



COMENIUS  
UNIVERSITY  
BRATISLAVA

# **Preliminary catalog of rock art in the Kaua Cave**

**Fátima del Rosario Tec Pool**

**Faculty of Arts**

**Comenius University**

**CU Grant number: UK/1153/2025**

January 2025

# Preliminary catalog of rock art in the Kaua Cave

This report presents the results obtained under grant UK/1153/2025, carried out primarily during the months of June and July 2025. The most representative contexts were documented using photography and photogrammetry. These materials are organized in a preliminary catalog that includes the most prominent paintings, grouped by areas of the cave.

It is important to note that this research represents only an initial stage of the project. A more detailed analysis of the rock art will require the application of additional methodologies in subsequent phases.

The depicted themes allow for multiple cultural and symbolic interpretations, some of which may be situated within the prehispanic Maya context. At this preliminary stage, basic descriptive categories are used: anthropomorphic figures (stylized human forms), zoomorphic, and geometric. The paintings are described based on observable attributes, prioritizing objective characterization that enables the distinction of individual motifs and groups.

This initial systematization contributes to addressing the long-standing debate regarding the authenticity of the pictographs by placing them within a probable chronological and functional framework, integrated with the cave's morphology and evidence of recurrent subterranean use.

One of the main contributions of this work is the development of a preliminary classification of the rock art manifestations based on formal, technical, and spatial criteria. This classification makes it possible to identify groups, recurrences, and variations within the graphic corpus (see Table 1). However, many paintings exhibit low visibility due to their state of preservation, so it is likely that the number of recorded motifs will increase with more detailed analyses. Furthermore, precisely defining the boundaries of pictorial groups proved challenging in several cases, underscoring the need to refine classification criteria and establish more accurate parameters for numbering.

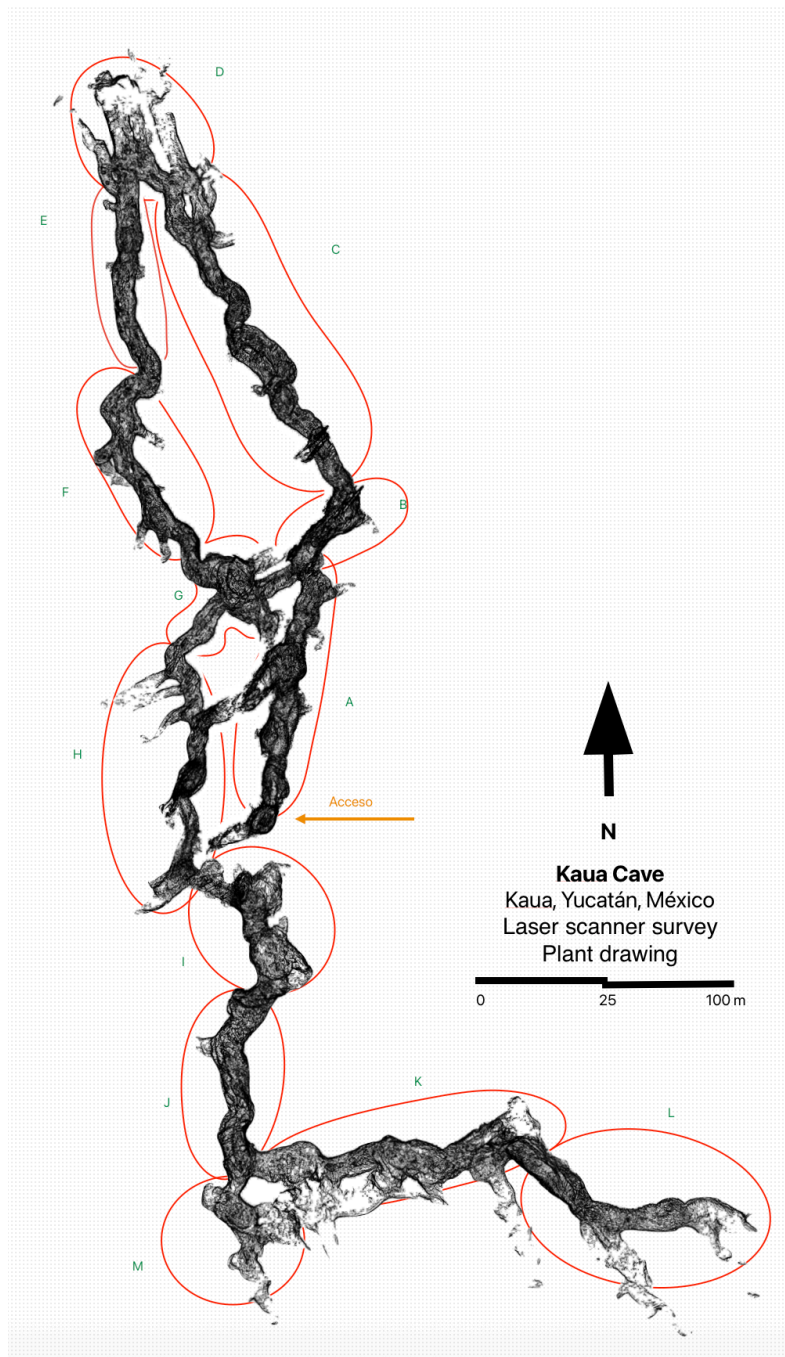
To date, the following have been identified:

