

Record A (Principal record)

Record A is used to register a new cave. However, you may also use Record A if the cave you explored is already registered, but only very poorly documented. It is also advisable to complete Record A if you have found a sizeable extension to a known cave, say, a 300m-long passage in a previously known 20m-deep pit.

Record A comprises four pages (double A3 format). The first page is the most important, as it contains details of the basic features of the cave, which will later be included in the database. You should always include a cave survey (Record E) when reporting on a new cave, as it is the basis for cave identification. Other supplements are welcome, though not mandatory: cartographic data (Record C), photographs (Record F), table of measurements (Record G) and cave condition (Record H).

Record A, page 1

The first page is dedicated to cave identification. The most important fields are those that define the cave entrance location: Access starting point, Access, Gauss-Krüger coordinates and Entrance altitude. These ought to be defined as precisely as possible, as any other data are meaningful only if one can find the cave. If measured, also include Bearings and GPS coordinates – WGS84. Yet another important data item is the cave size. If the reader cannot distinguish various lengths, the Passage length and Vertical range at least should be filled in.

Registry number

If you carried out research in an already registered cave, fill in its registry number. This is applicable in the case of work in a cave that is already registered, but poorly documented. In most cases, however, research in pre-registered caves is reported using Record B. If you are not sure about the cave's identity, it is better to leave this field empty (or complete it in pencil). Any theories about the cave's identity can be explained in the Notes and personal impressions field.

Only check The cave is not registered box if you are positive that the cave is not registered.

Document designation (Leave blank!)

Leave it blank as it will be entered by the Cave Registry.

Record number

For your own identification of records.

Date of visit

Insert the date of the exploration. If there was more than one visit, write the interval (e.g. 26. 8. – 18. 9. 2003). If the precise date is not known, insert the most probable date.

Date of record

Insert the date that the record was completed.

Cave name

Insert the cave name. If the cave has more than one name, then choose one of them as the »official« name and write the others (synonyms) in brackets. This should only be applied if

these are locally known names. Do not give the cave more than one invented name! The name should be in the Slovene language – if it is written in any other language, the Cave Registry will translate it into Slovene and use the translated form as the official name. Explain the name's origin in the Origin of cave name field on page 4. See the Recommendation of cave name choice section for guidelines on choosing appropriate cave names.

Organization

Insert the name of the club, society or institute that explored the cave. If the work is a collaboration between several organizations, you can include all of them, but the first should be the one the person mentioned in Author belongs to. If you explored the cave on your own, outside any organization, then leave the field empty.

Author

Enter the author name and surname; the author should also sign at the bottom of page 4.

Municipality

Enter the name of the municipality where the cave is located. If you do not know it, leave the field empty.

Landowner

If the cave entrance was shown to you by local people, they will surely know on whose property it is located. If possible, write down the owner's name and address. If it is in a public forest, write down the sector number, which is usually written on the larger trees.

Geographical location

Explain the cave location very briefly, in five to ten words. It should be written in such a way that anybody broadly familiar with the region realizes where the cave is. If possible use names from the »Atlas Slovenije«, the widely available atlas at the 1:50,000 scale.

Nearest settlement

It is best if you copy the name from the »Atlas Slovenije«, the widely available atlas at the 1:50,000 scale, where village names are written in block capitals (unlike hamlets or isolated farmsteads, which are written in small letters). Instead of the closest village, the name of the village used for access can be inserted, or the home village of the landowner or guide.

Access starting point

The point from where the Access to the cave is described must be clearly defined. It should be identifiable from the »Atlas Slovenije«, the widely available atlas at the 1:50,000 scale, and anybody should be able to find it. Applicable starting points are settlements, important crossroads or sizeable isolated buildings (such as a church, castle or mountain hut). Avoid references that are too general, such as the caving club headquarters, big city, region, etc.

Access

The access description is one of the most important parts of the record, and often more useful than the coordinates and bearings. The access description starts at the Access starting point and finishes at the cave entrance, where it overlaps with the description of Immediate

surroundings field. It should be described as a polygon, from recognizable point to recognizable point. If a turning is easy to miss, it is advisable to add a warning, such as, »*If the road starts to descend, you have missed the way*«.

Ensure that you use reference points that are clearly noticeable, are distinguishable from similar objects and – above all – are permanent. Good examples are forest roads, houses and other solid buildings (bridges, monuments, chapels, reservoirs, etc). As these objects can be common in the region, describe them precisely (e.g. *chapel with a sculpture of a saint, 1.5m-high chapel, chapel at a spring*, etc). Avoid features that are too general or are not permanent (e.g. *old chapel, red chapel*). If there are no permanent sites in the area, combine the description with topography: »*The track climbs gently towards the SW; after 250m there are two dolines on the right...*«. In this manner, one would still be able to follow the track, even if it became overgrown.

