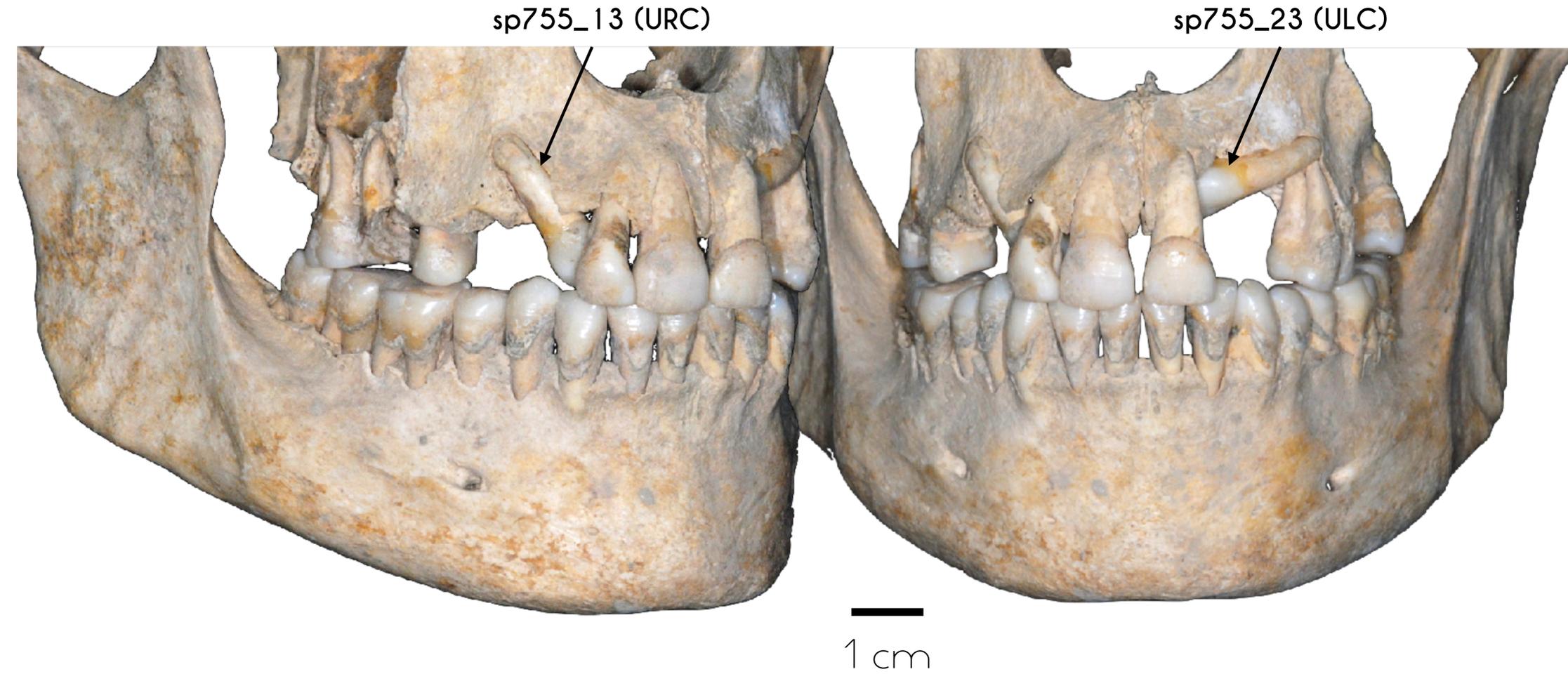
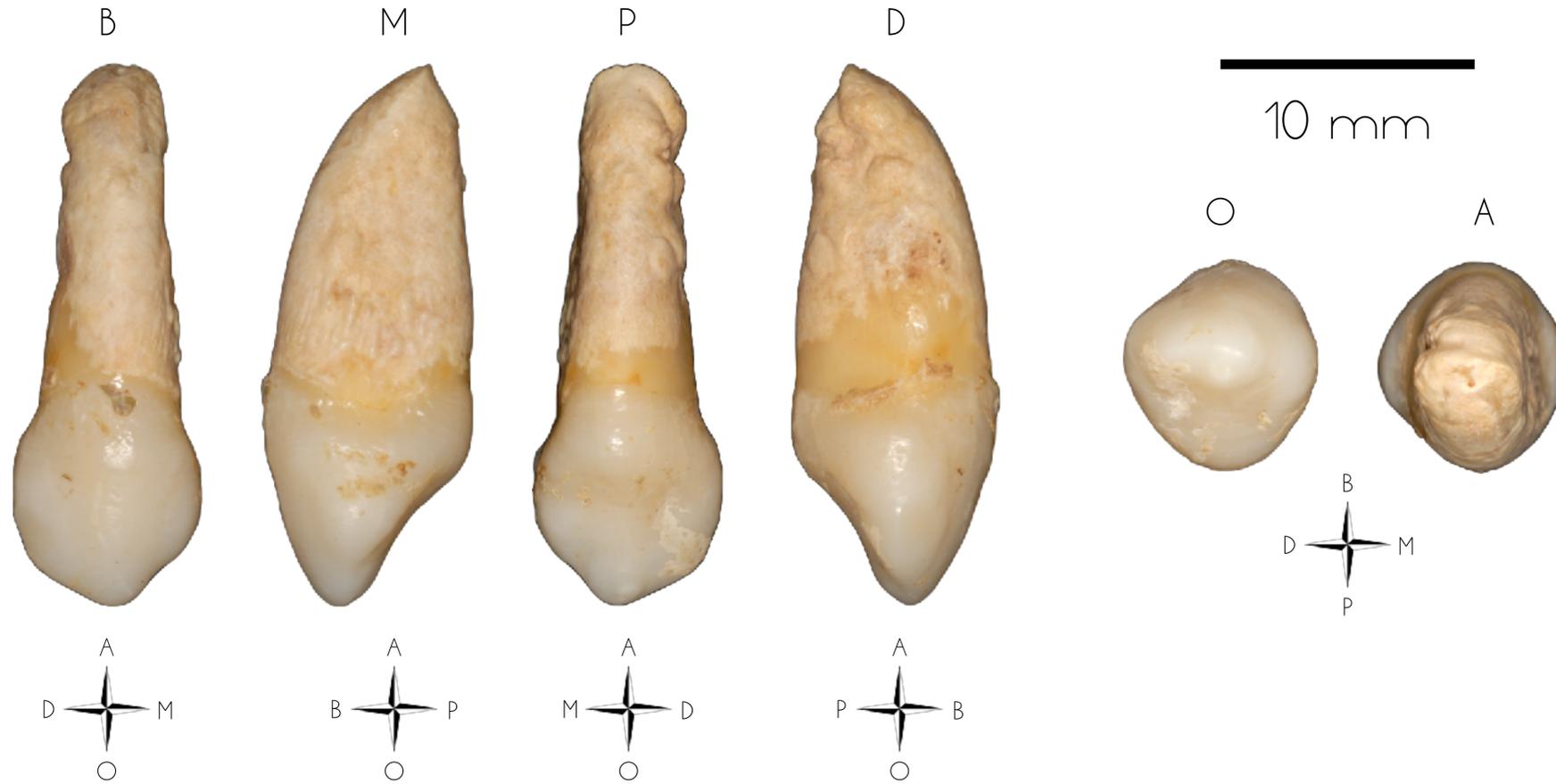


Sp755_13

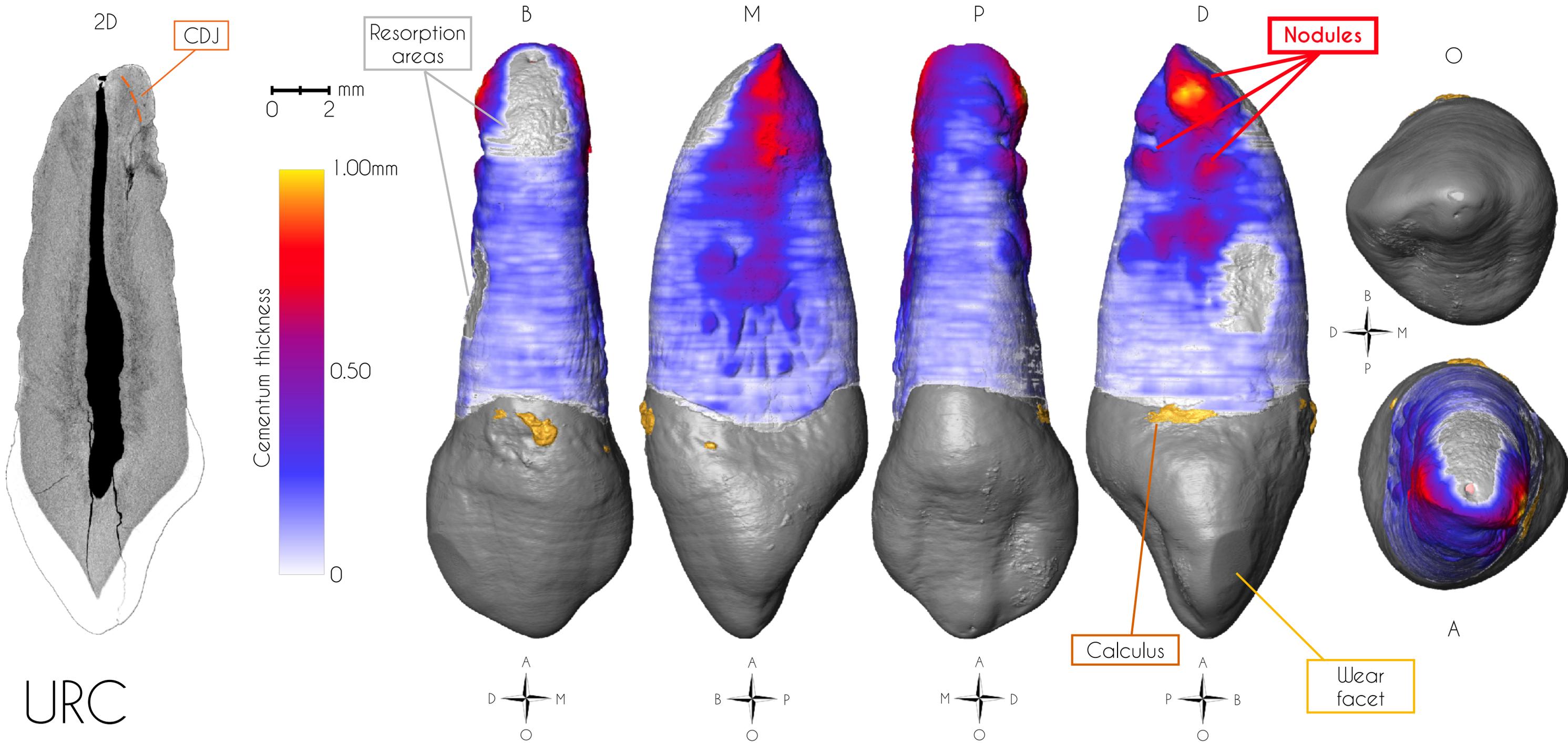
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URC	1	1	1	-	0	1	3.3.m	0	0	-	-

URC



DEG: degree; **DIR:** direction; **FOR:** form - **CAR:** carious lesion - **Pulp EXP:** pulp exposure - **IMP:** impaction - **FEN:** fenestration; **CAL:** calculus; **NT:** tooth loss in neighbouring teeth; **ANTA:** antagonist

Sp755_13



Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1000	2d	<	Yes	Nds (d)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;
Nds: nodules (m: mesial; d: distal; <: buccal; >: lingual)

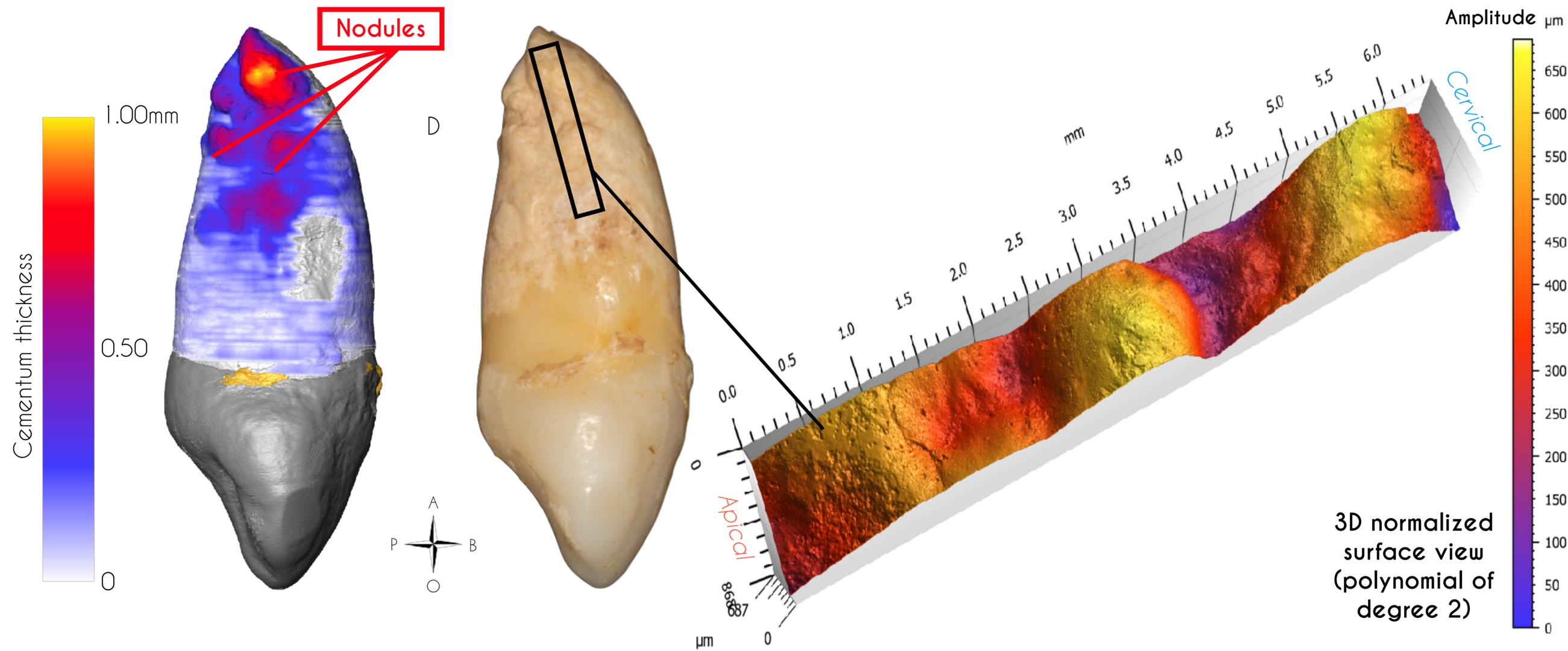
URC

Impacted

URC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	747	5.24%	0.88mm	6.60mm	1/11	2	Blue	1.5	1.8	10%

Sp755_13



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
2d	690	+S2	Nds

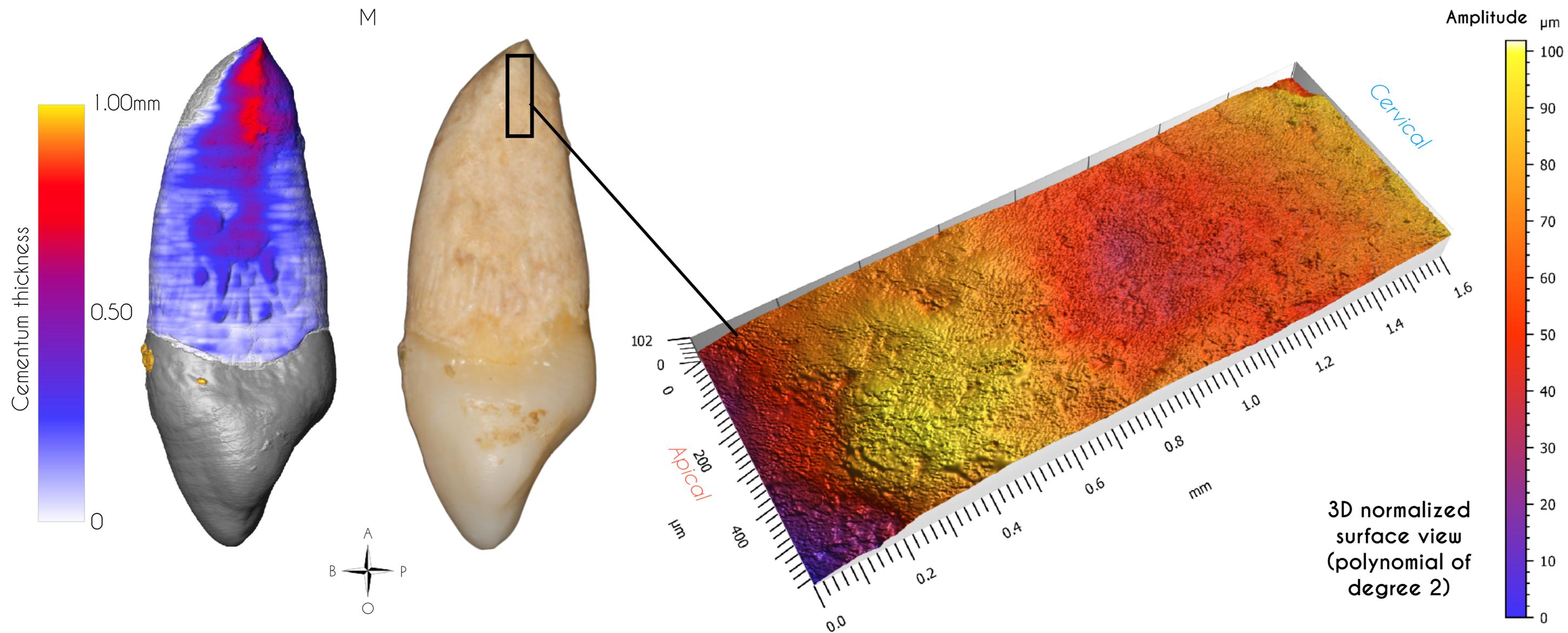
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
Nds: Nodules

Impacted

URC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1029	5.00%	0.88mm	3.04mm	1/5	2	Blue	1.5	1.8	10%

Sp755_13



Confocal microscopy - Topography 3D maps			
OF	MAX VE (μm)	ST	Note
2m	100	-R2	-

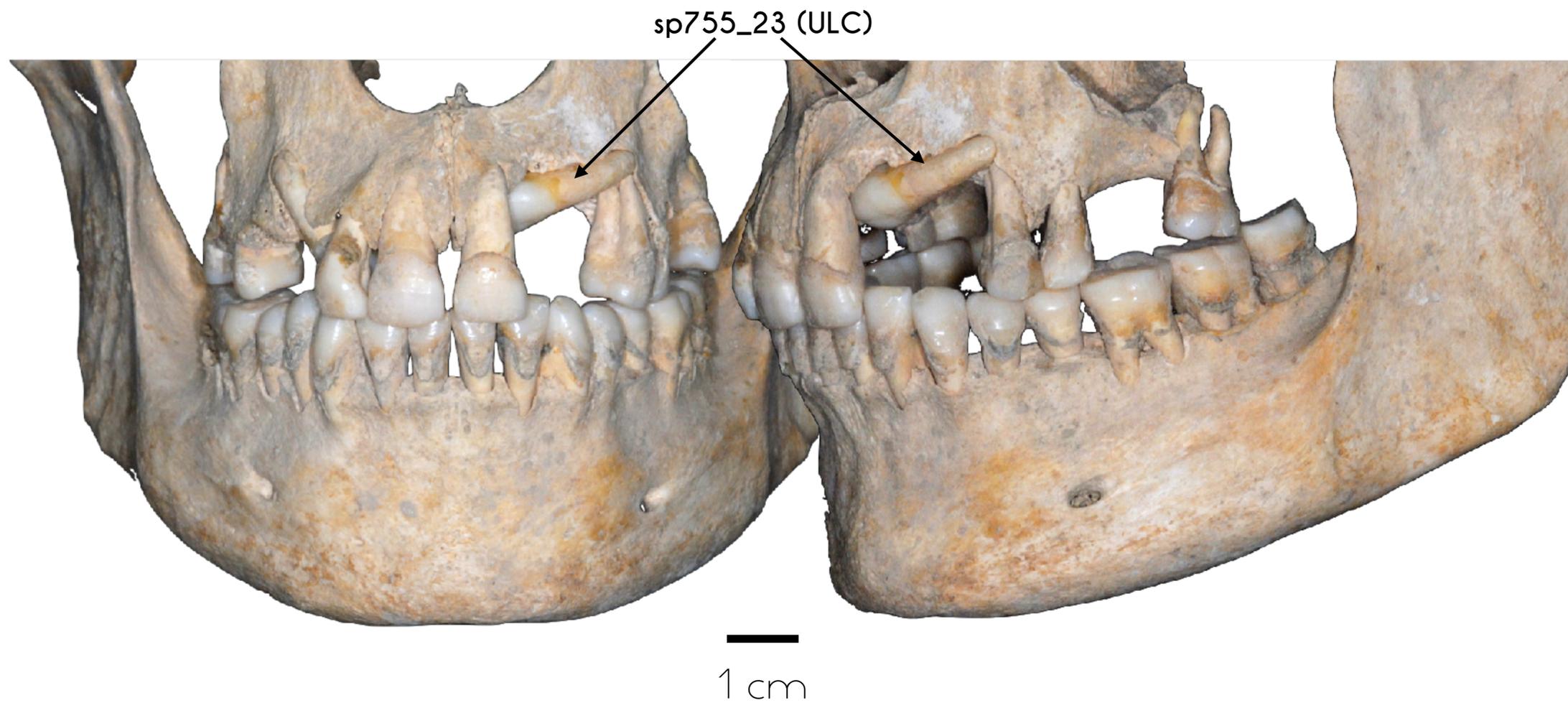
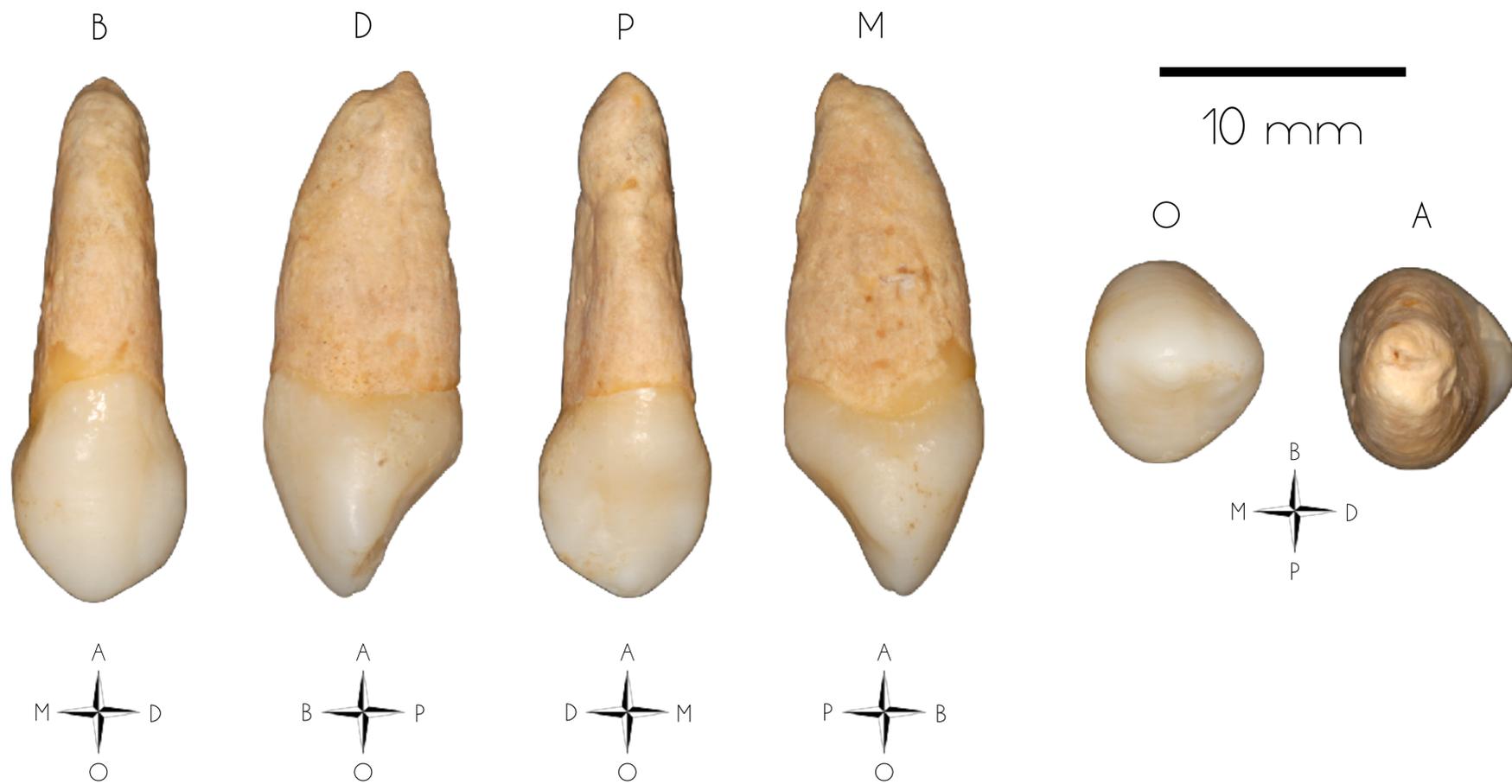
OF: other face (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Impacted

Sp755_23

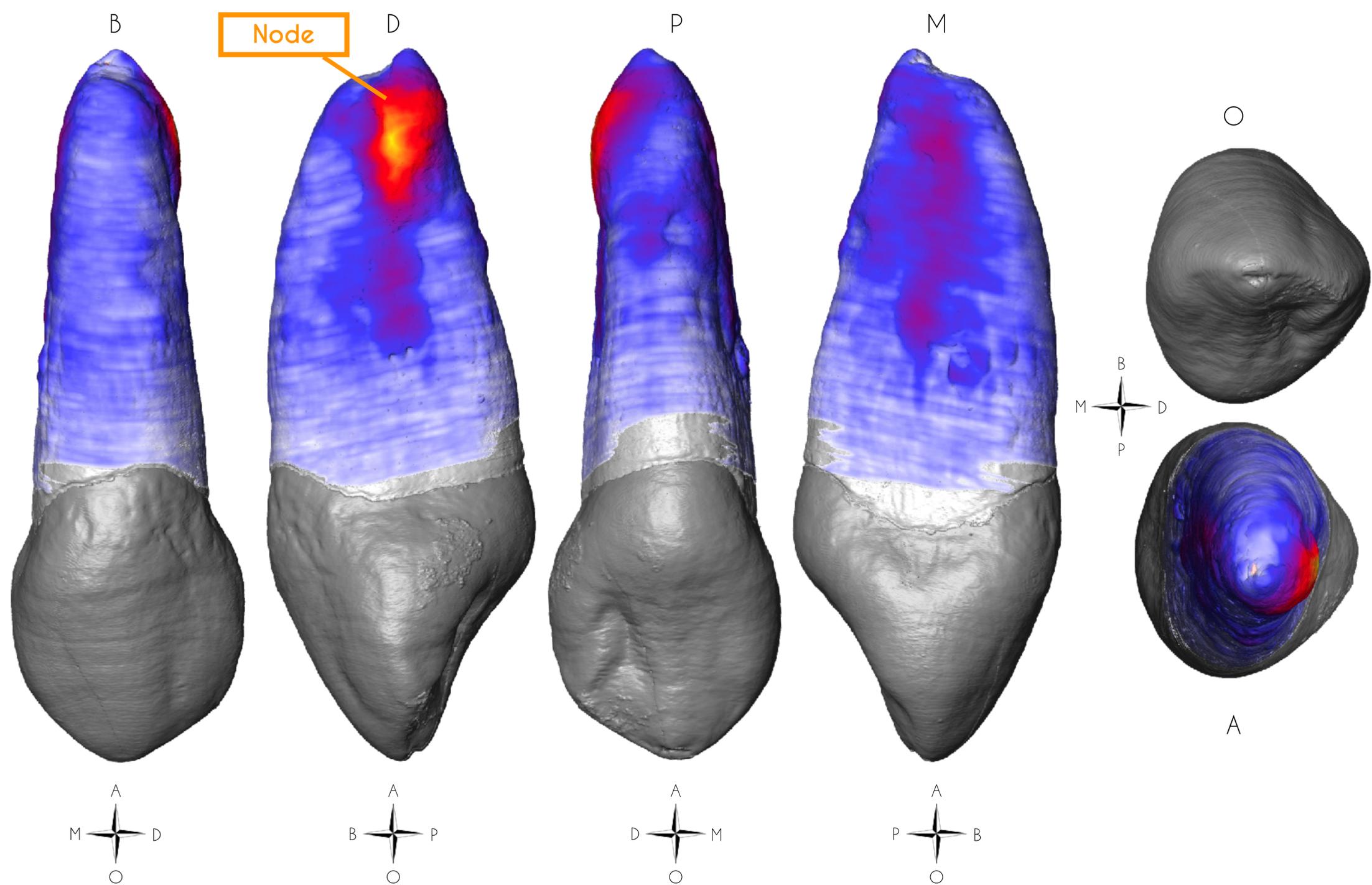
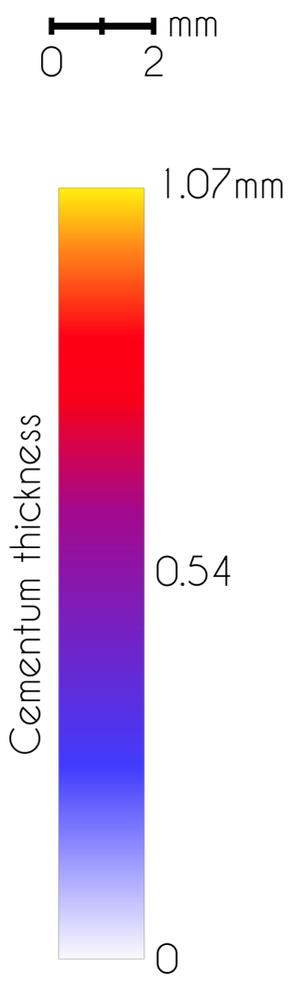
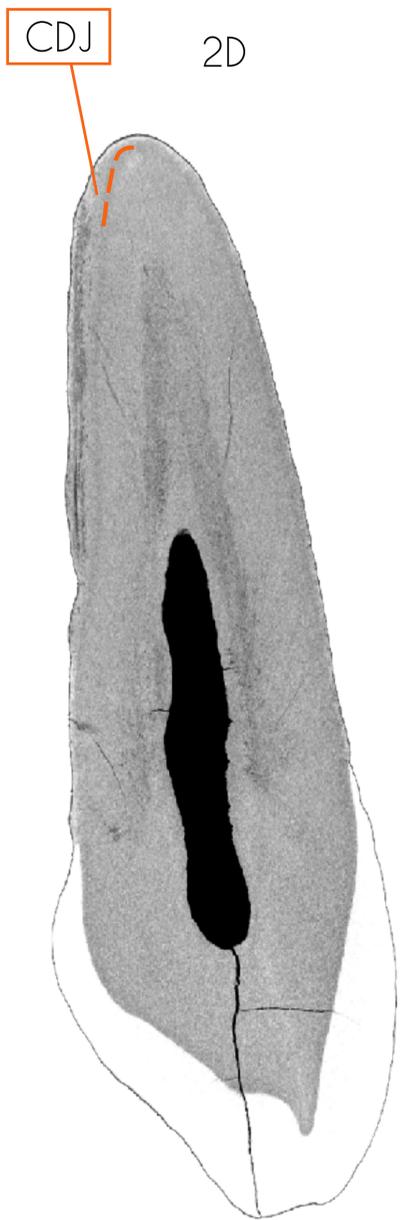
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
ULC	1	1	1	-	0	1	3.3.m	0	0	-	-

ULC



DEG: degree; **DIR:** direction; **FOR:** form - **CAR:** carious lesion - **Pulp EXP:** pulp exposure - **IMP:** impaction - **FEN:** fenestration; **CAL:** calculus; **NT:** tooth loss in neighbouring teeth; **ANTA:** antagonist

Sp755_23



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1070	2d	<	Yes	NOD (d)

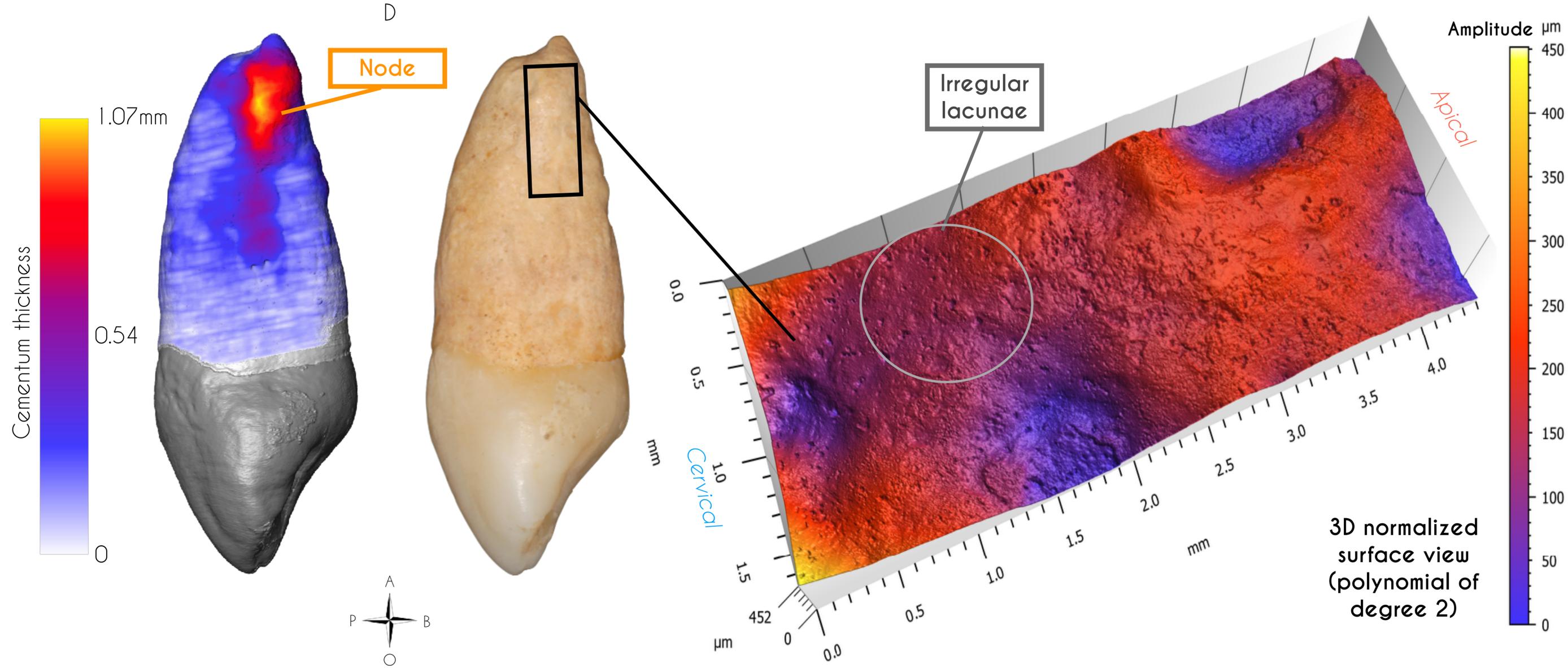
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;
NOD: node (m: mesial; d: distal; <: buccal; >: lingual)

