

Supplementary Information

Conversations with Caves: The Role of Pareidolia in the Upper Palaeolithic Figurative Art of Las Monedas and La Pasiega (Cantabria, Spain)

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Overview

The supplementary information below provides the full results generated from the lighting simulations for depictions in both Las Monedas (S.I. Table 1) and La Pasiega (S.I. Table 2), as well as screen-captured images for each of the photogrammetry models used in the lighting simulations. RLV was calculated from the linear RGB values taken from several points across a depiction at the brightest and dimmest points of flicker of the lighting simulation, using the equation $Y = 0.2126R + 0.7125G + 0.0722B$. For the lighting simulations of the Las Monedas art, and as described in the main text of the paper, due to the lower resolution of the models RLV was calculated at 5 equidistant points across the depiction from the centre of the light source (point 1) towards the periphery of the light source (point 5). For La Pasiega, the higher resolution of the models allowed RLV to be calculated at known distances of 0cm (centre of the light source) through to 60cm (away from the centre of the light source). The equation for RLV weighs RGB values according to how the eye interprets the relative brightness of different colours, providing a percentage for how bright a colour relatively appears on a scale from 0% = absolute darkness (black) to 100% = bright white. The light position was kept at a consistent distance of 40cm away from the cave wall for all simulations, unless the spatial context of the depiction would have restricted the positioning of the light source, i.e., a depiction was produced in a very narrow area. In these instances, the light source was placed at a distance deemed most appropriate, for example at the maximum distance available away from the wall being depicted on, but not too close to the opposite wall that the flames of the torch may have come into contact with it. The light source was offset to the left of the depiction, consistent with what might be expected if the artist was right-handed, and thus held the light source with their non-dominant left hand. For certain depictions, the orientation and order of the lines indicated it was possible the depiction was produced using the left hand, and thus the lighting simulation also simulated the light positioned to the right of the depiction. For Tables 3 and 4 in the main text of the paper, for both simplicity and to provide appropriate comparisons between depictions, only the values generated from the left offset light position are displayed.

Please note: Videos of the VR lighting simulation are available upon reasonable request to the authors.

VR Lighting Simulations: Las Monedas

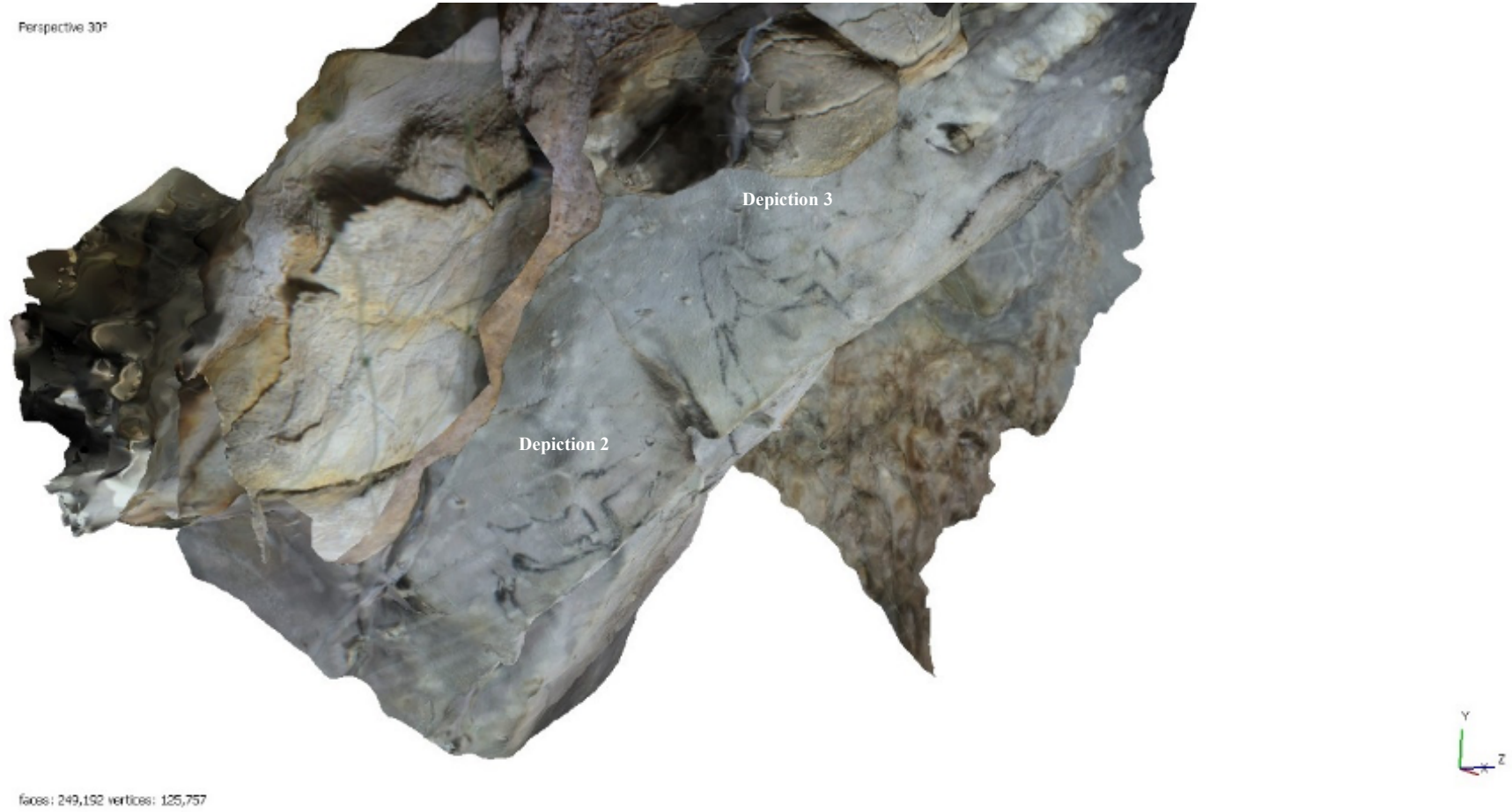
S.I. Table 1. Relative luminance values (RLV) for the VR lighting simulations of depictions within Las Monedas cave.

Depiction(s)	Light position	Point 1: Bright	Point 2: Bright	Point 3: Bright	Point 4: Bright	Point 5: Bright	Point 1: Dim	Point 2: Dim	Point 3: Dim	Point 4: Dim	Point 5: Dim
2	Left	15.4%	16.4%	12.9%	8.8%	6.1%	9.4%	9.6%	7.1%	4.0%	2.8%
3	Left	23.8%	19.6%	12.5%	5.5%	1.7%	14.3%	9.4%	4.9%	1.5%	0.7%
5	Left	29.9%	27.7%	19.6%	8.0%	4.3%	18.1%	18.3%	10.3%	2.1%	0.6%
6	Left	23.2%	7.5%	8.3%	3.9%	1.9%	12.7%	1.8%	4.8%	2.0%	0.5%
7 and 8	Left	18.2%	12.7%	12.6%	8.0%	5.0%	12.1%	8.6%	7.9%	5.0%	2.4%
11	Left	18.5%	23.0%	15.5%	10.8%	9.3%	10.7%	13.2%	7.6%	5.6%	4.0%
11	Right	10.5%	14.7%	16.4%	17.0%	15.0%	4.3%	7.8%	9.5%	10.4%	8.2%

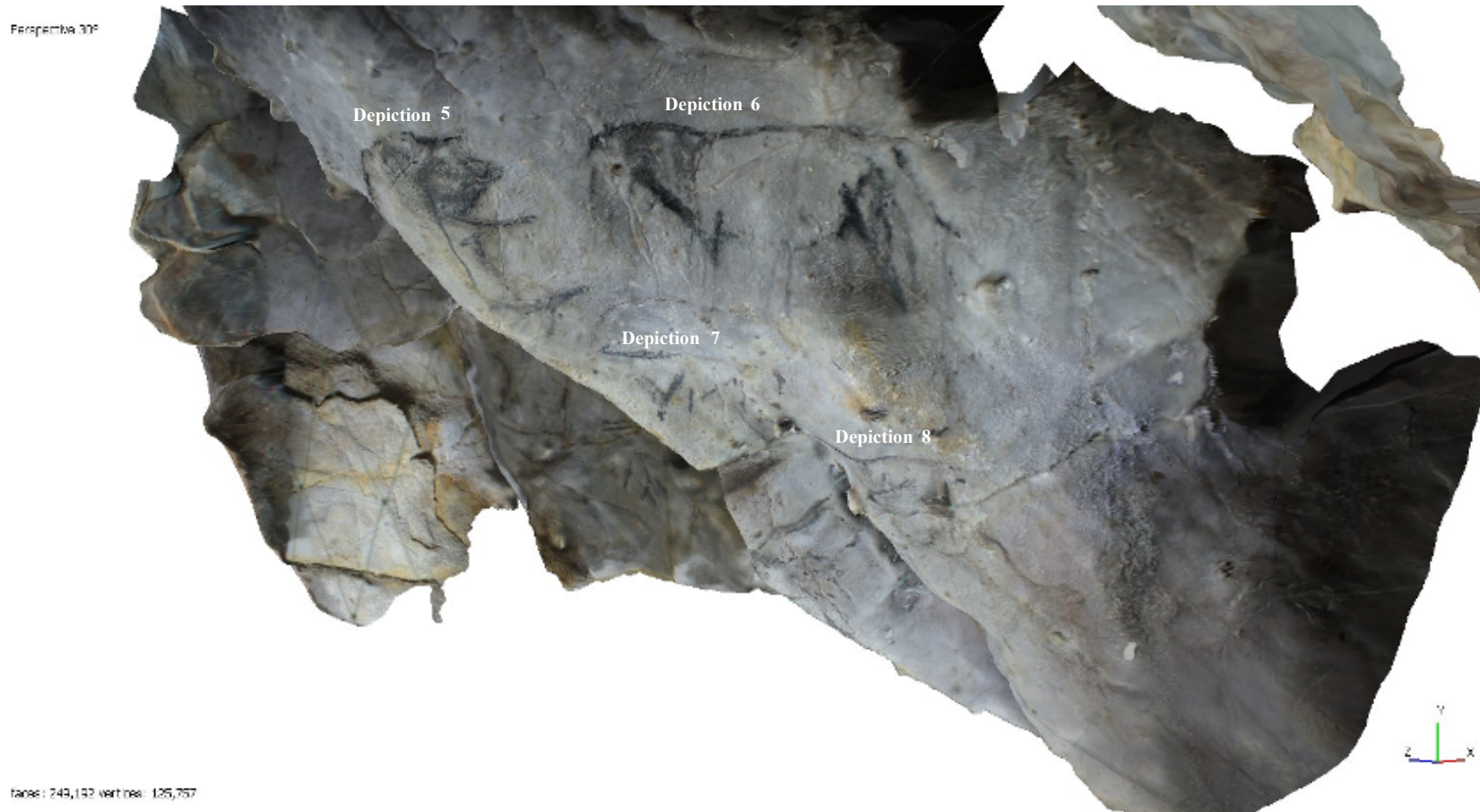
12	Left	8.1%	2.3%	4.6%	4.1%	3.1%	3.3%	90.0%	1.1%	1.2%	1.2%
13	Left	8.8%	14.1%	17.2%	12.3%	10.5%	3.4%	7.3%	7.2%	6.0%	4.0%
14	Left	19.2%	18.4%	15.5%	7.7%	3.0%	10.6%	10.0%	5.3%	0.9%	0.7%
14	Right	5.8%	6.6%	10.3%	12.9%	15.8%	2.1%	2.8%	4.6%	9.2%	9.1%
15	Left	22.1%	18.5%	12.9%	8.1%	6.3%	13.7%	9.8%	3.4%	3.9%	2.1%
16	Left	13.0%	11.8%	12.9%	8.2%	9.7%	7.6%	57.0%	7.5%	4.2%	6.2%
20	Left	2.0%	5.2%	8.8%	4.4%	1.1%	0.6%	2.7%	5.0%	0.7%	0.2%
21	Left	4.4%	8.3%	11.5%	9.8%	4.6%	1.0%	4.8%	5.0%	4.1%	0.9%
21	Right	4.8%	10.3%	10.8%	10.2%	5.1%	1.7%	7.4%	7.5%	5.1%	1.8%

