

## Supplementary Materials for

### **Multi-isotope evidence for the emergence of cultural alterity in Late Neolithic Europe**

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- Fig. S1. Density distribution of dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) isotope values, by site type and by sex and site type.
- Fig. S2. Summary graph of dentine collagen nitrogen ( $\delta^{15}\text{N}_{\text{dcol}}$ ) and carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) isotope values, enamel carbonate oxygen ( $\delta^{18}\text{O}_{\text{c}}$ ) isotope values, enamel apatite carbon ( $\delta^{13}\text{C}_{\text{ap}}$ ) and strontium ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) isotope values, and strontium ([Sr]) and calcium ([Ca]) concentrations for the 32 individuals analyzed in the study.
- Fig. S3. Dispersion of  $\delta^{13}\text{C}_{\text{dcol}}$  and  $\delta^{13}\text{C}_{\text{ap}}$   $\Delta\text{M1-M2}$  values for the 27 individuals selected for a life history approach.
- Fig. S4. Dispersion of M1 and M2  $\Delta^{13}\text{C}_{\text{dcol-ap}}$  values for the 27 individuals selected for a life history approach.
- Fig. S5. Correlation between latitude and both M1 and M2 enamel carbonate ( $\delta^{18}\text{O}_{\text{c}}$ ) and modern water ( $\delta^{18}\text{O}_{\text{dw}}$ ) oxygen isotope values.
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- Fig. S8. Map with the geological formations of the Rioja Alavesa region and surrounding areas, with reference to the locations where modern plant, salt, and water samples were obtained.
- Fig. S9. Strontium isotope ratios ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) for the individuals analyzed compared to the average BASr values for their burial sites and 15-, 30-, 60-, and 120-min walk distance catchments around these.
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- Fig. S12.  $\delta^{13}\text{C}_{\text{dcol}}$  (open purple squares) and  $\delta^{15}\text{N}_{\text{dcol}}$  (open orange triangles) isotope profiles of the M1 and M2 of the eight individuals showing clear dips around ages 9 to 11.

Table S1. Sequential dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{dcol}}$ ) isotope values from the 27 individuals selected for the early life history approach.

Table S2. Comparison between cave and megalithic grave dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{dcol}}$ ) isotope values.

Table S3. Comparison between cave and megalithic male and female dentine collagen carbon isotope values ( $\delta^{13}\text{C}_{\text{dcol}}$ ).

Table S4. Estimated duration of exclusive breastfeeding and weaning process, age at complete weaning, and preweaning and postweaning dentine collagen nitrogen isotope values ( $\delta^{15}\text{N}_{\text{dcol}}$ ) for the 27 individuals selected for the early life history approach.

Table S5. Summary table of adult bone collagen carbon ( $\delta^{13}\text{C}_{\text{bcol}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{bcol}}$ ) isotope values, dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{dcol}}$ ) isotope values (mean), enamel carbonate oxygen isotope values ( $\delta^{18}\text{O}_{\text{c}}$ ), and enamel apatite carbon ( $\delta^{13}\text{C}_{\text{ap}}$ ) and strontium ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) isotope, and strontium ([Sr]) and calcium concentration ([Ca]) values for the 32 individuals analyzed in the study.

Table S6. Comparison between M1 and M2 crowns' dentine collagen ( $\delta^{13}\text{C}_{\text{col}}$ ) and enamel apatite ( $\delta^{13}\text{C}_{\text{ap}}$ ) carbon isotope values, including  $\Delta$  calculation, by site and burial location.

Table S7. Modern stream and lake water oxygen isotope values ( $\delta^{18}\text{O}_{\text{dw}}$ ) from the Rioja Alavesa region.

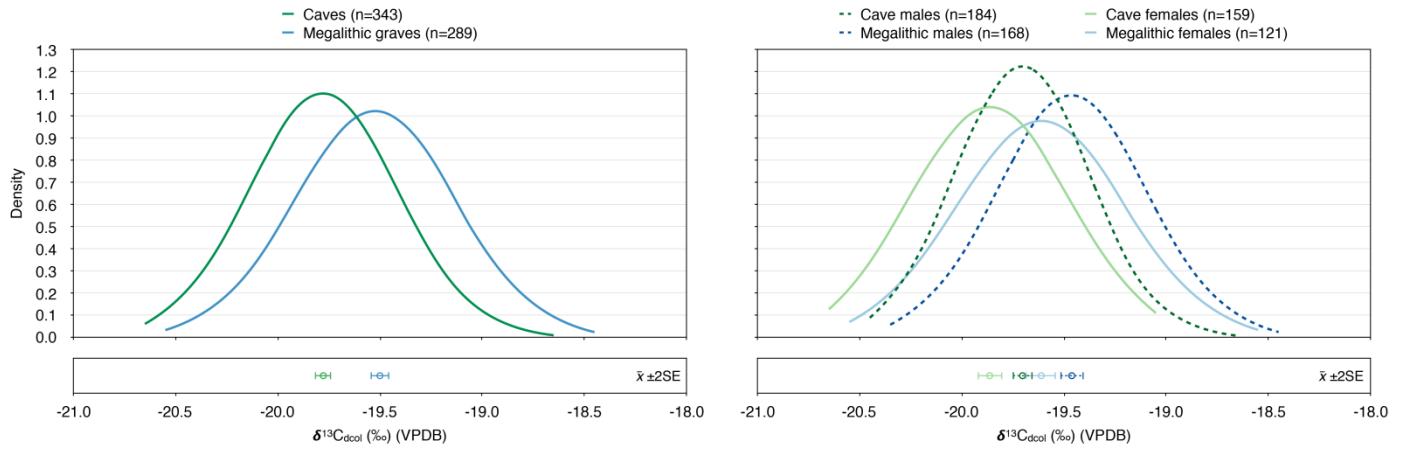
Table S8. Modern plant samples analyzed for the creation of the BASr map of the Rioja Alavesa region and strontium isotope ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) and strontium ([Sr]) and calcium concentration ([Ca]) values obtained from them.

Table S9. BASr ( $^{87}\text{Sr}/^{86}\text{Sr} \pm 1 \text{ SD}$ ) for the local area ("local BASr") and the average BASr values calculated for 15-, 30-, 60-, and 120-min walking distance catchments.

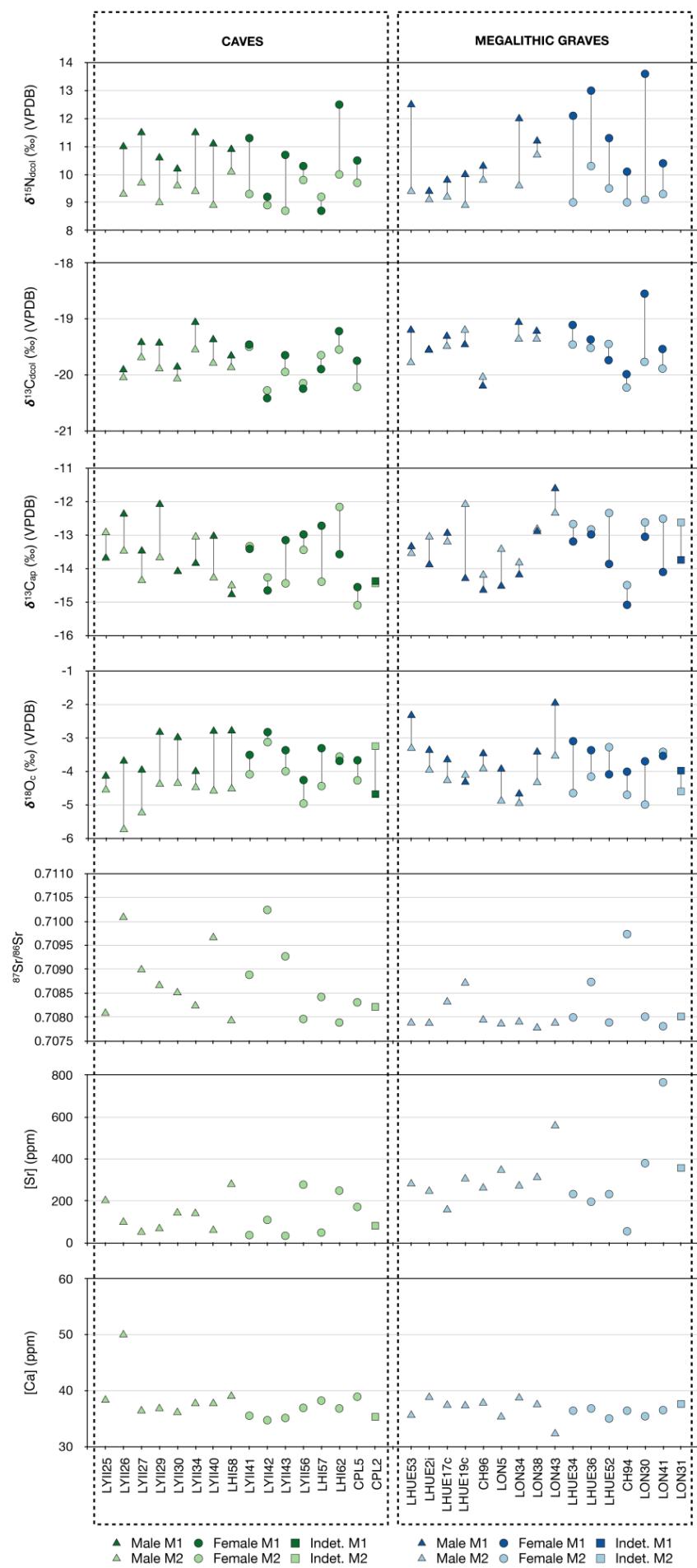
Table S10. Correspondence between the enamel apatite strontium isotope values ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) of the 32 individuals analyzed and the average BASr values calculated for the 0- to 60-min, 60- to 120-min, and >120-min walking areas from their respective burial locations.

Table S11. Strontium isotope ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) and strontium ([Sr]) and calcium concentration ([Ca]) values of salt and both spring and surface salt waters from the Rioja Alavesa region.

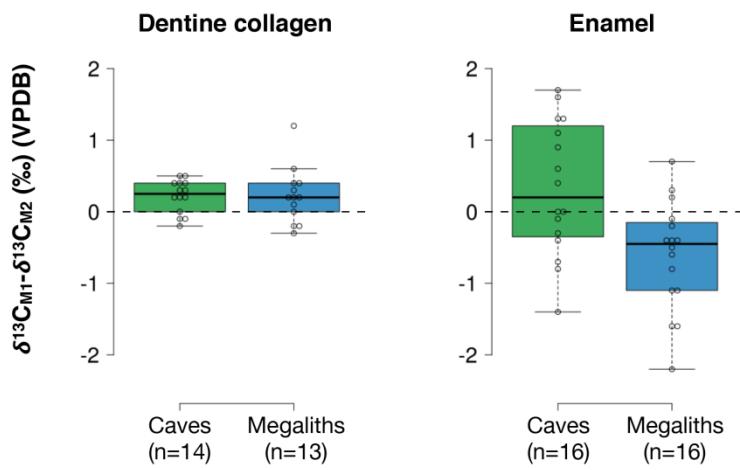
## SUPPLEMENTARY FIGURES



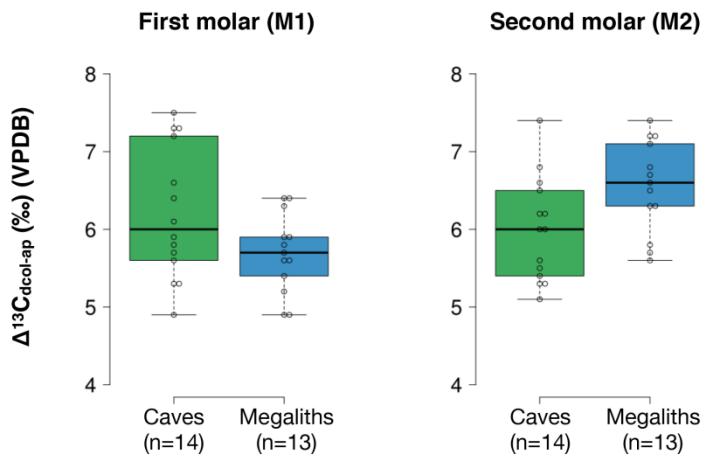
**Fig. S1. Density distribution of dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) isotope values, by site type (left) and by sex and site type (right).**



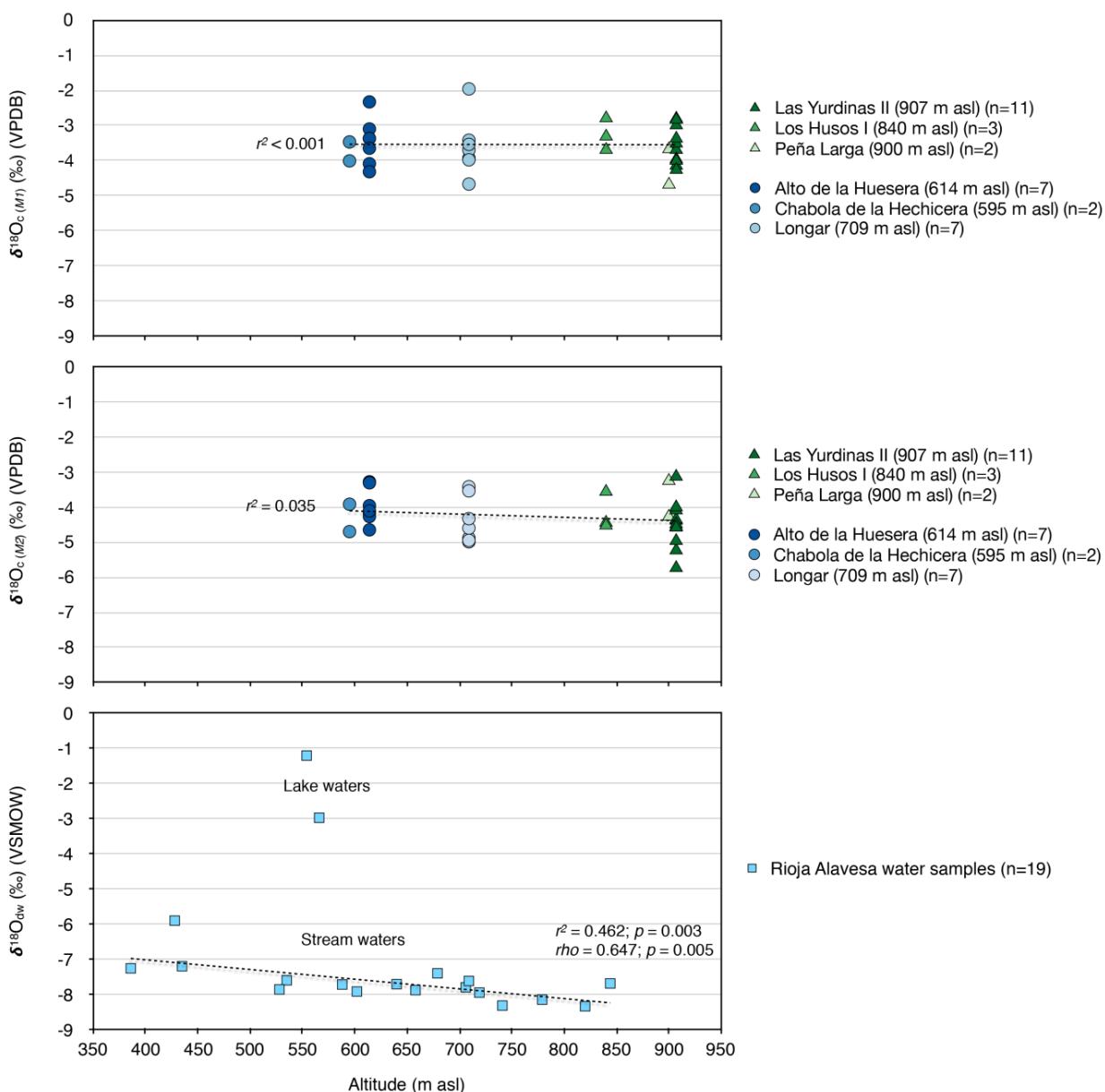
**Fig. S2. Summary graph of dentine collagen nitrogen ( $\delta^{15}\text{N}_{\text{dcol}}$ ) and carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) isotope values, enamel carbonate oxygen ( $\delta^{18}\text{O}_{\text{c}}$ ) isotope values, enamel apatite carbon ( $\delta^{13}\text{C}_{\text{ap}}$ ) and strontium ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) isotope values, and strontium ([Sr]) and calcium ([Ca]) concentrations for the 32 individuals analyzed in the study.  $\delta^{15}\text{N}_{\text{dcol}}$  and  $\delta^{13}\text{C}_{\text{dcol}}$  data represent the mean of the dentine collagen nitrogen and carbon isotope values corresponding to formation ages of M1 (0-3 years) and M2 crowns (2.5-8 years) (34), respectively (cf. Table S5).**



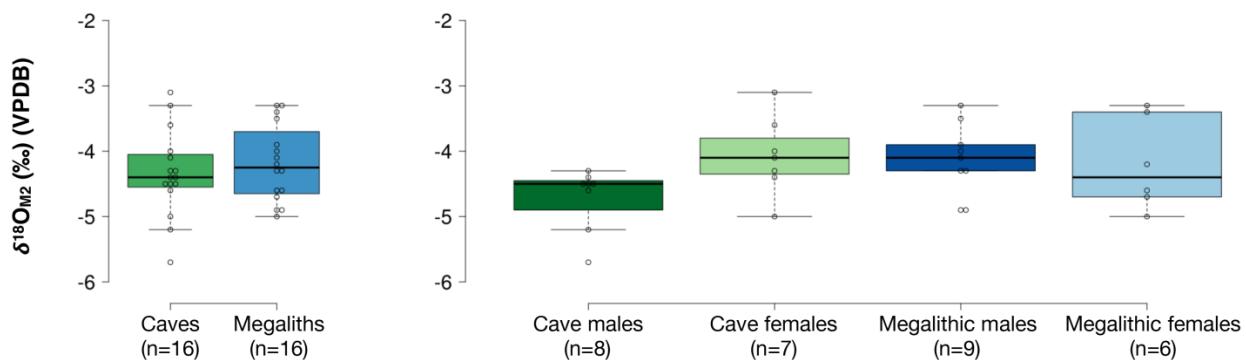
**Fig. S3. Dispersion of  $\delta^{13}\text{C}_{\text{dcol}}$  (left) and  $\delta^{13}\text{C}_{\text{ap}}$  (right)  $\Delta\text{M1-M2}$  values for the 27 individuals selected for a life history approach.**  $\delta^{13}\text{C}_{\text{dcol}}$  data used for the  $\Delta$  calculation are the mean of the dentine collagen carbon isotope values corresponding to formation ages of M1 (0-3 years) and M2 crowns (2.5-8 years) (34), respectively (cf. Table S5).