Impacted

ULC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	1014	4.97%	1.67mm	4.82mm	2/8	2	Blue	1.5	1.8	10%

Sp755_23



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
2d	450	+S2	IL

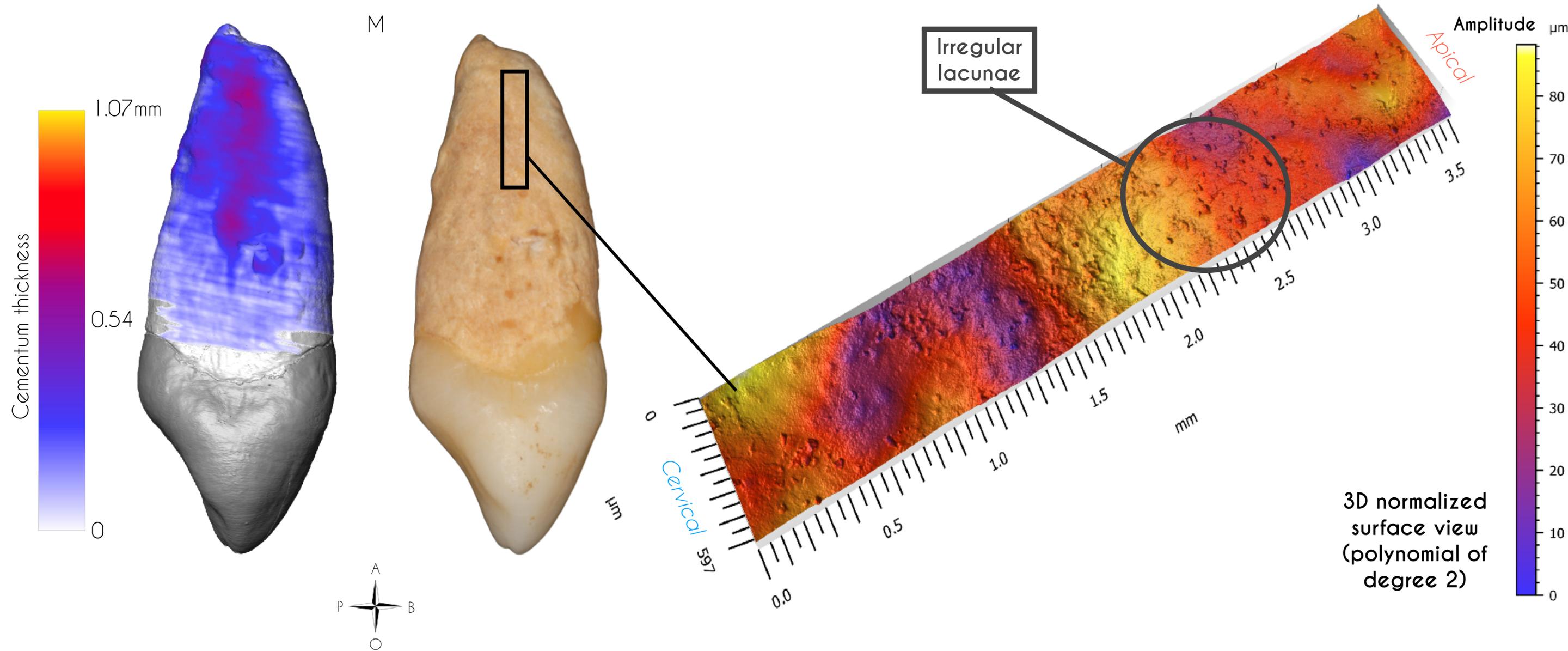
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
IL: irregular lacunae

Impacted

ULC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	751	5.50%	0.88mm	4.23mm	1/7	2	Blue	1.47	1.61	10%

Sp755_23



Confocal microscopy - Topography 3D maps			
OF	MAX VE (µm)	ST	Note
2m	90	-R2	IL

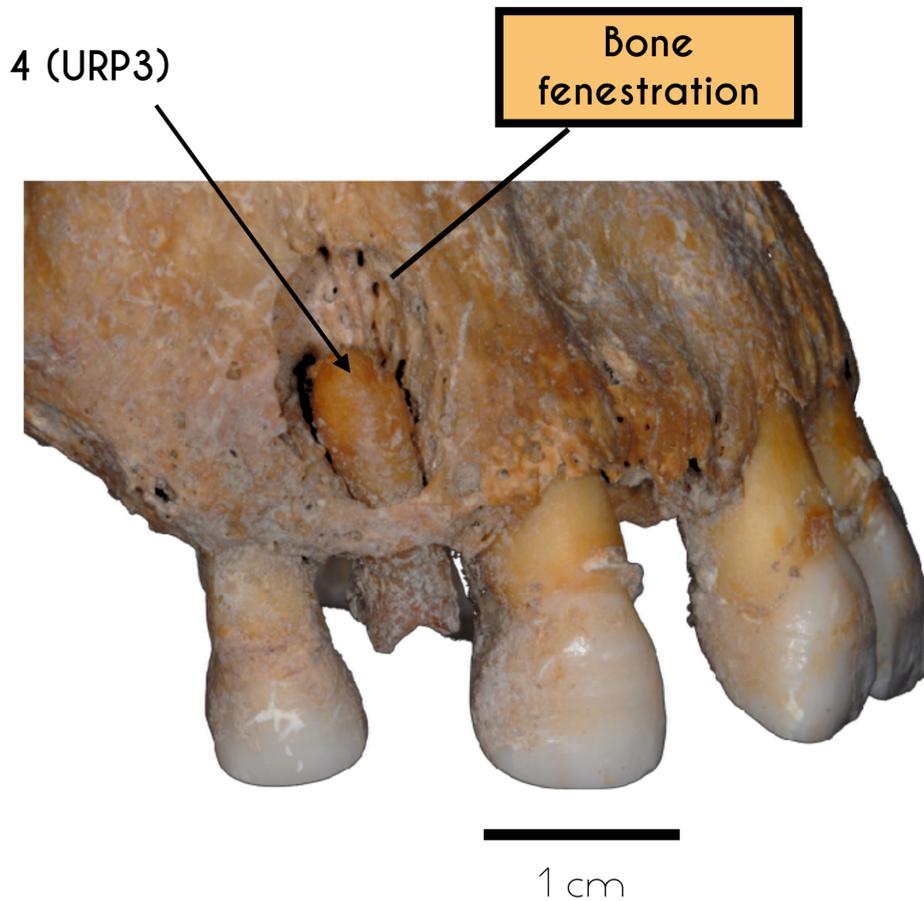
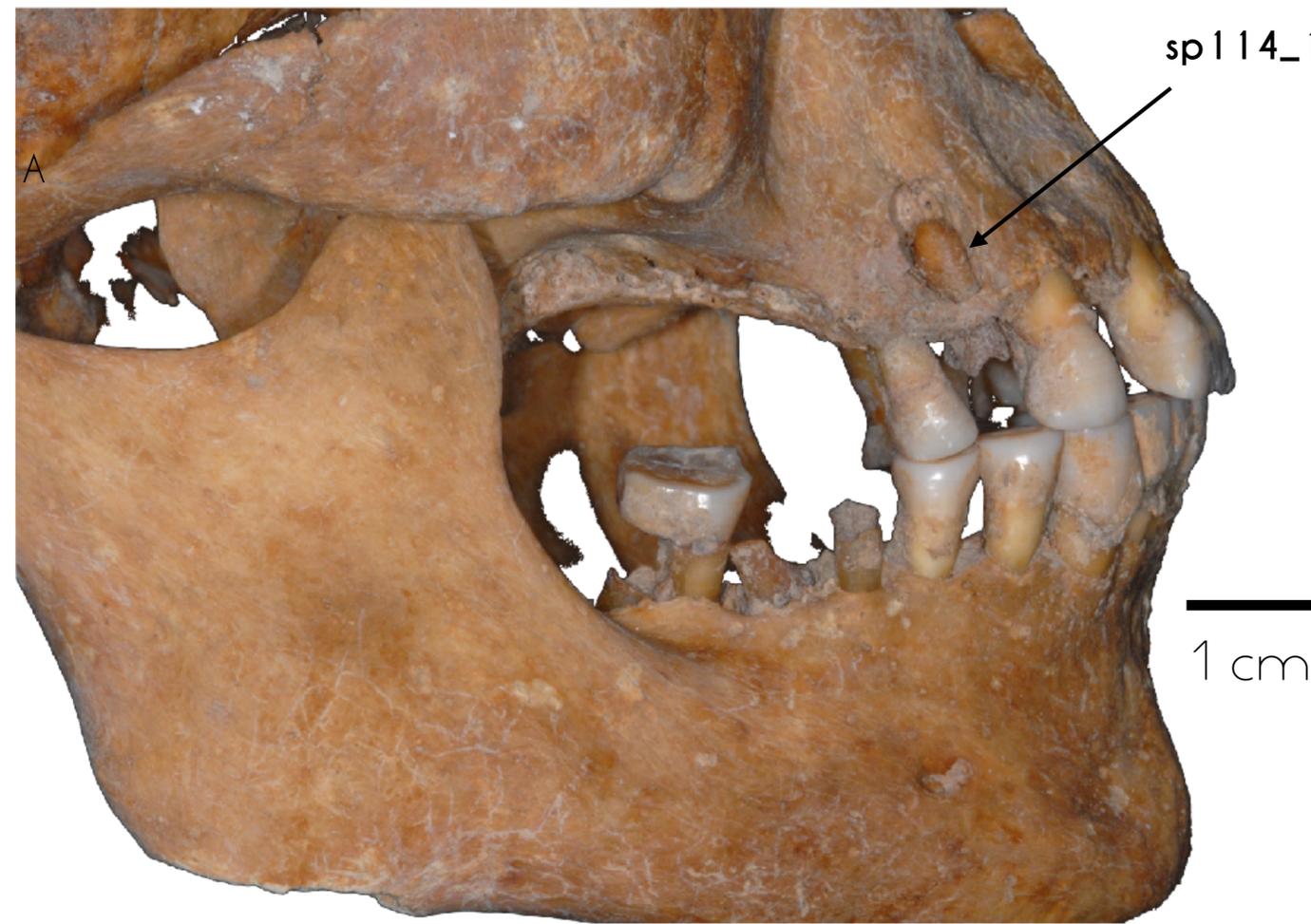
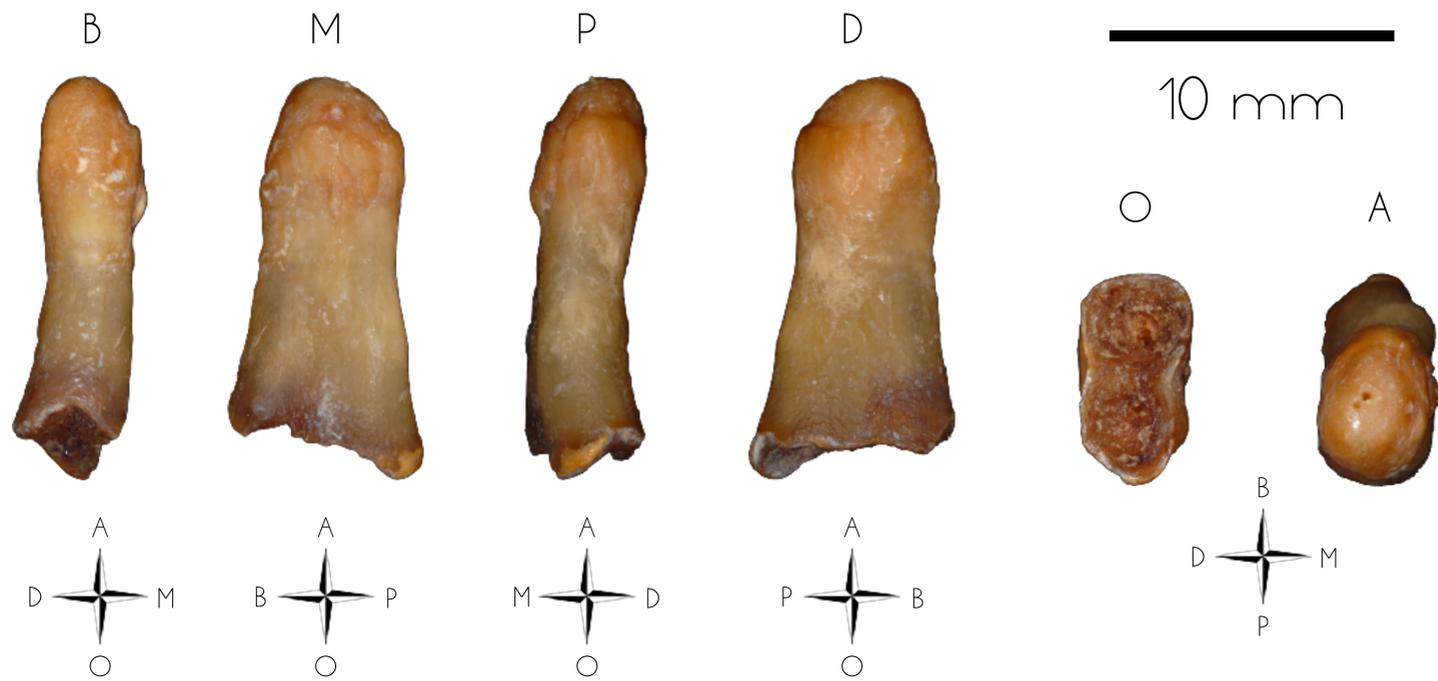
OF: other face;
 MAX VE: maximum vertical elevation;
 ST: surface texture; : scored (+) if it is high, (-) if it is low; S: smooth or R: rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
 IL: irregular lacunae

Impacted

Sp114_14

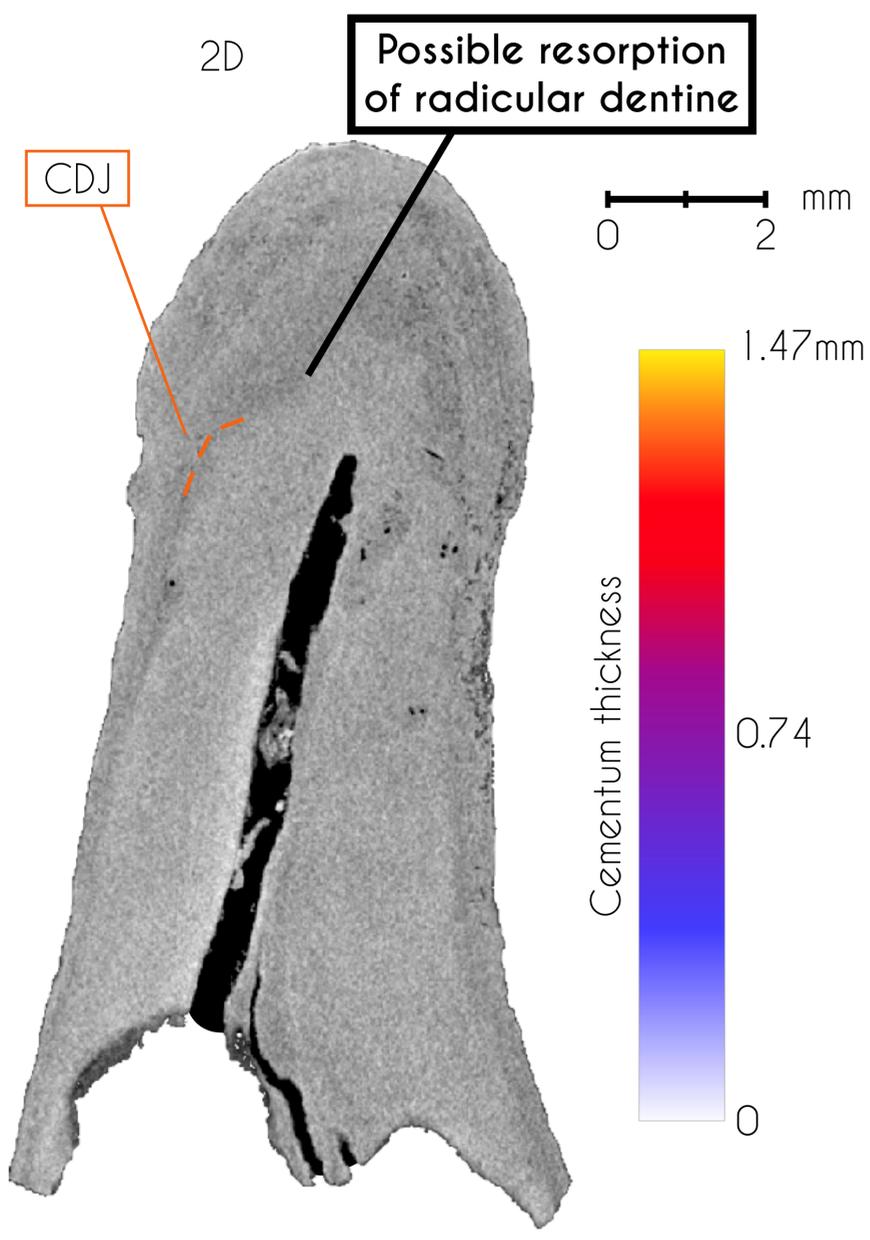
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URP3	NA	NA	NA	1/4	M	0	3.4.M	1	0	0	1

URP3

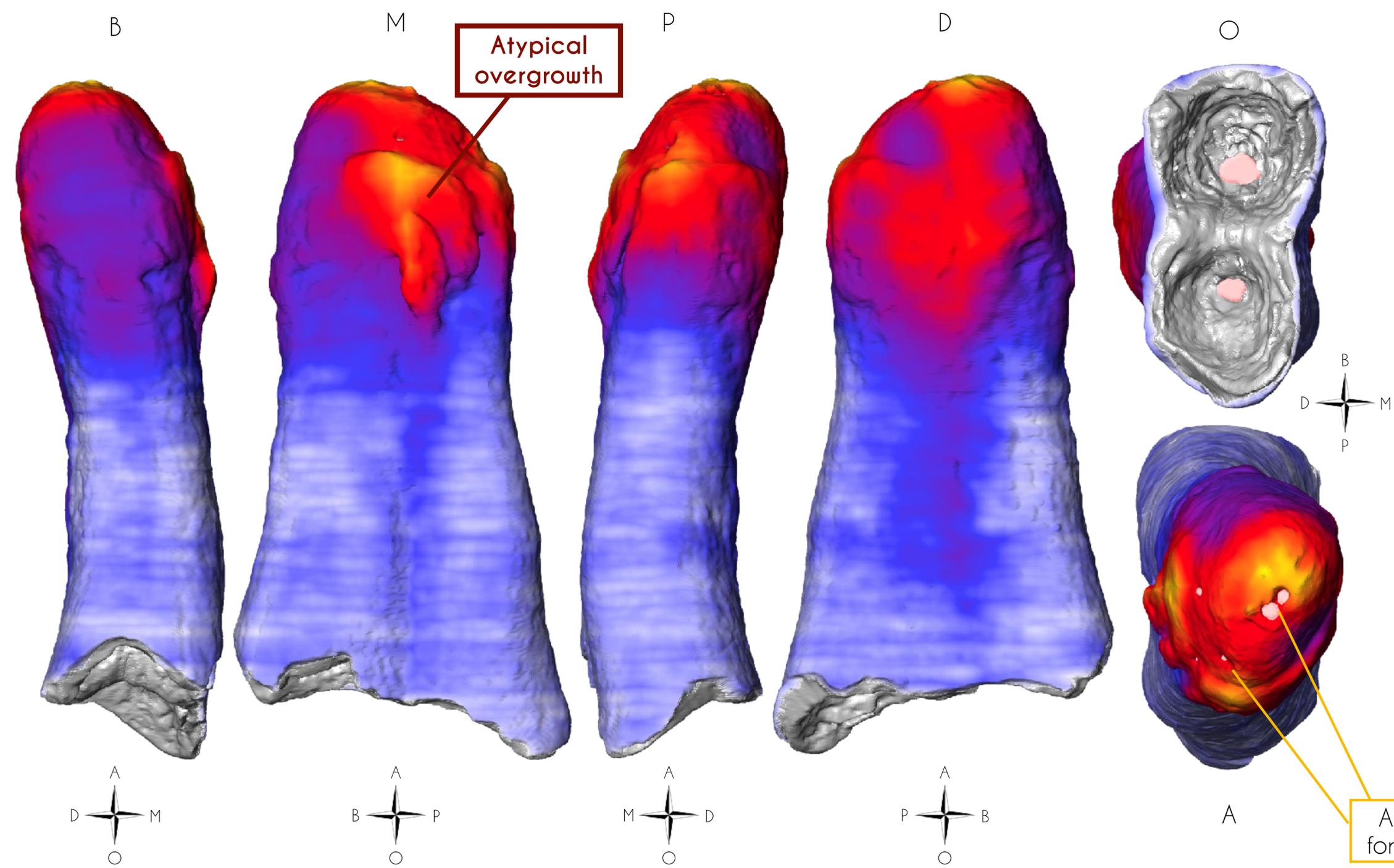


DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp114_14



URP3

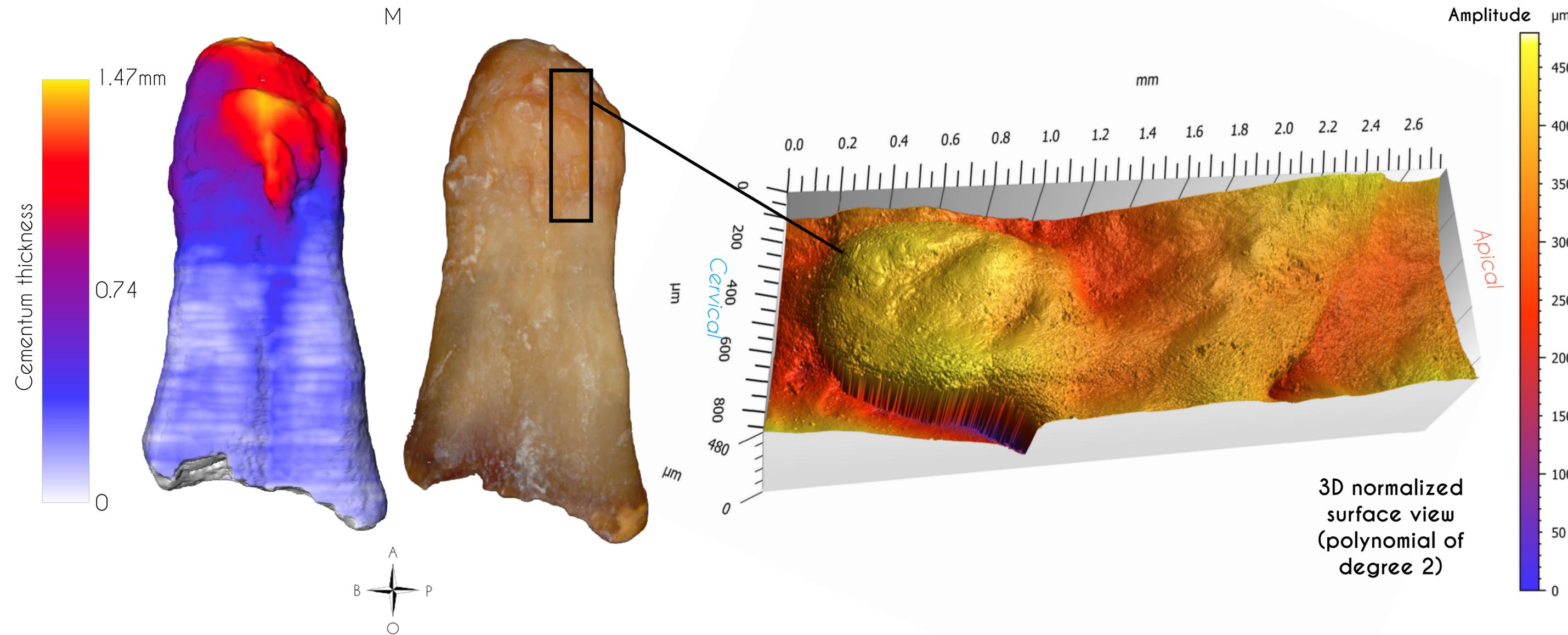


Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1470	m	<	No	OG

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;
OG: atypical overgrowth

Infected

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
MP	1032	7.00%	0.88mm	3.63mm	1/6	2	Blue	1.5	1.8	10%



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
m	475	+S2	-

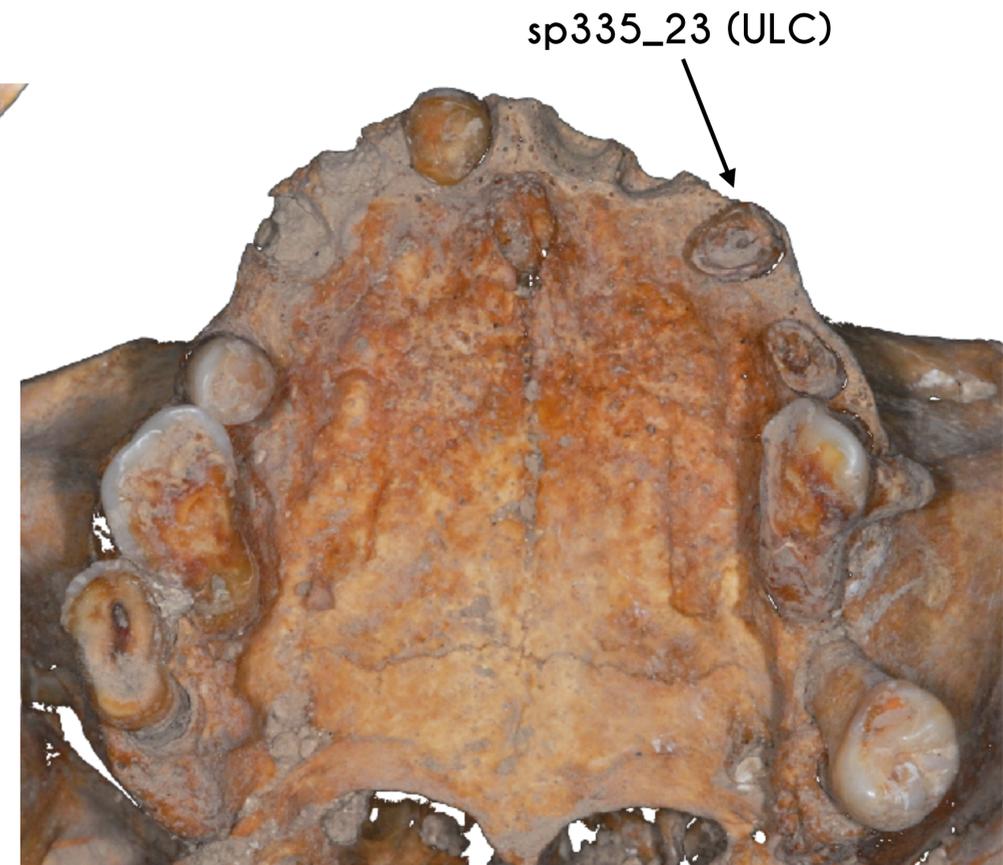
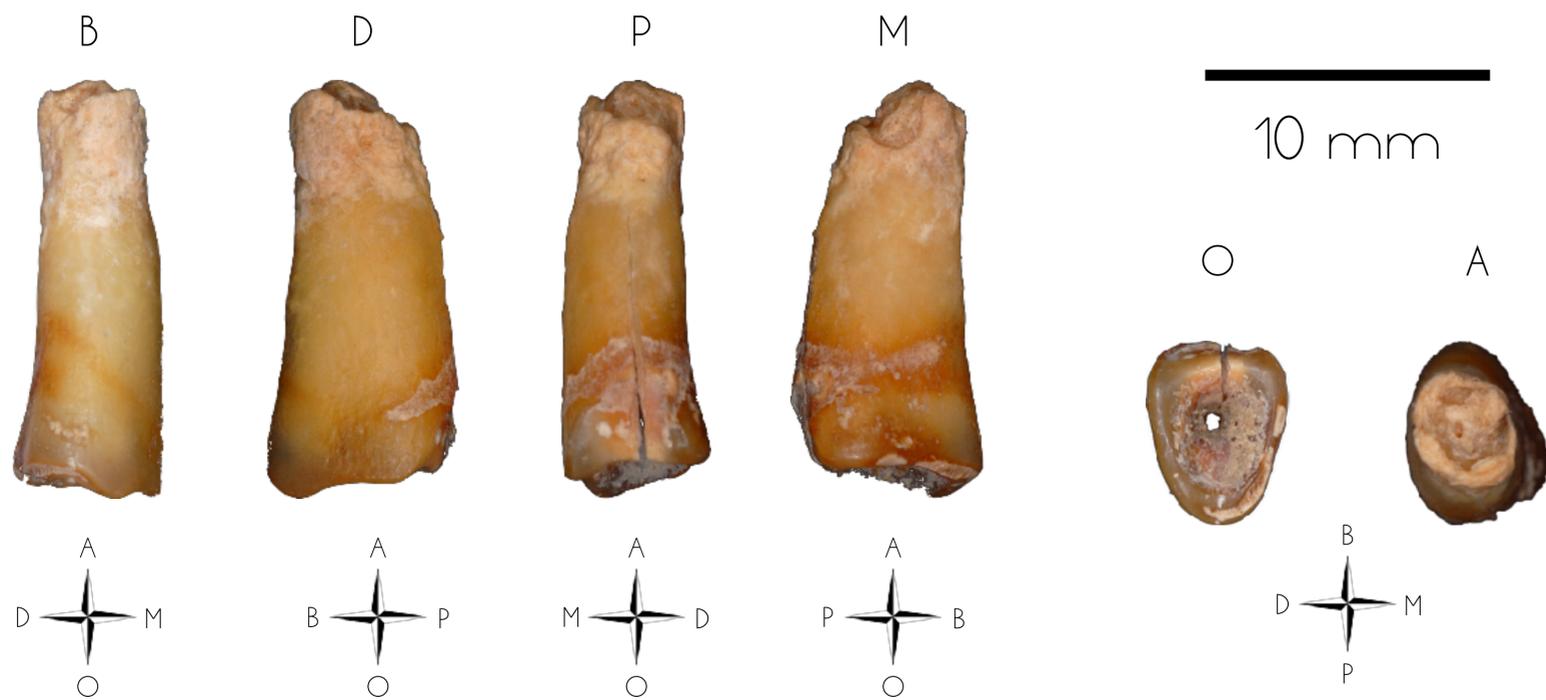
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Infected

Sp335_23

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
ULC	NA	NA	NA	1/4	M	0	1.4.M	1	0	2	1

ULC

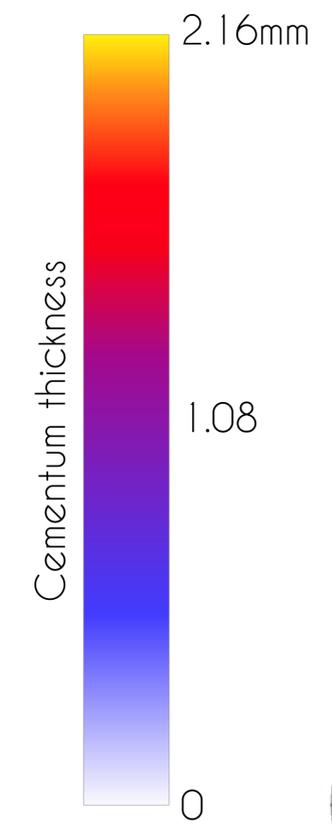


DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

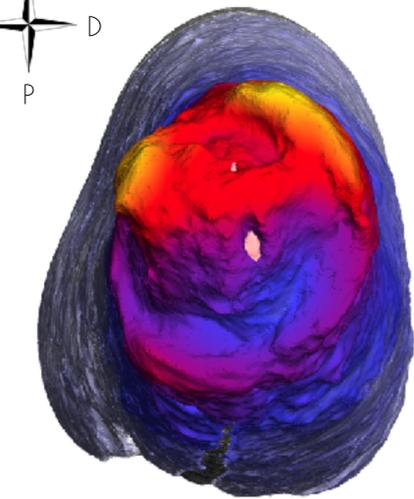
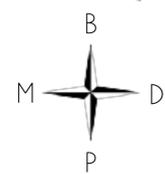
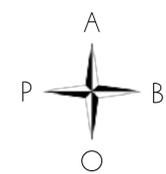
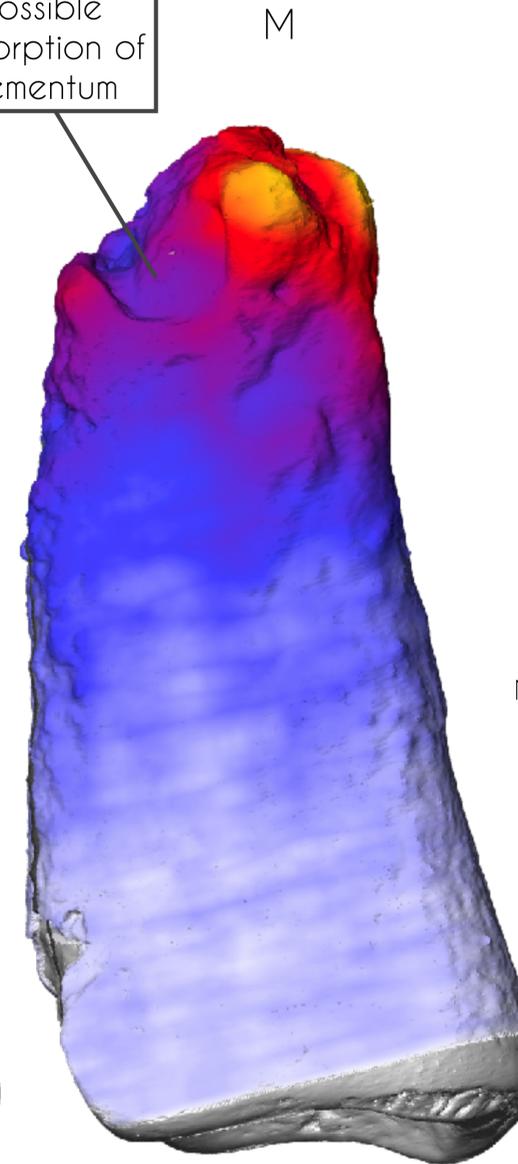
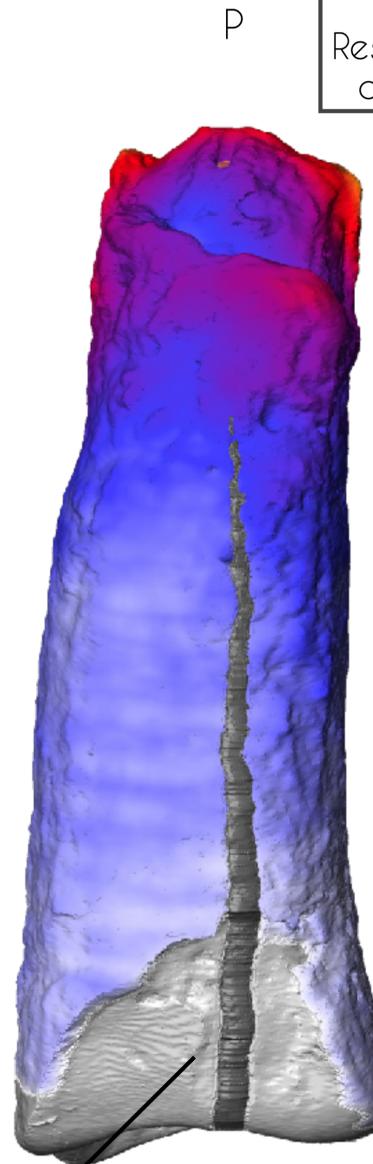
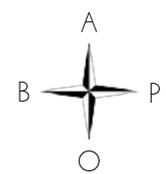
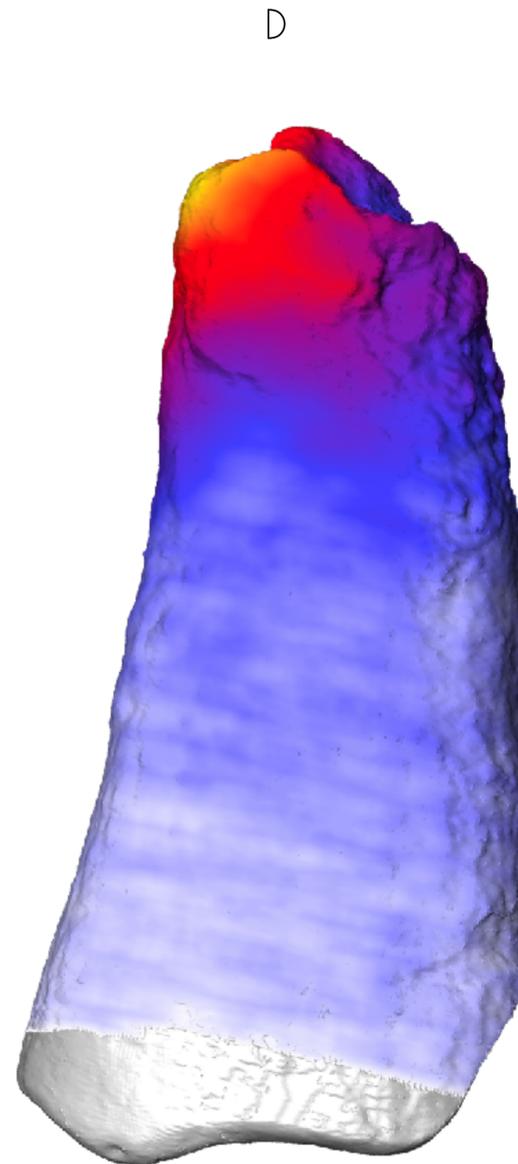
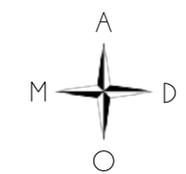
Sp335_23



