Total Area Shaft Bashing Guide, 2007

Containing shaft bashing information for all areas

Contents

How to shaft bash

1. Find a good area (see below).
2. Take with you: tackle, map, compass, shaft bashing guide (the correct volume), paper, pencil, identification tags, punches and nails.
3. Find a promising entrance, not just a shakehole that obviously chokes.
4. Explore the cave.
5. Mark the cave with an identification tag. Include the cave number and one of the following:

   ◯ if the cave has not been descended

   ⊘ if the cave has been descended, but not bottomed

   ⊗ if the cave has been bottomed.

   Do this discretely, not so that the marking can be seen by passing ICONA guards.
6. Make notes on the location. Include the following
   - Approximate position, e.g. 'on the left hand side of the Valle Extremero, 100m above the woods'. Note that left and right refer to directions when looking *down* valleys.

- Proximity to other features, but only include ones which other people are likely to be able to find. Avoid references to other caves, unless they are well known or easy to find. See the description of 37/7 as an example of how not to do it.
- GPS coordinates. You should be using the UTM WGS84 coordinate system. (On the standard Garmin etrex GPS, select "set-up" then "units"; select "UTM/UPS" as position format, and "WGS 84" as map datum.) To convert from WGS84 to European Grid add 108m E and 205m N.
- Take compass bearings to prominent features. It's best to pick near by features; it's no use saying 98° to the obvious entrance in the central massive, because it's on a bearing of 98° ± 2° from nearly all of our area.
- Note that there are some discrepancies between different maps. For example, the Mapa Topografico Nacional's Cabeza del Burro is Gustuteru's twin peak whereas Adrados's Cabeza del Burro is further west. MTN uses the name Las Salmonetas for the ridge marking the southern edge of the Top Camp area, whereas Adrados calls it Las Cabrones; MTN's Cabrones is further West. MTN called the F7 bowl Jous de Peña Blanca, whereas Adrados calls it Jous de Jorcada; Adrados uses the name Jous de Peña Blanca for the bowl to the South of F2. When describing locations of caves, please make it clear from which map you are working to avoid ambiguity.
- Note that some caves in this guide have had GPS coordinates recorded using European Grid (which agrees with the maps). When you spot such a cave, please make a note so that it can be corrected. To convert from European Grid to WGS84 subtract 108m E and subtract 205m N.

Note that it is not enough just to give the GPS coordinates.

7. When you get back to camp, write this all up in the log book. Include a concise description and location. If it's still going, say so and encourage people to go back.
8. If you find any errors or ommissions in this guide, please tell me (Gavin).
9. There should be a complete area guide at Ario, for reference. Please add notes to this, describing any finds, and making cross references to the log book. This makes updating the shaft bashing guide for next year much easier.

A note on areas and volumes

There are currently 15 areas:

Area 4 The area to the east of the Cabeza Julagua – Cabeza del Covu – Cabeza del Verde ridge, bounded to the south by the cliffs of Cabeza Llambria.

Area 5 The area around Ario, including the upper Valle Extremero (as far as the pond), the Green Ridge of Jultayu, the Jou La Cistra and the Xitu Col.

Area 6 The area around the Jorcada Blanca – Conjurtao ridge.

Area 7 The Jultayu bowl.

Area 8 The area between Xitu and Pico Gustuteru.

Area 9 The area around the huge shakehole La Jayada.

Area 10 The area on the far side (i.e. the Trea side) of the Green Ridge of Jultayu, and the lower Valle Extremero.

Area 11 The area behind the Cabeza La Forma – Cabeza Julagua ridge.

Area 12 The lower slopes of the gorge, overlooking Culiembro.

Area 13 The area beyond area 11, around Cabeza Muxa, and Vega Maor.

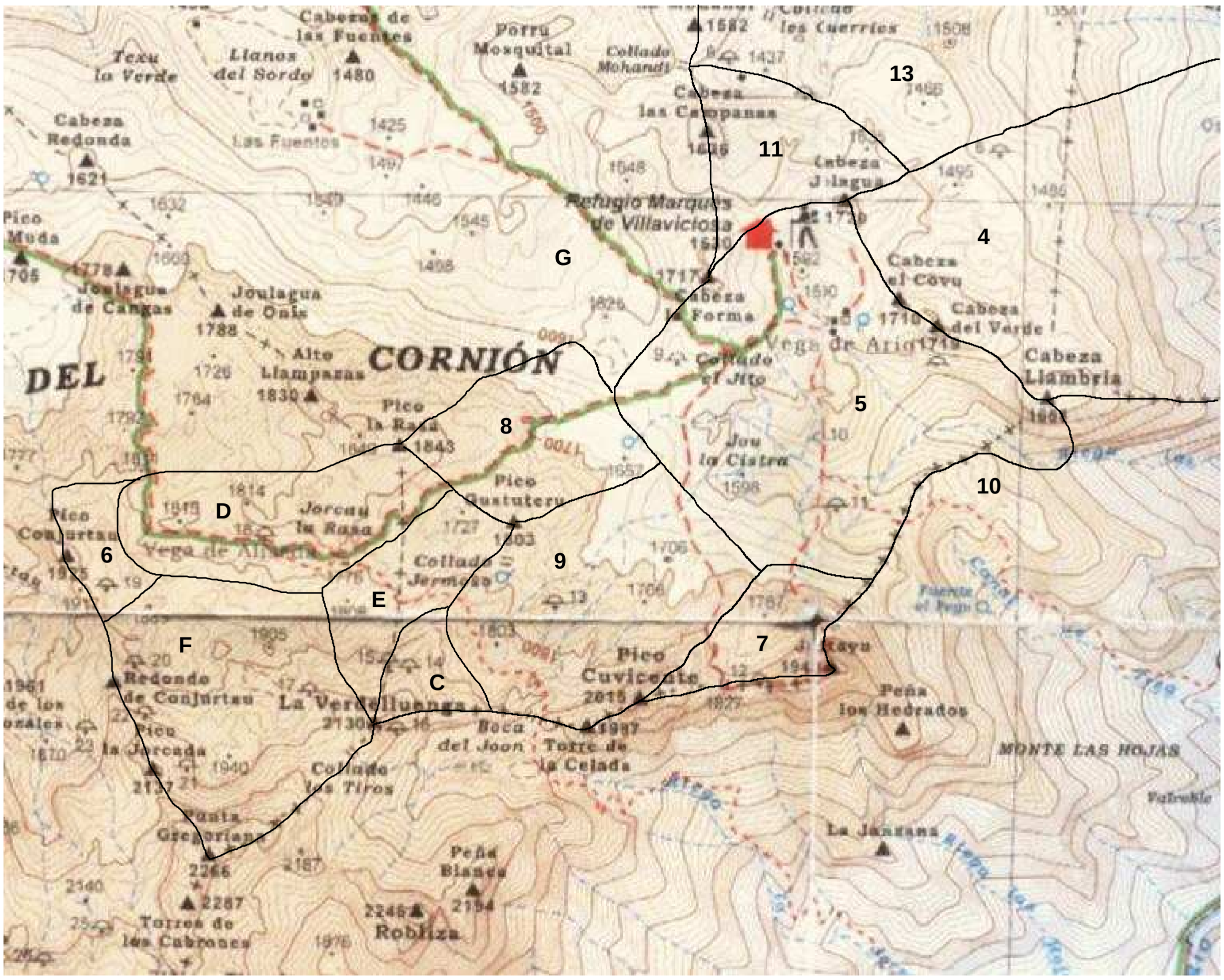
Area C The slope of La Verdelluenga above Boca del Joon.

Area D The Vega Aliseda, Jou de las Cuevas, extending as far east as the Joos La Manada Vieya.

Area E The area roughly between Verdelluenga, El Regallón and Gustuteru.

Area F The area around Top Camp.

Area G The area between sods 3 and 4.



Why the odd system of naming areas? Historical accident really. The original areas 1–4 were around Lagos. Then in 1979 when the expedition moved up to Ario, areas 5–9 were introduced. Then one year, they forgot the shaft bashing guides, and so made up names for some more areas (A–F). Area A had no caves in it, so has been dropped from this guide. Area B lay inside area 9, so I've renamed the caves. In 1987 a new area was explored, which was named area 4, as nobody could remember where the old area 4 was. Since then areas 10–13 and G have also been added.

There are four volumes of this shaft bashing guide:

Top Camp Area Covers areas 6, 8, 9 and C–F.

Ario Area Covers areas 4, 5, 7, 10, 11 and 13.

Gorge Area Covers area 12.

Total Area Covers all areas.

Make sure you have the correct volume before setting out.

Good places to shaft bash

Ario Area: There are a number of unfinished entrances in Area 4. It would be worth doing systematic prospecting, particularly over the likely route of 2/7.

It would be worth prospecting down the Valle Extremero, over the likely route of 2/7. Warning: this is very steep, and you will probably need a rope.

Most of areas 5 and 7 have been worked out in recent years. It might be worth revisiting 53/5 to try to find the source of the draught. It may be worth digging in The Valley of Dry Bones, again, in Pozu Jenga or at the eastern end. There are rumours of a large drafting hole somewhere down the Trea Valley—ask a pastor for directions. There are a few leads worth pursuing on the western edge of area 7, for example near 46/7.

Area 11 is now fairly worked out, although it may be worth looking further west than the Sistema Sierra Forcada, and the Dry Sump dig in 8/11 should be continued.

Top Camp: There are a few caves around La Jayada (areas 9 and C) that remain undescended. The area near the top of Cuvicente might be worth looking at (although it's a long walk from either camp). Caves higher up are likely to drop into upstream 2/7, while those lower down are more likely to go into C3/C4.

Areas D and E warrant some more attention. Caves here are likely to drop into updtream C3/C4.

If area F, there are a few caves still worth persuing. There are a number of entrances on Cabrones that remain undescended, and could be very deep.

Area 12: Several big entrances that look like fossil resurgances — hard to get to though.

Feel free to re-examine previously explored caves; many caves that had been thought to be bottomed have been extended.

Area 4

Area 4 is the region on the gorge side of the Cabeza Covu – Cabeza Julagua ridge. It contains a number of caves that have never been bottomed by OUCC.

⊘ 1/4 Pozu de la Roca Naranja

Location: Altitude: 1860m, Depth: 162m, Surveyed Length: 355m, Plan Length: 173m. The entrance of 1/4 is to be found by heading due North from the Ario bowl and climbing the ridge between Cabeza Julagua and Cabeza del Covu. From here the cairned path to Culiembro is followed for approximately 500m until a large depression is reached on the left of the path, with a very prominent orange rock in the bottom. The cave entrance is in the North wall of the depression almost immediately above a 5m cleft. 0344655 4789878.
Description: See Proc 13 or the guide to important OUCC caves for details.

⊗ 2/4

Location: Located on the rim of the same large depression containing 1/4 (the depression is easily recognised by the large orange rock within it) approximately 20m further around the rim of the bowl.

Description: A 2–3m climb down to a too-tight rift down which dropped rocks will rattle for several seconds. NOT diggable.

⊗ 3/4

Location: Located 200m south-west of 1/4

Description: A 10m pitch choked at its base.

⊗ 4/4

Location: To the right of the route down to 1/4. 0344830 4789465.

Description: A 10m pitch to a too-tight rift.

The next caves can be found by crossing the Cabeza Julagua – Cabeza Covu ridge, and following the valley down to a large bowl with a prominent tree in a cliff (bearing of 297° to Cabeza Julagua). This area is of interest because dowsing experiments have suggested that it lies above 2/7, beyond Choke Egbert.

⊘ 5/4

Location: 40m south-east of 7/4, bearing 294° to Cabeza Julagua in 10m diameter shakehole. A 16m pitch to a snow plug.

Description: Large shakehole with a wedged boulder (small rocks can be dislodged from behind this onto the pitch). 15m pitch lands on a snow-plug with a steeply sloping rift heading NW. A climb and ladder leads to more rift with a perched lump of snow. Pitch drops 20m. To NNE a small stream passage leads off but it is too small to follow. Digging here would be very time consuming. To NW three more shafts connect from above, presumably 7/4

⊗ 6/4

Location: Located in the same valley as 5/4. 0344817 4789491.

Description: A narrow free-climbable rift chokes about 10m down.

⊗ 7/4

Location: 295° to Cabeza Julagua, 100m south-east (down valley) from 9/4 and 40m south-west of the tree, down-valley from 6/4. 0344768 4789469.

Description: Boulder slope with 2m free climb leads to a chamber with no way on.

⊗ 8/4

Location: 75m from tree on bearing of 12°.

Description: A squeeze through a low rock arch leads to two 10m pitches which end in a choke.

⊘ 9/4

Location: 30m from tree on bearing of 335°, in cleft. Northwest of 7/4. Marked SIE ⊘. 0344721 4789525.

Description: At base of 18m entrance shaft, two shafts lead off. The left hand shaft is about 25m deep and completely choked at the bottom. The right hand one is about 8m deep and partly climbable although a ladder is recommended. At the bottom of this shaft a passage zig zags for a short way before coming to an end. On the outside of the second left hand bend is a 4m climb leading to a hole that was not investigated.

⊗ 10/4

Location: Located over the ridge from 5/4, in a green depression. Small hole between boulders in valley floor marked SIE O. 0344845 4789414, alt 1553.

Description: 3m climb down to the head of 15m pitch, rigged from a thread, which lands on a snow plug. At the bottom a bolt gives a 6m descent, with a squeeze past a second snow plug, onto third snow plug. Beyond the snow plug is a 6m climb down to a choked crawl. Most of the snow had gone by 2003.

⊘ 11/4

Location: Upslope from 10/4, marked SIE 1 ⊗.

Description: Descends about 20m, free climbable with care, to a snow plug. Near the bottom a slot on the left might be passable by a determined team with chisels, but doesn't look very promising.

⊘ 12/4

Location: In the col between Cabeza el Verde and Cabeza Llambria, in the south-east facing cliff, to the right and about 30m down from the col. 344785 4789147 (WGS84).

Description: A 10m diameter phreatic tube leads to a pitch. This is divided into two connecting shafts. The smaller of the two is 12m deep and lands in a boulder floored chamber with several possible ways on. To the right, downslope, are a bedding plane crawl, which quickly closes down, and a tight rift which was not explored. To the left, down slope, is a climb to a small passage which quickly closes down. Adjacent to where the ladder lands is a climb up to a small passage, which needs enlarging, but the passage seems to bell out beyond the constriction. At the bottom of the boulder slope a climb up (about 15m) to a visible passage was not attempted. From the top of the shafts, a squeeze past calcite opens out above the chamber. This is probably the same as 48/4.

⊗ 13/4

Location: 30m below the lowest ridge above the depression of 5/4. Insignificant partially choked cleft in cliff facing gorge (roughly north-east).

Description: Small pit contains animal remains, with rattling drop under boulders. No draught.

⊗ 14/4

Location: Crawl-in entrance above 13/4, going up-valley, at top of small cleft in cliff.

Description: Chokes.

⊗ 15/4

Location: Unnumbered shaft, by 7/4, marked OUCC 88 ⊗. 0344768 4789469.

Description: 8m free climb down shaft, with no way on.

⊗ 16/4

Location: In the right hand side of the valley containing most of the caves in area 4 is a visible cleft, which continues to the top of the valley; in the base of the bowl the cleft contains 9/4 and a small undescended shaft on the left-hand side of the valley. 0344700 4789518.

Description: 20m entrance pitch (spike, 2 bolt Y-hang, 2 deviations) lands on snow on a flattish floor. Ignoring the choked phreatic tube, there is a crawl over a stony slope into a chamber, filled at the bottom by a loose mud floor which 'sumps'. Traversing round to the right, through a window leads into another chamber. The write-up says: "It gets more complicated. See survey". Unfortunately no survey is included. Ends up in a 20m rift, which bells out. Other routes are possible at higher levels.

⊗ 17/4

Location: 15m north-east and upslope of 5/4.

Description: 5m sloping rift leads to impenetrable choke.

⊗ **18/4**
Location: Open entrance down valley from the first green depression over ridge east of 5/4, with picturesque Pozu arch.
Description: Chokes. Possible dig, but no draught.

⊗ **19/4**
Location: Hole in north-west face of depression just before the valley becomes steep.
Description: Chokes.

⊗ **20/4**
Location: Rock shelter in left wall of shattered valley north of 19/4 just below tree.
Description: Chokes.

⊗ **21/4**
Location: Entrance in small rock buttress at end of valley depression before valley becomes very steep. Altitude approximately 1465m.
Description: Short passage chokes.

⊗ **22/4**
Location: Rift entrance in shattered depression as valley becomes very steep. Altitude about 1435m
Description: Passage leads for 10–15m past a snow plug to a choke. Passage leads up to the right for 10m to a choked inlet.

⊗ **23/4**
Location: In valley notch overlooking steep section down to Culiembro, south-west from 22/4. 139° to top spire of right hand group of Central Massif. Altitude about 1435m.
Description: Dual pitches of 6 and 8m. Choked.

⊗ **24/4**
Location: In wide rock cleft, running down valley overlooking Culiembro, just before depression containing 22/4 and 23/4.
Description: 8m choked shaft.

⊗ **25/4**
Location: In the bottom of the valley running parallel to Covu–Llambria ridge at the bottom of a big cleft under Verde(?). Big walk-in entrance in right of valley over lip from 5/4. 0344945 4789544.
Description: Chokes.

⊗ **26/4**
Location: 150m south-east of 5/4 high up on a bank. A goat shelter with water resurging from the entrance. 0344902 4789430.
Description: Chokes.

⊗ **27/4**
Location: 5m to the right off the Culiembro path, 5 minutes over the Julagua ridge. SIE-marked shaft with beech tree in entrance. 0344393 4789754.
Description: Yorkshire style shaft with trees in top. 15m pitch to rock-filled rift. Faint draft issuing from 3 inch crack at far end.

⊘ 28/4

Location: Head East from Cabeza el Verde along a gulley which rises up and then dips down again towards a shakehole. Level with this shakehole to the right of the gulley is the entrance (hidden from view from this approach). 0344861 4789274.

Description: Entrance shaft (P7,P19) drops into chamber. Climb down through slot into large chamber (alternatively, rig pitch further along). Inlet to right leads to moonmilky area. Straight ahead leads to crawl through boulders, down to 4-way junction (Wobbly Rock Junction). To left is a crawl leading to a chamber. Climb over boulders to where rift narrows down: first lefthand bend is passable to wider section, but this needs widening in order to turn over for the next right-hand bend. Straight ahead from Wobbly Rock Junction, a tube descends to 3m drop into a chamber. the start of the SIE Route. The rift to the left closes down. Main route leads to 9m climb down to slot which is the top of the third pitch (P8). From the bottom of the third poitch, the fourth pitch follows immediately (P11). At the bottom, the rift becomes too narrow. To the right from Wobbly Rock Junction, a crawl, with holes connecting down into SIE route, leads into a flat area of breakdown, ending in a blockage with an enlargement — and a bone — visible beyond.

Pitch	**Rope**	**Rigging**
First pitch (P7)	40m	Thread backup; Y-hang off 2 spikes
Second pitch (P19)	“	Spike backup; bolt and spike Y-hang; needs deviation half way down
Climb (C9)	40m	Spike belay
Third pitch (P8)	“	Y-hang from two bolts; spike deviation
Fourth pitch (P11)	“	Bolt; bolt rebelay

⊘ 29/4

Location: To the east of Cabeza Verde is a collection of interconnecting bowls. On the rim between the largest bowl and the next one to the northwest is a 15–20m shaft, with a perched boulder above. Just across from 30/4. Faded SIE mark. Bearing Cabeza Llambria 163°. 0345016 4789308 ±8m, alt. 1557m.

Description: A 10m shaft drops onto a rocky floor. A man-sized hole drops down another 5m to a chossy slope leading down to a 10m pitch. The draught goes into a horizontal 4” slot which appears to turn vertical a little further in. Does not look hammerable. A large rift going back towards the first pitch goes for about 20m to a boulder-choked aven.

⊗ 30/4

Location: 20m from 29/4 and lower down. Marked SIE 3⊗. 0344906 4789437.

Description: 7m pitch, ends in a moonmilky boulder choke. Also recorded as 44/4.

⊗ 31/4

Location: Follow Culiembro path to 1/4, and then skirt round about 30m away from the bowl to pick up another path running up and down the hill. (Don’t follow too close to the bowl as htis leads to a shear drop overlooking the cave.) Uphill on the left (true right) is an 8m diameter walk in entrance. 0344613 4790020.

Description: Appears to have two ways on, but to the left ends immediately. To the right a climb leads to an 8m high, 2m wide draughting fossil passage. However, after 20m this promising leads meets a mud floor with no way on.

⊗ 32/4

Location: Downhill from 31/4 is a double bowl. On the ridge between then, at the side nearest the path — but invisible from the path — is a 4m diameter entrance.

Description: No way on.

◯ 33/4

Location: Over the ridge to the north of 31/4 is a 40m diameter shakehole. On the far side is a shaft, just above the path.

Description: Undescended.

⊗ 34/4

Location: West of 28/4. "I found a shaft just where I was expecting to find one."

Description: 5m free climbable shaft leads to chamber with no way on.

◯ 35/4

Location: In the next valley left (NW) of 31/4, at an altitude of 1420m, just above where a subsidiary valley joins from the left. The valley continues down to the pasture with the big brown boulders. Bearing to big brown boulders: 70°.

Description: An unlikely looking rift in the rock on the right of the valley, marked by a cairn by the entrance and another cairn above, and tagged as 34/4 (whoops!). Just round the corner is a shaft of maybe 30m.

⊗ 36/4, Pozu de la Garma de Joulagua

Location: Two adjacent holes (larger 0.5m by 2m) in slab just east of summit of Cabeza Julagua. Small, faint red paint marking by SIE. Bearings: Cabeza del Verde 150°, Cabeza del Covu 165°.

Description: 5m climb down to bouldery floor. No way on.

◯ 37/4, Pozu del Brigadoon

Location: Follow path to Area 4, up to the ridge. Instead of crossing the ridge between the cairns, continue to climb up to the ridge to about 6m above the height of the tow peaks and traverse around inside the valley at this height. About 50m away from the peaks is a dark green patch, above which the hole is located. But the hole can only be seen from the top of the ridge. This cave was found by Chris Vernon while he was lost in the mist, so the above description may be inaccurate.

Description: Undescended.

◯ 38/4

Location: About 100m from main col into Area 4, on bearing of 20°. Slightly higher than the cairn above the col, just below a rocky local maximum on the ridge. 0344250 4789732, alt. 1682m. (Previously described as: "0344251 4789722. Contour 100m north of 27/4 to boulder slope overlooking the orange rock. Various holes between boulders. Most significant is under a large flake on the south side of the boulder field.")

Description: 3m entrance pitch between boulders lands on a sloping chamber floor. A 10m clamber down to wider chamber section leads to comprehensive breakdown with no way on. Cave links with a small aperture to left of primary entrance.

⊗ 39/4

Location: 0344285 4789634.

Description: 2 concealed slots in rock slope, about 3m apart. Climb down to rift 9m pitch followed by 25m pitch. Tight slot leads to 5m climb down to a small chamber in hard limestone/crystals. Way on goes under the pitch; immature passage, too tight to follow, with no sign of widening.

⊘ 40/4

Location: 0344270 4789639. 1m diameter hole up slope from 39/4.

Description: 5m climb to small chamber. Body-sized hole down for further 5m, then rocks fall for 10-20m. Floor diggable to enter rift. Good draught.

⊘ **41/4**

Location: 0345061 4789652.

Description: Very narrow slot. Strongly draughting, but needs widening (chemical persuasion?).

⊗ **42/4**

Location: 0345078 4789654.

Description: Choked.

⊗ **43/4**

Location: 0344918 4789570.

Description: Choked.

⊗ **45/4**

Location: 0344834 4789660. Possibly diggable rift off to the right of ridge down from Julagua opposite Covu–Verde–Llambria.

Description: Looks rubbish. This might be the same as 18/13.

⊗ **46/4**

Location: 0344822 4789722. 15m shaft with a tree growing out of it.

Description: A wide rift off to the right carries on, descending about 4m, before reaching a 1m drop into a choke. This is probably the same as 18/13.

⊗ **47/4**

Location: 0344837 4789651.

Description: Up-sloping, crawley cave, enters along a ridge under a small tree. Chokes after about 6m.

◯ **48/4**

Location: 0344826 4789635.

Description: Undescended. This is probably the same as 12/4.

⊘ **49/4**

Location: 0344581 4789747. Right hand side of orange rock bowl, opposite 49/4, 10m down and across from what looks like an obvious entrance but is blank.

Description: Goes up to a squeeze which has not been pushed.

⊗ **50/4**

Location: 0344513 4789765. Obvious walk-in entrance on the left hand side of the orange rock bowl.

Description: 4m climb up hits the roof. Dead.

⊘ **51/4**

Location: 0344721 4789526. 10m north of 9/4.

Description: A small hole in the side of a shakehole, going 6m down into a small chamber. A crawl leads of into another chamber, but needs digging/hammering.

◯ **52/4**

Location: 0344777 4789549.

Description: A large hole in the ground with a big bush in the bottom, about 3m down. Full of scree at the bottom. Doesn't look very promising, but you never know!

⊗ **53/4**
0344381 4789795.

⊘ **54/4**
0344536 4789725.

⊗ **55/4**
Location: 0344510 4789755. Just above 50/4.
Description: 30m blind shaft with puddles in the floor.

⊗ **56/4**
0344553 4789980.

⊗ **57/4**
Location: 5m climb down opposite 31/4.
Description: Goes nowhere.