25	Left	13.5%	10.1%	13.4%	8.8%	4.2%	8.8%	6.6%	5.3%	4.8%	1.9%
26	Left	27.4%	20.9%	10.6%	9.7%	5.8%	16.5%	12.3%	6.0%	5.1%	2.7%
26	Right	1.9%	7.2%	7.0%	14.5%	19.7%	0.5%	4.4%	5.2%	9.7%	13.8%
28 and 29	Left	2.6%	4.8%	1.3%	0.9%	1.2%	1.1%	2.2%	1.0%	0.8%	1.0%
28 and 29	Right	4.1%	4.7%	5.2%	11.3%	7.4%	1.1%	1.7%	3.1%	7.3%	4.3%
30 and 31	Left	11.3%	11.6%	9.4%	7.4%	5.2%	4.7%	6.3%	5.3%	3.6%	2.7%
33	Left	20.6%	23.8%	17.7%	15.9%	15.3%	14.8%	14.7%	10.4%	10.1%	9.1%
34 to 36	Left	29.3%	15.4%	11.7%	8.5%	3.8%	16.4%	5.6%	4.1%	1.0%	0.9%

Photogrammetry Models: Las Monedas

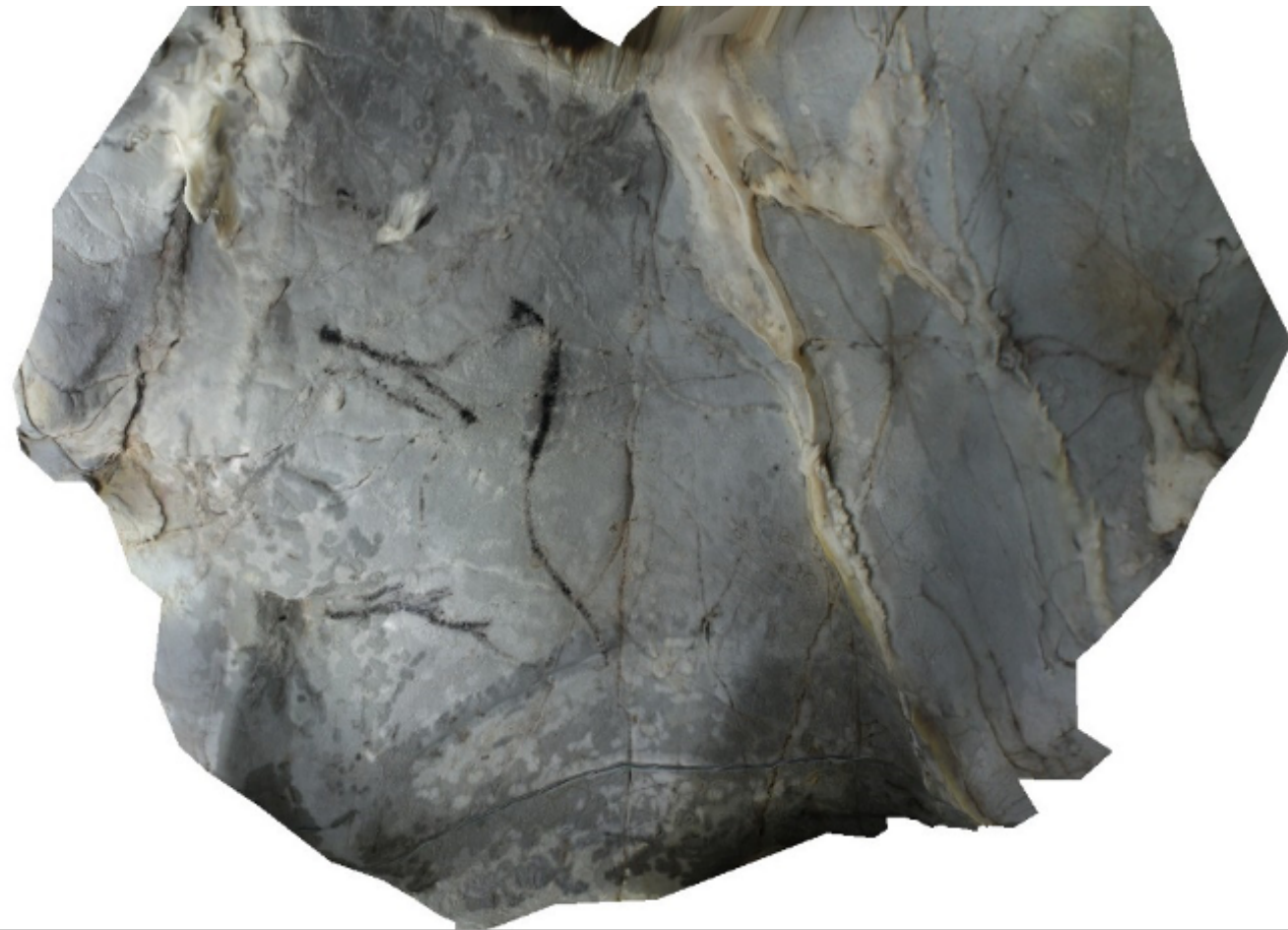


S.I. Figure 1. Screen-captured image of photogrammetry model 1 from Las Monedas, with depiction 2 and 3 visible.



S.I. Figure 2. Screen-captured image of photogrammetry model 1 from Las Monedas, with depictions 5 - 8 visible.

