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The Early Neolithic Offering Tumuli from Sacred Mountain (site E-06-4) in Nabta (Western Desert of Egypt)

Introduction

Site E-06-4 is a small section of a large sacred area discovered in the 2005 season. The area is composed of tumuli, a gigantic hearth and slab pavements with offering pits underneath, placed within a prominent mountain, a raised sandstone complex with many small knolls topped by a black to dark brown ferruginous quartzitic sandstone. The presented materials were recovered during the winter field seasons of 2007 and 2008 of the Combined Prehistoric Expedition[1] at Nabta Playa, Western Desert, Egypt (Fig 1). Because of its special, evidently sacrificial character the mountain has been given the name of Sacred Mountain, or Gebel El Muqaddas in Arabic.

The Sacred Mountain is located about 3 kilometers to the North of the Valley of Sacrifices. It is a serrated, prominent massif of about one kilometer in diameter rising above the flat plain of the North Nabta Playa Basin, well beyond the fossil shores of the lake (Fig. 2). On the East, the mountain abuts a wide, but shallow wadi that flows into the Valley of Sacrifices. The mount is dissected by a few small valleys and deflational basins, several of which form large, sandy cirques. On this all area 224 tumuli were noted (Fig. 3).

During the 2007 season, Tumuli 2, 19, 20, 21, and a few stone slab structures visible on the surface (Structures 2/1, 2/2, 2/3, 2/4, 2/5, 2/6, 2/7) were

1 The 2007 and 2008 field seasons at Nabta Playa were financed by the Institute of Archaeology and Ethnology, Polish Academy of Sciences, and the Combined Prehistoric Expedition Foundation, Washington DC.

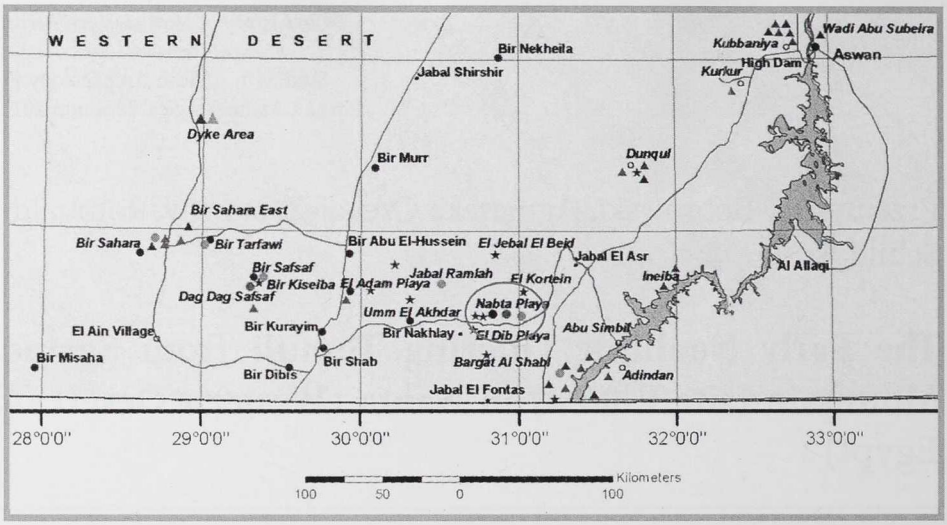

Fig. 1. Prehistoric sites in Southern Egypt and the location of Nabta Playa Basin (after Mazher, El Hinnawi, Radwan, Barakat, Ali 2005).