- A minimum of 24 individual motifs
- 46 pictorial groups (each containing between 2 and 10 associated images)
- 6 main pictorial panels
- In total, 76 analytical units have been documented.

The catalog produced represents only a first step toward a more comprehensive evaluation of the spatial distribution of the paintings in Kaua Cave. Given the limited number of comparable studies in caves with similar characteristics, this research positions itself as one of the first systematic approaches to such contexts in the Yucatán Peninsula, Mexico

Table 1. List of rock art representations by area

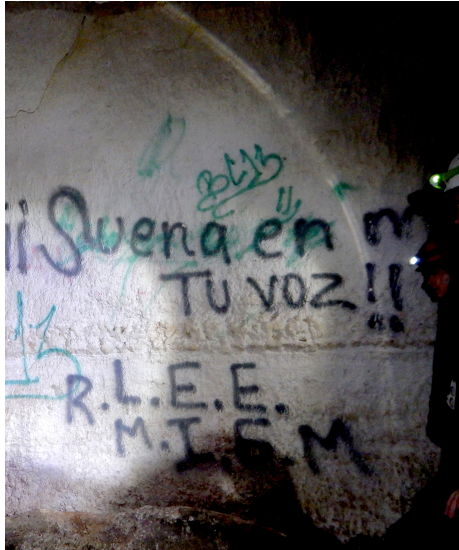
Area	Unit	Set	Panel
A		2 KA1-I KA1-II	
B	4 KN-B1-I KN-B1-II KN-B1-III KN-B3-IV KN-B3-V	5 KN-B2-1.1 KN-B2-1.2 KN-B2-1.3 KN-B4-1.4 KN-B4-1.5	
C	11 KN-C1-I KN-C1-II KN-C1-III KN-C1-IV KN-C2-V KN-C2-VI KN-C3-VII KN-C3-VIII KN-C3-IX KN-C5-XII KN-C5-XIII	11 KN-C1-1.1 KN-C1-1.2 KN-C1-1.3 KN-C1-1.4 KN-C2-1.5 KN-C2-1.6 KN-C3-1.7 KN-C3-1.8 KN-C3-1.9 KN-C4-1.10 KN-C5-1-11	2 KNC3-X KNC3-XI
D	4 KND1-I KND3-II KND4-III	1 KND2-1.1	
E		4 KNE1-1.1 KNE1-1.2 KNE2-1.3 KNE2-1.4	3 KNE2-I KNE2-II KNE2-III
F	1 KNF2-I	2 KNF2-1.1 KNF2-1.2	1 KNF2-II
G	1 KSG1-I		
H	1 KSH1-I	1 KSH-1.1	
I	1 KSI2-I	4 KSI1-1.1 KSI1-1.2 KSI2-1.3 KSI2-1.4	
J	1 KSJ1-I	7 KSJ1-1.1 KSJ1-1.2 KSJ2-1.3 KSJ2-1.4 KSJ2-1.5 KSJ2-1.6 KSJ2-1.7	
K		4 KSK1-1.1 KSK2-1.2 KSK2-1.3 KSK2-1.4	
L		2 KSL1-1.1 KSL1-1.2	
M		3 KSM1-1.1 KSM1-1.2 KSM1-1.3	
<b>Total</b>	24	46	6