Perspective 30°



faces: 79,679 vertices: 40,196

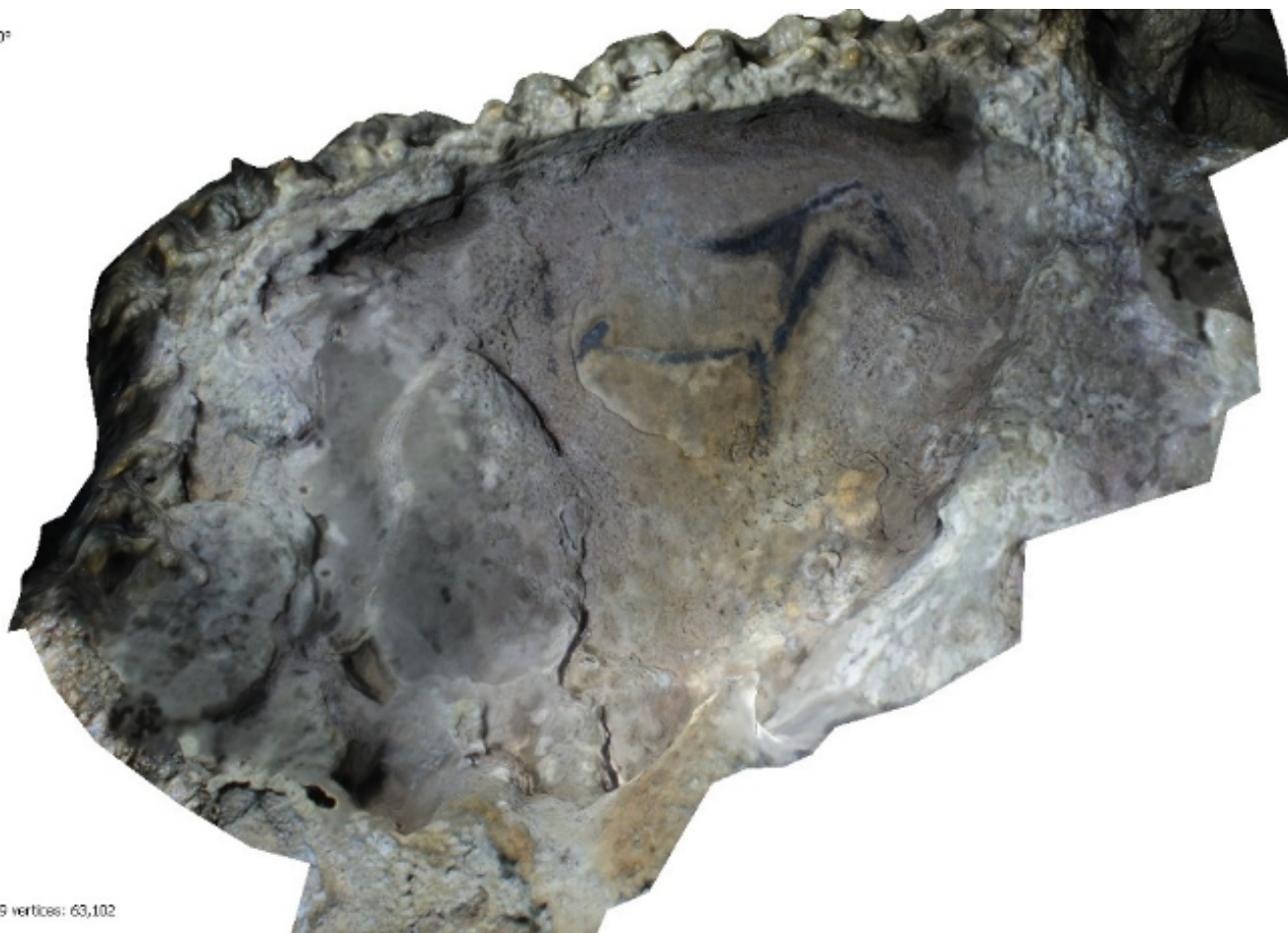


S.I. Figure 3. Screen-captured image of photogrammetry model 2 from Las Monedas, with depiction 11 visible.



S.I. Figure 4. Screen-captured image of photogrammetry model 3 from Las Monedas, with depiction 12 visible.

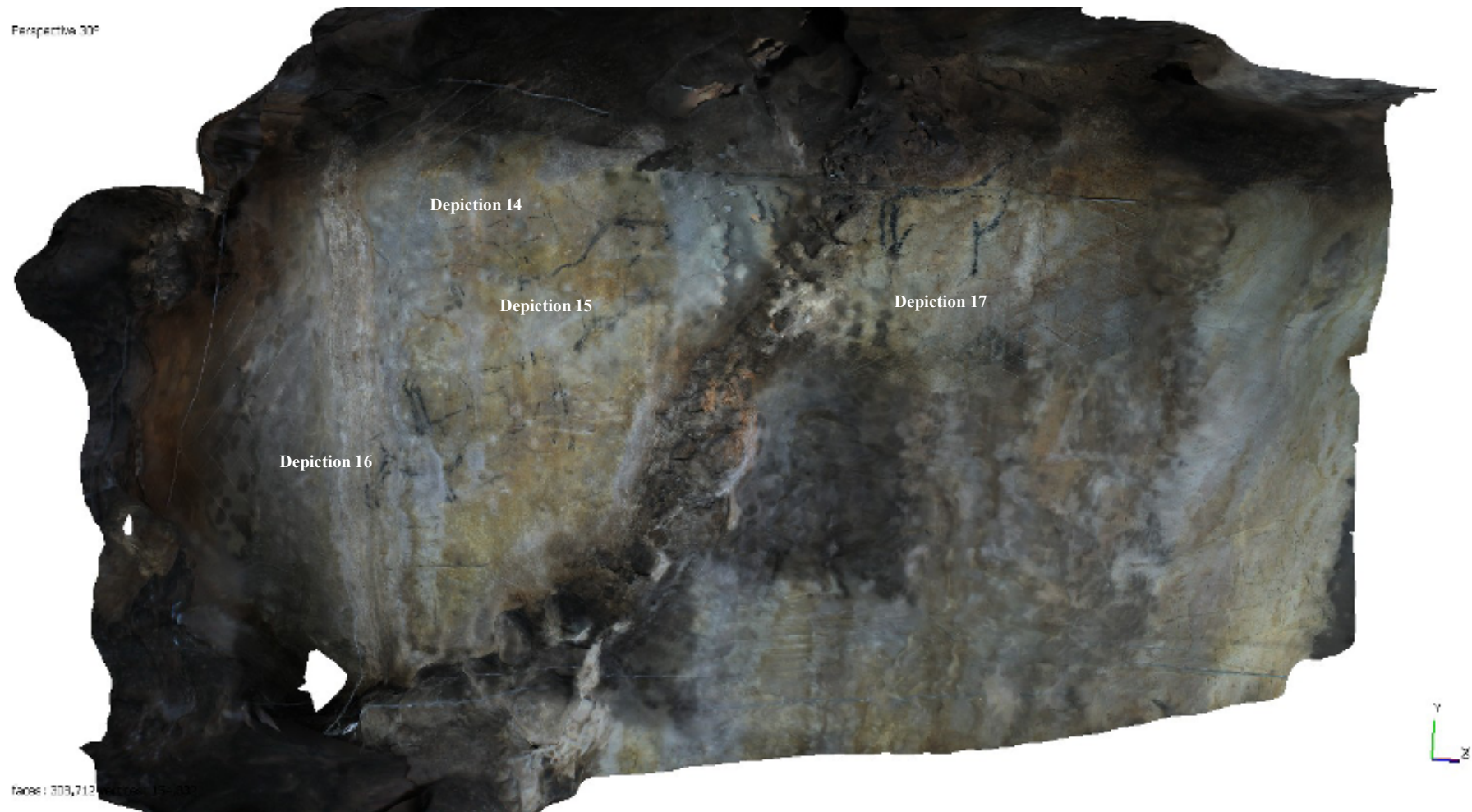
Perspective 30°



faces: 125,115 vertices: 63,102

S.I. Figure 5. Screen-captured image of photogrammetry model 4 from Las Monedas, with depiction 13 visible.

Persepolis 30F



S.I. Figure 6. Screen-captured image of photogrammetry model 5 from Las Monedas, with depictions 14 - 17 visible.

Perspective 30°



faces: 246,345 vertices: 123,780

S.I. Figure 7. Screen-captured image of photogrammetry model 6 from Las Monedas, with depictions 20 and 21 visible.



S.I. Figure 8. Screen-captured image of photogrammetry model 7 from Las Monedas, with depictions 25 - 36 visible.

VR Lighting Simulations: La Pasiega

S.I. Table 2. Relative luminance values (RLV) for the VR lighting simulations of depictions within Gallery A of La Pasiega cave.

No.	Light position	Flicker	0cm	5cm	10cm	20cm	30cm	40cm	50cm	60cm	Flicker	0cm	5cm	10cm	20cm	30cm	40cm	50cm	60cm
PA1.1	Left	Bright	16.2%	16.3%	17.0%	18.2%	16.4%	13.0%	12.8%	10.5%	Dim	11.6%	11.2%	11.2%	11.6%	10.5%	8.1%	7.8%	5.9%
PA2.1	Left	Bright	12.8%	9.2%	9.6%	5.4%	6.7%	4.2%	6.9%	4.0%	Dim	5.3%	6.7%	5.1%	5.3%	4.0%	2.0%	3.3%	1.9%
PA2.1	Right	Bright	22.1%	22.1%	16.5%	12.8%	10.3%	8.1%	5.4%	4.3%	Dim	21.0%	12.3%	9.1%	7.8%	5.3%	4.3%	1.9%	1.7%
PA2.2	Left	Bright	21.5%	13.3%	14.2%	18.8%	1.8%	14.4%	4.8%	6.1%	Dim	12.7%	9.5%	10.4%	10.6%	0.6%	7.4%	1.9%	2.5%
PA2.2	Right	Bright	21.3%	26.1%	25.0%	18.5%	17.6%	13.2%	7.3%	13.3%	Dim	14.5%	16.1%	13.2%	10.4%	10.0%	6.5%	2.5%	5.4%
PA2.3 - PA2.5	Left	Bright	30.7%	22.6%	19.1%	14.1%	13.4%	12.2%	11.2%	7.8%	Dim	18.1%	12.8%	9.8%	7.6%	6.1%	5.5%	4.6%	2.4%
PA2.3 - PA2.5	Right	Bright	23.8%	20.9%	21.1%	16.0%	18.0%	13.2%	10.5%	7.7%	Dim	18.0%	13.5%	13.4%	12.3%	10.9%	7.7%	5.7%	4.6%

PA3.1	Left	Bright	18.6%	18.8%	19.3%	15.0%	14.6%	14.8%	8.6%	8.3%	Dim	11.0%	11.3%	11.7%	7.7%	6.0%	5.5%	3.4%	3.8%
PA3.1	Right	Bright	14.8%	11.1%	15.6%	20.8%	15.6%	17.8%	19.2%	12.5%	Dim	7.9%	4.6%	7.9%	10.4%	10.7%	9.3%	9.1%	7.1%

PA3.3	Left	Bright	37.4%	30.4%	17.1%	12.1%	9.8%	5.8%	6.0%	8.6%	Dim	20.9%	19.7%	14.9%	7.0%	5.6%	2.3%	3.0%	4.9%
PA3.3	Right	Bright	28.0%	22.4%	15.8%	12.9%	13.2%	9.4%	2.3%	5.8%	Dim	15.3%	14.4%	10.6%	7.9%	7.9%	5.4%	0.5%	1.7%
PA4.1	Left	Bright	12.6%	16.1%	19.8%	18.3%	18.0%	12.4%	10.3%	9.3%	Dim	6.5%	10.1%	11.9%	11.3%	12.4%	7.0%	4.3%	5.5%
PA4.1	Right	Bright	19.6%	16.1%	16.5%	18.3%	13.6%	9.9%	6.0%	4.0%	Dim	12.5%	10.1%	9.6%	10.1%	8.8%	5.3%	2.2%	1.7%
PA4.2	Left	Bright	21.9%	15.7%	20.1%	21.3%	20.0%	15.0%	11.6%	10.4%	Dim	10.6%	8.7%	10.8%	11.5%	10.6%	8.2%	6.1%	4.6%
PA4.2	Right	Bright	29.2%	21.2%	24.7%	17.3%	13.8%	7.4%	5.5%	4.2%	Dim	20.0%	14.8%	16.0%	10.8%	9.3%	3.1%	2.5%	1.3%
PA4.3	Left	Bright	13.5%	9.4%	5.7%	9.2%	7.7%	8.3%	6.8%	7.9%	Dim	6.3%	5.6%	5.0%	4.8%	3.8%	4.5%	2.9%	2.2%