0 2 mm



ULC



A

Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
2160	<	>	No	RES (>)

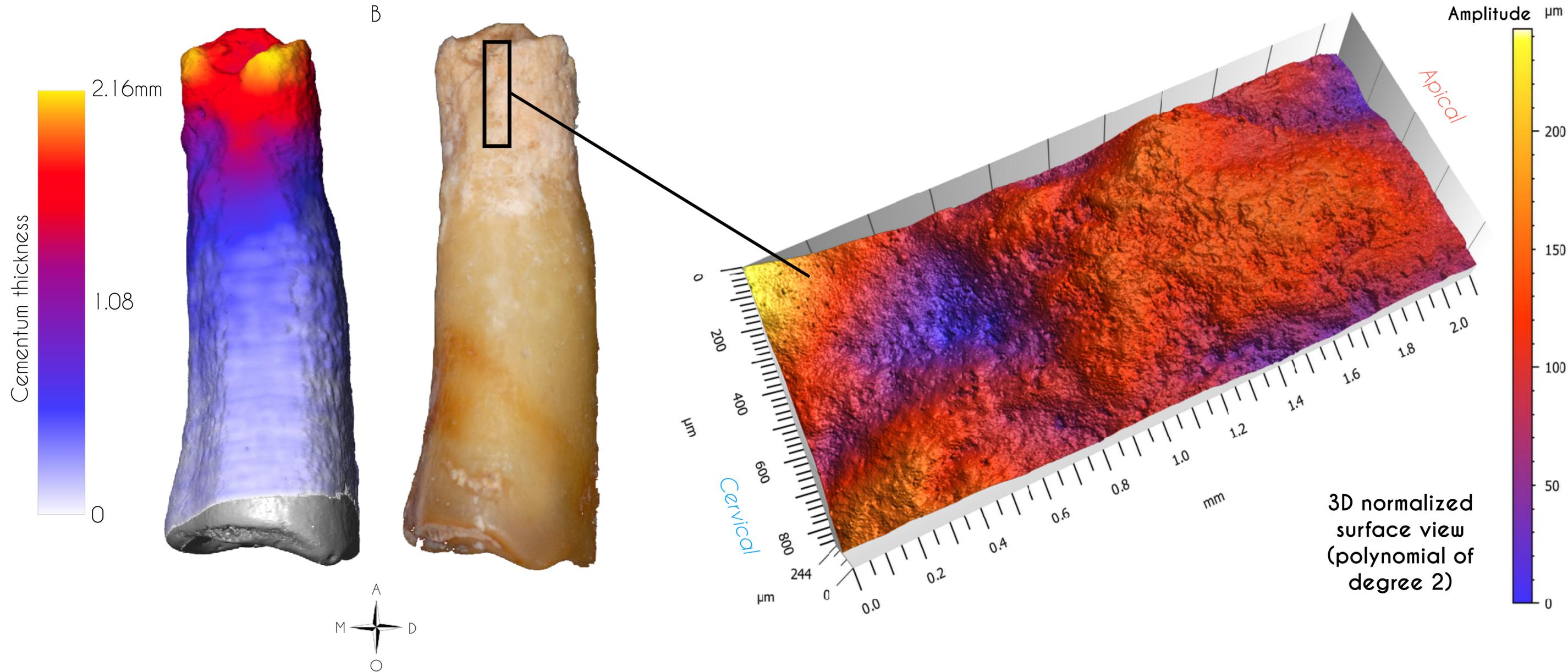
MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 PREF LOC: preferential location;
 RES: resorption;
 (<: buccal; >: lingual)

Infected

ULC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
BD	1206	4.71%	0.88mm	2.44mm	1/4	2	Blue	1.5	1.8	10%

Sp335_23



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
<	250	+R2	-

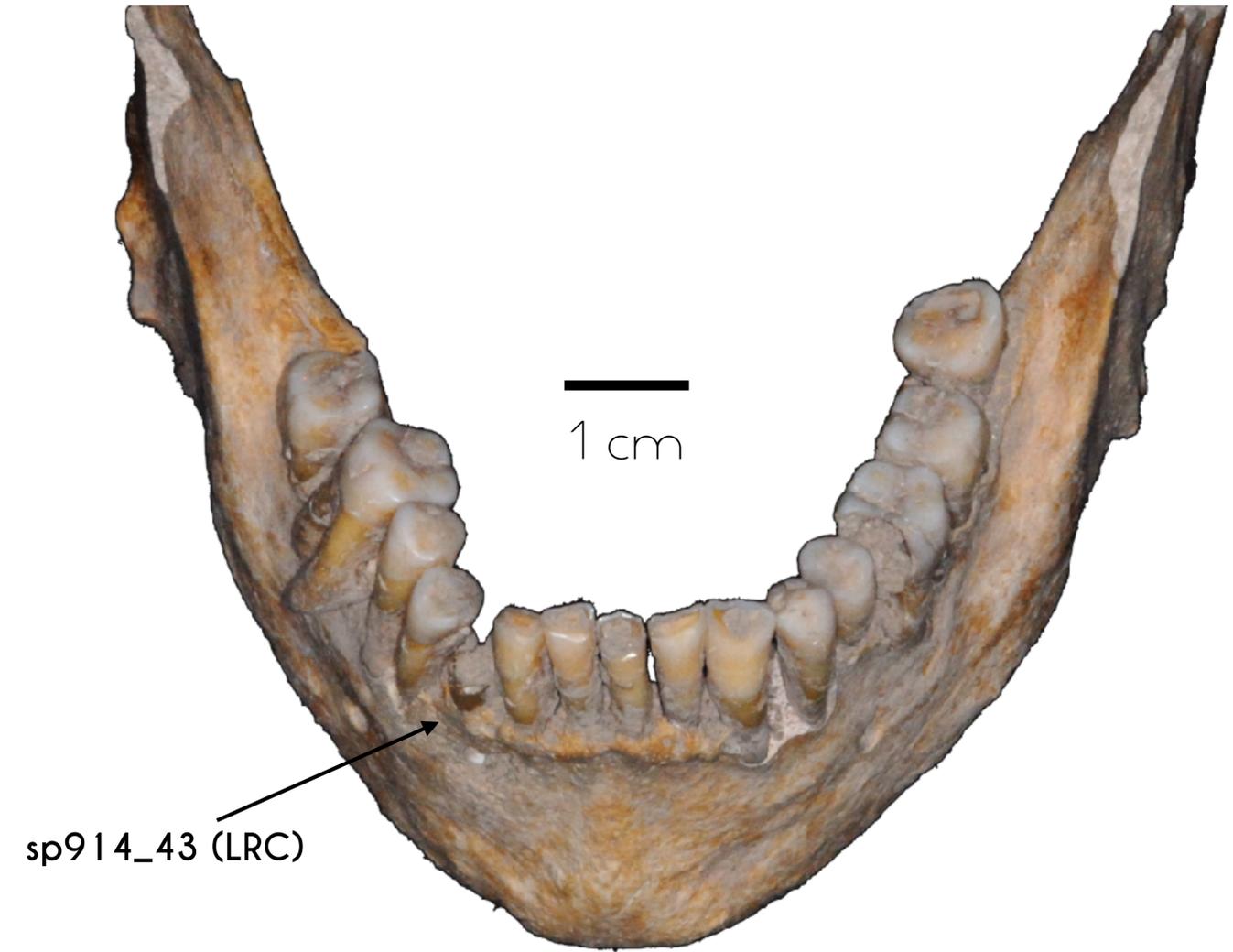
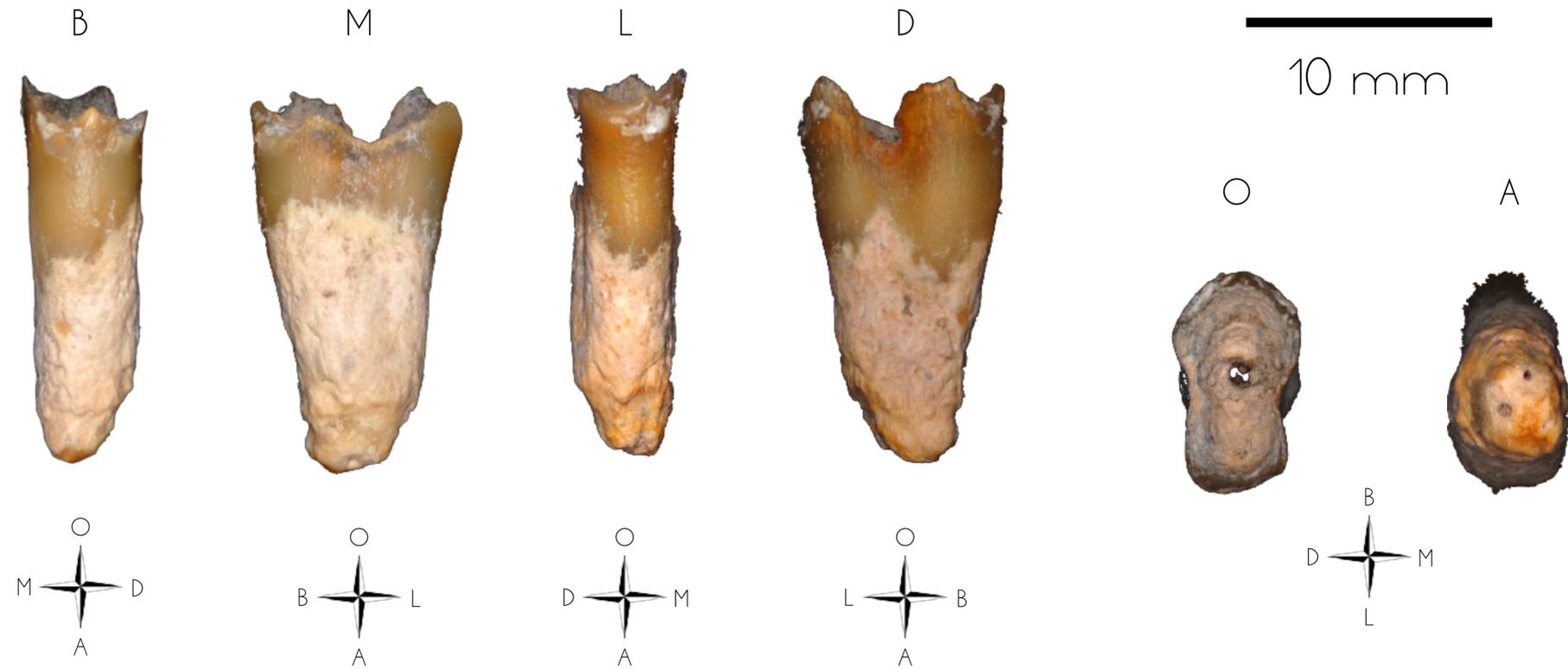
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Infected

Sp914_43

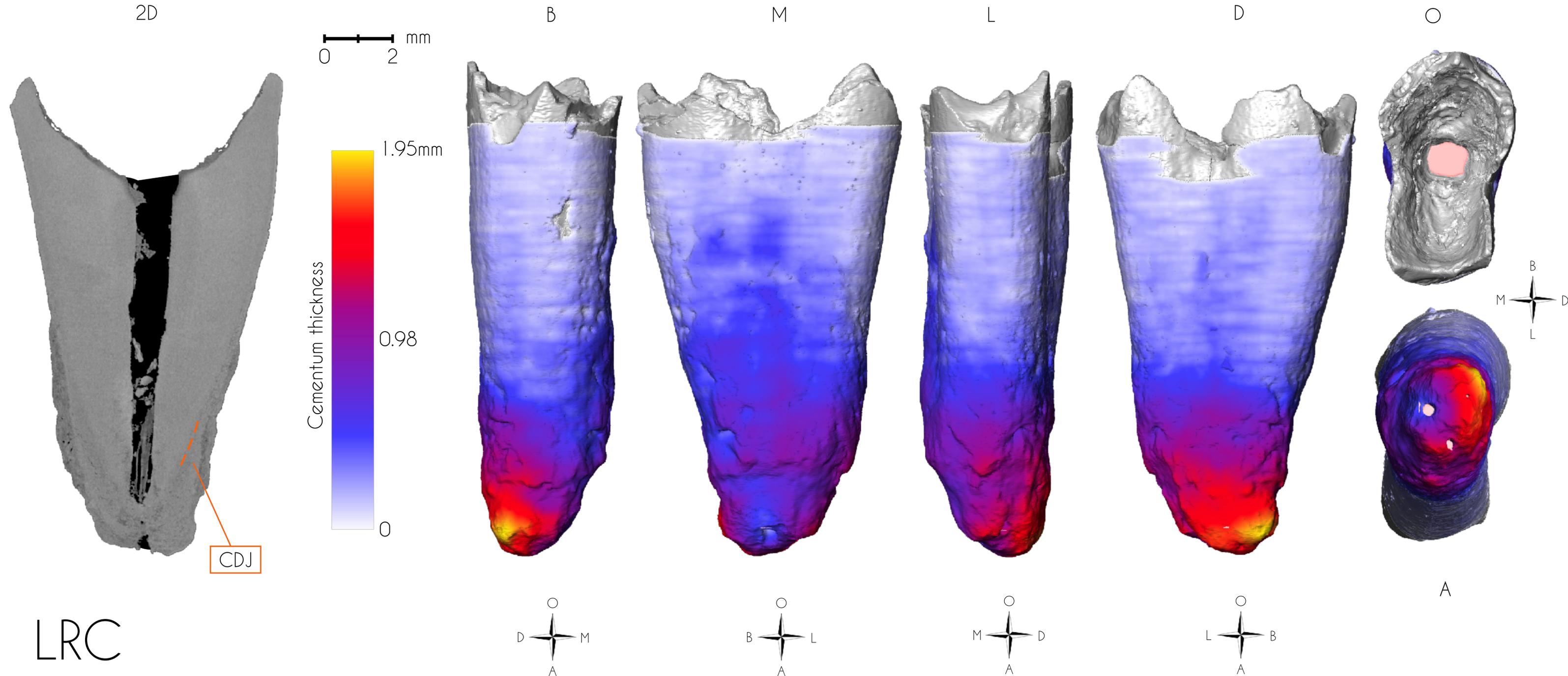
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LRC	NA	NA	NA	1/4	M	0	1.4.m	0	0	0	NA

LRC



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp914_43



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1950	d	m	No	-

MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 (m: mesial; d: distal)
 PREF LOC: preferential location;

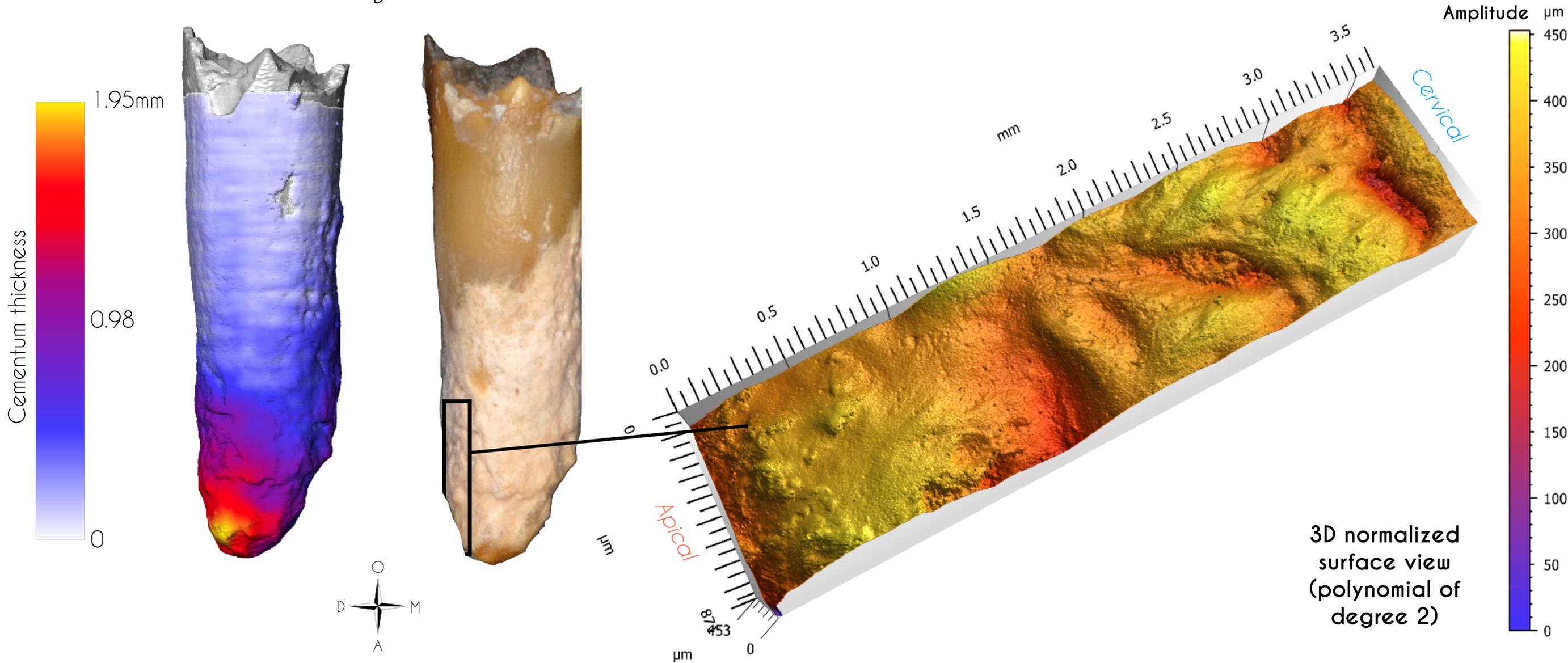
Infected

LRC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
BD	652	6.28%	0.88mm	3.63mm	1/6	2	Blue	1.47	1.61	10%

Sp914_43

B



3D normalized surface view (polynomial of degree 2)

Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
D	450	+S2	-

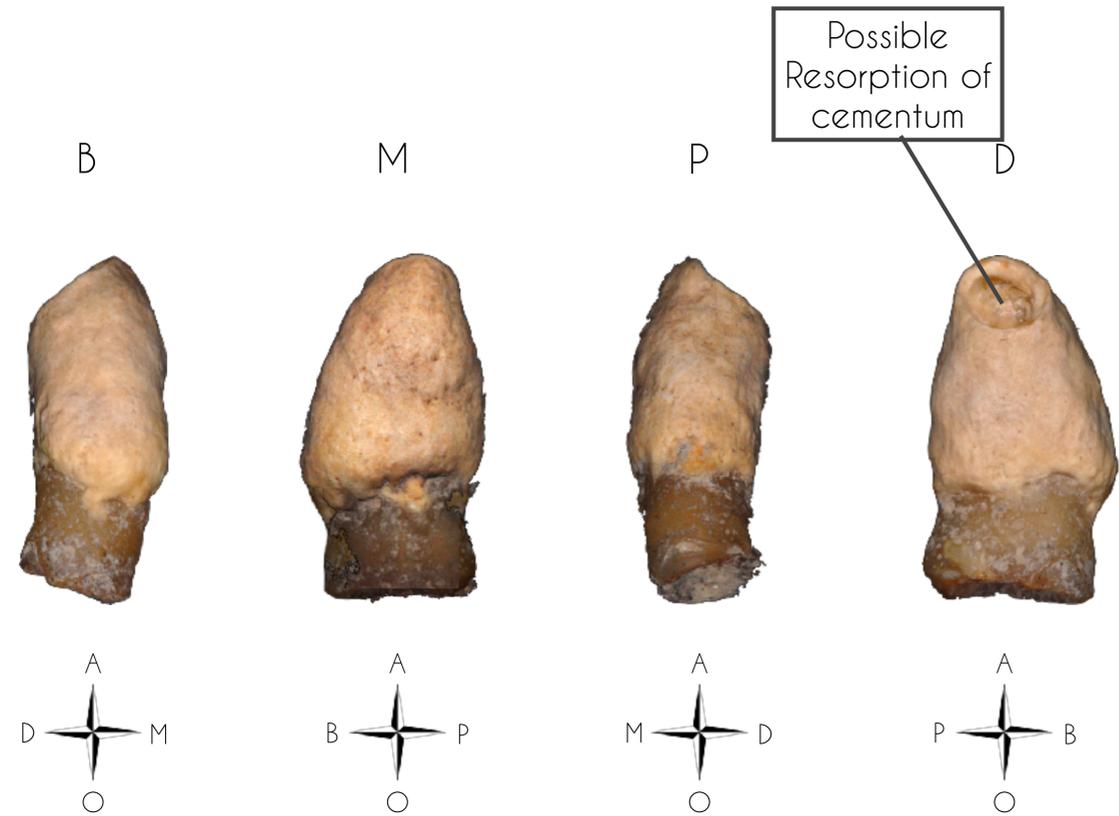
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Infected

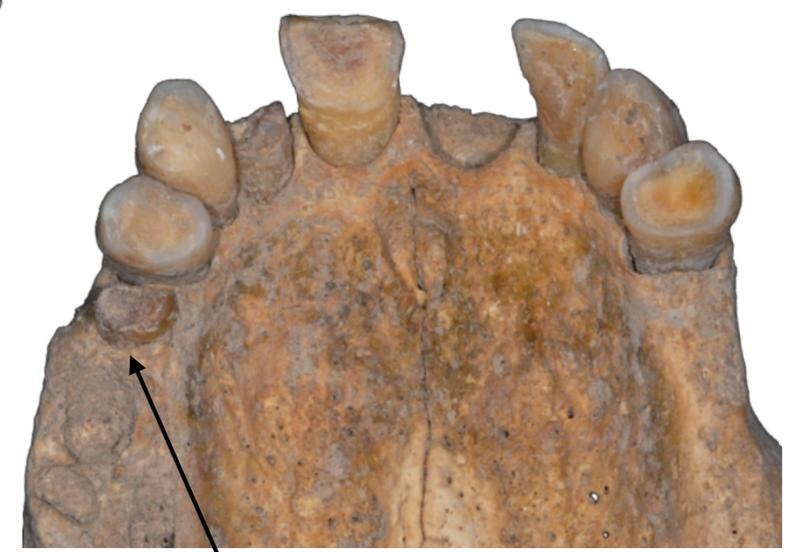
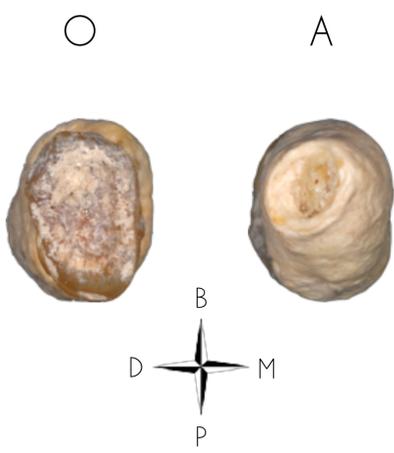
Sp1172_15

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URP4	NA	NA	NA	1/4	M	0	1.4.M	0	0	1d	1

URP4



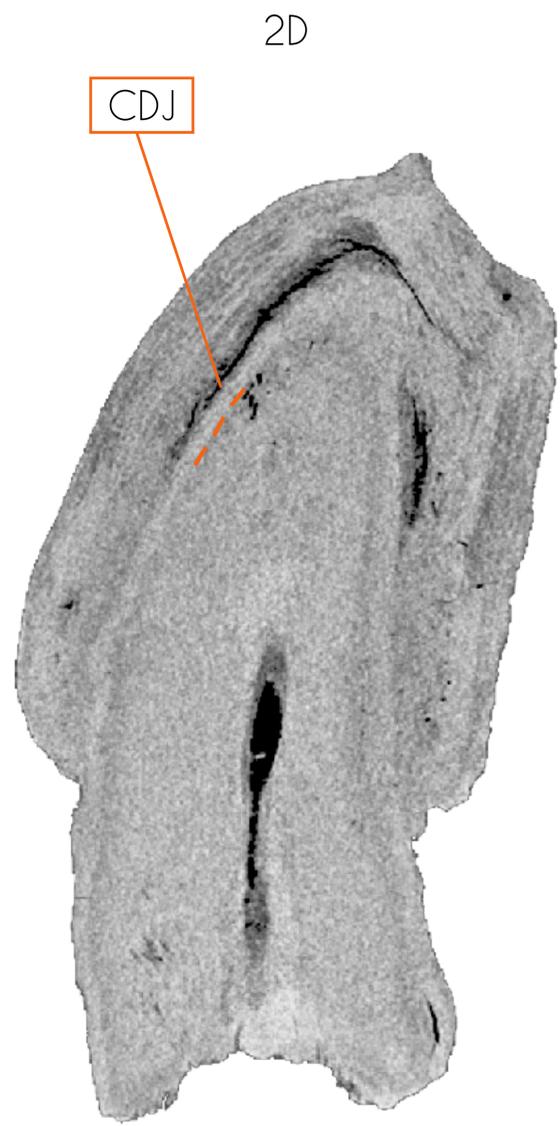
10 mm



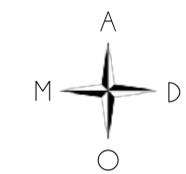
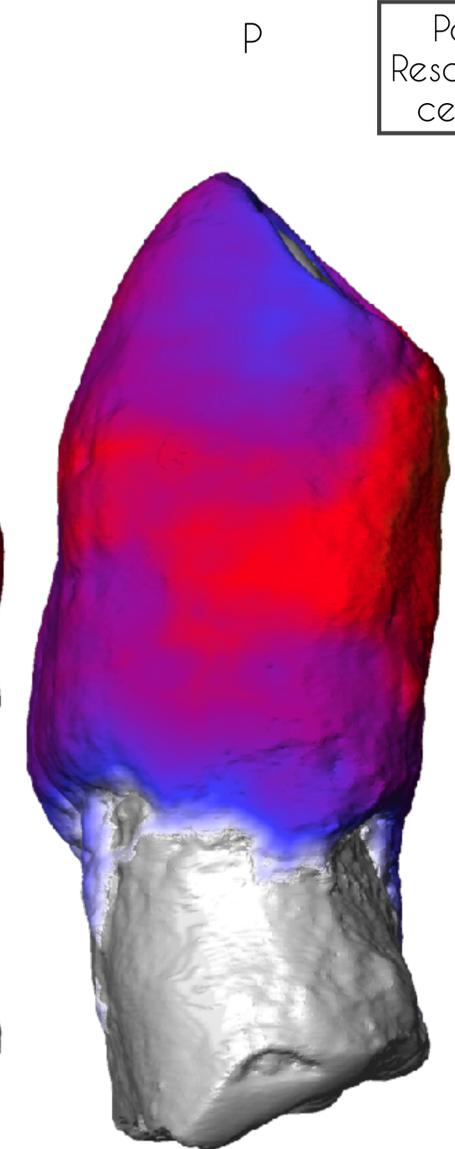
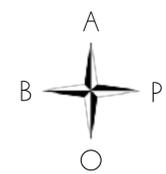
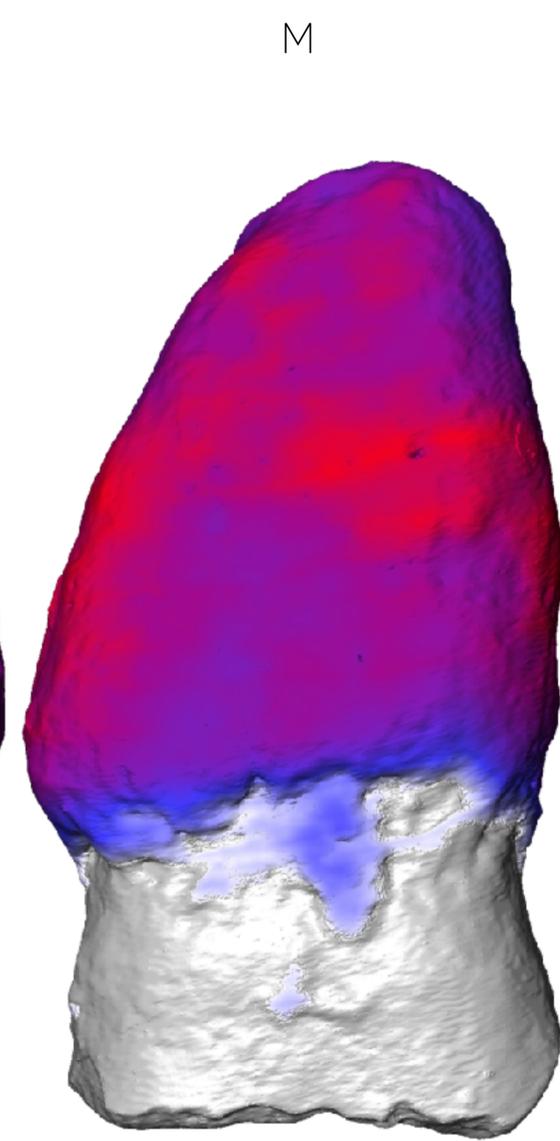
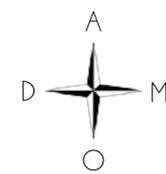
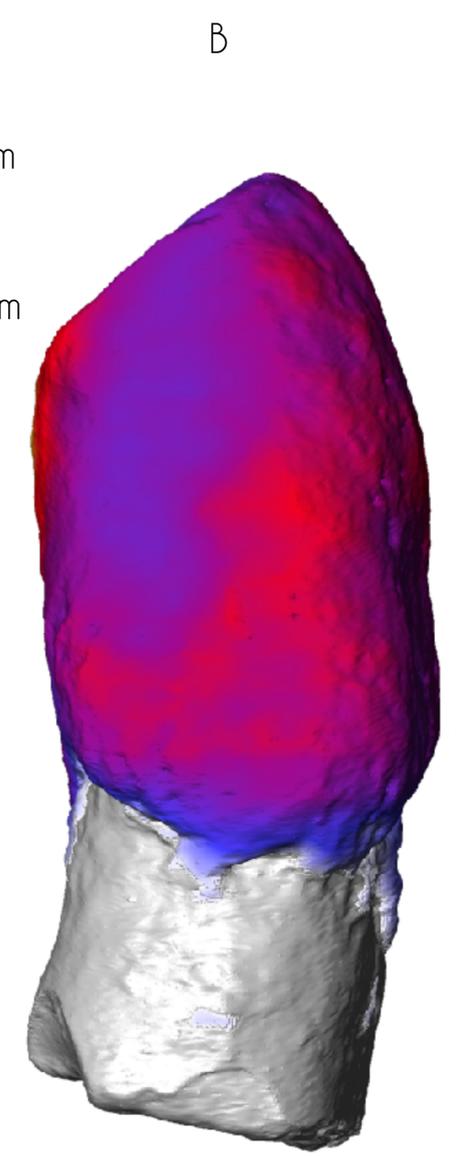
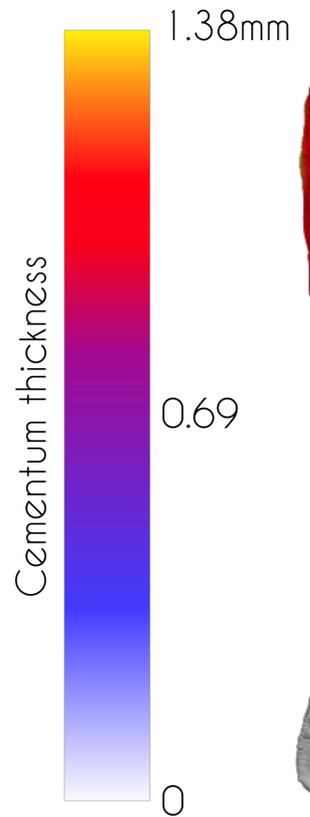
sp1172_15 (URP4)

DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

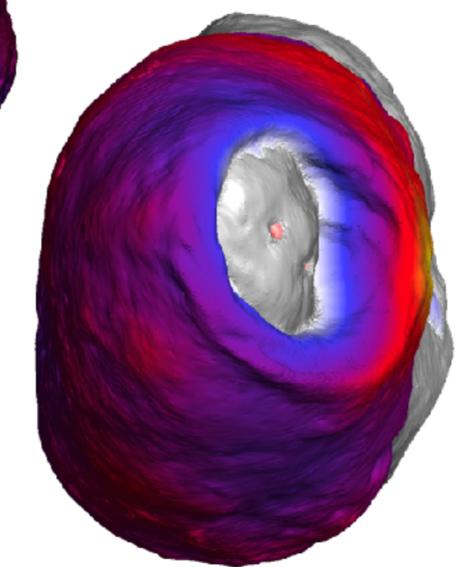
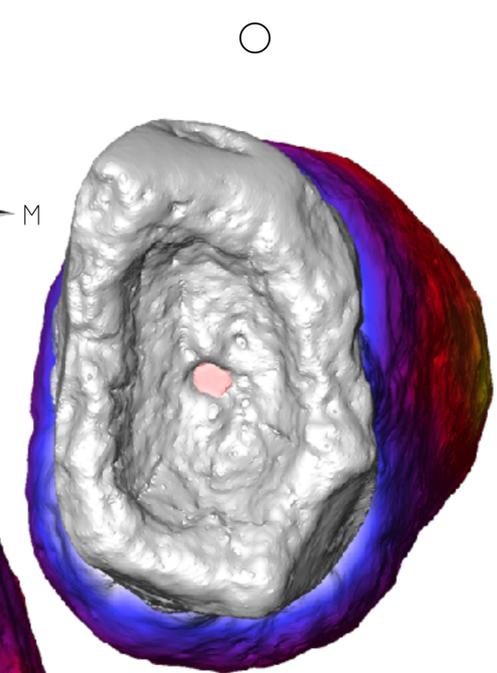
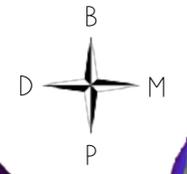
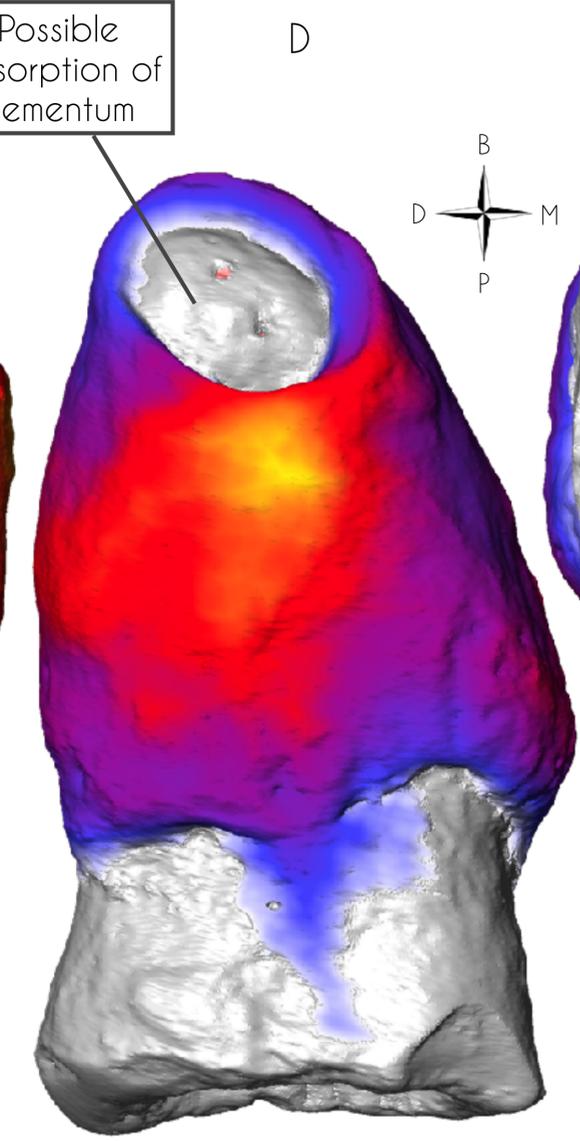
Sp1172_15



0 2 mm



Possible Resorption of cementum



A

Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1380	d	No	No	RES (d)

MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 PREF LOC: preferential location;
 RES: resorption;
 (d: distal)

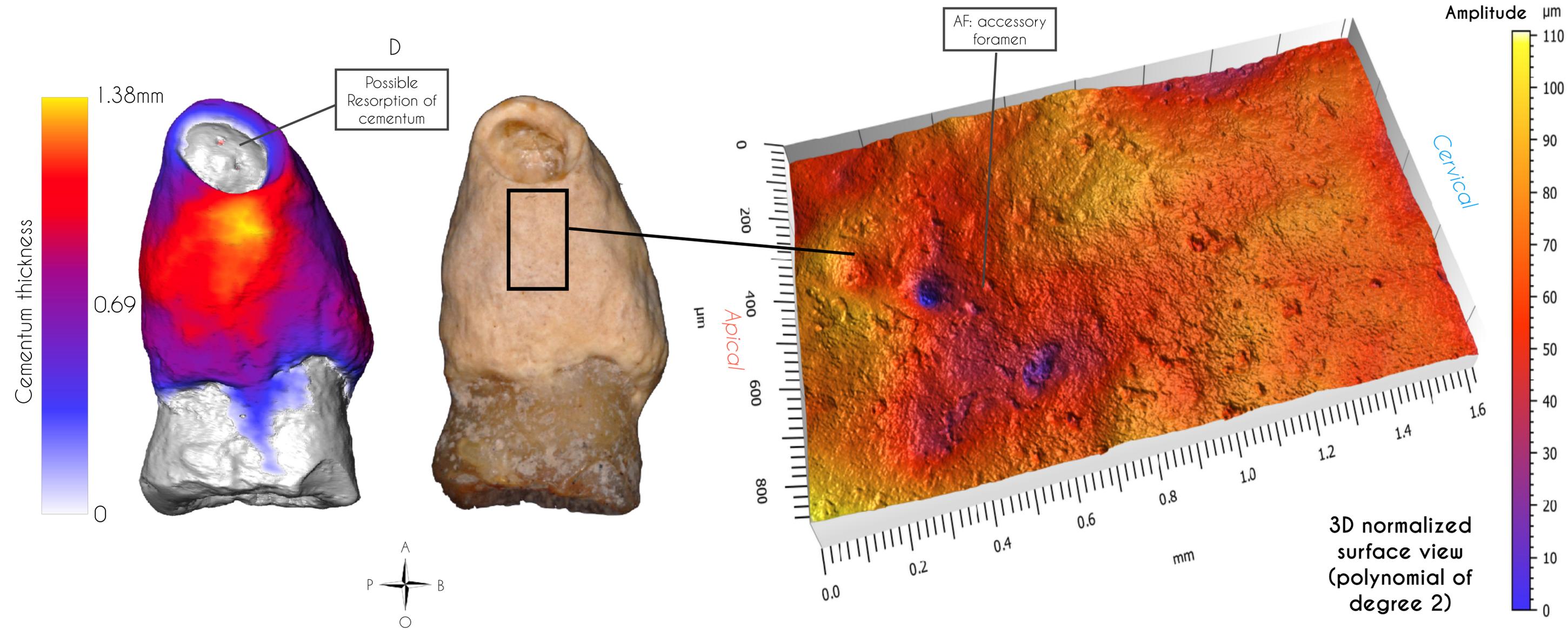
URP4

Infected

URP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	523	5.50%	1.67mm	2.44mm	2/4	2	Blue	1.47	1.61	10%

Sp1172_15



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
D	110	-S2	AF

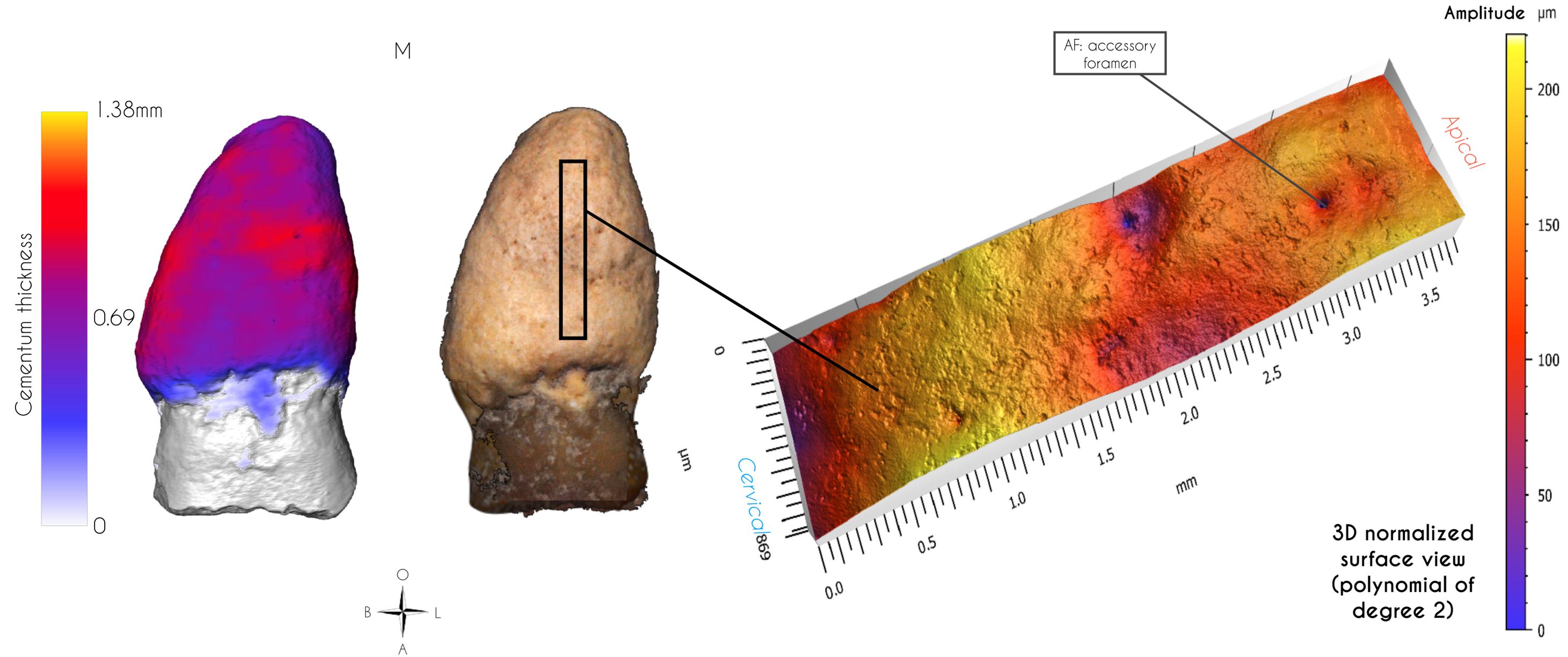
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
AF: accessory foramen

Infected

URP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	435	5.50%	0.88mm	4.82mm	1/5	2	Blue	1.47	1.61	10%

Sp1172_15



Confocal microscopy - Topography 3D maps			
OF	MAX VE (μm)	ST	Note
M	220	-S2	AF

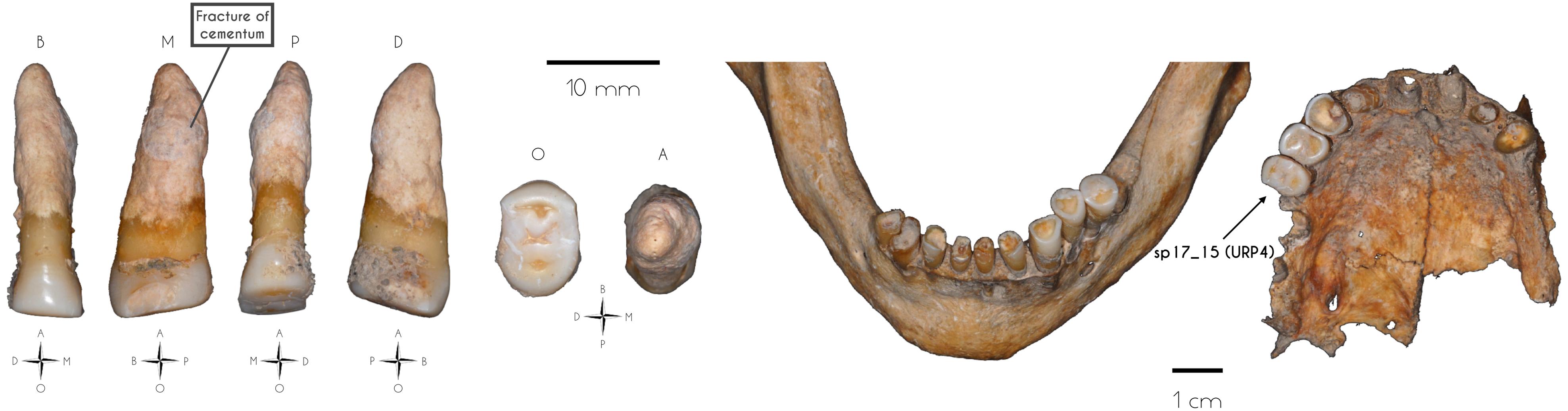
OF: other face;
 MAX VE: maximum vertical elevation;
 ST: surface texture; : scored (+) if it is high, (-) if it is low; S: smooth or R: rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
 AF: accessory foramen

Infected

Sp17_15

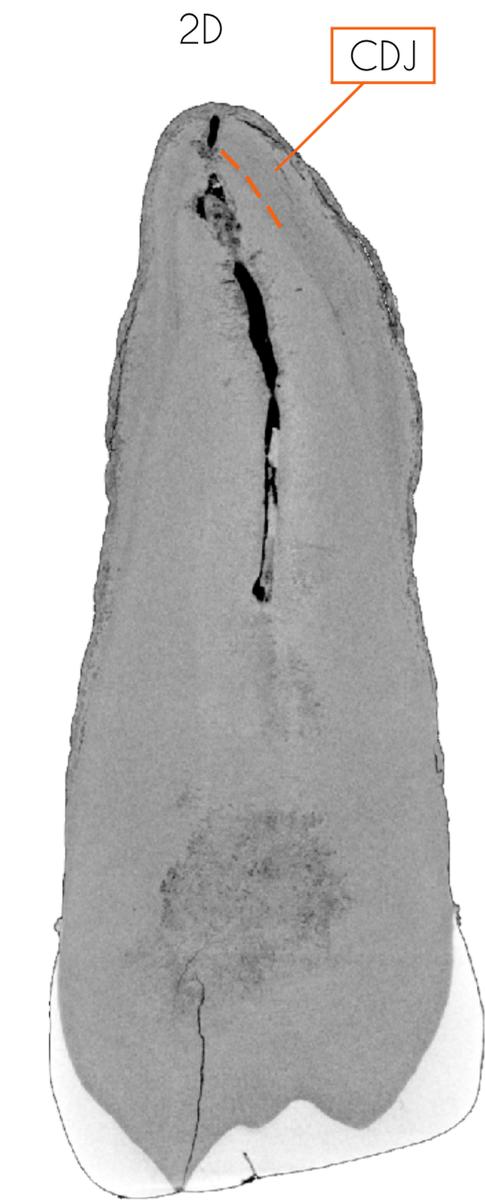
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URP4	3	4	2	-	0	0	1.2.m	0	0	1d	1

URP4



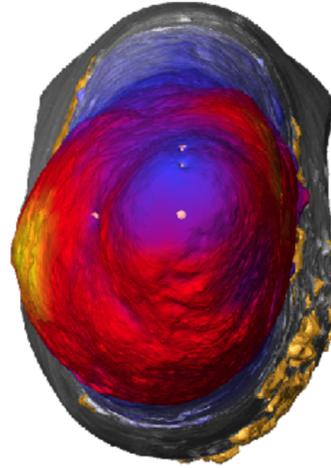
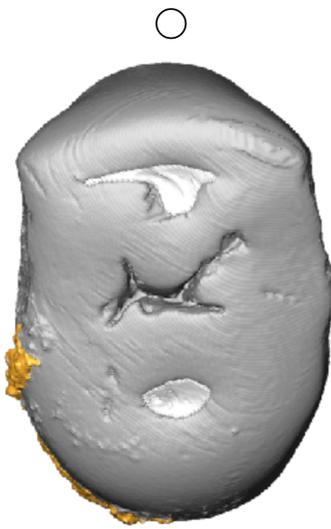
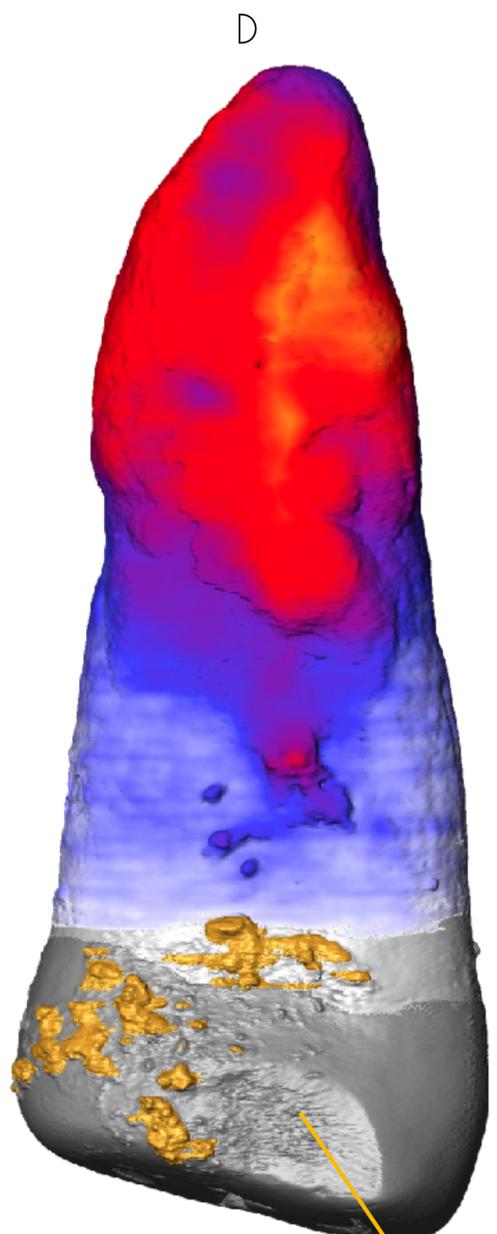
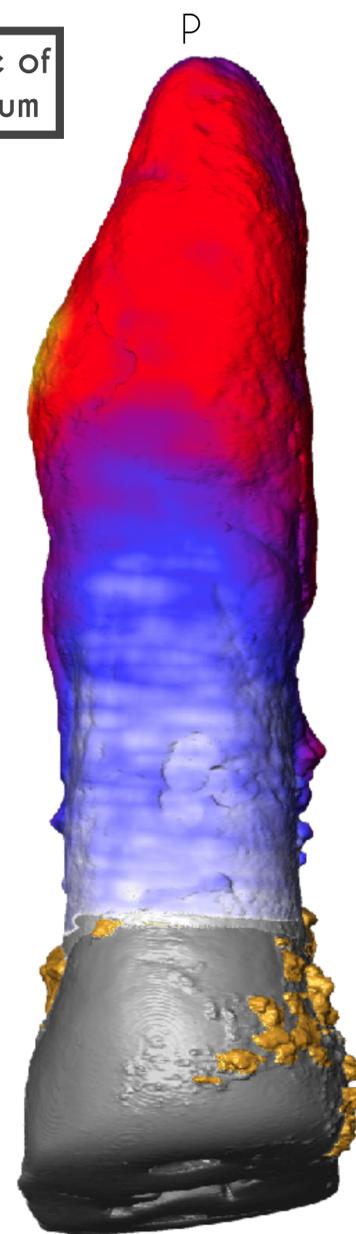
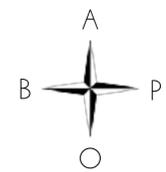
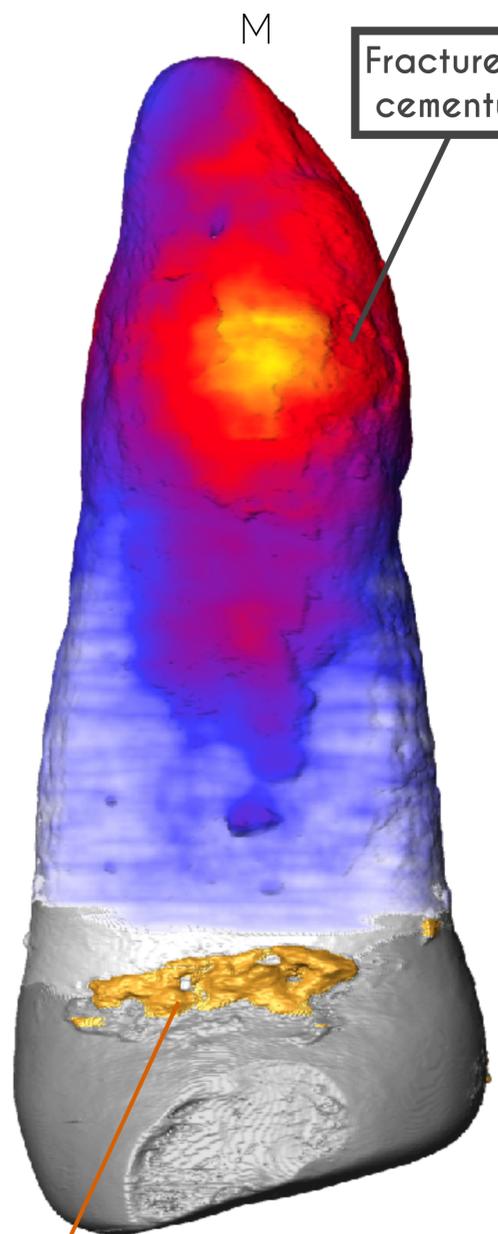
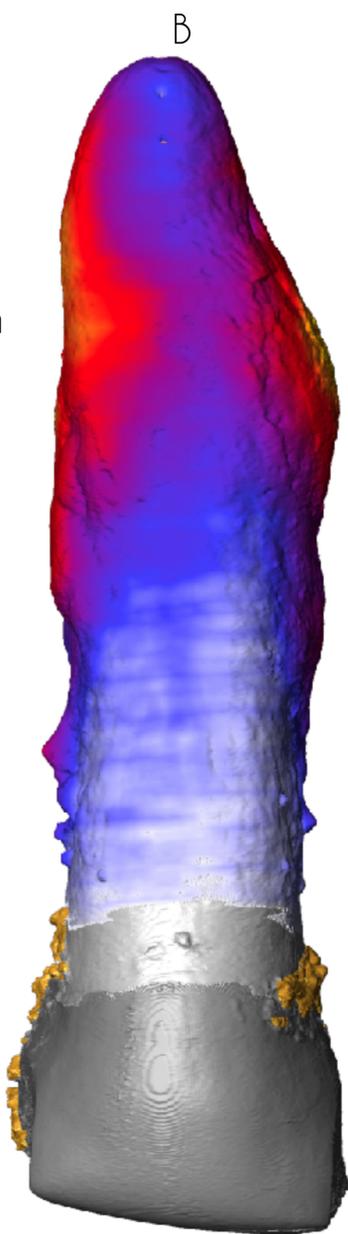
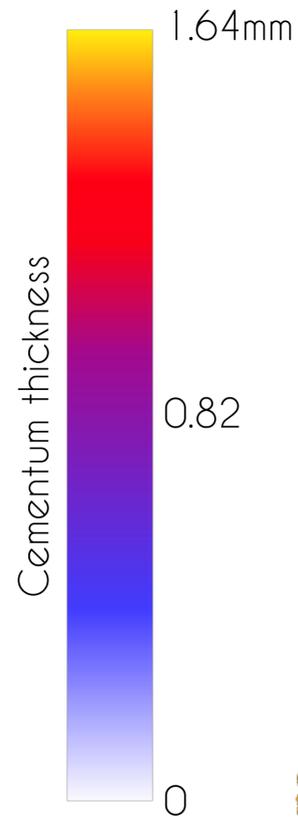
DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp17_15



URP4

0 2 mm



A

Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1640	2m	<	No	FR (2m)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
FR: fracture of cementum
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Hypofunctional

Calculus

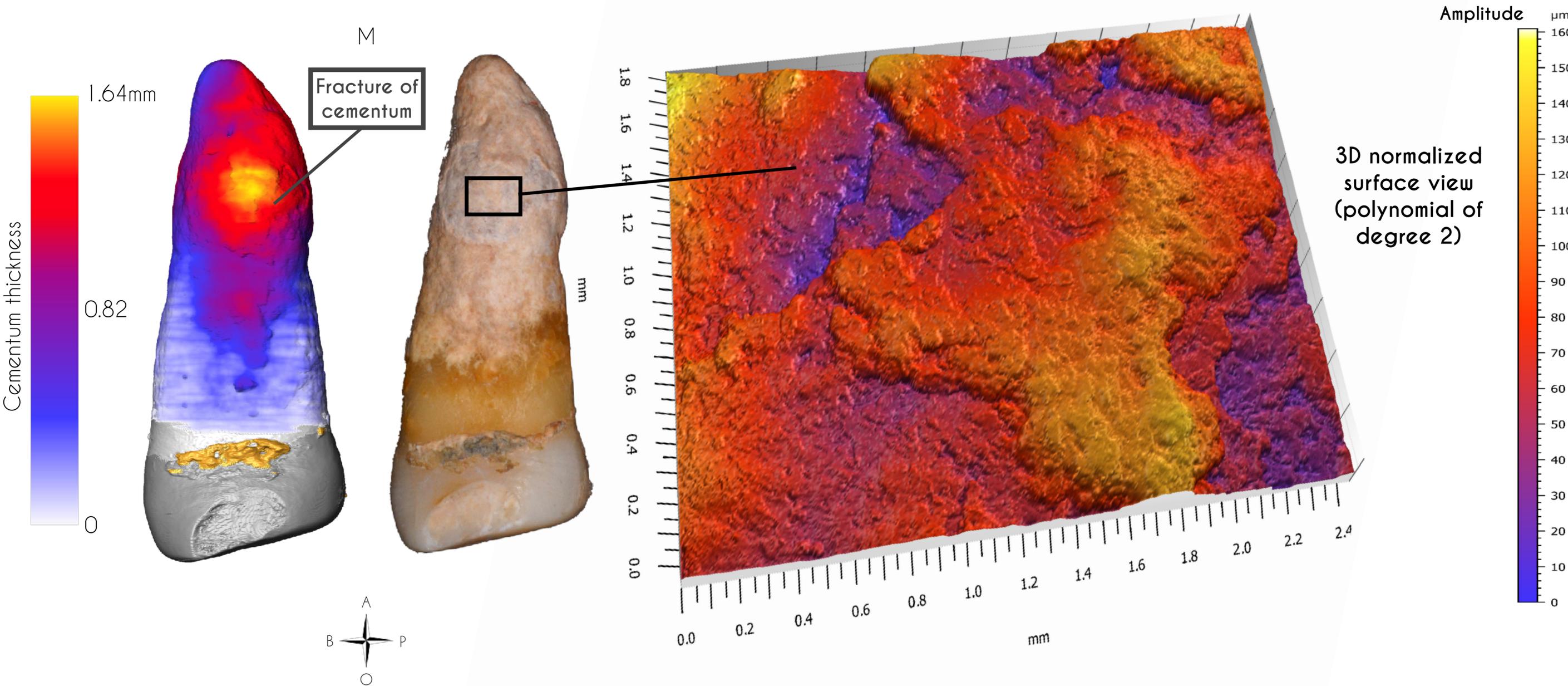
Wear Facet

Fracture of cementum

URP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	781	5.50%	2.46mm	1.85mm	3/3	2	Blue	1.47	1.61	10%

Sp17_15



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
2m	160	-R2	FR

Atypical ST: fracture of cementum

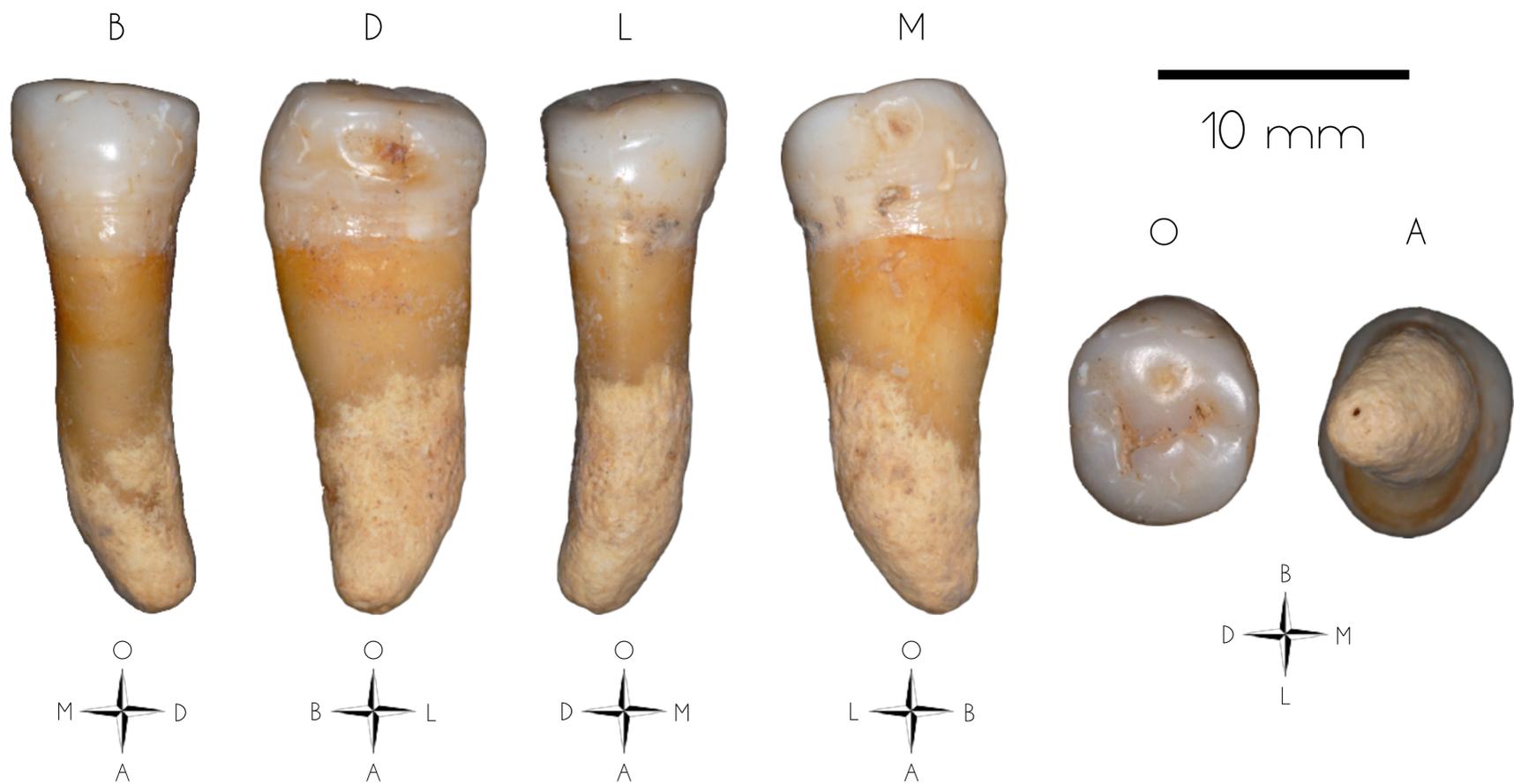
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
FR: fracture of cementum

Hypofunctional

Sp20_35

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP4	2	6	2	-	0	0	1.2.m	0	0	0	1

LLP4

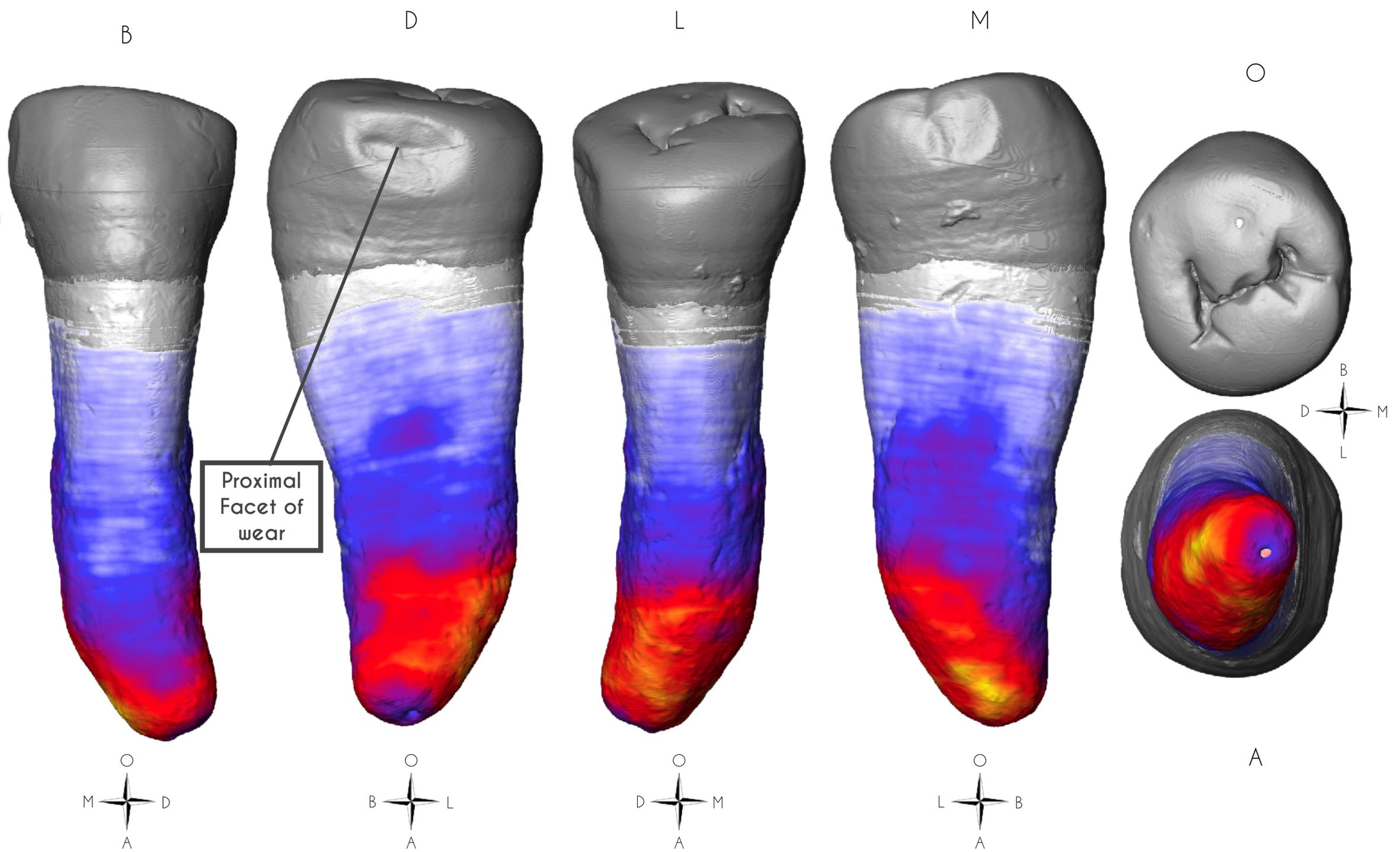
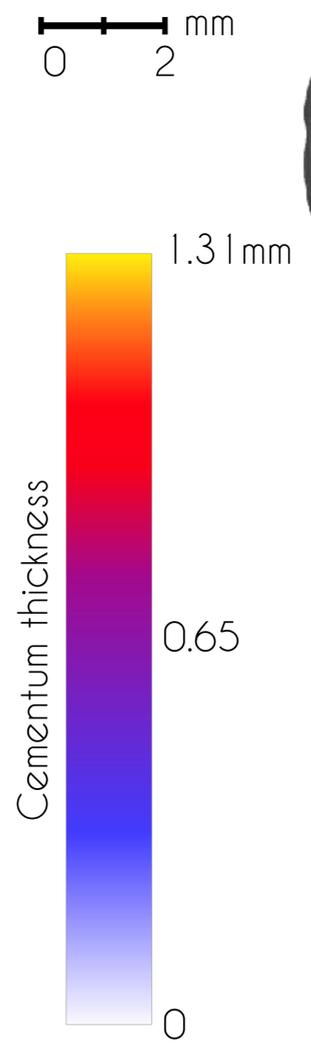