◯ **58/5**
Location: Head towards 31/4, but turn off to the right into a large bowl opposite it. On the far side of the depression is a 5m diameter, 5m deep free-climbable shaft.
Description: At the bottom, a man-sized cleft is visible to a horizontal passage leading to the left and right. No draught.

◯ **Unnumbered cave**
Location: Over the Cabeza Covu – Julagua col NE into Area 4. From the ridge above 38/4, travel 100m NW to a rift on a vertical faultline. Below the peak rising above the col. 0344218 4789750.
Description: 1 to 2m wide entrance rift appears to be 10m deep. Rocks rattle no further than this and there is little draft. (Previously described as "Big pitch, perhaps 20m with some rocks rattling further down.")

◯ **Unnumbered cave**
Location: 0344257 4789877.
Description: Obvious hole in a large bowl, 10m entrance pitch.

◯ **Unnumbered cave**
Location: From the ridge above 38/4, head down into bowl to north. Small entrance amongst boulders, at foot of 10m high cliff at bottom of the bowl. 0344263 4789854, alt. 1682m.
Description: Bowl with small hole in the bottom. Entrance pitch about 10m long.

◯ **59/4**
344697 4789886 (WGS84). Directly on top of col to the north of the orange rock valley, and just to the right of the path on the way to Chicago. Blind shaft which seems about 10m. Accessible, so worth dropping.

◯ **60/4**
Location: 30m west of 29/4. 0344981 4789318 ±5m, alt. 1562m. On far side of shakehole from 29/4.
Description: 10m pitch to wide-spanning boulder floor, past which rocks do not rattle at any of several points.

○ 61/4 Asopladeru la Texa (Bufona Canal la Texa)

Location: 345138 4789671 (WGS84), alt 1370. Originally numbered 5/13. Large rectangular entrance, 4m high 3m wide, facing north-east towards La Pena (rock between Oston and the gorge). Enormous draught creating flow of white mist out of entrance. It is described as being about one kilometre NE of Cabeza Julagua, in the middle of a "canal".

Description: This cave was originally explored by the SIE, in the '80s, down to a constriction, where they abandoned it. Several unsuccessful attempts were made by OUCC to find it in 1993. The SIE returned in 1985, and extended it down a large shaft. At −800m a large streamway is met, which sumps in both directions. From Sala Oston, a large chamber, two pitches above the streamway, an ascending traverse reaches a gallery. This eventually reaches another shaft, which drops to a pool. OUCC pushed the pool in 2005, to find a large gallery, eventually dropping through a choke to intersect a large streamway: downstream sumps; upstream reaches a large waterfall.

○ 62/4

Location: 0344890 4789725. Originally numbered 19/13.

Description: Low entrance with nettles, downwards slope, gentle draught.

⊗ 63/4

Location: 0344924 4789815. Originally numbered 20/13.

Description: Choked entrance which forks but ends after 2m climbs in foth directions.

○ 64/4

Location: 345090 4789633 (WGS84). Originally numbered 24/13. Described as just uphill and to the north of 23/13, but that doesn't fit with the GPS coordinates: maybe the reference should be to 67/4.

Description: A 10–15m shaft in shakehole, with no bottom visible. Inhabited by a pair of nesting birds (2004)

⊗ 65/4 (Billy Goat's Lair)

Location: 345231 4789596 (WGS84). Wide goat shelter in base of cliff facing north, with drips falling from cliff above and trickling in. Originally numbered 25/13.

Description: Chokes after 5m or so all along its length. Home to a large and magnificent longhaired and longhorned billy goat which looks like it's escaped its pastor (2004).

○ 66/4

345070 4789670 (WGS84). Not La Texa. Large rectangular entrance, marked SIE 86 Completed, about 20m higher up the hillside from La Texa. No detectable draft. Originally numbered 26/13.

○ 67/4

Location: 345078 4789619 (WGS84). A strongly drafting choke in a rift in the hillside overlooking La Texa. Originally numbered 27/13.

Description: Rocks dropped through holes in the choke rattle for several seconds, and it is easily diggable; would probably take less than half an hour.

⊗ 68/4

Location: About 20m above Asopladeru la Texa

Description: Entrance shaft rigged off large natural and bolt, about 15m deep. At the bottom is a small, strongly-draughting hole leading to a too-tight rift.

⊗ 69/4

Location: Further up than 68/4, a crack in the cliff.

Description: Handline climb down into cave. Closes down quickly.

⊗ 70/4

Location: Two holes in floor, near 69/4.

Description: The two holes connect at the bottom of their entrance pitches. A too-tight window looks through into tight passage.

○ 71/4

Location: On steep limestone slope, immediately right of path as heading down from notch in ridge from Ario bowl. 0344291 4789641, alt. 1510m.

Description: 4 to 5m deep rift pitch with undercut base. Undescended, but appears choked. No draught.

⊗ 72/4

Location: Near 71/4. 0344261 4789622, alt. 1508m.

Description: Small enlargement in rift. Free climb about 4m down. Very small rift heads off. No draught.

○ 73/4

Location: Near Pozu Chicago. At the back of an indentation in the north-eastern facing steep slopes leading down towards Ostón, Canal de Culiembro and the Cares Gorge. To reach the cave take the Ostón path past the Roca Naranja depression, then contour left at about 1450m. The left hand wall (looking out) of the indentation has rillenkarren, and there is a small stone cairn in front of the NE-facing entrance. 0344856 4790043 ±16, alt. 1467m.

Description: A vertical slot.

○ 74/4

Location: On the way back from 73/4, at the bottom of a large depression. 0344980 4789925 ±7, alt. 1431m.

Description: A large triangular cave entrance. It has a large catchment from the large depressions above it, on the hillside below the Roca Naranja depression.

⊗ 75/4

Location: From the ridge above 38/4, head towards large bowl to north but deviate left into smaller bowl. Large entrance accessed over substantial breakdown at foot of the bowl. 0344251 4789367, alt. 1672m.

Description: 10m pitch descends through rift into 8x1m chamber. 2m climb down continues, doubling back below entrance, but this closes down almost immediately.

⊘ 76/4

Location: In the highest of a line of depressions, north of Cabeza Llambria. 0344808 4789343, alt. 1584m.

Description: Large, walk-in entrance and smaller entrance unite in large chamber used as sheep shelter. Stoop leads to off-shoot containing an undescended climb.

⊘ 77/4

Location: Heading east from Cabeza Verde and skirting north of Cabeza Llambria, drop north onto ridge between two shakeholes. The entrance is a NNE-facing cleft, not visible from above. 0344950 4789299.

Description: Entrance shaft (P8) lands on sloping boulder ledge and continues at north end (P18), dropping into circular chamber of 3m diameter. Short traverse through rift passes over narrow hole beneath an oval window before second hole (P6) drops into another chamber. Climb through window 2m above chamber floor passes into boulder-choked chamber. Crawl below large central boulders leads to 4-way junction. 10m low crawl to left drops into chamber, leading via brief climb into second chamber with very tight but potentially passable rift. To right from 4-way junction, hole after 2m crawl (C5) drops into chamber that connects back up with central route of 4-way junction via very narrow climb. Climb down from chamber into streamway pot of white rock intersects rift that passes via drafting narrow slot over undescended 5m pitch.

Area 5

Area 5 is the region around Ario. Its boundaries are:

- to the north: the ridge behind the refugio, the Cabeza La Forma – Cabeza Julagua ridge (boundary with area 11);
- to the east: the Cabeza Julagua – Cabeza del Covu – Cabeza del Verde ridge (boundary with area 4);
- to the south-east: a line running from the small ridge in the Valle Extremero (just below the 53/5 pond) along the back of the Green Ridge of Jultayu. The ridge itself is in area 5; once you start descending towards Trea, you are in area 10;
- to the south: the rim of the Jultayu bowl (boundary with area 7);
- to the south-west: the rim of the Jou La Cistra (boundary with areas 8 and 9); the Jou La Cistra itself is in area 5;
- to the west: the Xitu Col (boundary with area G); the area around the col (including Pozu del Xitu) is in area 5; once you start descending sod 4, you are in area G.

1 Descended Over 1000 deep. One or two leads, but very deep. See Procs 10 and 12, and expedition reports from 1993 and 2001.

⊘ 1/5 Pozu del Xitu

Location: From the view indicator, follow the path towards sod 4 for 100m. Xitu is the large cleft 50m to the left of this. 0343459 4789232.

Description: Over 1000 deep. One or two leads, but very deep. See Procs 10 and 12, and expedition reports from 1993 and 2001.

⊗ 2/5

Location: An obvious hole in a shakehole near the Ario – Jultayu path, about 10 minutes from camp, opposite 3/5.

Description: A slippery 3m entrance climb leads to a ledge above a 14m pitch (2 bolt belays). At the bottom is a small chamber with a large snow plug. A crawl under boulders leads to a second 15m pitch (natural belay), landing in a small chamber with no way on. Water sinks into a 5cm wide rift in floor of final chamber. Survey in Proc. 10.

⊗ 3/5 Pozu los Caracoles

Location: About 2m to the left of the Trea path, about 10 minutes from camp, opposite a large shakehole (2/5). A small pit from which a sharply descending rift leads off. 344093 4788970 (WGS84).

Description: Another entrance into the Xitu system. See Proc. 12.

⊗ 4/5

Location: A large, obvious pothole about 20m deep in a small valley between two limestone outcrops.

Description: Chokes.

⊗ 5/5

Location: An obvious 4m × 4m hole in the bottom of a dry valley, on the south-east side of the Jou La Cistra.

Description: Can be descended for 5m to a small snowplug. Revisited in 1987 and a small tube at the bottom was dug out, but the rift revealed was too tight. Probably connects with La Prevista de Santa Dominico in 12/5.

⊗ 6/5

Location: Behind 3/5.

Description: A 2m wide, 8m deep rift which seems to be a continuation of the rift in 3/5. The rift chokes at all levels a few metres in.

⊗ 7/5

Location: 344159 4788759 (WGS84).

Description: A narrow rift with a boulder floor that diverges into two tight passages a few metres in. The left hand passage is too small for humans and the right one chokes almost immediately.

⊗ 8/5 Cheese Cave

Location: About 100m South-East of camp, at the base of a small cliff in a dry, rocky valley. The entrance is covered with boulders to keep sheep out and the first crawl is occasionally used as a shepherd's cheese store.

Description: Removing thelargest boulder allows a legs first squeeze into a crawl past foul smelling cheeses, which emerges into a rift containing the first pitch of 10m (wedged boulder for belay). The second pitch (20m) follows immediately and is a nice free hang (two bolts). At the bottom, an awkward climb down is followed by a section of wider, more spacious rift which soon narrows down. Another 5m climb down into the rift leads to the top of the third pitch (15m, natural belays). The rift chokes at all levels 100m beyond this. Survey in Proc. 10.

⊗ 9/5 Colin's Calamity

Location: About 100m North-East of 3/5. A small, unobtrusive hole in the ground on one side of some small hillocks.

Description: The 7m entrance pitch lands on a small pebble bed sloping into a small passage. The only possible way on rapidly becomes too tight.

⊗ 10/5

Location: 150m South-East of camp, a large, obvious pothole about 20m deep in a small valley between two limestone outcrops.

Description: The bottom of the shaft chokes, but halfway down a ledge gives access to a number of passages. Behind the ledge, a fift can be followed for about 10m until it becomes too chossy and tight. Along the ledge gives a short crawl to a choke. Traversing across the shaft gives another tight crawl which chokes after 10m.

⊘ 11/5

A shaft 22m deep (35m rope, 2 natural belays). A number of parallel shafts join up underground, but no way past the snow could be found. Maybe worth digging out. Worth another look.

⊗ 12/5 Pozu la Cistra

Location: To the left of the Jultayu path, about 100m before the junction with the Trea path, below a small cliff. 0344169 4788762.

Description: Another entrance into the Xitu system. See Proc. 12.

⊗ 13/5

Location: Below and to the right of 12/5. 344199 4788751 (WGS84).

Description: A narrow 7m deep rift which widens at the bottom. Chokes rapidly at all levels.

⊗ 14/5

Location: A small chamber in boulders in the rift containing 10/5.

Description: "A choke leads into the 10/5 shaft, but this self-destructed when John tried to get in."

⊗ 15/5

Location: 100m South-West of camp, although eating Mornflakes makes it seem further. 0343946 4789187.

Description: Twin 11m shafts in bare limestone. Used as the camp toilet during recent expeditions.

⊗ 16/5

This is the same cave as 5/5.

⊗ 17/5

Location: 400m South of the viewpoint, overlooking Jou La Cistra.

Description: A small entrance that terminates within a few metres.

⊗ 18/5

Location: Near 17/5. Entered via a rift running South-West.

Description: A 12m pitch beneath a spectacular rock bridge leads down onto a snow plug. The rift divides into two small passages that choke immediately.

⊘ 19/5

Location: Near 17/5.

Description: A spectacular entrance consisting of an 8m shaft which connects with a rift running North-West – South-East. The shaft can be climbed with care to a snow plug from which two ways on are seen. The left-hand one is a steeply sloping passage leading to a junction a few metres on. To the right quickly becomes too tight; to the left ends in a small chamber with a boulder floor, through which another chamber, about 2m high, can be glimpsed. Returning to the snow plug, the rift may be followed down the snow for about 5m, where the passage ends in a pebble bed where the roof closes down to floor level. A line is essential for a safe ascent of the snow plug.

⊗ 20/5

Location: Near the signpost on the way to Xitu. 0343684 4789183.

Description: A small hole emerges in a tiny chamber after 4m. From here a 10cm rift leads off.

⊗ 21/5

Location: Near the northern edge of Jou La Cistra. A crack which is virtually indistinguishable from the clints and grikes around it.

Description: 20m pitch emerges via a slender aven with an alternative horizontal entrance. Climb down leads to two small chambers. One can be climbed to a small aven, at the top of which a small crack of light is visible.

⊗ 22/5

Location: Two intersecting rifts in an area of heavily shattered and jointed limestone.

Description: A 9m pitch lands on a snow plug.

⊘ 23/5

Location: In a small, unpromising hole facing south.

Description: Those with large hips will find it easier to approach the entrance slope feet first and on their backs, but should be aware of the 2.5m drop into a rift. The rift slopes gently eastwards away from the main Ario depression and many small roof collapses impede progress. After 50m such a fall effectively blocks the rift, although various small holes may lead on. Revisited in 1987 and surveyed, but no way on found.

○ 24/5

Noted, but not pushed, or even found again.

⊗ 25/5

Location: 100m South of 15/5. A large, open shaft 8m deep, 8.5m long and 2m wide.

Description: Passage quickly leads to a boulder choke.

⊘ 26/5

Location: Horizontal slot 1m by 0.3m.

Description: Descent leads to an earthy rift inclined at 45° ending in a 10m pitch. At the bottom is a small chamber containing a narrow vadose trench 20m deep with a samll stream at the bottom. Descent is only feasible in one place, and the trench is allegedly too narrow to follow, but might be worth a look, if you can find it.

⊗ 27/5

Location: Opposite Xitu, 500m distant and out of sight of the refugio on the slopes of Gustuteru. 40° to top of hill above Xitu col, 75° to Cabeza del Covu (the hill with the shepherds huts on it), 234° to Gustuteru. A large doline full of shattered rock, marked OUCC 80.

Description: Leads to two choked holes which were originally described as emitting a strong draught. However, there was no sign of any draught in 1992. Doesn't go at all.

○ Unnumbered entrance

Location: Possibly in area 9. Just up slope and 3m up valley from 27/5.

Description: Two blocked shafts. The larger of the two contains many butterworts (Pinguicula grandiflora). Between the two blocked shafts, and under the rock arch separating them, is a 3m drop, best negotiated via a short crawl from the larger shaft. Not descended, but worth a look.

○ Unnumbered entrance

Location: Just below the top of Gustuteru, approach from the left side of Gustuteru and climb up the obvious gulley near some sheep shelter caves. Bearings Jultayu 135°, Cabeza Llambria 095°, Cabeza del Covu 074°.

Description: Two SIE-marked shafts 20-40m deep. May be well worth a look.

⊘ 28/5

Has been renumbered 3/9.

⊘ 29/5

Location: First visited in 1981 (see Proc. 10), but the description suggested a return to push the too-tight rift at the end might be worthwhile. From the junction of the Trea and Jultayu paths, follow the Trea path for about 20m until a smaller path leads off to the left. Cut diagonally left across the valley ahead, to join a well marked path on the other side. Follow this for a few hundred metres, to an obvious shaft on the right, with a tree growing out of one wall. 344381 4788681 (WGS84).

Description: 15m entrance shaft lands on a boulder floor, from where a short passage to the left leads to the top of a 37m pitch. Descending the pitch to the bottom, leads to a large rift, which ends at a muddy pool. Penduling right, 20m down the pitch, leads to a further 5m drop into a small chamber, the 1980 limit. From here two very narrow rifts lead off. The right hand one was hammered, and the first squeeze passed, to another squeeze; at the bottom of the rift is Lev's capping rod. Both rifts seem fairly deep and draught slightly. Rigging guide:

Pitch	Rope	Rigging
Entrance pitch (P15)	20m	Natural backup; bolt and natural Y-hang
Second pitch (P30)	35m	Two spike Y-hang; bolt and spike rebelay at −5m; long tape round block for rebelay at −20m.

⊗ 30/5 Red Circle Cave

Location: Directly behind where the big tent is normally pitched. Named after the SIE red circle outside the cave. Entrance is a stoop under a pile of boulders.

Description: Chamber with a hole in the floor 5m deep leading to a rift, both ways becoming impassable. A second entrance of a 5m climb enters in the chamber.

⊘ 30/5 Pozu Optimisto

Once called 31/5. Now renumbered 1/11.

⊗ 32/5

Location: Below 12/5

Description: A tight, T-shaped passage. Gets worse.

⊘ 33/5

Location: On the Northern slope of Cabeza Forma. Marked "OUCC 87" in red. 0343440 4789662.

Description: A large open pot, 25m deep, previously ending in a snow plug. A smaller surface shaft connects with the main shaft about 10m down. A tiny hole in the secondary shaft continues for 10m to a mud choke.

⊗ 35/5

A dig under a cliff above 39/5.

⊗ 36/5

Location: Above 5/5 in the Jou de la Cistra.

Description: 10m pitch leads to steep slope and rift decorated with formations. Too tight.

⊗ 37/5

Location: To the South of the Trea path on the slopes of Jultayu

Description: 4m free climb leads to 15m pitch. Chokes.

⊗ 38/5

Location: Near to 37/5.

Description: A large chamber with tiny rift leading off.

⊗ 39/5

Location: A 50m shaft marked SIE 86 ⊗, below 12/5 on the slope down to Trea.

Description: Choked.

⊗ 40/5

Location: Located in the left hand wall of a small side valley at the top of the Valle Extremero.

Description: A climb over a large boulder leads to a network of phreatic passages and another entrance inaccessible from outside.

⊗ 41/5

Location: 10m up valley from 40/5.

Description: Tight rift closes down.

? 42/5

There is no 42/5.

⊗ 43/5

Location: Valle Extremero.

Description: 20m free climb with squeeze at the top, becomes too tight.

⊘ 44/5

Location: 10m below 43/5

Description: A 10m pitch to a too-tight vertical rift behind a dead sheep (1988). Draughts strongly; stones rattle down merrily.

⊗ 45/5

Location: Next to 43/5

Description: 10m pitch, choked.

⊗ 46/5

Location: Above 44/5

Description: 13m pitch, choked.

⊗ 47/5

Location: Valle Extremero

Description: Choked rift containing a dead sheep.

⊗ 48/5

Location: In the Valle Extremero

Description: 30m pitch to snow plug, no way on.

⊗ 49/5 'My Little Rabbit Hole'

Location: Located 400m from the Ario camp on a bearing of 210°, on the Ario side of a large depression. Located on a bearing of 169° to Jultayu, 225° to La Verdilluenga, and 64° to Julagua.

Description: A mud slope leads to a 10m pitch. A squeeze leads into a 1m diameter phreatic tube with a vadose rift below it. A few metres beyond the squeeze it is possible to climb down 6m to the base of the rift, but no further progress is possible as the rift is too tight. Continuing along the phreatic tube it is possible to make progress for a further 50m or so to where the going becomes a bit awkward. Further progress may be possible by a more determined team. About 20m from the squeeze a three way junction is met. Straight on (130°) is the continuation of the phreatic tube already mentioned. To the left are two small chambers both too small to enter and one of which contains a small inlet. Just prior to the threeway junction is a narrow T-shaped passage. After a few metres it is possible to climb down to the floor of the passage 6m below. This passage contains a small stream. Downstream flows into the vadose trench of the main passage, but quickly becomes too tight at all levels, at a point where there is a 5m aven probably below the threeway junction. In very wet weather the sound of water can be heard beyond the present limit of exploration in the main phreatic tube, so this may be worth another visit.

⊗ 50/5

Location: Follow the Trea path from camp until it turns sharp left where it meets a green valley. At this point turn right to follow the green valley away from the path. After about 30m two cave entrances will be seen on the left; the first is 51/5 and the second is 50/5.

Description: A tricky 5m free climb (best laddered) lands in a small chamber with two ways on. Both routes rejoin at the top of a pitch into a second chamber with no way on. From the smaller of the two routes to the pitch a small climb (2–3m) lands in a passage connecting with 51/5.

⊗ 51/5

Location: Located a few metres closer to the Trea path than 50/5.

Description: Easy climb to a chamber, a low arch at the lowest point of the chamber provides a 1m climb into another small chamber. A passage back under this climb eventually connects to 50/5. (Neither 50/5 or 51/5 were marked).

⊗ 52/5

Location: An unmarked shaft near 15/5.

Description: Boulders were removed from the entrance to facilitate entry to a 2m free climb down past unstable boulder to a tight rift. The rift seemed to close down around the first bend, but no attempt was made to verify this by actually entering the rift.

⊘ 53/5 Cueva de la Rana.

Location: The cave is located in the Valle Extremero. A large valley comes down from Jultayu to meet the Valle Extremero, just above a small pond. The cave is an obvious large entrance directly above the pond, in the right hand side of the valley. 0344609 4788907.

Description: See the 1991 report. The howling gale in the entrance is lost at the bottom of the first pitch. A large rift leads to a large blind pit, that can be penduled over. Alternatively, a small series descends a couple of pitches, and becomes too tight.

⊗ 54/5

Location: A phreatic tube overlooking 53/5 (visible from 53/5 when looking back towards the Ario camp).

Description: This cave consists of an upward sloping phreatic tube trending to the left with, from about 10m in, moonmilk gours on the floor. After about 15m there is squeeze past a partial stal blockage. The cave ends at a series of larger gour pools; the passage continuing to the right is too tight.

⊘ 55/5

Location: Further up the valley towards camp than 54/5, on a bearing of 114° to Cabeza Llambria and 191° to Jultayu.

Description: The large entrance is clearly used as an animal shelter. The rift at the back of the entrance leads after 8m to a small 6m diameter chamber containing a muddy pool. There is no way on except the aven above. To the right of the main entrance is a small rift about 3m above the ground. This entrance leads to climbs up into an aven (rope and protection required). Alternatively a narrow rift lower down is still going.

⊗ 56/5

Location: Located on a bearing of 207° to Jultayu, 56° to Cabeza Llambria, and 148° (100m distance) to where the Trea path crosses the green Jultayu ridge.

Description: A 10m ladder pitch to a boulder floor — no way on.

We also looked at a short crawl about 30m Southeast of 56/5 and a small hole about 20m Southwest of 56/5 both of which close down after a couple of metres.

⊗ 57/5

Location: Located on a bearing 199° to Jultayu and 124° to 53/5. The entrance is an “obvious” dark, 8m vertical slit on south facing slope looking down into the Valle Extremero, reached by an awkward climb. The entrance is not marked.

Description: The 40° entrance slope leads to a chamber containing a lot of dead flow stone — no way on.

⊗ 58/5

Location: Above 55/5 in the face of Cabeza Llambria a series of interconnected phreatic tubes, with several entrances/exits one of which emerges well above the ground.

Description: All the passages eventually choke but they may be worth digging. The cave has not been marked.

○ 59/5

Located about 20m to the right of 32/5 (looking downhill), a 4s drop. Marked by the SIE in '86 as finished, but not marked by OUCC. May be worth a look.

⊗ A-Hole Cave

Location: A transected phreatic passage in the cliff of Cabeza Llambria, opposite 2/10. Reached by climbing.

Description: Chokes.

⊗ 60/5 (Unmarked entrance.)

Location: A small draughting hole about 20m from 8/5 (and 100m from camp) was enlarged by Paul Brennan.

Description: A small descending vadose passage ends in a tight squeeze, described as requiring someone small to push it. Someone small (LB) was unable to get out of daylight. No draft.

⊗ 61/5

Location: Originally described as "On the way to the green ridge of Jultayu, in a promising looking valley with no marked caves". Actually it is in the Valley of Dry Bones, up valley from 69/5

Description: A blind 20m shaft.

⊘ 62/5

Location: At the top of a bed of limestone sloping at 45°, overlooking the 53/5 valley, near a small shakehole with a choked rift at the back. About 200–300m down valley from 40/5. On a bearing of 140° to 53/5 (out of sight), 22° to Cabeza Verde, 74° to the boss on the ridge and 96° to Cabeza Llambria.

Description: An 8m free climb reaches rift. May go in either direction. Beware! Loose boulders at top.

○ 63/5 Dowser's Delight

Location: At bottom of cliff below Jultayu path, about 200m north of junction with Trea path. Originally found by dowsing.

Description: Very tight, possibly too tight, slot descends about 5m.