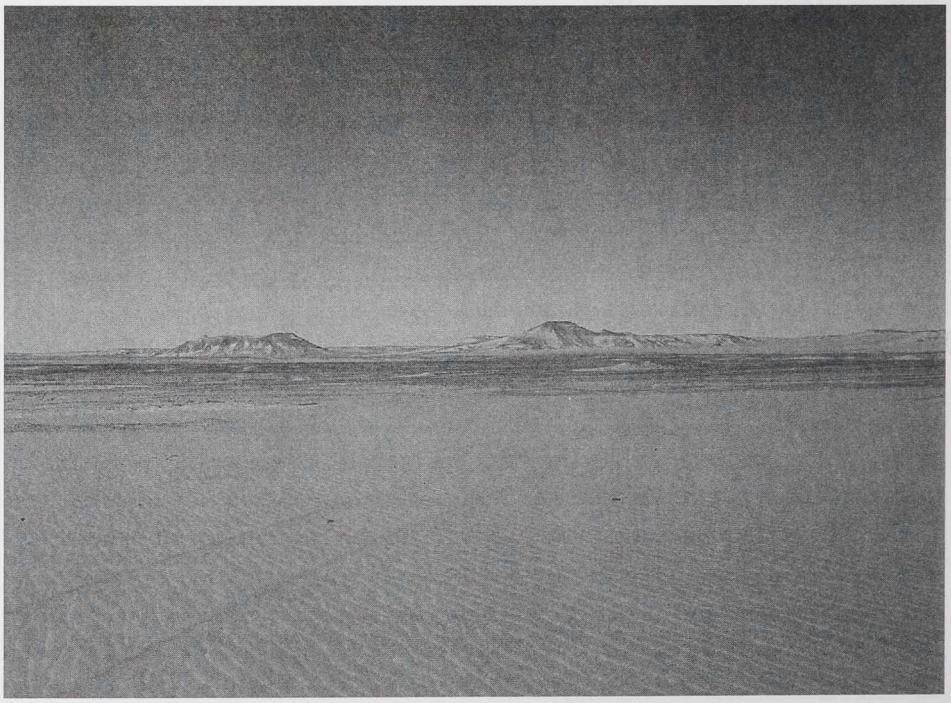

Fig. 2. Nabta Playa. View on the Sacred Mountain - site E-06-4 (photo R. Schild).

Fig. 3. Nabta Playa, site E-06-4. Hypsometrical map with known tumuli (made by P. Wiktorowicz).

excavated. All were situated on the southern slopes of the southern cirque, near the top of the hill. The most interesting of these is Tumulus 2 and the concentration of a few slab Structures, n. 2/1, 2/2, 2/3, 2/4, 2/5, 2/6, 2/7 in its immediate surrounding. All are located between two small sandstone ridges forming a part of the embayment of the southern cirque. The structures were formed by low piles and/or pavements of quatrtzitic sandstone slabs deposited immediately on fossil dune sand. Four of them, 2/1, 2/3, 2/5, 2/7, as well as Tumulus 2, had pits under the stones. Several of the slabs, particularly these in