PA5.1 and PA5.2	Left	Bright	20.4%	19.1%	17.7%	15.5%	15.6%	11.0%	7.6%	9.3%	Dim	13.5%	12.3%	11.0%	8.6%	9.7%	6.4%	4.6%	4.8%
PA5.3	Left	Bright	25.6%	25.4%	24.7%	24.2%	19.8%	15.6%	11.4%	9.3%	Dim	13.6%	14.4%	14.4%	12.6%	10.4%	8.2%	4.6%	2.5%
PA5.3	Right	Bright	14.7%	17.7%	17.3%	15.3%	14.0%	12.3%	12.0%	9.6%	Dim	8.7%	11.4%	11.7%	10.1%	8.6%	7.1%	7.6%	5.3%
PA5.4	Left	Bright	22.3%	20.3%	16.7%	9.3%	14.2%	9.7%	7.9%	5.4%	Dim	11.7%	11.6%	7.6%	5.2%	7.8%	5.0%	3.1%	1.9%

PA5.5	Right	Bright	8.6%	8.7%	9.8%	9.5%	9.9%	8.8%	9.0%	8.0%	Dim	7.2%	4.8%	4.8%	5.1%	6.8%	4.7%	4.5%	4.4%
PA6.1	Left	Bright	19.3%	18.3%	18.8%	15.9%	20.8%	18.2%	5.9%	11.6%	Dim	11.9%	10.6%	10.8%	9.6%	13.0%	10.9%	5.1%	6.4%
PA6.2	Left	Bright	18.2%	18.1%	18.1%	14.8%	14.4%	14.3%	12.4%	11.6%	Dim	11.5%	12.0%	12.0%	9.6%	10.0%	8.2%	7.9%	6.9%
PA6.2	Right	Bright	20.0%	15.6%	15.6%	11.3%	12.7%	15.9%	12.9%	6.7%	Dim	17.5%	13.7%	12.4%	7.2%	8.9%	10.9%	10.1%	4.7%
PA7.1	Left	Bright	14.4%	25.5%	26.9%	19.2%	15.0%	8.5%	3.9%	5.9%	Dim	13.4%	15.1%	15.2%	10.8%	8.2%	2.5%	0.7%	2.2%

PA7.1	Right	Bright	31.1%	30.4%	25.8%	25.4%	14.1%	11.4%	4.4%	0.0%	Dim	28.9%	18.6%	14.8%	14.9%	7.8%	5.9%	1.4%	0.0%
PA7.2	Left	Bright	17.2%	18.6%	22.9%	18.5%	10.1%	9.3%	10.6%	7.8%	Dim	12.9%	13.3%	17.3%	13.3%	10.4%	5.2%	7.4%	4.6%
PA7.3	Left	Bright	12.7%	18.3%	17.7%	16.0%	16.8%	18.6%	8.1%	2.4%	Dim	6.9%	10.8%	10.2%	8.3%	7.5%	9.6%	2.8%	0.9%
PA7.3	Right	Bright	17.0%	16.4%	15.6%	16.8%	16.2%	10.3%	9.6%	8.6%	Dim	14.0%	11.0%	8.6%	10.8%	8.1%	5.0%	5.0%	3.4%
PA7.4	Left	Bright	30.7%	24.1%	22.1%	15.0%	13.3%	9.6%	3.0%	6.7%	Dim	18.1%	15.1%	12.9%	7.6%	5.9%	4.7%	3.0%	3.0%
PA7.4	Right	Bright	15.8%	13.8%	10.0%	18.6%	17.1%	13.9%	11.5%	6.0%	Dim	12.8%	7.6%	5.9%	12.0%	10.0%	8.5%	6.2%	1.8%

PA7.5	Left	Bright	22.8%	20.7%	19.2%	18.6%	15.9%	14.7%	8.4%	10.0%	Dim	13.5%	12.2%	10.7%	10.4%	9.2%	8.2%	4.8%	5.2%
PA7.6	Left	Bright	24.7%	21.3%	17.1%	11.2%	14.4%	15.4%	12.4%	12.7%	Dim	13.8%	12.9%	8.7%	5.4%	9.4%	9.6%	6.9%	7.3%
PA7.6	Right	Bright	22.9%	18.2%	21.7%	18.3%	13.4%	10.5%	10.5%	12.2%	Dim	17.0%	13.9%	13.3%	11.4%	6.7%	5.0%	5.3%	5.8%

PA7.7	Left	Bright	23.1%	22.7%	24.7%	21.3%	19.7%	17.3%	18.0%	12.5%	Dim	17.2%	16.2%	18.1%	16.8%	14.4%	11.1%	11.6%	8.2%
PA7.8	Left	Bright	26.7%	23.8%	22.6%	17.7%	17.8%	16.2%	12.5%	9.3%	Dim	16.6%	14.2%	15.2%	11.0%	11.5%	9.8%	8.2%	4.8%
PA7.8	Right	Bright	14.1%	16.5%	12.3%	16.8%	13.9%	13.4%	12.9%	12.3%	Dim	8.7%	7.9%	8.2%	7.7%	7.3%	6.8%	6.3%	7.1%
PA7.9	Left	Bright	26.3%	25.7%	26.4%	17.3%	24.4%	17.7%	7.2%	8.4%	Dim	17.9%	18.3%	17.8%	14.2%	16.5%	12.7%	4.0%	5.0%
PA7.9	Right	Bright	25.0%	25.2%	23.0%	24.5%	22.6%	19.1%	15.7%	10.1%	Dim	14.8%	16.5%	14.5%	14.6%	12.8%	9.3%	7.7%	4.8%
PA7.11	Left	Bright	17.2%	17.1%	17.3%	15.2%	16.7%	12.7%	15.6%	11.0%	Dim	9.9%	10.4%	8.7%	9.4%	8.6%	7.4%	9.2%	6.6%
PA7.11	Right	Bright	17.2%	17.1%	16.5%	17.2%	13.9%	13.6%	9.5%	8.3%	Dim	9.8%	9.1%	9.9%	9.6%	7.2%	7.4%	4.8%	4.8%
PA8.1	Left	Bright	19.8%	20.0%	19.0%	18.4%	13.9%	11.2%	9.9%	5.9%	Dim	11.8%	12.1%	11.7%	12.2%	8.5%	5.5%	4.6%	2.4%
PA8.1	Right	Bright	41.0%	37.1%	31.3%	28.9%	20.9%	14.7%	9.2%	7.3%	Dim	31.2%	26.3%	25.9%	20.4%	15.4%	11.4%	8.3%	4.6%

