

Kayseri province (Turkey): 2022 update of the inventory of artificial cavities

Provincia di Kayseri (Turchia): aggiornamento 2022 dell'inventario delle cavità artificiali

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Abstract

As part of the revision of the "Map of the Rock-cut Sites of Mediterranean", the inventory of the artificial cavities of the Kayseri Province (Central Turkey), updated in July 2022, is reported here. From 23 sites listed in the simplified first list of 1988, the number of rock-cut and underground works today geo-referenced has risen to 82, distributed over 7,000 km² of volcanic deposits, on a total province area of 16,917 km².

Keywords: Cappadocia, Kayseri, artificial cavities, inventory.

Riassunto

Nell'ambito della revisione della "Carta dei Siti Rupestri del Mediterraneo", curata dalla Commissione Nazionale Cavità Artificiali della Società Speleologica Italiana, viene qui riportato l'inventario delle cavità artificiali della Provincia di Kayseri (Turchia Centrale), aggiornato a luglio 2022. A seguito di ricerche pluriennali sul campo condotte dagli autori e della raccolta di fonti bibliografiche di diversi ricercatori, da 23 siti elencati nella prima stesura semplificata del 1988, compilata da cinque archeologi locali, il numero dei sistemi rupestri e ipogei oggi geo-referenziati è salito a 82, distribuito su una estensione dei depositi vulcanici di 7.000 km², a fronte di una superficie complessiva della provincia di 16.917 km². Molti siti non sono unità singole ma sono costituiti da diverse cavità di vario tipo.

Parole chiave: Cappadocia, Kayseri, cavità artificiali, inventario.

Introduction

Continuing the revision and updating of the inventory of artificial (anthropogenic) Turkish cavities (Bixio *et al.*, 2021), developed, we point out, on the original project of 2000 by Mario Mainetti (Bixio *et al.*, 2012), it is now presented here the new specific list of sites hitherto identified in Kayseri province (fig. 1), already reported (but without identification marks) in the general map (see figure 3: after Bixio *et al.*, 2021).

The territory of Kayseri (*Caesarea*) was included, already at the time of Strabo (ca. 14-23 AD), in the *theme* of Cappadocia (*Kapadokya*), that is to say, a district with a military administration, variously extended over the centuries, located in central Anatolia, to the eastern borders of the Byzantine Empire (fig. 2). Today Cappadocia is no longer an administrative unit: still, it is a historical area that can be considered roughly corresponding, in addition to Kayseri (in the 9th century associated with the *theme* Charsianon, and then



Fig. 1 – Location of the city of Kayseri in Cappadocia, Central Turkey (drawing R. Bixio).

Fig. 1 – Posizione della città di Kayseri in Cappadocia, Turchia Centrale (grafica R. Bixio).

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Fig. 2 – Cappadocia at the time of Strabo, with capital Mazaca-Eusebia, today Kayseri (drawing R. Bixio, after Jones, 1954).

Fig. 2 – La Cappadocia ai tempi di Strabone, con capitale Mazaca-Eusebia, oggi Kayseri (grafica R. Bixio, da Jones, 1954).

Lykandos), to the provinces of Aksaray, Nevşehir, Niğde and, partially, to those of Kırşehir and Yozgat (fig. 3). Their total area is 58,000 km². This territory, which includes over 20,000 km² of volcanic rocks, is known worldwide for its extraordinary morphologies produced by erosion (mesas, buttes, canyons, cliffs, badlands, pinnacles).

Here, since ancient times, the local populations, taking advantage of the lithological characteristics, solicited by the climatic conditions and influenced by the historical events, have carved thousands of structures of various kinds (dwellings, utilitarian spaces, churches, shelters, water works, etc.). It is a huge historical and architectural heritage, primarily little known: “the landscapes of Cappadocia are strange and forbidding, and beyond the well-touristed sites, many remain abandoned” (Ousterhout, 2017, p. 171).

Many researchers, including the authors of this article, have been working for several decades to recover the memory of these extraordinary testimonies of material culture and produce a textual, photographic and topographical documentation on the rock-cut settlements present in each of the six provinces. In this context, we consider the creation of a general census of sites essential to determine their actual quantity and distribution, and to make available a helpful tool for further research.

Kayseri province

A settlement is already witnessed in the Chalcolithic Age in the archaeological site of Kültepe, 20 km northeast of today's city of Kayseri, the current capital of the homonymous Province (fig. 4). The site became the seat of the first Hittite capital known as Nesa (later Hanisa, in Hellenistic times), called Kanesh in the commercial tablets by the Assyrian who there had an important trading colony (*karum*) in the Middle Bronze Age (Beckman, 2012).

According to some authors (Khorenatsi, 1991; Uras, 1988) “*Gamirk* (EdN: the land of Cappadocia) was conquered and annexed to the Armenian Kingdom by Aram Haykazian (EdN: likely at mid-11th century BC) who ordered the local population to learn Armenian. The Armenian king Aram appointed Mshak the governor of Cappadocia. Here, in the place where Caesarea occurred later on, Mshak built an estate, fenced it and named it after himself, which later on was distorted and became Mazhak (EdN: Mazaca). In the Roman period (1st century AD), in honour of Emperor Gaius Julius Caesar Augustus, it was renamed Caesarea, now Kayseri” (Shahinyan, 2021, p. 99). In the region the rock-cut tombs of this period are known. In the interval (2nd century BC), the city

was named Euseb(e)ia, probably after King Ariarathe V Eusebeos.