Map of the study area showing the division of the cave into areas

## Area A

This area corresponds to the access gallery of the cave and consists of a corridor approximately 65 meters in length, oriented northward. In this sector, no paintings that can be considered ancient have been identified to date. Nevertheless, the presence of contemporary manifestations is evident, primarily in the form of graffiti executed with spray paint in various colors, suggesting the intervention of different individuals at different times. These manifestations include initials or names of visitors, sometimes accompanied by dates, as well as certain phrases or emblematic expressions. Given that this sector does not constitute a central focus of the objectives of the present report, only one representative example of these modern manifestations is included.



KA1-I

**Code:** KA1-I.

**Type of surface:** Wall

**Arrangement:** Associated

**Number of associated motifs:** 5

**Relationship with other motifs:** Proximity

**Technique:** Line

**Description:** Contemporary graffiti made with spray paint.

## Area B

This area has an approximate length of 25 meters and begins with a bend oriented toward the northeast, which connects, through a bifurcation, to a conduit located to the west that leads to the southern section of the cave. The presence of rock art begins in this area. A variety of motifs are observed on the longitudinal walls. In total, four sets and four individual motifs were identified.



KNB1-I

**Code:** KNB1-I.

**Type of surface:** Wall

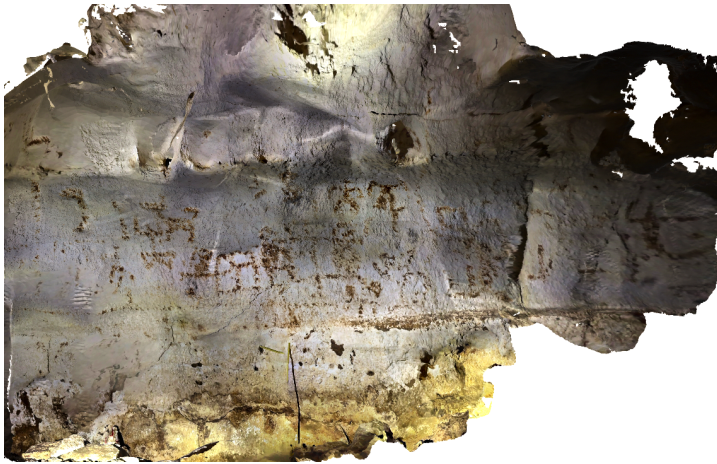
**Arrangement:** Isolated

**Number of associated motifs:** 2

**Relationship with other motifs:** Proximity

**Technique:** Stencil

**Description:** Cross-shaped image.



**Code:** KNB3-1.2

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 13

**Relationship with other motifs:** Association and proximity

**Technique:** Line

**Description:** Human and animal motifs, as well as abstract figures, are present along the wall.

KN-B2-1.2

Wall containing a set of images



**Code:** KNB3-1.3

**Type of surface:** Wall

**Arrangement:** Grouped,

**Number of associated motifs:** 4

**Relationship with other motifs:** Association and proximity

**Technique:** Line

**Description:** Zoomorphic figures depicted in profile and facing one another. On the left side, a quadruped (possibly a dog) is represented, while a primate is depicted on the right side. Additional associated images are present on the right-hand portion of the panel

KN-B3-1.3



**Code:** KNB4-1.5

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 3

**Relationship with other motifs:** Overlap

**Technique:** Line

**Description:** Set including human and zoomorphic figures, as well as a cross executed in a different pigment and superimposed over the figures.

KN-B4-1.5



KN-B3-IV

**Code:** KNB3-IV

**Type of surface:** Overhang

**Arrangement:** Isolated

**Number of associated motifs:** N/A

**Relationship with other motifs:** Proximity

**Technique:** Line

**Description:** Zoomorphic motif. This composite image depicts the profile of an animal's head with an elongated body that curves upward.

### Area C

This area extends for approximately 90 meters and is oriented toward the northwest. The passage presents slight curves, fissures, and lateral conduits that prevent it from being completely linear. The walls display several recesses, and the area ends just beyond a column that gives rise to new passages toward the north. In total, ten sets, two panels, and eleven individual motifs were identified.