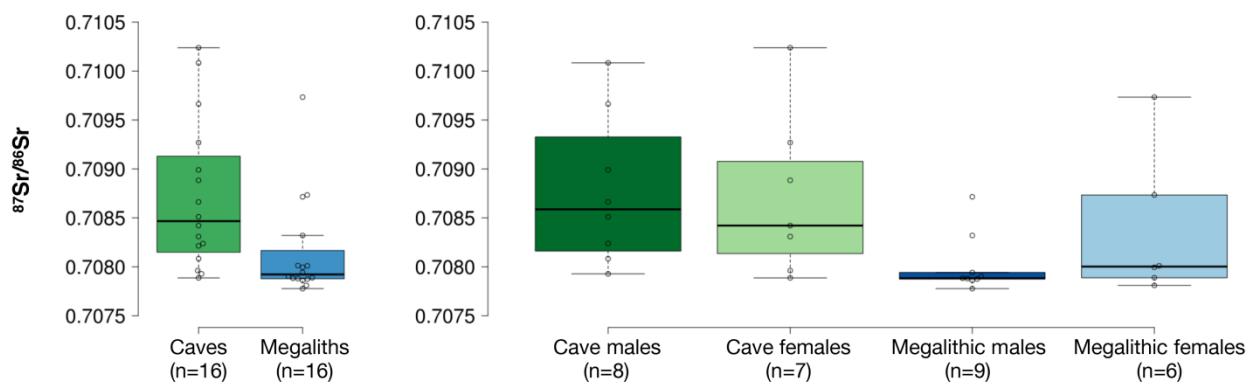
**Fig. S4. Dispersion of M1 (left) and M2 (right)  $\Delta^{13}\text{C}_{\text{dcol-ap}}$  values for the 27 individuals selected for a life history approach.**  $\delta^{13}\text{C}_{\text{dcol}}$  data used for the  $\Delta$  calculation are the mean of the dentine collagen carbon isotope values corresponding to formation ages of M1 (0-3 years) and M2 crowns (2.5-8 years) (34), respectively (cf. Table S5).



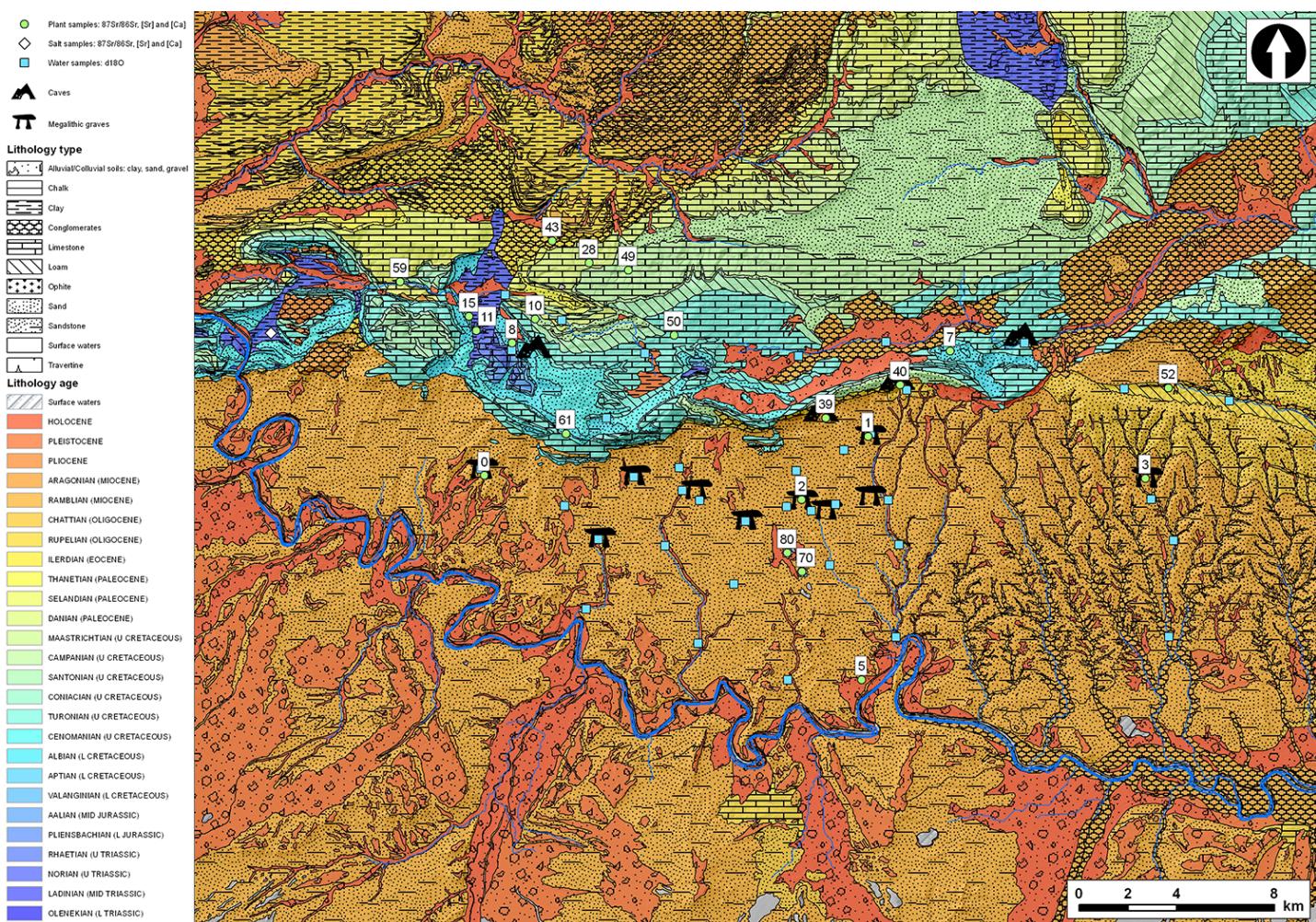
**Fig. S5.** Correlation between latitude and both M1 (top) and M2 (middle) enamel carbonate ( $\delta^{18}\text{O}_{\text{c}}$ ) and modern water ( $\delta^{18}\text{O}_{\text{dw}}$ ) (bottom) oxygen isotope values.



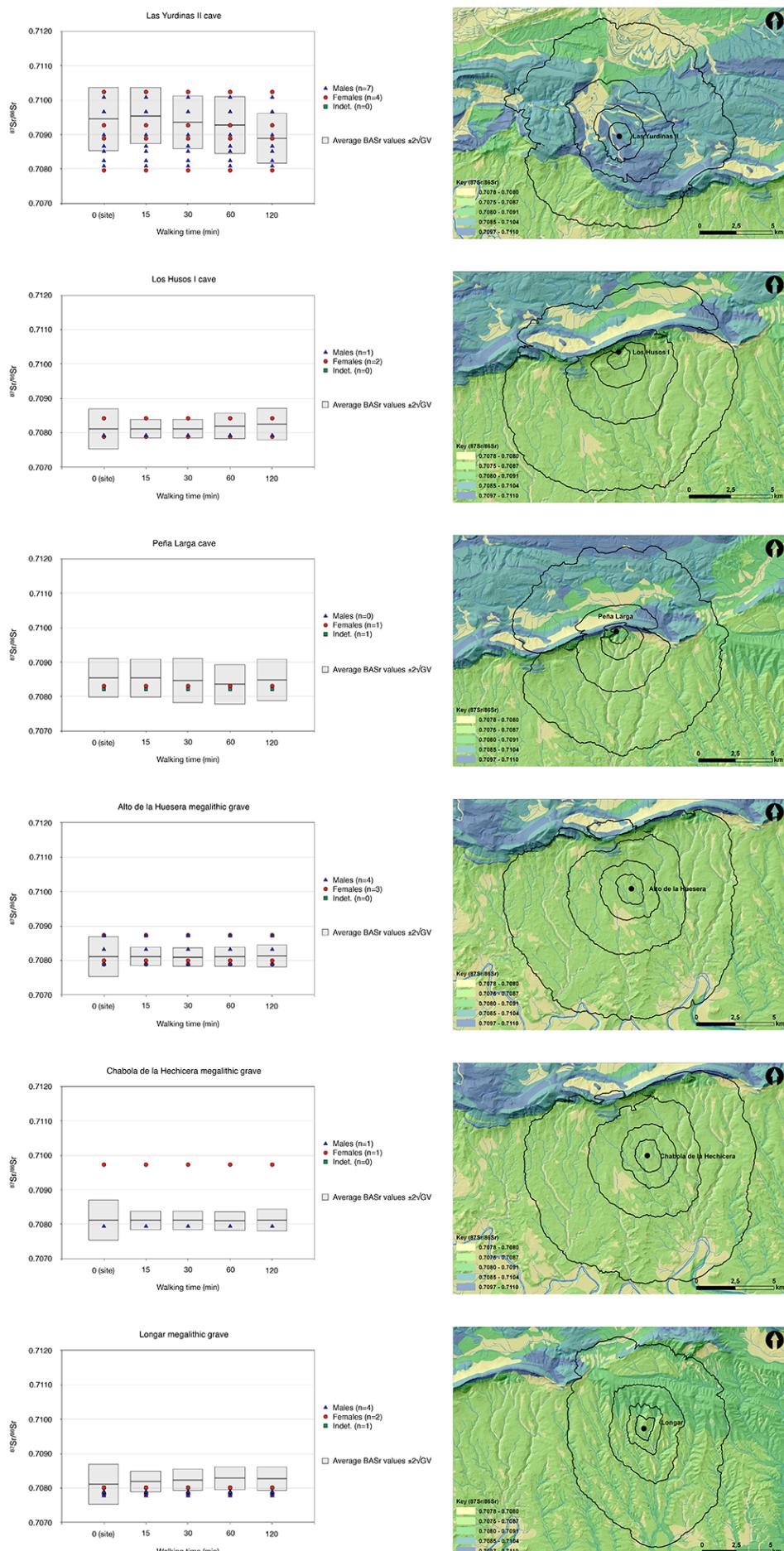
**Fig. S6.** Dispersion of enamel carbonate oxygen isotope values ( $\delta^{18}\text{O}_{\text{c}}$ ) by site type (left) and by sex and site type (right).



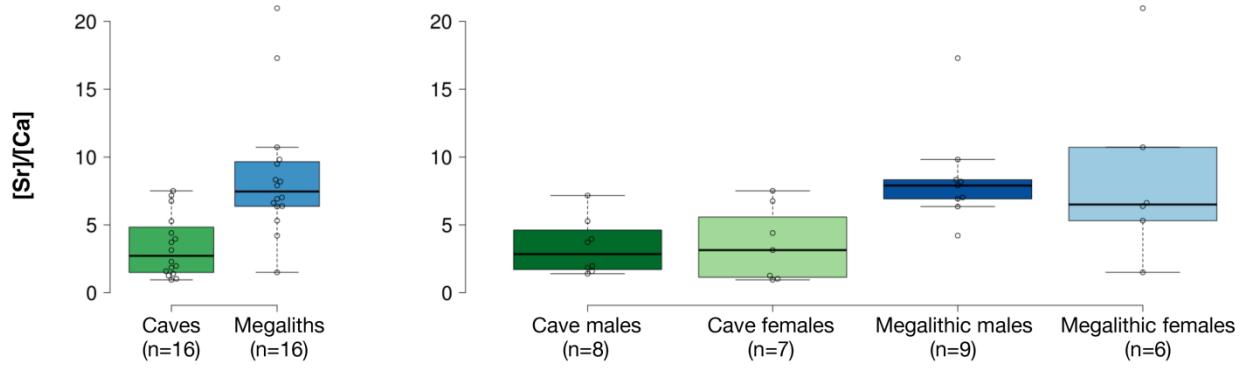
**Fig. S7.** Dispersion of strontium isotope values ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) by site type (left) and by sex and site type (right).



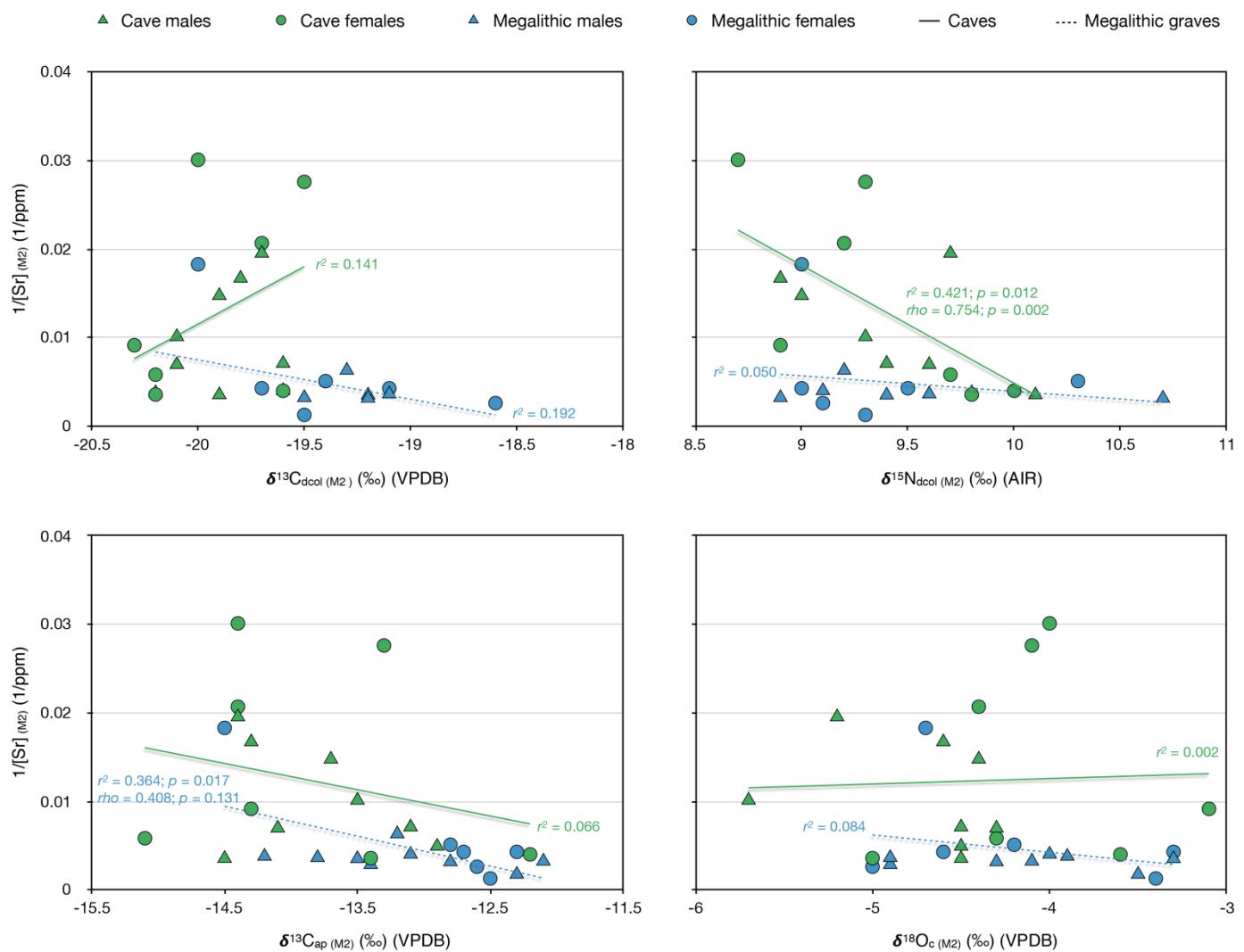
**Fig. S8.** Map with the geological formations of the Rioja Alavesa region and surrounding areas, with reference to the locations where modern plant, salt, and water samples were obtained.



**Fig. S9.** Strontium isotope ratios ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) for the individuals analyzed compared to the average BASr values for their burial sites and 15-, 30-, 60-, and 120-min walk distance catchments around these. BASr values are represented by gray shaded areas, where dispersion is expressed as  $\pm 2$  pooled standard deviations or  $\sqrt{\text{GV}}$ . The catchments around each site are mapped to the right.



**Fig. S10. Dispersion of  $[Sr](\text{ppm})/[Ca](\%)$  ratios by site type (left) and by sex and site type (right).**



**Fig. S11. Correlation between M2s'  $[Sr]$  values and (i) dentine collagen carbon isotope values ( $\delta^{13}\text{C}_{\text{dcol}}$ ), (ii) dentine collagen nitrogen isotope values ( $\delta^{15}\text{N}_{\text{dcol}}$ ), (iii) enamel apatite carbon isotope values ( $\delta^{13}\text{C}_{\text{ap}}$ ), and (iv) enamel carbonate oxygen isotope values ( $\delta^{18}\text{O}_{\text{c}}$ ).  $\delta^{13}\text{C}_{\text{dcol}}$  and  $\delta^{15}\text{N}_{\text{dcol}}$  data represent the mean of the dentine collagen carbon and nitrogen isotope values corresponding to formation ages of M2 crown (2.5–8 years) (34) (cf. Table S5).**



**Fig. S12.**  $\delta^{13}\text{C}_{\text{dcol}}$  (open purple squares) and  $\delta^{15}\text{N}_{\text{dcol}}$  (open orange triangles) isotope profiles of the M1 and M2 of the eight individuals showing clear dips around ages 9 to 11. Values obtained on the bone collagen ( $\delta^{13}\text{C}_{\text{bcoll}}$  and  $\delta^{15}\text{N}_{\text{bcoll}}$ ) of the same individuals at adulthood (18) are shown for reference (solid markers to the right).