⊘ 64/5

Location: About half way between 29/5 and where the Trea and Jultayu paths meet.

Description: A strongly draughting shakehole which was dug to a depth of about 3m before being abandoned as too unstable. May be worth another look.

⊘ 65/5

Location: 80° to Cabeza Llambria, 196° to Jultayu. Altitude about 1515m. Best route is to contour west from a point in the Valle Extremero at an altitude of about 1525m. A large well vegetated rift entrance.

Description: 40m shaft leads to several routes, all choking. One site could be dug, but would be a long term project.

⊗ 66/5

Location: The entrance is situated halfway up a pile of boulders in an area of shakeholes about 40m to the right of the Trea path and about 150m before the path starts descending steeply. The entrance is marked by a poorly visible cairn. 0344242 4788525.

Description: See 1991 report. Descends about 100m, via three pitches and an awkward rift (The Corner Shop), to where it becomes far too tight.

⊗ 67/5

Location: 20m from 66/5 on a bearing of 300°. Narrow shaft in shakehole. 0344226 4788531.

Description: A shaft into too-tight rift, dug open but no way on.

⊗ 68/5

Location: 40m W of 67/5, at base of cliff. 0344168 4788531.

Description: A shaft which chokes, with lots of perched boulders at the top.

⊘ 69/5

Location: In the Valley of Dry Bones, a strongly draughting hole.

Description: Dug to 6m depth over a number of trips, from where a side rift lead into a small chamber in a boulder choke with no way on. Dug further to reveal another small rift into chamber with three drafts. Both left and right are diggable with extreme care but have been left for another day.

⊘ Pozu Jenga

Location: In Valley of Dry Bones, under cliff. Smaller of two holes with noisy draft coming from rift. Diggable. 344245 4788465 (WGS84).

Description: Cliff face demolished to gain entry to a 6m pitch "Gravity Crisis" in the rift. Squeeze through boulders including the chockstone reaches a very drafty chamber. Final chamber dug in 1999 to vertical choke. Entrance shaft partly collapsed in 2000 to enable a wider and safer shaft to be dug. Rubble cleared in 2003 to open squeeze into small chamber. Strong draft from 3" slots. Rock is friable, so digging is still feasible. Worth a return. Beyond the chockstone, following the passage upwards leads to a squeeze down into a draughtless chamber. Choke opposite this way down draughts, and is worth digging.

⊘ Unmarked cave

Location: Far end of valley. Last of drafting holes.

Description: Short climb down, then head steeply down to boulder dig.

⊗ 70/5

Location: In the green valley going west from the metal signpost on the Trea path towards the site of the 1992 flooded campsite. A bedding plane crawl on the S side of the valley at an obvious overhang.

Description: A T-shaped passage, a bedding plane with a rift in the floor. After 5m it becomes flat out and two moonmilk stalactites impede progress slightly. Beyond a wiggle and squeeze, The Squish, leads to a right hand bend which must be passed on ones right side. Squeeze passed to reach standing passage (!) and two 25 foot climbs to total choke. Thank Christ!

⊗ 71/5

Location: 150m from camp on a bearing of 292°.

Description: This cave was dug open by removing a large boulder. A 15m pitch is followed by an 8m handline climb down to a boulder floor. An inlet rift part way down the pitch soon becomes too small.

◯ 72/5

Location: 0° to base of Jou de le Cistra. 276° to Gustuteru. On slope overlooking Jou de la Cistra, about 100m west of Jultayu path.

Description: 2m diameter pot, 5m deep. May have rift leading off at bottom.

◯ 73/5

Cabeza Llambria 065°, Jultayu 143°. Likely digging site in steeply descending rift at edge of Jou de la Cistra.

◯ 74/5

Location: Jultayu 146°. 1m square hole in centre of green depression in Jou de la Cistra, suitable for midgets who like flies and caterpillars.

Description: Hole filled with ferns and with a wide rillenkarren catchment to south west.

⊘ 75/5

Location: Labelled 72/5. UTM ref 434E890N. 50–100m S of 27/5. Found by contouring east from Martini Pool. 2m high rift at base of shakehole with a small phreatic tube at top.

Description: Boulders removed to make accessible to thin cavers. Slight draft and bigger passage or chamber about 2m in.

◯ 76/5

Location: Possibly labelled 72/5. Valle Extremero. 30m E of 54/5. 0344387 4788859.

Description: 1m diameter phreas ending in a calcite blockage. View to passage beyond. "Easy digging".

◯ 77/5

Go past 29/5 and continue along the edge overlooking the Valle Extremero. Cave is in a shallow rocky valley heading on a bearing of 60°. Bearings: Cabeza Verde 30°, Cabeza Llambria 64°, start of prow sticking out into Trea Valley 116°. 10 m shaft which needs medium sized rock removing to gain entry. Well placed but doesn't look massively promising.

◯ Unnumbered entrance.

0343999 4788476.

◯ Unnumbered entrance.

Location: 0344381 4788833.

Description: This is probably the same as 76/5.

◯ Unnumbered entrance.

0345210 4788837.

◯ Unnumbered entrance.

Phreatic remnant shelter on S face of Cabetha Forma. 0343489 4789488.

⊗ 78/5

Location: In the Ario bowl, towards the Refugio from the old camp site.

Description: A shaft lands on snow, rubbish and old mattresses. Round the corner is a connection to another entrance, containing more snow, possibly free-climbable.

⊘ 79/5

Location: Shakehole (the 2006 report described it as a "sakehole") in Ario bowl, just before and to the left of the snow shakehole.

Description: Slot amongst boulders opens up into small chamber with drafting holes in the floor that could be widened. An insect nest may prove problematic and require clearance.

Area 6

This is the area around the ridge between Pico de la Jorcada and Pico Conjurtao. Cave 3/6 is allegedly very promising.

⊘ 1/6 Ridge Cave

Location: E 41 236.6, N 88 115.3, A 1916.7. On the main ridge between Jorcada Blanca Pass and Pico Conjurtao. Best reached from Top Camp by walking down Bog Alley (directly away from La Verdilluenga) to a bowl filled with massive boulders. At the opposite side of the chaos, a green gully runs upwards. Ridge Cave is near the top of this, about 50m below the ridge.

Description: See Proc 12. May be worth going back to one day.

⊘ 2/6 Pozu Conjurtao

Location: E 41 166.8, N 88 020.5, A 1983.6. From Ridge Cave continue up the grassy slope followed by a scramble up a rift leads to the top of the ridge. A large open shaft.

Description: See Proc 12.

⊘ 3/6

Location: Walk up grass slope to ridge from Ridge Cave and turn left at the top untill the next grass field on the left side is met, before the ridge rises towards the 2/6 hill. Turn left (back towards Top Camp) and walk along and down the grass for 40m to a shakehole on the left side. The rift seen in the N wall is the continuation of the Ridge Cave (1/6) entrance fault; digging out some boulders at the bottom of the shakehole might connect down to the rifts near the first 1/6 pitch. The 3/6 entrance, however, is a hole in the W side of the shakehole. GR: 41211.3E, 88081.0N, 1940A (bottom of shakehole); 41206.8E, 88080.7N, 1942A (entrance).

Description: The entrance (marked but not investigated in 1988) seems to have grown by collapse (frost action? memory lapse?) since it was first seen in 1986. After removing the regular cobweb choke it is now possible to creep down the exceptionally spiky manhole and look along a floor level crawl onto the head of a 10–12m pitch! The head of 'Shit Creek' in 2/6 is 200m vertically below. Awaits following up.

⊗ 4/6

Location: Follow ridge as on the way to 3/6 but carry straight on to boulder jumble at foot (righthand side) of 2/6 hill. 4/6 is straight on in the S corner. The entrances were passed by many cavers en route to 2/6 in 1986 but never noticed except by Fred; they were rediscovered, marked and initially explored in 1988. GR: 41164.5E, 88084.0N, 1946A.

Description: A 2m climb down very loose boulder pile to tiny chamber with hole to drop ahead and another hole to smaller drop on left. Slide down the latter into very interesting cavity underneath a car-sized rock slab (supporting everything you've been treading on whilst approaching the entrance), and squeeze down another hole to floor level of first drop. This is in 1m wide 5m long 3m high vadose passage with clean scalloped walls, unfortunately with a solid gravel floor and ending as parallel 1" and 3" cracks in the far wall. Total depth is about 8m.

⊘ 5/6A–B

Location: 5/6A is a few steps west of 4/6. 5/6B is only 20m SW on the Polish side but difficult to find at the surface; it's easier from inside (and this is how it had been found in the first place!). GR: 41156.6E, 88090.6N, 1942A (5/6A); 41138.9E, 88088.2N, 1940A (5/6B).

Description: 5/6A is entered by scrambling down loose overhang into rift and traversing forward to 10m pitch (natural and 2 bolts). Penduling forward in the 167° striking rift gives access to a blind 5m pit (diggable?) whilst at the foot of the pitch a step under a rock arch gains the main chamber. The snow cone gave rise to the name of 'Pozu Paseo Nevado'. The snow is derived from the 5/6B shakehole upslope. The latter can be entered from outside using a short ladder or by carefully climbing through an eyehole but the rock is very loose and holds and belays tend to come off. A planar fracture at strike 167° dip 38° E controls some remarkable phreatic tubes both in the E wall of the chamber and at the surface above 5/6B. In the S wall of the chamber a too tight meander leads off, but it seems to widen below; pebbles aimed through gaps in the wedged gravel floor drop at least 3m.

Area 7

This area consists of the Jou del Jultayu, the bowl between Jultayu and Cuvicente, and the slopes of Jultayu and Cuvicente. The area is bounded on the Eastward side by the Bayeya ridge and meets Area 5 in the North, the boundary being roughly at the Southern edge of the Jou de la Cistra.

The majority of the caves in this area were explored in 1987. The exceptions, 1–8/7 and 21/7 were first explored in 1981 or 1982, but have been included for completeness, full details can be found in OUCC Proc. 10.

⊗ 1/7 Pozu del Bayeya

Location: Located on the Bayeya Ridge just below the cairned path to the Jultayu summit.

Description: Two entrances lead to an 80m shaft rigged in several hangs. (See Proc. 10 for further details). Re-examined (and where necessary re-bolted in 1989), but no way on was found.

⊘ 2/7 Pozu Jultayu

Location: The entrance is approximately 30m below the eye-hole (el Ojo de la Bruja) on the Juracao ridge linking the peaks of Jultayu and Cuvicente. The best route from the Ario Refugio is to follow the cairned path as far as the Jou del Jultayu and then to cross the Jou, aiming a little to the west of the Jultayu summit. The cave is situated below the most easterly of two obvious notches in the ridge. 0343871 4787808.

Description: An entrance series of three pitches leads to Paradise Rift. Beyond, are two routes: the original route followed a series of rifts, with short pitches, before opening out at Pessimist's Pot, at the top of a 400m deep shaft; the current route, GSP, is a section of easy rift, followed by a large pitch, Tumbling Dice, into a pleasant streamway, ending at a 100m pitch, Space Trout, which connects near the bottom of the main shaft. At the bottom of the shaft, Gusamo Grovel leads to the top of Just Awesome, a chamber 80m by 60m by 120m high, where the huge streamway is met. Upstream has been explored for approximately 2km, and is on-going. Downstream can be followed for 1.5km, through three chokes, to Primula Point. Alternatively, climbing up in Just Awesome enters The London Underground, a kilometre long passage, 80m wide at the start, which ends at a series of pitches down to Primula Point. From Primula Point, pitches lead up into a series of large boulder chambers, Postman Pat, Bod and Soup Dragon, before descending into the final section of streamway, Pimpernell Streamway. This ends at Choke Egbert, a large and unstable blockage, which is currently being dug. Over 800m deep, many km long. See expedition reports 1987–92 and 1998–2000, and Proc 13.

⊗ 3/7

Location: An open shaft about 200m from 2/7 in the direction of Ario

Description: 50m deep but no ways on. See Proc. 10 for further details.

⊘ 4/7

Location: A little uphill from 3/7, further round towards Cuvicente.

Description: A 1.5m climb leads to a twisting descending rift that soon chokes, looks clearable, and may be worth digging. See Proc 10 and 12 for details.

⊗ 5/7

Location: Reached by turning left at the Bayeya col, walking past 21/7, and then a few metres down into the bowl. 0343768 4788122 (WGS84).

Description: A 25m pitch (free-climable) leads into a too tight rift. See Proc. 10 for more details.

⊗ 6/7

Location: Located on the Jultayu side of the Jou de Jultayu on a bearing of 196° to Jultayu, 194° to the 2/7 doline and 238° to Cuvicente. It lies on the same line as the 2/7 rift series but beyond Pessimists Pot. The original 6/7, not the later one, which has now been renamed 46/7

Description: A large rift partly filled with snow. See Proc 10 for more details.

⊘ 7/7 Fridge Cave or Crossrift Cave

Location: Just outside the rim of the Jou del Jultayu, some 50m to the West of the Bayeya col.

Description: Rifts funnel into a shaft with permanent snow plug, descended for some 30m in the narrowing space between rock and snow — see Proc. 10 for details. May be worth another look as snow levels were much higher when this cave was last looked at.

⊗ 8/7 Cowskull Cave

Location: About 50–100m to the left of the Jultayu path, about a quarter of the way from the Trea path junction to the Bayeya col, just before the first steep bit.

Description: A triangular opening climbed into from uphill leads to a chamber with animal bones. A 15cm wide rift continues down whilst straight ahead the sky is visible through an even narrower rift. (See Proc. 10 for further details). In 1990 a second entrance was discovered over the the other side of the cliff face containing the original entrance. This leads, via 8m of rift passage, to a roomy chamber; a narrow crack bypassed by a free-climb leads to a second chamber — no way on.

⊗ 9/7

Location: On the North-western rim of the bowl, on the outside of the col just before the ridge rises steeply to the Cuvicente summit.

Description: A very large rift with rock bridges becomes 101m deep shaft, with no way on at the bottom.

⊗ 10/7

Location: Just below the lowest point on the Juracao ridge.

Description: A 20m climb down tight rifts — becomes too tight.

⊘ 11/7

Location: Halfway around the basin towards Jultayu from 2/7, approximately halfway to the bottom of the bowl. 0343943 4787944.

Description: A 2.5m phreatic tube — may be diggable.

⊗ 12/7

Location: On the grassy patch near the bottom of the Jou

Description: A 4m climb down to a very dubious dig.

⊗ 13/7

Location: Contour to the East from the Bayeya col for 40m. 0343912 4788118.

Description: Boulder choke on the inner slope of the Bayeya rim — unpromising.

⊘ 14/7

A choked meltwater sink at the deepest point of the doline below 13/7. Potentially diggable.

? 15/7

Never relocated, but probably refers to obvious rift just above and towards Cuvicente from 14/7.

⊗ **16/7**

Location: Some 20m towards Cuvicente from 14/7. 0343903 4788101.

Description: Choked shakehole

⊗ **17/7**

Location: Enter the Jou del Jultayu from the Bayeya col, follow contours and then descend left hand side of Bar Hill. 0343877 4788101.

Description: Shakehole with a small hole in boulders at the bottom — does not look diggable.

⊗ **18/7**

Location: A few metres further into the bowl and to the West from 17/7. 0343873 4788106 or 0343876 4788124, depending on whom you believe.

Description: Boulder floored rift 1–2m wide 10m long and 6m deep — no way on.

⊗ **19/7**

Location: Larger shakehole towards Jultayu from 17/7 and 18/7, separated by a little ridge from 14/7 and 15/7.

Description: Climb down among loose chair-sized boulders to a partly overhung alcove, from where stones can be dropped 5m into the interstices between boulders and rock. A crawl winds back to the surface.

⊘ **20/7**

Location: Close to the grassy shakeholes forming the very bottom of the Jou, some 25m uphill on the Northern rim in an area of parallel southwest–northeast joints.

Description: Entrance is a rectangular manhole, climbable for 2.5m to a steep loose soil ramp with fragile roof and walls. This is followed 6m later by a fine elliptical shaft of 35m which lands in a 3m x 6m chamber. 3m above the floor a strongly draughting diagonal crack in the northwestern wall opens to 5cm and offers a view through the rockwall into an adjacent chamber. Attempts were made to get through to the parallel shaft, but without success.

⊗ **21/7**

Location: On the northern rim of the bowl, 30m to the West of the Bayeya col. 0343813 4788142.

Description: A small hole in a corner overgrown with plants. 15m pitch followed by a squeeze leads to a choked chamber — no way on.

⊗ **22/7**

Location: Outside the northern rim of the Jou 150m west and a little downhill from 23/7.

Description: A small entrance leads to an 8m freeclimb to a snow filled chamber. Impassable.

⊗ **23/7**

Location: On the Northern rim of the Jou, 100m up along the ridge from 21/7. 0343717 4788136.

Description: 25m deep shaft landing on a rubble floor. A squeeze led into a small chamber with no way on.

⊗ **24/7**

Location: Two thirds of the way from 21/7 to 23/7. An 8m wide snow-filled pit with a rock bridge halfway along. 20m deep to the snow and boulders. 0343751 4788174.

Description: A climb down between the boulders led to a further drop of 7m down a rift. Any possible way on in the rift was blocked by boulders.

⊗ **25/7**
Location: 40m into the bowl towards Cuvicente from 19/7.
Description: Shallow boulder floored rift.

? **26/7**
A shakehole a few metres from 25/7.

⊗ **27/7**
Location: 25m towards Jultayu from 19/7 close to 16/7.
Description: Steep shakehole funnels into a square pot 4m across and 6m deep. A stooping height hole in the Southern corner leads to a chamber which is choked with sand. To the left a bedding plane closes down after 2m.

⊘ **28/7**
Location: On the top of Bar Hill, taking the left of two grassy gullies after the Bayeya col. 0343830 4788126.
Description: A series of pitches 37m deep ends in a boulder floored chamber. In one corner a rift continues but is blocked by a chockstone. Small draught; would need extensive work to widen enough to continue along the rift. The local dip is South and not North as elsewhere in the Jultayu area. Could be the results of local folding — maybe Bar Hill is a huge erratic tilted out of its original position.

⊗ **29/7**
Location: A few metres towards Cuvicente from 19/7.
Description: 3m deep manhole leads to a tight rift.

⊗ **30/7**
Location: 30m towards Jultayu from 16/7, close to 6/7.
Description: Large doline at the intersection of two rifts — no way on.

⊗ **31/7**
Location: From 30/7 follow the rift leading South past the next shakehole. 0343894 4788043.
Description: Boulder floored rift that can be walked through.

⊘ **32/7**
Position uncertain. Possibly diggable.

⊗ **33/7**
Choked shakehole 20m from 25/7 (in the direction of Juracao). 0343836 4788018.

⊗ **34/7**
Large shakehole just beyond 33/7 with a choked sink in the Eastern wall.

⊗ **35/7**
Location: A few metres from 34/7.
Description: A 3m shaft no way on at the bottom.

⊘ **36/7**
Location: At the lower end of the shakehole behind 35/7.
Description: A 3m climb in a loose boulder choke that might be diggable.

⊗ 37/7

Location: 5m from 36/7.

Description: A choked shaft.

⊗ 38/7

Location: Across the long shakehole just above 37/7.

Description: 7m high vertical slot visible from the Bayeya ridge which close down after a few metres. Before this a hole in the Southeast wall can be entered to a climb up that ends just below the surface.

⊗ 39/7

Location: By 18/7

Description: Unenterable fissure.

⊗ 40/7

Location: Reached by going up and to the West of 7/7, 25m to the West of 21/7. 0343776 4788181.

Description: Entrance under a very large boulder gives access to a 16m pitch down a twisting rift. At floor level a squeeze leads to a blind 10m pitch.

⊗ Unmarked cave

Location: Just uphill from 40/7 in same rift. Reached by traverse over 2–3m deep hole about 2m in diameter.

Description: Small hole going diagonally downwards leads to maze of boulders with daylight shaft. From here, a 10m free climb in rift leads to gravel floor. Rift continues back under entrance but quickly becomes too tight.

⊗ 41/7

Location: Outside the Northern rim of the bowl, 70m downhill from 23/7.

Description: 2m wide rift in the slope with boulder floor 11m below the lower end. The rift closes down in both directions.

⊗ 42/7

Location: 6m wide circular pit in steep slope to North of 22/7 visible as a slot from 41/7.

Description: A handline or ladder is advisable for the descent, but the rift appears choked in all directions.

○ 43/7

Location: 50m straight downslope from 22/7. Above 46/7 on left (true right) hand side of limestone.

Description: Apparently undescended.

○ 44/7

Location: Small hole 5m S of 46/7.

Description: Undescended 5m climb.

○ 45/7

Location: 30m WNW of 46/7.

Description: Rift with snow plug: possible way on past snow.

⊘ 46/7

Location: To west of Jultayu bowl, 50m North of 43/7.

Description: Large rift filled with snow, no way on in 1987 or early 1992; may be worth another look in a low snow year.

⊘ 47/7 Skull Cave

Location: An inconspicuous entrance in a gravelly slope, near the Jultayu path, slightly below the level of 2/7. 0344066 4787994.

Description: See 1991 report. Descends two pitches to a chamber littered with bones. Another pitch, with a very tight top, leads into a very complex area. The main way on leads to another pitch into a too-tight rift with a "large-sounding space" beyond. About 150m deep. Worth a look.

⊗ 48/7

Location: Go to lowest part of ridge between Jultayu and Cuvicente. Walk along ridge towards Cuvicente until stopped by sheer rock wall. Contour at this level about 30–50m further. Large cairn by entrance. In a good place to drop into upstream 2/7. 83° to Jultayu. 6° to Ario Refugio

Description: 10m deep shaft. No way on at the bottom.

○ unnumbered

Location: Jultayu 144° and 10m W of 23/7 on Jou ridge.

Description: Small rift parallel to 23/7, 1m wide and 3m long. Stones rattle for 3-4s. 40m pitch?

○ 49/7

Location: 0343763 4787909.

Description: Entrance in grass, 80cm by 25cm. Stones fall a couple of meters, no significant draught.

○ 50/7

Location: 0343815 4788147.

Description: 1.5m by 0.5m rift shaft; estimated depth 10m.

Area 8

This is the area on the slope of Pico Gustateru facing Xitu.

⊘ 1/8 Pozu del Canalizos

Location: From Ario, take the footpath towards Los Lagos, and just before the Xitu viewpoint, leave the path and continue to the left through the dolines looking for red marks. Once in a closed valley, the "Canalizos" (a particular karstic form, like organ tubes) are seen. The entrance is near the Canilizos. 0342989 4789059.

Description: An SIE discovery, extended by OUCC in 1997. Contains at least two leads: a draughting but dangerous choke, and a tight streamway at the bottom of Clusterfer.

⊗ 2/8

Location: 50–70m above 1/8

Description: Large, obvious rift, choked at the bottom.

⊗ 3/8

Location: 40–60m above 1/8

Description: Large, obvious entrance with a short descending passage to a choked rift.

⊗ 4/8

Location: Small hole in the corner of large shakehole, 'round the corner' from 3/8.

Description: Traverse over rift to head of 10m ladder pitch, landing on loose sloping pebble floor. Upslope leads to 2 grottos, downslope to a threatening boulder choke.

⊗ 5/8

Location: Obvious entrance with snow in.
Description: Chokes.

⊗ 6/8

Location: 0343088 4788784, alt 1683m.
Description: 20m shaft with snow at the bottom.

Caves 7–11/8 are at the foot of the huge karren slope that has 2–5/8 at the top.

⊘ 7/8

Dig at foot of shakehole. Needs mechanical/chemical assistance.

⊗ 8/8 Cueva del Darren del Cilau

Location: Grovel at the foot of a small cliff, looking rather like its namesake.
Description: Grovel leads to 20' high chamber with two blocked upward routes.

⊗ 9/8

Location: Cleft in side of dry valley up from and to the right of 8/8.
Description: Leads to a small chamber with skylights and no way on.

⊗ 10/8

Marked SIE C3. Cleft has a sharp bend with a 20m pitch in it. No way on.

⊗ 11/8

Location: In hillock slightly downslope from 10/8. Nearby is an SIE mark 'M6'.
Description: 15m deep slot, free-climbable. No way on.

⊗ 12/8

Location: There are two 12/8s: the real 12/8, and cave D1, wrongly labelled as 12/8. The real 12/8 is located just upslope from the Martini Pool by the route to the top of Gustuteru, on a bearing of 40° to Pozu del Xitu, 90° to Cabeza Llambria

Description: A 10m pitch down to a snow plug (replaced by exotic plants in recent years) with a 3m climb up one wall to reach a choke.

⊘ 13/8

Location: A bedding plane in the side of a rubble filled surface shaft, on the crest of the ridge between the Ario path and the 2 large grassy depressions of area 8. Aluminium tag placed.

Description: Doubling back through a slot inside, opens out over a climb down into a vadose rift. Down the canyon, bridging and climbing, it heads north(ish), passing one or 2 inlets in good rock, occasional avens and a small stream in bits. After a chossy climb down into a small chamber, the low route involves crawling, but can be bypassed over the top. The routes rejoin at another climb down to a chamber of about 5m x 3m. The continuation is about 5m up the forward wall. A high level route brings you to the top of the chamber, but no way across. The climb is possible but the rock is not good so a rope and protection are needed. Vital statistics: 55m long, 25m deep. Explored: TBB, PAR. Survey: Grade 1.

The following two caves are SIE discoveries, unmarked by OUCC; we have been invited to take a look.

⊗ Pozu Canilizos de Gustuteru #2

Location: Between #1 (1/8) and #3.

Description: A little shaft of 11m.