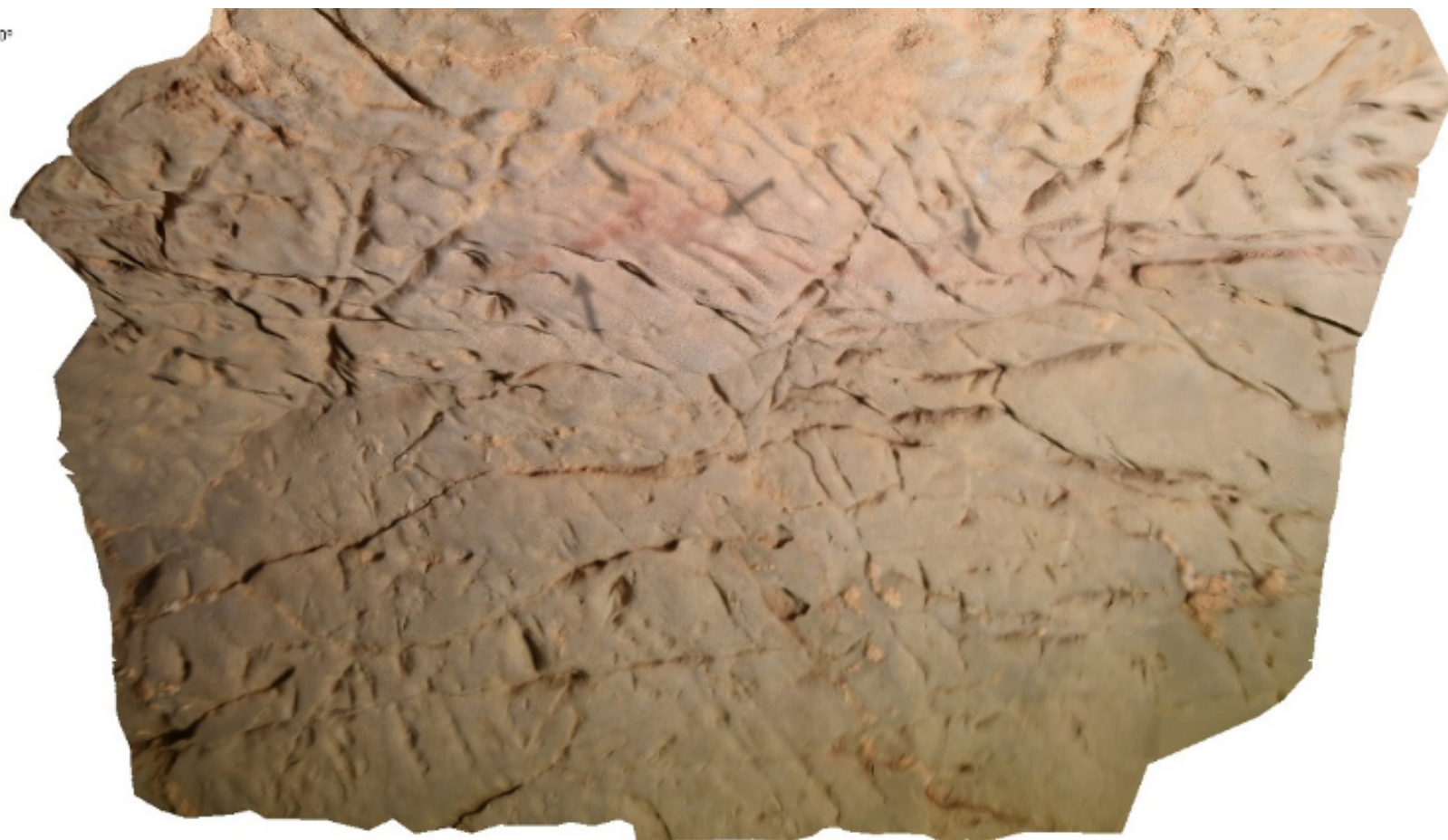
PA8.2	Left	Bright	20.2%	19.1%	18.8%	16.7%	12.3%	11.5%	9.3%	5.5%	Dim	11.8%	11.3%	11.0%	9.7%	5.9%	5.5%	1.9%	1.9%
PA8.2	Right	Bright	26.4%	20.7%	20.6%	15.9%	12.3%	8.6%	5.3%	4.6%	Dim	18.7%	15.0%	13.8%	11.0%	7.7%	4.8%	2.8%	1.6%
PA9.4	Left	Bright	23.7%	18.0%	15.3%	15.3%	12.9%	8.7%	9.2%	8.9%	Dim	14.9%	8.7%	9.1%	7.4%	6.8%	4.7%	3.9%	4.3%
PA9.4	Right	Bright	12.0%	13.0%	10.6%	10.4%	12.5%	11.1%	10.9%	13.4%	Dim	5.0%	5.0%	4.1%	6.6%	5.0%	4.8%	5.7%	6.4%
PA9.5	Left	Bright	24.8%	16.5%	20.4%	14.7%	11.9%	12.4%	9.8%	10.9%	Dim	20.5%	12.3%	12.0%	8.2%	7.2%	6.9%	5.0%	6.1%
PA9.5	Right	Bright	30.6%	26.3%	23.3%	24.0%	18.1%	9.9%	5.5%	10.4%	Dim	27.0%	18.4%	14.9%	13.6%	10.3%	5.3%	1.0%	5.2%
PA9.6	Left	Bright	23.1%	20.7%	18.1%	16.3%	14.8%	10.2%	6.4%	1.5%	Dim	14.1%	12.7%	11.0%	9.3%	8.9%	5.0%	2.3%	0.8%
PA9.7	Left	Bright	15.6%	13.4%	15.1%	11.8%	12.9%	11.4%	9.1%	9.3%	Dim	9.3%	8.3%	9.7%	8.4%	7.7%	6.9%	5.4%	4.6%
PA9.7	Right	Bright	19.9%	17.1%	14.1%	13.9%	10.1%	8.7%	8.4%	9.2%	Dim	17.1%	13.2%	11.1%	9.5%	6.9%	5.7%	5.4%	6.5%

PA10.1	Left	Bright	17.8%	15.7%	18.1%	16.7%	13.1%	10.3%	7.5%	7.5%	Dim	11.7%	10.3%	12.3%	11.1%	8.1%	6.1%	4.7%	4.2%
PA10.1	Right	Bright	22.0%	14.3%	16.9%	14.2%	14.3%	12.6%	9.0%	9.3%	Dim	15.0%	9.0%	11.1%	10.1%	8.2%	7.6%	5.0%	5.2%
PA10.3	Left	Bright	17.1%	15.0%	11.8%	11.3%	12.2%	10.6%	9.2%	3.6%	Dim	15.9%	9.6%	7.3%	6.9%	6.7%	6.0%	5.2%	1.4%
PA10.3	Right	Bright	13.5%	13.8%	12.0%	13.4%	12.5%	7.8%	9.4%	5.2%	Dim	9.3%	9.5%	7.8%	8.8%	7.7%	4.6%	5.7%	2.7%
PA10.4	Left	Bright	13.3%	12.9%	14.1%	13.0%	10.0%	9.6%	6.9%	6.1%	Dim	10.1%	7.8%	8.3%	7.6%	5.8%	5.3%	3.9%	2.8%
PA10.4	Right	Bright	17.3%	12.8%	13.2%	12.5%	7.9%	7.7%	5.4%	5.6%	Dim	10.9%	8.5%	8.5%	8.5%	3.9%	4.2%	2.3%	3.3%
PA12.1	Left	Bright	13.0%	11.8%	11.2%	10.9%	9.8%	7.3%	7.2%	6.5%	Dim	8.6%	5.8%	6.4%	5.7%	4.8%	4.3%	2.8%	2.7%
PA12.1	Right	Bright	15.9%	15.5%	10.4%	12.6%	11.9%	8.2%	7.2%	4.6%	Dim	9.7%	9.7%	4.6%	7.6%	6.8%	4.7%	2.5%	1.6%
PA12.2	Left	Bright	16.1%	17.8%	17.7%	16.0%	13.7%	11.8%	5.8%	2.9%	Dim	13.9%	12.8%	12.6%	11.6%	9.3%	8.2%	4.2%	2.1%

PA12.4	Left	Bright	15.4%	14.9%	10.3%	11.0%	9.6%	5.0%	4.7%	6.2%	Dim	9.4%	7.7%	5.7%	5.4%	5.2%	1.7%	1.9%	1.7%
PA12.4	Right	Bright	13.4%	15.8%	14.4%	15.2%	10.1%	9.3%	6.5%	5.7%	Dim	10.6%	8.6%	7.8%	8.2%	5.0%	4.3%	2.9%	1.9%
PA12.6	Left	Bright	17.8%	18.1%	14.8%	8.2%	4.7%	1.6%	-	-	Dim	10.3%	10.3%	9.3%	4.4%	1.7%	0.8%	-	-
PA12.10	Left	Bright	26.2%	19.1%	23.5%	19.4%	16.1%	10.3%	10.6%	7.7%	Dim	15.2%	11.3%	12.7%	9.8%	8.5%	4.3%	4.6%	4.1%
PA12.11	Left	Bright	24.2%	21.5%	17.8%	13.4%	10.4%	13.4%	2.6%	0.0%	Dim	13.5%	15.9%	11.8%	8.3%	7.1%	8.2%	0.9%	0.0%
PA12.12	Left	Bright	23.9%	17.9%	14.9%	9.8%	6.5%	3.4%	1.9%	2.4%	Dim	15.0%	11.2%	8.5%	5.0%	2.3%	1.2%	0.8%	0.8%
PA12.13	Left	Bright	19.1%	21.2%	20.3%	17.2%	13.3%	10.0%	5.0%	2.6%	Dim	12.5%	13.9%	14.3%	11.0%	9.4%	6.5%	2.2%	1.4%
PA12.14	Left	Bright	18.9%	22.3%	22.7%	14.3%	9.2%	2.6%	3.1%	1.6%	Dim	13.1%	13.1%	11.5%	8.2%	4.3%	1.3%	1.2%	0.7%