KNC3-1.9

**Code:** KNC3-1.9

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 2

**Relationship with other motifs:** Association

**Technique:** Line

**Description:** Anthropomorphic figure associated with a primate. The entire body is represented, possibly corresponding to a female figure, although the head is the best-preserved element. A notable feature is the presence of circular forms painted in charcoal at the center of the eyes.



KNC5-1.12

**Code:** KNC5-1.12

**Type of surface:** Column

**Arrangement:** Grouped

**Number of associated motifs:** 8

**Relationship with other motifs:** Overlap and association,

**Technique:** Line

**Description:** Geometric, anthropomorphic, and abstract motifs are present. A cross executed in a pigment markedly different from the rest of the paintings is superimposed over the figures.



KNC3-X

**Code:** KNC3-X

**Type of surface:** Wall and ledge

**Arrangement:** Panel

**Number of associated motifs:** 8

**Relationship with other motifs:** Proximity

**Technique:** Stencil

**Description:** Handprints are distributed on the wall in two sections: a group in the upper portion and another near the floor, where the images are barely perceptible. Due to their spatial proximity and technical characteristics, all were considered part of a single panel.



KNC3-XI

**Code:** KNC3-XI

**Type of surface:** Wall

**Arrangement:** Panel

**Number of associated motifs:** 4

**Relationship with other motifs:** Proximity

**Technique:** Printing

**Description:** Six handprints are present on the wall. All were considered as part of a single panel due to their spatial association and shared technical characteristics.



KNC1-1.2

**Code:** KNC1-1.2

**Type of surface:** Overhang

**Arrangement:** Grouped

**Number of associated motifs:** 5

**Relationship with other motifs:** Proximity, association

**Technique:** Line

**Description:** Protruding wall surface bearing anthropomorphic and geometric motifs, as well as a superimposed cross.



KNC2-1.5

**Code:** KNC2-1.5

**Type of surface:** Nook

**Arrangement:** Grouped

**Number of associated motifs:** 2

**Relationship with other motifs:** Association

**Technique:** Line

**Description:**

Composite motif that takes advantage of both a natural hollow and a protrusion of the rock surface, creating a visual effect that enhances spatial depth conditions.



KNC3-V

**Code:** KN-C3-V

**Type of surface:** Ceiling

**Arrangement:** Isolated

**Number of associated motifs:** N/A

**Relationship with other motifs:** Proximity

**Technique:** Line

**Description:** Spiral-shaped motif located within a recess in the ceiling. The image is not visible to the naked eye under normal lighting conditions.



**Code:** KNC3-VIII

**Type of surface:** Wall

**Arrangement:** Isolated

**Number of associated motifs:** 0

**Relationship with other motifs:** N/A

**Technique:** Line

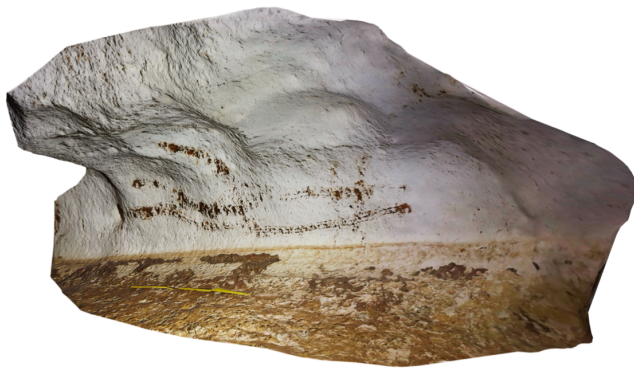
**Description:**

Motif depicting a schematic face. The border surrounding the face is faint and barely distinguishable.

KNC3-VIII

### Area D

This section corresponds to the beginning of the northern labyrinth, where five new continuation paths open and where the return route toward the southern side is also located. In this sector, only some of these paths are considered, which together total approximately 70 meters in length. The route is not linear, as natural columns alter the course of movement. The rock paintings associated with this bifurcation are characterized by their considerable length, reaching up to 20 meters in some cases, as a single painting may continue along the curvature of the passage. In total, one set and three individual motifs were identified. Given that this area marks the beginning of additional paths, it is likely that further motifs will be recorded and incorporated in later stages of the study.