DEG: degree; **DIR:** direction; **FOR:** form - **CAR:** carious lesion - **Pulp EXP:** pulp exposure - **IMP:** impaction - **FEN:** fenestration; **CAL:** calculus; **NT:** tooth loss in neighbouring teeth; **ANTA:** antagonist

Sp20_35



LLP4



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1310	1m	<	No	-

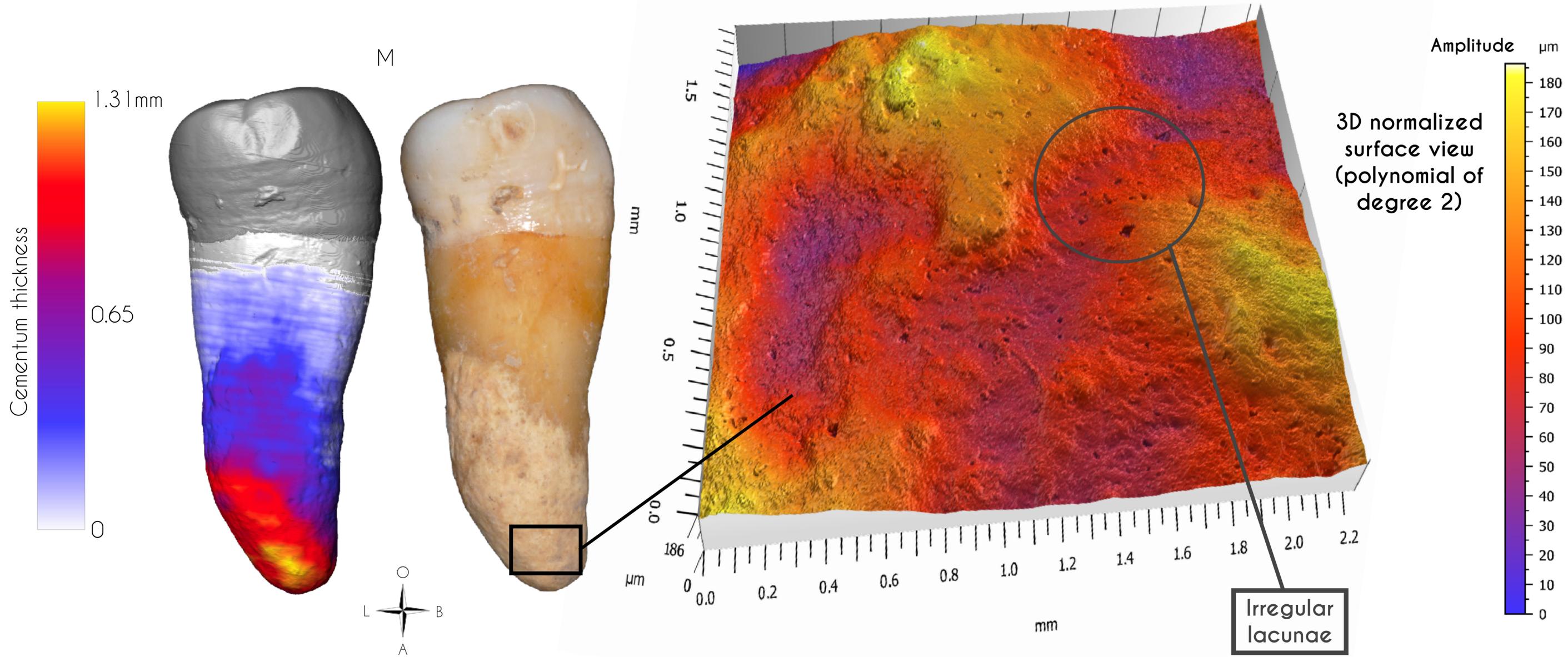
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;

Hypofunctional

LLP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1582	6.28%	2.46mm	1.85mm	3/3	2	Blue	1.47	1.61	10%

Sp20_35



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1 m	180	-S2	IL

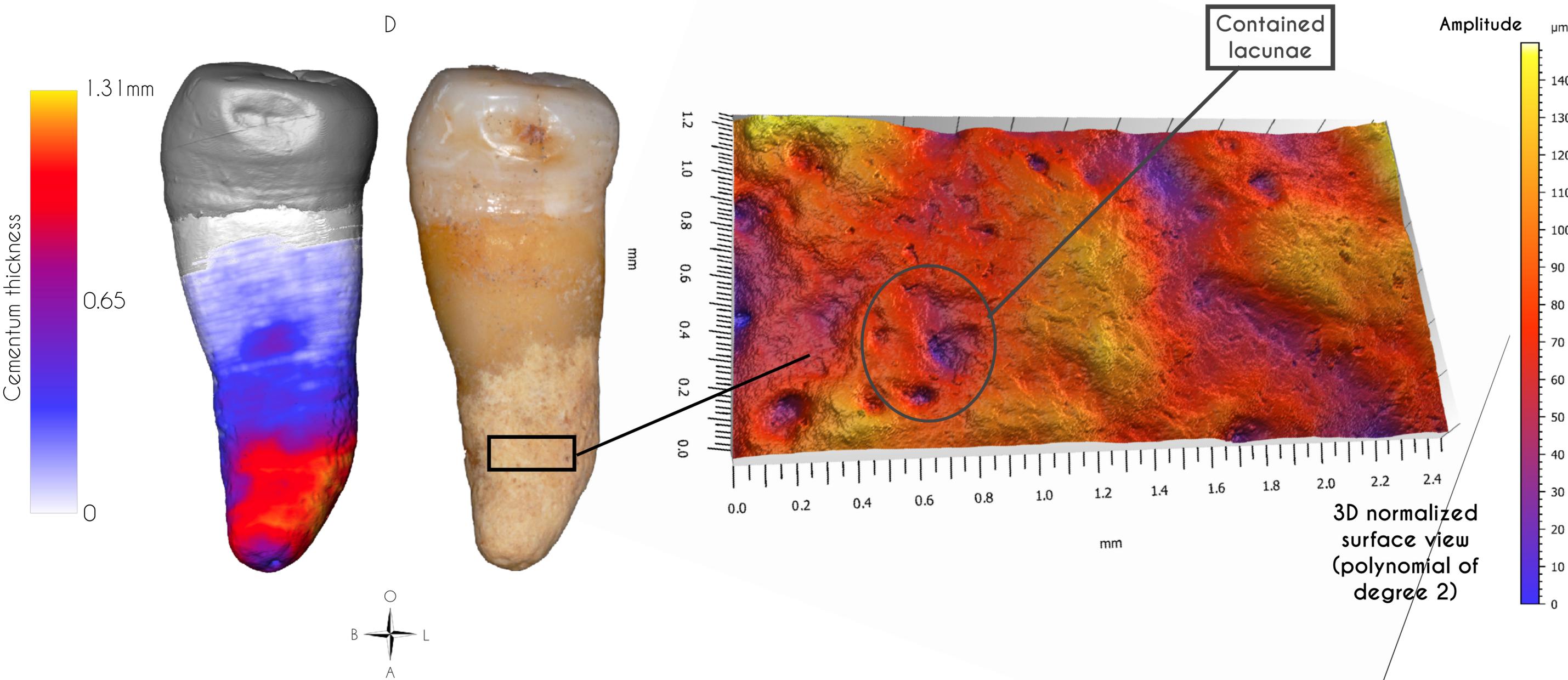
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
IL: irregular lacunae

Hypofunctional

LLP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	688	4.97%	2.46mm	1.25mm	3/2	2	Blue	1.49	1.79	10%

Sp20_35



Confocal microscopy - Topography 3D maps			
OF	MAX VE (μm)	ST	Note
2d	150	+S2	CL

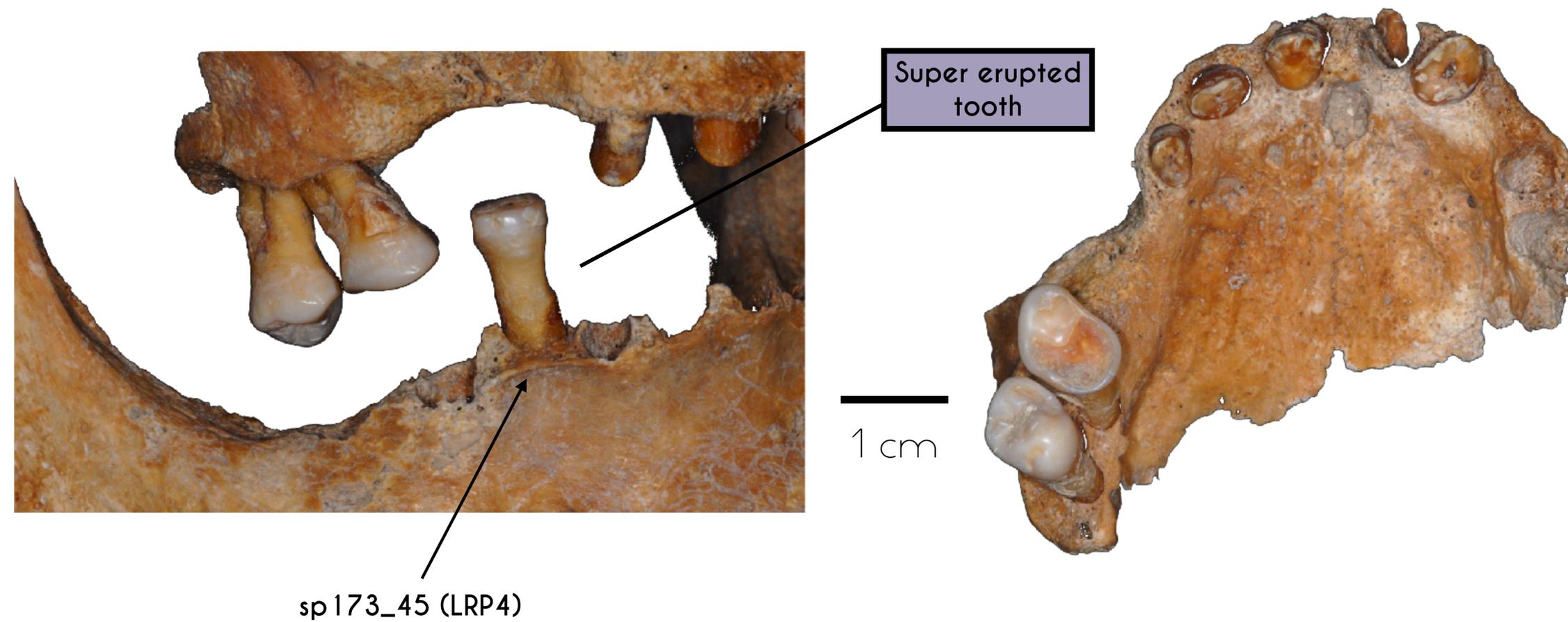
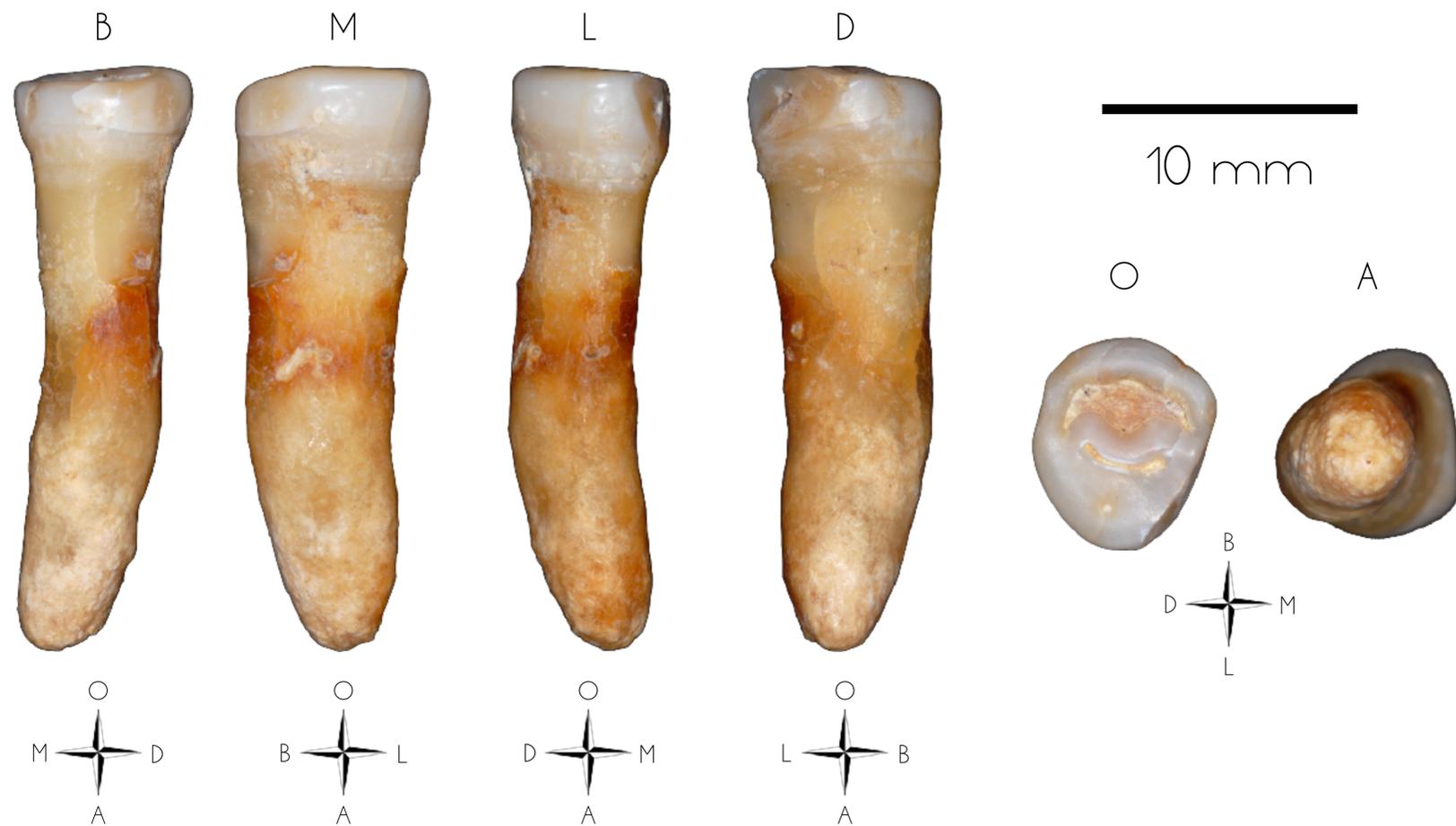
OF: other face;
 MAX VE: maximum vertical elevation;
 ST: surface texture; : scored (+) if it is high, (-) if it is low; S: smooth or R: rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
 CL: contained lacunae

Hypofunctional

Sp173_45

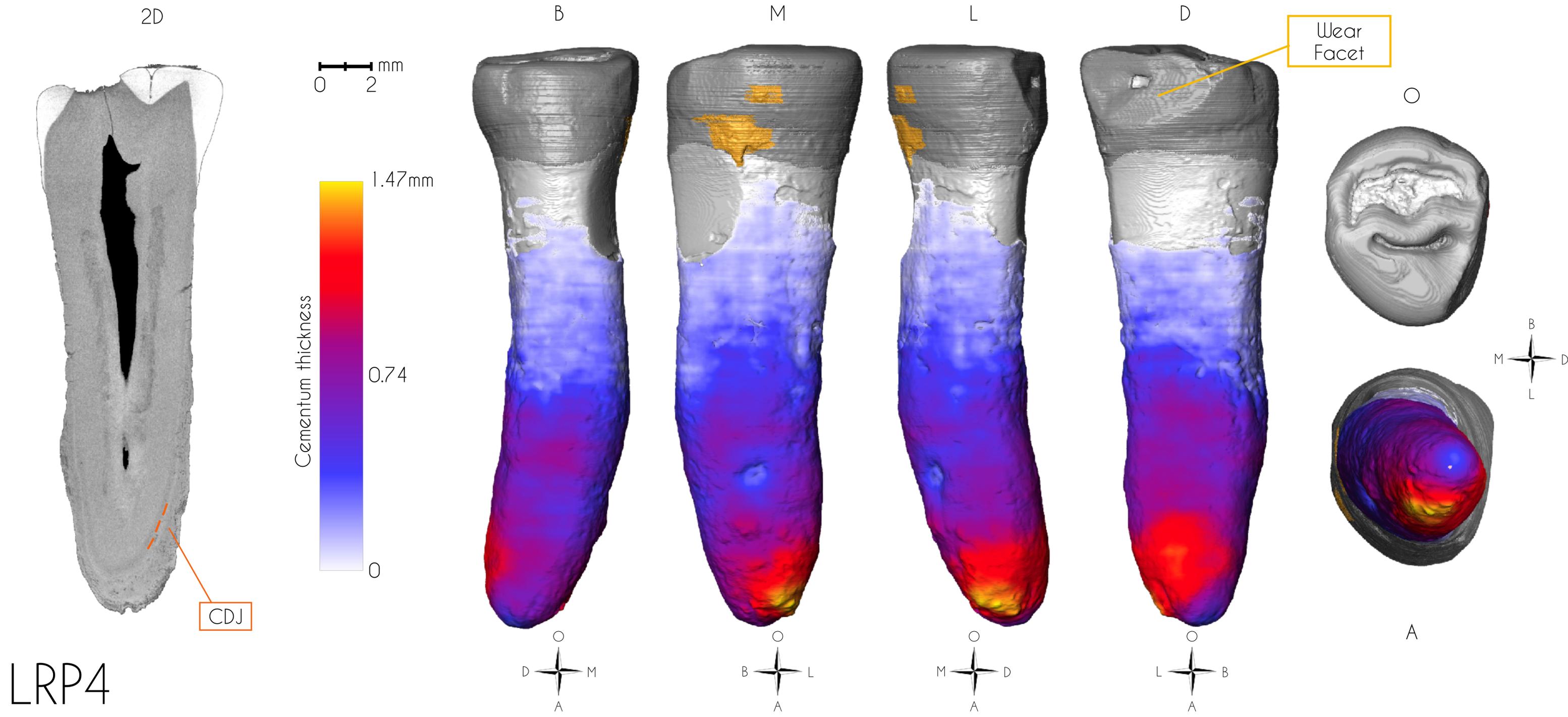
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LRP4	3	6	3	-	0	0	1.2.m	0	0	0	2

LRP4



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp173_45



Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1470	1>	<	No	SE

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;
SE: super-erupted tooth

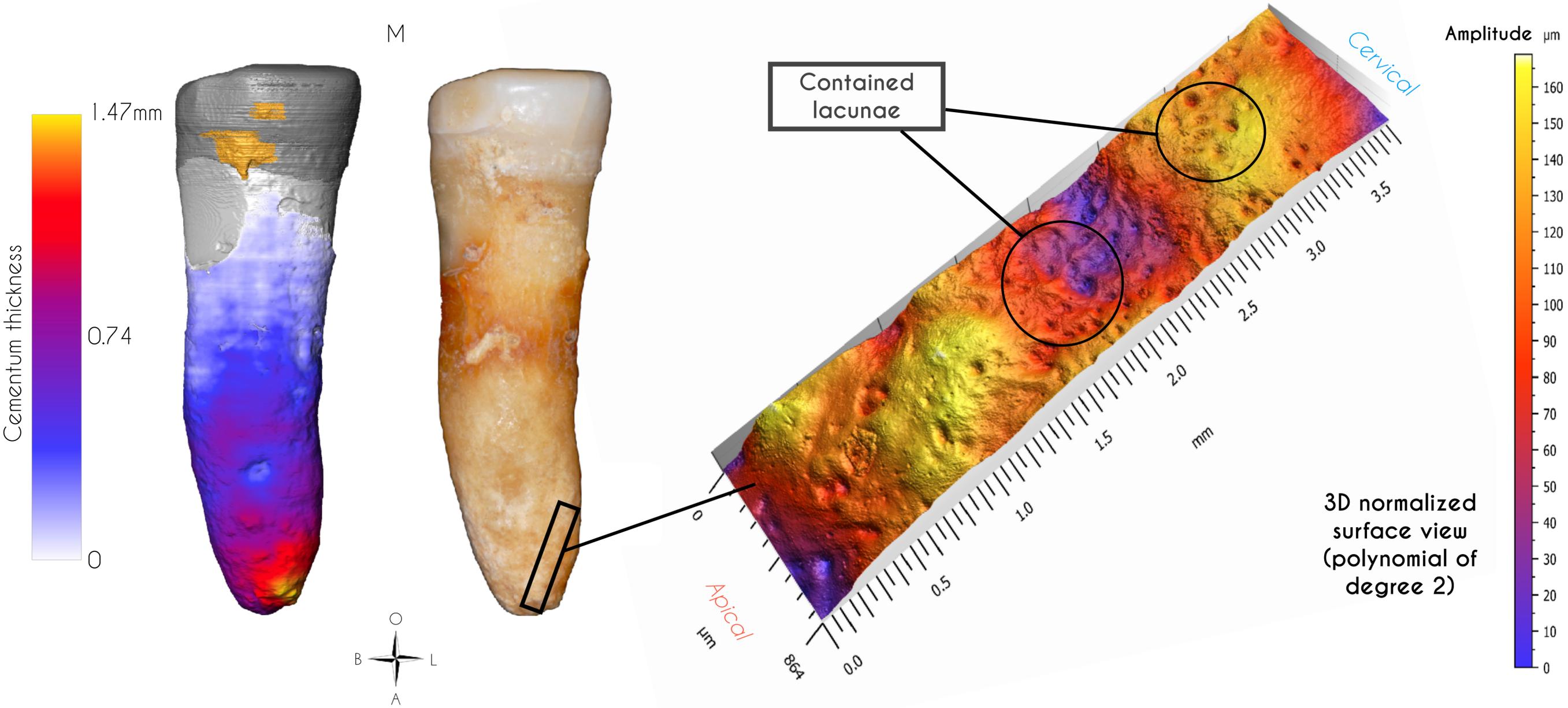
Hypofunctional

LRP4

LRP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
LM	1251	6.54%	0.88mm	4.82mm	1/8	2	Blue	1.5	1.8	10%

Sp173_45



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1>	170	+S1	CL

Sharpeys Fibers (super erupted tooth)

LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);

MAX VE: maximum vertical elevation;

ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

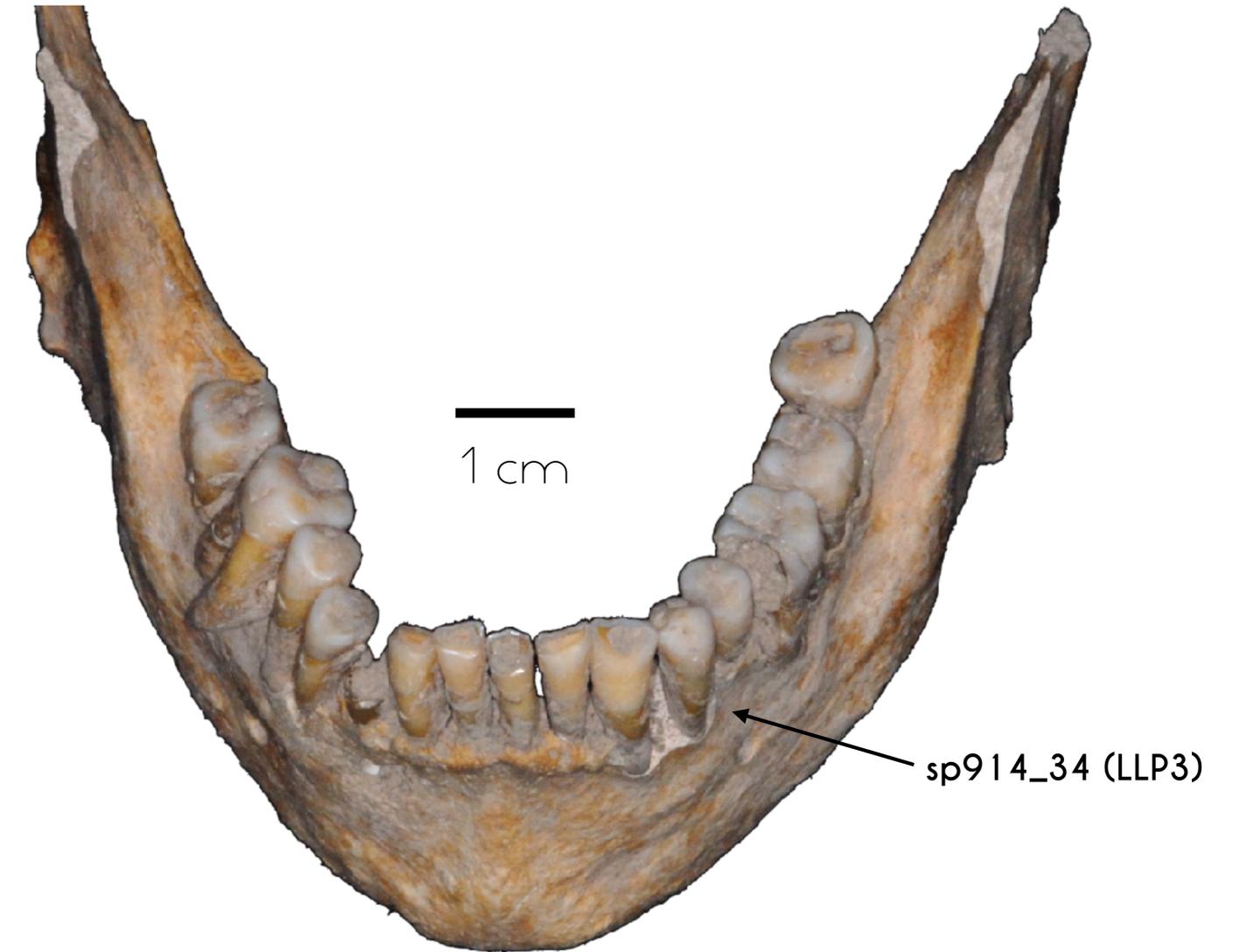
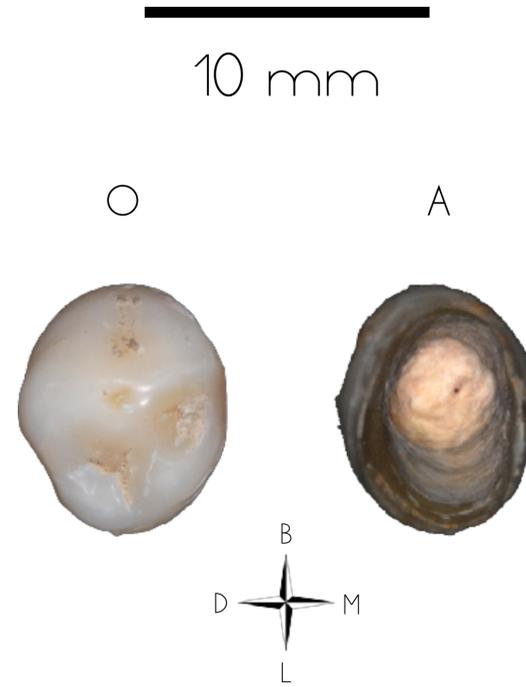
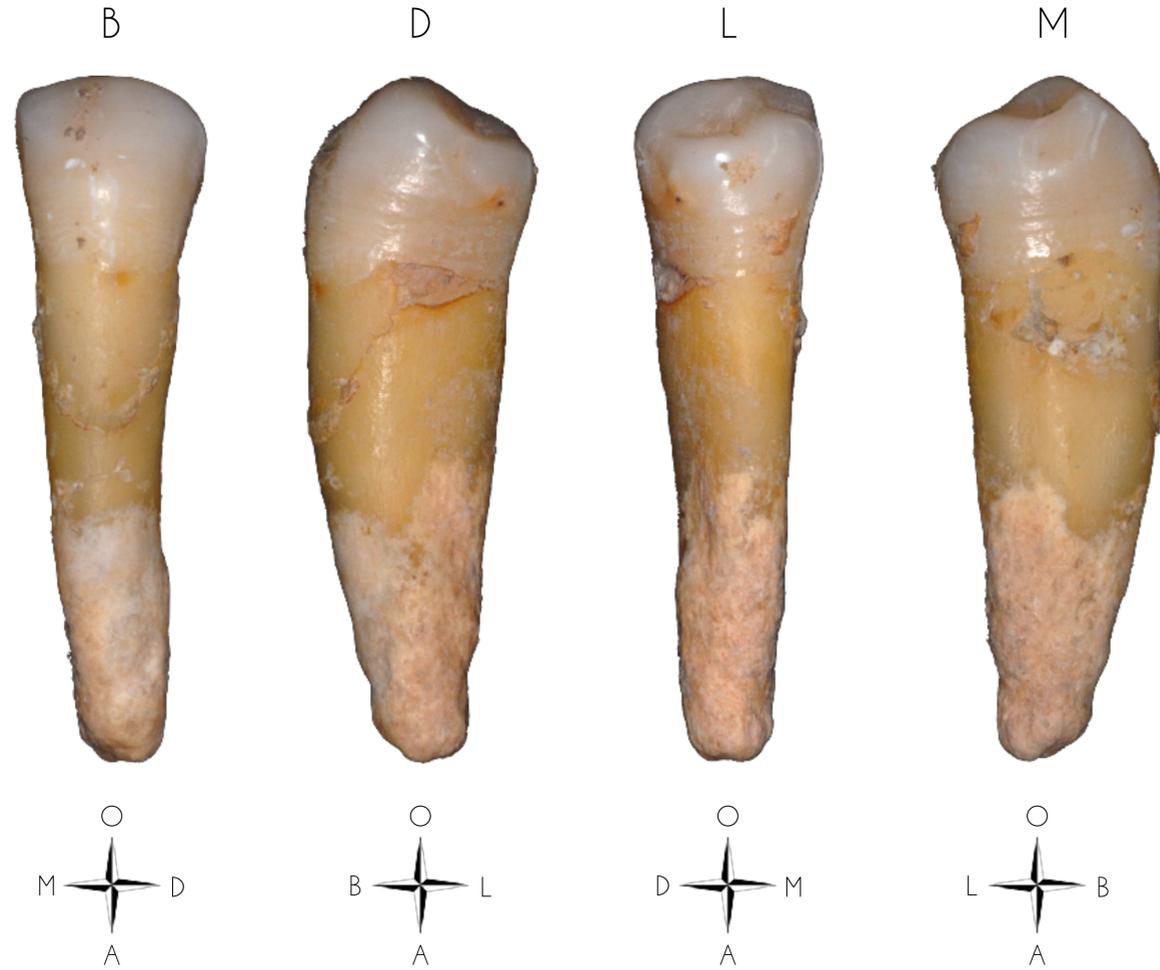
CL: contained lacunae

Hypofunctional

Sp914_34

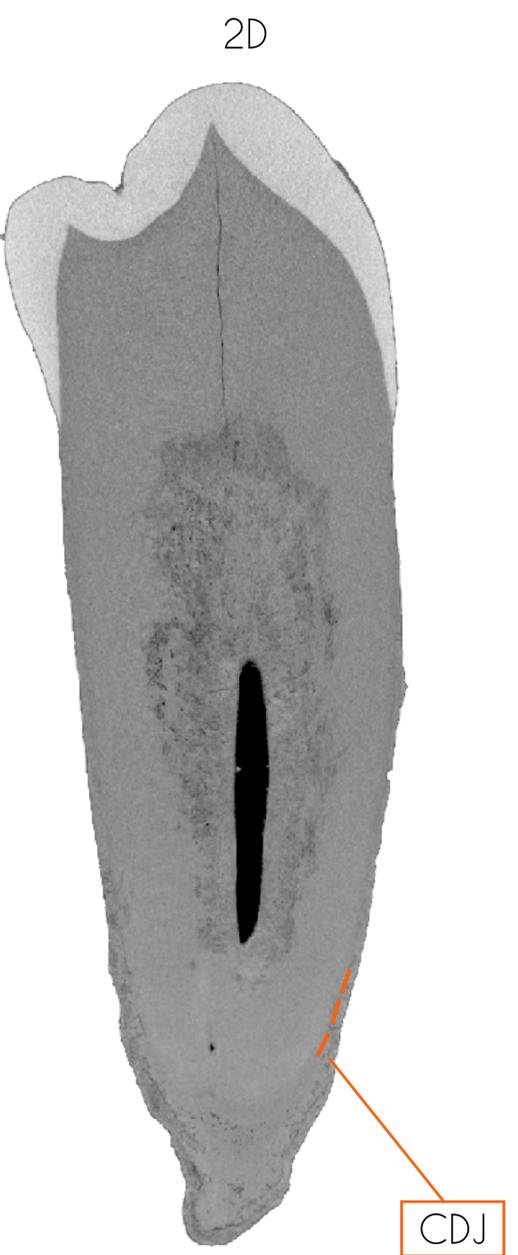
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP3	2	1	1	-	0	0	1.2.m	0	0	0	NA