## SUPPLEMENTARY TABLES

Table S1. Sequential dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{dcol}}$ ) isotope values from the 27 individuals selected for the early life history approach.												
Site	Individual	Age at death (years)*	Sex*	Id. number	Tooth	Age estimated (years)	Weight†	%C†	%N†	C:N†	$\delta^{13}\text{C}_{\text{dcol}}\text{ (‰)}$ (VPDB)	$\delta^{15}\text{N}_{\text{dcol}}\text{ (‰)}$ (AIR)
1. Las Yurdinas II	LYII.A.10.15065	30-35	M	LYII26_1	M1	0.90	0.8	45.3	16.4	3.2	-19.5	11.8
				LYII26_2	M1	1.50	1.0	45.3	16.5	3.2	-19.9	11.2
				LYII26_3	M1	2.10	1.2	45.1	16.5	3.2	-20.1	10.8
				LYII26_4	M1	2.70	1.1	41.9	15.3	3.2	-20.1	10.0
				LYII26_5	M1	3.33	0.9	44.9	16.2	3.2	-20.0	9.6
				LYII26_6	M1	4.00	1.0	43.5	15.8	3.2	-20.0	9.5
				LYII26_7	M1	4.67	0.8	43.7	15.8	3.2	-20.0	8.8
				LYII26_8	M1	5.20	0.9	43.9	15.9	3.2	-19.9	8.8
				LYII26_9	M1	5.60	0.9	44.0	15.9	3.2	-20.0	8.9
				LYII26_10	M1	6.00	0.8	44.2	15.9	3.2	-19.9	9.0
				LYII26_11	M1	6.40	0.7	43.3	15.5	3.3	-20.2	8.9
				LYII26_12	M1	6.80	0.9	45.9	16.6	3.2	-19.8	9.2
				LYII26_13	M1	7.38	0.7	44.1	15.8	3.2	-19.9	9.4
				LYII26_14	M1	8.13	0.6	46.8	16.8	3.2	-19.7	10.0
				LYII26_15	M1	9.25	0.8	44.2	15.9	3.3	-19.7	9.9
				LYII26_16	M2	3.19	0.8	45.8	16.6	3.2	-20.3	9.8
				LYII26_17	M2	4.56	1.1	47.1	17.2	3.2	-20.1	9.5
				LYII26_18	M2	5.94	1.0	43.8	15.9	3.2	-20.3	8.9
				LYII26_19	M2	7.31	1.2	45.2	16.4	3.2	-20.0	9.5
				LYII26_20	M2	8.33	1.2	44.7	16.3	3.2	-19.6	9.9

				LYII26_21	M2	9.00	1.2	42.7	15.5	3.2	-19.9	9.8
				LYII26_22	M2	9.67	1.0	43.3	15.7	3.2	-19.9	9.5
				LYII26_23	M2	10.25	1.1	44.3	16.0	3.2	-19.6	9.3
				LYII26_24	M2	10.75	0.6	40.5	14.5	3.2	-19.4	10.1
				LYII26_25	M2	11.25	0.6	41.0	14.7	3.2	-19.5	10.1
				LYII26_26	M2	11.75	0.6	47.3	17.0	3.2	-19.3	9.7
				LYII26_27	M2	12.67	0.6	45.0	16.3	3.2	-19.4	9.6
				LYII26_28	M2	14.67	0.8	43.0	15.4	3.3	-19.7	9.8
1. Las Yurdinas II	LYII.A.10.15080	30-40	M	LYII27_1	M1	0.90	1.0	42.5	15.3	3.2	-19.4	13.1
				LYII27_2	M1	1.50	0.8	52.4	18.9	3.2	-19.4	12.6
				LYII27_3	M1	2.10	1.2	45.6	16.5	3.2	-19.4	10.5
				LYII27_4	M1	2.70	1.2	44.9	16.2	3.2	-19.5	10.0
				LYII27_5	M1	3.25	1.1	45.6	16.4	3.2	-20.0	9.8
				LYII27_6	M1	3.75	1.0	44.8	16.1	3.2	-19.9	9.2
				LYII27_7	M1	4.25	1.2	43.4	15.6	3.2	-19.6	10.2
				LYII27_8	M1	4.75	1.2	43.5	15.7	3.2	-19.6	9.5
				LYII27_9	M1	5.25	1.2	44.1	16.0	3.2	-19.6	9.3
				LYII27_10	M1	5.75	0.8	41.8	14.9	3.3	-19.6	9.4
				LYII27_11	M1	6.25	0.6	44.3	15.5	3.3	-19.7	10.3
				LYII27_12	M1	6.75	1.1	41.9	15.1	3.2	-19.7	9.9
				LYII27_13	M1	7.38	1.2	45.8	16.5	3.2	-19.4	10.2
				LYII27_14	M1	8.13	1.0	44.7	15.9	3.3	-19.6	10.0
				LYII27_15	M1	8.88	0.7	43.2	15.3	3.3	-19.9	10.1
				LYII27_16	M1	9.63	0.7	44.0	15.7	3.3	-19.8	9.9
				LYII27_17	M2	3.05	1.2	42.8	15.5	3.2	-20.0	10.1

				LYII27_18	M2	4.15	1.2	43.8	15.9	3.2	-19.9	9.5
				LYII27_19	M2	5.25	0.9	43.9	15.8	3.2	-19.6	9.1
				LYII27_20	M2	6.35	0.6	44.8	16.2	3.2	-19.5	9.5
				LYII27_21	M2	7.45	0.9	42.9	15.3	3.3	-19.7	9.3
				LYII27_22	M2	8.33	1.1	43.8	15.8	3.2	-19.8	9.3
				LYII27_23	M2	9.00	0.7	42.4	15.3	3.2	-19.6	9.1
				LYII27_24	M2	9.67	1.2	45.7	16.4	3.2	-19.5	9.8
				LYII27_25	M2	10.25	1.1	43.4	15.7	3.2	-19.6	8.8
				LYII27_26	M2	10.75	1.1	46.6	16.7	3.2	-19.5	9.8
				LYII27_27	M2	11.25	0.6	42.1	15.1	3.3	-19.3	10.3
				LYII27_28	M2	11.75	0.9	48.5	17.5	3.2	-19.4	10.5
				LYII27_29	M2	12.67	0.9	44.9	16.1	3.3	-19.4	10.2
				LYII27_30	M2	14.00	1.1	45.1	16.2	3.2	-19.6	10.2
				LYII27_31	M2	15.33	0.8	43.3	15.5	3.3	-19.7	10.2
1. Las Yurdinas II	LYII.A.10.15077	24-30	M	LYII29_1	M1	0.30	0.4	41.4	14.2	3.4	-19.5	10.7
				LYII29_2	M1	0.90	0.9	48.0	17.5	3.2	-19.3	11.3
				LYII29_3	M1	1.50	0.8	43.2	15.6	3.2	-19.2	11.2
				LYII29_4	M1	2.10	0.0					
				LYII29_5	M1	2.70	1.0	41.5	15.3	3.2	-19.7	9.4
				LYII29_6	M1	3.20	0.6	47.3	17.2	3.2	-19.9	8.5
				LYII29_7	M1	3.60	0.7	29.7	10.4	3.3	-20.4	8.9
				LYII29_8	M1	4.00	1.1	42.8	15.6	3.2	-19.9	8.7
				LYII29_9	M1	4.40	1.1	43.3	15.6	3.2	-20.1	8.9
				LYII29_10	M1	4.80	1.1	42.9	15.6	3.2	-20.0	8.9
				LYII29_11	M1	5.33	1.1	41.5	15.1	3.2	-19.7	9.2

				<i>LYII29_12</i>	<i>M1</i>	6.00						
				<i>LYII29_13</i>	<i>M1</i>	6.67	1.1	41.6	15.1	3.2	-19.8	9.2
				<i>LYII29_14</i>	<i>M1</i>	7.75	1.1	44.5	16.2	3.2	-19.8	9.2
				<i>LYII29_15</i>	<i>M1</i>	9.25	1.0	42.8	15.5	3.2	-19.8	8.8
				<i>LYII29_16</i>	<i>M2</i>	4.56	0.6	42.8	15.6	3.2	-20.0	8.9
				<i>LYII29_17</i>	<i>M2</i>	5.94	0.9	42.0	15.3	3.2	-20.0	8.8
				<i>LYII29_18</i>	<i>M2</i>	7.31	0.7	40.9	14.9	3.2	-19.9	9.2
				<i>LYII29_19</i>	<i>M2</i>	8.20	0.8	42.2	15.4	3.2	-19.8	8.4
				<i>LYII29_20</i>	<i>M2</i>	8.60	0.8	43.6	15.9	3.2	-20.0	7.9
				<i>LYII29_21</i>	<i>M2</i>	9.00	0.9	46.3	16.9	3.2	-19.7	7.9
				<i>LYII29_22</i>	<i>M2</i>	9.40	0.8	44.4	16.1	3.2	-19.5	8.2
				<i>LYII29_23</i>	<i>M2</i>	9.80	0.8	42.5	15.4	3.2	-19.6	8.9
				<i>LYII29_24</i>	<i>M2</i>	10.50	0.9	39.3	14.2	3.2	-19.7	9.6
				<i>LYII29_25</i>	<i>M2</i>	11.50	1.0	42.9	15.6	3.2	-20.0	9.4
				<i>LYII29_26</i>	<i>M2</i>	13.00	0.9	47.6	17.4	3.2	-19.5	10.5
				<i>LYII29_27</i>	<i>M2</i>	15.00	1.0	43.9	16.0	3.2	-19.5	10.1
1. Las Yurdinas II	LYII.A.10.15064	35-40	<i>M</i>	<i>LYII30_1</i>	<i>M1</i>	0.90	0.8	47.6	17.0	3.3	-19.9	10.8
				<i>LYII30_2</i>	<i>M1</i>	1.50	1.2	43.9	15.7	3.3	-19.7	10.5
				<i>LYII30_3</i>	<i>M1</i>	2.10	1.0	42.4	15.3	3.2	-19.8	10.0
				<i>LYII30_4</i>	<i>M1</i>	2.70	1.0	42.2	15.1	3.3	-20.0	9.5
				<i>LYII30_5</i>	<i>M1</i>	3.25	0.9	44.7	15.8	3.3	-20.4	9.4
				<i>LYII30_6</i>	<i>M1</i>	3.75	1.1	43.4	15.5	3.3	-20.0	9.3
				<i>LYII30_7</i>	<i>M1</i>	4.25	1.2	41.9	15.1	3.2	-19.9	9.4
				<i>LYII30_8</i>	<i>M1</i>	4.75	1.0	44.1	15.7	3.3	-20.2	9.3
				<i>LYII30_9</i>	<i>M1</i>	5.25	0.7	44.6	16.3	3.2	-20.0	10.1

				LYII30_10	M1	5.75	1.2	48.0	17.5	3.2	-20.0	9.7
				LYII30_11	M1	6.25	1.2	47.2	17.1	3.2	-20.0	9.9
				LYII30_12	M1	6.75	1.2	42.1	15.3	3.2	-19.8	9.9
				LYII30_13	M1	7.38	1.2	41.7	15.1	3.2	-20.0	9.6
				LYII30_14	M1	8.13	0.9	36.8	13.1	3.3	-20.0	9.8
				LYII30_15	M1	8.88	0.9	43.2	15.4	3.3	-20.1	9.7
				LYII30_16	M1	9.63	0.8	43.2	15.4	3.3	-20.0	9.4
				LYII30_17	M2	3.05	0.5	40.1	14.6	3.2	-20.0	9.5
				LYII30_18	M2	4.15	0.6	40.9	14.9	3.2	-20.0	9.7
				LYII30_19	M2	5.25	0.6	41.6	15.1	3.2	-20.3	9.6
				LYII30_20	M2	6.35	0.9	36.0	13.1	3.2	-20.3	9.0
				LYII30_21	M2	7.45	0.8	42.1	15.3	3.2	-20.1	9.1
				LYII30_22	M2	8.20	0.8	42.3	15.3	3.2	-19.9	9.4
				LYII30_23	M2	8.60	0.5	40.8	14.7	3.2	-20.0	9.6
				LYII30_24	M2	9.00	0.9	42.4	15.4	3.2	-19.9	9.3
				LYII30_25	M2	9.40	0.9	43.8	15.8	3.2	-19.9	9.3
				LYII30_26	M2	9.80	0.6	41.9	15.1	3.2	-19.7	9.4
				LYII30_27	M2	10.33	0.7	41.2	15.0	3.2	-19.9	9.0
				LYII30_28	M2	11.00	0.9	45.5	16.6	3.2	-19.8	9.2
				LYII30_29	M2	11.67	0.9	47.4	17.1	3.2	-20.0	9.4
				LYII30_30	M2	13.00	0.9	42.4	15.4	3.2	-20.0	9.1
				LYII30_31	M2	15.00	0.9	41.8	15.2	3.2	-20.1	9.8
1. Las Yurdinas II	LYII.A.10.15120	20-24	M	LYII34_1	M1	0.38	0.4	41.1	14.7	3.3	-18.7	13.2
				LYII34_2	M1	1.13	0.5	44.2	15.9	3.3	-18.7	12.4
				LYII34_3	M1	1.88	0.7	41.6	15.0	3.2	-19.2	11.4

				LYII34_4	M1	2.63	0.6	40.4	14.5	3.3	-19.7	9.0
				LYII34_5	M1	3.20	0.7	41.8	14.8	3.3	-19.6	9.7
				LYII34_6	M1	3.60	0.5	41.9	14.9	3.3	-19.5	9.7
				LYII34_7	M1	4.00	0.8	41.0	14.6	3.3	-19.7	9.1
				LYII34_8	M1	4.40	0.7	40.6	14.4	3.3	-19.7	9.1
				LYII34_9	M1	4.80	0.4	41.3	14.5	3.3	-19.4	9.1
				LYII34_10	M1	5.33	1.0	45.1	16.3	3.2	-19.7	9.9
				LYII34_11	M1	6.00	1.0	40.7	14.7	3.2	-19.8	9.5
				LYII34_12	M1	6.67	0.6	41.6	14.8	3.3	-19.6	9.2
				LYII34_13	M1	7.75	1.1	41.3	14.9	3.2	-19.2	9.5
				LYII34_14	M1	9.25	0.6	41.7	15.0	3.3	-19.2	10.0
				LYII34_15	M2	3.05	0.7	46.1	16.6	3.2	-19.5	9.8
				LYII34_16	M2	4.15	0.9	46.3	16.7	3.2	-19.7	9.8
				LYII34_17	M2	5.25	0.8	45.3	16.3	3.2	-19.7	9.2
				LYII34_18	M2	6.35	1.0	44.8	16.0	3.3	-19.4	8.9
				LYII34_19	M2	7.45	0.9	45.1	16.2	3.3	-19.1	9.4
				LYII34_20	M2	8.33	0.6	47.7	17.5	3.2	-18.8	10.1
				LYII34_21	M2	9.00	0.3	41.5	14.3	3.4	-19.4	8.7
				LYII34_22	M2	9.67	0.6	44.0	16.0	3.2	-18.8	10.0
				LYII34_23	M2	10.33	0.7	46.8	16.8	3.2	-18.9	8.9
				LYII34_24	M2	11.00	0.5	45.5	16.3	3.3	-18.7	9.0
				LYII34_25	M2	11.67	0.8	44.6	15.9	3.3	-19.2	9.2
				LYII34_26	M2	13.00	0.6	44.1	16.0	3.2	-19.0	9.6
				LYII34_27	M2	15.00	0.9	44.3	15.9	3.2	-19.2	9.6
1. Las Yurdinas II	LYII.A.10.15098	24-40	M?	LYII40_1	M1	0.30	0.5	42.5	15.3	3.2	-19.2	11.9

				LYII40_2	M1	0.90	0.6	41.7	15.0	3.2	-18.9	11.9
				LYII40_3	M1	1.50	0.9	45.0	16.2	3.2	-19.3	11.5
				LYII40_4	M1	2.10	1.2	41.2	15.0	3.2	-19.7	9.6
				LYII40_5	M1	2.70	1.0	41.7	15.1	3.2	-19.7	10.4
				LYII40_6	M1	3.20	1.1	40.7	14.7	3.2	-19.7	8.5
				LYII40_7	M1	3.60	0.9	41.1	14.8	3.2	-19.7	8.8
				LYII40_8	M1	4.00	0.8	41.6	15.0	3.2	-20.0	8.3
				LYII40_9	M1	4.40	1.1	40.0	14.5	3.2	-19.9	8.6
				LYII40_10	M1	4.80	1.1	40.1	14.5	3.2	-20.1	9.0
				LYII40_11	M1	5.50	1.0	40.5	14.7	3.2	-20.1	9.1
				LYII40_12	M1	6.50	1.2	40.6	14.7	3.2	-19.9	9.2
				LYII40_13	M1	7.50	1.0	41.9	15.1	3.2	-19.5	9.1
				LYII40_14	M1	8.50	1.0	43.5	15.6	3.2	-19.7	9.3
				LYII40_15	M1	9.50	1.1	40.9	14.7	3.2	-19.8	9.1
				LYII40_16	M2	3.42	0.6	46.5	17.0	3.2	-19.5	8.9
				LYII40_17	M2	5.25	1.1	48.6	17.7	3.2	-19.8	8.6
				LYII40_18	M2	7.08	0.9	44.0	16.0	3.2	-19.6	8.7
				LYII40_19	M2	8.33	1.0	42.7	15.5	3.2	-19.8	8.3
				LYII40_20	M2	9.00	1.0	34.2	12.2	3.3	-20.1	8.4
				LYII40_21	M2	9.67	1.2	32.2	11.6	3.2	-19.7	7.8
				LYII40_22	M2	10.50	1.2	38.4	13.9	3.2	-19.2	8.0
				LYII40_23	M2	11.50	0.7	42.3	15.0	3.3	-19.5	7.7
				LYII40_24	M2	11.75	0.2	42.6	13.8	3.6	-19.8	6.4
				LYII40_25	M2	15.00	0.8	42.6	15.1	3.3	-19.6	8.8
1. Las Yurdinas II	LYII.A.10.15067	20-24	F	LYII41_1	M1	0.90	0.6	40.4	14.4	3.3	-19.3	12.6