⊘ Pozu Canilizos de Gustuteru #3

Location: Near #1 (1/8). The entrance collects water from a series of Canilizos.

Description: Another SIE discovery, extended by OUCC in 1997. Drops into Canalizos I at Cluszterfer. See 1997 report.

⊗ Pozu Xastre

Location: On the ridge overlooking sod 4, near 13/8, I think. See SIE material.

Description: An SIE find, which OUCC failed to extend significantly.

⊘ 14/8

Location: On Gustuteru, in base of cliff facing SE. 0343022 4788494, alt. 1727m.

Description: Reduces to body-sized tube, walled-off, 3m in. Good draught. Used by goats.

Area 9

Area 9 is around the large vertical shaft (300m +) Tras la Jayada between areas 7 and 8. Details of 1–9/9 are to be found in OUCC Proc. 12.

⊗ Tras La Jayada

Location: A large 300m plus open shaft first explored by SIE (see C. Puch's book). 0343150 4788377.

Description: A return was made to this cave in 1986 as it was thought to be worth looking for a way on. The cave was re-rigged using modern SRT methods down one wall with several rebelays, thereby giving several hangs of reasonable length rather than a single 300m pitch. The team thought they had cracked it when about 50m above the floor of the main shaft they managed to pendule into a parallel shaft. Unfortunately this landed after about 70m on a rubble floor with no ways on, extending the cave by no more than 15–20m.

⊘ 1/9

Location: Large 300m diameter shakehole 200m SSE of TLJ, includes marked entrances of 7/9 and 8/9. Bearings from central boss of 1/9 shakehole: 172° and 191° to Cuvicente; 233° to La Verdulluenga; Gustutertu 316°.

Description: A way through boulders leads to a 5m pitch landing on a snow plug. A way on may just be possible.

⊗ 2/9 La Jayada

Location: A huge shakehole, visible from miles away. 0342986 4787929.

Description: This cave was re-examined in 1987 and a route on past the snow plug was found. A number of large chambers were found with sky lights to the surface. No way on from these chambers was found. The find added approximately 44m to the depth of La Jayada to give a total depth of about 100m.

⊗ 3/9

Location: From the giant entrance of La Jayada, head leftwards and uphill, past the large shake-hole 'The Wiggly One' (13/9), to a shaft above a scree slope.

Description: The cave was originally explored in 1980 to a depth of 50m, where the shaft was blocked by a large snow plug. By 1990, this snow plug had been greatly reduced in size, and it was possible to continue to a depth of 90m. At the bottom, there was still a snow plug, although this appeared to be resting on a boulder floor. A parallel shaft 10m above the floor rejoins the main shaft.
Rigging Guide:

Pitch	**Rope**	**Rigging**
Pitch	Rope	Belays
C5	120m	Spike with thread backup
Old Lags Can't Rig (P20)	"	Spike and bolt Y-hang; natural deviation at -10m
Global Warming (P55)	"	Spike and bolt Y-hang; spike and bolt Y-hang rebelay
'Snow Way On (P5)	"	Bolt

⊗ 4/9

Location: On the approach to Tras la Jayada. up on the right hand side of the valley. Bearings: Jultayu, 64.5°; la Jayada, 202°.

Description: 4m deep entrance climb (approx 2 x 1.5m) leads to series of small chambers, ending in a rift which can be climbed down about 4m, but becomes too tight.

⊗ 5/9

Location: Due south of 4/9, on other side of small valley.

Description: Jagged rift partially concealed by a few jammed boulders. Ladder pitch to snow plug. Small hole leads to chamber with no way on.

⊘ 6/9

Location: Two large pits in karst outcrop on North edge of medium sized bowl about 60m down valley from Tras la Jayada. Bearings: Jultayu 123°, Verdeluenga 234°, Cuvicente 175°.

Description: Climb down into the pit which sometimes contains a snow plug. A 5m ladder pitch leads to a tight rift which could probably be pushed by a thin and determined party.

⊗ 7/9

Location: 10m ESE (120) of central boss of 1/9.

Description: 15m pitch to snow plug, sloping down at 20°to another upwards shaft. Halfway down the slope it is possible to kick down into the snow to a rift leading to a blocked bedding plane. At the bottom of the slope it is possible to kick down into a blocked shaft.

⊗ 8/9

Location: 10m NNE (10) of central boss of 1/9.

Description: A 30m deep rift with some choked passages leading off.

⊗ 9/9

Location: About 70m upslope from Tras la Jayada.

Description: A 30m pitch to snow ledge, followed by 5m pitch to the bottom. Three ways off, all choked.

⊘ 10/9, Cueva de los Huesos

Location: On a bearing of 126° to Jultayu and 172° to Cuvicente. Below rillenkarren on west wall of rift valley between two rocky shakeholes. The valley runs N-S below summit of Gustuteru with view north to Lagos path and south to Cuvicente. Labelled "OUCC 10/9" with badly faded red paint. 0343027 4788620, alt 1753m.

Description: 60m deep and tight. See 1999 report. Obvious hole above right of actual entrance goes nowhere. Small rectangular entrance into small chamber with a narrow, strongly draughting squeeze at the far end.Ledge 2m below and quite large passage continues down. 10m pitch lands on rocky floor with too tight rift, but a hole in the wall half way down the pitch leads to short walking passage with bones (animal? human?) to pitchhead. 6m pitch lands in awkward 3-4m high rift. Following this rift brings you to the third pitch, approx. 24m. Several further climbs down lead to Pipsqueak, a rift in the floor. Various passages lead off from this section, the most promising of which will need a fair amount of hammering and/or capping.

Rigging:

Pitch	Rope	Rigging
1st	L10	"Dodgy belays".
2nd	L10	"Dodgy belays".
3rd	40m	Two 2m steps down to main hang (20m); about 4 rebelays; needs a bolt deviation about half way down (not bolted).
Handline climbs	20m	
4th	20m	

⊗ 11/9

Location: Above an eyehole on the side of Gustutertu.

Description: A 12m vertical phreatic tube to a chamber. A crawl leading off becomes too tight but draughts.

? 12/9

8m down to snow plug.

⊘ 13/9 Wiggly Cave or The Wiggly One

Location: An extremely large shakehole located about 100m from La Jayada.

Description: Triskelion shaped (like the Isle of Man emblem), each leg being about 5m wide and 10m long, containing a large snow plug. Pitches can be rigged down to the snow plug from various places, but there seems to be no way on.

⊗ 14/9 Bara Shigri

Location: At end of valley containing 10/9, on SE slope of Gustutertu heading towards La Jayada and almost directly below 27/9. Formally known as B1 and probably labelled as such.

Description: Large walk-in entrance, 4m high, 6m wide, used as an animal shelter. Phreatic tube in roof leads up for over 10m. Choked horizontal crawl to rear of entrance chamber drafts. This was dug to low arch into open passage. Rift 5m long, 1.5m wide and 1m high but choked.

⊗ 15/9

Location: A small entrance in the bottom of a boulder-filled valley, 500m north of La Jayada. Formally known as B2 and probably labelled as such.

Description: 10m pitch. Chokes.

⊘ 16/9

Location: Just below Cuvicente-Verdelluenga ridge, 100m to col on bearing of 160°.

Description: Several 30m shafts with snow in them. Also known as 25/9.

⊗ 16/9A

Location: This is the largest and highest of the 16/9 shafts.

Description: Twice as high as the tree outside Harvey's house. Twin shafts meeting at the bottom. No way on past the snow. The other shafts in this area are still worth looking at.

⊘ 17/9

Location: To right (true left) of La Jayada is a green area with an obvious choked shakehole. Uphill to the right over a little ridge is a shallow valley with a snow plug. In the (true) right side of this wall is a cleft.

Description: Clamber down and double back under boulders. Not pushed further.

⊗ 18/9

Location: In valley running down from Verdelluenga, just over the rocky ridge 400m NNW of La Jayada. Bearings: Verdelluenga 232°, Cuvicente 144°.

Description: 10m descent to snow plug; further 5m descent reaches too-tight rift.

⊘ 19/9

Location: In the spur of Verdelluenga overlooking a 200m diameter closed depression. Bearings: Verdelluenga 222°, Cuvicente 118°. 342644 4787800 (WGS84).

Description: 25m deep shaft to snow plug. A rift goes off. A shake hole behind has a window into the main shaft.

⊗ 20/9

Location: In the side of the spur of Verdelluenga, in an area containing many shafts and shakeholes. Bearings: Verdelluenga 216°, Verdelluenga 110°.

Description: Huge, 30m long gulley with snow plug. Entrance pitch lands on snow, and slope can be followed down to the top of a pitch, choked with snow 10m down. Traversing over this pitch reaches a pleasant, round, 20–25m deep shaft, unfortunately choked at the bottom.

◯ 21/9

Location: Near the western col on the Cuvicente–Verdelluenga ridge, overlooking a bowl. Bearings 148°to col (about 300m), Verdelluenga 250°.

Description: An undescended 25m shaft.

◯ 22/9

About the same height as Boca del Joon, and 60–100m to the right (true left), in a shakehole behind a little ridge, and to the left (true right) of some nasty karren. See map in Ario log book.

◯ unnumbered

Location: On west of Jou ridge beneath the scree slopes. Cuvicente 192°. Two small entrances in rift on either side of large boulder.

Description: Choked but diggabke with slight draft.

◯ unnumbered

Location: Found in clag on path between Jultayu bowl and 27/9. At lowest end of valley that has a cairn at its north end.

Description: Small entrance beneath boulders in left hand wall. View through boulders to continuing passage below. Hand-line may be needed.

⊗ Unlabelled entrance

Location: Bottom of boulder filled ravine down slope and to true right of 3/9.

Description: Possible to drop between boulders into small chamber, but all ways on are choked.

⊗ 23/9

Location: 035° to Ario Refugio. 112° to Cuvicente. On karst above La Jayada, approximately 200m upslope and to left of spur from main ridge.

Description: Thin crack opens out to 5m free climb. Choked at bottom.

⊘ 24/9

Location: 037° Ario Refugio. 114° Cuvicente. On karst above La Jayada, approximately 200m upslope and to right of spur from main ridge.

Description: Body-sized vertical crack needs hammering to reach a small chamber.

⊘ 25/9

Location: 037° Ario Refugio. 114° Cuvicente. Several shafts in depression just to the north of Cuvicente-La Verdulluenga ridge, roughly halfway between the two peaks. Subsequently identified as 16/9 but has been tagged 25/9 a-e.

Description: **25/9a**. Bridge Pot. Large open shaft with 3s drop to snow plug. 40m rope did not reach snow-plug, but 70m rope reached snow and allowed some progress between snow and walls before these pinched in (LB). A rock bridge part-way down the shaft leads to an alternative pitch which also lands on the snow-plug. May be intesting in lower snow conditions. Revisted towards end of expedition but still snow-plugged.

25/9b. Downslope of 25/9a and obvious continuation of the same rift. 10m pitch but choked.

25/9c. Two shafts seperated by a rock bridge down to a snow plug. This can be accessed by clambering through boulders from a depression down-slope from the shafts. No way round snow-plug.

25/9d. 10m open shaft to snow-plug. The bottom of the shaft can be reached from a depression upslope of the shaft. Upslope in the depression leads to a 5m crawl, then 10m of walking passage to a moon-milk decorated chamber with skylights to the surface. Rig a 20m hand-line from top of depression to climb down loose slope to reach the bottom of the snow-plug. From here a 20m pitch between boulders can be rigged (JC).

25/9e. Unentered smaller shaft to west of main group.

"The caves up on the La Verdulluenga-Cuvicente ridge that JC, Keith and Lynn found (25/9a, b, c,d) have been retagged. The cave that was 25/9a or 25/9c or possibly 25/9b or 25/9d has now been reinstated as 25/9a. This being the pot with the bridge that is not a bridge but is in fact a bidge and may warrant further exploration. 25/9a is also still 25/9c, or possibly 25/9b or 25/9d because the tag for 25/9c (or b or c) which was on what was and is now 25/9a could not be found, and therefore 25/9a is still also 25/9c or b or d. The cave that was not 25/9a, but was 25/9a for a day is no longer 25/9a but is not 25/9b or 25/9c or 25/9d either, because the tag on 25/9a when it was not 25/9a could not be found for this cave. Hopefully the other 2 caves are correctly tagged. I hope this clears up any confusion."

⊘ Keith's Lost Caves

Location: On a line between 25/9 (16/9) and Gustutertu, roughly as you cross another (imaginery) line between La Verdulluenga and Ario, in an area of karst high up on the eastern of the valley below El Regallon.

Description: Two unentered holes in a small rifty valley.

⊘ 26/9

Location: Bearings: 162° to Cuvicente. 190° to La Verdulluenga. Three holes at the bottom of the northwesterly (southeasterly?) slope of Gusterteru located in the corners of 2 small rocky depressions.

Description: **26/9a**. Jultayu 134°, Cuvicente 176°, La Verdulluenga 226°(editor's note: these bearings are inconsistent with the ones above!). Short climb down in corner of higher depression to head of 10m pitch in rift. One way on at bottom chocked, and others routes are chocked, but a passage can be seen beyond and there is a slight draft. Half way down the entrance pitch a squeeze enters a continuation of the rift which can be free-climbed to a very (howling) drafty junction with a pitch down and a continaution of the rift blocked by a large boulder.

26/9b. Hole in opposite corner of depreesion from 26/9a. Possibly the same rift. Appears to choke but not thoroughly investigated.

26/9c. Hole in corner of a nearby depression in same rift line. Tight squeeze to probable boulder choke. Unentered.

? 27/9, Bill's Cave

Location: 065° to Cabeza Llambria, 118° to Jultayu, 156° to Cuvicente, 218° to La Verdulluenga. Rectangular depression with rift entrance on east side of the south-west upper slopes of Gustutero, about

100m from summit in direction of Cuvicente. Follow path from Martini pool, then climb up slope before reaching a large boulder. 0342983 4788514.

Description: Spiky 10m entrance pitch to chamber (Bolt Y-hang with natural back-ups) with a squeeze through to 2s drop. Second 10m pitch leads to a third 10m pitch in the same rift with progress again barred by a dig. Boulders passed to enter *Rocking Horse Rift*, with 20m pitch *The Chocalate River* reached through a small hole in the floor after 5m and named after the mud and calcite streamway ahead. Next pitchhead is very loose but opens into a fine 35m shaft *The Singing Pastuer*. This lands in a large rift with a small stream. Upstream leads to wet crawl *For Carbide's Sake* or too tight rift. Downstream leads through pretty calcite formations and the head of the 6th pitch, another 20m drop. At the base of the way on in the rift becomes impassable, but may yield to long term hammering to gain widening rift below. Alternatively climbing up the rift over calcite flowstone *Nocilla Streamway* enters *The China Grotto*, a superbly decorated chamber with crystal pools, *Chinese Flames*, and plenty of stal. A way on may exist over the China Grotto, but this would certainly destroy the formations with no guarantee of reward. A second hole in Rocking Horse Rift was pushed leading to an 8m where a tight rift beneath boulders joins the base of Chocolate River. A bolted traverse from the final pitch-head was not useful, but a serious capping effort will probably open the way on at the bottom of the pitch.

⊗ 28/9

Location: 067° to Cabeza Llambria. 124° to Jultayu. 168° to Cuvicente. 227° to La Verdulluenga. Large rillenkarren-ringed depression on south slope of Gustutertu, about 100m below obvious rock shelter.

Description: Small 2m deep rift blocked by rocks.

⊘ 29/9

Location: Might be 5/9. 063° to Cabeza Llambria. 115° to Jultayu. 152° and 172° to Cuvicente. 236° to La Verdulluenga. 350° to Gustutertu. Large (30m x 40m) bouldery depression with rillenkarren on east slope of La Verdulluenga above Tras Le Jayada.

Description: Various ways into meandering rift with strong draft. Stones rattle for up to 10s (?!) Rigged 10m pitch/climb in meandering rift to bouldery floor. Rift continues over short traverse to a squeeze and tight 3m climb down. Rift at bottom too tight.

⊗ 30/9

Location: 120° to Jultayu. 144° and 169° to Cuvicente. 211° to La Verdulluenga. Shake hole by path from C3 col down valley on SW slope of Gustutertu, on right of path going down.

Description: Block-filled rift. Climb into rift and crawl under surface boulders. Looks into hole at top of meandering rift 1 to 2m deep. Too tight. Not worth talking about.

⊘ 31/9

Location: 059° to Cabeza Llambria. 120° to Jultayu. 175° and 185° to Cuvicente. 230° to La Verdulluenga.

Description: Drafting dig at bottom of a shakehole. Dug to reveal a pitch, down which a crowbar was lobbed. Ladder pitch for 5-7m to boulder floor and too tight rift. May be diggable (KH, FL). Not clear if crowbar was retrieved.

⊘ SIE Mark1

On path from C3 col on left hand side of valley spightly lower than TLJ. Within 5m of path on RHS going down. Circular shaft with snow plug.

? SIE Mark2

123° to Jultayu. 167° and 182° to Cuvicente. 229° to La Verdulluenga. Circular depresion with rillenkarren benches.

⊘ **33/9**

Location: Jultayu 130°, Cuvicente 190° & 199°, La Verdulluenga 237°, Gustutertu 299°. Below scree slope down from path leading from Jultayu to the La Verdulluenga valley.

Description: 2m square entrance leads to narrow rift with small draft. Needs digging or hammering.

○ **34/9**

Location: Originally known at 33/9, and possibly labelled as such. 1–2m open shaft with 2s drop. Cuvicente 154°, La Verdulluenga 240°.

Description: Undescended.

○ **35/9**

Location: Approx 50 m South of the large shakehole circa 50m SE of La Jayada. Alternatively skirt round from 2/9 to the E. Near the bottom of a karst area sloping at 30°.

Description: Undescended 10m shaft.

⊗ **36/9**

Location: Near lower end of valley running down from La Verdelluenga containing many shakeholes. Bearing: La Verdelluenga 232°.

Description: 10m shaft rigged on naturals leads to chamber with snow plug and no way on.

⊗ **37/9**

Location: In valley roughly 200m E of twin peaks of Gustuteru (called Cabeza del Burro on Mapa Topographica Nacional). No peaks visible from entrance, but bearings from 10 m upslope La Verdelluenga 221°, Cuvicente 150°. Down valley from 41/9 and Cdo Jermoso (on Adrados map).

Description: Short climb down to walk in daylight entrance to small chamber with snow plug. Two daylight shafts enter from above. 3m climb down (bolted) to right of snowplug lands on bouldery floor with too tight rift heading off horizontally at floor level. Choked after 1m. Possibly barely perceptible draught. Snowplug was still quite large at end of 1999 expedition—possible source of water if we ever decide to camp nearby.

⊗ **38/9**

Location: Large walk-in animal shelter to the right (true left) of La Jayada, over a small ridge. Bearings: Cuvicente 127°, Ario Pastors' Huts 048°, La Verdelluenga 243°.

Description: Large entrance 6m wide x 2m high which slopes upwards at rear. Small grovel on right goes nowhere. Sloping squeeze on left at rear leads to a small sloping chamber. At the base of this chamber, a way through to a climb of about 5m in loose rift goes nowhere. Also from the chamber, a way back into the left hand side of the entrance can be found—climb over dead sheep. Unpromising.

⊗ **39/9**

Location: Small shaft about 1.5m across and 5m deep in karst outcrop to right (true left) of La Jayada in same valley as 36/9 about 150m up valley in direction of La Verdelluenga. Bearings: Cuvicente 135°, La Verdelluenga 229°.

Description: 5m deep shaft has too tight continuation at bottom. Piddly little rift may connect.

⊗ **40/9**

Location: Obvious shaft on lhs of large bowl where La Rena ridge forms right hand side of bowl (Jou los Purriellos on Adrados map). Very faded SIE mark and cairn near entrance. Bearing from entrance: La Verdelluenga 246°. Bearing from lip of bowl to cave 197°, La Verdelluenga 234°, Cuvicente 119°, Ario pastors' huts 48°, Cabeza Llambria 70°.

Description: Large shaft 6m x 3m rigged using bolt with boulder back-up at upper end of shaft. 15m drop onto snow plug—bolt rebelay 10m below lip, 2m below ledge. Continue down steep snow plug under a rock arch to a narrow drop through into another steep snow-floored chamber 6m x 4m. Various ways off were examined but were either choked with snow or stopped. Explored at end of expedition with low snow levels—return visit only worthwhile with exceptionally low snow levels.

⊗ 41/9

Location: Large boulder filled shakehole with open shaft in one corner in rocky outcrop on Cuvicente side of Cdo Jermoso (Adrados Map) between 36/9 and 37/9 near green patch. Bearings: Cuvicente: 140°, La Verdelluenga 227°, Cabeza del Verde 61°, Jultayu 110° (?).

Description: Shaft is 12m deep and rigged on bolt with natural backup. Bottom of shaft is rubble floor with remains of snowplug. Two little crawls (one each side) go nowhere. Removing a few rocks from under snowplug revealed solid floor with tight squeeze (probably passable by thin caver) to a body sized cavity with a rock ceiling and rh wall and rubble floor. Possibly diggable.

○ Unnumbered cave

0342859 4787975.

Area 10

Area 10 is the region between the green ridge running down from Jultayu and the gorge and includes the Valle Extremero from the lip of the bowl containing 53/5 to the gorge (i.e. everything to the east of the Leon-Asturias border). Initially, it was thought that this area, and 1/10 in particular, might provide a lower entrance to 2/7. This is still possible, but the surface survey showed that 1/10 is not near the line of 2/7.

⊗ 1/10

Location: The cave is located about 300m down the Valle Extremero. Just below the "prow" of rock that divides the upper part of the valley, leave the eroded path and strike off on a contour, rightwards (facing downslope). Two small valleys must be crossed before a climb down can be made to a small stream bed (normally dry). Ascent on the other side leads to a vertically descending hole, about 2m by 4m.

Description: The shaft is about 60m deep, in approximately 20m, 20m, 15m and 5m stages, with only standing-sized ledges between pitches. The landing is in a slightly sloping boulder floored rift about 50m long and 2–5m wide. Upslope the roof is about 25m high with water coming in from roof level. The water disappears into a grovel at the downslope end, and possibly resurges at Trea.

⊗ 2/10

Location: Located on a bearing 9° to the dolomite boss on the ridge of Cabeza Llambria, 49° to Cabeza Llambria and 98° to the obvious entrance in the central Massif. Further down the Valle Extremero from 53/5, walk down the valley with the 53/5 ridge going up from left to right. Follow this ridge up at an angle of about 30°; the lie of the ground forces you to the left. Eventually you see a line of entrances in the ridge in front of you. 58/5 is the left-most of these, a fine 4m high triangular entrance with a hidden eye-hole above it. This cave was surveyed and renumbered 10/10 in 1991.

Description: From the entrance a 30° mud slope leads after 10m to a small chamber. A climb down to the left leads to 15m of passage ending in a flow-stone blockage. A passage ascends to the left. A narrow slot in the floor is the head of a 5m blind pitch. After 15m, the passage leads to a small chamber, where a tight climb or a 10m pitch unite in a chamber. A crawl down a loose boulder slope leads to a three way split, with each way choked.

⊗ 3/10

Location: Walk up the green ridge towards Jultayu until you are at a height just below the top of Cabeza el Verde. To the left is a large bowl; one end opens out to look down on the Trea path. Walk about 2/3 of the way around the cliff face that forms the back wall of the bowl. The entrance is a 4m high slit in the cliff face.

Description: The lower half of the entrance is too small to permit entry of a person, but a climb up into the top of the entrance reveals a series of dry cascades descending at 45° — unexplored. This cave was originally found in 1989. Many unsuccessful attempts were made to relocate it, until finally in 1991 it was found to be an impenetrable crack.

⊗ 4/10

Location: Located near to the woods in the Valle Extremero, in the right hand cliff, a 1m by 1/2m entrance.

Description: A 5m horizontal rift leads to a 7m pitch which lands in a chamber with a pool. No way on. It is possible that a 15m climb above the entrance may lead to another entrance into the same rift.

⊗ 5/10

Location: Located on the green ridge of Jultayu, 50m on a bearing of 10° from the point where the Trea path opens out above the gorge. 344503 4788610 (WGS84).

Description: A small hole is the top of a 7m ladder pitch into a boulder floored chamber. At the base of a short boulder slope, a crawl over a small hole in the floor leads through a 5m long, 10m high chamber to a draughting choke. This was dug into a crawl, passing a narrow pot to a small chamber. A hole under boulders to the right leads to a choice of routes. A 10m pot connects with the narrow pot and is choked at the bottom. Opposite the hole, a small tube above a dangerously poised boulder leads down to a choke. The main route leads to the left into a chamber extending to a sloping boulder floor. Downslope leads to a choked rift. At the top of the slope, a crawl left leads to a surface connection (currently too tight) situated at the bottom of a deep shakehole; this is the source of the draught.

⊗ 6/10

Location: Located in the large depression, Huerta del Rey, near the top of the Trea Valley, which is believed to have been formed by the collapse of Choke Egbert in 2/7.

Description: A large rift in the south west corner can be abseiled into. Four separate passages were explored and all choked.

⊘ 7/10

Location: 53° to Cabeza Llambria, 214° to Jultayu. Just before the Trea path starts to descend steeply, it splits in two, passing either side of a grassy patch, containing a small cave. 0344418 4788566.

Description: A short drop into a tight rift. "A small person with a large hammer and a powerful blow could probably descend the rift."

⊗ 8/10

Location: 56° to Cabeza Llambria, 357° to Cabeza Verde, in the middle of the ridge leading to Cueto la Requexada, in a most unlikely position.