In the 4th century AD, *Caesarea* became an important Christian centre, home to three Fathers of the Church. Several masonry churches were built during that time, most of which have been lost. The carving of some rock-cut churches also began (figs. 7, 11). Over some centuries they reached an extraordinary number: Ousterhout (2017, p. 5) estimates that there are more than 1000 remains throughout Cappadocia today. In the territory of Kayseri it is estimated that there are at least 102 churches, often grouped in restricted areas. Their vestiges have been preserved until today, most likely precisely thanks to their underground location. On the other hand, “because of the nature of the land, much of Cappadocia’s architectural infrastructure was rock-cut rather than built” (Ousterhout, 2017, p. 9). As a result, in addition to the churches, a large number of rock-cut structures for residential use were created, as well as numerous intricate underground shelters, protected by defensive devices, including heavy millstone-doors (figs. 9, 10). Although we can not completely exclude that the origin of some shelters may be older, in principle we basically agree with Jerphanion (1925, p. 46), the first scholar who carried out systematic scientific research on the rock-cut works of Cappadocia, in particular in the Göreme/Ürgüp area, in the adjacent province of Nevşehir. According to him «...ce genre de fermeture nous reporte à une époque d’insécurité. Et l’on pense naturellement aux siècles où les Arabes, maîtres de la Cilicie, avant les victoires de Nicéphore Phocas, faisaient de fréquentes incursions à travers le Taurus. Derrière leurs meules de pierre les habitants des monastères (EdN: and villages) pouvaient attendre, à l’abri des traits et du feu, que le danger se fut éloigné”. Quaisarya, as it was called by the Arabs, was attacked as early as AD 647 (Michel le Syrien, *Chronique*, late 12th century, in Chabot, 1899). *Caesarea* became *Kaysareya*, today Kayseri, when the Seljuk Turks (late 11th century), then Ottomans conquered these territories. However, according to Ramsey’s observations, at least until the late 19th century, underground settlements were used by the Greeks (that is, the Byzantine population) who still inhabited the villages, but not by “Mohammedans” (sic, Ramsay, 1897, pp. 244-245). This is consistent with various testimonies collected by De Tapia, for example in the village of Germir, not far from Kayseri, where there is an underground shelter, according to which only the houses of the Christian people, i.e. the Greeks, were equipped with such cavities (Turkish = *in*, i.e. caves), used in everyday life as warehouses for agricultural products and wine. They were connected so as to reach, if necessary, neighbours’ houses by underground routes. Even in mixed villages, the Turks did not have “*in*” or, at least, none so comprehensive, or they were only in old Christian villages later converted to Islam. As a result it is believed that the Greeks invented the “*in*” long before the Turks conquered the region (De Tapia, 2017, p. 434).

The anthropogenic cavities

The Kayseri Province has a total area of 16,917 km², divided into 16 districts, at an average altitude between 1000 and 1500 m a.s.l. About 40% of the territory consists of volcanic rocks (ca. 7,000 km²) mainly produced by the colossal caldera of Erciyes Dağı (*Argaeus Mons*, 3916 m a.s.l.), while to the south is bordered by the calcareous massif of Ala Dağları (3756 m), characterized by extensive natural cavities (caves = *in*, but also *mağara* in Turkish). The structures carved by man have been identified in the area affected by the tuffaceous deposits, within a range of about 50 km, which centre is represented by the imposing volcanic cone of Erciyes. Actually, the area is limited to the western sector of the Province, but contiguous, to the west, and lithologically comparable to the territories of Nevşehir and Niğde, equally rich in ancient rock-cut and underground settlements, which inventory is currently under revision.

In 1988, five local archaeologists (Yörükoğlu Ö., Sevil T., Taşçi Z., Türkmen K. and Uysal V.) produced the first inventory of all the underground structures they knew, located in the six provinces of Cappadocia, although generically and incompletely reported, for a total of 121 sites. For the Kayseri Province only, they compiled a list of 23 sites (Yörükoğlu, 1988). Over time and thanks to the reports of several travellers and scholars, various and extemporaneous information has been added to this first inventory. In 2002, and then in 2012, they were collected in a structured repertory: a total of 204 sites was recorded in Cappadocia, of which 29 were in Kayseri, but not all localized



Fig. 3 – Extension of volcanic rocks in the six provinces of Cappadocia (drawing R. Bixio).

Fig. 3 – Estensione delle rocce vulcaniche nelle sei province della Cappadocia (grafica R. Bixio).