			LYII41_2	M1	1.50	1.2	45.3	16.4	3.2	-19.3	11.8
			LYII41_3	M1	2.10	0.4	40.0	14.1	3.3	-19.6	10.6
			LYII41_4	M1	2.70	1.0	44.1	15.9	3.2	-19.6	10.1
			LYII41_5	M1	3.20	1.0	41.6	15.0	3.2	-19.6	9.7
			LYII41_6	M1	3.60	1.1	41.2	14.9	3.2	-19.4	9.6
			LYII41_7	M1	4.00	1.0	41.1	14.8	3.2	-19.5	9.1
			LYII41_8	M1	4.40	0.9	41.8	15.0	3.3	-19.4	9.1
			LYII41_9	M1	4.80	1.1	40.4	14.6	3.2	-19.5	9.1
			LYII41_10	M1	5.50	0.9	41.7	15.0	3.2	-19.4	9.0
			LYII41_11	M1	6.50	1.2	41.6	15.1	3.2	-19.4	9.4
			LYII41_12	M1	7.50	1.1	41.3	15.0	3.2	-19.4	9.5
			LYII41_13	M1	8.50	1.0	40.0	14.5	3.2	-19.6	9.5
			LYII41_14	M1	9.50	0.7	41.6	14.9	3.3	-19.7	9.6
			LYII41_15	M2	3.19	0.6	41.4	15.0	3.2	-19.4	9.9
			LYII41_16	M2	4.56	1.1	42.9	15.5	3.2	-19.5	9.0
			LYII41_17	M2	5.94	1.2	37.9	13.6	3.2	-19.6	8.9
			LYII41_18	M2	7.31	1.1	48.7	17.6	3.2	-19.7	9.1
			LYII41_19	M2	8.33	1.1	55.2	20.2	3.2	-19.5	9.4
			LYII41_20	M2	9.00	0.9	45.1	16.3	3.2	-19.6	13.7
			LYII41_21	M2	9.67	0.7	43.3	15.4	3.3	-19.6	9.5
			LYII41_22	M2	10.33	0.6	43.9	16.0	3.2	-19.1	9.8
			LYII41_23	M2	11.00	0.5	46.4	16.8	3.2	-19.0	10.2
			LYII41_24	M2	11.67	0.6	41.9	15.2	3.2	-19.1	10.1
			LYII41_25	M2	12.67	0.3	42.4	14.5	3.4	-19.7	8.9
			LYII41_26	M2	14.67	0.9	43.2	15.4	3.3	-19.7	9.7

1. Las Yurdinas II	LYII.A.10.15071	35-40	F	LYII42_1	M1	1.50	0.8	46.0	16.7	3.2	-20.5	9.6
				LYII42_2	M1	2.10	0.9	44.9	16.4	3.2	-20.6	9.4
				LYII42_3	M1	2.70	0.9	41.0	14.9	3.2	-20.2	8.6
				LYII42_4	M1	3.25	1.1	43.7	15.9	3.2	-20.1	8.5
				LYII42_5	M1	3.75	1.2	45.0	16.3	3.2	-20.1	8.3
				LYII42_6	M1	4.25	1.2	49.8	18.2	3.2	-20.0	9.0
				LYII42_7	M1	4.75	1.0	42.6	15.4	3.2	-20.2	8.9
				LYII42_8	M1	5.33	1.2	42.3	15.4	3.2	-20.2	9.1
				LYII42_9	M1	6.00	0.9	27.7	9.8	3.3	-20.5	8.4
				LYII42_10	M1	6.67	1.2	43.3	15.7	3.2	-20.3	8.9
				LYII42_11	M1	7.75	0.8	42.7	15.3	3.2	-20.5	8.7
				LYII42_12	M1	9.25	1.0	44.0	15.8	3.2	-20.4	9.5
				LYII42_13	M2	3.05	0.5	41.6	15.2	3.2	-20.3	9.2
				LYII42_14	M2	4.15	1.0	42.1	15.4	3.2	-20.4	9.1
				LYII42_15	M2	5.25	0.9	43.4	15.6	3.2	-20.6	8.9
				LYII42_16	M2	6.35	1.0	46.2	16.8	3.2	-20.5	8.9
				LYII42_17	M2	7.45	1.0	43.1	15.7	3.2	-20.3	8.9
				LYII42_18	M2	8.33	1.1	44.2	16.0	3.2	-20.4	8.9
				LYII42_19	M2	9.00	0.9	42.3	15.3	3.2	-20.5	9.1
				LYII42_20	M2	9.67	0.9	43.7	15.8	3.2	-20.4	8.8
				LYII42_21	M2	10.33	0.9	42.5	15.3	3.2	-20.1	9.1
				LYII42_22	M2	11.00	0.8	42.6	15.4	3.2	-20.2	9.0
				LYII42_23	M2	11.67	0.6	44.0	15.9	3.2	-20.3	9.2
				LYII42_24	M2	13.00	0.4	41.1	14.9	3.2	-20.5	9.0
				LYII42_25	M2	15.00	1.1	43.1	15.8	3.2	-20.3	9.2

1. Las Yurdinas II	LYII.A.10.15089	24-35	F	LYII43_1	M1	0.64	1.1	40.7	14.8	3.2	-19.8	12.4
				LYII43_2	M1	1.07	0.9	41.5	15.0	3.2	-19.5	11.6
				LYII43_3	M1	1.50	0.9	42.8	15.5	3.2	-19.6	10.8
				LYII43_4	M1	1.93	0.8	41.7	15.1	3.2	-19.5	10.0
				LYII43_5	M1	2.36	1.1	41.8	15.2	3.2	-19.7	9.8
				LYII43_6	M1	2.79	1.0	40.9	14.8	3.2	-19.8	9.6
				LYII43_7	M1	3.20	1.1	41.1	14.9	3.2	-20.0	8.7
				LYII43_8	M1	3.60	0.7	40.2	14.4	3.3	-20.0	8.0
				LYII43_9	M1	4.00	0.9	40.4	14.6	3.2	-19.9	8.6
				LYII43_10	M1	4.40	1.1	41.0	14.7	3.3	-20.1	8.9
				LYII43_11	M1	4.80	0.5	41.5	14.7	3.3	-19.9	7.4
				LYII43_12	M1	5.33	1.0	41.4	14.9	3.2	-19.8	8.6
				LYII43_13	M1	6.00	1.0	41.9	15.1	3.2	-19.9	8.7
				LYII43_14	M1	6.67	1.1	39.9	14.4	3.2	-20.1	9.0
				LYII43_15	M1	7.50	0.8	41.9	14.9	3.3	-20.1	9.6
				LYII43_16	M1	8.50	0.4	40.1	14.1	3.3	-20.2	9.0
				LYII43_17	M1	9.50	0.6	42.1	15.0	3.3	-20.2	9.8
				LYII43_18	M2	3.42	0.9	44.3	16.2	3.2	-19.9	8.5
				LYII43_19	M2	5.25	1.2	33.6	12.0	3.3	-19.7	8.2
				LYII43_20	M2	7.08	0.8	42.5	15.3	3.2	-20.2	8.6
				LYII43_21	M2	8.33	0.8	42.4	15.2	3.3	-20.3	8.5
				LYII43_22	M2	9.00	1.0	40.4	14.4	3.3	-20.4	8.2
				LYII43_23	M2	9.67	0.4	44.2	15.4	3.3	-20.3	7.8
				LYII43_24	M2	10.50	0.4	43.8	15.6	3.3	-20.0	8.0
				LYII43_25	M2	11.50	0.6	40.5	14.5	3.3	-19.9	8.8

				LYII43_26	M2	13.00	0.5	45.1	16.2	3.3	-20.0	9.4
				LYII43_27	M2	15.00	0.4	43.5	15.0	3.4	-20.3	9.1
1. Las Yurdinas II	LYII.A.10.15085	24-30	F	LYII56_1	M1	0.50	0.3	40.0	13.5	3.5	-19.8	10.9
				LYII56_2	M1	1.50	0.7	42.8	15.3	3.3	-20.1	11.1
				LYII56_3	M1	2.50	0.4	41.7	14.8	3.3	-20.4	9.6
				LYII56_4	M1	3.25	0.5	40.6	14.3	3.3	-20.2	9.9
				LYII56_5	M1	3.75	0.5	44.6	15.6	3.3	-20.0	9.7
				LYII56_6	M1	4.25	0.8	41.9	14.8	3.3	-20.0	9.9
				LYII56_7	M1	4.75	0.8	40.8	14.3	3.3	-20.2	9.7
				LYII56_8	M1	5.25	0.6	42.0	14.7	3.3	-20.0	9.7
				LYII56_9	M1	5.75	0.7	41.6	14.5	3.3	-20.1	9.5
				LYII56_10	M1	6.25	0.6	42.1	14.7	3.3	-19.8	9.8
				LYII56_11	M1	6.75	0.9	42.6	15.1	3.3	-20.4	9.9
				LYII56_12	M1	7.38	0.6	41.7	14.7	3.3	-20.3	10.2
				LYII56_13	M1	8.13	0.6	42.1	14.9	3.3	-20.0	10.1
				LYII56_14	M1	8.88	0.6	41.4	14.7	3.3	-19.9	10.2
				LYII56_15	M1	9.63	0.4	41.8	14.7	3.3	-19.9	10.1
				LYII56_16	M2	3.19	0.7	42.8	15.3	3.3	-20.2	9.8
				LYII56_17	M2	4.56	0.3	46.5	16.1	3.4	-20.3	9.4
				LYII56_18	M2	6.63	0.8	43.4	15.5	3.3	-20.2	10.1
				LYII56_19	M2	8.33	0.6	43.0	15.3	3.3	-19.7	10.9
				LYII56_20	M2	9.00	0.3	42.2	14.4	3.4	-20.0	9.6
				LYII56_21	M2	9.67	0.5	46.9	16.8	3.3	-19.4	9.3
				LYII56_22	M2	11.00	0.6	44.6	15.9	3.3	-19.7	10.2
				LYII56_23	M2	14.00	0.7	43.6	15.2	3.4	-20.0	9.6

2. Los Husos I	LHI.F1.378	40-45	F?	LHI57_1	M1	1.50	0.6	43.9	15.7	3.3	-19.7	8.7
				LHI57_2	M1	2.10	0.5	40.7	14.4	3.3	-20.0	8.8
				LHI57_3	M1	2.70	0.7	42.5	14.7	3.4	-20.0	8.5
				LHI57_4	M1							
				LHI57_5	M1	3.75	1.0	44.9	16.1	3.3	-20.1	9.8
				LHI57_6	M1	4.25	0.9	46.9	16.8	3.3	-19.7	8.9
				LHI57_7	M1	4.75	0.5	41.0	14.4	3.3	-19.9	9.1
				LHI57_8	M1	5.25	0.8	43.7	15.6	3.3	-19.6	9.3
				LHI57_9	M1	5.75	0.8	43.2	15.3	3.3	-19.4	9.3
				LHI57_10	M1	6.25	0.0					
				LHI57_11	M1	6.75	0.7	44.2	15.6	3.3	-19.5	9.7
				LHI57_12	M1	7.50	0.6	42.4	15.1	3.3	-19.5	9.9
				LHI57_13	M1	8.50	0.6	43.1	15.1	3.3	-19.9	9.6
				LHI57_14	M1	9.50	0.5	42.0	14.8	3.3	-19.6	9.6
				LHI57_15	M2	3.19	1.1	44.6	16.2	3.2	-19.7	8.7
				LHI57_16	M2	4.56	1.0	45.9	16.5	3.2	-19.9	8.7
				LHI57_17	M2	5.94	1.1	49.3	18.0	3.2	-19.2	9.3
				LHI57_18	M2	7.31	1.1	50.5	18.4	3.2	-19.3	9.3
				LHI57_19	M2	8.25	1.0	44.1	16.0	3.2	-19.7	9.2
				LHI57_20	M2	8.75	1.2	47.7	17.3	3.2	-19.3	8.8
				LHI57_21	M2	9.25	1.0	42.7	15.6	3.2	-19.5	8.4
				LHI57_22	M2	9.75	0.6	48.3	17.3	3.3	-19.4	9.0
				LHI57_23	M2	10.33	1.2	49.6	18.0	3.2	-19.2	9.2
				LHI57_24	M2	11.00	1.0	43.9	15.9	3.2	-19.3	9.2
				LHI57_25	M2	11.67	1.1	44.5	16.1	3.2	-19.3	10.1

				LHI57_26	M2	12.67	1.2	49.5	18.0	3.2	-19.3	9.9
				LHI57_27	M2	14.00	0.8	45.7	16.3	3.3	-19.7	9.9
				LHI57_28	M2	15.33	0.7	44.0	15.6	3.3	-20.0	9.6
2. Los Husos I	LHID1.342.5	24-30	M	LHI58_1	M1	0.90	0.9	46.5	16.9	3.2	-19.6	12.2
				LHI58_2	M1	1.50	1.2	43.5	15.7	3.2	-19.4	10.8
				LHI58_3	M1	2.10	1.1	36.9	12.9	3.3	-19.9	10.4
				LHI58_4	M1	2.70	0.5	43.4	15.8	3.2	-19.7	10.1
				LHI58_5	M1	3.33	0.6	41.4	14.9	3.2	-20.0	10.6
				LHI58_6	M1	4.00	0.5	41.1	14.6	3.3	-19.8	10.0
				LHI58_7	M1	4.67	0.3	44.9	15.5	3.4	-19.6	8.9
				LHI58_8	M1	6.00	0.6	43.7	15.4	3.3	-19.9	9.9
				LHI58_9	M1	8.50	0.4	43.0	14.4	3.5	-20.0	9.6
				LHI58_10	M2	3.19	0.7	44.5	16.2	3.2	-20.0	10.2
				LHI58_11	M2	4.56	0.8	47.1	17.0	3.2	-19.7	10.2
				LHI58_12	M2	5.94	1.2	46.1	16.8	3.2	-19.6	9.9
				LHI58_13	M2	7.31	1.0	44.1	16.0	3.2	-20.1	9.7
				LHI58_14	M2	8.33	1.2	50.6	18.4	3.2	-19.4	10.3
				LHI58_15	M2	9.00	1.2	45.4	16.5	3.2	-19.4	10.1
				LHI58_16	M2	9.67	0.8	45.8	16.5	3.2	-19.8	9.8
				LHI58_17	M2	10.33	1.1	48.1	17.4	3.2	-19.7	10.0
				LHI58_18	M2	11.00	0.7	43.7	15.7	3.2	-19.9	9.4
				LHI58_19	M2	11.67	0.5	47.6	17.0	3.3	-19.6	9.6
				LHI58_20	M2	12.67	0.9	45.3	16.3	3.2	-19.7	9.3
				LHI58_21	M2	14.00	0.5	47.5	17.0	3.3	-19.3	9.7
				LHI58_22	M2	15.33	0.7	44.3	15.8	3.3	-19.6	9.6

2. Los Husos I	LHI.A4.282	ca. 15	F	LHI62_1	M1	0.50	0.5	43.9	15.7	3.3	-19.0	13.3
				LHI62_2	M1	2.00	0.6	42.8	14.9	3.3	-19.4	11.6
				LHI62_3	M1	3.20	0.4	40.4	14.3	3.3	-19.8	9.8
				LHI62_4	M1	3.60	0.5	41.2	14.1	3.4	-19.6	9.6
				LHI62_5	M1	4.00	0.5	41.0	13.9	3.5	-19.6	9.2
				LHI62_6	M1	4.60	0.8	43.4	15.2	3.3	-19.5	9.5
				LHI62_7	M1	5.33	0.6	43.2	14.7	3.4	-19.6	9.7
				LHI62_8	M1	6.33	0.6	41.7	14.4	3.4	-19.5	10.2
				LHI62_9	M1	7.50	0.3	42.3	14.1	3.5	-19.7	9.6
				LHI62_10	M1	9.00	0.4	44.9	14.8	3.5	-19.7	10.0
				LHI62_11	M2	3.19	1.0	43.0	15.7	3.2	-19.5	10.4
				LHI62_12	M2	4.56	1.0	51.0	18.2	3.3	-19.3	10.3
				LHI62_13	M2	5.94	0.9	44.2	15.7	3.3	-19.5	10.1
				LHI62_14	M2	7.31	0.8	44.5	15.5	3.4	-19.6	10.1
				LHI62_15	M2	8.25	0.6	43.5	14.7	3.4	-19.3	10.3
				LHI62_16	M2	8.75	0.5	45.4	15.2	3.5	-19.4	9.7
				LHI62_17	M2	9.25	0.6	45.1	15.1	3.5	-19.4	9.7
				LHI62_18	M2	9.75	0.6	41.2	13.9	3.5	-19.3	10.0
				LHI62_19	M2	10.50	0.5	42.7	14.4	3.5	-19.5	9.9
				LHI62_20	M2	11.50	0.6	41.5	14.1	3.4	-19.4	10.1
				LHI62_21	M2	14.00	0.6	42.1	14.4	3.4	-19.4	10.5
3. Peña Larga	CPL.50365-50366	20-30	F?	CPL5_1	M1	0.90	0.7	43.5	15.5	3.3	-19.6	11.0
				CPL5_2	M1	1.50	0.8	43.2	15.4	3.3	-19.7	10.6
				CPL5_3	M1	2.10	0.8	44.4	15.9	3.2	-19.8	10.0
				CPL5_4	M1	2.70	1.0	45.6	16.3	3.3	-19.8	10.1