If fixing the location is very difficult, it is a good idea to measure a polygon from the nearest clear reference point to the cave. In such cases, a sketch should be added, with the polygon and basic topography marked on it. A guide is worth mentioning only if you can provide an actual name and contact address.

The description should be written in such a way that the reader need only use a compass and a map. Altimeter and GPS data are welcome, but they should not be an essential part of the description. One should also be aware that commonly the reader might not search for the cave in the same season. Be careful to write in autumn, for example: »*The cave entrance is clearly seen under the trees...*«, as in the spring this may no longer be true.

Bearings

This field is used when recording caves in open terrain, where describing and fixing a location is difficult, such as on mountain plateaus. For each bearing the direction from the cave to the object, in degrees, is written in the first field and the object name in the second. Only clearly visible and unmistakable objects are applicable, such as sharp mountain peaks, mountain huts, isolated churches. Inappropriate objects include flat peaks, unclear bumps on ridges, large settlements, etc. The chosen objects should be clearly identifiable on a map, preferentially on the »Atlas Slovenije«, the widely available atlas at the 1:50,000 scale.

Details of map extract (map type, scale, number, date/edition)

Include data about the map extract embedded in the frame underneath: map type, scale, number in series and date/edition (year of publication).

(frame for map)

The main purpose of the map extract is to provide an approximate location of the cave easily. It is advised that you use the »Atlas Slovenije«, the widely available atlas at the 1:50,000 scale, or a 1:25,000 scale topographical map. Do not use maps that are too detailed, neither non-topographic maps. Map characteristics should be written in the Details of map extract (map type, scale, number, date/edition) field. The location of the cave should be clearly marked on the map. If necessary, mark any other caves or sites that are important for cave identification (especially the ones mentioned in Access). It is advisable to add a separate sheet with an extract from a more detailed map, say at 1:5000 scale (this is regarded as Record C). This is especially useful if it is difficult to provide directions.

Cave type

Describe the overall cave shape in just a few words, e.g. *diagonal cave with entrance pit*. If possible, ascribe one of the pre-defined types to the cave, e.g. *5.2 horizontal cave* (see the Cave type table section).

Gauss-Krüger coordinates (mandatory!)

This is probably the most important field of the record. Use the national Gauss-Krüger coordinate system and **not** the WGS84, applied in GPS systems (these data are entered in GPS coordinates – WGS84). The grid is printed on the topographic maps. The leading »5« is already inserted in the field, and you should add kilometres (three digits) and metres (three digits). They are separated with a double bar. In most cases you will not be able to determine the location to one metre, so in such cases put a zero in the last metre digit position. A typical coordinate of 5435480 (5435km, 480m) is correctly inserted as |5|4|3|5|/|4|8|0|. The first field is the Y coordinate (west-east), marked with a right-pointing triangle; the second is the X coordinate (south-north), marked with an upright triangle.

It is very important to write the source, from which you obtained these coordinates (based on). It can be a map (write the type, scale, number in series and edition) or GPS (write the model, and possibly the precision). If you determined the location with the GPS, make sure you used the national Gauss-Krüger system, as the difference between this and the WGS84 ellipsoid is over 1km! The parameters for the Slovene national grid (D48) are the following:

UTM grid	
longitude origin	E 15.0°
scale	0.9999
false easting	+500,000
false northing	-5,000,000

datum	
DX	+667.0
DY	-205.0
DZ	+472.0
DA	+739.8
DF	+0.10037483

If the cave has several entrances, locate the one that you described in Access. Additional entrances can be described under Notes and personal impressions.

GPS coordinates – WGS84

Use exclusively the WGS84 ellipsoid, with the following digits: degrees (first two boxes), minutes, seconds, hundredths of seconds; e.g. |1|4|/|2|3|/|5|1|/|9|7| (= 14°23'51.97"). For longitude the leading »1« is already printed, as is the leading »4« of the latitude. If you did not determine the location with a GPS, leave the field empty! The first field is the longitude (west-east), marked with a right-pointing triangle, the second is the latitude (south-north), marked with an upright triangle.

Entrance altitude

Insert the altitude above sea level. If possible, do **not** use GPS for altitude measurement as the difference between the WGS84 ellipsoid and local geoid is more than 50 metres in altitude.