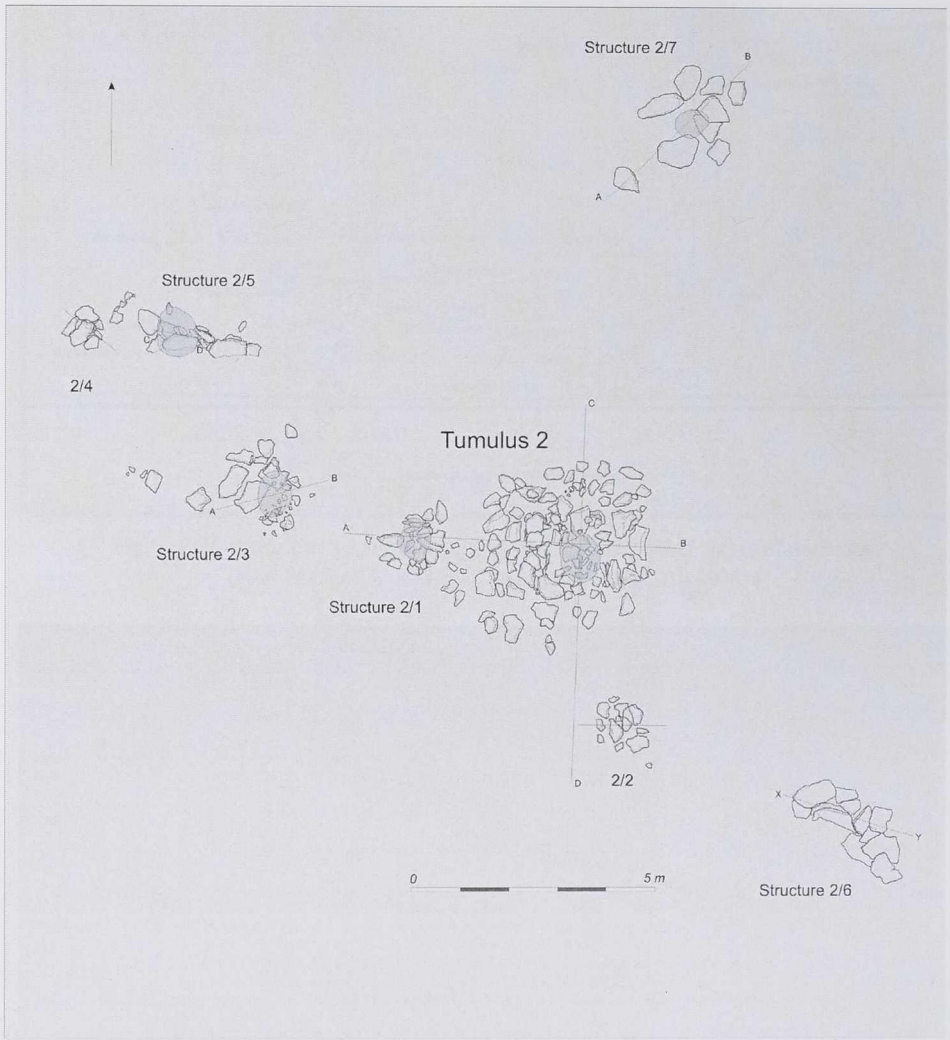

Fig. 4. Nabta Playa, site E-06-4. General view of excavated objects (drawn by M. Puszkarski, J. Sawicki).

the pits or immediately above, had been shaped by knapping (Fig. 4). During the 2008 season, the next 12 tumuli were excavated (that is no 18, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 40; see the Fig. 3).

1. Tumulus 2

Tumulus 2 had nearly a circular shape and measured about 4 m in diameter. It was some 60 cm high, although it's original height could have been considerable

Fig. 5. Nabta Playa, site E-06-4. View on the tumulus 2 (photo P. Bobrowski).

larger. It was build of irregular quartzitic sandstone blocks piled on top and around a pit Most of the stones were deposited over the central part of the pit. Some of these collapsed into the pit, after its presumed cover had disintegrated, to rest in the topmost infill at various angles. The tumulus was excavated in four quads. Two cross-sections have been recorded, along the N-S (CD) and W-E (AB) axes (Fig. 5).

An oval pit, measuring 110 x 90 cm, and about 130 cm deep, has been cut through a slightly consolidated dune sand, and a consolidated to cemented sandstone shingle bed (alluvial slope wash), into a weathered, whitish sandstone. The walls are straight. The pit was filled with a weekly consolidates dune sand. There was one sandstone slab, in a diagonal position, in the center of the shaft (Fig. 6). Near the bottom (in the eastern part of the shaft), two microlithic tools occurred, a small short side triangle and a backed bladelet, both made from the Eocene Egyptian flint.

Seven small concentrations of stone slabs were located close to Tumulus 2. One (Structure 2/2) occurred about 2 m to the South of the tumulus. The remaining four were placed along a straight line to the West of the tumulus at a distance of 1 m (Structure 2/1), at about 3 m (Structure 2/3), and at about 8 m (Structure 2/4 and 2/5) from the tumulus. About 5 m to the East was located structure 2/6, and about 10 m to the N – structure 2/7.

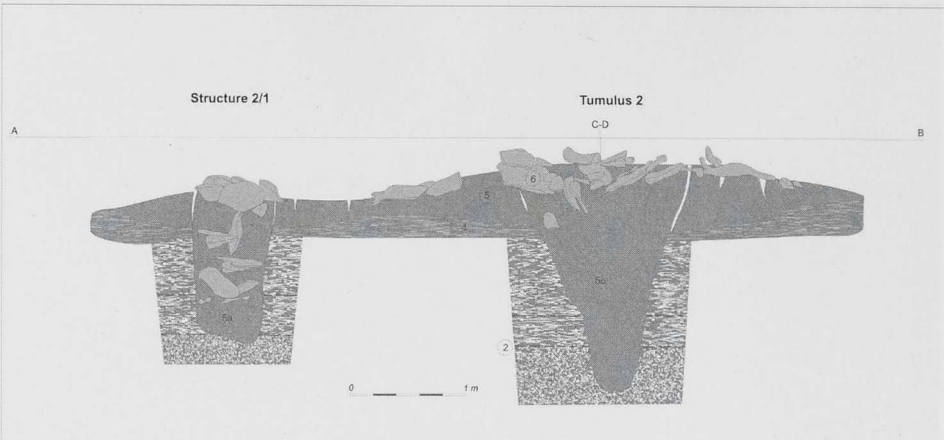

Fig. 6. Nabta Playa, site E-06-4. Profile A-B of Tumulus 2 and Structure 2/1 (drawn by A. Czekaj-Zastawny, J. Sawicki). 1, 3 - layer of consolidated eroded quartzitic sandstone, 2 - layer of limonite, 4 - layer of alluvial rubble of quartzitic sandstone, 5 - dune sand, 5a - consolidated dune sand, 6 - quartzitic sandstone stone slabs.