				CPL5_5	M1	3.33	1.0	44.7	15.9	3.3	-20.1	9.7
				CPL5_6	M1	4.00	0.6	43.8	15.6	3.3	-20.1	10.0
				CPL5_7	M1	4.67	0.6	43.9	15.8	3.2	-20.1	9.9
				CPL5_8	M1	5.33	0.4	43.6	15.2	3.3	-20.4	9.5
				CPL5_9	M1	6.33	0.7	46.5	16.6	3.3	-20.3	9.8
				CPL5_10	M1	8.50	0.8	42.5	14.8	3.4	-20.1	9.6
				CPL5_11	M2	4.15	0.7	46.6	16.9	3.2	-20.2	9.7
				CPL5_12	M2	5.25	0.7	46.6	16.7	3.3	-20.6	9.3
				CPL5_13	M2	6.35	0.8	46.7	16.9	3.2	-20.4	9.3
				CPL5_14	M2	7.45	1.1	46.0	16.6	3.2	-20.3	10.0
				CPL5_15	M2	8.25	0.9	46.3	16.6	3.3	-19.8	9.7
				CPL5_16	M2	8.75	0.9	48.2	17.3	3.3	-19.8	9.7
				CPL5_17	M2	9.25	0.7	52.4	18.8	3.3	-20.4	9.5
				CPL5_18	M2	9.75	1.0	44.0	15.9	3.2	-20.4	10.2
				CPL5_19	M2	10.33	1.1	47.7	17.2	3.2	-20.3	10.1
				CPL5_20	M2	11.00	0.9	46.5	16.6	3.3	-20.3	10.3
				CPL5_21	M2	11.67	0.8	44.1	15.8	3.3	-20.2	10.1
				CPL5_22	M2	13.00	1.0	47.0	16.7	3.3	-19.8	10.5
				CPL5_23	M2	15.00	1.2	45.8	16.4	3.3	-19.7	10.6
4. Alto de la Huesera	AH.2111	35-40	F	LHUE34_1	M1	0.30	0.5	39.6	14.1	3.3	-19.3	12.2
				LHUE34_2	M1	0.90	0.4	39.5	14.1	3.3	-19.0	12.4
				LHUE34_3	M1	1.50	0.6	40.1	14.5	3.2	-19.0	12.4
				LHUE34_4	M1	2.10	0.8	40.6	14.7	3.2	-19.0	12.1
				LHUE34_5	M1	2.70	0.7	40.2	14.5	3.2	-19.3	11.5
				LHUE34_6	M1	3.17	0.7	40.9	14.7	3.2	-19.8	9.9

				LHUE34_7	M1	3.50	0.4	41.5	15.0	3.2	-19.9	9.1
				LHUE34_8	M1	3.83	0.6	40.4	14.6	3.2	-19.4	9.4
				LHUE34_9	M1	4.16	0.6	40.3	14.6	3.2	-19.5	8.9
				LHUE34_10	M1	4.49	1.0	40.8	14.7	3.2	-19.3	8.8
				LHUE34_11	M1	4.82	0.5	39.9	14.2	3.3	-19.3	7.9
				LHUE34_12	M1	5.33	0.7	41.1	14.8	3.2	-19.4	8.1
				LHUE34_13	M1	6.00	0.5	39.7	14.2	3.3	-19.3	8.2
				LHUE34_14	M1	6.67	0.7	39.8	14.4	3.2	-19.4	8.6
				LHUE34_15	M1	7.38	0.8	40.0	14.4	3.2	-19.2	8.6
				LHUE34_16	M1	8.13	0.7	41.3	14.8	3.3	-19.1	9.0
				LHUE34_17	M1	8.88	1.2	43.4	15.8	3.2	-19.0	9.7
				LHUE34_18	M1	9.63	0.9	19.3	6.7	3.4	-19.4	8.2
				LHUE34_19	M2	4.15	0.9	44.0	15.9	3.2	-19.6	9.3
				LHUE34_20	M2	5.25	1.0	33.7	12.0	3.3	-19.9	8.1
				LHUE34_21	M2	6.35	1.1	42.7	15.5	3.2	-19.5	8.6
				LHUE34_22	M2	7.45	1.1	39.9	14.4	3.2	-19.1	9.1
				LHUE34_23	M2	8.33	1.1	36.1	12.9	3.3	-19.6	9.3
				LHUE34_24	M2	9.00	0.7	43.8	15.5	3.3	-19.9	9.4
				LHUE34_25	M2	9.67	0.5	43.5	15.5	3.3	-19.2	8.8
				LHUE34_26	M2	10.50	0.5	42.8	15.3	3.3	-18.8	8.7
				LHUE34_27	M2	11.50	0.6	48.3	17.7	3.2	-18.5	9.5
				LHUE34_28	M2	14.00	0.8	42.9	15.3	3.3	-19.2	9.3
4. Alto de la Huesera	AH.2157	30-35	F	LHUE36_1	M1	0.50	0.3	41.1	14.3	3.3	-19.7	12.6
				LHUE36_2	M1	1.50	0.6	42.6	15.2	3.3	-19.3	13.6
				LHUE36_3	M1	2.50	0.4	39.3	13.4	3.4	-19.5	12.3

				LHUE36_4	M1	3.17	0.4	40.2	14.1	3.3	-19.6	10.3
				LHUE36_5	M1	3.50	1.0	40.6	14.3	3.3	-19.8	10.2
				LHUE36_6	M1	3.83	0.2	40.4	12.4	3.8	-20.3	7.1
				LHUE36_7	M1	4.16	0.8	41.4	14.7	3.3	-19.7	10.2
				LHUE36_8	M1	4.49	0.4	40.1	13.9	3.4	-19.3	9.4
				LHUE36_9	M1	4.82	0.7	41.6	14.6	3.3	-19.3	10.2
				LHUE36_10	M1	5.33	0.4	39.6	13.7	3.4	-19.4	10.3
				LHUE36_11	M1	6.00	0.6	41.0	14.4	3.3	-19.3	10.8
				LHUE36_12	M1	8.50	0.6	45.8	16.2	3.3	-19.6	11.2
				LHUE36_13	M2	3.42	0.8	43.7	15.7	3.3	-20.0	10.0
				LHUE36_14	M2	5.25	0.6	41.1	15.0	3.2	-19.1	9.9
				LHUE36_15	M2	7.08	1.1	42.1	15.2	3.2	-19.5	10.0
				LHUE36_16	M2	8.25	1.2	53.1	19.5	3.2	-18.6	10.3
				LHUE36_17	M2	8.75	1.2	58.2	21.5	3.2	-19.0	10.4
				LHUE36_18	M2	9.25	1.1	42.4	15.3	3.2	-19.6	9.8
				LHUE36_19	M2	9.75	1.1	38.3	13.8	3.2	-19.8	9.8
				LHUE36_20	M2	10.33	1.1	52.2	19.1	3.2	-19.5	10.1
				LHUE36_21	M2	11.00	1.2	56.1	20.6	3.2	-19.4	10.1
				LHUE36_22	M2	11.67	1.1	50.2	18.4	3.2	-19.6	10.4
				LHUE36_23	M2	13.00	0.8	43.3	15.5	3.3	-19.9	10.3
				LHUE36_24	M2	15.00	0.6	41.9	15.0	3.3	-19.5	11.1
4. Alto de la Huesera	AH.2170	24-30	F?	LHUE52_1	M1	1.13	0.8	33.0	11.6	3.3	-19.9	12.0
				LHUE52_2	M1	1.88	1.0	42.6	15.4	3.2	-19.6	11.9
				LHUE52_3	M1	2.63	1.0	42.8	15.4	3.2	-19.8	9.9
				LHUE52_4	M1	3.20	0.5	41.1	14.5	3.3	-19.7	9.2

				LHUE52_5	M1	3.60	0.8	45.4	16.5	3.2	-19.9	9.1
				LHUE52_6	M1	4.00	0.8	42.1	15.2	3.2	-19.2	9.2
				LHUE52_7	M1	4.40	1.1	40.6	14.6	3.2	-19.1	9.5
				LHUE52_8	M1	4.80	1.1	40.3	14.5	3.2	-19.2	9.2
				LHUE52_9	M1	5.33	0.8	44.3	16.0	3.2	-19.2	9.6
				LHUE52_10	M1	6.00	0.7	43.3	15.7	3.2	-19.1	10.0
				LHUE52_11	M1	6.67	0.5	43.3	15.4	3.3	-19.6	9.5
				LHUE52_12	M1	7.75	0.4	43.0	14.3	3.5	-19.9	8.1
				LHUE52_13	M1	9.25	0.3	45.1	14.5	3.6	-19.7	8.1
				LHUE52_14	M2	3.19	0.7	40.2	14.6	3.2	-19.9	9.6
				LHUE52_15	M2	4.56	1.0	43.3	15.8	3.2	-19.4	9.4
				LHUE52_16	M2	5.94	1.1	43.6	16.0	3.2	-19.2	9.6
				LHUE52_17	M2	7.31	1.1	48.0	17.5	3.2	-19.4	9.3
				LHUE52_18	M2	8.33	1.0	42.0	15.3	3.2	-19.8	9.0
				LHUE52_19	M2	9.00	1.1	49.7	18.2	3.2	-19.8	8.4
				LHUE52_20	M2	9.67	1.1	47.1	17.2	3.2	-19.5	8.3
				LHUE52_21	M2	10.33	1.1	47.6	17.4	3.2	-19.2	8.8
				LHUE52_22	M2	11.00	1.0	42.6	15.6	3.2	-19.4	9.4
				LHUE52_23	M2	11.67	1.1	45.8	16.7	3.2	-19.4	9.2
				LHUE52_24	M2	13.00	1.1	45.3	16.5	3.2	-19.5	9.1
				LHUE52_25	M2	15.00	0.7	41.9	15.2	3.2	-19.3	9.3
4. Alto de la Huesera	AH.2169	45-55	M	LHUE53_1	M1	1.13	0.8	44.9	16.2	3.2	-19.0	12.9
				LHUE53_2	M1	1.88	0.8	43.5	15.7	3.2	-19.3	12.7
				LHUE53_3	M1	2.63	0.8	42.8	15.6	3.2	-19.4	11.7
				LHUE53_4	M1	3.25	1.0	43.3	15.7	3.2	-20.0	9.7

				LHUE53_5	M1	3.75	1.0	42.7	15.5	3.2	-19.9	8.9
				LHUE53_6	M1	4.25	1.2	40.5	14.7	3.2	-19.7	9.1
				LHUE53_7	M1	4.75	1.1	40.6	14.6	3.2	-19.8	9.2
				LHUE53_8	M1	5.33	0.9	41.3	14.8	3.3	-19.7	9.4
				LHUE53_9	M1	6.00	1.1	48.3	17.5	3.2	-19.4	9.9
				LHUE53_10	M1	6.67	0.7	33.1	11.6	3.3	-19.8	9.2
				LHUE53_11	M1	7.50	0.8	30.2	10.6	3.3	-19.9	9.1
				LHUE53_12	M1	8.50	1.1	42.4	15.2	3.2	-19.7	9.5
				LHUE53_13	M1	9.50	1.1	43.7	15.8	3.2	-19.6	10.0
				LHUE53_14	M2	4.56	0.5	35.7	12.9	3.2	-19.9	8.9
				LHUE53_15	M2	5.94	1.1	48.3	17.6	3.2	-19.8	8.7
				LHUE53_16	M2	7.31	1.0	41.2	15.0	3.2	-20.0	8.6
				LHUE53_17	M2	8.25	1.0	42.2	15.4	3.2	-19.7	8.7
				LHUE53_18	M2	8.75	1.1	44.2	16.1	3.2	-19.5	8.8
				LHUE53_19	M2	9.25	1.1	43.0	15.7	3.2	-19.6	9.1
				LHUE53_20	M2	9.75	1.1	43.5	15.8	3.2	-19.6	9.3
				LHUE53_21	M2	10.33	1.0	42.7	15.6	3.2	-19.7	9.4
				LHUE53_22	M2	11.00	1.1	46.9	17.1	3.2	-19.4	9.5
				LHUE53_23	M2	11.67	1.1	47.0	17.1	3.2	-19.5	9.4
				LHUE53_24	M2	13.00	0.8	42.2	15.3	3.2	-19.6	9.7
				LHUE53_25	M2	15.00	0.8	39.8	14.4	3.2	-19.5	10.1
4. Alto de la Huesera	AH.2075	24-30	M	LHUE2i_1	M1	1.13	0.4	40.5	13.8	3.4	-19.4	9.8
				LHUE2i_2	M1	1.88	0.6	41.8	14.9	3.3	-19.6	9.3
				LHUE2i_3	M1	2.63	0.7	46.3	16.5	3.3	-19.7	9.0
				LHUE2i_4	M1	3.33	0.5	46.8	16.5	3.3	-19.7	8.4

				LHUE2i_5	M1	4.00	1.0	40.8	14.7	3.2	-19.7	9.0
				LHUE2i_6	M1	4.67	0.7	45.9	16.4	3.3	-19.3	9.8
				LHUE2i_7	M1	5.50	0.6	42.3	14.8	3.3	-19.2	9.1
				LHUE2i_8	M1	6.50	0.6	41.7	14.7	3.3	-19.3	9.5
				LHUE2i_9	M1	7.75	0.9	39.4	13.9	3.3	-19.5	9.2
				LHUE2i_10	M1	9.25	0.5	42.0	14.4	3.4	-19.2	9.0
				<i>LHUE2i_11</i>	<i>M2</i>	<i>3.42</i>	<i>0.3</i>	<i>41.3</i>	<i>14.8</i>	<i>3.2</i>	<i>-20.1</i>	<i>8.6</i>
				LHUE2i_12	M2	5.25	0.6	42.8	15.3	3.3	-19.6	8.9
				LHUE2i_13	M2	7.08	0.5	42.3	15.1	3.3	-19.8	9.0
				LHUE2i_14	M2	8.33	0.9	42.8	15.4	3.3	-19.7	9.2
				LHUE2i_15	M2	9.00	1.0	40.3	14.4	3.3	-19.6	9.3
				LHUE2i_16	M2	9.67	0.9	43.1	15.6	3.2	-19.0	9.7
				LHUE2i_17	M2	10.33	1.0	41.9	15.2	3.2	-19.0	10.0
				LHUE2i_18	M2	11.00	0.9	44.0	15.9	3.2	-19.0	10.0
				LHUE2i_19	M2	11.67	0.7	39.1	14.2	3.2	-19.0	10.3
				LHUE2i_20	M2	13.00	0.9	41.6	15.1	3.2	-18.6	9.7
				LHUE2i_21	M2	15.00	0.7	41.3	14.9	3.2	-19.0	9.6
4. Alto de la Huesera	AH.2383.2	40-45	M	LHUE17c_1	M1	0.75	0.8	41.6	15.1	3.2	-18.9	11.8
				LHUE17c_2	M1	1.25	0.8	41.3	14.9	3.2	-19.2	10.3
				LHUE17c_3	M1	1.75	0.9	40.8	14.8	3.2	-19.6	9.3
				LHUE17c_4	M1	2.25	0.5	40.4	14.5	3.3	-19.3	8.6
				LHUE17c_5	M1	2.75	0.6	40.9	14.7	3.3	-19.6	9.0
				LHUE17c_6	M1	3.20	1.1	44.3	16.1	3.2	-19.5	9.4
				LHUE17c_7	M1	3.60	0.7	40.7	14.6	3.3	-19.5	8.4
				LHUE17c_8	M1	4.00	1.2	45.3	16.3	3.2	-19.5	9.1

				LHUE17c_9	M1	4.40	1.1	43.0	15.6	3.2	-19.5	8.9
				LHUE17c_10	M1	4.80	1.1	39.8	14.4	3.2	-19.7	9.0
				LHUE17c_11	M1	5.33	1.1	43.5	15.8	3.2	-19.4	9.1
				LHUE17c_12	M1	6.00	1.0	40.8	14.7	3.2	-19.4	9.3
				LHUE17c_13	M1	6.67	1.0	41.3	14.9	3.2	-19.5	9.7
				LHUE17c_14	M1	7.50	1.1	43.5	15.7	3.2	-19.3	10.3
				LHUE17c_15	M1	8.50	1.0	41.1	14.8	3.2	-19.5	9.8
				LHUE17c_16	M1	9.50	0.6	40.6	14.5	3.3	-19.4	9.8
				LHUE17c_17	M2	4.56	0.9	43.2	15.6	3.2	-19.7	8.9
				LHUE17c_18	M2	5.94	1.1	58.8	21.6	3.2	-19.2	8.9
				LHUE17c_19	M2	7.31	1.2	49.1	17.9	3.2	-19.5	9.2
				LHUE17c_20	M2	8.33	1.2	55.5	20.4	3.2	-19.2	10.2
				LHUE17c_21	M2	9.00	1.2	49.8	18.2	3.2	-19.3	9.8
				LHUE17c_22	M2	9.67	0.8	42.8	15.4	3.3	-19.5	8.3
				LHUE17c_23	M2	10.50	0.6	45.3	16.5	3.2	-19.0	9.0
				LHUE17c_24	M2	11.50	0.6	42.5	15.4	3.2	-18.9	8.8
				LHUE17c_25	M2	13.00	0.6	43.2	15.7	3.2	-18.6	9.1
				LHUE17c_26	M2	15.00	0.6	42.9	15.3	3.3	-18.8	9.6
4. Alto de la Huesera	AH.2386.2	40-55	M	LHUE19c_1	M1	0.90	0.9	40.9	14.8	3.2	-19.3	12.3
				LHUE19c_2	M1	1.50	1.1	41.2	14.9	3.2	-20.1	10.0
				LHUE19c_3	M1	2.10	0.7	41.3	14.9	3.2	-19.4	9.1
				LHUE19c_4	M1	2.70	0.5	40.0	14.2	3.3	-19.1	8.8
				LHUE19c_5	M1	3.33	0.7	40.9	14.6	3.3	-19.2	8.3
				LHUE19c_6	M1	4.00	0.8	41.1	14.7	3.3	-19.1	8.8
				LHUE19c_7	M1	4.67	0.5	40.1	14.1	3.3	-19.3	8.1