Description: A 3m deep pit, with a 50cm diameter entrance. Described as very silly.

⊘ 9/10

Location: 45° to Cabeza Llambria, 344° to Cabeza Verde. On the left hand side of the ridge leading to Cueto le Requexada. Invisible from the path.

Description: Entrance squeeze leads immediately to a 6m drop to a bouldery ledge. A further pitch of 10m in 3m wide pot, with slimy walls of mud and moonmilk, to floor with a 1m high body sized rift, partially blocked by stal and mud.

⊗ 10/10 Cave of the Old Men's Dream

Location: 44° to Cabeza Llambria, 347° to Cabeza Verde, altitude about 1510m. Directly below 9/10.

Description: This cave was discovered amid much excitement, and described as being as large as the

2/7 stream passage. It was explored and surveyed. The next day it was identified as 2/10, explored the previous year. It is much smaller than described, being a fairly typical phreatic passage.

⊗ 11/10

Location: 58° to Cabeza Llambria, 3° to Cabeza Verde, altitude about 1555m, in shattered ridge running towards the Valle Extremero.

Description: A shaft with a wedged boulder at the top. A ledge 2m below surface leads to 8m pitch, and further 4m boulder slope down to choke. Climb up to right leads to choked inlet.

⊗ 12/10

Location: 47° to Cabeza Llambria, 357° to Cabeza Verde. 15m from 8/10.

Description: 'S' shaped rift chokes after 2m

⊗ 13/10

Location: The cave is reached from a point on the green ridge of Jultayu, overlooking the Trea Valley, about 50m above the Trea path and 10m below a prominent lump of rock with a tree in the Trea side. Bearings: Cueto la Requexada 92°; first bunch of trees in the Trea valley 120°. An exciting 50m abseil (two spike belays, bolt 8m down, bolt just above lip) with fine views of the gorge, lands on a vegetated ledge. The cave is at the top the ledge, and visible from the prow in the Trea valley.

Description: Chokes immediately.

⊘ 14/10

Location: Trea Area. Cabeza Llambria 052°, Cueto-La-Requexada 126°, 170°to spur between CLR and Jultayu. Walk down Trea path until junction between CLR and route down to Huerta del Rey. Entrance is found by heading up grassy slope towards local peak. Entrance below peak, under small sloping overhang.

Description: Body sized rift drops into body sized tube. This heads down for 3m to top of 3m pitch in rift. Rig using laddrer from flake. This drops to a sloping, bouldery floor to diggable, clacited, drafting dig in rift. Digging revealed a continuation of the passage but more digging is necessary before it can be entered by cavers.

◯ 15/10

Location: In lower slopes of Area 10, just above the forest in Valle Extremero. 0344729 4788950. Estimated elevation 1150m (?).

Description: Low crawl at foot of cliff appears choked.

◯ 16/10

"GPS buggered up; if memory serves it was about 50m after [15/10]". Hole 5m x 5m, about 10m above ground (maybe higher) in left hand cliff.

⊗ 17/10

This is the same as 13/10.

◯ 18/10

Location: Seen from 0344721 4788581: shortly after the Trea Path splits, follow path that goes up to ridge between Extremero and Trea ("The Prow"); cave is visible from whole of ridge. Bearing 126° *from* above location.

Description: 5m x 3m hole in cliff, 20m above green slope on right of Huerta del Rey.

◯ 19/10

Location: When the Trea Path splits, follow the route onto the ridge between Extremero and Trea ("The Prow"). Near the top of the ridge. 0344788 4788583.

Description: Body-sized hole under large rock.

◯ 20/10

Location: Half way down cliff. Half way down Extremero, directly below summit (Cabeza Llambria?). Would require a very long rope and a very brave abseil to reach.

Description: Inverted V- (i.e. $\bigwedge$-) shaped hole. This might be Iestyn's A-Hole (described after 59/5).

⊘ 21/10, La Cueva de la Mariposa

Location: UTM 0344922 4788446. The entrance to downstream 2/7 (not)?! Near the end of the Extremero–Trea ridge (The Prow), following the line of 2/7 but beyond Huerta del Rey/Choke Egbert, a rift in the ridge reveals a hole which can be entered 0344922 4788446.

Description: Excavated hole leads into an attractive white rift, 20m long and 10m high, which pops out into the cliff overlooking the Trea Valley.

⊘ 22/10

Location: Rift on the right hand side of the Trea Path. 0344160 4788668.

Description: On the tight side and unlikely to go anywhere.

⊘ 23/10, Flytrap

Location: 0344702 4788611.

Description: Tube followed by short climb leads to choke with bones and chisel (?).

◯ 24/10

0344553 4788602. Small hole off path between Prow and Trea Path.

⊘ 25/10

Location: 0344606 4788623. Just on Trea Path side of the previous cave; it looks like they connect.

Description: Drop straight down into grass, not under outcrop.

⊗ 26/10

Location: In the base of the Valle Extremero, about 200m above the trees, in the base of the cliff, near a large boulder. 0344884 4788961, alt. 1348m (33m accuracy).

Description: 10m long. Used as a sheep shelter.

⊗ 27/10

Location: On the left side of Valle Extremero, near the woods, at the base of the big cliff that forms the north side of the valley. 0345262 4788803, alt. approx. 1100m.

Description: A small spring. A trickle of water flows out from between boulders, and runs 20m down a slab before sinking in scree. A spring was also reported at 0345314 4788735, alt. 1071m; it is not clear whether this is the same spring, or a related one.

⊗ 28/10

Location: In the trees in the Valle Extremero, 20m north of the ridge on the south side of the valley, on a grassy slope, between two trees that are 5m apart. 0345461 4788470, alt. 1188m.

Description: 1m by 0.5m vertical slot leads down for 2m to a 3m long, choked chamber. No draught.

⊗ 29/10

Location: On the ridge above 28/10, 20m north of the ridge, on a grassy, boulder-strewn slope. 0345202 4788474, alt. 1305m.

Description: Body-sized vertical slot leads down 1m to a 1m high chamber, 5m by 3m, with rocky sloping floor. Choked. No draught.

⊗ 30/10

Location: On Cueto la Requexada, at an altitude of about 1200m, about 20m from the ridge, just below a tree. 0345438 4788443, alt. 1202m.

Description: Small hole, 2m deep, goes nowhere. It's possible that this is the same as 28/10.

Area 11

This is the area situated behind the ridge behind the Ario Refugio; it is marked as Jous de Ario on the map.

⊘ 1/11 Pozu Optimisto

Location: The difficulty of finding this cave is legendary. Halfway up (60m below the ridge) a fracture-controlled valley, about 80m long, with strike 20°, in a fairly even northwards-facing slope, south west of the Jou de Ario. The bottom of the gulley is a shakehole 20m long by 5m wide with a path running through it. Above this is an open 20m deep shaft, 6m long by 3m wide, with an inscription on the top of a boulder on the western brink. A rock bridge separates this from another shaft. Bearings from entrance: Julagua 92°, Llorosos 51°, small hills north west of Jou de Ario, 37° and 359°; from top of ridge above entrance: entrance 47°, Jultayu 159°, Pico Jorcada 223°, Julagua 90°, first small hill 39°. Entrance grid reference: E43330, N89940, A1590.

Description: See Proc 11 for details. This cave was originally explored in the early 1980s when it was numbered 30/5. It ended in a constriction which was passed in 1993, to a sump.

⊘ 2/11

Location: 225° to Cabeza Forma, 276° to Cabeza los Campanas, 146° to Cabeza Julagua, 180° to Ario saddle. From the valley (approximately 400m north of Ario) a cairn is visible above the cave. Marked 'OUCC 2/11' badly.

Description: Climb down 3m in entrance cleft to head of 10m ladder pitch, rigged off natural plus long wire through thread above. Lands in gently sloping, bouldery rift chamber. At lower south western end is an easy squeeze through to continuation of rifts which become too tight. To the right an outlet has cut down into another chamber but way on requires hammering. To the left an undescended 8m pot is found. Cave trends 290° – 60°. Back at the bottom of the pitch, a crawl leads off either side; upwards to the left, downwards to the right. These rifts lead down to the top of a parallel rift that can be free climbed down for 15m to boulders.

Caves 3/11 to 6/11 are close to the path running north west from Ario parallel to the Los Lagos path below sod 4. 3/11 is the furthest of these from Ario. The compass bearings may be unreliable as the pencil used to make notes was found to contain metal!

◯ 3/11

156° to Cabeza Forma, 112° to Cabeza Julagua. Small bedding crawl at base of cliff above col on left hand side, 50 feet above green col. Undescended.

⊗ 4/11

Location: 164° to Cabeza Forma, 106° to Cabeza Julagua. Unlikely entrance at foot of 6m deep and 10m across green basin at foot of valley on path. 100m closer to Ario than 3/11. 0343515 4789942.

Description: A wide crawl leads to a 5m pitch into a choked rift.

◯ 5/11

183° Cabeza Forma. 103° to Cabeza Julagua. Obvious shaft with snow plug, on right hand side of path towards Ario, at foot of valley. Marked as unfinished by SIE. No OUCC mark. Undescended. 0343447 4789981. This might be the same as 39/11, but the coordinates don't agree.

◯ 6/11

Sheep shelter at base of 2m high cliff 10m above 5/11. Unentered.

⊘ 7/11

Location: 196° to Cabeza Forma, 131° to Cabeza Julagua, 337° to Porrón de Muhandi. Forms a large feature near a cairn on the col overlooking the steep drop to Pozu Los Texos. Walk down boulder slope to foot of 12m cliff. 0343702 4790148.

Description: Cave floor is covered in animal droppings. Crawls lead off. Not investigated further.

⊘ 8/11

Location: 125° to Cabeza Julagua, 227° to Cabeza Forma, 330° to Cabeza de los Campanas. Almost on top of the cairned ridge running at a bearing of 340° northwest from Cabeza Julagua, just on the right hand side (away from Ario) near a cairn. Large obvious entrance with perched boulder over top, tarpaulin in the entrance and bushes growing. Faded SIE marked ⊘84. 0343929 4789932.

Description: 140m deep cave pushed in 92. A couple of unexplored leads remain. See 1992 expedition final report.

⊗ 9/11

Location: About 200m from Ario Refugio (bearing 20°) on second green ridge. Altitude about 1630m. 95° to Cabeza Julagua, 140° to Cabeza Las Campanas. Faint SIE mark, not marked by OUCC.

Description: Entrance is 1.5m by 5m trending 30°. Opens out to 3m by 10m. 12m shaft with short climb at foot of ladder which leads to a boulder floor with no way on.

⊗ 10/11 Leg of Mutton Cave

Location: On north west side of Cabeza Julagua, 352° to Cabeza Las Campanas, altitude about 1605m. Entrance at lower end of large obvious cleft running down across the hillside. Marked OUCC 10/11.

Description: Entrance squeeze through boulders is followed by a 5m climb to a bouldery, bone scattered floor sloping towards an alcove. From this point there is no way on, but a 2.5 climb up reveals a small alcove to the left with a too tight inlet beyond, which may be hammerable. These seem to be continuations of the surface fracture. Seems limited in potential.

⊘ 11/11

Location: 275° to Cabeza Las Campanas, 220° to Cabeza Forma, altitude about 1575m. Unmarked. On green grassy gryke, 15m north of the green path running east from Cabeza Las Campanas.

Description: 6m pit with very mossy sides and possible dig at the bottom. Distinctly unpleasant.

⊘ 12/11

Location: 298° to Cabeza Las Campanas, 210° to Cabeza Forma. On the south side of the same valley as 2/11 and 11/11, at the same height as 2/11. 10m south of the green path from Cabeza Las Campanas.

Description: Hopeful looking rift leading southwards and soon gets to a point where minor gardening may allow further progress. Worth another look.

⊗ 13/11

Location: On the SE face of the first ridge, about 600m on a bearing of 310°from the peak of Cabeza Julagua.

Description: Small system with 5 separate entrances, 3 easily passable. Cleft in cliff can be entered into a rift about 10m long, access to entrance is easier at higher level and the rift widens out after about 2m, where small skylight entrance can be seen above. The rift closes down again, although it may be just passable, about 7m into cave, where daylight is visible beyond the constriction. This comes from one of two entrances in large cleft near ridge top, and this entrance gives access to the remaining 3m of rift beyond the above noted constriction. Doubling back under this entrance, the rift continues slightly to the right and can be followed for about 2m to an easy squeeze into a roomy chamber. The other entrance comes in above this squeeze. The chamber is about 5m long and slopes away from the entrance. Halfway down the right hand wall an inlet comes in along a tight sinuous rift through which the fifth entrance can be seen but is too tight. At the bottom of the chamber a rift leads off downwards but is choked after 4 metres by largish boulders. No way on or draught is apparent.

⊗ 14/11

Location: In valley below 13/11, at bottom of shakehole.

Description: Two large bouldery rills with trickling water draining into a shakehole.

⊗ 15/11

Location: On NW face of Cabeza Julagua 50m below summit, just above one of the paths leading to Ario. 2 Obvious entrances. 0344071 4789880.

Description: Right hand entrance: short climb up, obviously blind. Left hand entrance: entertaining traverse to reach sizeable entrance and vestibule about 4m long and 2m deep. Three ways off, all appear to be silted up. Bottom entrances seep water, and appear to be probably resurgence entrances rather than inlet entrances. Not speleologically exciting, but very obvious landmarks from valley below.

⊘ 16/11

Location: On the NE side of Cabeza La Forma, 5m N of the path leading to the Ario Refugio and on top of a small spur. Cabeza La Forma 193°, Cabeza Julagua 101°, Cabeza Las Campanas 345°. Not marked.

Description: Obvious hole in the ground. Triangular vertical shaft about 2.5m by 1.5m at the top and 10m deep. A tight crawl heads south, but becomes too tight.

⊘ 17/11

Location: Not recorded

Description: Surface rift 0.75m by 5m at the top and approximately 4m deep with a bouldery floor. The rift is oriented N - S, and the floor slopes slightly to the S. At the bottom a tight squeeze leads E, passable if a few boulders were removed. Beyond the squeeze a narrow passage leads N. On the surface, 10m to the N, a tight vertical slit is almost certainly the end of the passage described above. 2 or 3 small holes in the rock lie along the line between the end of the passage and the second surface slit.

⊗ 18/11, Pozu Small Snails

Location: 15m east of the climbing wall.

Description: A 3m deep hole with a connection through to 19/11.

⊗ 19/11, Pozu Rubber Clogs

Location: 15m east of the climbing wall.

Description: A 3m deep hole with a connection through to 18/11.

⊘ 20/11

The easier top entrance into Systema Sierra Forcada. See elsewhere.

? 21/11

Small entrance above 23/11.

? 22/11, Pozu del Shades

6m pit to draughting rift.

⊗ 23/11 Entrada del Raptor

A sporting entrance into Systema Sierra Forcada, entering in Wet Cheeks Rift. See elsewhere.

⊗ 24/11

Location: A hole overlooking Mohandi. 80m SSE of 26/11; 130m north of 23/11. Marked ‘SIE ◯’.

Description: 10m entrance pitch lands on boulder slope, leading to second pitch of 8m. Bouldery floor descends, before suddenly ending in a wall. Hole 6m up can be reached by traversing from top of second pitch, but the rift becomes too-tight.

⊘ **25/11**
Location: In left (East) side of long depression to west of 26/11 and 27/11.
Description: Small draughting dig.

⊗ **26/11**
The bottom entrance into Systema Sierra Forcada, entering just before the Mud Sump. See elsewhere.

◯ **27/11**
Location: Near 26/11. Looks like a fossil resurgance.
Description: A big draughting hole

⊗ **28/11**
Location: A strongly draughting hole, downhill and to the right of 26/11.
Description: A squeeze between loose rocks enters a too-tight rift.

⊗ **29/11**
Location: In Mohandi valley, just above the springs, behind a car sized boulder.
Description: A horizontal grovel, which splits just inside the entrance. Both routes choke quite quickly.

◯ **30/11**
Location: Small shaft in small north-facing depression, 10m below top of ridge (On Cabeza Julagua side). Bearings Cabeza Julagua 139.5°; Area 11 survey cairn 166°, Cabeza Forma 219°, Cabeza las Campanas 281°.
Description: Entrance climb of 2m leads to short crawl. Doesn't look as if cave continues through crawl.

? **31/11**
Location: At base of cliff on the ridge above 26/11 (63.30m north, 11.18m west and 28.08m above 26/11).
Description: Small draughting crawl.

◯ **32/11**
Location: 0344360 4790248.
Description: Big entrance. This is probably the same as 13/13.

◯ **33/11**
Location: 0343870 4789779.
Description: Undescended 15m shaft with a rift leading off at the bottom.

◯ **Unnumbered cave**
Location: 0343750 4790124
Description: 10m pitch in rift.

◯ **Unnumbered cave**
0343802 4790040.

Caves 34/11 to 39/11 are in the blank area between Xitu and Cabeza Muxa, and below Cabeza las Campanas and the Las Campanas–Los Pazos ridge.

◯ **34/11**
Location: 0343692 4789895.
Description: Strongly drafting choke.

○ 35/11

Location: About 50m south of path at foot of small cliff. 0343395 4790048.

Description: Squeeze through boulders to climb down at left hand side of entrance.

⊗ 36/11

Location: 0343467 4789963.

Description: Bedding plane crawl chokes after 1m.

⊗ 37/11

Location: 0343470 4789954. 50m south of path.

Description: Climb down 4m in rift; crawl chokes after 1m.

⊘ 38/11

Location: UTM 0343452 4789869. At the head of small valley 50m south of the path with a 2m high small cliff above is a very strongly draughting grassy hole.

Description: Three entrances. A: small, tight grassy hole with strong draft; diggable but probably doesn't go. B: around the rocks from A; horizontal crawl into boulder-choked area; cave visible beneath; good digging potential; drafts. C: sizeable rift uphill from A and B; descended 10–15m in total, where rift closes. Worth another look.

○ 39/11

Location: Big obvious tall entrance, 5m south of path, with small tree at top. 0343611 4789892. This might be the same as 5/11, but the coordinates don't agree.

Description: 10m pich in a rift with small amount of snow at bottom.

Area 12

This is the situated on the slopes above Culiembro. All the caves were spotted by Richard and Fred while en route to or during a climbing trip in the Central Massif. None have yet been entered; they are of interest because they may be fossil resurgences for 2/7.

○ 1/12

Visible from Oston, at an altitude of about 1150m. A round transected phreatic passage in a cliff. This will require a tricky climb to reach.

○ 2/12

To the left of 1/12 at an altitude of about 1050m. A huge hole (about 15m by 10m) lurking at the head of its own little gorge, with a small wood in it. Looks like a fossil resurgence for 2/7.

○ 3/12

Below the Oston – Carmameña path and marked on the map. A massive hole leading in the direction of Carmameña. This might have nothing to do with 2/7.

○ 4/12

About 150m above and slightly to the left of Cueva Culiembro, looking like a transected phreatic passage. Access would require being guided from the other side of the gorge, using radio or semaphore.

○ 5/12

Between the Valle Extremero and Valle de Trea, about 2/3 of the way towards the Trea path, and about half way up to Huerta del Rey. Looks like a scoop but difficult to assess.

⊗ **6/12**

Location: On Culiembro path, obvious large entrance in cliff at altitude of around 800m.

Description: Might be 3/12. Chokes immediately.

⊗ **7/12**

Location: A bit below 6/12, another large entrance.

Description: This might be 3/12 too. An artificial staircase of rock leads up to a wooden fence across the entrance. Chokes immediately.

⊗ **8/12**

Location: Follow the higher of the two Culiembro paths from Oston. Where it starts zig-zagging down the valley go straight on at the first bend and follow a goat track round onto the rib. Climb down and continue traversing downwards to meet a narrow and exposed goat track round the edge of the rib to suddenly arrive at the cave.

Description: Chokes immediately.

⊗ **9/12**

Location: Same height as Oston, on a bearing of 50°to Oston.

Description: Triangular entrance 3m high, 1.5m wide. Chokes immediately.

⊗ **10/12**

Location: 40m above 9/12.

Description: Large entrance under overhang with fir tree in entrance. Large chamber with artificial walls at back. Crawl at back chokes immediately. Climb to right leads to second chamber with 10cm wide continuation.

⊗ **11/12**

Location: 0344972 4789928.

Description: 15m long, 8m deep.

○ **12/12**

0346133 4789944.

○ **13/12**

0345511 4789944.

○ **14/12**

0345459 4789854.

○ **15/12**

Location: On the flank of Cabeza Llambria, above Culiembro, at an altitude of about 835m, in the main rib on that side of the mountain, just above some trees in a small gulley within the rib. The cave was spotted from the other side of the gorge, and is believed to be above the further reaches of Culiembro Cave.

Description: A circular entrance, estimated as 5m diameter.

○ **16/12**

Location: About 100m above 15/12.

Description: A large rift entrance.

◯ 17/12

Location: On the flank of Cabeza Llambria, towards Ostón, in a rib to the left of a fault-controlled gulley, slightly lower than Ostón.

Description: A large entrance in a cliff face.

◯ 18/12

Location: Just above Culiembro Cave, visible from the road.

Description: An impressive rift.

Area 13

This area lies beyond area 12, around Vega de Mohandi, Cabeza Muxa and Vega Maor. The SIE are working in this area again, so we ought to lay off it unless invited. At the moment it only contains SIE discoveries, which are included here for the sake of completeness, and in case we ever drop into any of them. Descriptions are taken from Espeleosie 27 and Atlas de las Grandes Cavidades Españolas, 1987.

⊘ 1/13 Pozu de los Texos

Location: Huge entrance, about 500m westish from Vega Maor.

Description: Pitch of 93m from east side of shaft drops into 30m wide passage, descending to streamway, reported as 200 litres per second, sumping in both directions. May be worth diving.

⊗ 2/13 Pozu Joon

Location: 200m south of Pozu de los Texos.

Description: Single pitch of 128m. Side passages are marked at −88m and −110m.

⊗ 3/13 Pozu les Cuerries

Location: Near Collado las Cuerries, north of Vega de Mohandi.

Description: A complicated cave, with two series, terminating at depths of 212m and 545m. The latter intersects a large streamway, believed to be the upstream continuation of Cabeza Muxa.

⊗ 4/13 Pozu Cabeza Muxa

Location: Huge entrance below Cabez Muxa.

Description: Entrance shaft has pitches of 26m, 11m, 15m, 4m, 4m, 7m, 3m, 10m, 37m, 247m, 102m to depth of 600m, where a large stream is met. Upstream seems to end at a lake needing a boat after 300m. Downstream descends pitches of 5m, 4m, 6m, 3m to 150m of open streamway. Then a 6m pitch, followed after a further 100m by pitches of 9m, 8m, 6m, 6m, 4m, 4m, 14m, 10m, 3m, 11m, 21m, 4m, 10m, 6m, 6m, 6m, 6m, 7m, 6m, 15m, (over a horizontal distance of about 600m) ending in a sump at a depth of 906m.

◯ 5/13 Asopladeru la Texa (Bufona Canal la Texa)

Renumbered as 61/4.

⊗ 8/13, Pozu Cabeza Julagua

See elsewhere.

⊗ 9/13, Pozu de la Cemba de Joulagua

Location: North of 8/13.

Description: An 8m drop to a bouldery floor, with a small climb down at one end, which is choked.

⊘ 10/13, The Windy Cave of Oston

Location: Oston Area. About 200m along the ridge W out of Oston towards Ario, a small drafting hole 10m to the left of the path.

Description: Sharp horizontal, triangular entrance enters hading rift about 1m high. After 10m this opens to a chamber with old stal and choked passages ahead and to the left. To right, 3m climb to junction. Right leads to crawl after 4m. Unexplored. Left is more open and drafty and leads after 20-30m of easy going to crawling over fossil stal. Unexplored beyond.

⊗ 11/13

Location: 0344326 4790074

Description: Choked hole, strong draught. Short section of passage accessed by climbing down into the bowl and entering the other end of the cave, follow passage up to other side of choke. (This is different from the 11/13 described in the 2003 report.)

◯ 12/13

Location: 0344312 4790088.

Description: Open entrance, can see into small chamber.

⊗ 13/13

Location: 0344346 4790260. Big obvious cleft on NW side of Julagua bowl. Huge chamber leads off into side of bowl.

Description: Chamber 15m by 20m, very old calcide choked rift at bottom. This is probably the same as 32/11.

⊘ 14/13

Location: 0344660 4790129.

Description: Gully climb down into bottom of huge shaft. Passage off to right covered in moonmilk and calcite. 4" hole at end echoes and stones thrown through rattle down a pitch. Easy digging, with hammer and chisel.

⊗ 15/13

Location: 0344644 4790030.

Description: Small shakehole. Oval entrance leads onto 5m pitch. Passage below chokes after about 5m.

⊗ 16/13

Location: 0344754 4790125.

Description: Narrow rift entrance pitch. Narrows off to choke after 25m.

⊘ 17/13, Pozu Chicago

Location: On the slope leading towards Ostón, best reached by following the Ostón path past the Roca Naranja depression, and then contouring left. 0344791 4790105.

Description: See full description in 2006 report. The cave starts out as a rift, leading to the top of a 100m shaft (P10, P26, P71). 30m from the bottom it is possible to swing into a window (Wild West Passage). Traverses lead to Disposable Belays Pitch (P35). Below, a series of tight rifts, with three short pitches, eventually lead to a climb up into a large chamber containing an undescended 50m pitch.

◯ 18/13

Location: 0344817 4789714. Attractive 8m shaft on northside of larger shakehole. Small sycamore by entrance.