KND1-I

**Code:** KND1-I

**Type of surface:** Wall

**Arrangement:** Isolated

**Number of associated motifs:** N/A

**Relationship with other motifs:** N/A

**Technique:** Line

**Description:**

Photogrammetric record of a dynamic zoomorphic figure, depicting a quadruped with a tail and horns. The lines follow the natural morphology of the wall surface.



KND3-II

**Code:** KND3-II  
**Type of surface:** Wall  
**Arrangement:** Isolated  
**Number of associated motifs:** N/A  
**Relationship with other motifs:** N/A  
**Technique:** Line  
**Description:** Photogrammetric record of an elongated zoomorphic figure, possibly representing a snake.



KND3-III

**Code:** KND3-III  
**Type of surface:** Wall  
**Arrangement:** Isolated  
**Number of associated motifs:** N/A  
**Relationship with other motifs:** N/A  
**Technique:** Line  
**Description:** Schematic anthropomorphic figure depicted in motion, holding an object in one hand. The scene may be associated with a hunting-related activity.



KND2-1.1

**Code:** KND2-1.1  
**Type of surface:** Wall  
**Arrangement:** Grouped  
**Number of associated motifs:** 3  
**Relationship with other motifs:** Association  
**Technique:** Line  
**Description:** Elongated motif created through the joining of lines. The painting follows the natural curvature of the walls. The first photograph presents a view from one end, while the second image consists of a photogrammetric record intended to emphasize the depth and curvature of the space.



## Areas E and F

Areas E and F correspond to a single passage that begins after the bifurcation, oriented toward the southern side, and concludes at the intersection that connects it with Area B. The two areas are distinguished from one another by the presence of a pronounced curve. Area E has an approximate length of 53 meters, while Area F extends for 42 meters. On both walls of the cave, multiple images are observed, mainly organized into sets and panels. In total, four main sets and three panels were identified in Area E, whereas Area F contains one individual image, two sets, and one panel. It should be noted that, particularly in these two sections of the cave, determining the precise beginning and end of the sets is complex.



KNE2-1.2

**Code:** KNE2-1.2

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 6

**Relationship with other motifs:** Overlap, association,

**Technique:** Line

**Description:** Set of abstract images.



KNE2-I

**Code:** KNE2-I

**Type of surface:** Wall

**Arrangement:** Panel

**Number of associated motifs:** N/A

**Relationship with other motifs:** Proximity and overlap

**Technique:** Lline

**Description:** Scene comprising at least six human figures depicted in different positions and activities. The composition recalls representations observed on Maya polychrome vessels. A cross is superimposed on the panel.



KNE2-II

**Code:** KNE2-II

**Type of surface:** Wall

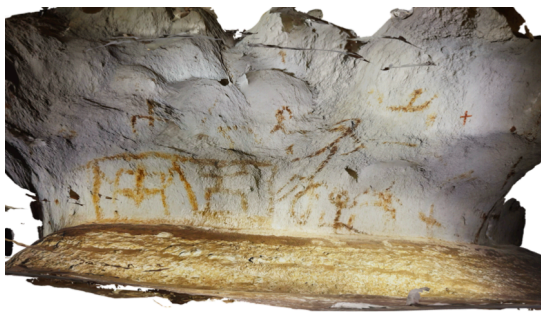
**Arrangement:** Panel

**Number of associated motifs:** N/A

**Relationship with other motifs:** proximity

**Technique:** Lline

**Description:** Scene featuring three schematic anthropomorphic figures with raised hands. The central figure is smaller in scale, suggesting that it may represent an infant.