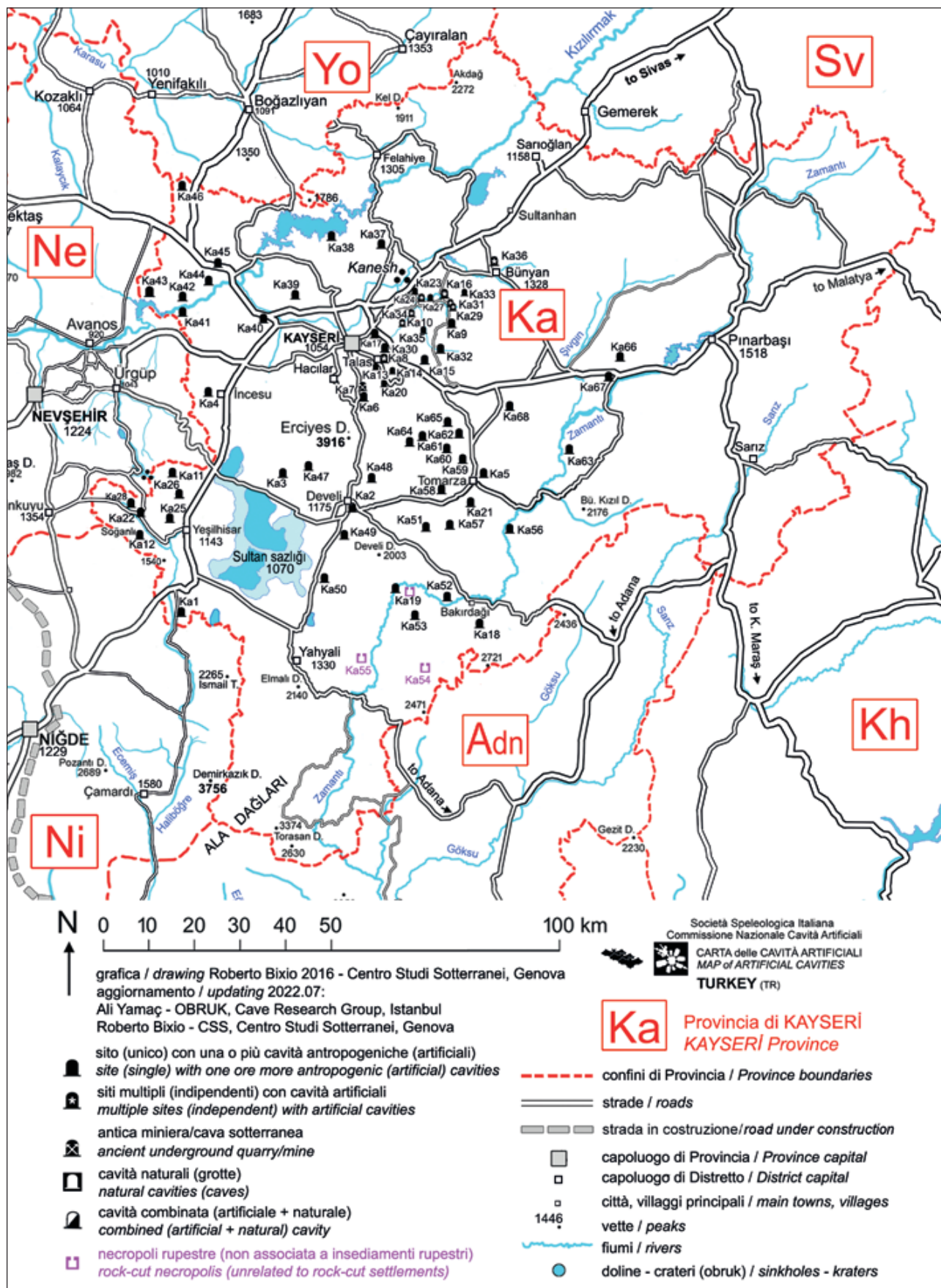


Fig. 4 – Kayseri Province. Location of sites (Artificial Cavities) listed in table 1 (drawing R. Bixio).

Fig. 4 – Provincia di Kayseri. Posizione dei siti (Cavità Artificiali) elencati nella tabella 1 (grafica R. Bixio).

(Bixio *et al.*, 2002; 2012). In 2014, at last, a project of systematic research starts, the Kayseri Underground Structures Inventory Project, promoted by the Municipality of Kayseri (*Kayseri Büyükşehir Belediyesi*), and ÇEKUL Trust (Çevre ve Kültür Değerlerini Koruma ve Tanıtma Vakfı), entrusted with an agreement to Obruk Cave Research Group (O'MAG = Obruk Mağara Araştırma Grubu) of Istanbul. Thanks to this research, which is still in progress (see for example Yamaç, 2015; 2021), the updated inventory of artificial cavities of the Kayseri Province has been compiled and published here. The sites listed are 82, all geo-referenced, spread over 10 of the 16 districts (tab. 1), and marked on the map in figure 4.

We point out that black icons in the map indicate the location of each site listed; asterisks in icons cor-

respond to very close, but independent sites (colored boxes in the list); each site may consist of only one cavity or, in most cases, several cavities (for example, cluster of churches or/and dwellings) or, often, hundreds of cavities, different in type and extent, forming real cliff villages (figs. 6, 8), or interconnected underground networks, almost always defended by countless millstone-doors (figs. 9, 10). Of course, they are considered in this inventory as a single site.

The initials of the column "type" refer to the classification developed by the CNCA-Commissione Nazionale Cavità Artificiali of the Società Speleologica Italiana (Typology Tree in fig. 5 - see, for example, Parise *et al.*, 2013; CNCA site on line/Sitography). In the last column the alphanumeric initials referring to the bibliography are reported, which appears in full in the table 2.

List of sites in KAYSERİ (Ka) province - revised version 2022.07 (July)

(Caesarea) (Qaisarya) (Eusebia) (Mazaca)

Note. This inventory is derived from the list published in 2012 (Bixio *et al.*, 2012), revised and updated.

(column 1) alphanumeric abbreviation (Id mark) to which the sites in the map refer = the first two letters (Ka) refer to the administrative Provinces into which the Turkey is subdivided. The numbers are assigned in the order each site is pinpointed.

(column 2) full name of Province.

(column 3) full name of District. Between brackets: normal = (old name); *italics* = (*historical name*).

(column 4) locality = inhabited centre (town/village) nearest to the listed site.

Between brackets: normal = (old name); *italics* = (*historical name*).

(column 5) latitude of the listed site.

(column 6) longitude of the listed site.

When the exact location is not yet detected, the coordinates in brackets refer to the nearest village.

(column 6) site name with presence of anthropogenic (artificial) cavities (if different from the locality) and any other information **Main independent rock-cut chamber tombs/cliff necropolis are listed in violet.**

(column 7) type = rock-cut type/intended use = abbreviations (Id marks) in the "Tree of Types" of SSI-CNCA.

(column 8) source = Tr + number = bibliographic references (see specific table) / pc = personal communication.

Note: not always all existing bibliography is reported in this inventory.

In Turkish:

Great Region=BÖLGE // Province=İL // District=İLÇE // Town=ŞEHİR/ŞEHİR // Village=KÖY // locality=MEVKİ

Tab. 1

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka01	Kayseri	Yeşilhisar	Doğanlı Köy (<i>Gordeles</i>)	38°10'27.09"N	35°05'31.63"E	Doğanlı - underground shelter	D7	Tr058-Tr061 Tr064-Tr077 Tr204-Tr209 Tr238
Ka02	Kayseri	Develi	Bahçebaşı	38°22'48.09"N	35°29'37.22"E	Öksenek - rock-cut church	C1	Tr212
Ka03	Kayseri	Develi	Kulpak Köy	38°27'28.91"N	35°18'57.93"E	Kulpak Dağı - cliff settlement	B1	Tr064
Ka04	Kayseri	İncesu (<i>Sadacora</i>)	İncesu	38°37'23.04"N	35°09'27.80"E	Eski Köy İleri - cliff settlement (11 rock-cut dwellings and 3 rock-cut churches nearby)	B1 C1	Tr219
Ka05	Kayseri	Tomarza	Tomarza	38°27'48.11"N <i>To be checked</i>	35°49'49.28"E <i>To be checked</i>	Tomarza - 4 rock-cut churches are reported in the surroundings of Tomarza, without a precise location)	C1	Tr135 pp 49/197
Ka06	Kayseri	Melikgazi	Hisarcık Köy	38°36'45.57"N	35°31'10.07"E	Kırlangıç Valley - underground shelter	D7	Tr064-Tr209 Tr238
Ka07	Kayseri	Melikgazi	Hisarcık Köy	38°37'52.50"N	35°31'08.98"E	Asarkaya (also Hisarcık) - 10 Assyrian tin mines, no underground settlement	E2	Tr064 pc Yamaç
Ka08	Kayseri	Talas						
Ka08.1	Kayseri	Talas	Talas	38°40'28.29"N	35°33'28.75"E	Ali Dağı - underground shelter (528 m tunnel length and a huge cistern)	D7	Tr064-Tr077 Tr058-Tr204 Tr209-Tr238
Ka08.2	Kayseri	Talas	Talas	38°40'45.76"N	35°32'57.63"E	Harman Yeri - underground shelter	D7	Tr211
Ka08.3	Kayseri	Talas	Talas	38°41'15.19"N	35°33'30.08"E	Ali Saip Paşa - underground shelter (a single tunnel 916 m and a millstone-door)	D7	Tr058 Tr209 Tr238