Description: Undescended. This is actually 46/4.

○ **19/13**
Renumbered 62/4

○ **20/13**
Renumbered 63/4

○ **21/13**
Location: 0344719 4790174.
Description: 2m by 3m oval hole, about 20m deep.

○ **22/13**
Location: 0344874 4790742.
Description: 6m deep to apparent choke.

⊗ **23/13**
Location: 344707 4790041 (WGS84). Large cleft in north side of shakehole directly south of Chicago, just over the ridge at the end of the valley of the orange rock.
Description: 10m climb down boulder slope to fork followed by 2 chokes.

24/13 – 27/13
Renumbered 64/4 – 67/4.

○ **28/13**
Location: 6m from path, near Ostón. 0345345 4790531 alt. 1187m.
Description: Small opening 1m wide, beneath limestone roof. Can see into bedding plane. No significant draught. Large block could be passed if required; alternatively, more digging to right would create easy entry.

⊘ **29/13**
Location: Near Ostón. 0345626 4790494, alt. 1124m.
Description: Large entrance 5m wide by 4m high, used by cattle. Walled building at back of cave, through door. Hands and knees crawling in phreatic passage, 1m diameter, continues unexplored. Back in entrance chamber, steep climb up may have a possible way on, but does not look promising. Nothing appears to be draughting.

⊗ **30/13**
Location: The cave stands out when viewed from Ostón, and looks inviting. Hole in cliff, 15m up in right hand side of steep valley, second valley over from Ostón. Very difficult scramble leads to entrance set back in cliff and covered in bushes. 0345544 4789984, alt. 1044m.
Description: Entrance is 3m high by 2m wide and ends in a comlete choke after a couple of metres. A small hole in the roof shows zero promise.

○ **31/13**
Location: Near Ostón. 0345666 4790565, alt. 1080m.
Description: Small shaft, about 4m deep, blocked at top. Would require crowbar. Unable to see what happens off from one corner at the bottom.

⊗ **32/13**
Location: Near Cabeza Muxa. 0344866 4790684, alt. 1380m.
Description: Entrance 3.5m diameter phreatic tube, rising to a skylight at far end after approx. 20m. Used as a sheep shelter. Passage branches and probably goes to the surface. No draught.

◯ 33/13

Location: Near Cabeza Muxa. 0344480 4790377, alt 1477m.

Description: Large open shaft with snowplug in the bottom. Visible draught, and several blowholes around the snowplug. Hole in WSW corner looks most promising. Rift in bottom is 2m wide by 17m long. Very impressive!

Area A

This used to be the flank of Cuvicente towards the area 9 valley. It never contained any A-numbered caves, but now contains some with /7 and /9 numbers. All new caves in this area should be given /7 or /9 numbers.

Area B

This used to be the area around La Jayada; it has now been absorbed into area 9, and its two caves, B1 and B2, renumbered as 14/9 and 15/9.

Area C

This seems to be the area between Boca el Joon and la Verdelluenga. There is no information available for caves C1 and C2.

⊗ C3 Sima Verdelluenga

Location: Uphill from La Jayada. Bearings: Cabeza Llambria, 67.5°; Cuvicente, 94.5°; El Regallon, 355.5°. Just below the ridge on the Ario side, a 10m x 4m cleft containing the shaft mouth, just below a subsidiary ridge. 0342562 4787688.

Description: See 1994 and 1995 expedition reports.

⊗ C4 Playschool Pot

Location: 43°13' 40" N, 1°15' 10"W. At the same altitude as C3, further over on the ridge towards La Verdelluenga. A subsidiary spur of the mountain meets and crosses the ridge, and in the fold between them is the rock-filled pit containing the entrance. A bit below 16/9 on the (true) left hand side of the valley in an area of karst with lots of blind shafts. Cuvicente 106°, second summit of Cuvicente 122°. 0342487 4787907.

Description: See 1996 expedition report.

⊗ C5

"10-15m pitch with Gavin's sunglasses at the bottom." This is the same cave as C4.

⊗ C6

Location: Gustuteru 328°, Jultayu 263°, Robliza 173°.

Description: A 17 m shaft to a choke.

⊘ C7

Location: Gustuteru 352°, Jultayu 286°, La Verdelluenga 118°.

Description: A snow plugged shaft.

? C8

0342507 4787688. See 1994 Expedition report.

? C9

This is the same cave as C3.

⊗ C10

Location: The cave is slocated down slope from C3; there is a small knoll containing a depresion: the cave lies inside this.

Description: Narrow slit leads, after 4m climb, down to small chamber; two 2m climbs down lead to the head of a 13m pit into a boulder filled chamber.

⊗ C11

Location: Regallon 28°, Cuvicente 268°.

Description: A man sized hole was opened in a bouldery rift. A 20m pitch is followed by a vertical constriction, which bells out into a 20m pitch, landing in a chamber with a boulder floor. No way on.

⊗ C12

Location: 200m lower than C3.

Description: A big hole filled with snow. No way on found.

⊗ C13

Location: On the east side of La Rena, just below the fault line which crosses La Rena up ridge of El Regallon. The entrance is a long rift trending NE/SW (8m by 2m) with a rock bridge.

Description: A 20m pitch rigged from a bolt on the rock bridge lands on a snow plug. Climbing 5m leads to a second 20m pitch landing on a boulder floor with a small draughting hole. A small window 5m above floor can be penduled into but becomes too tight.

⊘ C14

Location: On the east side of La Rena, 100m from C13 on a bearing of 054, NE of C16, on the left side of the main fault from La Verdelluenga to Tras la Jayada. The cave is a rift in the top of the plateau between El Regallon and La Jayada which continues under the surface on a boulder floor.

Description: The cave continues and drafts out.

◯ C15

15m below C14 and 6m towards El Regallon, an undescended shaft in the rift.

⊘ C16

Location: From new Top Camp head through the pass in La Rena and follow evident rift (terminating at C14).

Description: C16 is a 15m deep section of rift with steep walls and chocked boulders. A draft can be felt from the boulder floor.

◯ C17

30m from C13 on a bearing of 152.5. The entrance has a characteristic large rock bridge.

⊘ C18

Location: 10m below last peak of La Rena, bearings Cuvicente 121.5 and Cabeza Llambra 75.

Description: A 14m diameter shaft, partly filled with snow, ending in a drafting boulder choke.

○ **C19**

On main ridge from La Verdelluenga to Cuvicente, 10m below C8.

⊘ **C20**

Location: In shakehole on Top Camp side of C9, at point nearest C9.

Description: A 4m climbable shaft leads down into a small entrance chamber. A short floor level crawl leads in to a second chamber. A further crawl on the opposite wall leads through a sharp right turn to a small choked chamber. A slot in the floor leads down a fifteen metre pitch to a rift with steeply sloping boulder floor. At down slope end the rift becomes too tight but stones can be thrown through a gap in the boulders and fall some distance. Digging is awkward but some progress was made to enlarging the hole.

⊗ **C21**

Near western col of Cuvicente-La Verduluenga ridge. 10m NW of C9, on the E edge of shakehole.

10m pitch. Bottomed.

○ **C22**

Location: Down the ridge E of El Regallon(?). Alt 1773m, 43.13.8N, 004.56.2W

Description: Small hole in base of shakehole with incredibly faint draft.

○ **C23**

Location: 5m east of the Gustuteru–Verdelluenga ridge, about 50m before El Regallon. 0342527 4788118 ±8m, alt. 1875m.

Description: A collection of interconnecting shafts, about 10m deep. Undescended.

Area D

This is the Jou de las Cuevas, Vega Aliseda, and the area eastwards as far as Gustuteru.

⊗ **D1**

Location: 43°, 13', 40" N, 1°, 15', 22" W, labelled 12/8, incorrectly.

Description: Two pitches (15m, 20m) seperated by a rock bridge. At the bottom are two small chambers.

⊗ **D2**

Location: In La Jou de las Cuevas. Follow the ridge from snow pole to Vega de Aliseda. Continue in the same direction for about 150m to large obvious entrance shaft, visible from knoll above new Top Camp. 0342427 4788628, alt 1778m.

Description: The shaft is 30m by 5m, split in two by a rock bridge at -20m. The pitch is rigged from two bolts on the edge of the shaft. Rebelay at -5m gives a descent on to a snow plug at -50m. Two rebelays on opposite wall follow down the side of the snow plug to a 45 snow slope which ends with no way on approximately 100m below the surface.

⊘ **D3**

Location: 10m north of D2. Entrance has a Polifemo '81 paint mark.

Description: An awkward 4m climb down the shaft leads to a small hole at floor level. A fifteen metre pitch can be rigged from naturals here (needs a rope protector) through the hole. Penduling into a window at -10m breaks into a rift leading off left and right. At the base of the pitch a tight rift leads off. This is a lower level of the right hand part of the rift from the window. Heading right leads across two blind pitches before terminating below several inlet avens. Some of these where climbed for almost fifteen metres before they closed down. Heading left from the window leads to a free climbable pitch. The rift continues before closing down, with a pitch beyond the constriction. The constriction has yet to be pushed.

⊗ D4

Location: From where ridge to snow pole joins Vega de Aliseda go right. Another track goes left to D2. The cave is the first depression on this track. There is a medium sized menhir in D4b. D4a is easily visible from the other side of the shakehole as a black hole.

Description: Both are blind shafts, 2m and 4m deep respectively.

⊘ D5, A Dig

Location: First discovered on the 1979 expedition. Walk W along Vega de Aliseda towards direct route to Lagos and descend last shakehole.

Description: A slightly jagged 1m by 50cm entrance to 4m drop (climbable with care). Very good draft can be seen as steam from cave. The cave has a diggable boulder floor and is often snowplugged.

⊘ D6, William's Wolf Trap

Location: On W side of Gusterteru. Turn N from Vega de Aliseda on route down to Sod 4 and walk for about 20m. A hole dug under the small climb on path.

Description: A loose slope leads into a small chamber, drafting from a tight rift to the south.

⊘ D7

Location: By the Vega de Aliseda moraine, bearings La Verdelluenga 152, Conjurtao 274. Head direct from new Top Camp to orange rocks N of Vega de Aliseda moraine. Stop at prominent shakehole about 30m before reaching Vega. Prominent back wall has yellow/brown staining and a small bush growing out of it.

Description: Climbing down through large boulders for 3m leads to a small chamber. Draughting rift to 2 second drop, 3 second rattle.

⊗ D8, Torca del Vasco

Location: UTM coordinates: 0341859 4788564; Altitude: 1780m; Depth: 375.79m; Surveyed length: 1386.61m. (All readings from 1996 survey).

The cave is located on the southern edge of the Vega de Aliseda, slightly to the west of the terminal moraine. The entrance is a six metre by four metre shaft, hidden from view unless standing on the rim of the shakehole.

The most certain way to find the entrance is to climb out of the Vega de Aliseda from the terminal moraine to the top of the first ridge. Walking west along the ridge for approximately one hundred metres leads to the edge of the shakehole. The cave is marked with a faded Polifemo mark.

Alternatively, from the Snow Pole walk down the left side of Shit Creek across the small shakehole at the bottom. Head directly down the grass slope, round a small boulder filled depression into a large bowl. Bearing slightly left, cross the bowl to a level grassy area. Follow this out of the bowl. Towards the Vega de Aliseda lies a low ridge.

The entrance is on the far side of the ridge and slightly left of the point where the grass track leaves the large bowl.

Description: See 1996 expedition report.

⊘ D9

Location: UTM coords (GPS) : 0342122 4788681 Altitude (GPS) 1717m Bearings: 208° to snow pole; 172° to La Verdelluenga; 111° to Jultayu. 2 shafts 20-25' deep in bare sloping rock on RHS of gully.

Description: Base of deeper shaft looks diggable and drafts.

⊗ D10

Location: Just round corner from D9.

Description: Chamber 6m wide/long. Dry — good potential cache. No potential.

⊗ D11

Location: UTM coords. (GPS) : 0342170 4788772 Altitude (GPS) : 1807m. 50m further on from D10.

Description: 2m climb down into dissolved hollow, A further 5m climb down a slot under a wall. Could say optimistically it is diggable.

⊗ D12

Location: UTM coords. (GPS) : 0342111 4788835 Altitude (GPS): 1765m Bearings: 172° to La Verdelluenga; 228° to Peña Santa. From the climb where you normally leave the Vega Aliseda path to get to Top Camp, continue instead for another 20m past the cairn. Turn right at the next cairn and follow a small valley NW. Climb out of the valley to the highest point on its left and you are now in sight of the entrance.

Description: 25' shaft into a 4m by 6m chamber. Trickle of water in one corner and hole in floor to very small canyon. Climb over final meander gives some pretty formations, but ended in a choke after 10m.

⊗ D13

Location: NW of D9 and 40m lower.

Description: Climable meander descends 10–15m to further pitchhead, a 10m pitch into canyon. Soon choked. Slight rattle and intermittent draft.

⊗ D14

Location: Due W of D9 and 30m lower is "shepherd's cave". D14 is about 25m N of this, descending gully in loose rock.

Description: Chokes after 20m.

⊗ D15

Location: 146° to La Verdelluenga, 180° to next peak W (Cabrones?). Alt 1733m, 43.14.146N; 4.57.321W.

Description: Awkward 5m climb down obvious fissure entrance chokes about 25m down. Rebecco skeleton in 1997.

◯ D16

Location: Follow Vega Aliseda to W end, and turn north into large doline. D16 is large shaft on N edge of doline. La Verdelluanga 141°, 180°to next peak west (Cabrones?).

Description: 20+m pitch to snow plug and choked chamber with inlets. Possible connects with drafting squeeze in D17.

⊘ D17

Location: 50m W of D16 and on the same bedding/fault is 1m x 2m meander descending at 45° for 15m to small chamber with four small outlets. Alt 1773m, 43.14.019N, 4.57.342W.

Description: Needs digging. Drafts out.

⊘ D18

Location: Follow path W uphill from end of Vega Aliseda. Entrance under cliff which bounds right hand side, about half way up. La Verdelluanga 130°, 172°to next peak west (Cabrones?). Alt 1848m, 43.13.884N, 4.47.355W.

Description: Ramp descends 5m to diggable choke with draft.

⊗ D19

Location: On W side of small hill S of Vega Aliseda at W end. Large open rift with snow plug. La Verdelluenga 139°, next peak west (Cabrones?) 174°.

Description: 10m pitch down to rock bridge over meander. Obvious way on ahead follows bolt traverse over large boulder and down ramp on righ hand wall to a 30m pitch into a very large boulder-filled chamber. 10m pitch at the far end of this drops into water-worn butthoroughly choked smaller chamber. Trending back underneath the entrance, the westwards continuation of the fault goes down 10m, 5m and 20m pitches. Through a small arch leads to a tall perpendicular rift passage, which appears to be upstream passage; this pinches out after 40m. Boulder floor by arch is effectively downstream and drafts, but is choked.

◯ Unmarked entrance

Cairned entrance by D19. Undescended.

⊗ D20

Location: "The cave in the bowl with lots of moonmilk that Rob showed me". An "obvious" entrance at the fool of an outcrop between the "notch" and the Vega Aliseda, skirted on either side by the two conventional routes to Top Camp.

Description: A crawl from the entrance leads to a small rift. Round a few bends it enlarges to where a single ladder pitch lands on a false boulder floor. Left, a pretty, 7m high passage goes 10m to a drafting choke. A way through the boulders from the main passage leads to a descending rift that pinches out. Right at the bottom of the first pitch, going through boulders leads to another pitch (two ladders). Turning right at the bottom of this pitch leads to a boulder filled chamber with no way on.

⊘ D21

Location: North from Top Camp in straight line towards small peak. 171° Verdelluenga, 143° El Regalon, 188° Cabrones.

Description: Mendip-esque sloping planar roof entrance, rope climb down (25m rope) green slope, short steep section, then gentler muddy slope to boulder floor. Draughting hole in boulders under calcite teeth can be free-climbed to smaller chamber, with 8m pitch in rift left undescended. Rattle of 1–2 seconds. I think this is the same as D13

⊗ D22

Location: 0342167 4788564

Description: Entrance on an inclinded bedding, and the whole cave is aligned to it. Climb down 8–10m into high rift chamber. Downstream small hole leads to 5m climb into rift passage going in both directions. Chokes in one direction, gets too narrow in the other. "Good lead, but come back in 10000 years!"

◯ D23

Location: 0342218 4788376, alt 1746m.

Description: A 6m-ish shaft with snow at the bottom, but possibly a way on past the snow.

⊘ D98

Location: Needs more sensible number. Follow Aliseda path to cairn at turn off for Top camp. Head N (away from TC) and cave is found 250m N of cairn in direct line of sight to small peak. Where grassy slope meets lapiaz there is a group of down-dip entrances.

Description: Good draft into cave. Entrance leads to 15m pitch with continuing passage above, then free climbable pitches of 5m and 10m before undescended 10m pitch. Good prospect.

Area E

This area consists (roughly) of the region between La Verdelluenga, El Regallón and Pico Gustuteru and bounded on one side by Area F and Top Camp and on the other by the Vega Aliseda and Areas 8 and

9. This area is not often visited because it is all at high altitude and a bugger of a walk from any of our camps. Descriptions of E1–4 appear in OUCC Proc. 11 and both E1 and E2 may be worth another visit as both were blocked with snow when visited in 1982.

⊘ E1

Location: 43° 13' 33" N, 1° 15' 15" W. At an altitude of around 1960m on a direct line between Pico Gustuteru and La Verdelluenga.

Description: 10m pitch to snow plug. May be worth another look.

⊘ E2

Location: 43° 13' 29" N, 1° 15' 15" W. Around 100m to the south of E1; an obvious entrance.

Description: Degenerates into a tight 15m rift pitch, which opens out into a very loose chamber. The only way on is blocked by snow. May be worth another look.

⊗ E3

43° 13' 27" N, 1° 15' 17" W. A small hole hole in a dolomitised area below the summit of La Verdelluenga.

⊗ E4

Location: 43° 14' 00" N, 1° 14' 35" W. Just to one side of the red-marked path to the Vega Seca.

Description: A 12m pitch down to a crawl, to two loose climbs. The way on rapidly becomes too tight.

○ E5

To the South (left when walking from Area 9 to E) of the path (to Top Camp?), a shaft marked Polifemo 1982 Sima Estrecha. It consists of a 3m deep by 2m long rift entered via a 1m diameter entrance. The rift is choked with boulders though there is a slight draught from under the phreatic roof. Bearing 134° to El Regallón and 260° to what the discoverers thought was probably Cabeza del Burro.

⊗ E6

Location: Located on a bearing of 350° to La Rasa, 195° to La Verdelluenga and 110° to El Regallón.

Description: A 10m drop down a rift pointing towards La Verdelluenga enters a 3m diameter chamber with two avens. Clambering on down leads to a climb into a vadose rift choked with earth and small stones.

⊗ E7

Location: On a bearing of 90° to El Regallón and 180° to La Verdelluenga.

Description: A body sized entrance in a dolomite/grassy area, descends for two body lengths before closing down.

The most promising area is located up the Southern edge of the grassy/dolomite band ascending towards La Verdelluenga, past the numerous holes marked Polifimo 17.8.82 on the right and SIE O opposite in the direction of a yellowish nobble. The SIE cave may be worth a visit as it ends after a few metres in a body sized crawl draughting slightly with a mud floor. The following caves were found in this area.

⊗ E8

Location: Just before the nobble and to the right. Bearing 297° to Pico Conjurtau, 165° to La Verdelluenga.

Description: A 9m long by 3m wide rocky floored phreatic tube remnant, no prospects.

⊘ E9

Location: Traversing to the right and ascending slightly for approximately 50m leads, via a long narrow rift filled with snow approximately 20m down to two imposing entrances below a subsidiary summit to the west of La Verdelluenga. The first is a shaft 10–15m deep to snow with a possible way on at the back and a connection to the next entrance marked E9. 0342163 4787982.

Description: From the base of a boulder slope E9 has a 10m drop to a steeply descending snow slope down an imposing 3m wide by 10m high passage. Both caves are still continuing, although are normally snow plugged. In 2001, the snow plugs were reportedly looking smaller than in previous years.

◯ E10

Location: Another shaft about 30m below E9 dropping 15m to snow.

Description: Undescended.

⊘ E10

Location: There is another cave marked E10, at 0342079 4787785 ±15m, alt. 1960m, but which doesn't fit the above description.

Description: A large, descending passage, with snow.

⊘ A Dig

Has been renumbered D5

⊗ E11

Location: Situated behind the dolomite peak in area E, on opposite side of large shakehole from peak. Entrance is a small rift in wall above shakehole.

Description: A 10m ladder climb leads down to a ledge. After a ten metre traverse above snow plug the rift closes down.

⊗ E12

Location: Originally numbered F85. On N slope of La Verdelluenga, bearings La Rasa 346, El Regallon 82. From snow pole head directly for El Regallon. Cave lies at about same height as snow pole across two low ridges (keep high). Above bowl shaped corrie with roches moutonnees. Horizontal passage at base of small crag. Now cairned above entrance.

Description: The horizontal passage leads to a 20m pitch. A small window 4m above floor leads to a muddy slope. Climbing down slope breaks into the roof of a rift. 9m and 12m pitches follow. These land near 'Heels over Head,' the tight rift where Bertha needs further stabilizing. Squeezing past Bertha is tight and awkward. Below is a 10m free climb down through a rift to another tight squeeze, 'Bloody Finger.' Below this the rift becomes very tight, with no obvious sign of it opening. Survey in 2001 report.

? E13

Number not allocated.

⊘ E14

Location: On N flank of Verdelluenga, immediately above F71 in an outcrop overlooking the valley below Top Camp, and directly to the W of The Green Tongue. 10m long rift with faded Polifermo markings.

Description: Pot at N end is 15m deep but blind. Tight entrance at S end through a squeeze (The Mink) leads to a 45–50m pitch (Tubular Bells) rigged from natural belays with one bolt rebelay. Window through to parallel shaft 30m down, before landing on a small snow cone. Obvious hammered continuation on shelf just above snow cone is blocked by a "ship's prow" of rock, beyond which is running water, and a pitch. A good prospect, although probably related to F64.

⊗ **E15**

Location: In area of bare limestone, down the ridge E of El Regallon. 200m on 255° from El Regallon. 43.13.7N, 004.56.3W.

Description: Steeply sloping narrow streamway enters too-tight crossrift at −10m. No draft.

⊗ **E16**

Location: Near E15. Obvious large double shaft at top of bare rock area.

Description: 10m diameter witha snow plug and boulder floor. No draft.

◯ **E17**

0342291 4788005.

⊘ **E18**

Location: High on the flank of Verdelluenga, above an obvious dolomite nobble with a limestone cap, about 30m south of the nobble. 0342191 4787792 ±5m, alt. 1962m.

Description: A 15m pitch to snow in rift. Snow lower but still plugged at south end, and receded to choked stone ledge to north, 2m below bulk of the ice. Currently (2006) no obvious way on.

◯? **E19**

Location: 40m SE of E18, above snow-filled shakehole. 0342172 4787757 ±6m, alt. 1968m; lower entrance 0342158 4787759.

Description: Entrance shafts appear to connect with a chamber, the latter accessible via a triangular hole at the foot of the shakehole. Strong shaft ("draft"?) in chamber of non-obvious origin.

◯ **E20**

Location: 100m SE of dolomite nobble described above. 0342107 4787766, alt. 1979m.

Description: Shaft in rift with snow. There might be a continuation at the NW end.

◯ **E21**

Location: Just downhill from E20.

Description: 30m long, deep rift, running NNE, with snow at bottom.

◯ **E22**

Location: Part way down the sea of limestone below E10, many grikes converge to a gulley, which leads to a 20m long shakehole. 0342056 4787862 ±12m, alt. 1910m.

Description: No obvious way in, but draughts strongly. A lot of water probably sinks here in wet weather. Worth a dig!

◯ **E23**

Location: Just above and to the north of col on ridge. Three shafts aligned to the north. Marked SIE ◯. 0342763 4788549, alt. 1761m.

Description: The shafts are about 20m deep, to snow, and connect underground.

◯ **E24**

Location: In east side of shakehole. Faded SIE marking on wall. 0342492 4788328, alt. 1736m.

Description: 2m wide, 1m high passage, drops to snow. Needs a handline.

Area F

Most of the locations for caves in Area F are given by Cartesian coordinates, in round brackets, and polar coordinates, in square brackets, relative to the Top Camp Cairn (longitude 1° 15' 21"W, 4° 56' 55.3" W with respect to Greenwich; latitude 43° 13' 39.1" N; GR (of bolt next to cairn): E 41742.57, N 88012.16, A 1913.72).

For example (184W, 81S, −20), [201, 249°] represents that the cave is 184m west, 81m south and 20m below Top Camp Cairn, or 201m away on magnetic bearing 249°.

Most of the locations are based on Gerhard's map (in metres a.s.l. at Alicante all in UTM square 30TUN) and should be accurate to within one meter. Others are based on a survey dating from 1985, and are often out by several tens of meters; such locations are marked with a question mark.

Note that the bearings given in the polar coordinates are calculated from the Cartesian coordinates, using a magnetic variation of 3°. Magnetic North was 3° 05' west of Grid North in July 1993 (decreasing annually by 9'), i.e. compass bearings are about 3 degrees larger than grid azimuths. (And calibrate your compass!). The bearings are *from* Top Camp: add or subtract 180° to get the bearing *to* Top Camp. The descriptions may also include a bearing measured in the field: this does not necessarily agree with the calculated bearing.

The dates in some descriptions give the logbook entry describing the cave's discovery and exploration.