2. Structure 2/1

Structure 2/1 has been formed by a concentration of quartzitic sandstone slabs laid in an approximately circular arrangement with a diameter of 140 cm and a height of 40 cm. The structure was dissected along the AB cross section line of Tumulus 2. Under the pavement of sandstone slabs, a regular pit appeared, sunk into the sandstone shingle bed. The pit was oval in shape, measuring 85 x 70 cm, and reached about 100 cm in depth; the walls were straight. It contained weakly consolidated dune sand and two levels of thin sandstone slabs arranged in box-like structures, whose sides had been placed at an angle to the horizontal stone slabs forming their bases. At the bottom of the pit, four microlithic tools have been found, two triangles with a small short side and two backed bladelets.

3. Structure 2/3

It is a concentration of quartzitic sandstone slabs positioned in an irregular, close to oval, feature measuring about 200 x 150 cm. Under the slabs, a pit occurred. It was oval in shape, measuring 90 x 70 cm. The pit was covered by a single, horizontal stone slab. In a cross section along the west-east line, the pit showed a straight wall and an irregular one. It was filled with a weakly consolidates dune sand. About 20 cm below its top, two diagonal

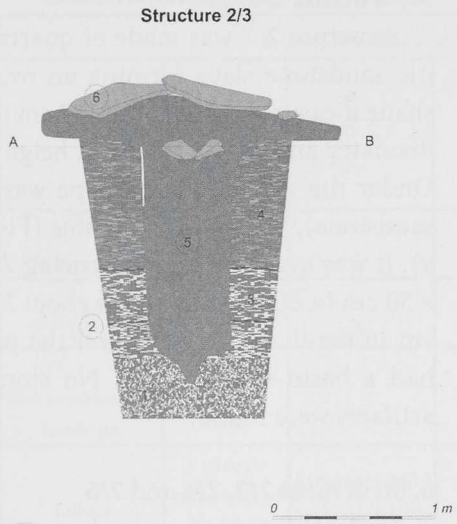

Fig. 7. Nabta Playa, site E-06-4. Profile A-B of structure 2/3 (drawn by A. Czekaj-Zastawny, J. Sawicki). Legend: see fig. 6.

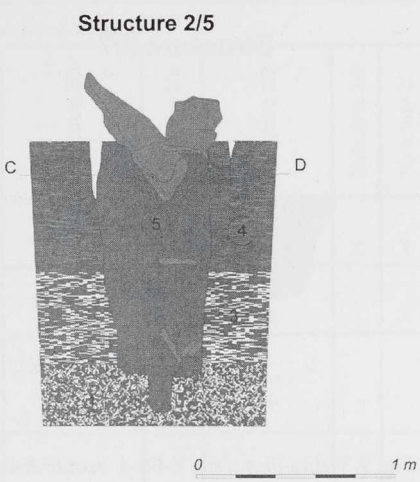

Fig. 8. Nabta Playa, site E-06-4. Profile A-B of structure 2/5 (drawn by A. Czekaj-Zastawny, J. Sawicki). Legend: see fig. 6.

stone slabs were placed. At a depth of 120 cm, a vertical, thin slab divided the pit into two parts. At the flat bottom of the pit, or at about 125 cm from its top, a small cavity in its northern part has been observed. It had a lens-like shape and measured 25 x 10 cm, with a depth of about 25 cm (Fig. 7). No artifacts were found.

4. Structure 2/5

Tumulus 2/5 was made of quartzitic sandstone. On the surface it presented an elongated shape, with slabs in a diagonal position, creating a steep roof measuring about 2,5 m long, and about 50 cm high. The embankment of the tumulus contained yellowish dune sand and quartzitic sandstone slab constructions and two levels of stone slabs. These oblique slabs formed a kind of receptacle, both covered by a single stone slab that lay in a horizontal position. Under the surface stones the top of the pit was observed. In plan view it was oval in shape (110 x 80 cm). The pit contained weakly consolidated dune sand. At the flat bottom of the pit (about 120 cm from the top of the pit) a small cavity in northern part of the pit was observed. It had a lens shape and measured 15 x 10 cm, with a depth of about 20 cm (Fig. 8). No stone artifacts were found, just six fragments of teeth of gazelle (*Gazella dorcas*).