				LHUE19c_8	M1	5.33	1.1	42.8	15.5	3.2	-19.2	9.2
				LHUE19c_9	M1	6.00	1.1	39.5	14.3	3.2	-19.0	9.2
				LHUE19c_10	M1	6.67	1.0	41.4	15.0	3.2	-19.0	9.6
				LHUE19c_11	M1	7.75	0.7	41.9	14.9	3.3	-19.5	9.4
				LHUE19c_12	M1	9.25	0.5	40.5	14.3	3.3	-19.4	9.8
				LHUE19c_13	M2	5.25	0.8	44.2	16.0	3.2	-19.3	8.9
				LHUE19c_14	M2	7.08	0.5	40.2	14.4	3.2	-19.3	8.9
				LHUE19c_15	M2	8.33	0.7	42.5	15.1	3.3	-19.3	9.2
				LHUE19c_16	M2	9.00	0.6	43.7	15.9	3.2	-19.3	9.8
				LHUE19c_17	M2	9.67	0.6	45.4	16.6	3.2	-19.3	10.0
				LHUE19c_18	M2	11.00	0.7	42.6	15.0	3.3	-19.1	9.0
				LHUE19c_19	M2	13.00	0.4	43.1	15.1	3.3	-19.5	9.6
				LHUE19c_20	M2	15.00	0.7	43.3	15.1	3.3	-19.4	9.9
5. Chabola de la Hechicera	CH.19.11.13	20-24	F?	CH94_1	M1	0.30	0.9	43.2	15.5	3.2	-19.9	11.1
				CH94_2	M1	0.90	1.0	44.0	15.8	3.3	-20.0	11.2
				CH94_3	M1	1.50	1.2	46.6	16.9	3.2	-19.8	10.0
				CH94_4	M1	2.10	1.2	42.8	15.5	3.2	-20.1	9.4
				CH94_5	M1	2.70	1.1	45.4	16.4	3.2	-20.1	9.1
				CH94_6	M1	3.25	1.1	43.6	15.5	3.3	-20.1	8.8
				CH94_7	M1	3.75	0.9	46.9	16.6	3.3	-20.1	8.9
				CH94_8	M1	4.25	0.9	43.4	15.1	3.4	-20.3	8.6
				CH94_9	M1	4.75	0.9	45.9	16.0	3.4	-20.5	8.9
				CH94_10	M1	5.33	1.1	44.2	15.3	3.4	-20.3	8.9
				CH94_11	M1	6.00	1.1	46.2	15.9	3.4	-20.3	9.0
				CH94_12	M1	6.67	1.0	45.4	15.1	3.5	-20.3	8.8

				<i>CH94_13</i>	M1	7.50	0.8	47.0	15.2	3.6	-20.5	9.1
				<i>CH94_14</i>	M1	9.00	0.7	44.6	13.4	3.9	-21.1	8.3
				CH94_15	M2	3.05	1.2	44.2	16.1	3.2	-20.1	9.3
				CH94_16	M2	4.15	1.0	43.8	15.8	3.2	-20.2	9.2
				CH94_17	M2	5.25	1.0	43.2	15.7	3.2	-20.4	8.9
				CH94_18	M2	6.35	1.0	43.0	15.4	3.3	-20.4	9.0
				CH94_19	M2	7.45	0.6	47.8	17.1	3.3	-19.9	9.5
				CH94_20	M2	8.33	1.1	46.1	16.2	3.3	-19.9	8.9
				CH94_21	M2	9.00	1.1	47.1	16.1	3.4	-20.1	8.8
				<i>CH94_22</i>	M2	9.67	0.6	48.6	14.4	3.9	-20.6	9.2
				<i>CH94_23</i>	M2	10.50	0.6	43.3	13.7	3.7	-20.3	9.2
				<i>CH94_24</i>	M2	11.50	0.9	46.5	15.4	3.5	-20.0	9.2
				<i>CH94_25</i>	M2	13.00	0.6	48.2	14.8	3.8	-20.5	9.3
				<i>CH94_26</i>	M2	15.00	0.7	46.3	15.1	3.6	-20.6	9.3
5. Chabola de la Hechicera	CH.19.13	24-30	M	CH96_1	M1	0.30	0.8	36.7	13.0	3.3	-20.1	11.2
				CH96_2	M1	0.90	1.1	45.1	16.3	3.2	-20.0	11.7
				CH96_3	M1	1.50	0.9	44.0	16.0	3.2	-20.3	9.7
				CH96_4	M1	2.10	1.0	43.1	15.5	3.2	-20.4	9.5
				CH96_5	M1	2.70	1.0	49.4	17.7	3.3	-20.1	9.6
				CH96_6	M1	3.50	0.9	42.2	15.1	3.3	-20.2	10.0
				CH96_7	M1	4.50	1.0	43.4	15.5	3.3	-19.9	10.0
				CH96_8	M1	5.33	0.8	42.0	14.9	3.3	-20.0	9.4
				CH96_9	M1	6.00	0.9	45.8	16.4	3.3	-20.1	9.8
				CH96_10	M1	6.67	1.2	43.7	15.7	3.2	-19.9	10.6
				CH96_11	M1	7.50	0.6	45.0	16.3	3.2	-19.8	10.2

				CH96_12	M1	8.50	1.0	45.2	16.1	3.3	-20.0	9.7
				CH96_13	M1	9.50	0.6	44.9	15.9	3.3	-19.8	10.7
				CH96_14	M2	3.05	1.0	44.7	16.2	3.2	-20.4	9.6
				CH96_15	M2	4.15	0.7	42.4	15.5	3.2	-19.9	9.3
				CH96_16	M2	5.25	0.4	44.2	15.8	3.3	-20.0	8.9
				CH96_17	M2	6.35	0.8	44.0	15.8	3.2	-20.2	10.0
				CH96_18	M2	7.45	0.4	41.2	14.4	3.3	-20.1	9.7
				CH96_19	M2	8.33	1.2	44.0	15.9	3.2	-19.8	9.9
				CH96_20	M2	9.00	1.1	47.7	17.3	3.2	-19.7	9.8
				CH96_21	M2	9.67	1.1	42.9	15.4	3.2	-19.9	9.8
				CH96_22	M2	10.25	0.5	44.5	15.9	3.3	-19.9	10.1
				CH96_23	M2	10.75	1.0	44.4	15.9	3.3	-20.1	9.7
				CH96_24	M2	11.25	0.8	43.7	15.7	3.2	-19.8	10.0
				CH96_25	M2	11.75	1.2	43.3	15.7	3.2	-19.3	10.0
				CH96_26	M2	12.67	0.6	41.3	14.6	3.3	-19.4	10.9
				CH96_27	M2	14.00	0.9	44.2	15.8	3.3	-19.7	10.8
				CH96_28	M2	15.33	1.0	45.6	16.2	3.3	-19.9	10.8
6. Longar	LONGAR.1981	30-35	F?	LON30_1	M1	1.13	1.2	47.5	17.3	3.2	-18.6	13.6
				LON30_2	M1	1.88	0.3	37.3	12.6	3.5	-19.3	11.1
				LON30_3	M1	2.63	0.0					
				LON30_4	M1	3.67	0.6	33.0	11.3	3.4	-19.9	9.2
				LON30_5	M1	4.67	0.5	35.8	11.9	3.5	-19.9	8.4
				LON30_6	M1	5.50	0.4	36.5	11.9	3.6	-20.0	8.5
				LON30_7	M1	6.50	0.3	37.7	11.7	3.8	-20.3	8.9
				LON30_8	M1	8.50	0.3	36.5	11.0	3.9	-20.3	8.6

				LON30_9	M2	3.05	0.4	43.6	15.8	3.2	-19.9	8.6
				LON30_10	M2	4.15	0.9	45.8	16.6	3.2	-19.8	9.2
				LON30_11	M2	5.25	0.5	44.0	15.6	3.3	-19.7	9.4
				LON30_12	M2	6.90	0.7	49.7	17.9	3.2	-19.5	9.2
				<i>LON30_13</i>	<i>M2</i>	<i>8.33</i>	<i>0.5</i>	<i>30.3</i>	<i>10.6</i>	<i>3.4</i>	<i>-20.2</i>	<i>8.0</i>
				LON30_14	M2	9.33	0.7	52.3	18.4	3.3	-19.8	9.7
				LON30_15	M2	10.67	0.6	46.8	16.6	3.3	-19.6	9.8
				LON30_16	M2	11.67	0.4	57.5	20.0	3.4	-19.7	9.8
				<i>LON30_17</i>	<i>M2</i>	<i>12.67</i>	<i>0.3</i>	<i>41.4</i>	<i>13.7</i>	<i>3.5</i>	<i>-19.9</i>	<i>8.6</i>
				<i>LON30_18</i>	<i>M2</i>	<i>14.67</i>	<i>0.4</i>	<i>42.0</i>	<i>13.8</i>	<i>3.5</i>	<i>-19.9</i>	<i>9.3</i>
6. Longar	LONGAR.209	24-30	M	LON34_1	M1	0.90	0.6	50.5	18.5	3.2	-18.6	13.5
				LON34_2	M1	1.50	1.0	44.4	16.0	3.2	-18.9	12.9
				LON34_3	M1	2.10	0.8	42.4	15.2	3.2	-19.2	11.4
				LON34_4	M1	2.70	0.8	42.6	15.4	3.2	-19.5	10.2
				LON34_5	M1	3.20	1.1	42.4	15.4	3.2	-19.4	9.7
				LON34_6	M1	3.60	1.2	47.2	17.1	3.2	-19.2	9.6
				LON34_7	M1	4.00	1.1	47.0	17.1	3.2	-19.4	9.1
				LON34_8	M1	4.40	1.2	48.1	17.5	3.2	-19.1	9.0
				LON34_9	M1	4.80	1.2	46.3	16.9	3.2	-19.1	9.2
				LON34_10	M1	5.50	0.8	43.9	15.8	3.2	-19.4	9.6
				LON34_11	M1	6.50	0.7	42.0	14.8	3.3	-19.6	9.2
				LON34_12	M1	7.75	0.8	41.9	15.0	3.2	-19.2	9.5
				LON34_13	M1	9.25	0.5	40.7	14.7	3.2	-19.2	9.4
				LON34_14	M2	3.19	1.2	43.8	16.1	3.2	-19.4	9.9
				LON34_15	M2	4.56	0.9	46.1	16.8	3.2	-19.5	9.5

				LON34_16	M2	5.94	0.6	43.7	15.8	3.2	-19.3	10.3
				LON34_17	M2	7.31	0.6	45.0	16.3	3.2	-19.5	10.0
				LON34_18	M2	8.25	1.0	42.4	15.2	3.3	-19.5	9.4
				LON34_19	M2	8.75	0.7	43.6	15.6	3.3	-19.5	9.1
				LON34_20	M2	9.25	0.6	43.9	15.5	3.3	-19.2	10.3
				LON34_21	M2	9.75	0.7	43.8	15.7	3.3	-19.5	9.3
				LON34_22	M2	10.33	0.6	46.6	16.7	3.3	-19.4	9.9
				LON34_23	M2	11.00	0.5	40.4	14.1	3.3	-19.2	9.3
				LON34_24	M2	11.67	0.5	46.0	16.3	3.3	-19.2	9.3
				LON34_25	M2	13.00	0.4	41.0	14.2	3.4	-19.4	9.4
				LON34_26	M2	15.00	0.7	41.5	14.9	3.2	-19.2	9.9
6. Longar	LONGAR.1967	30-35	M?	LON38_1	M1	0.90	0.7	41.3	14.6	3.3	-19.2	12.1
				LON38_2	M1	1.50	0.3	41.0	14.0	3.4	-19.5	12.3
				LON38_3	M1	2.10	0.7	31.3	10.5	3.5	-19.3	10.9
				LON38_4	M1	2.70	0.5	39.5	13.9	3.3	-19.1	11.0
				LON38_5	M1	3.30	0.3	42.2	14.2	3.5	-19.5	10.0
				LON38_6	M1	4.00	0.5	38.8	13.5	3.4	-19.3	10.0
				LON38_7	M1	4.67	0.3	42.7	14.6	3.4	-19.4	10.0
				LON38_8	M1	5.33	0.8	37.7	13.1	3.3	-19.5	10.3
				LON38_9	M1	6.00	0.5	34.7	12.2	3.3	-19.7	11.4
				LON38_10	M1	6.67	0.8	37.8	13.4	3.3	-19.7	10.4
				LON38_11	M1	7.75	0.6	40.6	14.5	3.3	-19.2	10.9
				LON38_12	M1	9.25	0.4	35.4	11.9	3.5	-19.3	10.5
				LON38_13	M2	2.96	0.8	42.4	15.4	3.2	-19.3	10.5
				LON38_14	M2	3.88	1.1	42.4	15.5	3.2	-19.3	10.3

				LON38_15	M2	4.79	1.1	47.6	17.4	3.2	-19.0	10.9
				LON38_16	M2	5.71	1.0	45.7	16.7	3.2	-19.2	10.9
				LON38_17	M2	6.63	1.2	43.3	15.9	3.2	-19.5	10.8
				LON38_18	M2	7.54	1.2	48.2	17.6	3.2	-19.5	11.1
				LON38_19	M2	8.25	1.2	44.1	16.1	3.2	-19.4	10.6
				LON38_20	M2	8.75	1.0	46.1	16.7	3.2	-19.1	9.7
				LON38_21	M2	9.25	1.2	47.2	17.2	3.2	-18.6	9.7
				LON38_22	M2	9.75	1.2	46.1	16.9	3.2	-18.4	9.9
				LON38_23	M2	10.33	0.8	44.3	15.9	3.2	-18.7	9.9
				LON38_24	M2	11.00	0.7	43.4	15.6	3.2	-19.5	10.1
				LON38_25	M2	11.67	0.8	43.9	15.8	3.2	-19.4	10.4
				LON38_26	M2	12.67	0.7	42.3	15.2	3.2	-19.1	10.2
				LON38_27	M2	14.00	0.8	42.9	15.3	3.3	-19.3	10.6
				LON38_28	M2	15.33	0.5	44.0	15.4	3.3	-19.3	11.0
6. Longar	LONGAR.919	35-40	F?	LON41_1	M1	0.90	0.7	41.7	15.0	3.2	-19.0	12.0
				LON41_2	M1	1.50	1.0	40.5	14.7	3.2	-19.5	10.6
				LON41_3	M1	2.10	0.9	41.0	14.8	3.2	-19.6	9.6
				LON41_4	M1	2.70	1.1	41.0	14.9	3.2	-20.0	9.6
				LON41_5	M1	3.20	0.7	40.9	14.7	3.3	-20.2	9.3
				LON41_6	M1	3.60	0.5	40.9	14.6	3.3	-20.1	9.2
				LON41_7	M1	4.00	0.6	40.6	14.7	3.2	-20.0	9.6
				LON41_8	M1	4.40	0.7	41.7	14.9	3.3	-20.0	9.4
				LON41_9	M1	4.80	0.5	40.2	14.3	3.3	-19.9	10.5
				LON41_10	M1	5.33	0.7	42.0	15.0	3.3	-19.8	8.6
				LON41_11	M1	6.00	0.5	40.3	14.4	3.3	-19.7	8.5

LON41_12	M1	6.67	0.6	40.7	14.7	3.2	-19.3	9.2
LON41_13	M1	7.75	0.5	40.3	14.3	3.3	-19.3	9.4
<i>LON41_14</i>	<i>M1</i>	<i>9.25</i>	<i>0.4</i>	<i>39.4</i>	<i>13.3</i>	<i>3.5</i>	<i>-20.5</i>	<i>8.6</i>
LON41_15	M2	3.42	1.0	42.8	15.4	3.2	-20.2	9.8
LON41_16	M2	5.25	0.7	43.1	15.4	3.3	-20.1	9.4
LON41_17	M2	7.08	0.7	42.6	15.1	3.3	-20.1	9.2
LON41_18	M2	8.33	0.5	42.7	15.0	3.3	-19.5	8.9
LON41_19	M2	9.33	0.6	34.4	12.1	3.3	-20.2	9.7
LON41_20	M2	10.33	0.6	43.0	15.3	3.3	-19.8	9.9
LON41_21	M2	11.00	0.6	43.0	15.4	3.3	-19.8	10.1
LON41_22	M2	11.67	0.5	43.4	15.2	3.3	-19.8	9.7
LON41_23	M2	14.00	0.5	42.9	14.5	3.4	-19.9	9.8

\* For details on age and sex estimation methods, see *I0* and *I8*.

† Values from samples exhibiting anomalous C:N ratios, %C, %N and/or having sample weights < 0.4mg are shown in italics and highlighted in gray.

