

CONSTELLATION INDUS - THE INDIAN

Indus is a constellation in the southern sky. Created in the late sixteenth century, it represents an Indian, a word that could refer at the time to any native of Asia or the Americas.

Indus was created between 1595 and 1597 and depicting an indigenous American Indian, nude, and with arrows in both hands, but no bow. Created at the time when Portuguese explorers of the 16th century were exploring North America, **the constellation is generally believed to commemorate a typical American Indian that Columbus encountered when he reached the Americas.** He was intending to reach India by sailing west and assumed it was ocean all the way around, and when he encountered land he thought for a short time that it was India and called the people he saw Indians. Despite the mistake, the name Indian stuck, and for centuries the native people of the Americas were collectively called Indians. **Nowadays American Indians are known as Indigenous Americans.**

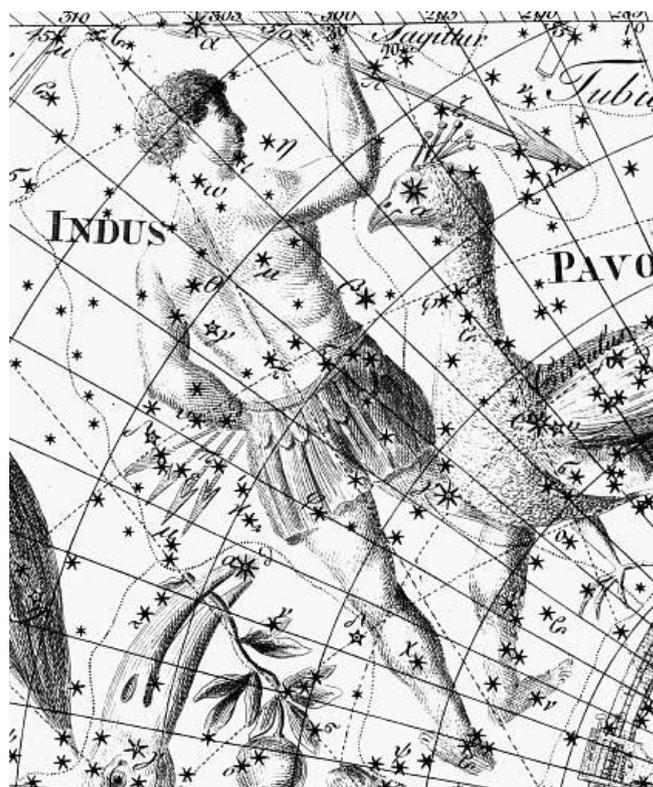
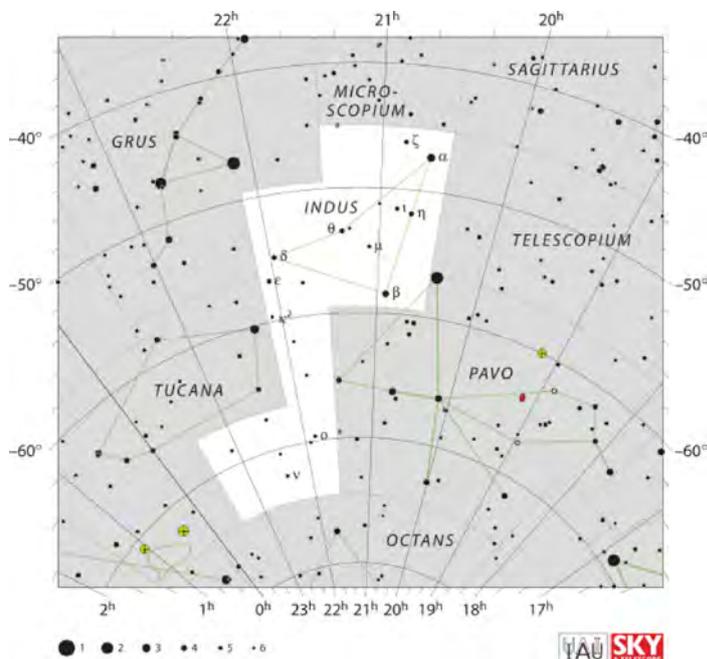
The word Indus comes from the name of India. **It originally derived from the river Indus that originates in Tibet and flows through Pakistan into the Arabian Sea.** The ancient Greeks called this river Indos. Related words are: Hindu, indigo (Greek indikon, Latin *indicum*, 'from India', a blue dye from India, derived from the plant *Indigofera*), indium (the element is named after indigo, which is the colour of the brightest line in its spectrum),