KNE2-III

**Code:** KNE2-III

**Type of surface:** Wall

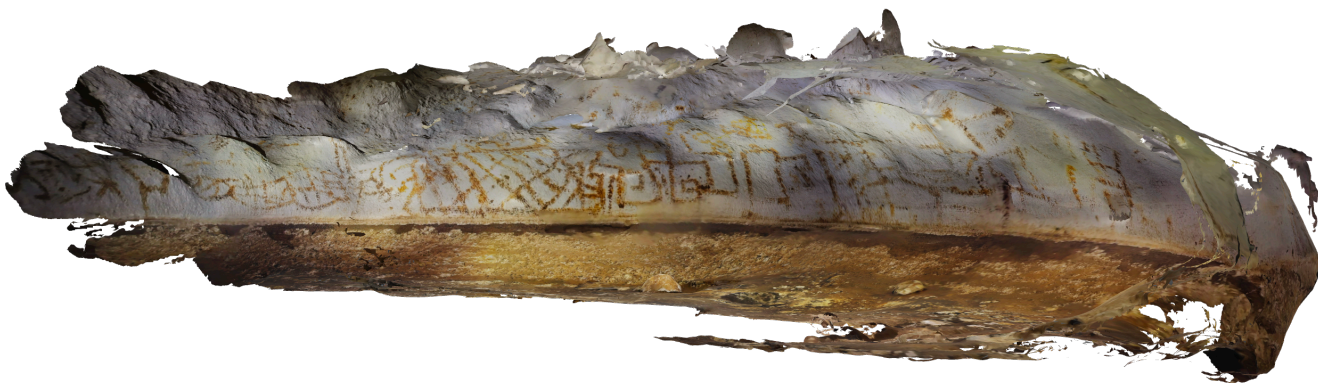
**Arrangement:** Panel

**Number of associated motifs:** N/A

**Relationship with other motifs:** proximity

**Technique:** Lline

**Description:** Two schematic anthropomorphic figures, one with its hands down and the other with its hands up. The panel is framed by a rectangular line.



KNE2-IV

**Code:** KNE-IV

**Type of surface:** wall

**Arrangement:** Panel

**Number of associated motifs:** N/A

**Relationship with other motifs:** Proximity

**Technique:** Line,

**Description:** The upper photogrammetric record illustrates the morphology of the wall, the length of the panel, and the associated sets documented in this area. The main image is suggested to represent a turtle, comparable to those depicted in Maya codices.



KNF1.1.1

**Code:** KNF1-1.1

**Type of surface:** Wall

**Arrangement:** Panel

**Number of associated motifs:** 3

**Relationship with other motifs:** Proximity

**Technique:** Line

**Description:** Set of images located near a bend in the passage.

## Area G

This area corresponds to an intersection of three paths that links the northern and southern areas and leads toward the entrance. It comprises approximately 46 meters of conduits and is characterized, in its central portion, by the presence of large white rocks. Although this section is spatially significant, only a single painting was recorded. From this point onward, the route continues toward the south.



KNG1

**Code:** KNG1-I

**Type of surface:** Wall

**Arrangement:** Isolated,

**Number of associated motifs:** N/A

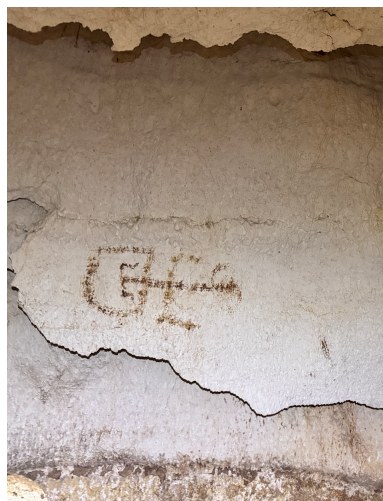
**Relationship with other motifs:** N/A

**Technique:** Line

**Description:** Cruciform figure on a rectangle.

## Area H

This area begins at a curve and presents several small lateral bifurcations that reconnect with the same path. Overall, this area extends for approximately 58 meters; however, only one gallery is wider, while the remaining passages are narrow conduits. The preliminary record identified one set and one individual figure in the main gallery. Additional sets will be incorporated into this section in subsequent stages of the study.



KSH1-I

**Code:** KSH1-I

**Type of surface:** Overhang,

**Arrangement:** Isolated

**Number of associated motifs:** N/A

**Relationship with other motifs:** Proximity

**Technique:** Line

**Description:** Geometric pattern



KSH1-1.1

**Code:** KSH1-1.1

**Type of surface:** Overhang,

**Arrangement:** Grouped

**Number of associated motifs:** 3

**Relationship with other motifs:** Association,

**Technique:** Line and print

**Description:** two handprints, an abstract figure, and a profile depiction of a primate with an open mouth are present.

## Area I

This area corresponds to a passage section measuring approximately 39 meters, oriented slightly toward the southeast. It includes a main gallery and several fissures in which paintings are located. The preliminary record identified one individual figure and four sets. Additional sets will be incorporated into this section in later phases of the research.