**Table S2. Comparison between cave and megalithic grave dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcol}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{dcol}}$ ) isotope values.**

Age (years)	$\delta^{13}\text{C}_{\text{dcol}} (\text{\textperthousand})$ (VPDB)									
	Caves				Megalithic graves				Mixed model nested ANOVA†	
	k	n	pooled mean	$\sqrt{\text{GV}^*}$	k	n	pooled mean	$\sqrt{\text{GV}^*}$	F	p
0-2.9	14	53	-19.7	0.4	13	47	-19.4	0.5	$F_{(1, 24.47)} = 1.08$	0.309
3-4.9	14	77	-19.9	0.3	13	66	-19.7	0.4	$F_{(1, 24.78)} = 3.25$	0.084
5-6.9	14	58	-19.9	0.3	13	50	-19.6	0.4	$F_{(1, 24.76)} = 5.39$	<b>0.029</b>
7-9.9	14	91	-19.8	0.4	13	72	-19.5	0.4	$F_{(1, 24.61)} = 6.50$	<b>0.018</b>
10-11.9	14	37	-19.6	0.4	12	32	-19.3	0.4	$F_{(1, 23.66)} = 2.12$	0.159
12-16	14	27	-19.7	0.4	11	22	-19.4	0.4	$F_{(1, 22.17)} = 6.18$	<b>0.021</b>
COMBINED (0-16)	14	343	-19.8	0.4	13	289	-19.5	0.4	$F_{(1, 24.94)} = 5.22$	<b>0.031</b>
Age (years)	$\delta^{15}\text{N}_{\text{dcol}} (\text{\textperthousand})$ (AIR)									
	Caves				Megalithic graves				Mixed model nested ANOVA†	
	k	n	pooled mean	$\sqrt{\text{GV}^*}$	k	n	pooled mean	$\sqrt{\text{GV}^*}$	F	p
0-2.9	14	53	10.7	1.2	13	47	11.2	1.5	$F_{(1, 23.66)} = 0.32$	0.580
3-4.9	14	77	9.4	0.6	13	66	9.3	0.6	$F_{(1, 24.69)} < 0.01$	0.978
5-6.9	14	58	9.4	0.5	13	50	9.4	0.7	$F_{(1, 24.69)} = 0.12$	0.760
7-9.9	14	91	9.5	0.6	13	72	9.5	0.6	$F_{(1, 24.46)} = 0.82$	0.478
10-11.9	14	37	9.4	0.7	12	32	9.6	0.5	$F_{(1, 23.40)} = 0.86$	0.330
12-16	14	27	9.7	0.5	11	22	9.9	0.6	$F_{(1, 22.51)} = 0.80$	0.279
COMBINED (0-16)	14	343	9.6	0.9	13	289	9.7	1.0	$F_{(1, 24.70)} = 3.03$	0.397

\* Composite or pooled standard deviations.

† Satterthwaite's correction formula is used to take into account unequal group sample sizes (58, 59).

**Table S3. Comparison between cave and megalithic male and female dentine collagen carbon isotope values ( $\delta^{13}\text{C}_{\text{dcol}}$ ).**

Age (years)	Cave males				Megalithic males				Mixed model nested ANOVA†	
	k	n	pooled mean	$\sqrt{\text{GV}^*}$	k	n	pooled mean	$\sqrt{\text{GV}^*}$	F	p
0-2.9	7	29	-19.5	0.4	7	27	-19.4	0.5	$F_{(1, 11.89)} = 0.10$	0.763
3-4.9	7	39	-19.9	0.2	7	31	-19.6	0.3	$F_{(1, 11.88)} = 5.18$	<b>0.044</b>
5-6.9	7	31	-19.8	0.2	7	28	-19.5	0.3	$F_{(1, 11.81)} = 4.67$	0.054
7-9.9	7	49	-19.7	0.3	7	47	-19.5	0.3	$F_{(1, 11.91)} = 2.75$	0.126
10-11.9	7	21	-19.5	0.3	7	19	-19.3	0.4	$F_{(1, 11.67)} = 0.93$	0.355
12-16	7	15	-19.6	0.3	7	16	-19.3	0.4	$F_{(1, 11.79)} = 2.47$	0.145
COMBINED (0-16)	7	184	-19.7	0.3	7	168	-19.4	0.4	$F_{(1, 11.98)} = 3.29$	0.097
<hr/>										
Age (years)	Cave females				Megalithic females				Mixed model nested ANOVA†	
	k	n	pooled mean	$\sqrt{\text{GV}^*}$	k	n	pooled mean	$\sqrt{\text{GV}^*}$	F	p
0-2.9	7	24	-19.8	0.4	6	20	-19.4	0.5	$F_{(1, 10.74)} = 1.23$	0.293
3-4.9	7	38	-19.9	0.3	6	35	-19.8	0.4	$F_{(1, 10.92)} = 0.26$	0.620
5-6.9	7	27	-19.9	0.4	6	22	-19.6	0.4	$F_{(1, 10.94)} = 1.49$	0.250
7-9.9	7	42	-19.9	0.4	6	25	-19.6	0.4	$F_{(1, 10.78)} = 3.17$	0.105
10-11.9	7	16	-19.7	0.5	5	13	-19.4	0.4	$F_{(1, 9.96)} = 1.10$	0.321
12-16	7	12	-19.9	0.4	4	6	-19.5	0.3	$F_{(1, 8.30)} = 3.05$	0.119
COMBINED (0-16)	7	159	-19.8	0.4	6	121	-19.6	0.4	$F_{(1, 10.97)} = 1.88$	0.201

\* Composite or pooled standard deviations.

† Satterthwaite's correction formula is used to take into account unequal group sample sizes (58, 59).

**Table S4. Estimated duration of exclusive breastfeeding and weaning process, age at complete weaning, and preweaning and postweaning dentine collagen nitrogen isotope values ( $\delta^{15}\text{N}_{\text{dcol}}$ ) for the 27 individuals selected for the early life history approach.**

Burial location	Site	ID	Individual	Age*	Sex*	Estimated duration of exclusive breastfeeding (years)	Estimated $\delta^{15}\text{N}$ pre-weaning	Estimated duration of weaning period (years)	Estimated age at complete weaning (years)	Estimated $\delta^{15}\text{N}_{\text{dcol}}$ post-weaning		
Funerary cave	Las Yurdinas II	LYII26	LYII.A.10.15065	YA (30-35)	M	< 0.9	indet.	> 3.8	4.7	8.8		
		LYII27	LYII.A.10.15080	YA (30-40)	M	$\leq 0.9$	indet.	$\geq 2.9$	3.8	9.2		
		LYII29	LYII.A.10.15077	YA (24-30)	M	0.9	11.3	2.3	3.2	8.5		
		LYII30	LYII.A.10.15064	YA (35-40)	M	< 0.9	indet.	> 2.9	3.8	9.3		
		LYII34	LYII.A.10.15120	YA (20-24)	M	$\leq 0.4$	indet.	$\geq 2.2$	2.6	9.1		
		LYII40	LYII.A.10.15098	YA (24-30)	M?	0.9	11.9	2.3	3.2	8.3		
		LYII41	LYII.A.10.15067	YA (20-24)	F	$\leq 0.9$	indet.	$\geq 3.1$	4.0	9.1		
		LYII42	LYII.A.10.15071	YA (30-35)	F	< 1.5	indet.	> 2.3	3.8	8.3		
		LYII43	LYII.A.10.15089	YA (24-35)	F	$\leq 0.6$	indet.	$\geq 3.0$	3.6	8.1		
		LYII56	LYII.A.10.15085	YA (24-30)	F	< 1.5	indet.	> 1.0	2.5	9.6		
	Los Husos I	LHI57	LHI.F1.378	MA (40-45)	F?	< 1.5	indet.	> 1.2	2.7	8.5		
		LHI58	LHI.D1.342.5	YA (24-30)	M	< 0.9	indet.	> 1.8	2.7	10.0		
		LHI62	LHI.A4.282	J (ca. 15)	F	$\leq 0.5$	indet.	$\geq 3.1$	3.6	9.6		
	Peña Larga	CPL5	CPL.50365-50366	YA (20-30)	F?	< 0.9	indet.	> 1.2	2.1	9.7		
<i>Funerary caves combined</i>						$\bar{x}$	$\leq 0.9$	11.6	$\geq 2.4$	3.3	9.0	
						$\sigma$	0.3	0.4	0.8	0.7	0.6	
Megalithic grave	Alto de la Huesera	LHUE34	AH.2111	YA (35-40)	F	1.5	12.4	3.3	4.8	7.9		
		LHUE36	AH.2157	YA (30-35)	F	< 1.5	indet.	> 2.0	3.5	10.2		
		LHUE52	AH.2170	YA (24-30)	F?	1.1	12.0	2.5	3.6	9.1		
		LHUE53	AH.2169	MA (45-55)	M	1.1	12.9	2.7	3.8	8.9		
		LHUE2i	AH.2075	YA (24-30)	M	< 1.1	indet.	> 2.2	3.3	8.4		
		LHUE17c	AH.2383.2	MA (40-45)	M	$\leq 0.8$	indet.	$\geq 2.8$	3.6	8.4		
		LHUE19c	AH.2386.2	MA (40-55)	M	$\leq 0.9$	indet.	$\geq 3.8$	4.7	8.2		
	Chabola de la Hechicera	CH94	CH.19.11.13	YA (20-24)	F?	0.9	11.2	3.4	4.3	8.6		
		CH96	CH.19.13	YA (24-30)	M	0.9	11.7	1.2	2.1†	9.5		
	Longar	LON30	LONGAR.1981	YA (30-35)	F?	$\leq 1.1$	indet.	$\geq 2.0$	3.1	8.6		
		LON34	LONGAR.209	YA (24-30)	M	$\leq 0.9$	indet.	$\geq 3.5$	4.4	9.0		
		LON38	LONGAR.1967	YA (30-35)	M?	< 0.9	indet.	> 3.1	4.0	10.0		
		LON41	LONGAR.919	YA (35-40)	F?	< 0.9	indet.	> 2.7	3.6	9.2		
<i>Megalithic graves combined</i>						$\bar{x}$	$\leq 1.0$	12.0	$\geq 2.7$	3.9†	8.9	
						$\sigma$	0.2	0.7	0.7	0.5†	0.7	

\* For details on age and sex estimation methods, see 10 and 18.

† CH96 was excluded from the calculation of the mean values of megalithic graves and from statistical tests for being a clearly outlier (Z-score > 2.0).

**Table S5. Summary table of adult bone collagen carbon ( $\delta^{13}\text{C}_{\text{bcoll}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{bcoll}}$ ) isotope values, dentine collagen carbon ( $\delta^{13}\text{C}_{\text{dcoll}}$ ) and nitrogen ( $\delta^{15}\text{N}_{\text{dcoll}}$ ) isotope values (mean), enamel carbonate oxygen isotope values ( $\delta^{18}\text{O}_{\text{c}}$ ), and enamel apatite carbon ( $\delta^{13}\text{C}_{\text{ap}}$ ) and strontium ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) isotope, and strontium ([Sr]) and calcium concentration ([Ca]) values for the 32 individuals analyzed in the study.**

Site	Id. number	Individual	Age*	Sex*	Bone collagen†		Dentine collagen‡								Enamel							
					$\delta^{13}\text{C}_{\text{bcoll}}$	$\delta^{15}\text{N}_{\text{bcoll}}$	M1 $\delta^{13}\text{C}_{\text{dcoll}}$				M1 $\delta^{15}\text{N}_{\text{dcoll}}$				M1 $\delta^{18}\text{O}_{\text{c}}$	M2 $\delta^{18}\text{O}_{\text{c}}$	M1 $\delta^{13}\text{C}_{\text{ap}}$	M2 $\delta^{13}\text{C}_{\text{ap}}$	Carbonate		Apatite	
							$\bar{X}$	$\sigma$	$\bar{X}$	$\sigma$	$\bar{X}$	$\sigma$	$\bar{X}$	$\sigma$							M2 $^{87}\text{Sr}/^{86}\text{Sr} \pm 2\sigma\$$	M2 [Sr] (ppm)
Las Yurdinas II	LYII25	LYII.A.10.15086	YA (30-40)	M	-20.0	9.7	-	-	-	-	-	-	-	-	-4.1	-4.5	-13.7	-12.9	0.708083 ±10	201.7	38.3	5.27
	LYII26	LYII.A.10.15065	YA (30-35)	M	-19.9	9.6	-19.9	0.3	-20.1	0.2	11.0	0.8	9.3	0.4	-3.7	-5.7	-12.4	-13.5	0.710083 ±16	98.5	50.0	1.97
	LYII27	LYII.A.10.15080	YA (30-40)	M	-19.9	9.5	-19.4	0.1	-19.7	0.2	11.5	1.5	9.7	0.4	-4.0	-5.2	-13.5	-14.4	0.708990 ±17	51.1	36.4	1.40
	LYII29	LYII.A.10.15077	YA (24-30)	M	-20.2	8.5	-19.4	0.2	-19.9	0.1	10.6	0.8	9.0	0.3	-2.8	-4.4	-12.1	-13.7	0.708663 ±13	67.6	36.8	1.84
	LYII30	LYII.A.10.15064	YA (35-40)	M	-20.1	9.7	-19.9	0.2	-20.1	0.2	10.2	0.6	9.6	0.3	-3.0	-4.3	-14.1	-14.1	0.708511 ±10	142.8	36.1	3.96
	LYII34	LYII.A.10.15120	YA (20-24)	M	-20.1	8.8	-19.1	0.5	-19.6	0.2	11.5	1.8	9.4	0.3	-4.0	-4.5	-13.8	-13.1	0.708238 ±10	140.2	37.7	3.72
	LYII40	LYII.A.10.15098	YA (24-30)	M?	-20.2	8.3	-19.4	0.3	-19.8	0.2	11.1	1.0	8.9	0.5	-2.8	-4.6	-13.0	-14.3	0.709663 ±13	59.7	37.7	1.58
	LYII41	LYII.A.10.15067	YA (20-24)	F	-20.3	9.3	-19.5	0.1	-19.5	0.1	11.3	1.1	9.3	0.4	-3.5	-4.1	-13.4	-13.3	0.708884 ±14	36.2	35.5	1.02
	LYII42	LYII.A.10.15071	YA (30-35)	F	-20.8	9.0	-20.4	0.2	-20.3	0.2	9.2	0.5	8.9	0.3	-2.8	-3.1	-14.7	-14.3	0.710238 ±9	109.0	34.7	3.14
	LYII43	LYII.A.10.15089	YA (24-35)	F	-20.7	9.1	-19.7	0.1	-20.0	0.2	10.7	1.1	8.7	0.6	-3.4	-4.0	-13.1	-14.4	0.709269 ±19	33.2	35.1	0.95
Los Husos I	LYII56	LYII.A.10.15085	YA (24-30)	F	-20.1	9.4	-20.3	0.2	-20.2	0.2	10.3	1.0	9.8	0.2	-4.3	-5.0	-13.0	-13.4	0.707961 ±11	277.2	36.9	7.51
	LHI57	LHI.F1.378	MA (40-45)	F?	-20.2	9.1	-19.9	0.2	-19.7	0.3	8.7	0.2	9.2	0.5	-3.3	-4.4	-12.7	-14.4	0.708421 ±10	48.3	38.2	1.26
	LHI58	LHI.D1.342.5	YA (24-30)	M	-20.1	9.3	-19.7	0.2	-19.9	0.2	10.9	0.9	10.1	0.3	-2.8	-4.5	-14.8	-14.5	0.707928 ±13	279.2	39.0	7.16
Peña Larga	LHI62	LHI.A4.282	J (ca. 15)	F	-19.9	9.4	-19.2	0.3	-19.6	0.1	12.5	1.2	10.0	0.3	-3.7	-3.6	-13.6	-12.2	0.707887 ±22	248.4	36.8	6.75
	CPL2	CPL.4968-4971	J (ca. 15)	I	-20.3	9.5	-	-	-	-	-	-	-	-	-4.7	-3.3	-14.4	-14.4	0.708214 ±10	80.9	35.3	2.29

	CPL5	CPL.50365-50366	YA (20-30)	F?	-20.5	10.1	-19.8	0.1	-20.2	0.2	10.5	0.5	9.7	0.3	-3.7	-4.3	-14.5	-15.1	0.708309 ±18	171.0	38.9	4.40
Alto de la Huesera	LHUE34	AH.2111	YA (35-40)	F	-20.0	8.7	-19.1	0.2	-19.5	0.2	12.1	0.4	9.0	0.9	-3.1	-4.6	-13.2	-12.7	0.707995 ±10	232.1	36.4	6.38
	LHUE36	AH.2157	YA (30-35)	F	-20.0	9.8	-19.4	0.1	-19.5	0.3	13.0	0.9	10.3	0.7	-3.4	-4.2	-13.0	-12.8	0.708734 ±13	195.4	36.8	5.31
	LHUE52	AH.2170	YA (24-30)	F?	-19.6	9.1	-19.7	0.2	-19.5	0.3	11.3	1.2	9.5	0.3	-4.1	-3.3	-13.9	-12.3	0.707888 ±11	231.8	35.0	6.62
	LHUE53	AH.2169	MA (45-55)	M	-19.5	9.8	-19.2	0.2	-19.8	0.2	12.5	0.7	9.4	0.8	-2.3	-3.3	-13.3	-13.5	0.707883 ±10	281.3	35.6	7.90
	LHUE2i	AH.2075	YA (24-30)	M	-19.3	8.3	-19.6	0.2	-19.6	0.2	9.4	0.4	9.1	0.4	-3.4	-4.0	-13.9	-13.1	0.707875 ±11	246.2	38.8	6.35
	LHUE17c	AH.2383.2	MA (40-45)	M	-19.7	8.8	-19.3	0.3	-19.5	0.1	9.8	1.3	9.2	0.5	-3.6	-4.3	-12.9	-13.2	0.708320 ±13	157.4	37.4	4.21
	LHUE19c	AH.2386.2	MA (40-55)	M	-19.6	9.5	-19.5	0.4	-19.2	0.2	10.0	1.6	8.9	0.5	-4.3	-4.1	-14.3	-12.1	0.708715 ±10	305.5	37.3	8.19
Chabola de la Hechicera	CH94	CH.19.11.13	YA (20-24)	F?	-20.3	9.3	-20.0	0.2	-20.2	0.2	10.1	1.0	9.0	0.2	-4.0	-4.7	-15.1	-14.5	0.709733 ±10	54.6	36.4	1.50
	CH96	CH.19.13	YA (24-30)	M	-20.3	9.8	-20.2	0.1	-20.0	0.2	10.3	1.1	9.8	0.5	-3.5	-3.9	-14.6	-14.2	0.707942 ±9	261.6	37.8	6.92
Longar	LON5	LONGAR.310	MA (40-45)	M	-19.9	9.9	-	-	-	-	-	-	-	-	-3.9	-4.9	-14.5	-13.4	0.707862 ±12	346.7	35.3	9.82
	LON30	LONGAR.1981	YA (30-35)	F?	-20.2	9.1	-18.6	0.0	-19.8	0.2	13.6	0.0	9.1	0.3	-3.7	-5.0	-13.0	-12.6	0.708010 ±10	379.4	35.4	10.72
	LON31	LONGAR.2008	YA (20-24)	A	-19.8	9.9	-	-	-	-	-	-	-	-	-4.0	-4.6	-13.7	-12.6	0.708013 ±10	356.8	37.6	9.49
	LON34	LONGAR.209	YA (24-30)	M	-19.8	9.5	-19.1	0.4	-19.4	0.2	12.0	1.5	9.6	0.4	-4.7	-4.9	-14.2	-13.8	0.707902 ±10	271.8	38.7	7.02
	LON38	LONGAR.1967	YA (30-35)	M?	-19.7	10.2	-19.2	0.1	-19.4	0.2	11.2	0.8	10.7	0.4	-3.4	-4.3	-12.9	-12.8	0.707777 ±11	312.2	37.5	8.33
	LON41	LONGAR.919	YA (35-40)	F?	-20.2	9.9	-19.5	0.4	-19.9	0.3	10.4	1.1	9.3	0.5	-3.5	-3.4	-14.1	-12.5	0.707810 ±11	765.4	36.5	20.97
	LON43	LONGAR.730	MA (45-55)	M	-19.8	10.1	-	-	-	-	-	-	-	-	-2.0	-3.5	-11.6	-12.3	0.707880 ±10	558.5	32.3	17.29

\* For details on age and sex estimation methods see 10 and 18.

