Ancient human settlements in Syria have been revealed in declassified spy satellite images by a small team of researchers led by ANU PhD student Mandy Mottram.

The survey team found Early Islamic pottery factories, a hilltop complex of megalithic tombs and conclusively identified remains from around 130,000 years ago during their latest trip to the Euphrates River valley.

The area is based northeast of Syria’s second largest city Aleppo. The current investigations complement two decades of work excavating at the ancient fortress site of Jebel Khalid by a team from ANU and the University of Melbourne, led by Emeritus Professor Graeme Clarke.

Jebel Khalid was established in the wake of Alexander the Great’s conquest of Western Asia and the acquisition of the territory of Syria by Alexander’s general, Seleukos, in the third century BC.

Ms Mottram’s team aims to establish for the first time a record of human occupation in the area, from the first arrival of early human groups between 1 million and 700,000 years ago, to Ottoman times.

The satellite images, from the United States’ CORONA program, were photographed in the late 1960s, and declassified in the late 1990s. They are valuable because they show the landscape prior to disturbance by the rapid agricultural development that is now taking place across much of Syria.

Painstaking analysis of the images is complemented in the field by use of GPS and GIS techniques to build up a comprehensive picture of landscape features and promising sites for closer study and excavation.

Significant results from the survey team’s most recent trip to the region include the conclusive identification of Middle Palaeolithic [c.130,000-40,000 years ago] remains on Jebel Khalid, the location of two major Early Islamic pottery factories, and the identification of a hilltop complex of megalithic tombs, similar to the dolmens found in Europe.

“The dolmen site in particular is a significant find, because in other parts of the Middle East these structures are usually associated with Bronze Age pastoral peoples,” Ms Mottram said. “Nomadic and semi-nomadic pastoralists leave very few archaeological marks, so the find will help us to understand the interplay between pastoralists and farmers at that time. Work is already planned for 2007 to fully research this remarkable site.”

The team has already used the images to identify major archaeological features including a hilltop Byzantine basilica, and a 24 hectare fortified town dating to the Early Bronze Age. The images also identify smaller scale remains, including ancient villages, cemeteries, and farmsteads.

Source: Australian National University