Write the source of the measurement in the on field: map (type, scale, number, edition), altimeter (type, precision) or GPS (type, precision).

Polygon length

The polygon length is the sum of all the distances measured in the cave, including perimeter measurements of large halls, closed loops, etc, but it does not include the transverse passage profiles. If only passage lengths were measured, with no auxiliary measurements, the polygon length equals the Passage length. In general, however, the polygon length is always longer than the passage length.

Passage length

The passage length is the sum of all the measurements along the passage. Auxiliary measurements are not included. The measurements are not projected into the horizontal, i. e., the passage length of a 20 metre pit is 20 metres. The passage length of a completely horizontal cave equals its projected horizontal length (Horizontal length); the passage length of a completely vertical cave equals its Vertical range. If you are not familiar with the three »lengths«, at least the Passage length should be inserted.

Horizontal length

Horizontal length is the length of the passages as projected onto a horizontal plane. The horizontal length of a completely horizontal cave equals its Passage length; the horizontal length of a completely vertical cave equals the diameter of the pit.

Vertical range

The vertical range is the difference between the highest and the lowest point in the cave. In a pit the vertical range equals its depth. In a completely horizontal cave the vertical range equals the highest point of the passage. However, only measured values should be taken into account. Do not include vague estimates of the heights of chimneys that nobody has climbed or measured.

Entrance dimensions

Enter the cave entrance width and height, e.g. $5m \times 2m$ (= the entrance is 5m wide and 2m high). In vertical entrances (pits) enter both dimensions (entrance length and width) as well, although the order is not important.

Entrance pit

Fill in this field only if the entrance is vertical. The shortest vertical should be written. The bottom is regarded as being where there is no need for further climbing, not just the first bolt or step on the wall.

Internal pits

If there are additional pits in the cave after the entrance pit, write in their depths. If a pit was not explored to the bottom, add a plus sign beside its furthest explored point, e.g. »25m+«. Chimneys can be written if they have a horizontal continuation. In this case a plus sign is added in front of the size, for convenience add a minus for pits in this case: »-45m« (= pit), »+15m« (= chimney).

Siphons

Write the length and depth of the siphons, if any, e.g. »30m / 4.5m«. If the cave was visited in different seasons, write the values for low water level.

Record A, page 2

The second page of Record A is dedicated to the cave description, including its surroundings, entrance, internal parts and contents. It is collectively called the Cave morphology. There is plenty of space to write about the cave morphology, with no need for specialist knowledge.

Immediate surroundings

Insert a short description of the terrain around the cave. Give its basic characteristics: slope, inclination direction, presence of rocks, soil, etc. Vegetation should be briefly mentioned, such as forest type, visibility, penetrability, etc.

Entrance and entrance passage(s)

The entrance passage of the cave is regarded as where there is enough natural illumination to allow safe movement without artificial light. This includes shallow entrance pits, passages just inside the entrances of horizontal caves, etc. Very small caves are generally entirely included within this category.

The description should be based on the basic features and dimensions. Do not forget to include technical characteristics if appropriate, such as bolts locations, which potential dangers should be taken into account, etc.

Internal passage(s)

The internal passages are generally considered to start where there is not enough natural light to allow safe movement through the cave without artificial illumination. Always describe from the entrance along the main passage into the cave. The description should »guide« the reader through the cave, with the emphasis on basic features (directions and dimensions). It is advisable to include more important measurement points in the description and repeat them on the cave survey (e.g. »At point 12 there is a 10m-deep pit«.). Avoid using words like *substantially*, *close*, *less*, etc – use numbers instead (*twice*, *5 – 8m*, *several tens of metres*, etc). Use plenty of bearing directions; they should always accompany descriptions like *left* or *slightly right*.

Simultaneously, present other features worth mentioning, like floor type (mud, stones, water), dripstones, etc. Do not forget the technical characteristics (potential dangers, bolts, etc). Write also which parts of the cave were not explored in detail, where continuations are suspected, etc. A useful parameter in larger halls or chambers is an estimation of the volume.

If there is not enough room in the space provided, add a line: »Continued on separate sheet«, and continue the description on a page of its own. In this case do not forget to write the cave name, your name, the organization and the date at the top of the page.

Cave sediments, interesting features and forms

Describe the natural objects you found in the cave. This includes sediments (type, where, quantities), water-carried material (branches, leaves), guano, carcasses, etc. Limestone features should be described as well. Human-related objects are described in the Pollution and other human impact field.

Record A, page 3

The third page is dedicated to Scientific data about the cave. Although most cavers are not professionals in geology or biology, it is still easy to note a few observations. Even the report »*We did not find anything*« or »*We did not observe*« is a useful contribution.