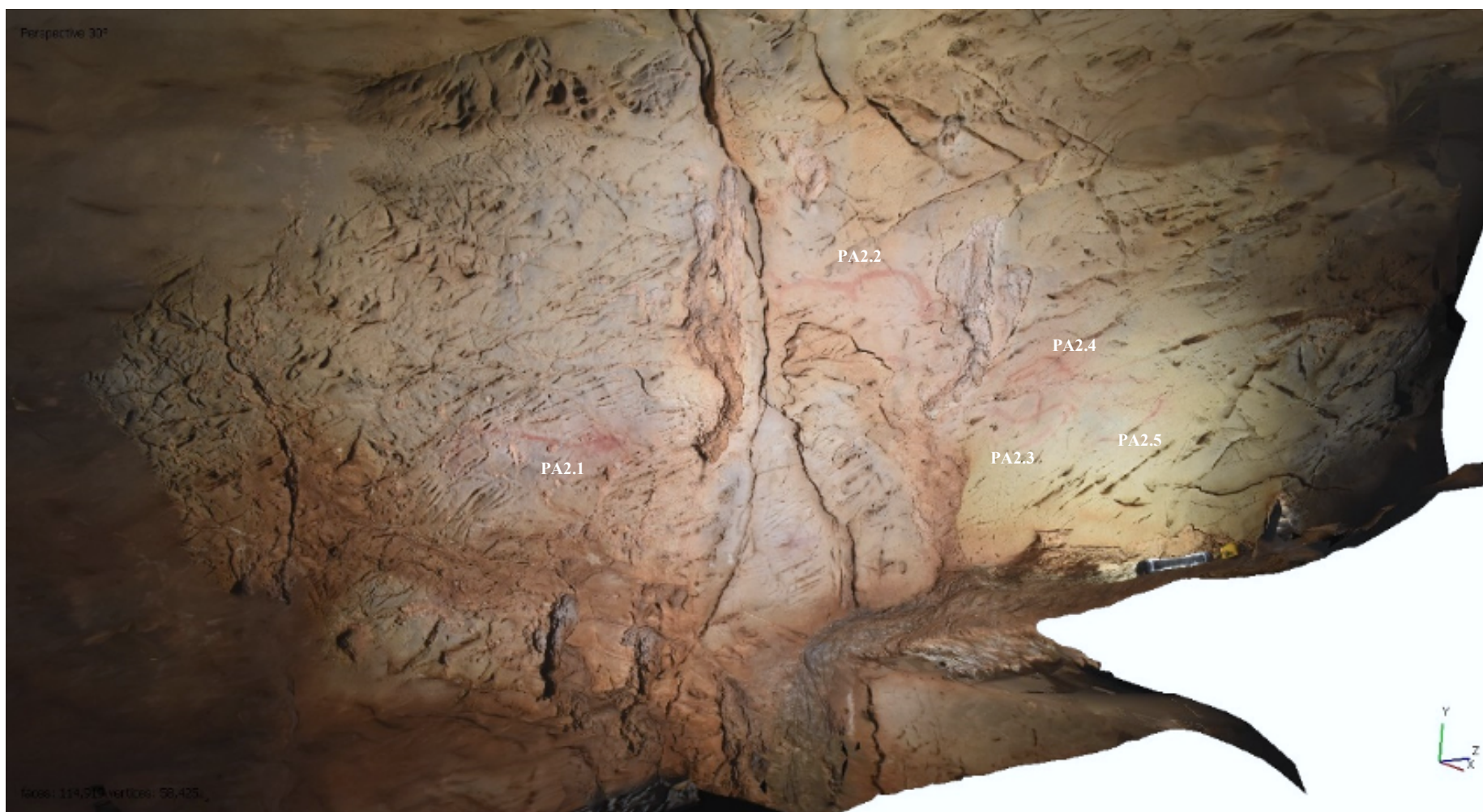
Photogrammetry Models: La Pasiega

Perspective 30°

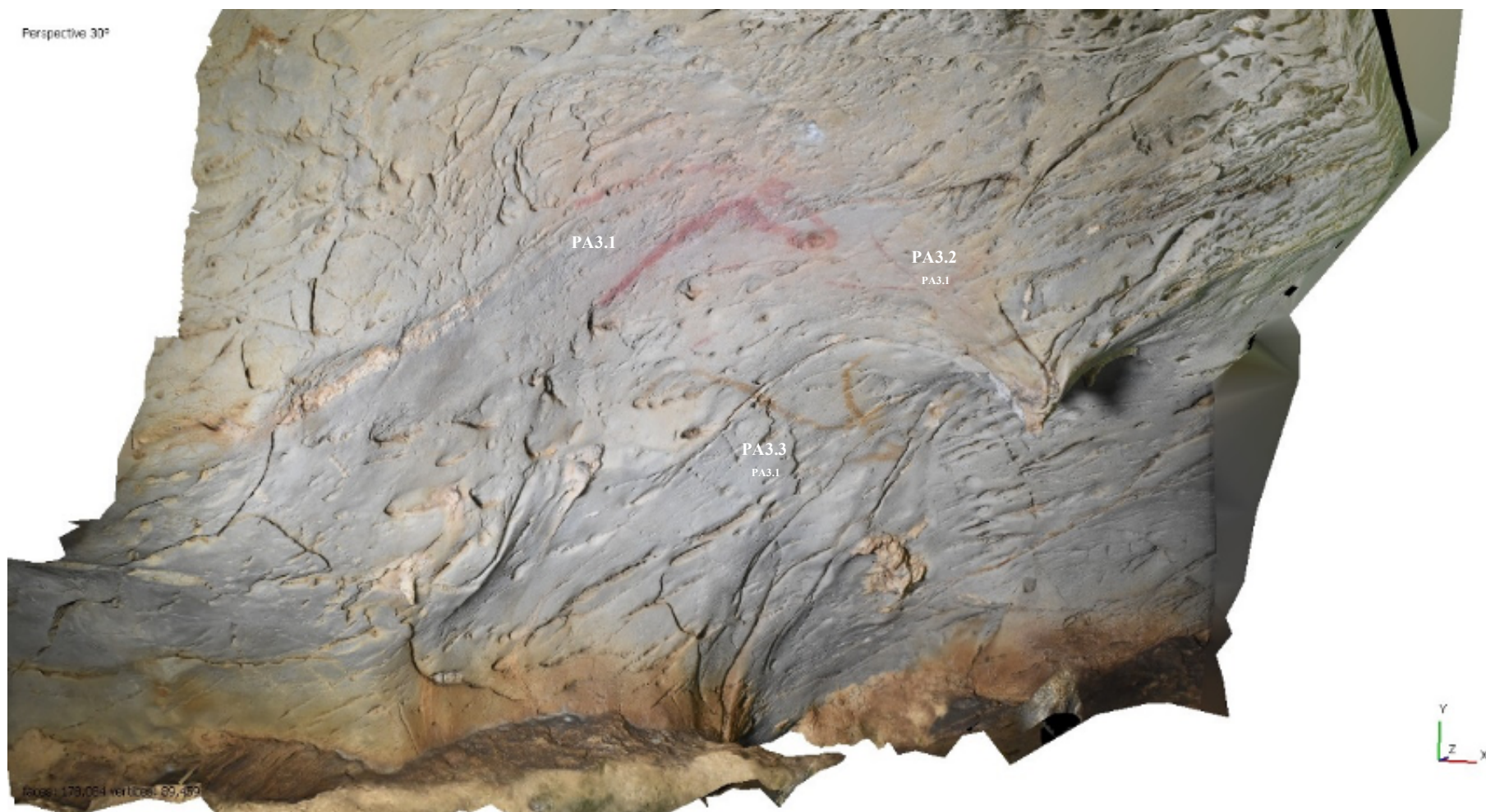


faces: 231,682 vertices: 116,400

S.I. Figure 9. Photogrammetry model of Panel PA1 from La Pasiega, with depiction PA1.1 visible and arrows highlighting the head, ears, and dorsal line.



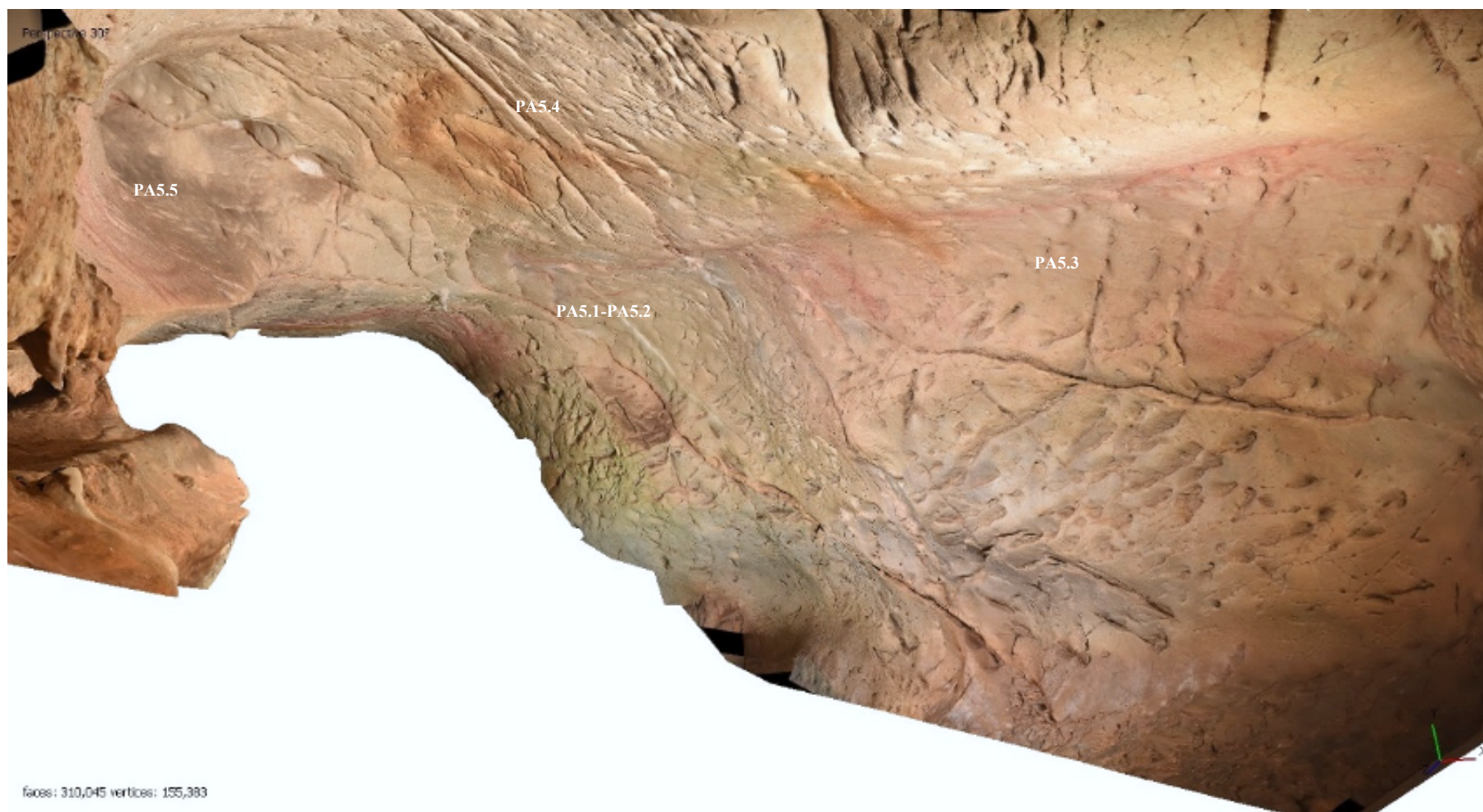
S.I. Figure 10. Photogrammetry model of panel PA2 from La Pasiega, with depictions PA2.1 - PA2.5 visible.



S.I. Figure 11. Photogrammetry model of panel PA3 from La Pasiega, with depictions PA3.1 - PA3.3 visible.