LLP3



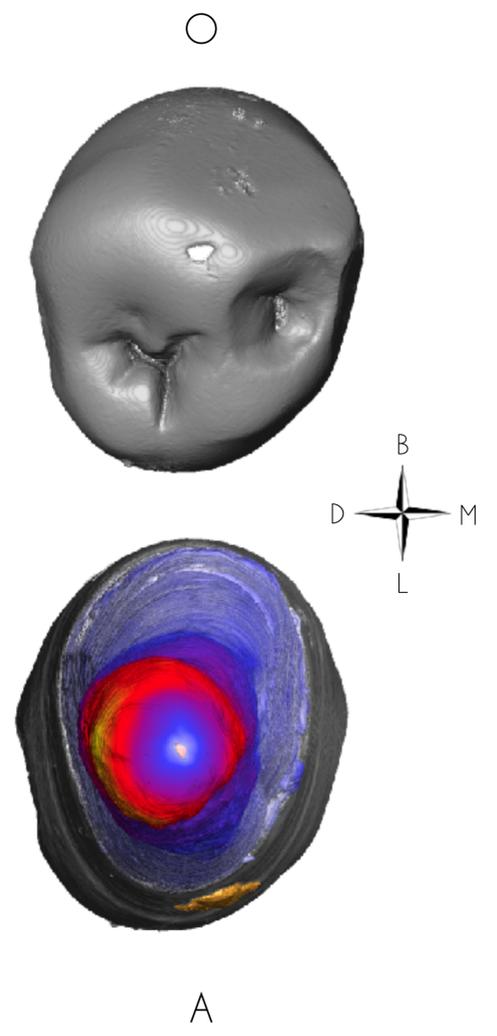
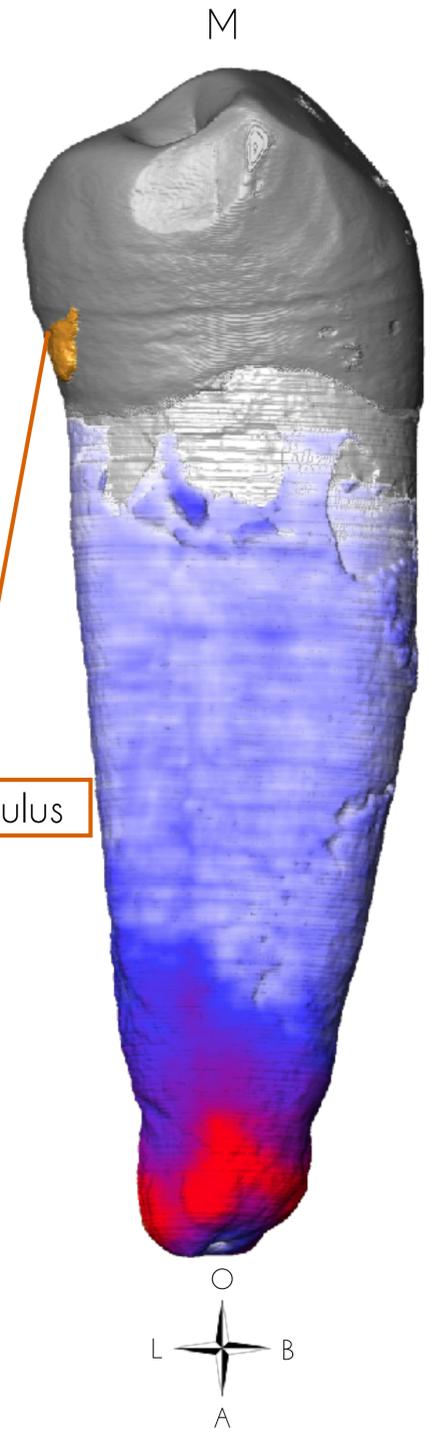
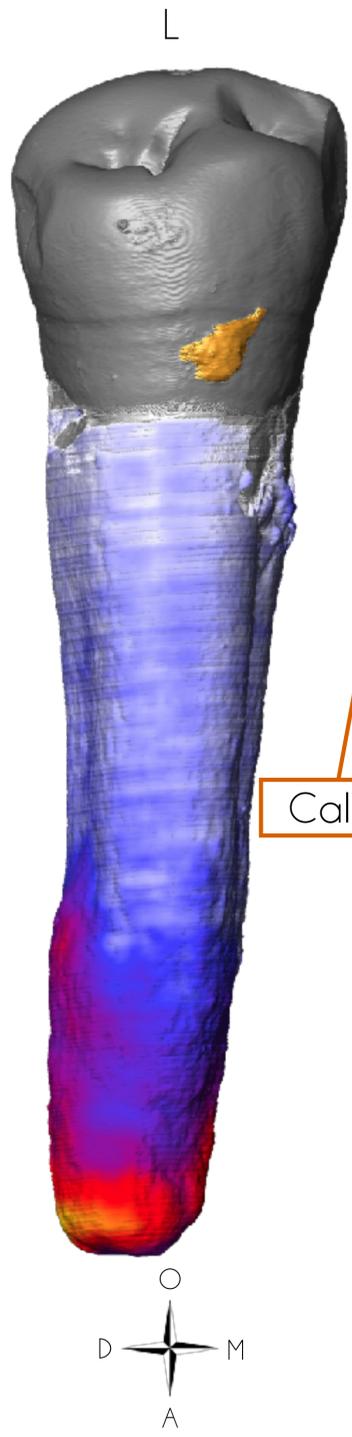
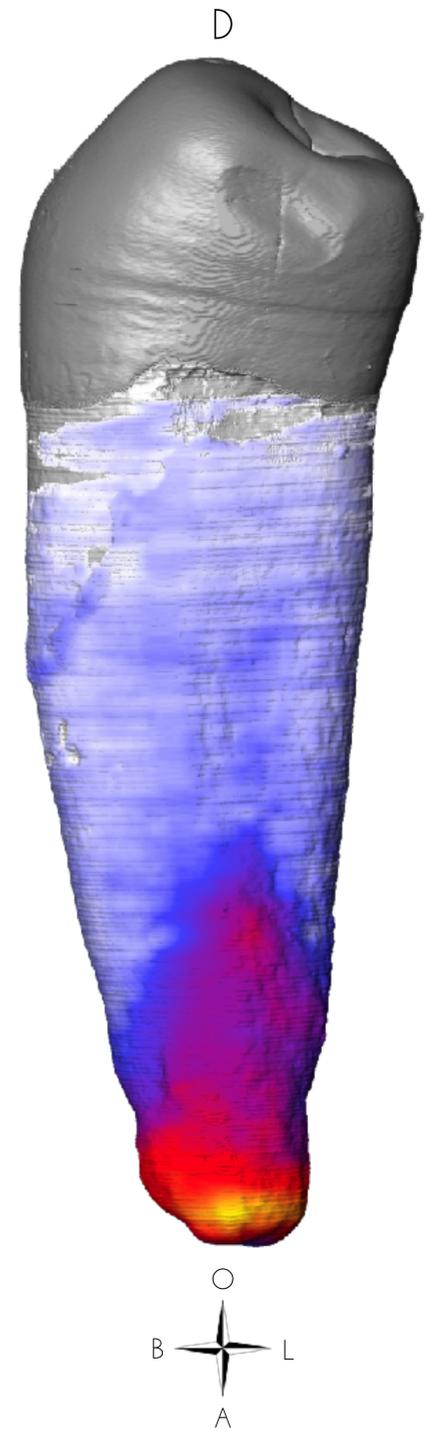
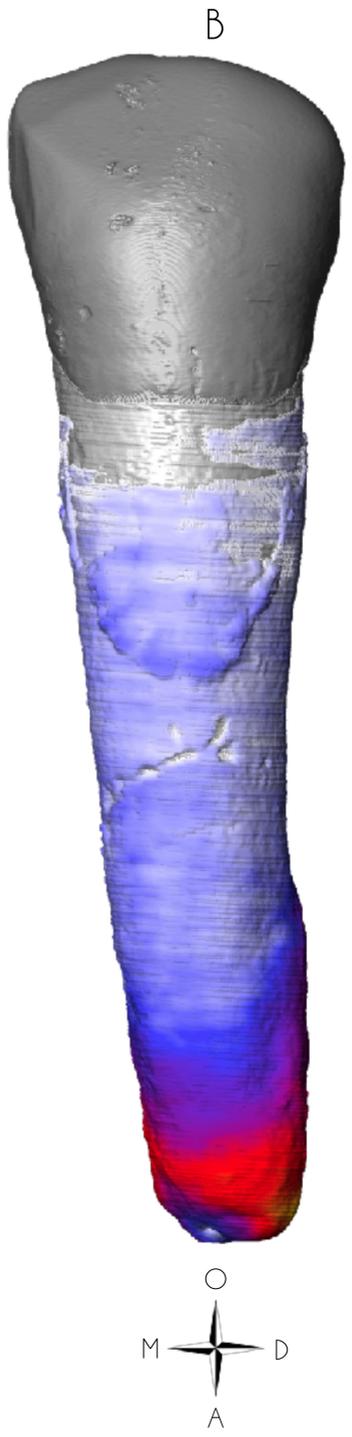
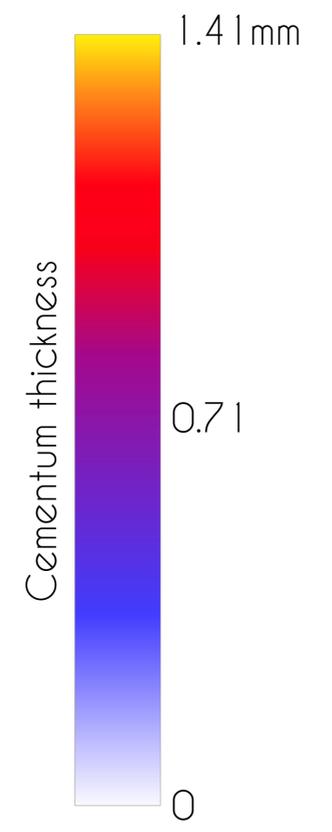
DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp914_34



LLP3

0 2 mm



Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1410	1d	No	No	-

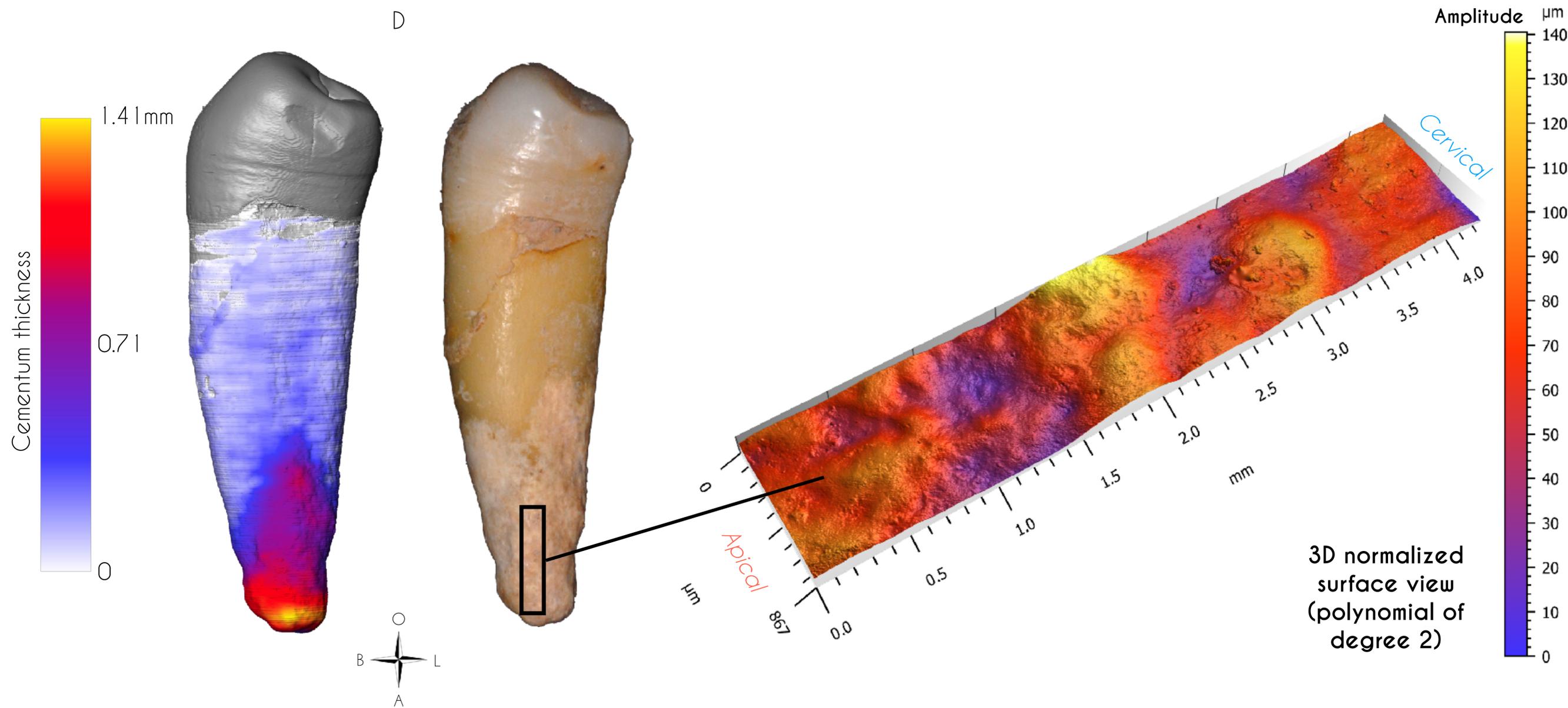
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;

Hypofunctional

LLP3

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	454	4.71%	0.88mm	4.82mm	1/8	2	Blue	1.5	1.8	10%

Sp914_34



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (µm)	ST	Note
1d	140	-S2	-

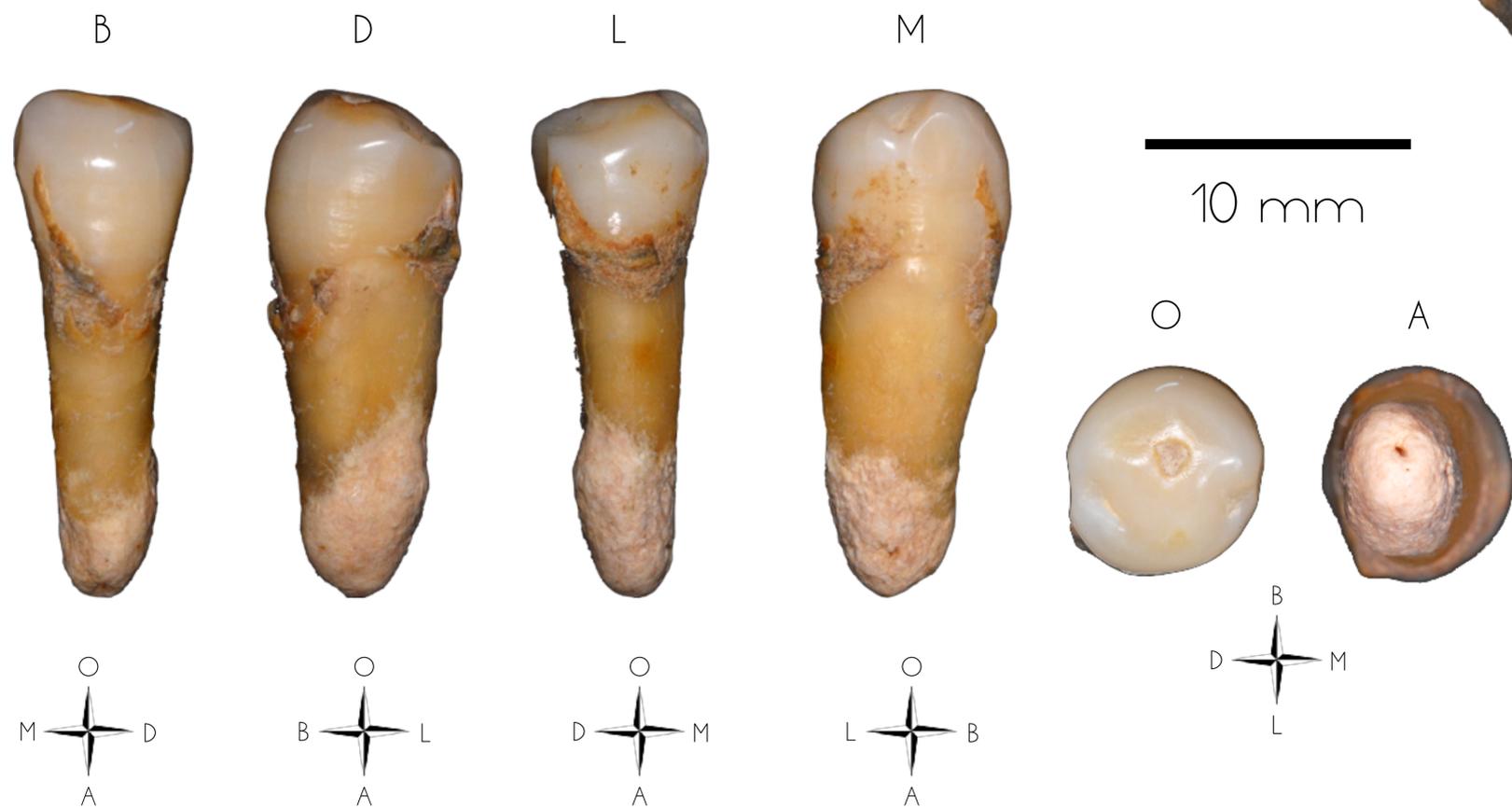
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hypofunctional

Sp1230_34

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP3	3	1	1	-	0	0	1.2.m	0	1	0	1

LLP3

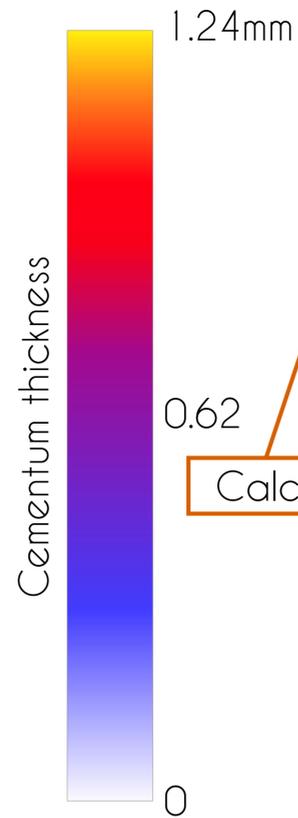


DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

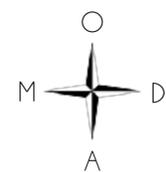


LLP3

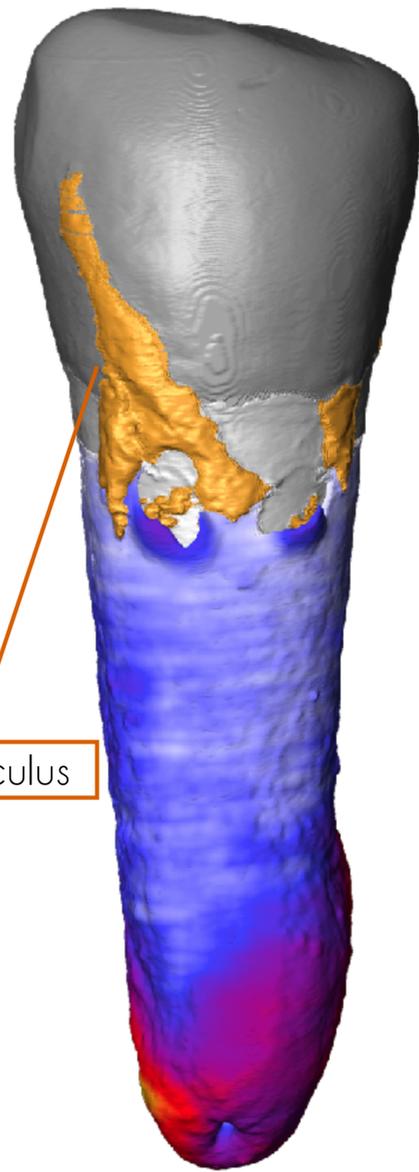
0 2 mm



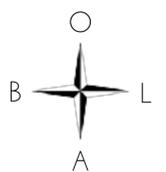
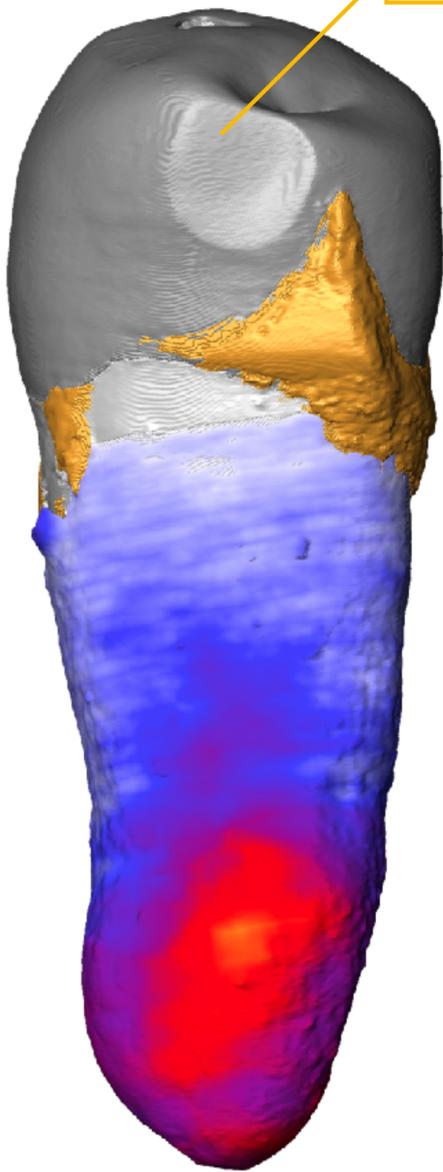
Calculus



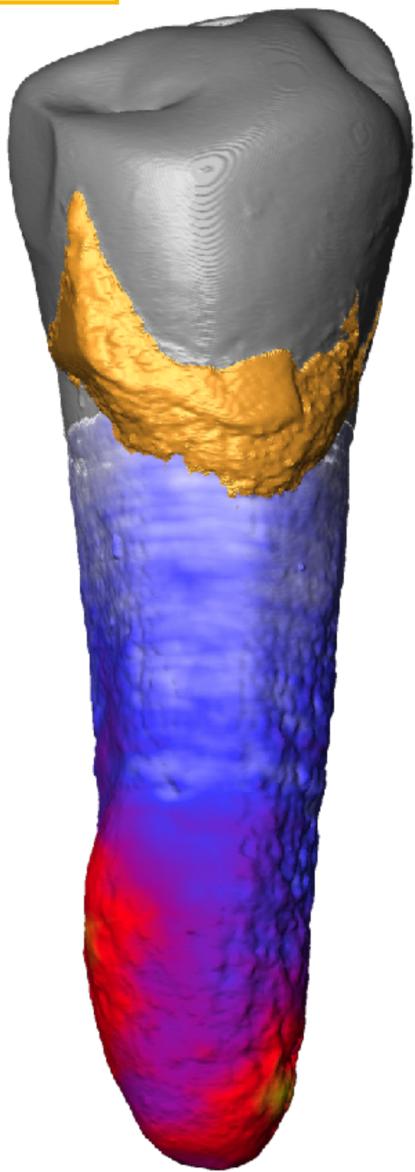
B



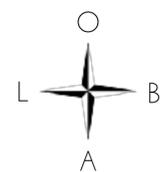
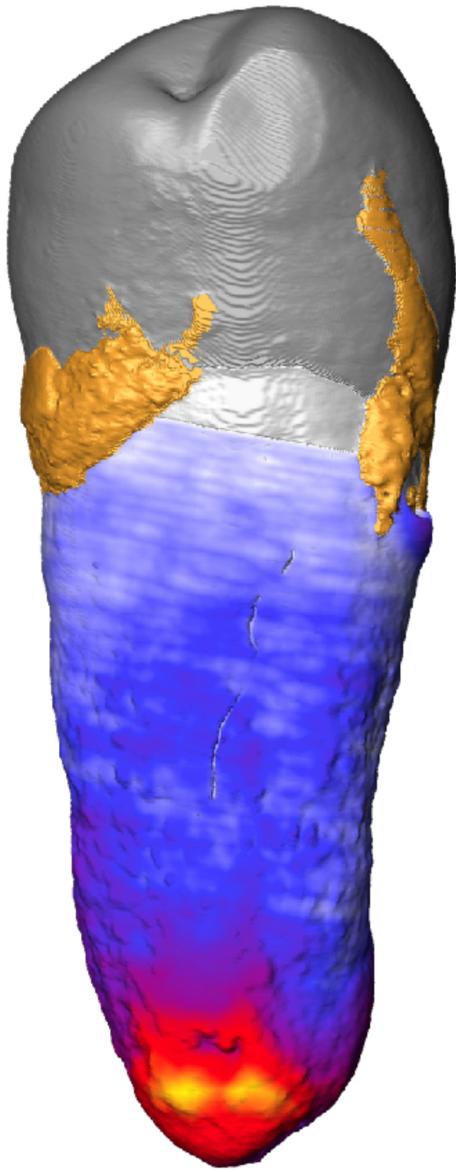
D



L

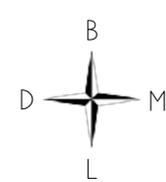
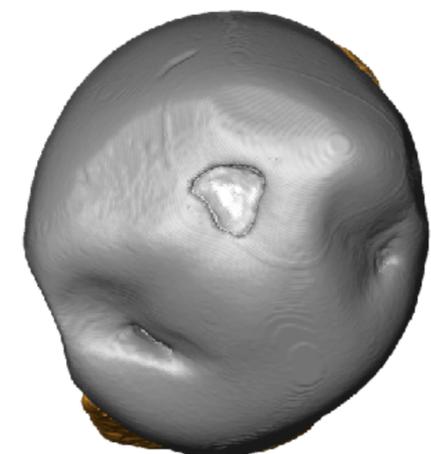


M

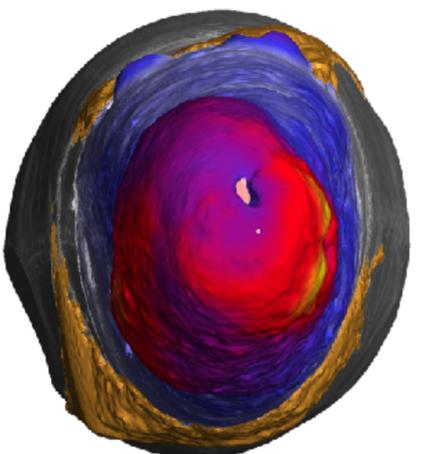


Proximal wear facet

O



A



Sp1230_34

Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1240	1m	No	No	-

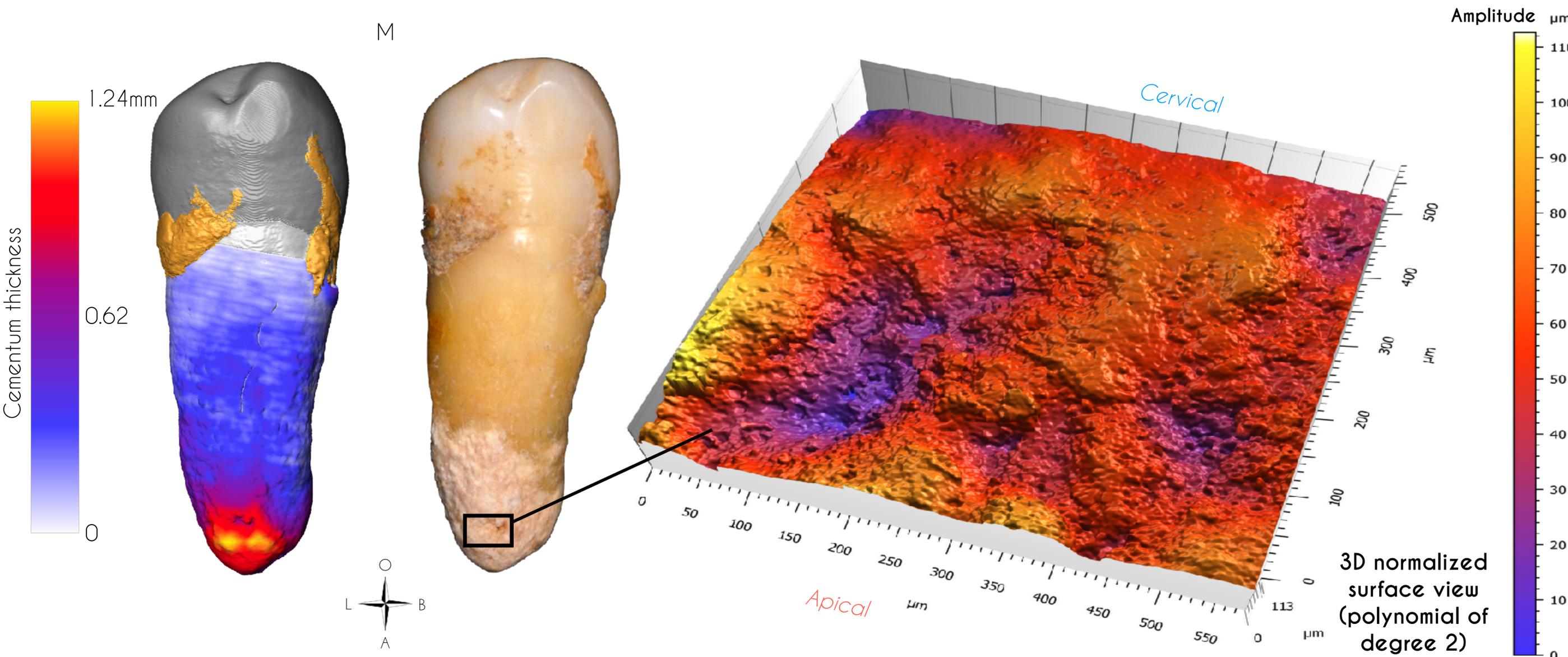
MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
 PREF LOC: preferential location;

Hypofunctional

LLP3

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
LM	241	4.00%	1.67mm	1.25mm	2/2	2	Blue	1.47	1.61	10%

Sp1230_34



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1m	110	-R2	-

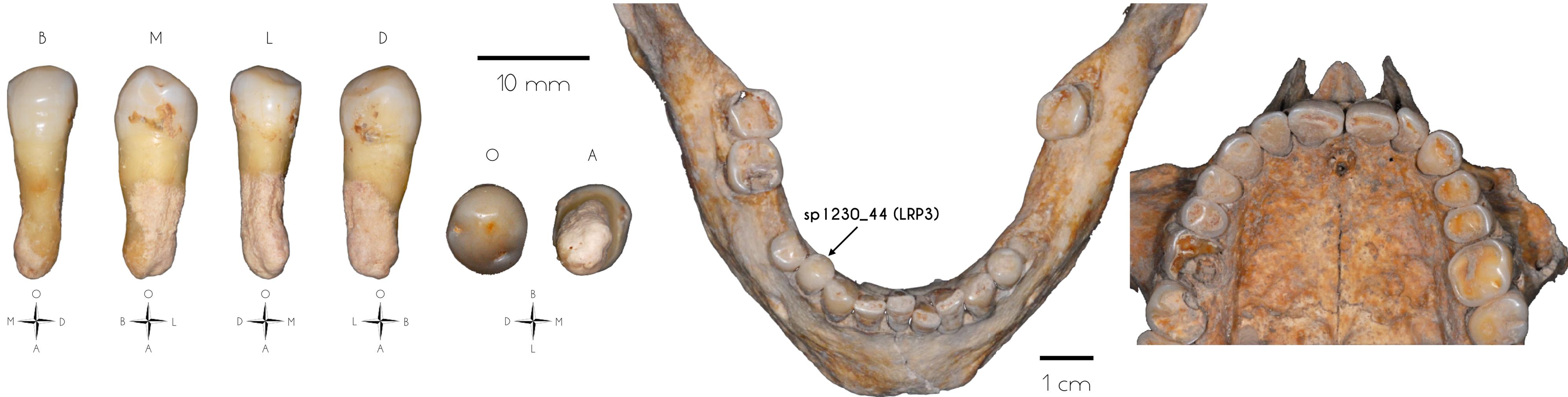
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hypofunctional

Sp1230_44

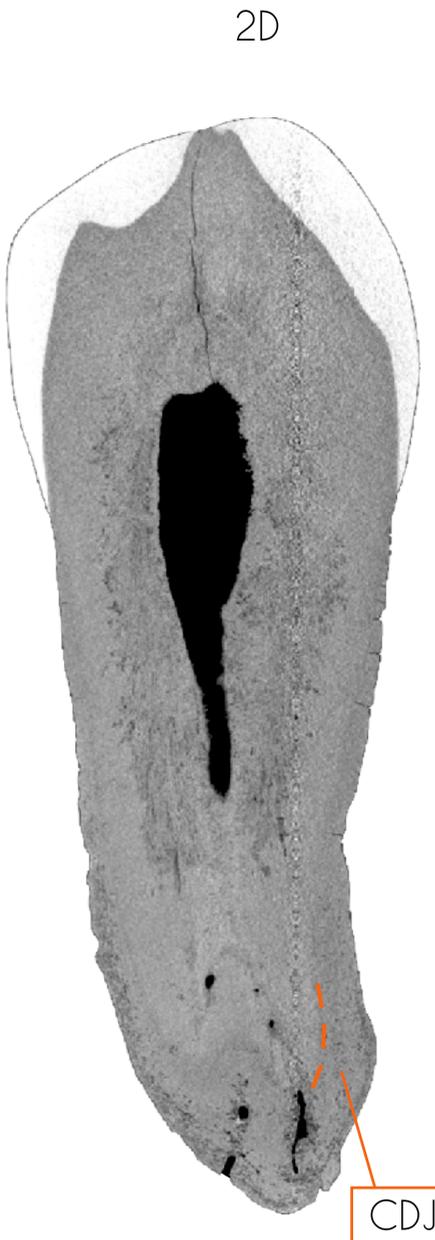
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LRP3	3	1	1		0	0	1.2.M	0	0	0	1

LRP3

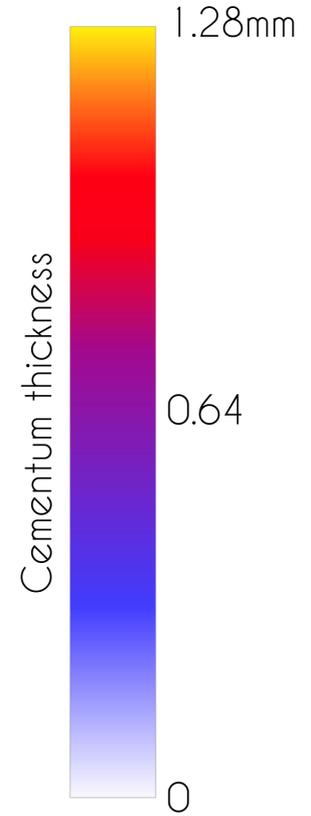


DEG: degree; **DIR:** direction; **FOR:** form - **CAR:** carious lesion - **Pulp EXP:** pulp exposure - **IMP:** impaction - **FEN:** fenestration; **CAL:** calculus; **NT:** tooth loss in neighbouring teeth; **ANTA:** antagonist

