

# A hidden corridor discovered near 4,500-year-old Great Pyramid of Giza

March 4, 2023

**In news**— A hidden corridor, 9 m long and roughly 2 m wide, has been unearthed by scientists close to the main entrance of the 4,500-year-old Great Pyramid of Giza in Egypt.

## **Key findings-**

### **The latest discovery and the technology used-**

- **The tourists' entrance used today is the passage dug by the Abbasid Caliph al-Ma'mun's men** in the Middle Ages, located at the intersection of the Descending and Ascending Corridors.
- Scientists detected an empty space behind the northern face of the Great Pyramid, about 7 m above this entrance.
- Marked on the outside with a stone slab with a gabled chevron structure, **scientists have now confirmed the presence of a hidden corridor behind it.**
- The initial discovery of a void was made using a imaging technique known as **cosmic-ray muon radiography.**
- This method uses the penetrative power of cosmic subatomic particles called muons to scan large structures.
- A muon detector tracks the number of muons going through the object from different directions, to form a three-dimensional image.
- The discovery was originally made by the ScanPyramids project in 2016 using a non-invasive technique called cosmic-ray muon radiography.

## **The importance of the discovery-**

- **ScanPyramids, initiated in 2015, is an international project** that uses various high-tech instruments employing non-invasive infrared thermography, ultrasound, 3D simulations and cosmic-ray radiography to study the structures.
- For the longest time, experts have known that many secrets hide behind the thick walls in often physically inaccessible places.

### **The Great Pyramid of Giza-**

- It is the **largest of the three pyramids in Giza**, originally standing roughly 147 m above the Giza plateau.
- **Construction was started in circa 2550 BC, during the reign of Khufu**, often considered the greatest pharaoh of Egypt's old kingdom.
- It is estimated that the pyramid was built using 2.5 million stone blocks, each weighing between 2.5 and 15 tonnes.
- Building the Great Pyramid was a feat of engineering unmatched for thousands of years.
- Of note is not only the scale of the building – **it was the tallest structure on the planet until the main spire of the Lincoln Cathedral in the United Kingdom overtook it in 1400 AD** – but also its symmetry and perfect alignment to the four cardinal directions (the error is less than 1/15th of a degree).
- Greek historian Herodotus wrote about it glowingly in the 5th century BC, Arab travellers in the middle ages described and measured the structure with remarkable accuracy, and **Napoleon Bonaparte, during his Nile expedition of 1798, spent days at Giza with a team of scholars and scientists**, ostensibly starting the modern field of Egyptology as we know it.
- But as interesting as the Great Pyramid's towering presence is, perhaps of even greater fascination are **its**

**inner secrets – passages and chambers hiding many mysteries**, some still untouched, others found and long forgotten, and many currently accessible.

- **Khufu's pyramid contains by far the most elaborate system of passages and chambers concealed within any pyramid.**
- This is the only one of the 35 such tombs constructed between 2630 and 1750 BC to contain tunnels and vaults well above ground level – most others either have a chamber at the ground level or well below it with the structures being completely solid inside
- This has meant that the **Great Pyramid hides within it a world unto itself** which has attracted treasure hunters and scholars of Egypt's antiquity alike.
- While there is no consensus on who first entered the tomb after it was sealed in about 2566 BC, accounts as far back as that of Herodotus (445 BC) imply that at least some passages inside the pyramid had already been opened and explored in antiquity itself.
- **There are two distinct tunnel systems inside the Great Pyramid** – the Descending Passage (described by Greeks like Herodotus) and the Ascending Passage (more hidden, opened by the Arabs as recently as the 9th century).

Further

reading:

<https://journalsofindia.com/muons-to-study-the-fortress-wall-of-xian-an-ancient-city-in-china/>