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka09	Kayseri	Melikgazi	Büyük Büürüngüz	38°45'37.42"N	35°44'29.44"E	Büyük Büürüngüz (Koramaz Vadisi) - underground settlement (coordinates of one entrance, but the underground settlement extends 1273 m under the whole surface village. There are 27 millstone doors)	D7	Tr063
Ka10	Kayseri	Melikgazi/Gesi						
Ka10.1	Kayseri	Melikgazi/Gesi	Belağası Köy	38°46'05.00"N	35°38'18.45"E	Belağası + cliff Settlement: 28 rock-cut dwellings, underground aqueduct and a church) + underground shelter No 1 + underground shelter No 2: only one millstone but 52 very small rooms	D7 A3 B1 C1	Tr058 Tr205 Tr209 Tr238
Ka10.2	Kayseri	Melikgazi/Gesi	Belağası Köy	38°45'38.34"N	35°38'35.42"E	Ötedere Valley 1 - underground shelter No 1	D7	Tr058-Tr205 Tr209-Tr238
Ka10.3	Kayseri	Melikgazi/Gesi	Belağası Köy	38°46'02.41"N	35°38'33.15"E	Ötedere Valley 2 - underground shelter No 2 (maybe also Hasan Efengi)	D7	Tr058-Tr205 Tr209-Tr238
Ka10.4	Kayseri	Melikgazi/Gesi	Mimar Sinan / Demokrasi	38°45'34.12"N	35°37'28.73"E	Avedik Valley - cliff settlement (5-6 dwellings and a small rock-cut church)	B1 C1	Tr211
Ka11	Kayseri	Yeşilhisar	Gülbayır Köy	38°26'37.50"N	35°03'57.20"E	Gülbayır	D7?	Tr237
Ka12	Kayseri	Yeşilhisar	Soğanlı Köy (Soandos)	38°20'40.51"N	34°58'16.41"E	Soğanlı - rock-cut settlement (consisting of 16 churches / small monasteries, tombs and dove-cotes, and at least two shelters / redoubts with millstone-doors, located along the two branches of the valley. On the upper edge of the plateau, perhaps dove-cotes)	D7 C1 C2 B7	Tr135-Tr137 Tr159-Tr160 Tr167-Tr176 Tr185-Tr117 Tr216-Tr218
Ka13	Kayseri	Talas	Gülistan Köy	38°39'39.04"N	35°34'13.02"E	Gülistan - underground shelter (also named as Reşadiye shelter)	D7	Tr211-Tr230 Tr238
Ka14	Kayseri	Talas	Reşadiye Köy	38°40'03.23"N	35°35'49.71"E	Karaağaç - underground shelter	D7	Tr230 Tr238
Ka15	Kayseri	Talas	Kuruköprü	38°41'08.75"N	35°41'31.69"E	Kuruköprü - underground shelter	D7	Tr211
Ka16	Kayseri	Melikgazi						
Ka16.1	Kayseri	Melikgazi	Ağırnas Köy (Aragena)	38°48'48.31"N	35°42'59.23"E	Ağırnas 1 (Koramaz Vadisi) - underground shelter (with a church inside)	D7 C1	Tr064-Tr077 Tr210-Tr238
Ka16.2	Kayseri	Melikgazi	Ağırnas Köy (Aragena)	38°48'55.47"N 38°48'55.31"N	35°42'52.05"E 35°42'55.72"E	Ağırnas 2 "Mimar Sinan" (Koramaz Vadisi) - underground shelter (coordinates of only one entrance but the underground settlement covers the entire surface village) Mustafa Bozdemir (possibly a segment of Mimar Sinan underground shelter)	D7	Tr060 Tr206 Tr210 Tr217 Tr238
Ka16.3	Kayseri	Melikgazi	Ağırnas Köy (Aragena)	38°48'57.21"N	35°42'26.07"E	Ağırnas 3 (Koramaz Vadisi) - cliff settlement (195 rock-cut dwellings and 15 rock-cut churches in three valleys)	B1 C1	Tr062-Tr067 Tr135-Tr170 Tr210-Tr213 Tr229-Tr238
Ka17	Kayseri	Melikgazi	Germir (Konaclar)	38°44'9.56"N	35°33'35.18"E	Germir (also Konaclar) - underground shelter	D7	Tr064 Tr195 pp 208/211
Ka18	Kayseri	Develi	Küçük Künye	38° 8'34.29"N	35°49'2.22"E	Küçük Künye - rock-cut village	B1	Tr135 pp 49/197
Ka19	Kayseri	Develi	Ayşepinar Köy	38°13'43.17"N	35°36'56.56"E	Ayşepinar - rock-cut village and 10 Roman rock-cut tombs dating around second century AD)	B1 C2	Tr135 (p 197) Tr212 Tr215
Ka20	Kayseri	Talas	Zincidere Köy	38°38'33.92"N	35°34'32.10"E	Zincidere - underground shelter (several entrances below the houses of the village, all blocked + one rock-cut church)	D7 C1	Tr135 (p 196) Tr226-Tr230 Tr238
Ka21	Kayseri	Tomarza	Göbü	38°24'37.45"N	35°48'5.90"E	Göbü - rock-cut church	C1	Tr135 pp 49/197
Ka22	Kayseri	Yeşilhisar	Güzelöz Köy (Mavrucan)	38°23'21.23"N 38°23'15.31"N	34°57'16.32"E 34°57'17.36"E	Güzelöz 1 (underground shelter) Güzelöz 2 (more than 14 rock-cut churches and several rock-cut dwellings, barns and wine-presses on the slopes of Mavrucan Valley + roman tombs)	D7 B1 C1 C2	Tr058-Tr062 Tr127-Tr135 Tr170-Tr185 Tr187-Tr209 Tr214-Tr221 Tr222-Tr223 Tr224-Tr229 Tr238
Ka23	Kayseri	Melikgazi	Ispıdın Köy (Bağpınar)	38°48'46.87"N	35°39'19.08"E	Ispıdın (Koramaz Vadisi) (7 rock-cut dwellings + 14 rock-cut churches)	B1 C1	Tr067
Ka24	Kayseri	Melikgazi						
Ka24.1	Kayseri	Melikgazi	Vekse Köy (Özlüce)	38°48'12.05"N	35°39'32.57"E	Vekse 1 Village (Koramaz Vadisi) (2-3 dwellings + an underground shelter with several entrances below the houses of the village and a huge millstone but all tunnels blocked)	D7 C1	Tr062 (p 241) Tr067 Tr213
Ka24.2	Kayseri	Melikgazi	Vekse Köy (Özlüce)	38°48'28.48"N	35°40'26.77"E	Vekse 2 North Wall (Koramaz Vadisi) rock-cut churches (3 dwellings + 5 rock-cut churches)	B1 C1	Tr213
Ka25	Kayseri	Yeşilhisar	Keşlik Köy	38°22'23.74"N	35°02'46.07"E	Keşlik - rock-cut dwellings + apiary	B1 B8	Tr059 (p 365)
Ka26	Kayseri	Yeşilhisar	Erdemli Köy	38°24'53.03"N	35°04'10.73"E	Erdemli (large rock-cut settlement with facilities and churches/monastery)	B1 C1	Tr059-Tr062 Tr065-Tr231 Tr232-Tr233 Tr234-Tr235 Tr236

