 29.5 Earth days (long nights) | 24.6 hours | Mars has Earth-like day length, crucial for circadian rhythms and solar power. |
| Water | Ice at poles, confirmed reserves | Ice at poles, subsurface water | Both have water, but Mars' larger reserves and potential for agriculture are more promising. |
| Radiation Protection | No atmosphere, no magnetic field | Thin atmosphere, some protection | Mars offers slightly better shielding, though still challenging. |
| Energy | Strong sunlight, but long lunar nights (2 weeks) | Solar weaker, but day/night cycle manageable | Mars' cycle is more compatible with solar energy and human activity. |
| Population Potential | Small bases, limited resources | Large-scale city possible with terraforming | Musk envisions Mars as a "backup civilization" for humanity. |



GPT-5 is here - OpenAI

Musk's Vision

- **Multi-planetary species:** Musk's ultimate goal is to ensure humanity survives even if Earth faces catastrophe. Mars is large enough and resource-rich enough to host a **self-sustaining city of 1 million people**, which the Moon cannot realistically support. ²
- **Terraforming potential:** Mars' CO₂ atmosphere could, in theory, be thickened or engineered to support plant growth. The Moon has no atmosphere to work with.
- **Psychological and biological factors:** Mars' 24.6-hour day and stronger gravity make it more livable for humans long-term compared to the Moon's extreme cycles and weaker gravity.

Do Astronauts Need Helmets on Mars?

Yes. **Mars' atmosphere is too thin and mostly carbon dioxide, so humans cannot breathe without helmets and pressurized suits.** The difference is that Mars' atmosphere, while not breathable, can still support pressure-based habitats and protect against micrometeorites—something the Moon cannot offer. ³

Risks and Trade-offs

- **Mars challenges:** Long travel time, dust storms, radiation, and thin atmosphere make colonization extremely difficult.
- **Moon advantages:** Easier access, abundant sunlight, and confirmed water ice. But its long nights, lack of atmosphere, and extreme radiation exposure limit large-scale settlement.

In short: Musk sees the Moon as a stepping stone, but Mars as the destination where humanity can truly build a second civilization. The Moon is close, but it's not a place where millions could thrive. Mars, despite being harder to reach, offers the possibility of a permanent, self-sustaining society.

Would you like me to create a **scenario matrix comparing Moon vs Mars colonization feasibility over the next 50 years?** That could highlight the trade-offs in terms of cost, risk, and population potential.

¹ Futura² newspaceeconomy.ca³ Britannica

Elon Musk's vision for space exploration, through SpaceX, emphasizes making humanity a multi-planetary species to ensure long-term survival, and he sees Mars as the best candidate for a self-sustaining civilization rather than just a outpost or base. While the Moon is indeed closer and offers some advantages like shorter travel times (about 3-4 days versus 6-9 months for Mars, depending on orbital alignments), more intense sunlight (Mars receives roughly 43% of Earth's solar flux due to its greater distance from the Sun), and no global dust storms (Mars experiences periodic ones that can last weeks and reduce solar power), Musk prioritizes Mars for its potential to support a large, independent population—up to a million people or more in a city—without constant reliance on Earth. The Moon, in his view, is more of a stepping stone for testing technologies (e.g., SpaceX's Starship is contracted for NASA's Artemis lunar landings), but not the end goal for colonization. [physicsforums.com](#) [+2 more](#)

First, a quick clarification on some points in your query to set the facts straight:

- **Atmospheres and suits/helmets:** Mars has a thin atmosphere (about 1% of Earth's pressure, 95% CO₂, with traces of nitrogen and argon), which provides minimal protection from radiation and extreme cold but is useless for breathing—yes, astronauts would absolutely need full pressurized suits and helmets outdoors, just like on the Moon. The Moon doesn't have a meaningful atmosphere at all; it has an ultra-thin exosphere (mostly helium and neon from solar wind), which is effectively a vacuum for practical purposes. Neither body allows unprotected human exposure. [physicsforums.com](#)
- **Water:** Both have confirmed water ice, primarily at the poles. The Moon's was detected in shadowed craters at the south pole (via missions like India's Chandrayaan-1 in 2009 and NASA's LCROSS in 2009), while Mars has more extensive subsurface ice and polar caps (confirmed earlier by NASA's Phoenix lander in 2008 and ongoing rover data). Mars' water is more abundant and accessible overall for large-scale use. [physicsforums.com](#)
- **Solar power and storms:** The Moon's proximity to the Sun means stronger solar intensity, but its 28-Earth-day rotation leads to 14-day-long nights, making consistent solar power tricky without massive batteries or nuclear alternatives. Mars' dust storms can block sunlight temporarily (e.g., forcing rovers like Opportunity into hibernation), but its ~24.5-hour day allows more predictable solar cycles, and storms are regional rather than constant. [physicsforums.com](#)

Now, onto Musk's core reasons for targeting Mars over the Moon, based on his public statements and SpaceX's roadmap:

1. **Backup for Human Survival (Defensive Rationale):** Musk views Earth as vulnerable to extinction-level events like asteroid impacts, nuclear war, pandemics, or climate catastrophes. Colonizing Mars creates a "backup" for humanity, ensuring the species persists even if Earth becomes uninhabitable. The Moon is too close and gravitationally tied to Earth—any disaster massive enough to wipe out Earth (e.g., a large asteroid) could also devastate the Moon or make resupply impossible. Mars, being 50–400 million miles away, offers true independence as a separate planetary system. He often references the Fermi paradox (why we haven't detected alien civilizations) as evidence that single-planet species don't last long, so spreading out is crucial. [deciphr.ai](#) [+2 more](#)
2. **Self-Sustainability and Resources:** Mars has in-situ resources that enable a colony to become self-reliant, unlike the Moon's barren environment. Key examples:
 - Abundant water ice for drinking, agriculture, and splitting into oxygen (for breathing) and hydrogen (for fuel).
 - CO₂ atmosphere for producing methane fuel via the Sabatier process (combining CO₂ with hydrogen), allowing rockets to refuel on Mars for return trips or expansion.
 - Nitrogen and other elements for fertilizers and life support.
 - Minerals and metals for construction.

