



### **Caves of Ellora, India**

These are not natural caves. They were carved by man, some 1200 years ago, out of solid basalt, and they are truly amazing in terms of the enormous amount of effort involved that went into their creation. They lie near Aurangabad in western India, and the basalt they are cut into is part of the massive Deccan Traps, the pile of Cretaceous lavas more than a kilometre thick that poured from vents developed over a mantle-plume hot-spot. Like any basalt, this rock is hard and tough, yet the Hindu masons of years ago chose to work in the strongest of the fine-grained lava, avoiding weaknesses that could lie within the vesicular horizons. Archaeologists claim that it was a good rock to work in, because it hardened on exposure to the atmosphere, and was a little softer when fresh. Nevertheless it was a labour of love (or perhaps enforced slavery) to excavate the dozens of caves in the basalt cliff at Ellora (and also the older caves cut into an incised meander at nearby Ajanta). Most of the Ellora caves reach 20–30 metres back into the rock, creating single rooms with walls carved into statues and shrines. But the largest Ellora site, the Kailasha Temple, is almost open to the sky. Instead of cutting a cave, those labourers of old cut three trenches that formed a loop back into the hillside. This loop reached 90 metres in, and was 35 metres deep at the back. The block of basalt hillside that remained inside the square-cut loop was then carved into the temple that is seen in the photograph (with some idea of scale given by the sari-clad lady in the doorway). The whole structure and all its intricate carvings were carved from the solid rock, *in situ*; the original ground surface lies in profile across the top of the photo. It probably took 7000 labourers more than 100 years to excavate 200,000 tonnes of basalt, all by hand, and carve what was left into an utterly amazing temple. This is rock sculpture that really does surpass nature. © *Photograph and text by Tony Waltham Geophotos*