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka27	Kayseri	Melikgazi	Turan Köy	38°48'14.09"N	35°42'00.87"E	Dimitre (Koramaz Vadisi) cliff settlement (229 rock-cut dwellings and 7 rock-cut churches)	B1 C1	Tr067 Tr213
Ka28	Kayseri	Yeşilhisar	Başköy (Ortaköy)	38°23'36.02"N	34°56'16.96"E	Başköy (today get together Ortaköy) - rock-cut village and 9 rock-cut churches, dwellings and wine-press)	B1 C1	Tr062-Tr127 Tr135-Tr170 Tr185-Tr187 Tr214-Tr221 Tr222-Tr223 Tr224
Ka29	Kayseri	Melikgazi						
Ka29.1	Kayseri	Melikgazi	Subaşı Köy	38°47'49.41"N	35°44'04.10"E	Subaşı 2 (Koramaz Vadisi) - underground shelter No 2 (5 millstone doors, entrance collapsed)	D7	pc Yamaç
Ka29.2	Kayseri	Melikgazi	Subaşı Köy	38°47'52.05"N	35°44'00.53"E	Subaşı Monastery - rock-cut monastery	C1	Tr212
Ka30	Kayseri	Melikgazi	Aydınlar (Tavlusun)	38°41'32.96"N	35°34'45.06"E	Derevank - cliff settlement (also St. Sergius monastery)	B1 C1	Tr064-Tr068 Tr170-Tr239 Tr240
Ka31	Kayseri	Melikgazi						
Ka31.1	Kayseri	Melikgazi	Küçük Bürüngüz	38°47'57.14"N	35°43'51.78"E	Subaşı 3 (Koramaz Vadisi) - underground shelter No 3 (Same rock cliff with other structures, small and unfinished)	D7	pc Yamaç
Ka31.2	Kayseri	Melikgazi	Küçük Bürüngüz	38°48'01.69"N	35°43'34.95"E	Küçük Bürüngüz (Koramaz Vadisi) - cliff settlement	B1	Tr213
Ka32	Kayseri	Melikgazi	Gürpınar Köy	38°42'39.14"N	35°42'38.75"E	Gürpınar - cliff settlement (few rock-cut dwellings interconnected)	B1	Tr230
Ka33	Kayseri	Melikgazi	Subaşı Köy (Üskübü) (Skopi-Manda)	38°48'48.68"N	35°46'11.27"E	Subaşı 1 (Koramaz Vadisi) - underground shelter No 1	D7	Tr210
Ka34	Kayseri	Melikgazi/Gesi						
Ka34.1	Kayseri	Melikgazi/Gesi	Güney Köy	38°47'00.09"N	35°40'05.35"E	Güney - rock-cut church	C1	Tr212
Ka34.2	Kayseri	Melikgazi/Gesi	Bahçeli Köy	38°46'46.24"N 38°46'43.04"N	35°39'18.22"E 35°39'18.07"E	Penzikli - underground shelter 1 Çatalin - underground shelter 2	D7	Tr058 Tr209 Tr238
Ka34.3	Kayseri	Melikgazi/Gesi	Kayabağ Köy (Darsiyah)	38°46'26.93"N	35°39'41.37"E	Değirmendere Valley (also Darsiyah) - cliff settlement (3 churches, more than 30 dwellings and several Ottoman dovecotes)	B1 C1	Tr064 Tr209
Ka35	Kayseri	Melikgazi	Güzelköy Köy	38°44'35.26"N	35°40'45.53"E	Talasıra - underground shelter	D7	Tr211
Ka36	Kayseri	Bünyan						
Ka36.1	Kayseri	Bünyan	Bünyan	38°50'50.18"N	35°51'08.89"E	Kayabaşı - cliff rock-cut settlement (10-15 rock-cut dwellings and an underground shelter)	D7 B1	Tr226 Tr230
Ka36.2	Kayseri	Bünyan	Bünyan	38°50'42.57"N	35°51'23.33"E	Bünyan - underground shelter (2 millstone doors and 5 chambers)	D7	pc Yamaç
Ka37	Kayseri	Kocasinan	Akin Köy	38°51'48.89"N	35°31'44.61"E	Akin - cliff settlement (10-15 rock-cut dwellings)	B1	Tr220
Ka38	Kayseri	Kocasinan	Çevril Köy	38°55'46.87"N	35°27'41.28"E	Old Çevril - cliff settlement (30 rock-cut dwellings)	B1	Tr220
Ka39	Kayseri	Kocasinan	Molu Köy	38°48'06.25"N	35°22'23.10"E	Kepez Hill - cliff settlement	B1	Tr229
Ka40	Kayseri	Kocasinan	Boğazköprü	38°45'12.97"N	35°18'11.81"E	Hörin Hill - cliff settlement	B1	Tr230
Ka41	Kayseri	Kocasinan	Küllü Köy	38°47'10.87"N	35°04'55.91"E	Old Küllü - cliff settlement (hundreds of rock-cut dwellings)	B1	Tr220 Tr229
Ka42	Kayseri	Kocasinan	Yuvalı Köy	38°47'48.88"N	35°05'16.59"E	Old Yuvalı - cliff settlement (numerous rock-cut dwellings and 2-3 rock-cut churches)	B1	Tr220 Tr229
Ka43	Kayseri	Kocasinan	Bayramhacı	38°48'04.59"N	34°59'51.75"E	Bayramhacı - quarries (or storage structures: 9 huge rock-cut structures, some larger than 400 m ²)	B1?	Tr220 Tr230
Ka44	Kayseri	Kocasinan	Yuvalı Köy	38°49'15.41"N	35°09'18.03"E	Bostanlı - cliff settlement (18 rock-cut dwellings)	B1	Tr220
Ka45	Kayseri	Kocasinan	Yemliha Köy	38°52'17.03"N	35°11'04.25"E	Bilig Bağları - cliff settlement (20-30 rock-cut dwellings)	B1	Tr220 Tr229
Ka46	Kayseri	Kocasinan	Elmalı Köy	(39°00'33.44"N)	(35°05'30.95"E)	Elmalı - cliff settlement (coordinates centre village)	B1	Tr230
Ka47	Kayseri	Develi	Kulpak Köy	38°28'32.47"N	35°21'06.94"E	Kulpak Innikaya - cliff settlement	B1	Tr229
Ka48	Kayseri	Develi (Gabadonia)	Çomaklı Köy	38°26'57.07"N	35°32'32.54"E	Çomaklı - underground shelter (entrance blocked few years ago)	D7	Tr230
Ka49	Kayseri	Develi	Tombak Köy	38°19'34.92"N	35°29'03.79"E	Tombak - underground shelter and rock-cut dwellings	D7 B1	Tr212
Ka50	Kayseri	Develi	Gazi Köy	38°14'32.72"N	35°26'2.95"E	Gazi - underground shelter + rock-cut cistern	D7 A3	Tr212 Tr238
Ka51	Kayseri	Develi	Şahmelik Köy	38°21'04.87"N 38°21'03.68"N 38°21'12.44"N	35°41'44.67"E 35°41'50.84"E 35°41'45.14"E	Şahmelik 1 - underground shelter within the east cliff settlement Şahmelik 2 - underground shelter within the east cliff settlement Şahmelik 3 - west cliff settlement	D7 B1	Tr212
Ka52	Kayseri	Develi	Yenice Köy	38°12'19.09"N	35°44'35.02"E	Mahmutçuk - underground shelter (now submerged)	D7	Tr212
Ka53	Kayseri	Develi	Hoşça Köy	38°10'30.82"N	35°40'26.98"E	Hoşça - cliff rock-cut settlement	B1	Tr230