The Moon lacks these in sufficient quantities—it's mostly dry regolith with limited volatiles, making everything dependent on Earth shipments. Musk's plan involves in-situ resource utilization (ISRU) to bootstrap a city, aiming for it to grow food, manufacture goods, and support a million people by around 2050. [reddit.com](#) [facebook.com](#)

[space.stackexchange.com](#) [physicsforums.com](#)
3. **Better Habitability for Long-Term Living:** Mars is more Earth-like in ways that support human health and psychology.
 - Gravity: Mars' 38% of Earth's is closer to home than the Moon's 16%, reducing risks like bone loss, muscle atrophy, and fluid shifts during extended stays.
 - Day length: Nearly 24 hours helps maintain human circadian rhythms, versus the Moon's disorienting 28-day cycle with extreme temperature swings (–250°F to 250°F).
 - Potential for terraforming: Musk talks about warming Mars (e.g., via nuclear or solar methods) to thicken the atmosphere, melt ice, and create a more livable environment over centuries—impossible on the Moon due to its low gravity, which can't retain gases long-term.

[physicsforums.com](#)

[physicsforums.com](#)
4. **Inspiration and Adventure:** Beyond survival, Musk sees Mars as a grand challenge that unites humanity and sparks innovation, much like the Apollo era. It's about the thrill of exploration and building something new, not just scientific bases (which the Moon could host). He envisions affordable travel (e.g., \$100,000–\$500,000 per person eventually) to make it accessible, turning it into a societal endeavor. [dw.com](#) [+2 more](#)

In short, while the Moon's proximity makes it ideal for near-term missions and resource extraction (e.g., helium-3 for fusion, though unproven), Musk treats it as practice for the real prize: a thriving, redundant human presence on Mars to hedge against existential risks and expand our horizons. SpaceX's Starship is designed with Mars in mind, capable of carrying 100+ people per flight for mass migration.

The first country to detect water ice on the Moon was India, through its Chandrayaan-1 mission in 2008.



GPT-5 is here - OpenAI

Timeline of Lunar Water Discoveries

| Year | Country | Mission | Discovery |
|---------|-----------------------|------------------------------|--|
| 1976 | Soviet Union (Russia) | Luna 24 | Claimed detection of water in lunar soil samples, though results were disputed later. ¹ |
| 2008 | India | Chandrayaan-1 | NASA's Moon Mineralogy Mapper (M ³) onboard India's orbiter provided the first confirmed evidence of water molecules and ice deposits at the lunar poles . ² |
| 2009 | USA | LCROSS & LRO | Confirmed presence of water ice in permanently shadowed craters at the south pole. ³ |
| 2020 | USA | SOFIA (airborne observatory) | Detected water molecules in sunlit regions of the Moon. ³ |
| Ongoing | China | Chang'e missions | Found hydrated minerals and confirmed water signals, but not the first discovery . |

Key Point

- **India's Chandrayaan-1 (2008)** is widely recognized as the **first mission to confirm water ice under the lunar surface**, using NASA's M³ spectrometer carried aboard the Indian spacecraft. ¹ ²
- Earlier Soviet claims (1976) exist, but they were controversial and not universally accepted.
- The US later confirmed and expanded the findings with LCROSS and LRO in 2009.
- China's Chang'e missions have contributed more recent evidence, but they came after India and the US.

 **Answer:** Among India, the US, and China, **India was the first to detect water ice on the Moon in 2008 with Chandrayaan-1.**

The first country to detect water in the form of ice under the crust of the Moon (specifically, subsurface ice in permanently shadowed polar craters) was the United States. This occurred in 2009 via NASA's LCROSS mission, which impacted the Cabeus crater near the lunar south pole and analyzed the resulting ejecta plume, confirming the presence of near-pure crystalline water ice mixed in the regolith (about 5.6% by mass in the excavated material). While earlier US missions like Clementine (1994) and Lunar Prospector (1998) provided indirect evidence through radar and hydrogen signatures suggesting possible ice, LCROSS offered the first direct spectroscopic confirmation. en.wikipedia.org

India's Chandrayaan-1 mission (2008–2009) detected hydroxyl and bound water molecules on the surface, with later analysis (2010) of its Mini-SAR data consistent with polar ice deposits and a 2018 study using its M3 instrument confirming exposed surface ice patches. However, this came after LCROSS's subsurface ice detection. China has made later contributions, such as on-site detection of water in lunar soil via Chang'e-5 (2020) and plans for direct polar ice study with Chang'e-7 (expected ~2026), but not first. en.wikipedia.org +4 more



Now the Magnificent 7 behaves stronger than NASDAQ, but in 2026, market movers will include PLTR, AVGO, ASTS, PL, RKL B and SpaceX.