† After 18.

‡ Mean of dentine collagen carbon isotope values ( $\delta^{13}\text{C}_{\text{dcol}}$ ) corresponding to formation ages of M1 (0-3 years) and M2 crowns (2.5-8 years) (34) (cf. Table S1).

§ Each  $^{87}\text{Sr}/^{86}\text{Sr}$  value is reported with a  $2\sigma$  error (absolute error value of the individual sample analysis – internal error, reported as times  $10^6$ ).

**Table S6. Comparison between M1 and M2 crowns' dentine collagen ( $\delta^{13}\text{C}_{\text{col}}$ ) and enamel apatite ( $\delta^{13}\text{C}_{\text{ap}}$ ) carbon isotope values, including  $\Delta$  calculation, by site and burial location.**

Burial location	Site	$\delta^{13}\text{C}_{\text{col}} (\text{\textperthousand})$ (VPDB)						$\delta^{13}\text{C}_{\text{ap}}$ means ( $\text{\textperthousand}$ ) (VPDB)				$\Delta_{\text{col-ap}} (\text{\textperthousand})$ (VPDB)	
		n	M1		M2		n	M1		M2		M1	M2
			pooled mean*	$\sqrt{\text{GV}}$ †	pooled mean*	$\sqrt{\text{GV}}$ †		$\bar{x}$	$\sigma$	$\bar{x}$	$\sigma$		
Funerary cave	Las Yurdinas II	10	-19.7	0.4	-19.9	0.3	11	-13.3	0.7	-13.8	0.6	6.4	6.1
	Los Husos I	3	-19.6	0.3	-19.7	0.2	3	-13.7	1.0	-13.7	1.3	5.9	6.0
	Peña Larga	1	-19.8	-	-20.2	-	2	-14.5	0.1	-14.8	0.5	5.3	5.4
	Funerary caves combined	14	-19.7	0.4	-19.9	0.3	16	-13.5	0.8	-13.9	0.8	6.2	6.0
Megalithic grave	Alto de la Huesera	7	-19.4	0.3	-19.5	0.3	7	-13.5	0.5	-12.8	0.5	5.9	6.7
	Chabola de la Hechicera	2	-20.1	0.2	-20.2	0.2	2	-14.9	0.3	-14.3	0.2	5.2	5.9
	Longar	4	-19.1	0.4	-19.6	0.3	7	-13.4	1.0	-12.9	0.5	5.7	6.7
	Megalithic graves combined	13	-19.4	0.4	-19.6	0.3	16	-13.6	0.9	-13.0	0.7	5.7	6.5
Sites combined		27	-19.5	0.4	-19.8	0.4	32	-13.6	0.8	-13.5	0.8	5.9	6.3

\* Mean of dentine collagen carbon isotope values ( $\delta^{13}\text{C}_{\text{col}}$ ) corresponding to formation ages of M1 (0-3 years) and M2 crowns (2.5-8 years) (34) (cf. Table S5).

† Composite or pooled standard deviations.

**Table S7. Modern stream and lake water oxygen isotope values ( $\delta^{18}\text{O}_{\text{dw}}$ ) from the Rioja Alavesa region.**

Sample ID	GPS location (ETRS89 30N)			no. measurements	$\delta^{18}\text{O}_{\text{dw}} (\text{\textperthousand})$	$\sigma$
	X	Y	Altitude (masl)			
6	530768	4713600	602	2	-7.9	0.0
12	539543	4707576	386	3	-7.3	0.2
13	535720	4710228	554	2	-1.2	0.0
14	535084	4711034	566	2	-3.0	0.0
16	536068	4712758	535	2	-7.6	0.0
18	535103	4705821	428	2	-5.9	0.2
23	538586	4715945	658	3	-7.9	0.3
24	534011	4717729	844	3	-7.7	0.3
25	537409	4715251	640	2	-7.7	0.0
26	550018	4713238	588	2	-7.7	0.0
27	550938	4711553	528	3	-7.9	0.1
28	548903	4717763	706	2	-7.8	0.0
30	550734	4707595	435	2	-7.2	0.2
31	539133	4719693	679	2	-7.4	0.1
32	535548	4719118	719	3	-8.0	0.1
34	529237	4719226	820	3	-8.4	0.1
35	523778	4719343	779	3	-8.2	0.2
36	523508	4721626	709	2	-7.6	0.3
37	525829	4720587	741	3	-8.3	0.2

Table S8. Modern plant samples analyzed for the creation of the BASr map of the Rioja Alavesa region and strontium isotope ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) and strontium ([Sr]) and calcium concentration ([Ca]) values obtained from them.											
Sample	Tree species	GPS-location (ETRS89 30N)			Area	Formation	Gen. lithology	Age (stage, period)	$^{87}\text{Sr}/^{86}\text{Sr} \pm 2\sigma^*$	[Sr] (ppm)	[Ca] (ppm)
		X	Y	masl							
70T1	Holm oak ( <i>Q. ilex</i> )	535689	4710267	557	Rioja Alavesa lowlands, salt lake shore	01a – Clay, lime, sand and gravel. Alluvial. Floodplain	All/Coll soils. Clay, sand, gravel	Holocene	0.707815 $\pm$ 5	405	15100
80T1	Holm oak ( <i>Q. ilex</i> )	535081	4711035	568	Rioja Alavesa lowlands, salt lake shore	01a – Clay, lime, sand and gravel. Alluvial. Floodplain	All/Coll soils. Clay, sand, gravel	Holocene	0.707884 $\pm$ 7	133	3668
5T1a	Holm oak ( <i>Q. ilex</i> )	538152	4705830	422	Rioja Alavesa lowlands	01a – Clay, lime, sand and gravel. Alluvial. Floodplain	All/Coll soils. Clay, sand, gravel	Holocene	0.707905 $\pm$ 14	318	9440
5T1b	Holm oak ( <i>Q. ilex</i> )	538152	4705830	422	Rioja Alavesa lowlands	01a – Clay, lime, sand and gravel. Alluvial. Floodplain	All/Coll soils. Clay, sand, gravel	Holocene	0.707885 $\pm$ 7	-	-
3T2a	Holm oak ( <i>Q. ilex</i> )	549773	4714089	711	Rioja Alavesa lowlands	01b – Alternating beds of calcareous sandstone, limolites and red argilites	Sandstone	Ramblian – Middle Aragonian (Miocene)	0.707801 $\pm$ 16	-	-
3T2b	Holm oak ( <i>Q. ilex</i> )	549773	4714089	711	Rioja Alavesa lowlands	01b – Alternating beds of calcareous sandstone, limolites and red argilites	Sandstone	Ramblian – Middle Aragonian (Miocene)	0.707808 $\pm$ 8	-	-
5T2	Holm oak ( <i>Q. ilex</i> )	538130	4705824	419	Rioja Alavesa lowlands	01b – Alternating beds of calcareous sandstone, limolites and red argilites	Sandstone	Ramblian – Middle Aragonian (Miocene)	0.707896 $\pm$ 16	191	9231
0T1	Holm oak ( <i>Q. ilex</i> )	522651	4714209	611	Rioja Alavesa lowlands	01b – Alternating beds of calcareous sandstone, limolites and red argilites	Sandstone	Ramblian – Middle Aragonian (Miocene)	0.707994 $\pm$ 13	-	-
2T1	Holm oak ( <i>Q. ilex</i> )	535668	4713216	608	Rioja Alavesa lowlands	01b – Alternating beds of calcareous sandstone, limolites and red argilites	Sandstone	Ramblian – Middle Aragonian (Miocene)	0.708400 $\pm$ 10	18	9980
1T1	Holm oak ( <i>Q. ilex</i> )	538402	4715814	682	Rioja Alavesa lowlands	01b – Alternating beds of calcareous sandstone, limolites and red argilites	Sandstone	Ramblian – Middle Aragonian (Miocene)	0.708454 $\pm$ 14	19	10239
39T1	Holm oak ( <i>Q. ilex</i> )	536667	4716570	814	Sierra Cantabria S foothills	01b – Alternating beds of calcareous sandstone, limolites and red argilites	Sandstone	Ramblian – Middle Aragonian (Miocene)	0.708492 $\pm$ 13	6	10018
43T2	Gall-oak ( <i>Q. faginea</i> )	525432	4723835	689	N lower mountains	02a – Conglomerates. Red argilites and loam	Conglomerates, loam	Rupelian – Chattian (Oligocene)	0.708161 $\pm$ 7	11	7584
52T2	Holm oak ( <i>Q. ilex</i> )	550731	4717800	638	Sierra Cantabria S foothills	02b – Conglomerates. Loam and nodular chalk	Conglomerates, loam	Rupelian (Oligocene)	0.708695 $\pm$ 9	115	12627
11T2	Gall-oak ( <i>Q. faginea</i> )	522325	4720162	755	Sierra Cantabria N foothills	04 – Oolitic and bioclastic limestone, 'carniolas' and laminated dolomites	Limestone	Rhaetian (Upper Triassic) – Pliensbachian (Lower Jurassic)	0.709975 $\pm$ 11	11	9910

50T1	Downy oak ( <i>Q. pubescens</i> )	530439	4719973	869	Sierra Cantabria N foothills	06 – White calcarenite and dolomite limestone	Limestone	Turonian – Santonian (Upper Cretaceous)	$0.710006 \pm 7$	3	7047
7T1	Holm oak ( <i>Q. ilex</i> )	541759	4719326	763	Sierra Cantabria N foothills	07a – Sand, sandstone and conglomerate beds (Utrillas formation)	Sand	Albian (Lower Cretaceous) – Cenomanian (Upper Cretaceous)	$0.710133 \pm 9$	15	13924
8T1	Oak ( <i>Q. robur</i> )	523781	4719645	777	Sierra Cantabria N foothills	07a – Sand, sandstone and conglomerate beds (Utrillas formation)	Sand	Albian (Lower Cretaceous) – Cenomanian (Upper Cretaceous)	$0.712172 \pm 13$	4	6925
61T1	Oak ( <i>Q. robur</i> )	525996	4715929	1126	Sierra Cantabria top	07b – Sand, sandy loam, limestone, Prealveoline and orbitoline carcarenite and dolomites (Dosante formation)	Sand	Cenomanian (Upper Cretaceous)	$0.710776 \pm 10$	13	3466
49T1	Downy oak ( <i>Q. pubescens</i> )	528552	4722636	763	N lower mountains	08a – Sandy limestone, calcarenite and sandy loam	Limestone	Campanian – Maastrichtian (Upper Cretaceous)	$0.709388 \pm 7$	8	9464
10T1	Gall-oak ( <i>Q. faginea</i> )	524743	4720625	739	Sierra Cantabria N foothills	08b – Alternating sandy loam and sandy limestone centimetric/decimetric beds (Montes de Vitoria formation)	Sand	Campanian – Maastrichtian (Upper Cretaceous)	$0.710141 \pm 10$	5	6403
40T1	Oak ( <i>Q. robur</i> )	539719	4717921	910	Sierra Cantabria S foothills	17 – Conglomerates. Lutites and sandstone	Conglomerates	Chattian (Oligocene) – Ramblian (Miocene)	$0.708829 \pm 9$	4	6042
28T1	Downy oak ( <i>Q. pubescens</i> )	526940	4722929	827	N lower mountains	18a – Limestone, massive dolomite sandstone and loam. Dolomites (Salarons formation)	Limestone	Danian (Paleocene)	$0.708893 \pm 10$	7	14822
59T1	Holm oak ( <i>Q. ilex</i> )	519184	4722161	625	N lower mountains	18b – Limestone, massive dolomite sandstone and loam. Sandy limestone, sandstone and sandy loam	Limestone	Santonian – Maastrichtian (Upper Cretaceous)	$0.709048 \pm 8$	6	8286

\* Each  $^{87}\text{Sr}/^{86}\text{Sr}$  value is reported with a  $2\sigma$  error (absolute error value of the individual sample analysis – internal error, reported as times  $10^6$ ).

**Table S9. BASr ( $^{87}\text{Sr}/^{86}\text{Sr} \pm 1 \text{ SD}$ ) for the local area (“local BASr”) and the average BASr values calculated for 15-, 30-, 60-, and 120-min walking distance catchments.**

Burial location	Site	Local BASr	15min BASr*	30min BASr*	60min BASr*	120min BASr*
Funerary cave	Las Yurdinas II	0.7104 $\pm 0.0003$	0.7096 $\pm 0.0008$ (3)	0.7094 $\pm 0.0008$ (3)	0.7093 $\pm 0.0008$ (4)	0.7089 $\pm 0.0007$ (5)
	Los Husos I	0.7081 $\pm 0.0003$	0.7081 $\pm 0.0003$ (1)	0.7081 $\pm 0.0003$ (2)	0.7082 $\pm 0.0004$ (4)	0.7083 $\pm 0.0005$ (5)
	Peña Larga	0.7086 $\pm 0.0003$	0.7085 $\pm 0.0006$ (4)	0.7085 $\pm 0.0006$ (5)	0.7084 $\pm 0.0006$ (5)	0.7085 $\pm 0.0006$ (5)
Megalithic grave	Alto de la Huesera	0.7081 $\pm 0.0003$	0.7081 $\pm 0.0003$ (1)	0.7081 $\pm 0.0003$ (2)	0.7081 $\pm 0.0003$ (3)	0.7081 $\pm 0.0003$ (5)
	Chabola de la Hechicera	0.7081 $\pm 0.0003$	0.7081 $\pm 0.0003$ (1)	0.7081 $\pm 0.0003$ (1)	0.7081 $\pm 0.0003$ (3)	0.7081 $\pm 0.0003$ (5)
	Longar	0.7081 $\pm 0.0003$	0.7082 $\pm 0.0003$ (2)	0.7082 $\pm 0.0003$ (3)	0.7083 $\pm 0.0003$ (3)	0.7083 $\pm 0.0003$ (5)

\* Values between round brackets represent the number of different geological formations included in the calculation of the average BASr.

**Table S10. Correspondence between the enamel apatite strontium isotope values ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) of the 32 individuals analyzed and the average BASr values calculated for the 0- to 60-min, 60- to 120-min, and >120-min walking areas from their respective burial locations.**

Burial location	Site	Individual	Walking time (min)		
			0-60	60-120	>120
Funerary cave	Las Yurdinas II	LYII25			
		LYII26			
		LYII27			
		LYII29			
		LYII30			
		LYII34			
		LYII40			
		LYII41			
		LYII42			
		LYII43			
		LYII56			
	Los Husos I	LHI57			
		LHI58			
		LHI62			
	Peña Larga	CPL2			
		CPL5			
Megalithic grave	Alto de la Huesera	LHUE34			
		LHUE36			
		LHUE52			
		LHUE53			
		LHUE2i			
		LHUE17c			
		LHUE19c			
	Chabola de la Hechicera	CH94			
		CH96			
	Longar	LON5			
		LON30			
		LON31			
		LON34			
		LON38			
		LON41			
		LON43			

**Table S11. Strontium isotope ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) and strontium ([Sr]) and calcium concentration ([Ca]) values of salt and both spring and surface salt waters from the Rioja Alavesa region.**

Sample	Type	GPS-location (ETRS89 30N)			Area	$^{87}\text{Sr}/^{86}\text{Sr} \pm 2\sigma^*$	[Sr] (ppm)	[Ca] (ppm)
		X	Y	masl				
Añana_S	Salt	501156	4738241	597	Alava western valleys (ca. 30km from Rioja Alavesa)	0.708193 $\pm$ 6	45	3993
Buradón_S	Salt	513877	4720055	500	Sierra Cantabria N foothills	0.708207 $\pm$ 8	3	327
Añana_W	Spring salt water	501156	4738241	597	Alava western valleys (ca. 30km from Rioja Alavesa)	0.708170 $\pm$ 5	26	1678
Buradón_W	Spring salt water	513877	4720055	500	Sierra Cantabria N foothills	0.708258 $\pm$ 6	25	1180
Carralogroño_W	Surface salt water (lake)	535689	4710267	557	Rioja Alavesa lowlands	0.707820 $\pm$ 6	21	512
Prado_W	Surface fresh water (lake)	535081	4711035	568	Rioja Alavesa lowlands	0.707855 $\pm$ 5	3	76

\* Each  $^{87}\text{Sr}/^{86}\text{Sr}$  value is reported with a  $2\sigma$  error (absolute error value of the individual sample analysis – internal error, reported as times  $10^6$ ).