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka54	Kayseri	Develi	Yeniköy	38°04'25.21"N	35°41'50.23"E	Yeniköy - 3 Roman rock-cut tombs dating around second century AD)	C2	Tr212 Tr215
Ka55	Kayseri	Yahyalı	Taşhan Köy	38°06'15.14"N	35°31'23.28"E	Taşhan - rock-cut tombs	C2	Tr225 Tr230
Ka56	Kayseri	Tomarza	Şih Barak Köy	38°20'27.23"N	35°53'24.78"E	Fatinler - underground shelter	D7	Tr211 Tr238
Ka57	Kayseri	Tomarza	Pusatlı Köy	38°21'18.70"N	35°45'45.30"E	Sümengen - underground shelter	D7	Tr211
Ka58	Kayseri	Tomarza	Pusatlı Köy	38°25'37.92"N	35°44'16.65"E	Eski Pusatlı - underground shelter + several underground dwellings	D7 B1	Tr211
Ka59	Kayseri	Tomarza	Tomarza	38°28'53.16"N	35°48'08.66"E	Kirkor - underground shelter	D7	Tr211
Ka60	Kayseri	Tomarza	Kömür Köy	38°29'46.67"N	35°45'02.75"E	Kömür - underground shelter	D7	Tr211
Ka61	Kayseri	Tomarza	Kuşcağız Köy	38°31'14.83"N	35°40'52.75"E	Kuşcağız - underground shelter (very close to Ta01 Danalılık/Talas district)	D7	Tr211
Ka62	Kayseri	Tomarza	İncili Köy	38°31'56.53"N	35°45'49.12"E	İncili - underground shelter	D7	Tr211
Ka63	Kayseri	Tomarza	Emiruşağı Köy	38°27'43.27"N	36°04'46.32"E	Emiruşağı - underground shelter	D7	Tr211 Tr238
Ka64	Kayseri	Talas (Mustalaske)	Çömlekçi Köy	38°30'35.48"N	35°39'40.90"E	Danalılık - underground shelter (very close to To08 Kuşcağız/Tomarza district)	D7	Tr211
Ka65	Kayseri	Talas						
Ka65.1	Kayseri	Talas	Sosun (Ortakavak)	38°33'18.13"N	35°44'27.73"E	Ortakavak - underground shelter	D7	Tr230
Ka65.2	Kayseri	Talas	Sosun (Ortakavak)	38°33'09.98"N	35°44'28.52"E	Sosun - underground shelter (a crossing cavity with a single 340 m long tunnel, double entrance and 4 chambers, 2 millstone doors)	D7	pc Yamaç
Ka66	Kayseri	Pınarbaşı (Ariaratheia)	Pazarören Köy	38°40'52.45"N	36°10'06.75"E	Pazarören 1 (also İsbidin) - underground shelter	D7	Tr230 Tr238
Ka67	Kayseri	Pınarbaşı	Pazarören Köy	38°39'26.04"N	36°09'32.05"E	Pazarören 2 - underground shelter (6 millstone doors and 12 chambers)	D7	pc Yamaç
Ka68	Kayseri	Tomarza	Kızılören (Kızılviran) (Yünören)	38°34'21.82"N	35°54'25.95"E	Kızılören - underground settlement / shelter	D7	Tr159