KSI1-2

**Code:** KSI1-2

**Type of surface:** Wall, nook

**Arrangement:** Grouped

**Number of associated motifs:** 8

**Relationship with other motifs:** Overlap, association,

**Technique:** Line

**Description:** Motifs arranged in reticulated patterns across two levels of the cave's morphology. Associated with the main image are additional geometric figures, including characters resembling letters of the alphabet.



KSI1-4

**Code:** KSI1-1.4

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 2

**Relationship with other motifs:**

Association,

**Technique:** Line

**Description:** Zoomorphic figures, possibly representing an amphibian and a fish.

## Area J

This is a linear conduit whose terminal end leads to a bifurcation where the southern labyrinth begins. It measures approximately 56 meters in length. This section primarily contains complex sets of paintings. The preliminary record identified one individual figure and seven sets. Additional sets will be incorporated in subsequent stages.



KSJ1-1

**Code:** KSJ1-1

**Type of surface:** Wall

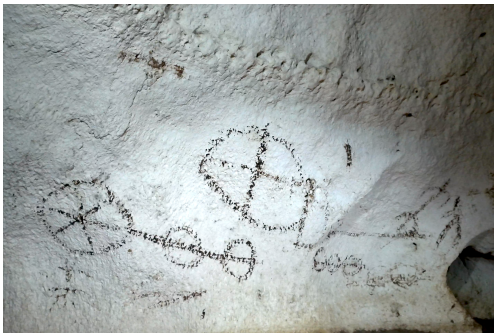
**Arrangement:** Isolated

**Number of associated motifs:** N/A

**Relationship with other motifs:** Proximity

**Technique:** Line

**Description:** Zoomorphic motif depicted in profile. The figure presents four legs, a tail, and horns. Abstract motifs are visible within the enlarged abdominal area.



KSJ1-1.1

**Code:** KSJ1-1.1

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 5

**Relationship with other motifs:** Association,

**Technique:** Line

**Description:** Circular geometric figures of varying sizes.



KSJ1-1.1

**Code:** KSJ1-1.2

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 8

**Relationship with other motifs:** Association

**Technique:** Line

**Description:** A diversity of anthropomorphic, zoomorphic, and abstract motifs is present. Variations in pigment suggest that the images were executed at different times.

## Area K

This area corresponds to the beginning of the southern labyrinth. The passage is oriented east–west, and six secondary paths bifurcate along the southern wall. It has an approximate length of 36 meters. The preliminary record identified four sets; however, additional sets are expected to be incorporated in later stages of the study. Code: KSK1-1.1

**Type of surface:** Wall



KSK1-1.1

**Arrangement:** Grouped

**Number of associated motifs:**

**Relationship with other motifs:** Association,

**Technique:** Line

**Description:** Zoomorphic figures are depicted. The image on the left represents a canid rendered with refined and controlled lines, whereas the figure on the right displays more rudimentary execution.

**Code:** KSK2-1.2

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:**

**Relationship with other motifs:** Association, overlap

**Technique:** Line

**Description:** This image depicts a schematic anthropomorphic figure associated with a rectangular form. Differences in pigment indicate color superposition, suggesting that the motif was repainted.



KSK2-1.2

## Area L

This area corresponds to the last section documented using LiDAR technology. The preliminary record identified two sets, although additional sets are expected to be incorporated in later stages. This section measures approximately 56 meters, where the passage bifurcates and continues toward the southern side.



KSL1-1.2

**Code:** KSL1-1.2

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 5

**Relationship with other motifs:** Association

**Technique:** Line

**Description:** Along the wall, a series of motifs is visible, among which a possible insect figure can be distinguished.

### Area M

This area corresponds to the continuation of the southern side at the beginning of the southern labyrinth. New paths bifurcate within this section. It measures approximately 65 meters in length and corresponds to the point at which LiDAR documentation concluded. The preliminary record identified three sets; however, additional sets are expected to be incorporated in later stages of the study.



KSM1-1.1

**Code:** KSM1-1.1

**Type of surface:** Wall

**Arrangement:** Grouped

**Number of associated motifs:** 4

**Relationship with other motifs:** Association

**Technique:** Line

**Description:** Geometric figures associated with a clay bank. A rectilinear spiral and additional abstract lines are present.