Particularly good places to look in this area include:

- On the flank of Verdelluenga overlooking Top Camp, e.g. F41, F56.
- Further west on Verdelluenga, e.g. F64: this area remains poorly explored.
- F57 and the nearby F11 and F12.
- The area between Top Camp and F38, e.g. F18, F19, and two unmarked entrances nearby.
- Holes aligned on F20, and near F7, e.g. F44–F49, F58, and F63.
- Holes in and near Brown Gully, many of which have never been descended, e.g. F27, F31, and F34.
- Holes in and near F20 Gully, many of which have never been descended, e.g. F22, F23, F24, and F55.
- The area near F5, e.g. F28, and F32.
- Higher up towards Punta Gregoriana which remains poorly investigated.
- F40.

⊘ F1 Cliff Rift Hard

Location: (164W, 491S, +155), [518, 198.5°]. To Top Camp: 18.5°. Located on the flanks of Punta Gregoriana, and easily visible from Pozu Jorcada Blanca (it stands out as a shadow), this is a rift in the side of a cliff.

Description: The 20m entrance pitch lands on a snow plug (23.7.82). Tackle: 22m rope, two long tapes to naturals.

⊗ F2 Pozu Jorcada Blanca

Location: (71W, 263S, +53), [272, 198°]. A large generally snow-filled doline at the edge of a rocky plateau about 600m from La Verdelluenga on a bearing of 280°. "The cave is best approached from Ario via the Vega de Aliseda." (in 1982, before T.C. was invented!!)

Description: See OUCC Proc. 11 for description.

? F3

Lost and not painted. Rumoured to be a hole of insignificant depth somewhere down 'Bog Alley'.

⊗ F4

Location: Exact location not known. 'A shaft on the other side of the ridge from F2'. This is thought to mean across the Jorcada Blanca col into the Polish area.

Description: One side is plugged, but a 30m shaft rigged between boulders at the other end drops to a pile of snow and boulders. An unpromising crawl leads painfully to a chamber, with several choked pots in it. No way on. (22.7.83)

⊗ F5

Location: From the col between F38 and F2, head up the gulley to the south. F28 is in the first flat bit; F5 is on the second flat bit, to the left. Bearing 286° to F2; 337°to Top Camp.

Description: Deep rift (8 by 2m at surface), trending 84°. Large snow plug in entrance, revealing two pitches at either end of the rift (W and E). West descent: 20m pitch to snow plug revealed as 3m block of snow jammed in the top of the pitch. 3m gap to large pile of snow in the bottom of the rift. Pitch ends when narrow rift meets snow (at West end). Shaft appears to continue but is full of snow. East descent: 20m to the top of the snow, where a water drip had made a 1m wide by 20m deep hole down to the floor of the rift. This was explored but did not go. Continuing in towards the East leads down into a rift approximately 20m high and long. This had a solid stony floor and closed, both up and along, with no leads.

⊘ F5b

Location: 6m right (true left) ofmain F5 shaft.

Description: Narrow crack leads into cliff face. Bottom chokes, but top might be hammerable. Very good draft.

⊘ F5c

Location: Between main shaft and F5b.

Description: Bold step across shakehole into small phreatic tube leading into cliff. Tight, but might be passable. Slight draft.

⊗ F6 Pozu Paso Doble

Location: Extending between (358W, 72S, −15), [365, 262°] and (358W, 82S, −10), [367, 260°]. Located approximately 500m west of Pozu Jorcada Blanca (F2), the entrance is an obvious feature at the base of a cliff formed in a distinctive bed of dolomotised limestone. The main pitch seems to be controlled by the same fault as the F20 entrance shafts.

Description: The entrance passages appear to follow the bedding steeply down-dip until the main chamber is reached. Much of the cave is extremely unstable. During the brief period of exploration the collapse was accelerated, and appears to have been progressing since then. From the main chamber there are three routes on. Directly ahead, a short passage leads to an unstable, 22m pitch, choked at the bottom. An interesting ladder climb leads down the boulder pile to the head of a blind 6m shaft. A short traverse around the top of the shaft leads to a narrow meandering passage which can be followed upstream to a pair of active inlets which are too tight. A climb up above the stream leads to the top of the vadose trench, where remnants exist of what appears to be the early, phreatic stage of passage development. Following this upper route brings one out overlooking and high up in the main chamber, with no route on. Survey: Proc. 11, p. 24.

⊗ F7 Pozu las Perdices

(F7C) (184W, 81S, −20), [201, 249°]. On a limestone pavement dipping at about 20°, approximately 210m distant from Top Camp on a bearing of 250°. The pavement is that leading from Pozu Jorcada Blanca down to the large scree-filled depression near Vega Aliseda. Bearings: 113° to La Verdelluenga; 204° to Jorcada Blanca. The entrances are described below. F7A–C lead into Pozu les Perdices proper; for the main cave description see Proc. 12.

⊗ F7A

A deep snow-filled gash, some 10m long and 3m wide, leading into a beautiful ice cave. Could do with another look. The Iceflier (see Proc. 11, pp. 26f), which must by now have melted away, might have concealed a shaft, and the F20 rifts pass 200m vertically below.

⊗ F7B

A square 3m × 3m shaft, intersecting a rift.

⊗ F7C

A tunnel onto a snow pitch.

⊗ F7D

Location: (164W, 65S, −23), [176, 251°]. In the SE trending fracture ascending from F7B.

Description: Open rift 8m long and 1.2m wide, about 10m deep to gravel floor (with little snow left in '89); both ends close off. A line is advisable.

⊘ F7E

Location: (186W, 63S, −25), [196, 254°]. Open shaft in SW trending rift ascending from F7B.

Description: 12m pitch hading southeast lands in narrow, sharp crawl leading SW along the rift, parallel to the vein-controlled F7C entrance 15m away; not pushed past a squeeze. Draughts and continues, expected to connect into Perdices eventually. Likely to be blocked with snow except in all but the lowest snow years.

⊗ F7F

Location: (189W, 56S, −28), [197, 256°]. A few metres downhill and left (N) of F7E; still above F7A.

Description: Archetypal key-hole (revealed by clearing a few boulders), with leg-trapping lower section, is thrutched down to 5m pot (rope essential) still in daylight. At the bottom, a corroded flowstone cascade emerges from a 30cm wide phreatic tube up in the righthand wall; the main way down is choked with gravel after 2m.

There are two unnumbered karst features nearby: a short crawl in shattered rock near the large doline below F7A (199W, 27S, −43), [200, 265°], and a bit of walking-size vadose passage intersected by surface erosion and partly covered by boulders a few metres W along the fault (?) joining F7A to F48 (206W, 44S, −36), [210, 261°].

⊗ F8

Location: (117W, 2S, −38), [117, 272°]

Description: Collapse has rendered the entrance impassable. Previously a crawl through boulders at the bottom of a shakehole went into a small chamber with no way on. (5.8.84)

⊗ F9

Location: Not recorded, but somewhere near F7 and F8.

Description: 'An interesting-looking crack in the cliff face with a bouldery depression beneath'. A small chamber exists beneath the boulders; no way on (6.8.83).

⊘ F10

Location: (34W, 53S, +1), [63, 215°]; (37W, 57S, +1), [68, 216°]; (39W, 48S, −1), [62, 222°]. At the the start of the walk from Top Camp to F2. 'A huge shaft 20m deep with a snow plug in it'. On escarpment 50m SW from Top Camp.

Description: First (marked) entrance is rift striking SE (not a very common direction!), and is sound connected to second shaft. The third is in the same rift as the first a few metres down (NW), but independent, and is choked with pebbles and four dead mornflake tins.

⊘ F11

Location: Above F57, but below F54, roughly on the same fault line.

Description: A 20m drop, the first 5m freeclimbable. Below this narrow entrance, a drip enters, and the cave develops into a rift, down which 'stones rumble for some time'. 20ft climb leads to a pitch, 40m freehang to the bottom, which is choked. A window 20ft up from the base of the shaft is also choked. May be worth checking, because of its proximity to F57.

⊘ F12

Location: 20m away from F11 on bearing 10°.

Description: Descended for 15m on ladder. Three ways on: (a) down, where stones bounce and crash; (b) across into an ascending passage; (c) along a rift. Chokes—at least on route (a). May be worth checking, because of its proximity to F57.

⊗ F13

Location: (351E, 274S, +110), [445, 131°]? To Top Camp: 322°. These readings do not agree with each other. Impressive rift-like entrance at base of cliff above scree slopes to SE of Top Camp, at the base of cliff with cross-shaped cracks.

Description: Cave is 25m long (large walking-size passage) with a 10m climb at the end. Choked, but with a very good draught.

⊗ F14

Location: Originally reported as (230W, 138S, +30) but probably (230*E*, 138S, +30), [268, 124°]? To Top Camp: 301°. An impressive-looking hole in the hillside surrounded by very chossy shattered rock.

Description: Through the hole is a chamber whose floor is covered in a snow cap 3-5m deep. This slopes down to a vertical slit 1m wide by 2m high, above a handline climb of 3m to another snow-covered chamber. A small passage goes on from the lefthand bottom corner for about 10m, ending in a small blind chamber. 'There are probably ways on under the snow' (4.8.84). A visit in '88 revealed no leads, although the other side of the snow-covered breakdown pile forming the floor of the entrance chamber could now also be descended to a blind chamber. Another return in '93 confirmed that there is no way on.

The descriptions of F15 and F16 were partly swapped in Proc. 12.

⊗ F15

Location: (163E, 44S, +0), [169, 108°]. To Top Camp: 301°. A very pronounced rift entrance (pronounced 'rift entrance'), underneath la Verdelluenga, visible from Top Camp cairn. Go up dolomite band along grassy ledge towards slit.

Description: Slit is open snow-filled rift about 7m deep. In 1988 the remaining snow was found to rest on the floor. A crawl down the E end chokes after 2.5m; at the W end a boot-sized gap affords a view into a tiny cross-rift.

⊗ F16

Location: F16 northern window: (206E, 103S, +5), [230, 119°]; F16 southern window: (232E, 110S, +4), [257, 118°]. To Top Camp: 289.5°.

Description: Two main entrances to this cave lead to a snow-filled chamber. The righthand side of the chamber leads into a smaller snow-filled chamber. 'There is probably a way on under the snow'. (Not found in 1985, when snow levels were very low, though) (4.8.84). It is no longer advisable to walk into F16 since in '88 the remaining 3m of snow sitting on the floor (visible around the edges) of the 'chamber' were a good 8m free-hang below the entrance windows (2 bolts from the S window). The side-shaft leading up to the N window is almost free-climbable from below. The cave is in remarkably clean white limestone, apparently in a very large block derived from the Picos limestone strata further south that has come to rest in the middle of the thrust zone.

⊗ F17

Location: (1E, 113S, +26), [113, 182°]. 100m due south from Top Camp (and uphill). To Top Camp: 1°. A long fluted rift, 10m deep, in depression between cairns C1 and C2.

Description: Open rift (leading nowhere in particular) on strike 150°–160°:the continuation of the F10 fracture, it seems. Just below, 14m north, a narrow 5m pot is blind except for a tiny crack opening into the next doline; near the end of the 1985 expedition, an injured sheep was rescued from this.

⊗ F18

Location: (90E, 179S, +47), [201, 156°]. East and down from survey point T2, or NW and up from F38—the locations of F18 and F19 are reversed in Proceedings 12 p.61.

Description: 8m deep open pothole in long shallow surface rift striking 36°, with connection to a second pothole SW. Chokes; re-checked in 1997.

⊗ F19

Location: (114E, 172S, +36), [207, 149°]. East of F18, at edge of top level of pavement overlooking the depression below F38, in a fracture system on a 30° strike. Bearing 152°to F38.

Description: Open rift 1m wide and more than 10m long, hading 70° NW, with a snowplug some 10m down (in '89). Rechecked in 1997—no way on.

⊗ Unnumbered shaft

Location: In continuation of F19 rift, a few metres SW.

Description: Hand-lined climb of about 10m. Rocks rattle down a 10cm wide slot for a few seconds.

⊘ Unmarked entrance

Location: Bearing 150° from camp, about 200m away, overlooking the route to F38.

Description: An awkward scramble down a gulley to a snowplug (not fully checked out) and a small draughting hole on the right, passable, possibly with a little digging.

⊘ Unmarked shaft

Location: Roughly below F19, bearing 180° to F38.

Description: An open rift with snow at the bottom—may be passable.

Caves F20–27 were discovered on 6/8/84 by Andy Riley, and are situated on the flanks of the Ridge between the 'F20 Gully' and the 'Brown Gully' (except F25–26 which lie beyond the latter). Until '89, several of these had not been visited (or found again) since then, and some still await exploration.

⊘ Unmarked entrance

(498W, 172S, +116), [527, 254°]. High up in the F20 gully (Argayo Cortado), in the lefthand wall (looking downhill), an entrance leads into a chamber with some remarkable fossil stal and possible continuations.

⊗ F20

Location: (452W, 123S, +56), [469, 258°]. To Top Camp: 80°. The entrance is not easy to find. Early in the exploration the standard route was to climb down to the bottom of Bog Alley and then to ascend to the left up a steep bouldery gulley. Later it was found easier to traverse at a higher level, crossing the scree slope on the way to F6, and to scramble up the steep rocks to the left. F20 is at the top of a moderate-sized scree patch, about 80% of the distance to the top of the ridge. The entrance is a small cleft in the rock.

Description: See Proc. 12.

⊗ F21

Location: Entrance: (497W, 63S, +77), [501, 266°]; Skylight: (503W, 55S, +84), [506, 267°]; Balcony: (519W, 40S, +75), [520, 269°]. Just below F20, look for a folded, reddish, thinly banked limestone bed on the true lefthand verge of the gully and follow this diagonally upward until some 10m below the crest of the ridge. Climb down a fluted rock face and walk into the obvious entrance.

Description: Shafts enter from above, through which blue sky can be seen (unless it's cloudy, or night-time). Eventually a huge rift is met which can be walked along (approx. 1.5m wide, 10m high, with daylight at the top (again, unless it's night-time). Ends after 20m. Climb through a hole to a balcony looking NW along the ridge onto the hill containing 2/6. (Proc. 12 incorrectly reported that the balcony looked into the next valley.)

⊘ F22

Location: In tributary gully downhill from F20 and to the left off the main gully. Erroneously relabelled "F23" from 1985 to 1989, and referred to under that number in Proc. 12, p. 57 (but not on p. 61). To Top Camp: 83°. Entrance is a large shaft near the bottom of a gully (R.H. side), a little higher than Top Camp.

Description: The shaft is 10m deep. There may be a way on under the snow, but it's a bit near F20 to be very useful.

⊘ F23A-C

Location: F23A: (432W, 56S, +19), [435, 266°]; F23B: (431W, 66S, +23), [436, 264°]; F23C: (439W, 66S, +24), [444, 264°]. In platform on lefthand verge of the Argayo Cortado below F20, just above F36. To Top Camp: 85°. Near F22, but lower down on the right.

Description: 25 foot shaft. F23A was reported blind in 1984 but all three openings seem to be sound-connected (certainly the latter two are). F23B is an inpenetrable fisure with a 6 second rattle. F23C might go after shifting some large boulders, or there might be a horizontal link from F23A into the 'audible chasm'. NB F20 is *not* underneath but some 60m off sideways so this one might well go deep independently. Well worth checking out.

◯ F24

Location: (453W, 22S, +19), [453, 270°]. On limestone pavement NW from F23; visible from Top Camp but difficult to access. To Top Camp: 93°.

Description: Large shaft about 10–15m deep. No way on at bottom of pitch.

⊗ F25

Location: (515W, 12S, +45), [516, 272°]. On lefthand (true left: looking down) verge of the 'Brown Gully' (Argayo Pardo) just below where it crosses the Ridge. [631W, 44N, +46]. To Top Camp: 94°.

Description: Meander with skylights ending after 15m in a choked little rift. Thought at one time to belong to the 2/6 shaft system nearby, but it rather seems it once was part of a cave system underneath the fault-controlled Brown Gully itself.

⊗ F26

Location: (503W, 24N, +26), [503, 276°]. To Top Camp: 99° In the bottom of an amazing surface rift (rift is 20-25' deep) (6.8.84). At intersection of rifts downhill and northeast from F25 (well north of the

Brown Gully).
Description: Hole about 8m deep.

◯ F27

Location: (449W, 8N, −6), [449, 274°]. Halfway up the Argayo Pardo (Brown Gulley), in lefthand verge (looking down), below the rift containing F26, and just above a car sized boulder. To Top Camp: 100°. (6.8.84).

Description: 10m entrance pitch; no way on at bottom.

⊘ F28 (formerly 'F6', 'F20')

Location: (103E, 318S, +102), [334, 165°]? To Top Camp: 342°; to 'Spike': 252°. Below F5.

Description: 10m deep entrance shaft (opening out to 3x4m) leading to a snow plug. Rift trends into mountain and closes off after 5m. Graham-sized passage leads off to the left and then round a corner: 'couldn't get in it, Guv' says Jan (6.8.84).

⊗ F29

Location: (387W, 55N, -29), [391, 85°]? At base of depression at the bottom of the F20 gully. (Not found in '89 from this description; probably near F33.

Description: 15m entrance pitch to chossy floor with small snow pile. Daylight entering from West through unlocated entrance (possibly a depression with some snow at the bottom). Numerous narrow rifts enter, but pitch disappointingly closes off to a 1mm cleft in the rock. No way on (6.8.84).

⊗ F30

(506W, 103N, +3), [516, 285°]. To Top Camp: 107°. This is another name for 1/6. See 'Ridge Cave', Proc. 12.

◯ F31

Location: (348W, 93N, −59), [360, 288°]. At S verge of grass field where the Verdelluenga thrust and the path to Ridge Cave re-emerge from the large boulder-filled Jou W of Top Camp and start to rise towards the Ridge.

Description: A 1m diameter shaft. 11m pitch or awkward climb. Way on is obstructed by a large but removable boulder. Beyond is a boulder pile descending for 2.5m until it meets the roof. It is difficult to say whether a continuation to either side exists, though this seems unlikely.

⊗ Unmarked rift

Location: 25m SW from F31 (uphill).

Description: 3m climb and 3m pitch in south-trending rift lands on cobbles and snow. Tiny hole in south end gives view of floor 4m down. Alternatively climb back up 2m above hole, and thrutch forward in tight rift to look down an oval 80cm by 30cm shaft, ending at a similar level.

◯ F32 (formerly 'F21', 'F29')

Location: (217E, 226S, +10), [313, 139°]? Beneath F5.

Description: A 1m × 4m shaft with a 3 second rattle. A snow plug is visible, but the shaft seems to continue.

⊗ F33

Location: (360W, 21N, −47), [360, 276°]. Walk up Brown Gully from the very bottom end and leave it early, just past a blind oblique 'doorway' on the left, going left and up. Entrance is tiny manhole ('dwarfhole' would be more appropriate) on a limestone clint, just above the gulley. To Top Camp: 97°.

Description: Originally described as a 5m tight pitch. The squeeze is less than 15cm wide, and completely ridiculous.

⊘ F34

Location: (431W, 26N, −15), [431, 276°]. From Brown Gully, climb up NW verge into what looks like a big wiggly meander when seen from Top Camp. The first wiggle turns out to end at a rock wall but climbing up to the pavement and back down into the continuation leads to the entrance in a rift on 30° hading 50–60° E intersecting the meander. To Top Camp: 97°; to La Verdelluenga: 113°.

Description: Pitch 6m to boulders. From here, another 3.5 metres down to snow plug and boulder floor. Possible way on through boulders upslope; slight draught (28.7.85). Looks interesting and is well worth checking.

⊘ Unmarked crawl

On the left of the F20 gulley, very near the top, near where the gulley narrows. This was previously found by Paul Brennan in 1986, and is marked on Gerhard's map.

⊗ F35

Location: (418W, 30S, −3), [419, 269°]. At N edge of large sloping karren field traversed by the '85 route to F20 below its entry point to the F20 gully. To Top Camp: 90°; to La Verdelluenga: 109°.

Description: 15m pitch, chokes, no way on (28.7.85).

⊗ F36

Location: (414W, 67S, +13), [419, 264°]. In F20 gully on lefthand verge (looking down), 30m before bottom end of gully (this being taken to be where the 1985 route turned left and the gully degenerates into an overhanging precipice). To Top Camp: 84°; to La Verdelluenga: 106°.

Description: Open shaft 10-15m deep, 10m long x 1.5m wide, choked at the bottom (28.7.85).

? Arch Caves

Unmarked entrance upslope from F2 towards the Jorcada Blanca col.

⊗ F37

Location: On the right side of a gully ascending from the 'Arch Caves'.

Description: A small hole descends down a steep rubble slope with two squeezes to a small aven. No way on (29.7.85).

⊗ F38

Location: (250E, 250S, +6), [350, 140°] to nearest 50m. Downhill and east from F19. Follow path east from Top Camp for about 200m and then up and to the right into a large boulder-strewn cirque overlooked by an arched alcove, usually above a snow field, in its southern wall. F38 is that alcove.

Description: Enter past snowfield to large chamber with fine ice column (in 1985, at least!). Pool at back of cave is covered in a thin layer of ice. This was the Top Camp water supply at the end of '85 (3.8.85) and throughout the '86 expedition. The pool was gone in '87 and never seen since.

⊗ F39

Location: (200E, 200S, +1), [300, 140°] to nearest 50m. Turn right about 50m before reaching F38. A small pothole under a rock wall.

Description: 5m drop past snow to a choke. No way on (3.8.85).

⊘ F40

Location: (566W, 145N, +23), [584, 287°]. Walk up the grassy slope from Ridge Cave. On the ridge turn right and walk down the ridge for about 100m to a large depression in very metamorphosed limestone. To the left of the depression is F40, a vertical crack about 4m by 1m. This cave may be worth another look as the draught was lost by the original explorers.

Description: The first pitch lands on a small ledge. Two short climbs, with a blind pot to the left, lead to the second pitch. This lands on a large rock bridge with pitches to the left and right; the best hang is down the left hand shaft. This pitch lands in a small chamber. The pitch continues below, but the way on is through a slot above and to the left of the continuation. This leads to a 2m climb with a pitch to the left and a blind pot to the right, at the bottom of the shaft to the right of the rock bridge. A traverse above the pitch leads to a good natural belay, for a 10m pitch to a ledge, from where a short pendule to a rock bridge leads to a 19m pitch. This lands in a boulder-floored chamber, with the way on a short rift 1m wide, ending in a tight vertical squeeze to the left: The Salamander. This drops into a small chamber with a sloping boulder floor, leading straight to the next pitch. As the top was loose, this was rigged from a very rounded flake with nothing much stoppong the tape rolling off. The pitch, though small at the top, opens out after a few metres and is very impressive. It lands in another large boulder-strewn chamber. An ascending scree slope finishes at one end. The opposite direction soon closes down to a narrow rift half-filled with boulders. After four meters this pops out into a small chamber, where the draught present in the rest of the cave disappears up an aven. The only way on is down through boulders. The passage then closes down, ending in a sandy choke into which you can stick a welly for about a foot. (3.8.86, 17.8.86). Survey: Proc. 12, p. 64.

Pitch	**Rope**	**Rigging**
Entrance shaft (P15, C15, P10)	50m	Large natural on right and flake; 2 natural rebelays.
Left-hand shaft (P9)	20m	Natural belays.
P10, P19	45m	Traverse to natural belay; rebelay from small flake above rock bridge.
Disappointment Pot (P20)	30m	Rounded boulder.

⊘ F41

Location: The cave is located in the karst between the scree slope running up to F13, and the Verdelluenga thrust. At about the same height as F13, bearing 204°. In a very large shakehole.

Description: See 1997 report for details. This cave is normally full of snow; different routes are possible, depending upon the snow levels. Not a nice place.

⊗ F42

Location: 100m downhill from F57, bearing to Top Camp 66°. When walking downhill from F57, in the second hillock on the right hand side.

Description: Open shaft (P7) lands in choked cobble-floored chamber; all ways on lead back up to the surface.

⊗ F43

Location: (71E, 154S, +40), [170, 158°]. In pavement just E of a shallow depression in N flank of the hills SE of Top Camp. Bearing 155° from Top Camp.

Description: 2.5m by 1.6m shaft visible only from close quarters. 15m pitch, choked at the bottom.

⊘ F44

Location: (106W, 41S, −33), [113, 252°]. In pavement W and down from Top Camp, 50m S of F8.

Description: Square-ish doline 8m wide and 6m deep with an arched entrance in the E corner. The doline was laddered from the N corner giving a 1m climb and 4m pitch onto snow (2m above floor of doline). Rock arch in E wall of doline leads to chamber in iron ore vein with daylight seeping in through roof boulders; all possible routes lead upward and choke. Rift in SE corner of doline on S by E trend passes underneath skylight aven and leads to a drop after a few metres. A 2m pitch lands on top of second snow pile in 5m by 8m chamber with bedding plane roof. The gap between snow and wall was sounded to at least 4m on the left side; this may or may not be a plugged shaft. Descending the snow pile to the right gains a depth of 10m below lip of doline with two ways on: a crawl to the right past fossil aragonite ‘popcorn’ and some stal ascends back to daylight under snow in the SW corner of the doline, while straight ahead, a narrow, draughting, descending rift with a snow floor remains unentered due to lack of oversuits.

⊗ Unnumbered shaft

Location: (104W, 46S, −28), [113, 249°]. Upslope of the F44 doline, on the S side.

Description: A small rifty shaft immediately breaks into F44.

⊗ Unnumbered shaft

Location: (103W, 51S, −23), [115, 246°]. Follow the same fracture further uphill.