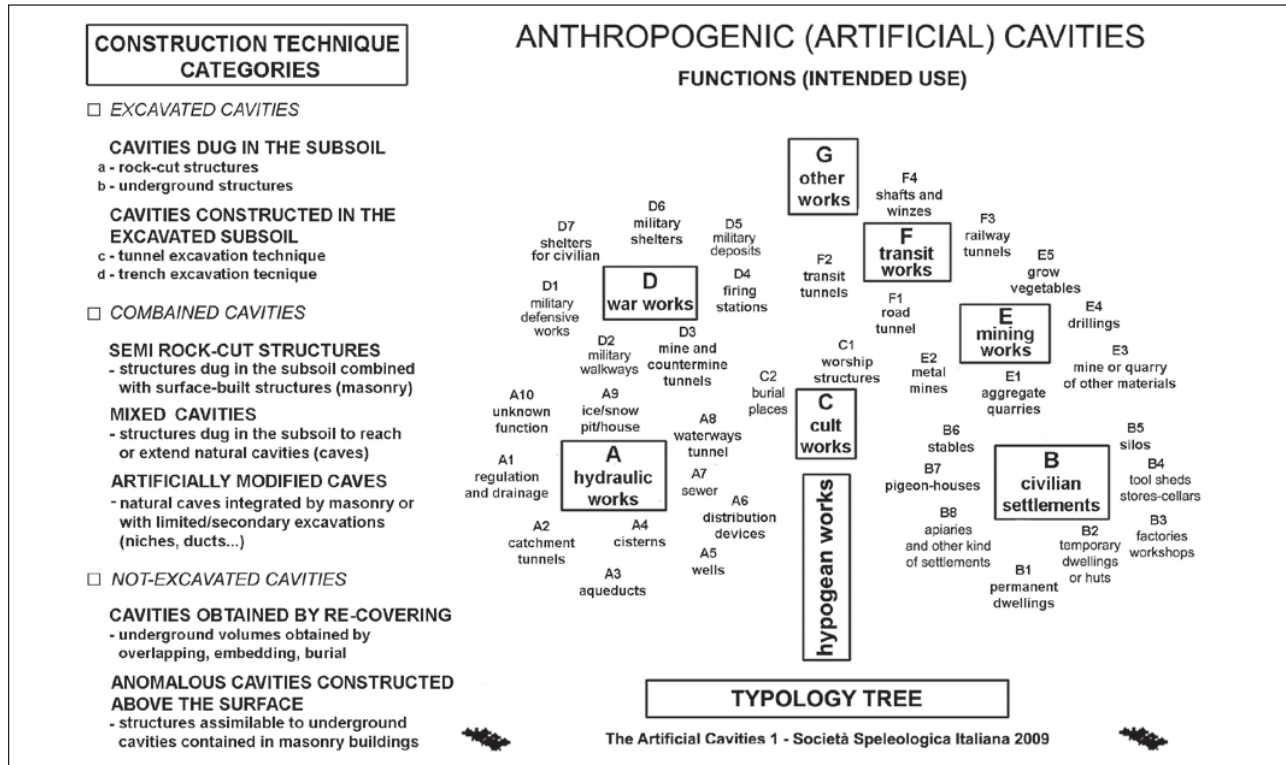


Fig. 5 – Classification of anthropogenic (artificial) cavities into categories and types: scheme created by the National Commission of Artificial Cavities of the Italian Speleological Society (drawing R. Bixio).

Fig. 5 – Classificazione delle cavità antropogeniche (artificiali) in categorie e tipologie: schema realizzato dalla Commissione Nazionale delle Cavità Artificiali della Società Speleologica Italiana (grafica R. Bixio)

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Fig. 6 – Şahmelik Valley. East Cliff Settlement, with underground shelter: Id mark Ka51 (photo A.E. Keskin).

Fig. 6 – Şahmelik Valley. Insediamento in Falesia Est, con rifugio sotterraneo: sigla identificativa Ka51 (foto A.E. Keskin).

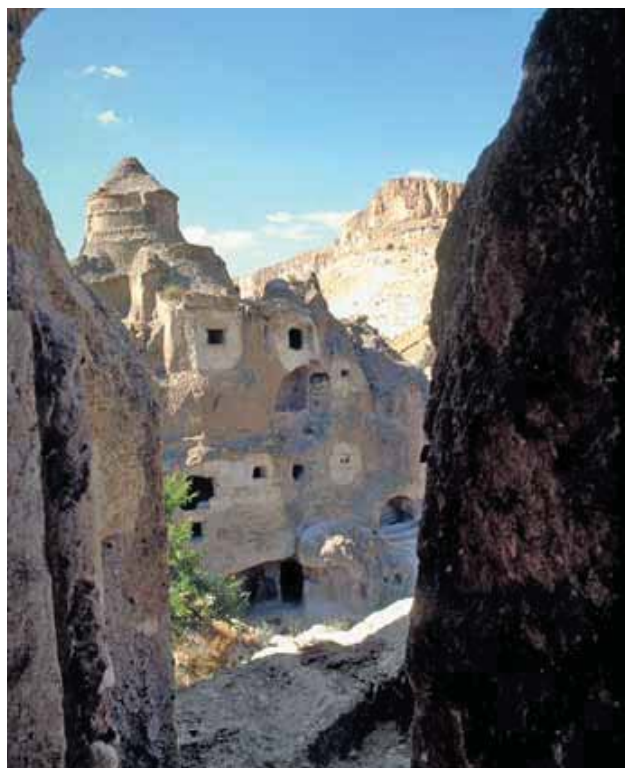


Fig. 7 – The Valley of Soğanlı, Id mark Ka12. Settlement consisting of several small rock-cut monasteries, with tomb and rooms defended by millstone-doors. In the picture, the church Kubbeli (photo R. Bixio).

Fig. 7 – Valle di Soğanlı, identificativo Ka12. Insediamento costituito da diversi piccoli monasteri rupestri, con tombe e vani difesi da porte-macina. Nella foto la chiesa Kubbeli (foto R. Bixio).