Sp1230_44

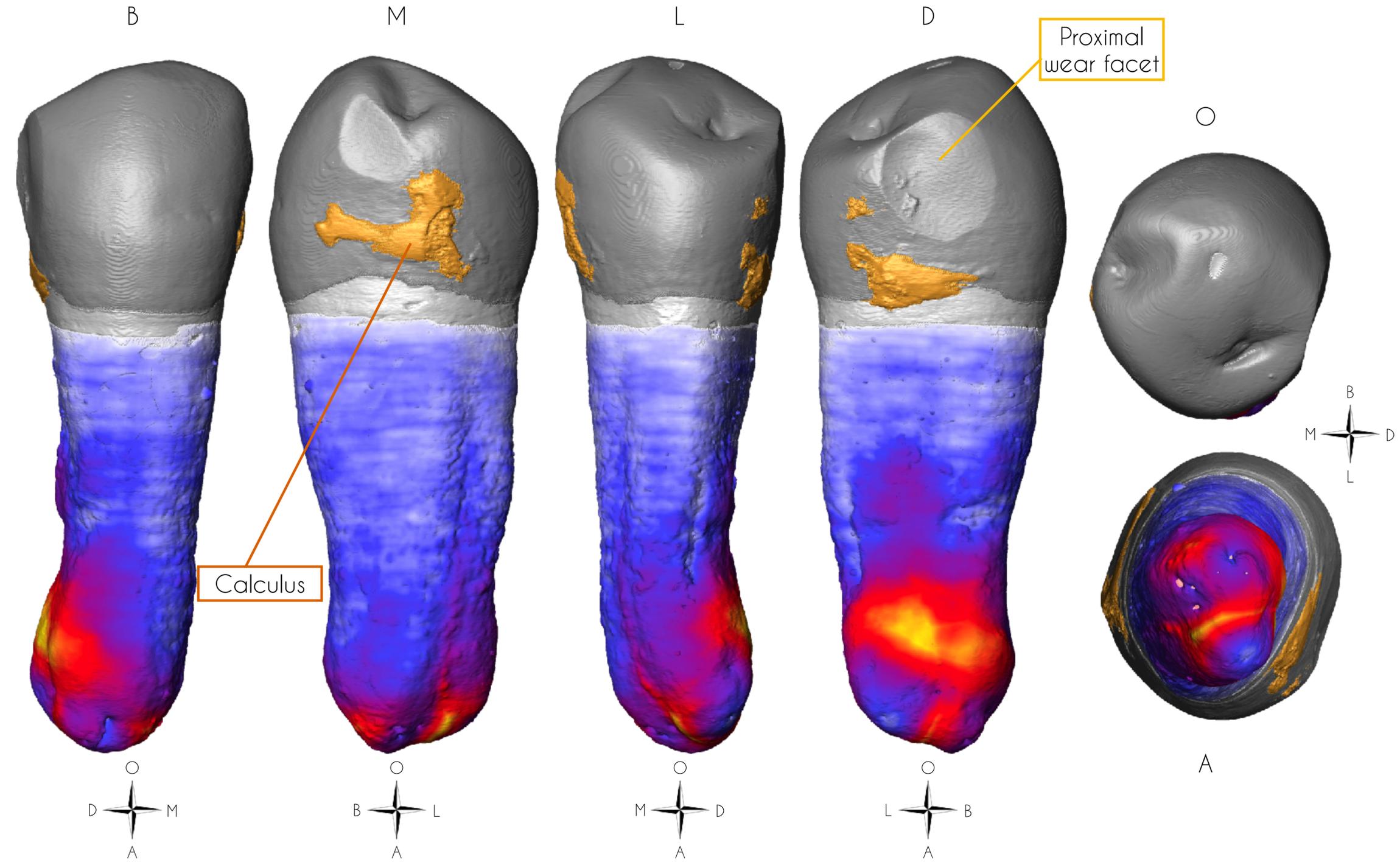


0 2 mm



2 Roots

LRP3



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1280	1d	m	No	2 roots

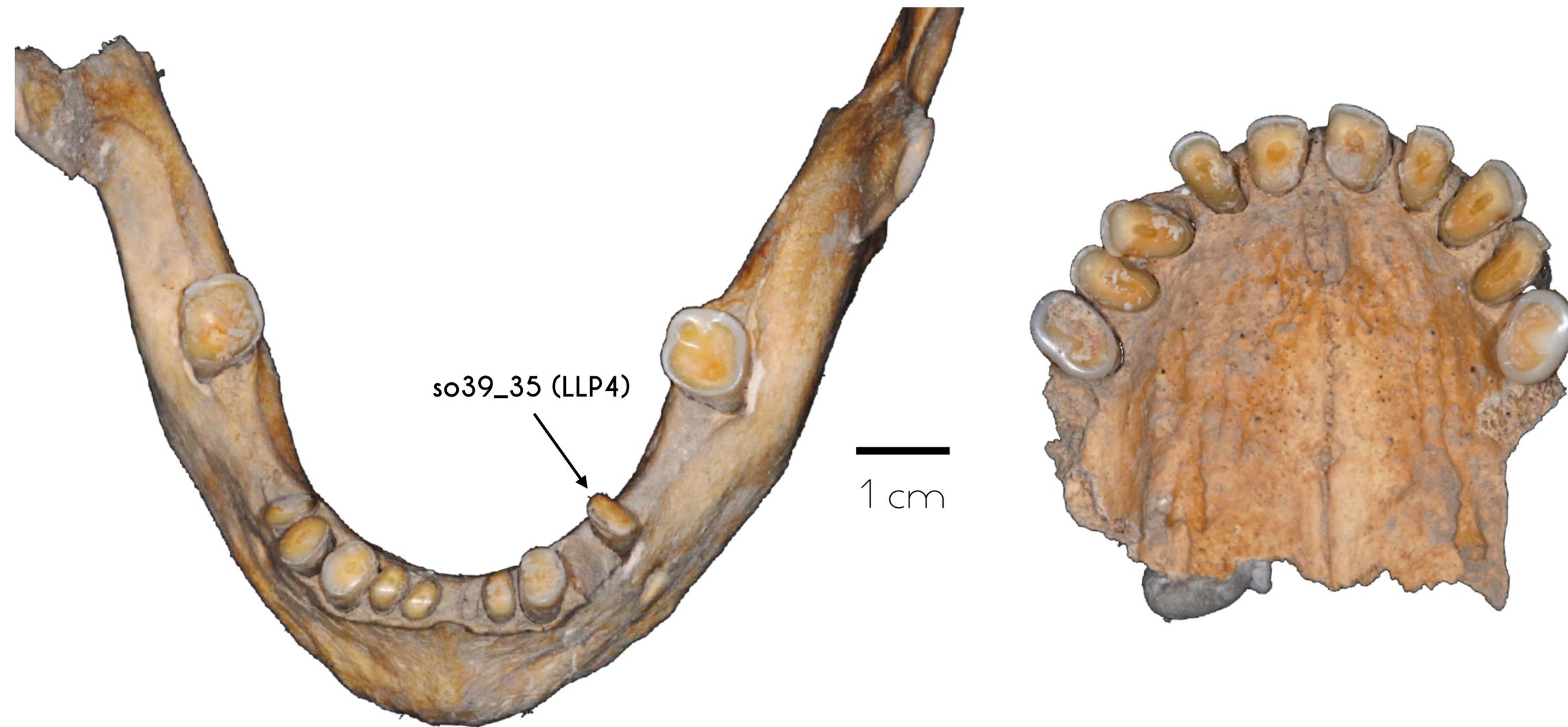
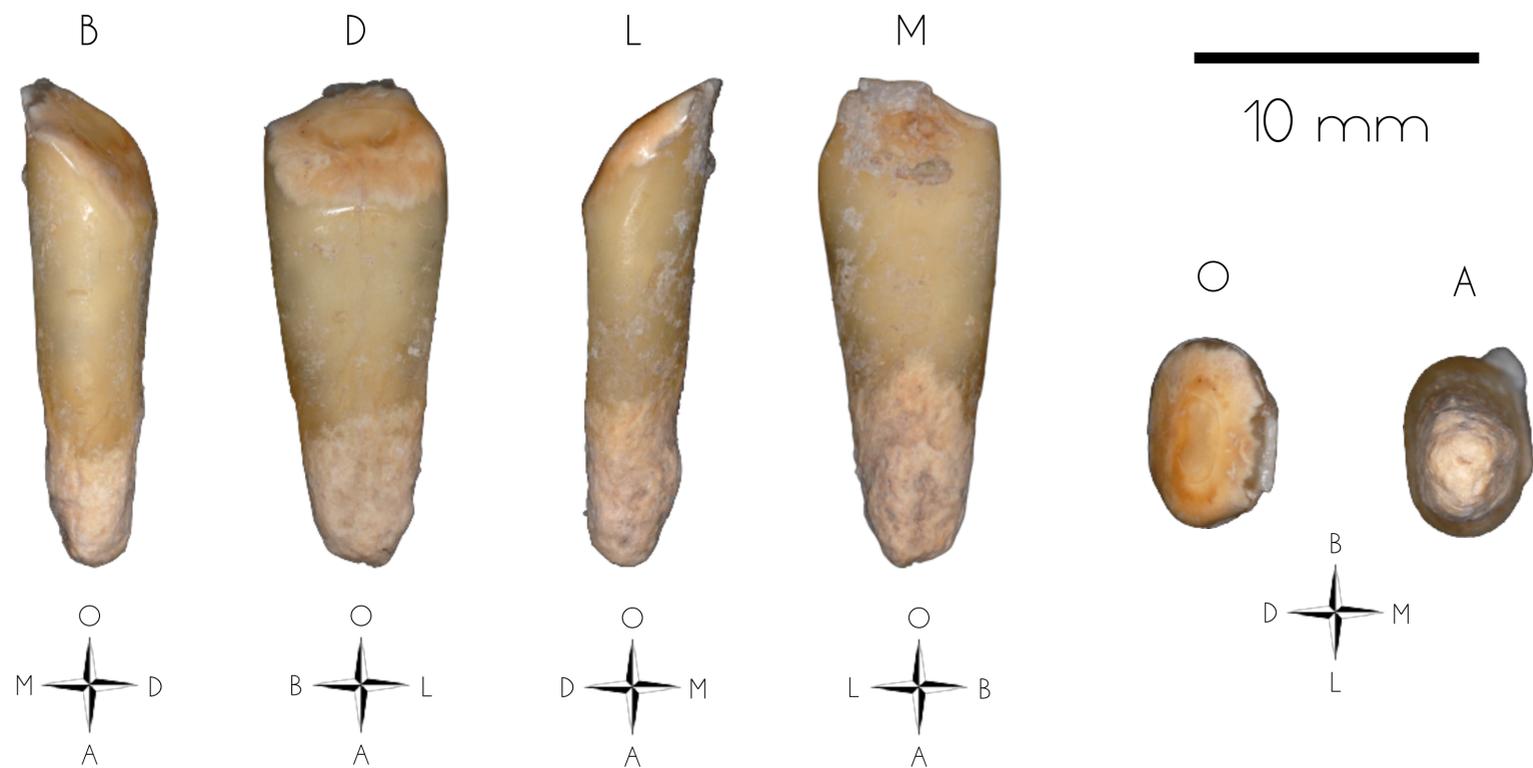
MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
 PREF LOC: preferential location;

Excluded

Sp39_35

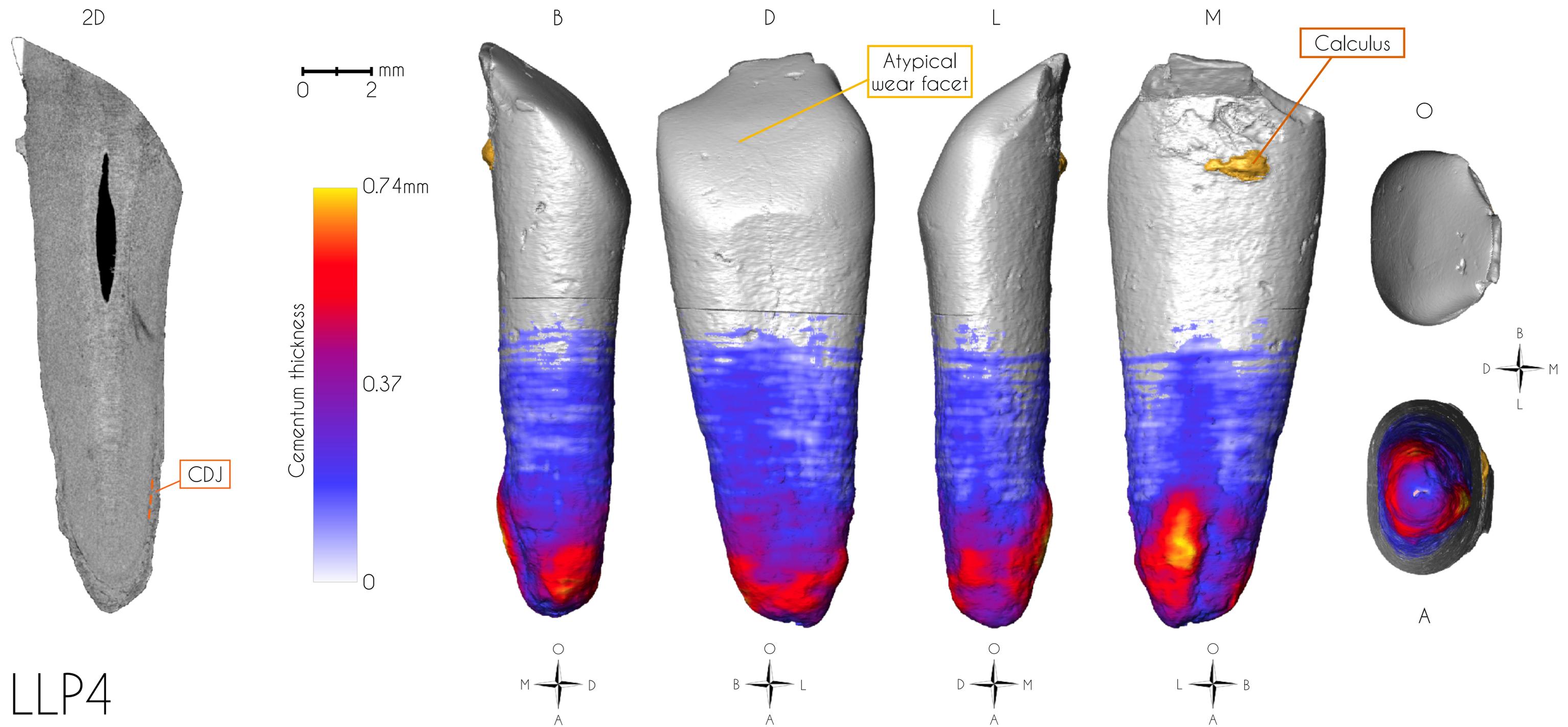
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP4	8	4	2	-	0	0	1.2.m	0	0	2	1

LLP4



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp39_35



LLP4

Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
740	1m	No	Yes	-

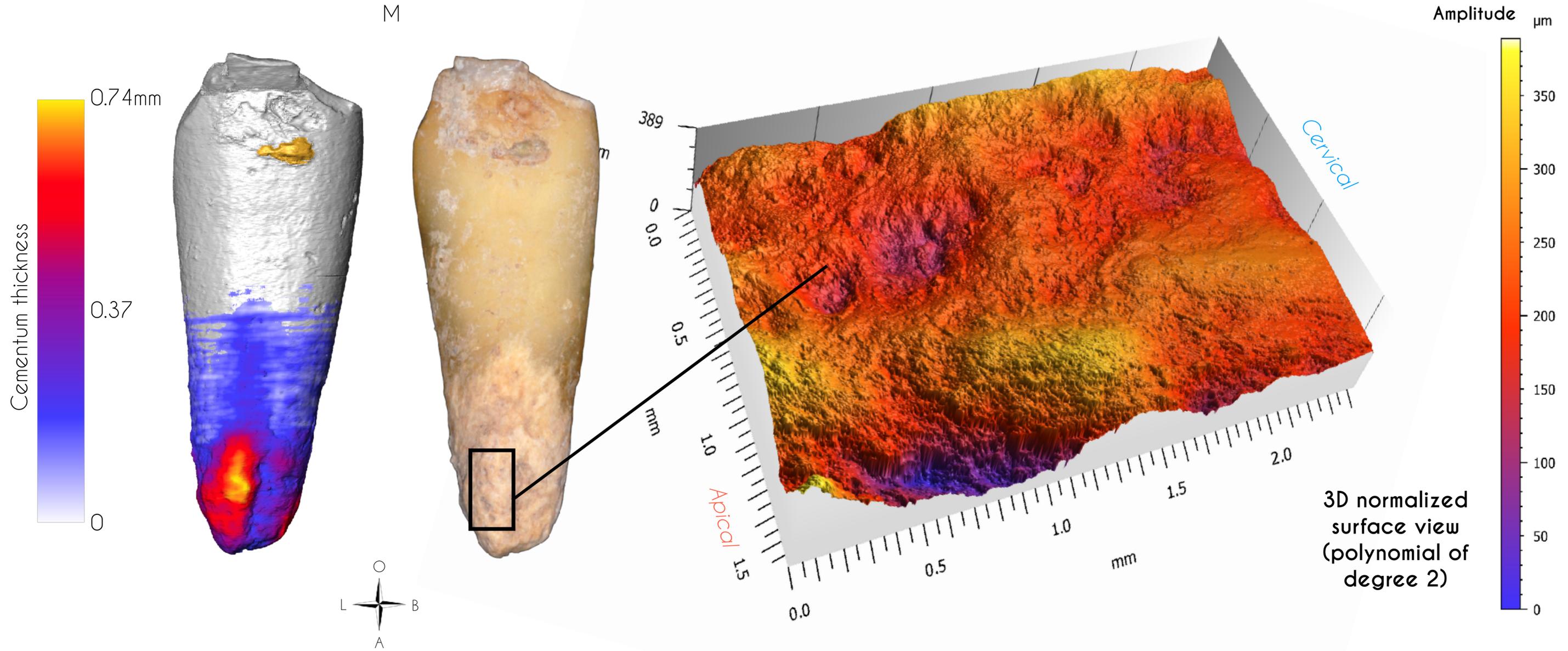
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;

Hyperfunctional

LLP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1310	5.24%	1.67mm	3.04mm	2/5	2	Blue	1.47	1.61	10%

Sp39_35



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1m	400	+R2	-

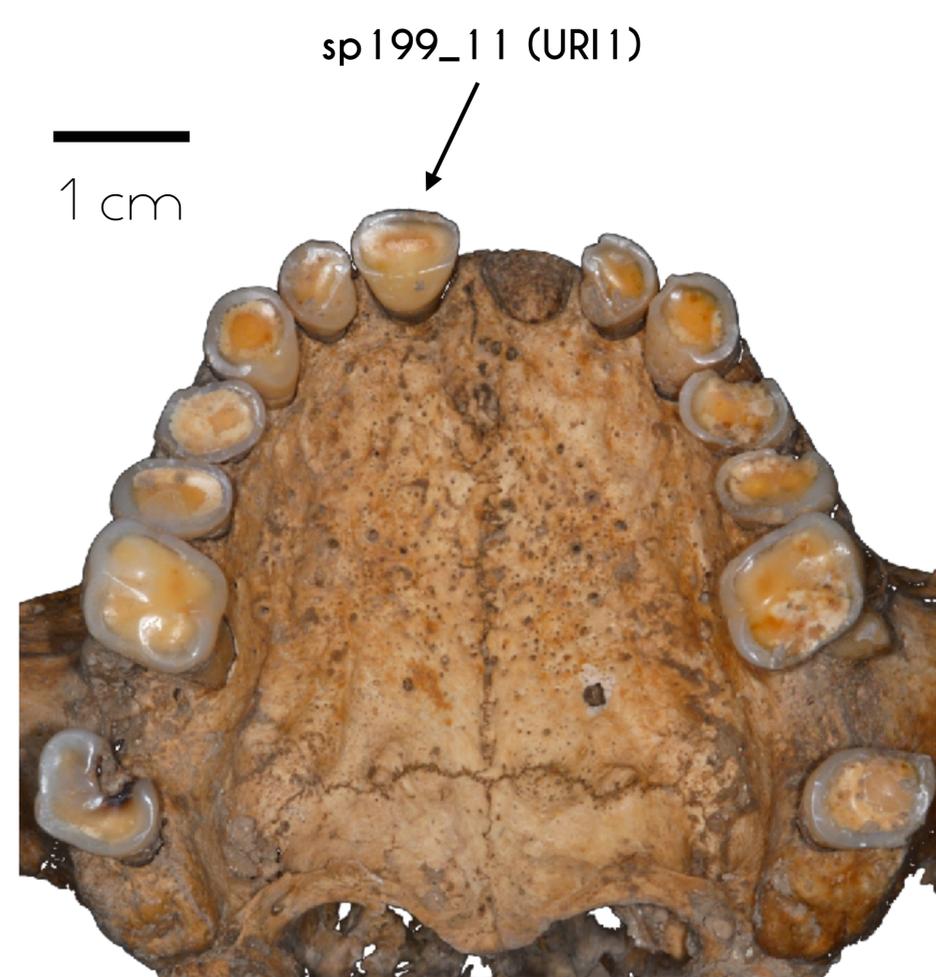
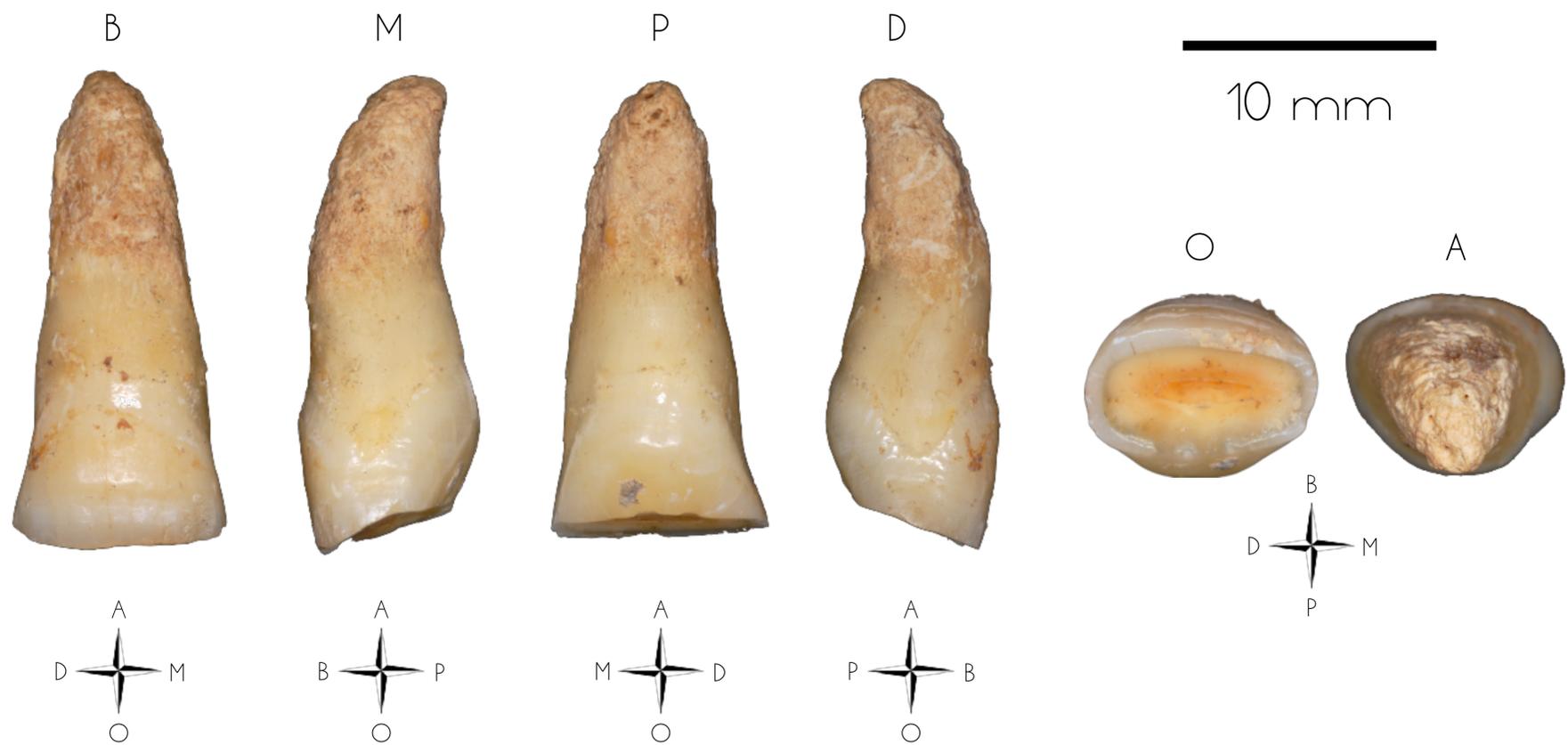
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hyperfunctional

Sp199_11

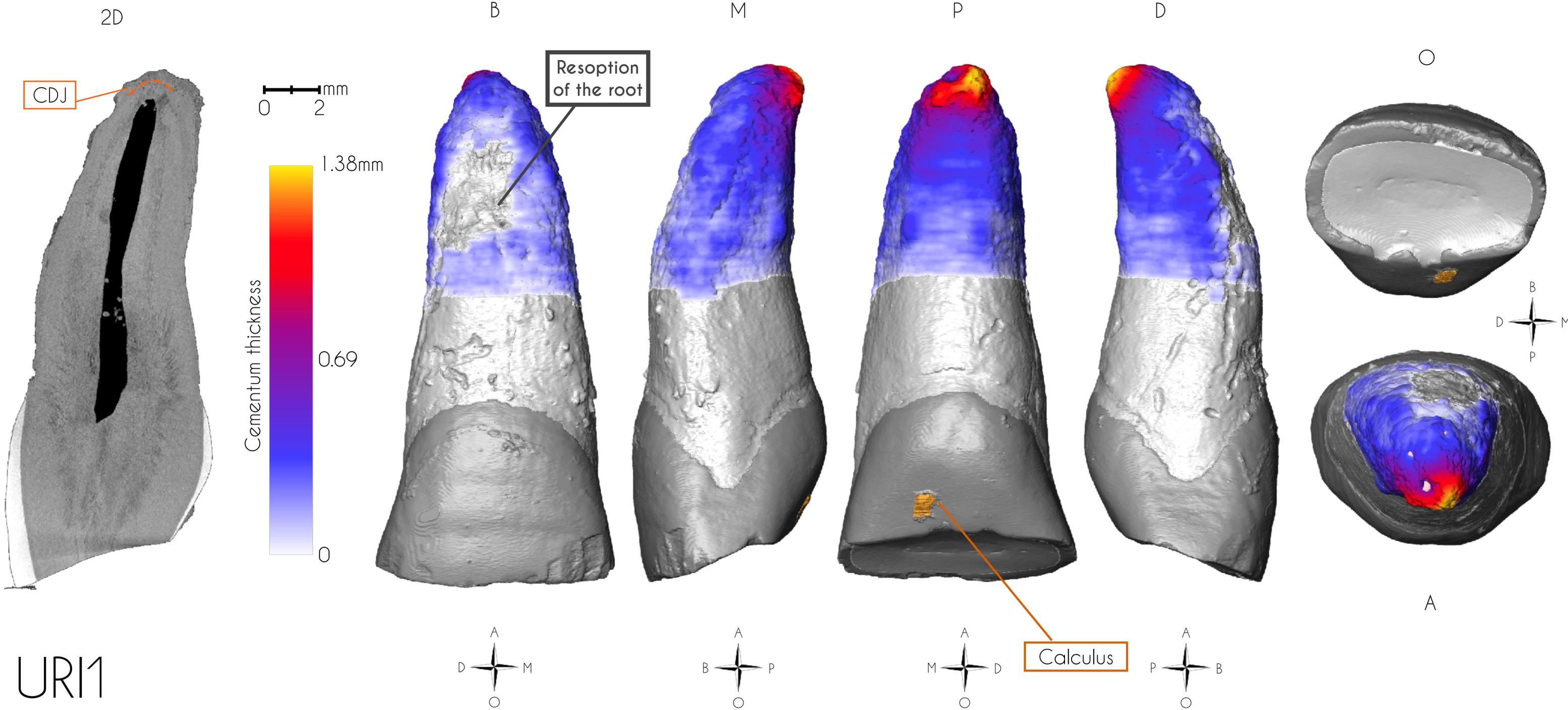
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URI 1	6	6	4	-	0	0	1.2.m	0	0	0	1

URI1



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp199_11



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1380	1>	<	Yes	RES (1<)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
RES: resorption of the root;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

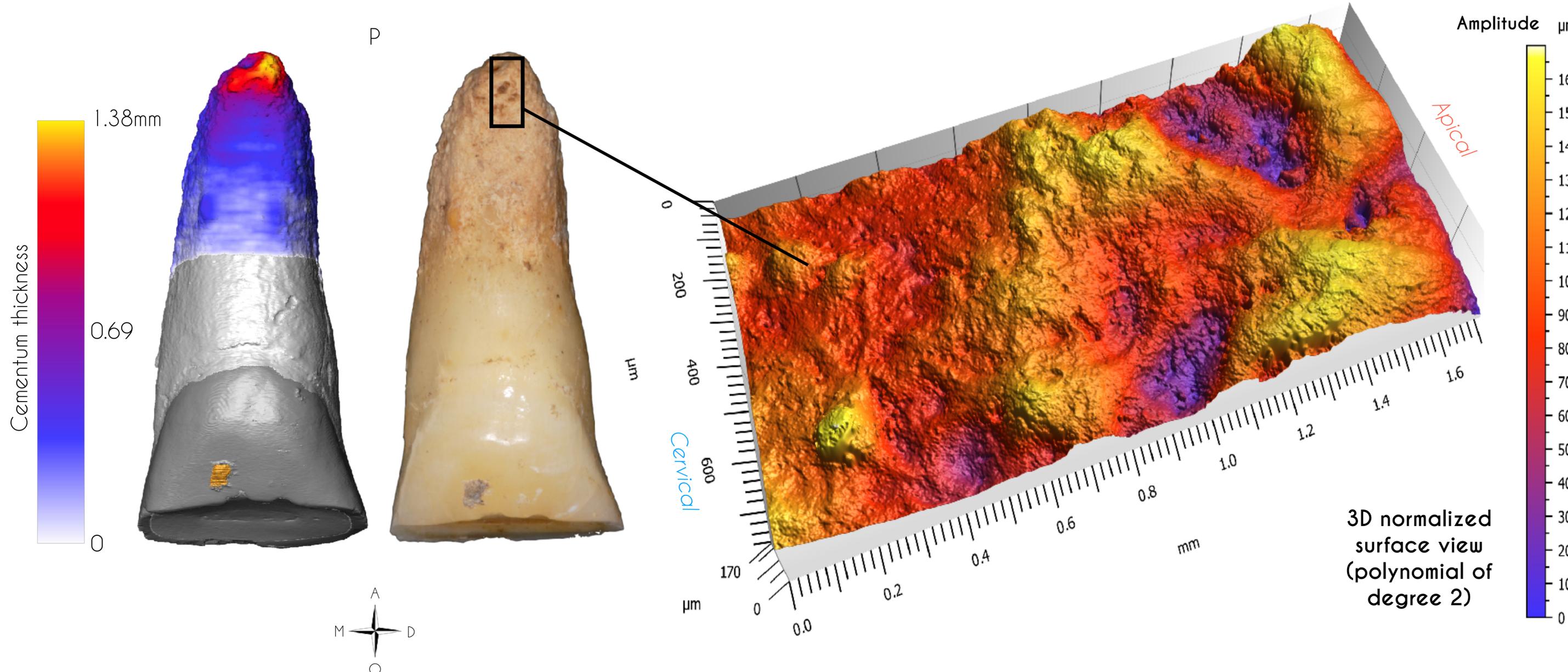
URI1

Hyperfunctional

UR11

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
P	577	4.00%	0.88mm	1.85mm	1/3	2	Blue	1.49	1.79	10 %

Sp199_11



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1>	170	+R1	-

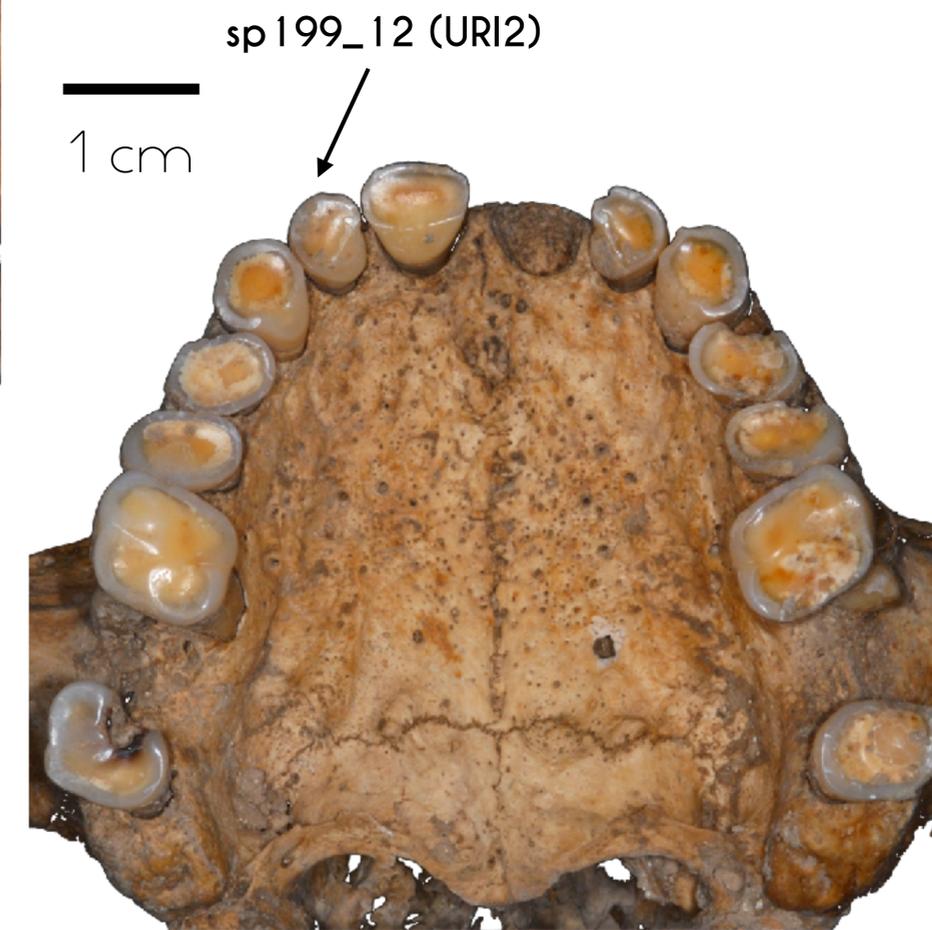
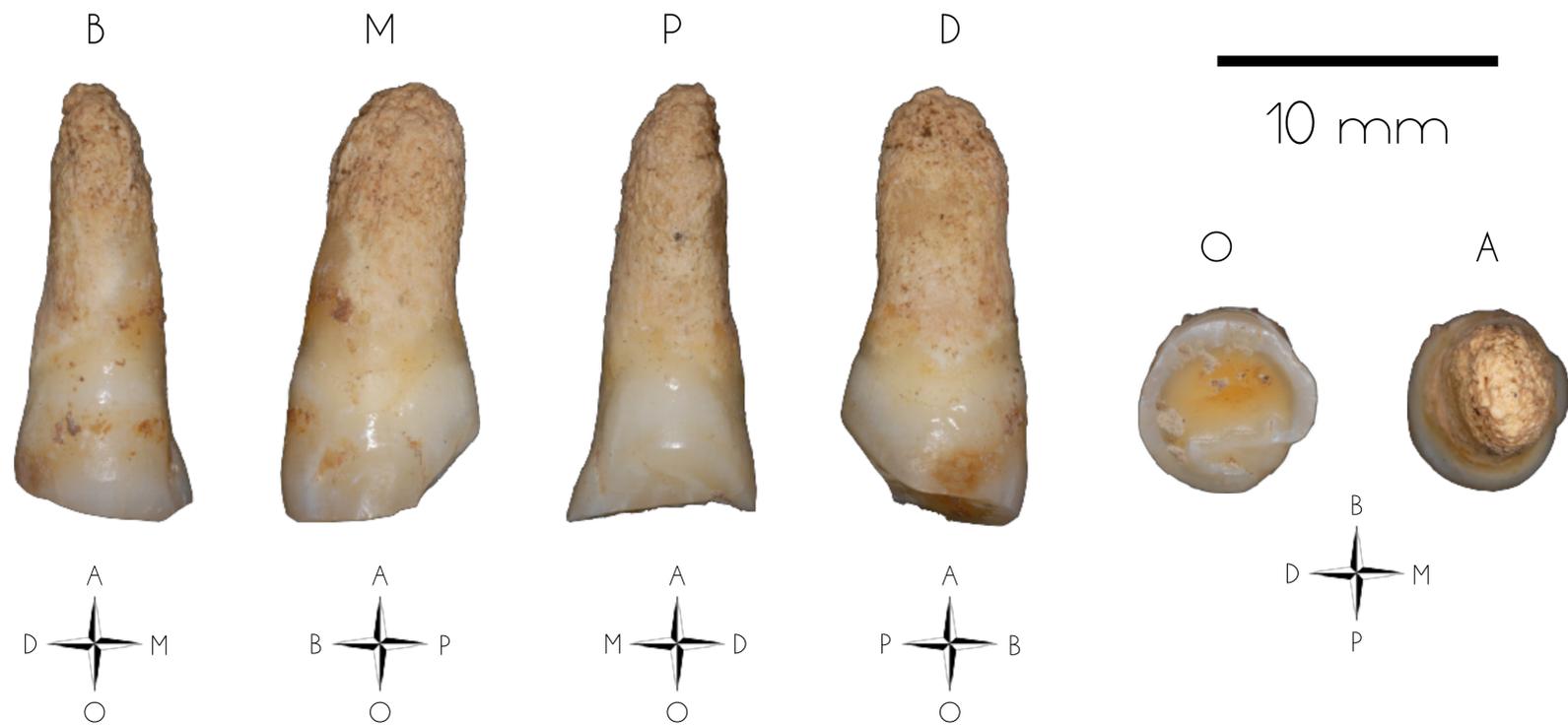
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hyperfunctional