Description: A 4m deep blind open rift.

⊘ Coffin-Lid

(101W, 50S, −24), [112, 246°]. Two steps further north a slab the size and shape of a coffin lid conceals a body-sized rattling opening, possibly connecting to the chamber beyond the rock arch in F44.

⊘ F45A–B

Location: F45A: (91W, 75S, −14), [118, 233°]; F45B: (146W, 56S, −24), [156, 252°]. A group of entrances located upslope (SE) from F44, just below the first of the large karren-riddled ‘shoulders’ on the way from Top Camp to Perdices and F20; F45B is the fluted, hading crack at the uphill verge of the shoulder.

Description: F45A must have been looked down many times by passers-by who thought they saw a solid floor 10m down. The entrance is at a junction of two deeply incised vadose inlets spanned by a rock bridge and a large wedged boulder, a 15m SRT pitch (best rigged from the bridge) passes some ice flow (’89) at -10m and lands on the col of an extensive snowplug in a (2-4m wide) SE-NW rift. Descending the snow in the NW corner leads to a strongly draughting snow chute 5m further down, which was not descended. On the SE side, scrambling down leads to a point at which a possible way on past the snow is seen. Light entering above via F45B can be seen at this point.— Blocked with snow at −10m in 1992.

⊘ F46

Location: Some 30m NE of F7D in obvious fracture trending 15° and hading NW. Take care, surface rock is VERY loose.

Description: Rift in floor of surface meander. Rig rope from natural at top of gully, then another natural at top of entrance pitch (P8). Pitch lands on snow, from where continuation on NW wall (P6) lands on snow-covered false floor in intersection of four rifts, two coming down from entrance, while the other two carry on downwards but are very narrow. Pebbles hit more snow after 3–4m. A chisel would be needed to make this passable; a short pitch would follow immediately.

⊘ F47

Location: Shaft: (191W, 2N, −50), [191, 274°]. 20m N and down from large doline N of F7A.

Description: Small doline climbable to entrance into chamber in its N side, with a 1.5m wide shaft breaking the roof of the chamber. Chamber has a dubious snow floor. From the roof bedding plane (strike 95° dip 55° N) a meandering passage has cut down on the NW side of the chamber. This was entered by rigging a 7m pitch through the skylight shaft, and left by ascending a tricky 2m climb to floor of doline and 1m and 3m climbs up out of same. Snow is resting on either ledges or floor 1.5m lower and remains a dubious affair. Descending 2 badly supported snow ‘tongues’ and a large chockstone in obvious rift down dip (N) leads to 30cm high bedding plane descending further to an estimated 10m drop but obstructed by large floor flake and roof stal. Impassable without hammering.

⊘ F48

Location: 30m W along fault (trending 73° hading 85° S) from F7A.

Description: Shelf broken by three shafts into underlying chamber, The Vestibule, 15m by 5m wide. Rig down largest skylight from naturals, then rebelay from another natural to drop past the snow into a rift (35m rope needed). Looking back offers interesting views of VW sized holes supporting much of the snow in the Vestibule, while walking forward eventually gains a decent floor in a tall 2–3m wide by 5m chamber. Ascend boulder slope to the left to enter continuation of rift 50–80 cm wide after right hand bend, with chockstones at various levels. This was followed at floor level to where a well-developed pair of ramps betrayed the original flow direction (inward). Ahead, it is possible to drop down a couple of feet into the bottom of the rift, but this route becomes too tight. Traversing above the drop, the rift continues to a 10m pitch. Two short climbs are followed by a 6m pitch into a small chamber. A tight rift needs hammering, but may continue.

⊘ F49

Location: (242W, 53S, −32), [247, 261°]. Just a few metres further W along the F7A-F48 fault, in floor of 2m wide niche at the head of a shallow surface meander.

Description: Wedged boulders with enticing and draughting black holes between them. Requires extensive engineering to force an entrance as the boulders are rather large. May only provide another entrance to F48.

⊘ Unmarked entrance

Location: (253W, 32S, −49), [255, 266°]. Some 25m downhill (N) from F49, the F20 fault passes through a little doline (unmarked) on 68° strike, before crossing a bouldery grass field.

Description: Through gaps in the boulder floor of the doline, snow is seen and a draught emerges. Looks diggable.

⊗ F50

Location: Located behind F20, not far from F14 on a bearing of 296° to Top Camp and 138° to the spike on the ridge.

Description: A slope down to a snow plug, choked.

⊗ F51

Location: Located near to F50 on bearing of 141° to the spike on the ridge, 227° to the right of the Jorcada Blanca pass.

Description: An 8m climb down to a choke, no way on.

⊗ F52

Location: Located high on the steep slope to the left (as you walk towards Top Camp) of the sandy/dolomity valley. The entrance is on a bearing of 144° to Verdeluenga and is marked with a cairn visible from the sandy valley (or was in 1988). An impressive shaft belling out from a small unobvious entrance located part way up the steep rock slope to the left and above the path to Top Camp. The entrance is only visible from above.

Description: The first pitch (25m) is easiest rigged with a ladder, the rest of the shaft can be rigged with rope in three hangs (10m, 20m, 15m). All ways on from the bottom were choked. Penduling to the right reaches a rift leading to a 15m pitch, choked at the bottom.

⊗ F53

Location: Lower down the slope and to the left of F52. 310° to the snow pole, and just across the valley and up-slope from there, in a small lump of limestone separated from the main block. 0342098 4787944 ±24m, alt. 1886m.

Description: A 2m climb followed by 30° descending rift which becomes too tight.

⊗ F54

Location: On the same fault as F57, about 30m left (true right) of the dolomite band, at the highest comfortable traverse level. A large shakehole, only visible from above, with a scree slope running into it from above. Bearing 68° to Top Camp.

Description: The entrance shaft can be rigged from the eastern side (spike belay). This lands on the snow slope, but a small tube can be penduled into (bolt at entrance of tube). At the end of the tube are three ways on: to the right, a climb down soon becomes too tight; traversing forward, a tube continues before dropping back into the cave further down: this may provide an easier route. The original route was to rig a pitch at the end of the tube (spike belay) back down to the snow slope. The rope can be deviated from a spike through a hole in the snow, down into passage below. A snow slope (bolt belay) continues down to the start of a rift. The rift leads into a large chamber (where the alternative route enters from above). Here a climb over some boulders enters a continuation of the rift. The rift can be followed for some way; several chokes are encountered, but these can be climber over. At the final choke, a slot in the roof leads into a large chamber with an inlet coming in, and the continuation choked.

⊘ F55

Location: In F20 Gulley, 20m below F36, on true right, in a shakehole with snow, 10m south of survey station T7.

Description: Walk into chamber with two tight crawls continuing. Top one draughts well, but may just connect with rift on surface above.

⊘ F56

Location: Just below the Verdelluenga–Cabrones ridge, to the west of the Verdelluenga Thrust ("The Green Tongue"), in a small depression in an area of karst, near the base of a cliff.

Description: This has been renumbered F88.

⊘ F57, Cueva del Arco

Location: The cave is located on a bearing of 248° from Top Camp. An obvious shakehole on the hillside is visible from camp; this is choked with snow. Twenty meters higher is a large rock arch at the mouth of a large tunnel heading into the hillside. A strong draught blows from the entrance; in some conditions this can be seen as steam from Top Camp.

Description: The entrance pitch (P6) lands on a snow slope, descending at an angle of 40°, down a tunnel about 5m wide and 10m high. The snow slope can be followed for about 70m, to a 10m pitch. The snow slope continues for a further 20m, to the top of a 7m pitch, which is followed almost immediately by a steep descent down boulders. A large hole is visible in the roof at this point, which might be reachable by traversing, or possibly via one of the entrances F11 and F12 which are roughly above this point. Ten metres ahead, the snow slope flattens out to a junction. Straight ahead, a small slide down over snow leads to a choke and aven. Following the main passage round a bend to the right, leads past a beautiful frozen waterfall to the base of a vertical wall. It is conjectured that a pitch may lie under the snow at this point (don't unclip!).

Two climbs of 6m and 5m lead up onto a ledge, from where a 10m pitch can be rigged down the other side. Alternatively, a further climb leads to a possible traverse to a ledge, but this does not look very hopeful. The pitch lands on a ledge from where two short climbs lead to a cobble floor. Round the corner, a solid wall suddenly appears, blocking the way on. The floor draughts noticeably, but the prospects for digging do not look good. From the ledge, a climb up the opposite wall leads to a balcony, from where a tube descends into a too-tight rift.

Rigging:

Pitch	Rope	Rigging
Entrance pitch (P6)	200m	Y-hang from two spikes; spike deviation (would be best rigged with a ladder).
First snow slope (70m)	”	Two spike rebelays.
Second pitch (P10)	”	Bolt backup and bolt belay on left hand wall.
Second snow slope (20m)	”	Rebelay from huge boulder.
Third pitch (P7)	”	Spike and bolt belays on right hand wall; spike deviation.
Descent down boulders (C10)	”	Natural belay.
Final snow slope (20m)	”	Natural rebelay.
Climbs up (C6, C5)	”	Bolt and natural; two bolts.
Final pitch (P10, C6)	20m	Y-hang from bolts for climbs; bolt rebelay.

⊘ F58

Location: In the sloping karren above the F7 entrances.

Description: A diggable slot.

⊗ F59

Location: On left-hand side of outcrop of limestone, halfway up green valley from Top Camp to La Verdelluenga, level with overhanging bluff. Bearing 302° to Top Camp.

Description: Two entrances. Entrance A is a 7m deep shaft leading to bouldery floor with no way on. B is an immediately adjacent 5m deep shaft with a bouldery floor. A hole at the bootom gives a visual connection between the two shafts.

⊗ F60

Location: To the right (true left) of the Verdelluenga track, about 50m below the level of F41.

Description: A 2m by 4m hole surrounded by jagged, loose rock. A snow slope descends about 30m to a snow and rock floor. No way on. Not a nice place.

⊗ F61

Location: Three entrances on the opposite side of Brown Gulley from F25, but higher up.

Description: The left-hand entrance is a rift closing down to 3–4 inches at all levels. The middle entrance ends 5m down on a pebble floor. The right-hand entrance is a choked manhole just big enough to insert your legs.

⊗ F62

Location: Behind and to the left (true right) of climb over cliff, east of camp. Bearings: Verdelluenga 111°, Sphinx 129°.

Description: Obvious surface rift choked in places. 8m climb down, sharp in places, to choked floor.

⊘ F63

Location: Near the ridge, just south of F20 Gulley. Scramble down west side of ridge, and walk into a small shake hole. Originally numbered F58, but unmarked.

Description: To the right is a shaft 5–10m deep. Ahead are two passages which seem to choke, but need checking with a light.

◯ F64

Location: Hidden, impressive entrance, high up on Verdelluenga on steep slope. Just up and west a bit from E9. Bearings: 298° to Conjurtao; 343° to snow pole. Altitude approx. 1985m. 0342042 4787746.

Description: See 1994 expedition report.

⊗ **F65**

Location: Snow Pole 326°. Top left of La Verdelluenga, approx 10 m below the ridge.

Description: 30m shaft past a snow plug. A sloping 13m pitch beyond ends in boulders.

⊗ **F66**

Location: Snow Pole 008°, altitude approx 1895m. A rift in a complex of rifts on the west edge of a large shattered bowl. On the large ridge heading WNW of F64.

Description: An 8m climb down followed by a squeeze through boulders and a 10m climb down into chamber. A passage at the far side has a skylight opening but way on is blocked by boulders.

⊗ **F67**

Location: Snow Pole 018°, Old Top Camp 256°, altitude approx. 1895m. A lozenge shaped shaft 30m west of F66.

Description: Drops 15–18m to a choke.

⊘ **F68**

Location: F13 190°, Old Top Camp 277°, altitude approx. 1930m. Dry Shaft in top of a scree filled shallow hoyo to the right of the shoulder of La Verdelluenga.

Description: A 5m loose climb leads into a tube at the head of a 10m pitch into a chamber. Right leads past an awkward corner to a low chamber and down to two large boulder chokes. Boulders draught strongly.

⊗ **F69**

An 8m climb in a 1m wide rift to a bouldery floor.

? **F70**

Location: 150m from the Snow Pole on a bearing of 200°.

Description: A 25m shaft. A second shaft in the NW corner is blocked with snow.

⊘ **F71**

Location: Snow Pole 310+10°, La Verdelluenga 155+10°. SJP? A small entrance close to the grass-limestone boundry on the NW flank of La Verdelluenga.

Description: A spiky 6m climb leads to free-climbable 6m and 5m pitches. A draughting tube at the bottom leads into a phreatic tube. The tube leads to a 3m pot with the ways on being too tight. Alternatively, squeeze down into 5m high rift; way on is too tight, but draughting.

⊗ **F72**

An 8m climb in a rift followed by a further 8m drop in the rift becomes too tight.

⊗ **F73**

Location: Heading away from the snow pole camp to the south leads into a shallow valley. About 50m up this valley a series of rifts can be seen about 30m south of the valley. F73 and 74 are located here (entrances are tagged).

Description: A 25m deep narrow slot; no way on.

⊘ **F74**

Location: Near F73.

Description: A 10m shaft drops down onto a snow plug.

⊗ **F75**

Location: Snow Pole 081.5°, La Verdelluenga 135°.

Description: Major landscape gardening exercise revealed a 7m shaft blocked with boulders. No draught.

⊗ **F76**

Location: Snow Pole 081°, 5m E of F75.

Description: A 6m open shaft with no way on.

⊗ **F77**

Location: 5m N of F76.

Description: A 4m shaft with a further 4m deep rift on the S corner. Blocked.

⊘ **F78**

Location: Snow Pole 080°, La Verdelluenga 128°, "Thrift Rift".

Description: A 10m deep fissure, 1–1.5m wide. At the NW end a small inaccessible chamber can be seen.

⊗ **F79**

Location: Vega Aliseda (orange rocks) 025°, La Verdelluenga 126°, Snow Pole 065°.

Description: "The Great System of Nothing". A dug out hole amongst boulders leads down into a rift open to numerous skylights.

⊘ **F80**

Location: Ascend onto the Cabrones ridge via the scree gulley at the north east end, and follow the ridge for about 500m. The cave is just below the ridge to the south, just before the subsidiary ridge leading to Robliza. The best way to get to the cave is to start down the subsidiary ridge, and then contour across. 0341858 4787149.

Description: The obvious way to rig the entrance shaft is from the lowest point on the rim. This route descends for about 50m, via a number of rebelays, to land on snow. It is possible to descend further, between the snow plug and the walls, but no route looks promising. The GER reportedly descended to a depth of 150m at the south west end, although this route was blocked by snow in subsequent years. There is an obvious rock arch to the south west at a depth of 25m, with an unexplored window visible beyond.

The way on to the deeper parts of the cave is to begin rigging from high up on the east side, descend a gulley, then swing left into the next gulley; 15m lower, swing further left to the start of a permanently rigged traverse line, which leads onto a ledge.

The ledge is at the top of a 80m pitch. Descending the pitch fully lands on a steeply descending snow slope, in a large rift heading north east, ending at a blank wall with no obvious leads. Alternatively, there are two windows visible on the opposite side of the shaft at depths of 15 and 25m.

The lower window can be reached by a pendule and traverse along the left hand wall. Ahead, a short drop leads to a hole in the floor, which leads back down to the snow slope. An aven above is believed to connect with the upper window. Traversing across the hole leads to a climb up, with no way on at the top.

The upper window has been reached via a traverse. It leads up towards a boulder choke. Significant draught, but no person-sized holes yet.

Rigging:

Pitch	Rope	Rigging
First pitch, direct route (P60)	75m	Bolt and spike Y-hang; natural rebelay; 5 bolt rebelays to snow; 2 bolt rebelays down side of snow.
First pitch, to ledge (P25, T12)	45m	Bolt and spike Y-hang; spike rebelay; spike rebelay for swing into next gulley; bolt rebelay; bolt deviation; thread deviation; bolt rebelay; bolt at start of traverse; bolt in middle of traverse; bolt at end of traverse (replace traverse by further descent and pendule, followed by ascent up loose slope).
Second pitch, direct route (P80)	90m	Two bolts; bolt rebelay (needs a second bolt); spike deviation; 5 bolt rebelays; spike deviation; bolt rebelay.
Snow slope	25m	Bolt.
Second pitch, to lower window (P25, T10)	45m	Two bolts; bolt rebelay (needs a second bolt); spike deviation; bolt and spike Y-hang rebelay; bolt at start of traverse; thread belay; spike belay; spike belay at end of traverse.
Descent and traverse (P5, T8)	20m	Spike belay; bolt at start of traverse; thread belay; spike at end of traverse.

⊗ F81

Location: On the Asturias side of the watershed, very close to the summit of Punta Gregoriana.

Description: 25m shaft to a rocky snow plugged floor.

⊘ F82

Location: 343° from the Snow Pole. Head down the shallow valley from the Snow Pole and bear left toward the orange rocks in Vega Aliseda. A massive collapse area with a pale orange back wall.

Description: A possible way exists down in the bottom of the large boulders.

⊗ F83

Location: 10m on the true right and above the Brown Gully, opposite F34 rift. 350° to lump en route to Ridge Cave.

Description: 8m Shaft and a 4m climb down into rift with fossils.

⊘ F84

Location: On the way from the snow pole towards Old Top Camp, in a block of limestone to the right, down rift from F74.

Description: Drop onto snow plug; there may be a way past the snow.

? F85

Has been renumbered E12.

◯ F86

Location: At the base of the green tongue proper, 19m from F59 on a bearing of 199.

Description: An undescended shaft down side of snow plug in large shakehole.

⊗ F87

Location: Walk up towards dolomite peak in area E from new Top Camp. On the right of ridge above F71 is a large depression. F87 is a metre wide rift in right hand wall of depression.

Description: Climbing down the rift leads under an arch to floor level. Doubling back through a crawl at floor level leads into a boulder choke.

⊗ F88

Location: Just below the Verdelluenga–Cabrones ridge, to the west of the Verdelluenga Thrust ("The Green Tongue"), in a small depression in an area of karst, near the base of a cliff. 0342059 4787469.

Description: Originally explored in 1993, when it was numbered F56, to the base of the first pitch, where it was blocked with snow. Explored further in 1997, to a depth of about 100m. See 1997 expedition report for full description.

⊗ F89

Location: On the flank of Cabrones, above F5. Bearings 3–° to F2; 244° to right hand end (cliff) of Punta Gregoriana.

Description: A small crawl into chamber chokes.

⊗ F90

Location: About two levels higher than F89. Snow pole 8° top of F13 rock 56° (about 200m). Cave is slightly higher than F13 rock.

Description: Impressive rift with snow plug heads into hillside. 25m pitch onto snowplug. All ways on choked with snow (1997).

⊘ F91

Location: From west end of Vega Aliseda, follow valley to left uphill, following cairns for about 150m into area of shakeholes. Cave is in right (true left) hand side, overlooking obvious shakehole. Verdelluenga 128°, Cabrones 172°, climb out of Vega Aliseda on direct route to Los Lagos 84°.

Description: Cave descends at 45° for 5m to choke. but on left just inside entrance is hole through boulders looking into chamber. Well-aimed rocks rattle for a few seconds. Drafts. Needs a crowbar.

⊘ F92

Location: Further up valley from F91, scramble up to the left along fault on bearing 138°, hading at 40° down to NE. 126° to Pico Aliseda.

Description: Awkward 10m climb down into rift. A few metres ahead is a drop of maybe 20m (undescended).

◯ Unmarked entrance

Next shaft up from F92. Might go with digging.

⊘ F93

Location: Overlooking F92.

Description: Phreatic tube at base of cliff. Goes 5m and then gets low. Needs oversuit.

◯ F94

Location: In middle of scree-filled valley running along the base of Cabrones towards the pass. Cave is about 100m from col leading to F38. Bearings: left hand peak of Cabrones 104°, right hand peak 214°.

Description: Undescended. In a fairly naff place. It's surprising it's not already full of rocks; this might mean that it opens out below (or not).

◯ F95

Location: Near F94, at base of cliff jutting out from Cabrones.

Description: 10m shaft, might continue past snow.

◯ F96

Location: Two-thirds of the way up the valley running along the base of Cabrones towards the pass is a snow field at the base of a cliff. F96 is at the top left (true right) of this.

Description: A rift heading into the mountain. Not tagged. Looks promising.

○ F97

Location: To the SW of the F96 snowfield is a 25m x 20m ledge, a short awkward climb above the scree slope. Bearings F2 12°, pass 292°. The easiest route to the ledge might be to continue up the main valley, climb up a scree runnel, and then traverse up to the ledge. F97 is near the N end of the ledge.

Description: Several parallel shafts to snow. Undescended.

○ F98

Location: SE corner of ledge containing F97.

Description: Shaft to snow. Skylight above, possibly with parallel shaft. Looks promising.

⊘ F99

Location: SW corner of ledge containing F97.

Description: Walk into 8m x 8m chamber. Appears to be blind, but needs checking with a light.

Area G

Area G is the area to the south of the Ario path, below the Xitu col. It is not in our permitted area, so please do not go caving there.

⊗ G1

Location: South of the Ario path below the Xitu col (between sods 3 and 4). To the right of the path to Las Fuentes.

Description: A large entrance that is used as an animal shelter, soon chokes. Is only of interest as there is a good example of phytokarst in the entrance.

⊗ G2

Location: Continuing along the Las Fuentes path from G1 take the path leading off to the left. About 15m below the top of the hill on the northeast side is an obvious hole in a grassy bank.

Description: The entrance is a 3m freeclimb down to a small chamber containing rotten queso boards. To the right is a 12m pitch rigged from a natural eyehole in the left wall. The pitch lands in a rift, uprift quickly chokes at an old cow's skull, down rift goes past much rotten and fallen stal to a 2m freeclimb which finally chokes at a stal blockage.

⊗ G3

Location: From G1 continue along the Las Fuentes path. At T-junction turn left (right goes to Las Fuentes). Over the lip of the bowl are three shafts. 0342401 4789833, alt. 1453m.

Description: Middle shaft can be rigged from large boulder labelled OUCC G3. A 5m drop to a ledge is followed by a 20m drop to a snow plug. Down the snow plug a passage descends for 20m before ending in an aven. Part way down along the passage an alcove on the right contains a second aven. Back at the snow plug a 60°gravel slope can be ascended to a skylight and on the left a hairy climb to a balcony overlooking a shaft (which may be the original shaft).

Near G3 are two blind shafts, one containing a poisonous snake (1992).

There appear to be two caves numbered G4

⊗ G4

Location: Located roughly up and to the south of G3. 0342369 4789783, alt. 1470m.

Description: A low entrance which allowed access to a couple of chambers amongst boulders — no way on.

⊘ G4

Location: To the left of the path going down Sod 4, at the bottom of the hill. Large entrance at the end of a blind valley.

Description: Climbing down a snowplug the passage divides. To the right a rift can be followed up and along for 5m and then down 2m to the floor, the rift continues, and may be worth pushing further. To the left at the bottom of the snow plug continue down the snow to reach an unlocked wooden door to a small chamber containing racks for cheese. At the of the chamber a passage ascends with more racks. The passage seems to close down.

There also seem to be two G5s

⊘ G5

Location: Located on the slopes up to the La Rasa ridge slightly higher than the level of the cols into a large closed depression.

Description: The entrance was approximately 1.5m in diameter and after the removal of a couple of boulders allowed access to the right to a 2.5m freeclimb down a rift to a boulder floor. However a descending rift to the left draughted well, but a hammer might be useful to ease the descent.

⊘ G5

Location: 60m down valley from the second G4. Shaft labelled SIE 84.

Description: Stones rattle down for 4-6 seconds.

⊘ G6

Location: Northeast of G5 was a similar entrance located above the next closed depression.

Description: A phreatic tube about 1m wide with a trench in the floor carried a good draught. Quite tight, but it looked that perseverance might lead to a pitch down.

◯ G7

Location: A few hundred metres further on from G6, at the same level, a body-sized descending hole emitted a strong draught.

Description: The entrance was not marked or entered, but would definitely be worth another look.

⊘ Unmarked entrance

Location: In valley to the left of head of Sod 2, by the alternative path. 20m W of drafting boulder collapse. (Editor's note: this is a long way below the lower limit of Area G, but I'm not about to invent a new area.)

Description: Ladder pitch.

⊗ G8

Location: 0343374 4789216.

Description: 20m pitch leading to boulder slope down to a second 10m pitch. Cave ends. Originally named G2/2. Survey in 2001 report.

⊗ G9

Location: 0343310 4789313.

Description: Small shattered chamber. Contains cheese. No way on.

◯ Unnumbered cave

Location: 0343189 4789265.

Description: 7m shaft and phreatic tube.

◯ Unnumbered cave

0343210 4789305.

◯ G10

Location: In long rift up a slope from lowest col between Ario and Area G. 0342946 4789202 ±11m, alt. 1615m.

Description: Sloping shaft, maybe 10m deep.

◯ G11

Location: Not far from Sod 3. 0342355 4790248 ±5m, alt. 1465m.

Description: Large shallow shaft, 5m by 3m by 5m deep, possibly with passage through the boulders.

◯ G12

Location: Not far from Sod 3. 0342343 4790277 ±4m, alt. 1446m.

Description: Small shaft with entrance almost completely occupied by tree, 3m by 2m by 10m deep.

⊘ G13

Location: Some 30m from the path at the foot of Sod 4. 0343268 4789396.

Description: 3m long rift cave with cold draught. Dig gained a couple more metres length and depth, leading to a less-promising vertical dig in rock and animal bones.