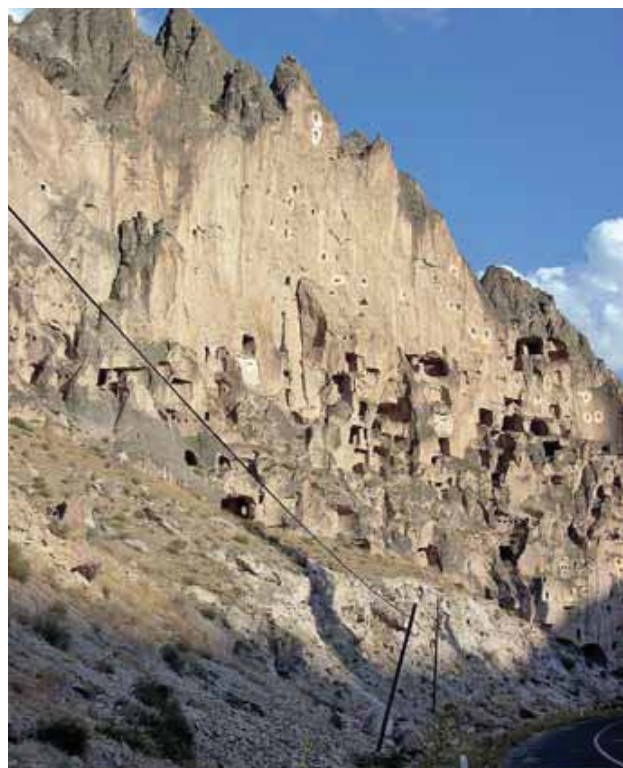


Fig. 8 – Rock-cut settlement Id mark Ka12 located at the entrance of the Valley of Soğanlı, with dwellings, churches, and characterized by dozens of dovescotes carved in the highest level of the cliff (photo R. Bixio).

Fig. 8 – Insediamento rupestre identificativo Ka12 all'imboccatura della Valle di Soğanlı, con abitazioni, chiese e dozzine di piccionaie scavate nella parte più alta della falesia (foto R. Bixio).



Fig. 9 – Büyük Bürüngüz, Id mark Ka09, one of the underground shelters along the Koramaz Valley (photo A.E. Keskin).

Fig. 9 – Büyük Bürüngüz, identificativo Ka09, uno dei rifugi sotterranei lungo la Valle di Koramaz (foto A.E. Keskin).



Fig. 10 – District of Tomarza. Kuşcağız underground shelter, Id mark Ka61 (photo A.E. Keskin).

Fig. 10 – Distretto di Tomarza. Rifugio sotterraneo di Kuşcağız, identificativo Ka61 (foto A.E. Keskin).

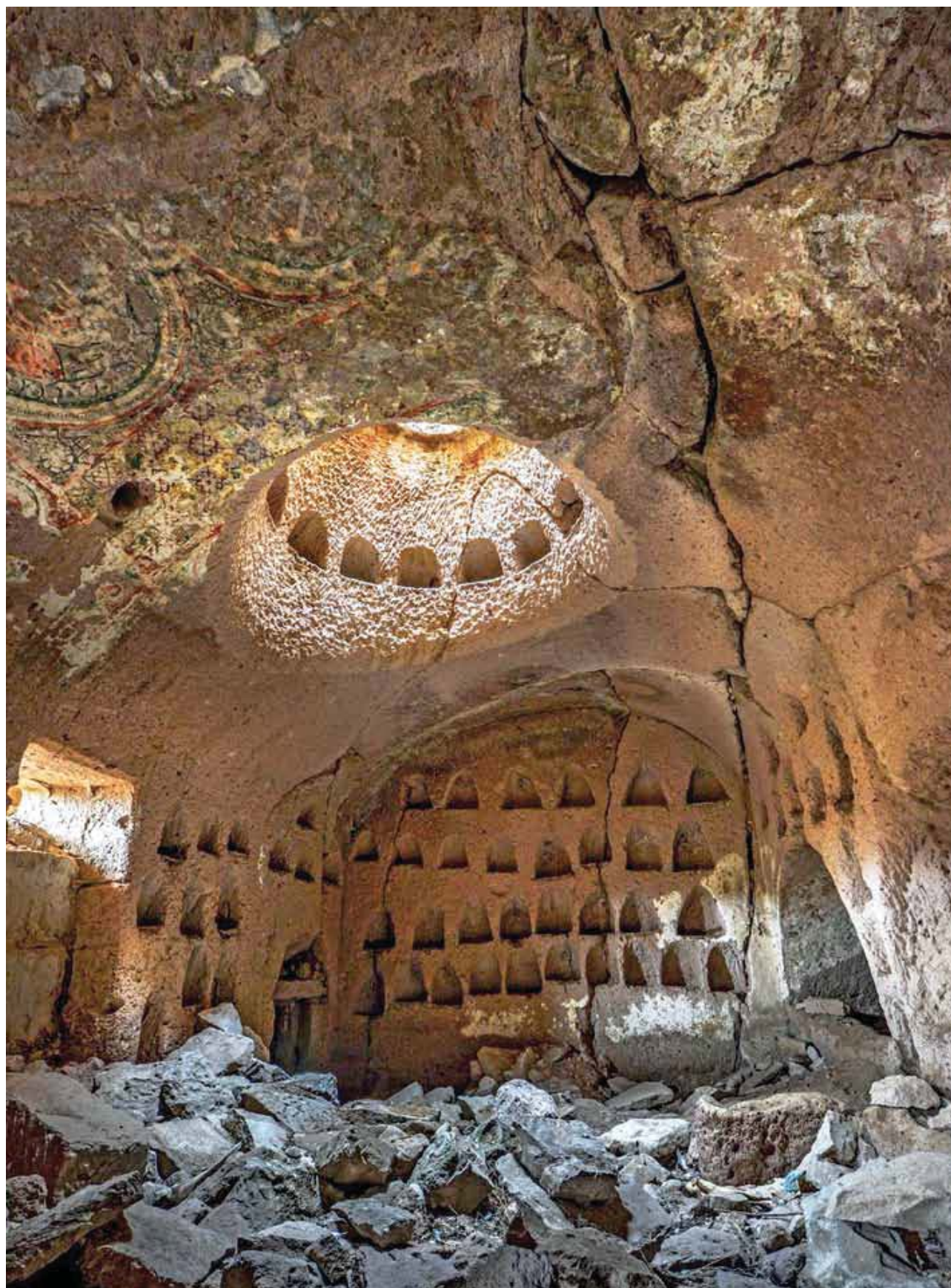


Fig. 11 – Değirmendere Valley. Rock-cut church Id mark Ka34.3 transformed into a dovecote (photo A.E. Keskin).

Fig. 11 – Değirmendere Valley. Chiesa rupestre identificativo Ka34.3 trasformata in piccionaia (foto A.E. Keskin).



Fig. 12 – Small rock-cut monastery, “open courtyard” type, in the upstream part of the Soğanlı Valley (photo A. De Pascale).
Fig. 12 – Piccolo monastero rupestre “a corte aperta” nella parte a monte della Valle di Soğanlı (foto A. De Pascale).

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