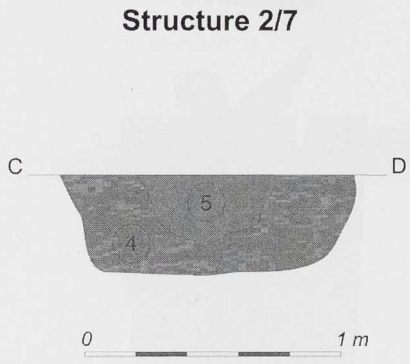

Fig. 9. Nabta Playa, site E-06-4. Profile A-B of structure 2/7 (drawn by A. Czekaj-Zastawny, J. Sawicki). Legend: see fig. 6.

5. Structure 2/7

Structure 2/7 was made of quartzitic sandstone slabs forming an oval shape measuring about 300x180 cm in diameter and about 30 cm in height. Under the embankment (slope wash sandstone), the shaft was visible (Fig. 9). It was oval in shape measuring 70 x 50 cm in diameter and just about 25 cm in depth. In cross section the pit had a basin-shaped form. No stone artifacts were found.

6. Structures 2/2, 2/4 and 2/6

Under the stones forming two separate slab pavements, no traces of pits have been found at the level of slope wash, perhaps suggesting that the slab pavements were already in lag positions (?). Structure 2/2 had a circular shape, measuring about 100 cm in diameter and was about 10 cm high, Structure 2/4 was of about 100 cm in diameter and measured some 10 cm in height, while Structure 2/6 had an elongated shape, 250 cm x 100 cm.

7. Cultural content of the tumulus and structures

Except for Structures 2/2, 2/4 and 2/6, all the features included relatively deep pits under the sandstone block/slab cover. Four of the pits had animal remains inside (Table 1). In two cases, Tumulus 2 and Structure 2/1, the pits also contained microlithic insets, probably parts of composite arrowheads (Fig. 10). Three structures, 2/1, 2/3 and 2/5, on the other hand, showed slab constructions inside the pit, seemingly subdividing the pit into separate compartments.

The faunal remains are very limited. In the case of ruminant remains (dorcas gazelle?), it is likely that only small, selected parts of the body were deposited inside the pit. The Nile oyster fragment indicates a seemingly precious deposit of only a fragment of this bivalve, perhaps a single valve. The empty compartments strongly suggest that also some other, perishable organic offerings might have been in use such as grain, milk or blood. Both, the compartments and the hypothetical organic cover of the pit in Tumulus 2 indicate that the users of the tumulus and the structures kept for some time a free access to

Table 1. Nabta Playa, site E-06-4. The characteristic of features examined archaeologically

E-06-4, Tumulus 2 and Associated Structures								
Units	Tumulus 2	Structure 2/1	Structure 2/2	Structure 2/3	Structure 2/4	Structure 2/5	Structure 2/6	Structure 2/7
Stone cover	X	X	X	X	X	X	X	X
Pit	X	X	-	X	-	X	-	X
Slab construction inside pit	-	X	-	X	-	X	-	-
Lithics	1 triangle and 1 backed bladelet)	2 triangles and 2 backed bladelets	-	-	-	-	-	-
Animal remains	1 fragment of a shell of Nile oyster (*Etheria nilotica*)*	12 fragments of long bones of a ruminant (antelope/ gazelle?)*	-	3 tooth fragments of a ruminant (*Gazella dorcas*)*	-	6 tooth fragments of a ruminant (*Gazella dorcas*)*	-	-
Plant remains	18 charcoal fgts (*Tamarix*)**	12 charcoal fgts (*Tamarix*)**	-	5 charcoal fgts (*Tamarix*)**	-	-	-	-
14C dates	7960 ± 50 BP (Poz-20288)	-	-	7990 ± 40 BP (Poz-20315)	-	-	-	-

* Analyses by M. Osypińska.

** Analyses by M. Lityńska-Zając

the pits and that these were of multiple uses. Charcoal remains, all resulting from the burning of tamarix, imply presence of fires in the immediate vicinity of the arrangements (Table 1).