This constellation is one of the 12 figures formed by the Dutch navigators **Pieter Dirkszoon Keyser and Frederick de Houtman** from stars they charted in the southern hemisphere on their voyages to the East Indies at the end of the 16th century. It first made its appearance in 1598 on a globe by the Dutch cartographer **Petrus Plancius** and first appeared in print in 1603 on the Uranometria atlas of **Johann Bayer**.

Indus and Pavo, the Indian and the Peacock, are two constellations usually depicted together. Indus, king of Scythia, first discovered silver, Latin *argentum*, the word is cognate with the word Argus, and the argus pheasant (according to Klein) and Argus Panoptes the hundred-eyed giant of Argos in the Peloponnese, employed by Hera to spy on Io, her husband's lover. **Argus' name is said to be cognate with the Argo of Argo Navis whom Jason entrusted the building of the ship to Argus, after whom it was named.** Argus' many eyes represent the starry heavens. **After he was killed by Hermes, Hera rewarded Argos for his service of watching Io by placing his hundred eyes on the tail of the peacock, adjacent Pavo, representing the starry heavens.** The argus pheasant, Argusianus argus (a relative of the peacock), is named after Argos, having long tail feathers marked with brilliantly coloured, eyelike spots. **'Argus-eyed' is used to describe an alert or watchful person; a guardian.**

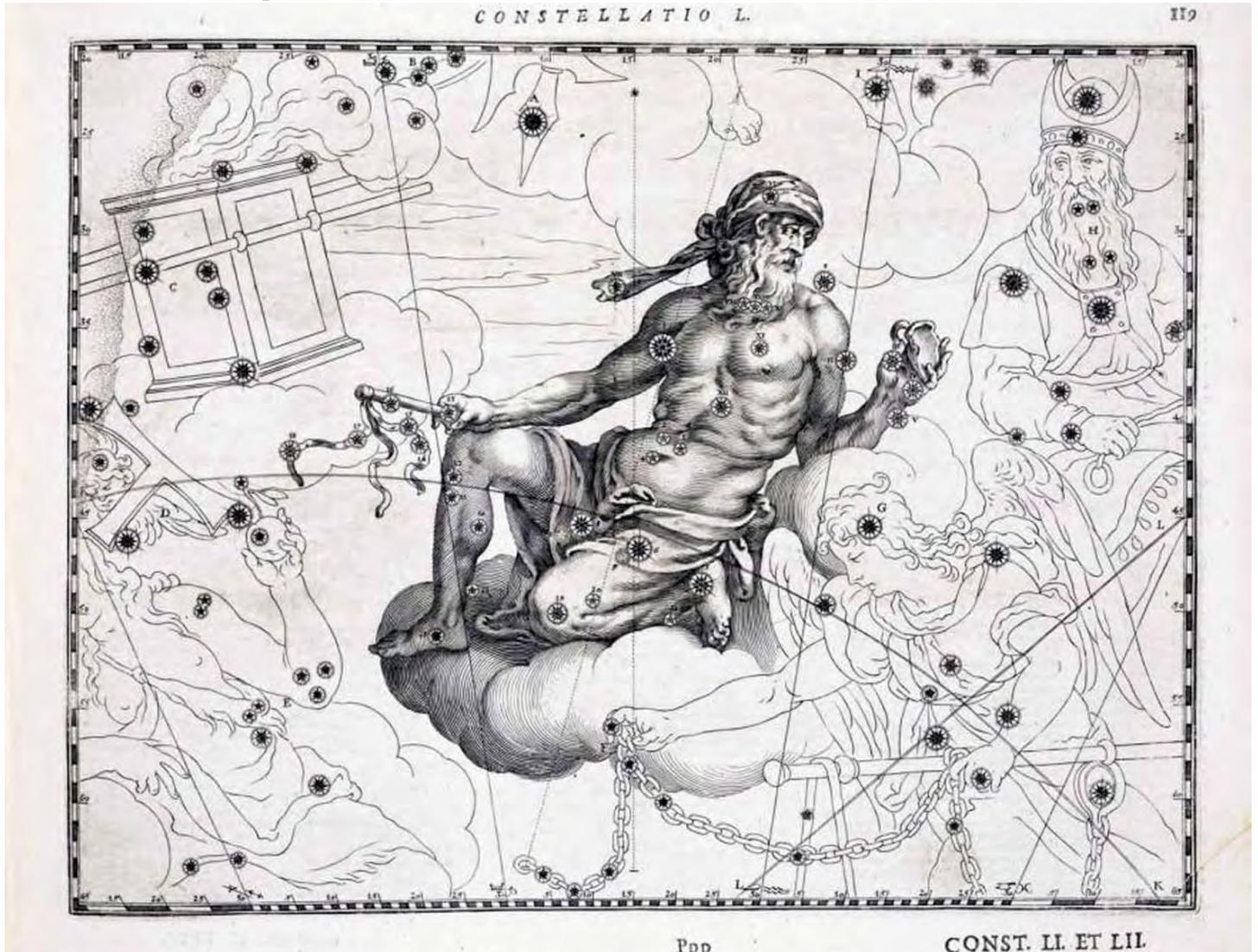
Indus does not contain any bright stars. *Alpha Indi* (the *Persian*) is the brightest star in Indus. It is an orange giant of magnitude 3.1, 101 light-years from Earth. *Beta Indi* is an orange giant of magnitude 3.7, 600 light-years from Earth. *Delta Indi* is a white star of magnitude 4.4, 185 light-years from Earth.