Geological

The field is dedicated to data about the rocks. Even without geological knowledge one can note the bed thickness, inclination angle, the presence of faults and joints, whether the rock is brittle, etc. Ideas about the cave's mode of formation can also be given here.

Hydrological

Hydrological data are related to underground water. If the cave is dry, simply note that fact. Small pools or drips from the ceiling are also worth mentioning. In the case of an underground river, the following data are of interest: flow direction, average flow (litres/second), clarity/muddiness, water level, temperature. Do not forget to mention rainfall during the past week. Siphon descriptions also fit in this field.

Meteorological

This field is used mainly for description of air currents. Note where air currents are present, how strong they are, how they were measured, and also note the temperature outside the cave.

Ice conditions are also reported in this field: where, how big, in which form (icicles, bulk ice, ice crystals, frozen lake, etc). Do not forget to mention the outside temperature, and a report on the weather for the previous weeks can also be useful.

Biological

Anybody can write a few basic notes on the animals seen in the cave. Count the bats, describe them in a few words, were they active or not, where were they seen, etc. Insects and spiders are also commonly encountered. Animal remains or traces can be reported too (faeces, footprints, bones, etc).

Archaeological

Traces of past human residence or visits are reported here. This includes remains of old walls, fireplaces, various artifacts, possible rock paintings, etc. Do not report on modern graffiti or litter here – they should be written in the Pollution and other human impacts field. Legends and stories from past times are reported in the History field.

Economic

If the cave is appropriate for any economic use, or is being used in this way, write it here (storeroom, watering place, tourism). If the cave was used in any way, but is no longer used, record this as well. The »economic use« of the cave as a rubbish dump should be recorded in the Pollution and other human impacts field. In this case it is highly recommended to submit a separate Record H.

Pollution and other human impacts

This field is mainly dedicated to the description of litter in the cave. Describe the type of litter, estimate the volume and note if the littering has ceased or is still going on. Remains left

by other cavers are also mentioned here: spent calcium carbide, telephone wires, graffiti, etc. The Record H is specifically dedicated to pollution and if a degraded cave is encountered, that form should be submitted too.

Record A, page 4

Concluding remarks are written on the fourth page.

History

History is the collection of historical data on the cave. It is partly connected to the Archaeological data, except that oral information is acceptable in the History section. Most such information can be gathered from the local population. Even if the story sounds more like a fairy-tale, it is worth reporting. If the cave has a long history of exploration, note this too.

In the western part of Slovenia many caves were assigned an Italian registry number (VG – Venezia Giulia) between the World Wars. If such a number exists, note it here.

Origin of cave name

Describe how the name of the cave arose. If it is a local name, ask the local people what it means. There may be several names for one cave. If the name is your (or your group's) invention, describe the background. This may be very useful for resolving possible future disputes about which name is authentic, and can also help with understanding the orthography of more difficult names.

Technical difficulty and equipment required

Make sure to describe the equipment that is necessary for a visit: how many ropes, plates, carabiners; perhaps a boat, additional carbide. Warn especially of major difficulties like rock brittleness or instability, sudden water level changes, severe narrows, etc. Note also the condition of technical aids in the cave (traverses, fixed ladders, bolts, etc).

Research recommended

After your exploration is over, it is fair to pass on hints to future explorers, about whether it is worth carrying out further research in the cave. Mention air currents (draughts), narrow or low passages that might be extended, unclimbed chimneys, etc.

Notes and personal impressions

This is the field for »all the rest«. You can comment on the cave's identity, e.g. *»Based on the entrance shape the cave probably corresponds to cave No. ..., but its location is over 1km away from the recorded position«.*

References

Here you can list books, articles and web pages where further information on the cave can be found.

Participants

List the people who participated in the research, if possible with full first names and surnames. If the participants belong to different societies, add the related society names in brackets.

Measured by

List the people who participated in the cave measurement.

Position determined by

List the people who helped to determine the cave's position.

Photographs by

List the people who participated in the cave photography.

Samples collected by

List the people who collected geological, biological or other samples.

Measuring equipment used

Describe the equipment used for cave measurement and position determination. Rather than just a simple list (e.g. *compass, metre tape, etc*) add details of the models and their precision. If you improvised, record this too, e.g. »*We measured the distance using a rope*«.

___ on ___

Write the place and date of the record.

Stamp

Add the official stamp of the society or organization you quoted in Organization on page 1, if available.

(signature)

Signature of the author of the record, whose name is supplied in Author on page 1.