9. Archaeological Association of Tumulus 2 and the Structures

Two features of the complex (Table 1) yielded practically identical radiocarbon ages of 7990 ± 40 years BP (Poz-20315) and 7960 ± 50 years BP (Poz-20288), or, while calibrated, placing these events between around 7,100 and 6,800 calibrated years BC (Fig. 11). This is an age within the El Nabta Humid Interphase and the time of the Holocene Climatic Optimum in the South Western Desert. As to the lithics, all of them have very close analogies with the materials of the El Nabta Vari-

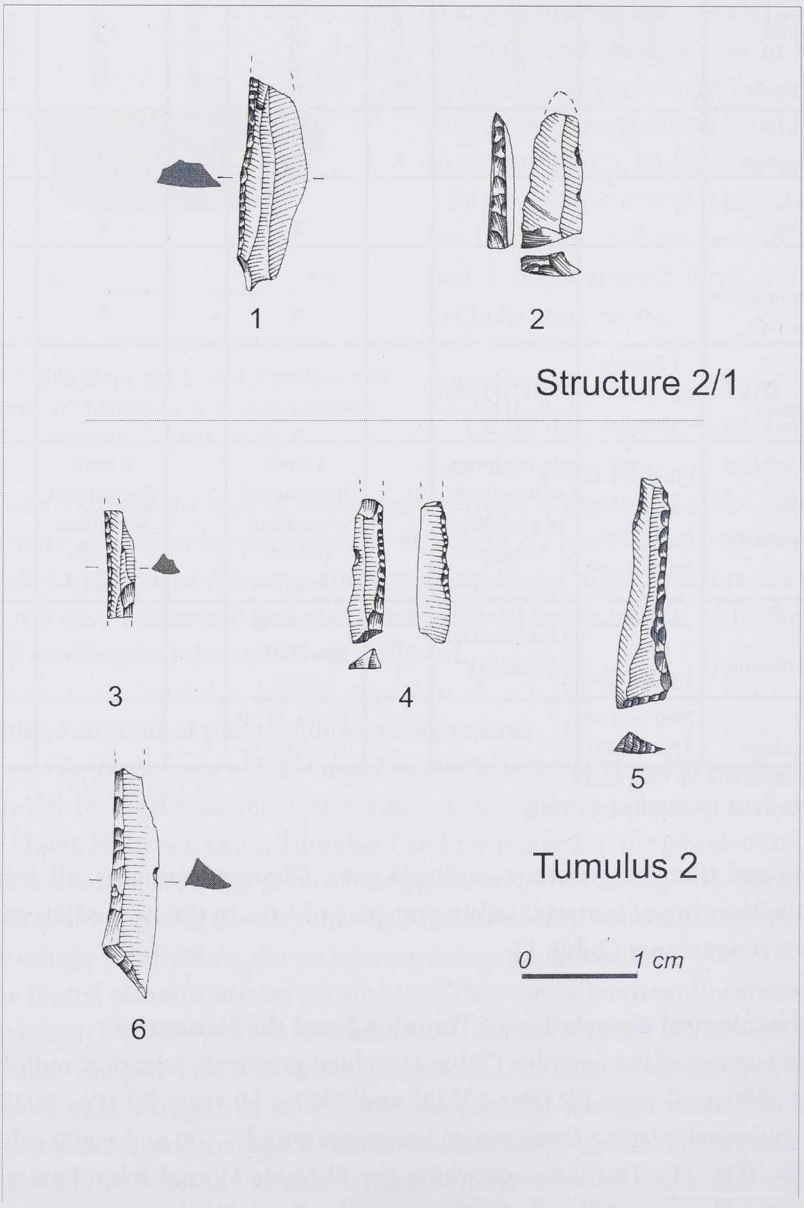

Fig. 10. Nabta Playa, site E-06-4. Microliths from tumulus 2 (1, 2) and structure 2/1 (3-6); (drawn by M. Puszkarski).