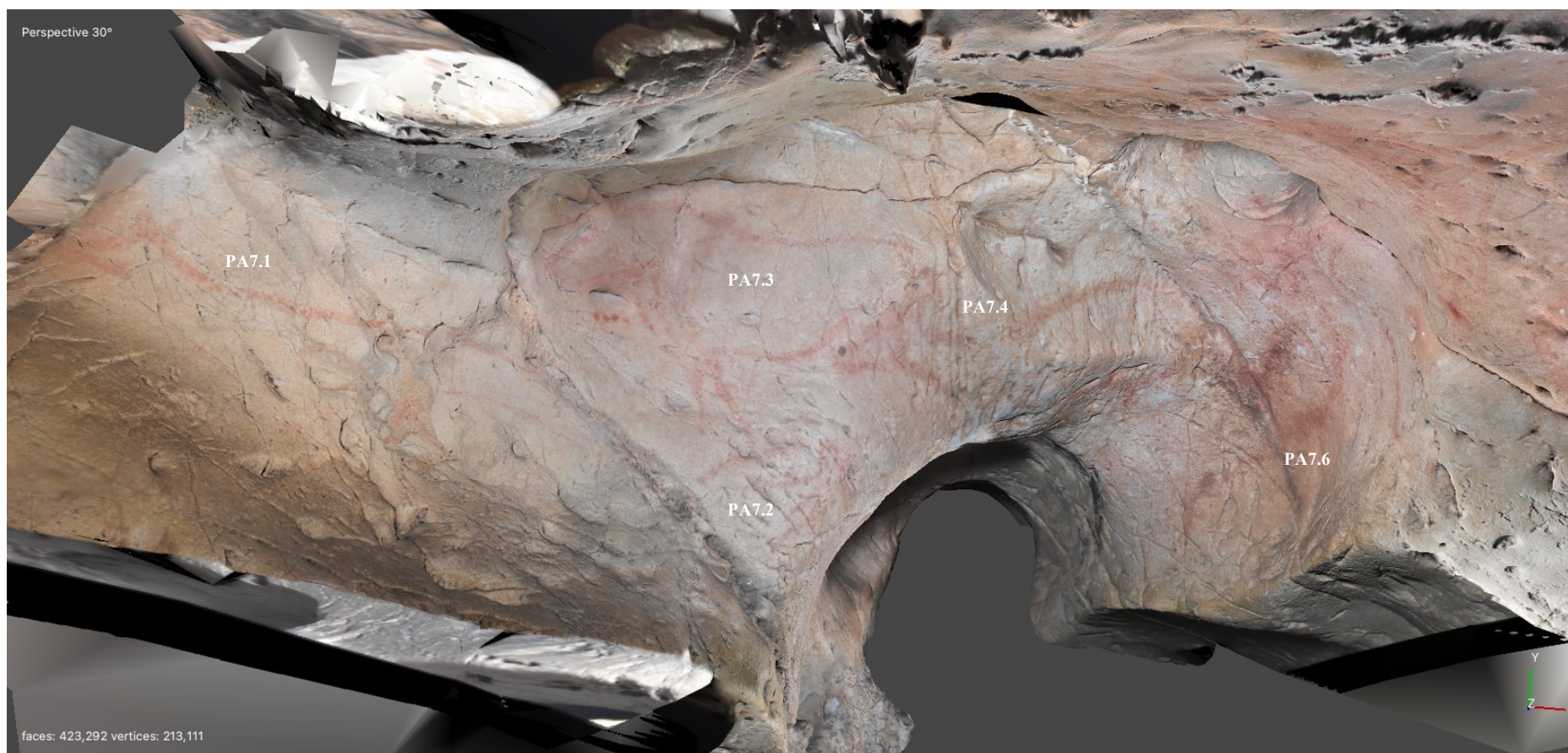
S.I. Figure 12. Photogrammetry model of panel PA4 from La Pasiega, with depictions PA4.1 - PA4.3 visible



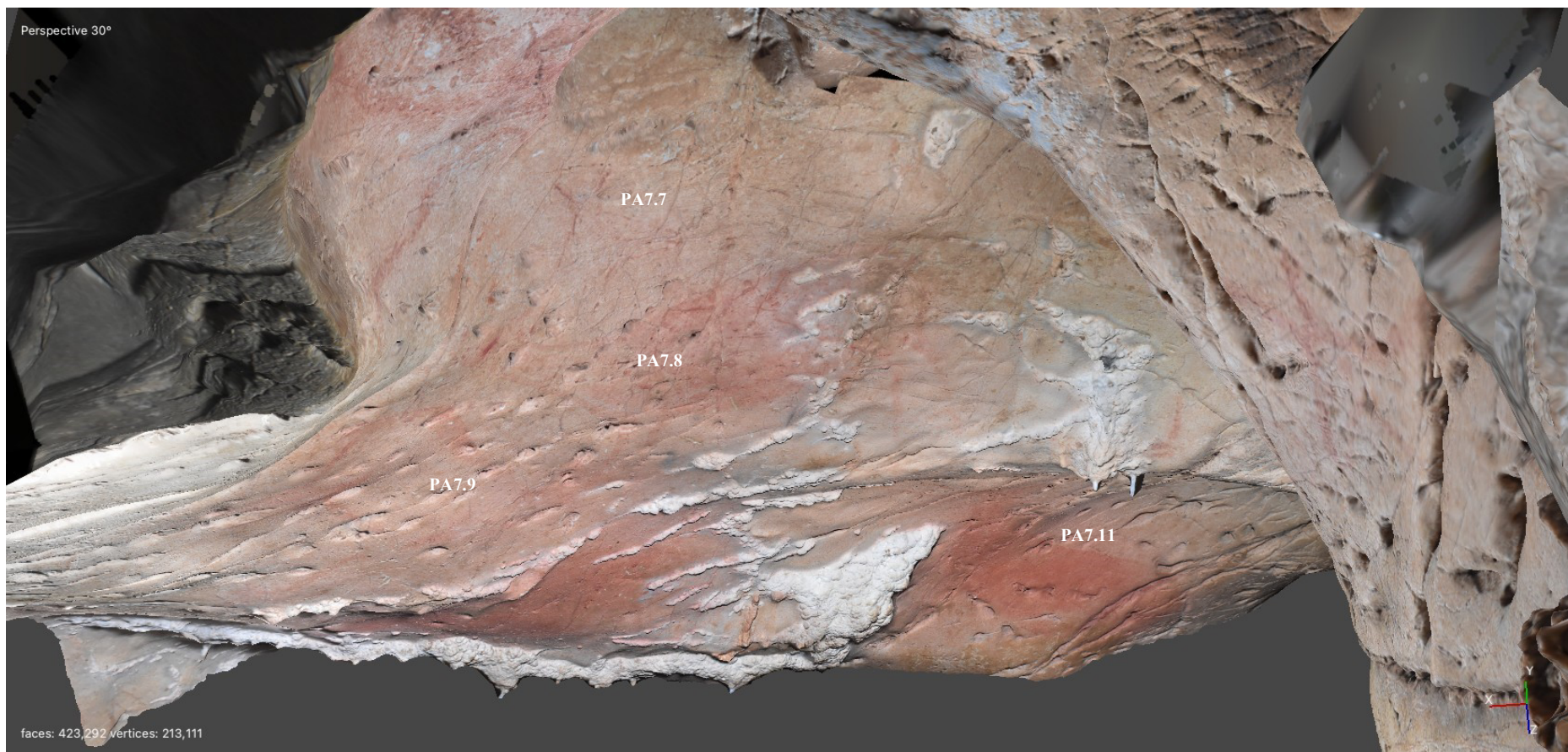
S.I. Figure 13. Photogrammetry model of panel PA5 from La Pasiega, with depictions PA5.3– PA5.5 visible.



S.I. Figure 14. Photogrammetry model of panel PA6 from La Pasiega, with depictions PA6.1 and PA6.2 visible.

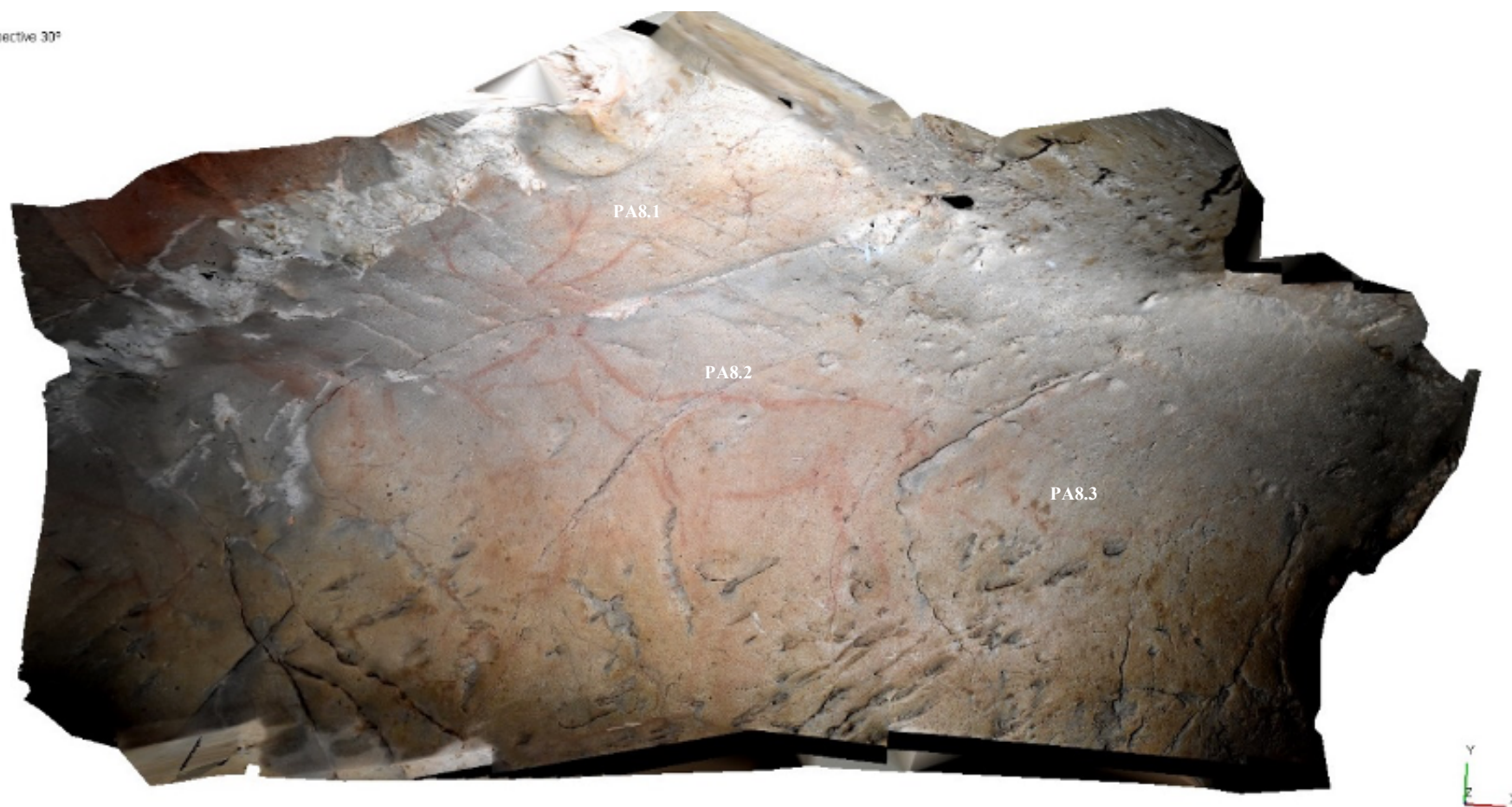


S.I. Figure 15. Photogrammetry model of panel PA7 from La Pasiega, with depictions PA7.1 – PA7.6 visible.