Epsilon Indi is one of the closest stars to Earth, approximately 11.8 light years away. It is an orange dwarf of magnitude 4.7, meaning that the yellow dwarf Sun is slightly hotter and larger. The system has been discovered



Indus, an Indian brandishing a spear in one hand and holding a clutch of spears with the other, as shown in the Uranographia of Johann Bode (1801). Bayer's original depiction showed the Indian face-on with the spear in his left hand. Bode has turned him round so he is seen from the back, perhaps to make him right-handed.

to contain a pair of binary brown dwarfs, and has long been a prime candidate in SETI studies. ***Epsilon Indi* has the third highest proper motion of any star visible to the naked eye, and the ninth highest overall.** Around the year 2640, the star will move to the constellation Tucana. Indus is home to one bright binary star. *Theta Indi* is a binary star divisible in small amateur telescopes, 97 light-years from Earth. Its primary is a white star of magnitude 4.5 and its secondary is a white star of magnitude 7.0. **Julius Schiller** in his efforts to catalogue and identify all the heavenly constellations with biblical figures joined Indus with Pavo as the patriarch Job of the Old Testament.



FACTS Indus is the 49th constellation in size, occupying an area of 294 square degrees. It lies in the fourth quadrant of the southern hemisphere (SQ4) and can be seen at latitudes between +15° and -90°. The neighboring constellations are Grus, Microscopium, Octans, Pavo, Sagittarius, Telescopium and Tucana. Indus has two stars with known planets and contains no Messier objects. There are no meteor showers associated with the constellation. Indus belongs to the **Johann Bayer family of constellations, along with Apus, Chamaeleon, Dorado, Grus, Hydrus, Musca, Pavo, Phoenix, Tucana and Volans.**

DEEP SKY OBJECTS IN INDUS NGC 7049, is a galaxy located about 100 million light years from Earth. It spans approximately 150,000 light years. The galaxy has a prominent dust ring and relatively few globular star cluster. It has characteristics of both a spiral galaxy and an elliptical galaxy. The galaxy's unusual appearance is believed to be the result of several recent collisions with other galaxies.



Galaxy NGC 7090, as seen by the NASA/ESA Hubble Space Telescope. The galaxy is viewed edge-on and we cannot easily see the spiral arms, which are full of young, hot stars. However, our side-on view shows the galaxy disc and the bulging central core, where typically a large group of cool old stars are packed in a compact, spheroidal region. It has an apparent magnitude of 10.51 and is about 30 million light years distant. It was discovered by the English astronomer John Herschel on October 4, 1834. AK