Table 2. Schema of Pleistocene and Holocene climatic and cultural changes in the Southern Western Desert in Egypt (after Wendorf and Schild 2001, 648-651)

BP DATING	CLIMATIC AND CULTURAL PHASES	C14 DATES FROM E-06-4
5500- 4800/4150 bp	Final Neolithic Humid Interphase	
5800-5500 bp	Post Late Neolithic Arid Phase	
6550-5800 bp	Late Neolithic Humid Interphase	6240 ± 40 BP (Poz-20418)
6600- 6550 bp	Post Middle Neolithic Arid Phase	
7200/7100- 6600 bp	Middle Neolithic Humid Interphase	6890 ± 40 BP (Poz-20316) 7190 ± 40 BP (Poz-20665)
7300-7200/7100 bp	Post El Jerar Arid Phase	
8050-7300 bp	El Nabta/ El Jerar Humid Interphase	7960 ± 50 BP (Poz-20288) 7990 ± 40 BP (Poz-20315)
8200- 8050 bp	Post El Ghorab Arid Phase	
8400- 8200 bp	El Ghorab Humid Interphase	
8850- 8400 bp	Post El Adam Arid Phase	
9500- 8850 bp	El Adam Humid Interphase	
~10 000- 9 500 bp	Pre El Adam Arid Phase	

ant of upper Early Neolithic, particularly the assemblages recovered from the huts at Site E-75-6 at Nabta Playa, some four kilometers to the south-east of the Sacred Moutain. The date from Structure 2/1 (Table 1) has been measured on calcium carbonate in the ruminant bone and has to be considered as minimal. At the face value, it is a date within a very late Al Jerar variant or an early Middle Neolithic (Table 2).

9. Conclusions

It is strongly suggested that the presented features of Site E-06-4 contain small offerings to supranatural beings. Beside the specific architecture of the objects and their content, the entire context of the mountain implies its sacred character. It does not contain any remains of settlements of any time and is placed beyond the fossil lake and the areas intensively occupied during Neolithic, such as the eastern and western shores of the Nabta Playa, some 3 to 4 kilometers to the south. The mountain stands high above, and just at the edge, of the main outwash shallow valley draining the rising to the north higher plains, badlands and gebels of the northern Nubia-Sheb Pediplain. It is the place where the main summer rain run-off was passing by, feeding the playa lake of Nabta Playa.

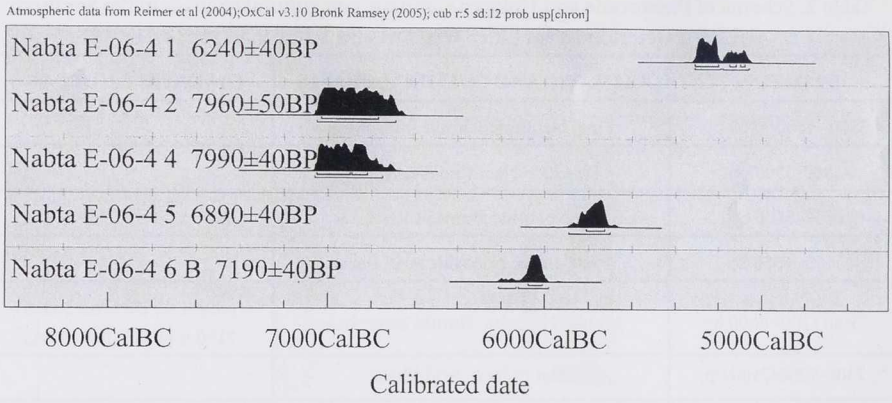

Fig. 11. Nabta Playa. Sequence of radiocarbon datas from site E-06-4.

A sacred character of the mountain is farther indicated by many dozens of small rock tumuli, pavements and other man made rock structures, a huge complex hearth in the southern cirque as well as a flat sandstone hill with fossilized bones presumable resulting from offerings. A radiocarbon date of 6890 ± 40 (Poz-20316) years BP, uncalibrated, from the hearth and another one of 6240 ± 40 (Poz-20418) years BP, uncalibrated, on the bones from the sandstone hill, link these events with the Middle and Late Neolithic phases of occupation of the Nabta Playa Basin.

There are several important aspects of these recent discoveries that are far beyond its local significance. First of all, the Early Neolithic sacrificial tumuli of Nabta are the oldest known tumuli ever found. Secondly, the associated smaller structures with slab compartments may imply offerings to gods or spirits made by single individuals or nuclear families in contrast to offerings and/or sacrifices performed by a special delegate of a social group, a shaman, priest, etc. The tumuli and offerings made by the El Nabta foragers and cattle keepers are almost 15 hundred years older than the oldest sacrificial tumuli in the Valley of Sacrifices of Nabta Playa made by the Ru'at El Baqar pastoralists of Late Neolithic. The discovery of a new, extremely important ceremonial area in the Nabta Playa Basin adds a new dimension to this huge ceremonial centre, perhaps the most complex and complete Stone Age ceremonial monument of the entire Africa.

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