S.I. Figure 16. Photogrammetry model of panel PA7 from La Pasiega, with depictions PA7.7 – PA7.11 visible.

Perspective 30°



faces: 187,280 vertices: 94,022

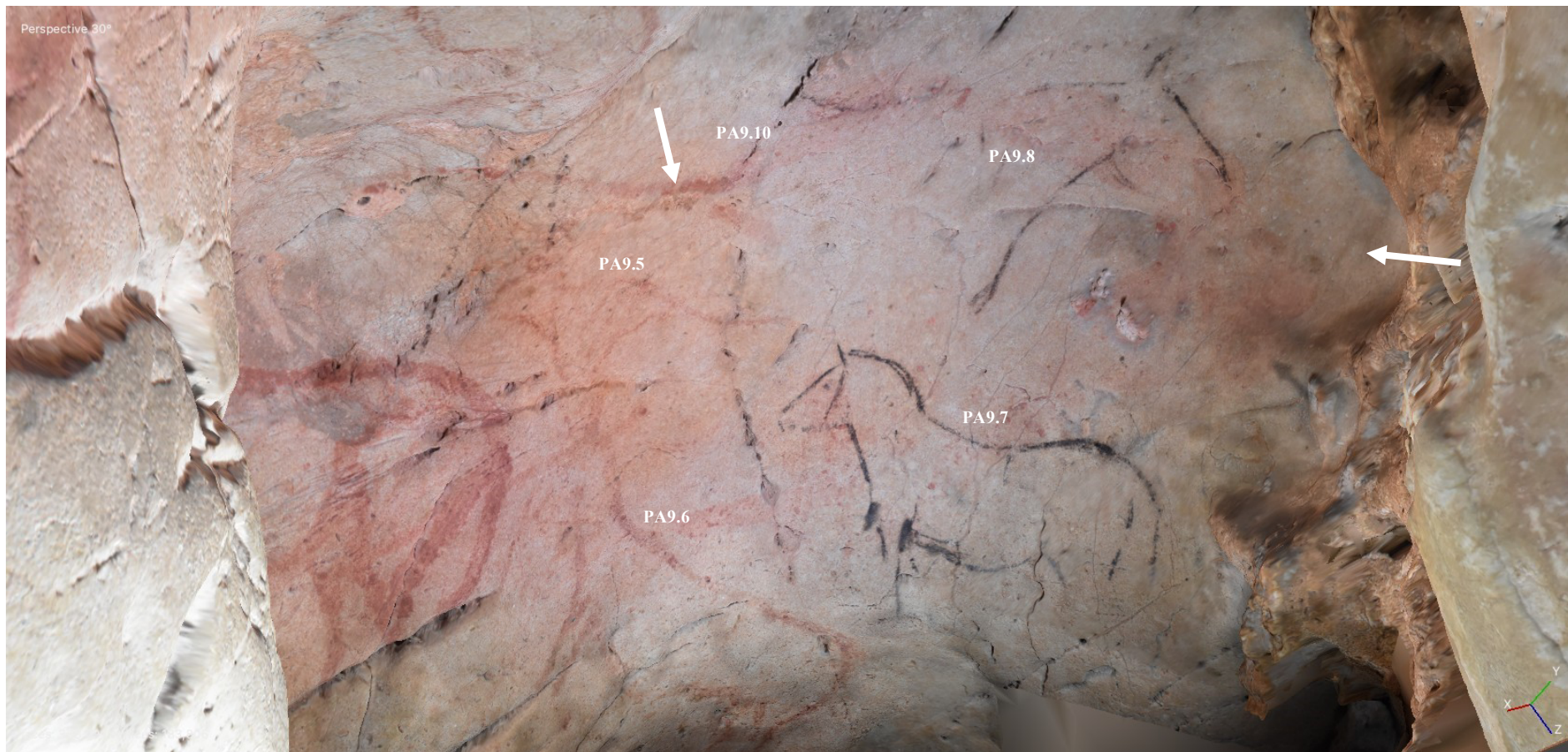
S.I. Figure 17. Photogrammetry model of panel PA8 from La Pasiega, with depictions PA8.1 – PA8.3 visible.



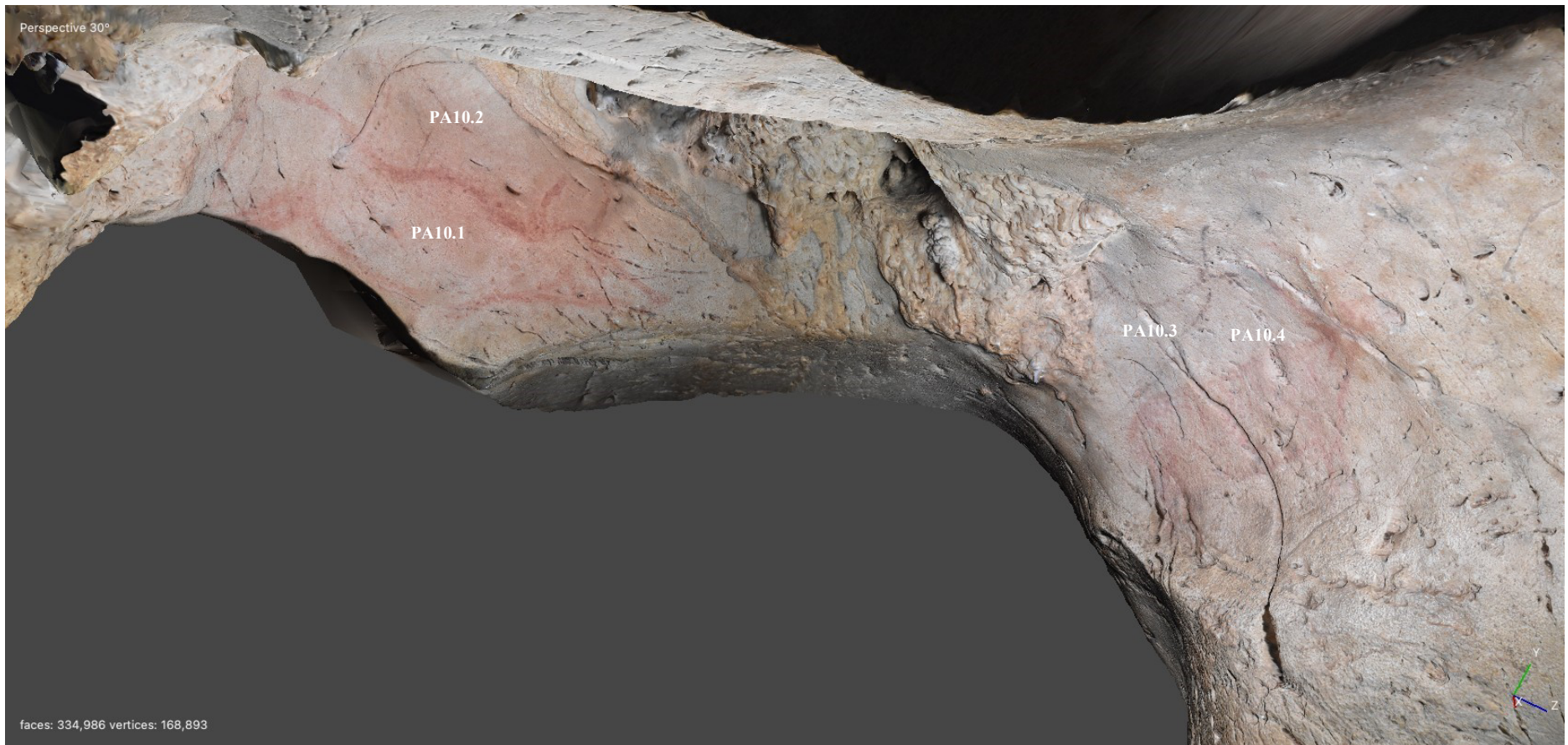
S.I. Figure 18. Photogrammetry model of panel PA9 from La Pasiega, with depiction PA9.1 visible.



S.I. Figure 19. Photogrammetry model of panel PA9 from La Pasiega, with depictions PA9.2 – PA9.7 visible



S.I. Figure 20. Photogrammetry model of panel PA9, with depictions PA9.5 – PA9.9 visible with arrows highlighting the head (facing right) and the dorsal line of PA9.10



S.I. Figure 21. Photogrammetry model of panel PA10 from La Pasiega, with depictions PA10.1 – PA10.4 visible.



S.I. Figure 22. Photogrammetry model of panel PA12 from La Pasiega, with depictions PA12.1, PA12.2, PA12.4 and PA12.6 visible. Depictions that are too small/faded to be seen in the photogrammetry model are not labelled.



S.I. Figure 23. Photogrammetry model of panel PA12 from La Pasiega, with depictions PA12.10 – PA12.14 visible.