Sp199_12

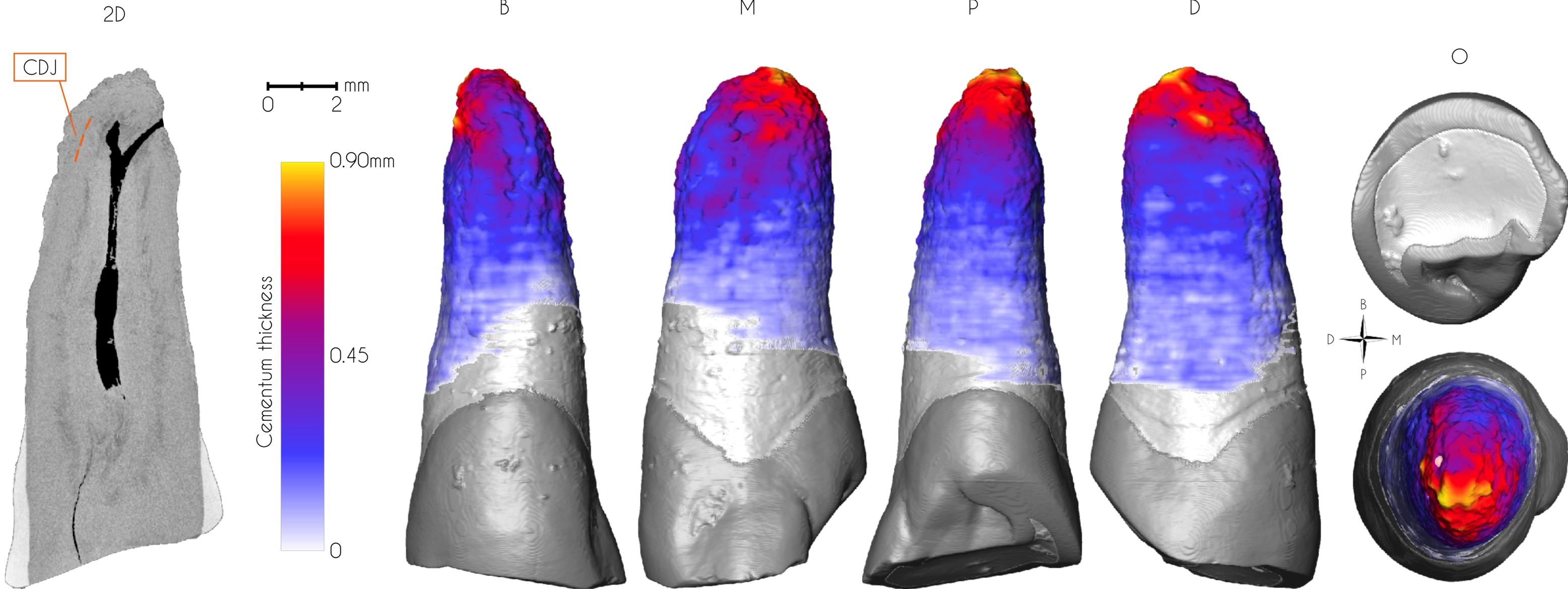
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URI2	6	4	4	-	0	0	1.3.m	0	0	0	1

URI2



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp199_12

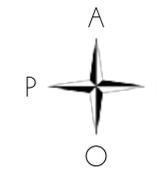
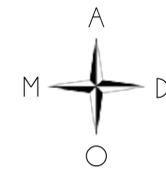
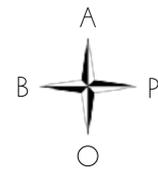
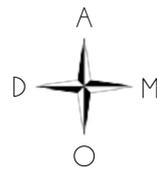


Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
900	1>	<	Yes	-

MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
 PREF LOC: preferential location;

URI2



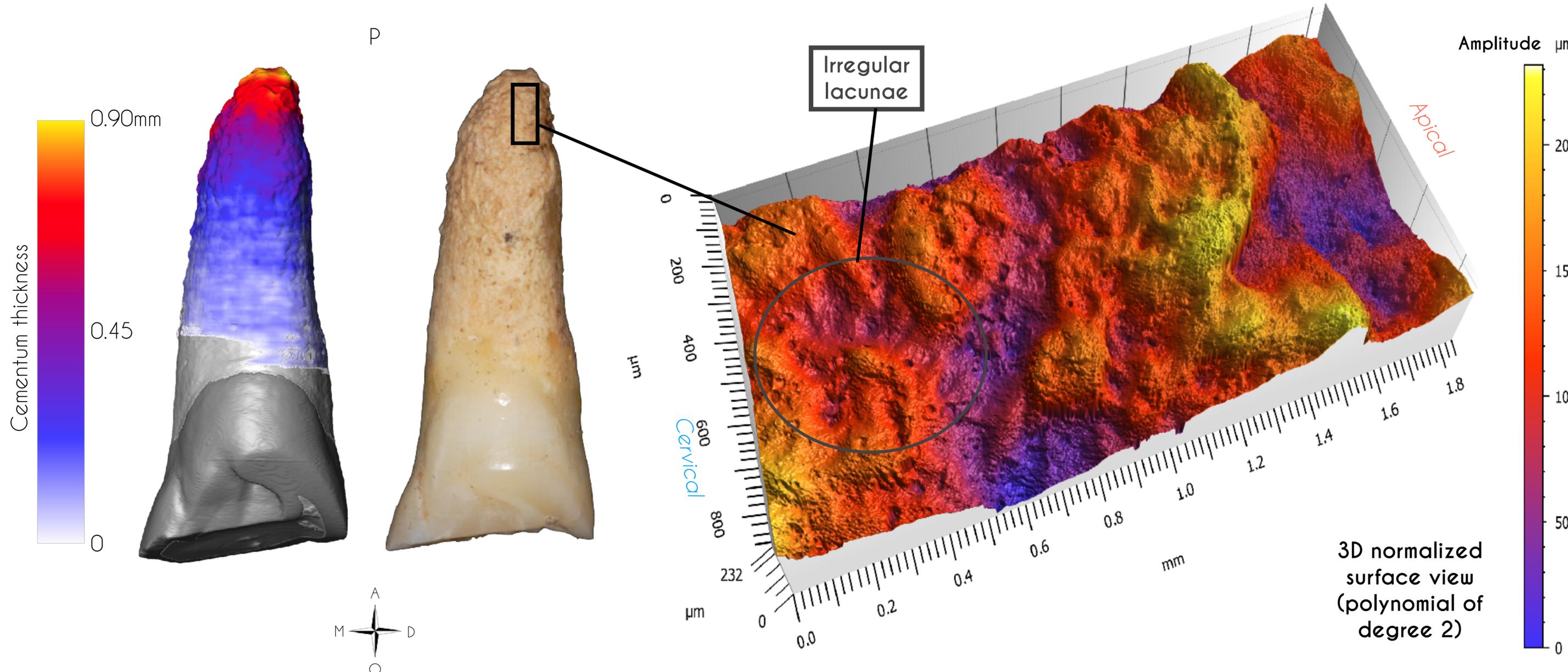
A

Hyperfunctional

URI2

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
P	949	6.91%	0.88mm	1.85mm	1/3	2	Blue	1.49	1.79	10%

Sp199_12



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1>	230	+R1	IL

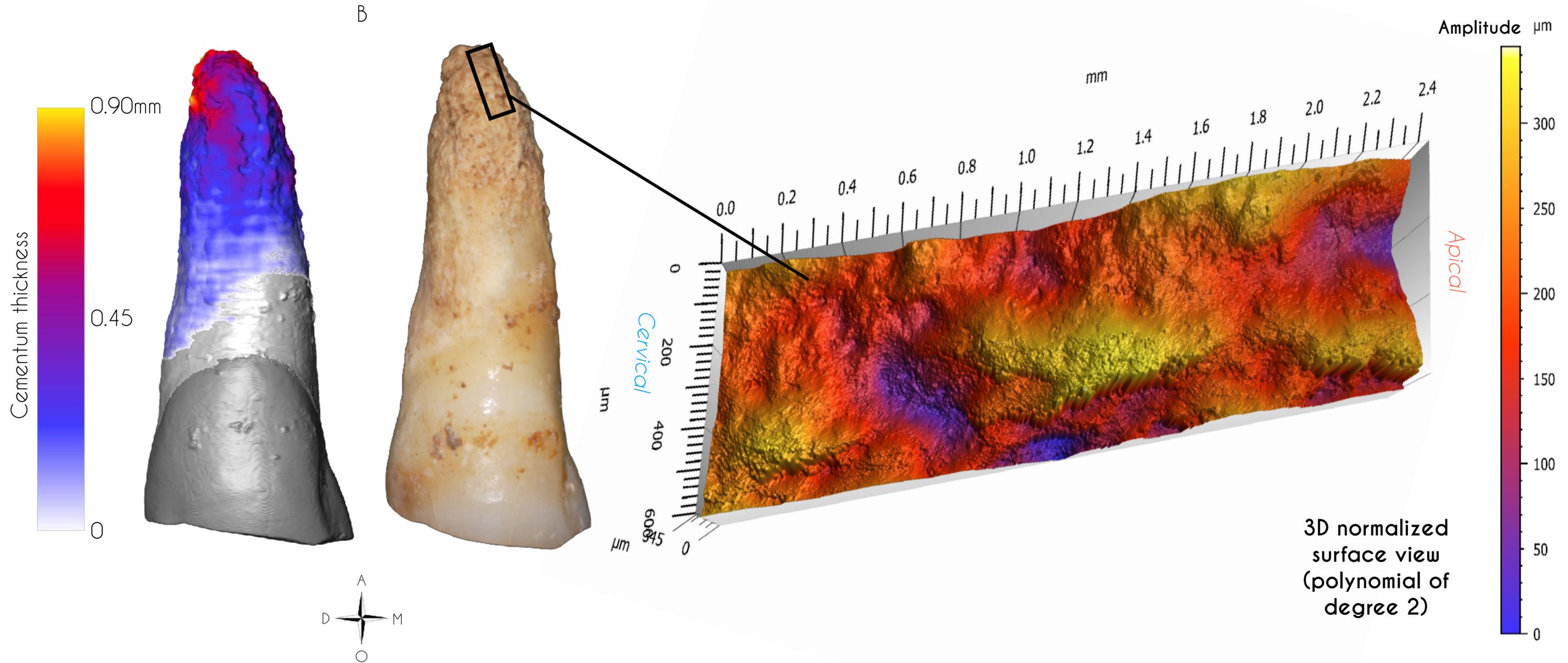
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
IL: irregular lacunae

Hyperfunctional

URI2

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
BM	882	5.76%	0.88mm	2.44mm	1/4	2	Blue	1.49	1.79	10%

Sp199_12



Confocal microscopy - Topography 3D maps			
OF	MAX VE (μm)	ST	Note
1<	350	+R1	-

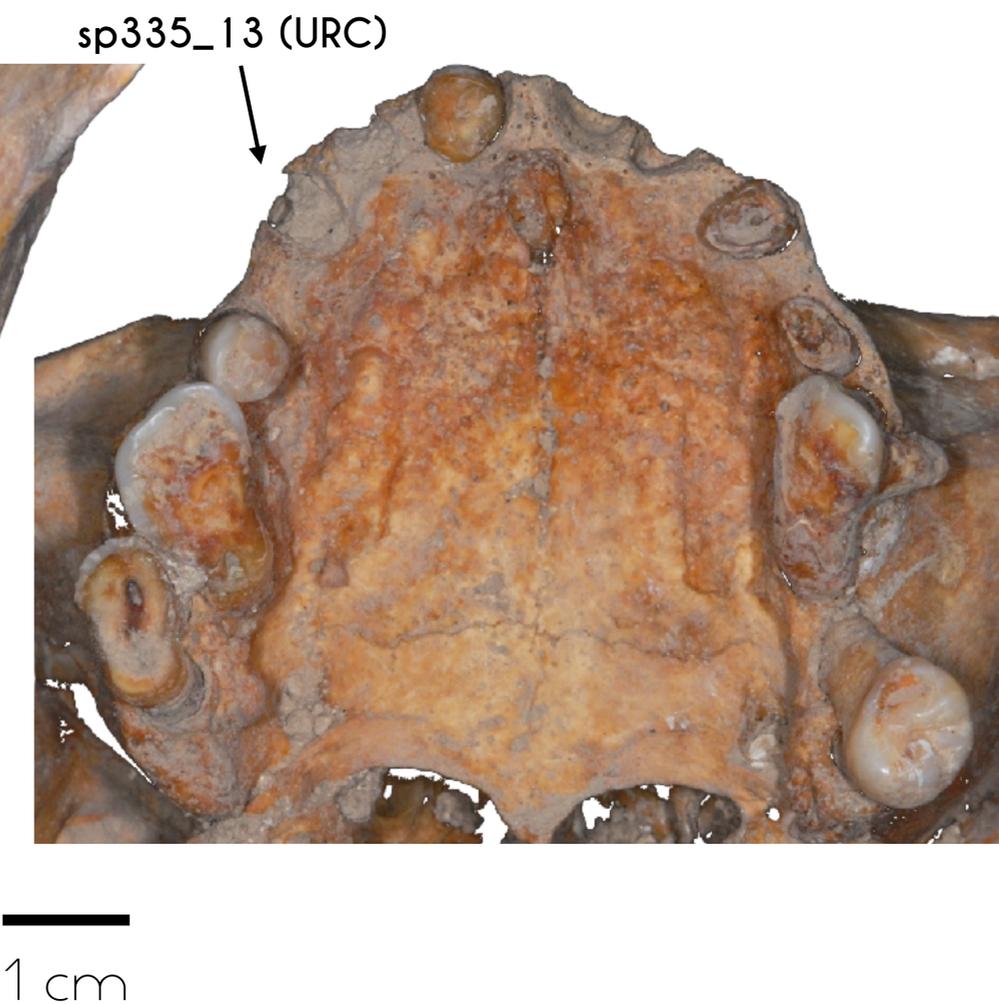
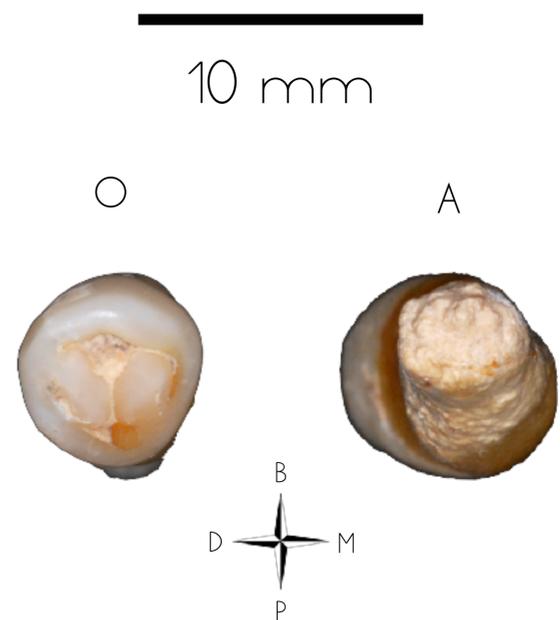
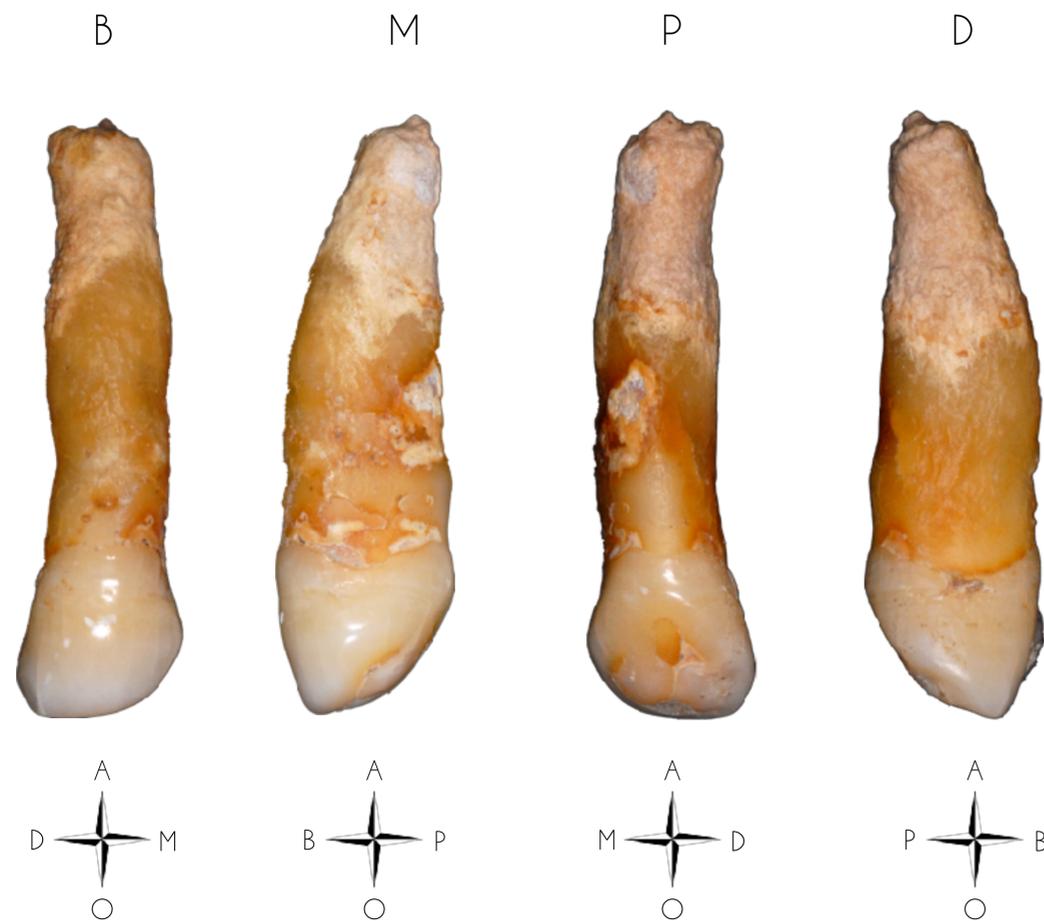
OF: other face;
 MAX VE: maximum vertical elevation;
 ST: surface texture; : scored (+) if it is high, (-) if it is low; S: smooth or R: rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hyperfunctional

Sp335_13

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URC	4	2	2	-	0	0	1.2.m	0	0	2	1

URC

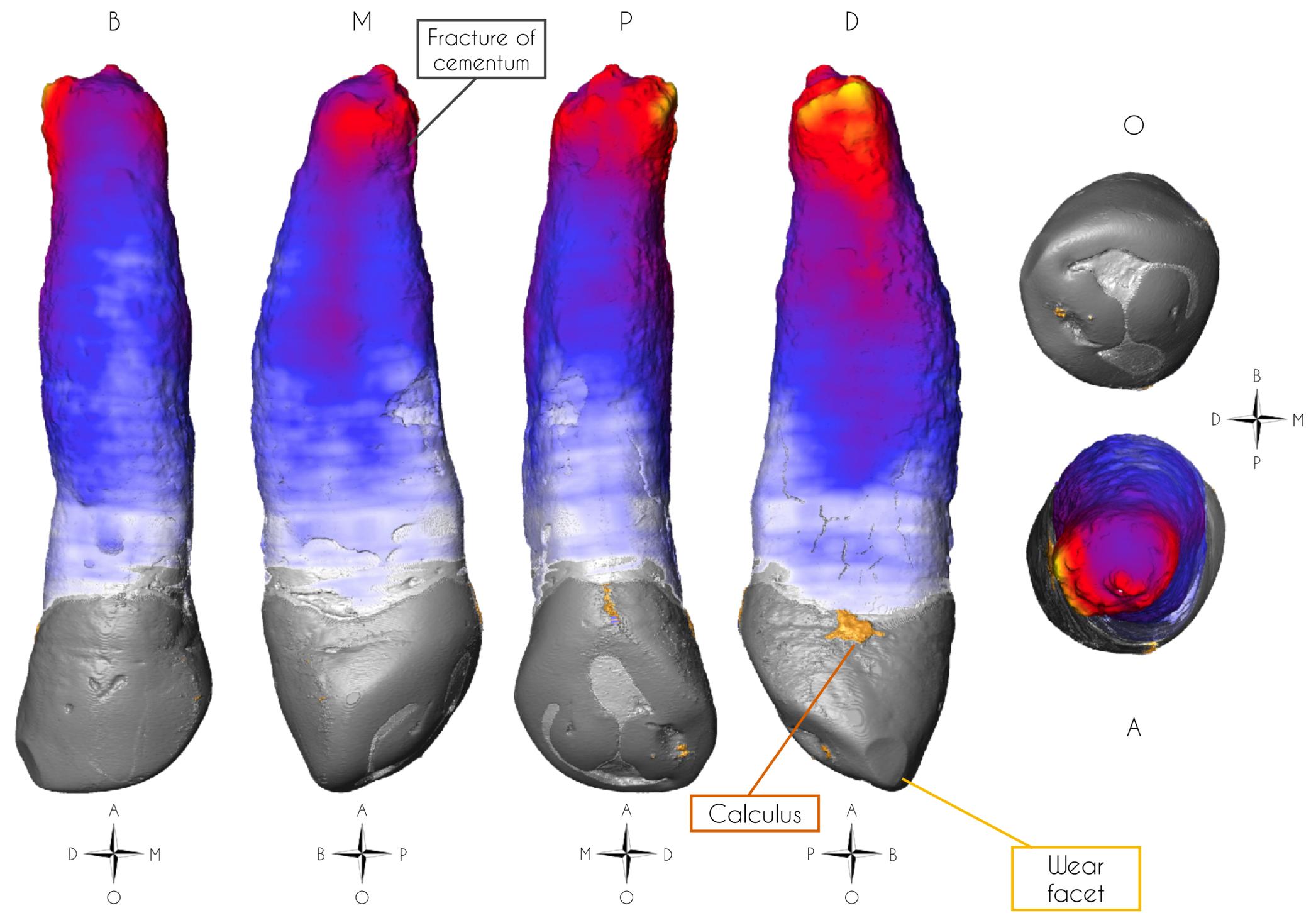
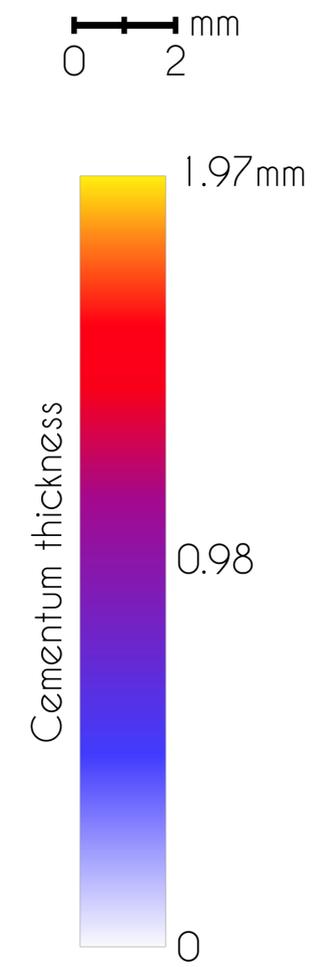


DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp335_13



URC



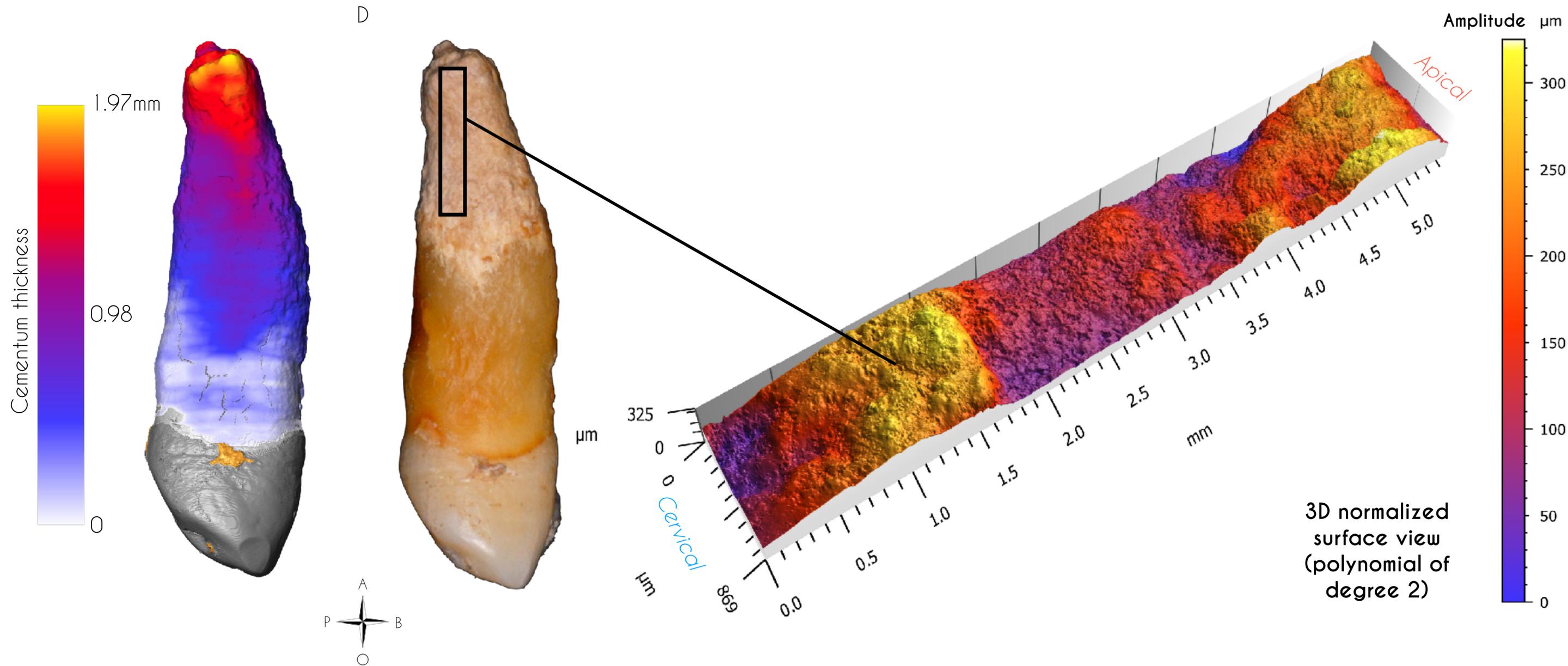
Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1970	1d	<	Yes	FR (1>m)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
FR: fracture of cementum;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Hyperfunctional

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	960	6 %	0.88mm	6.01mm	1/10	2	Blue	1.5	1.8	10 %



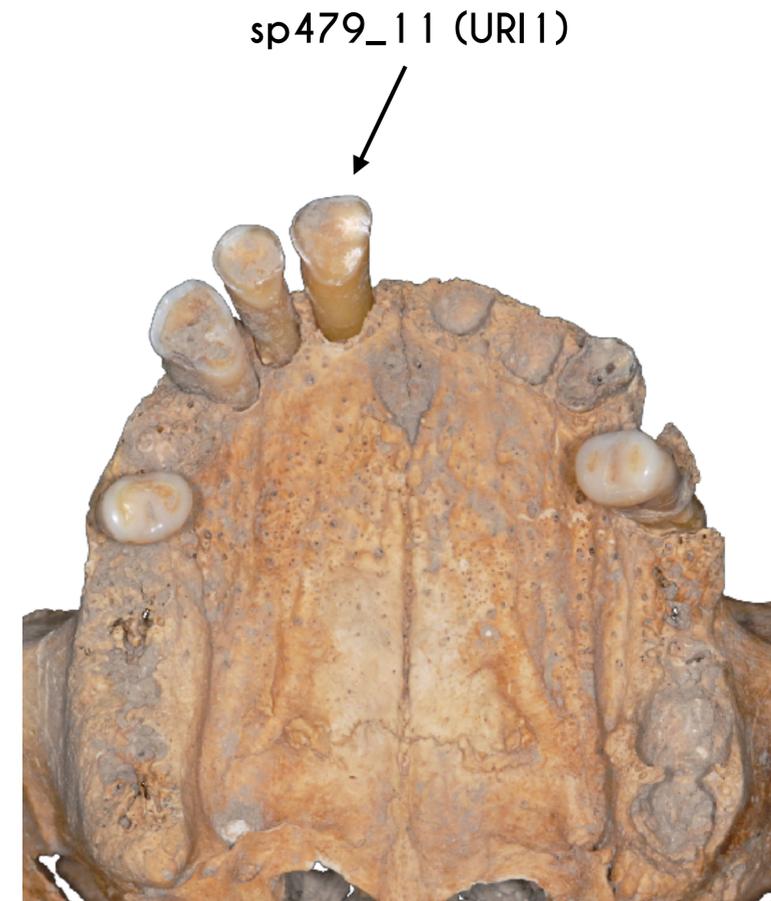
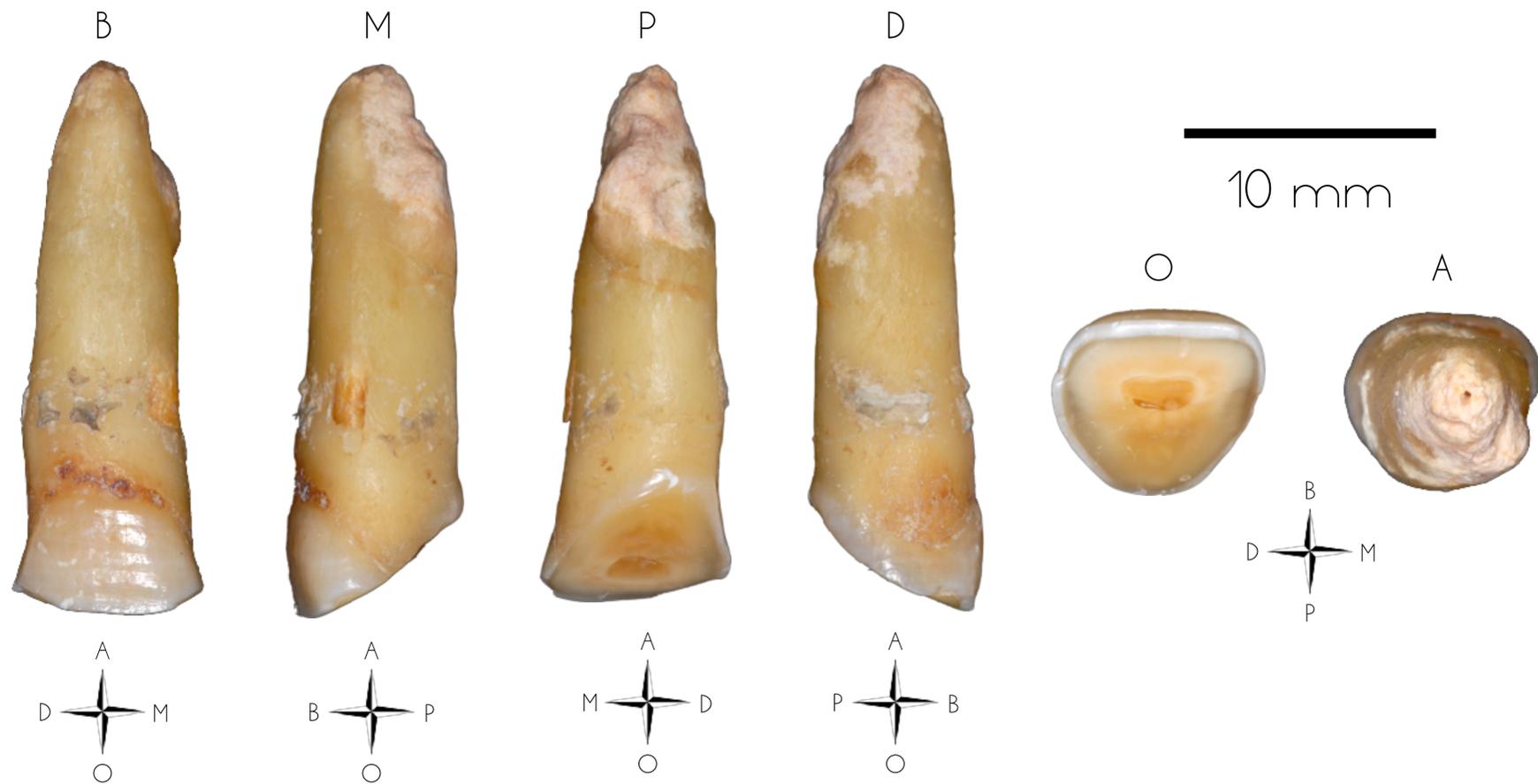
Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1d	325	+R1	-

LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Sp479_11

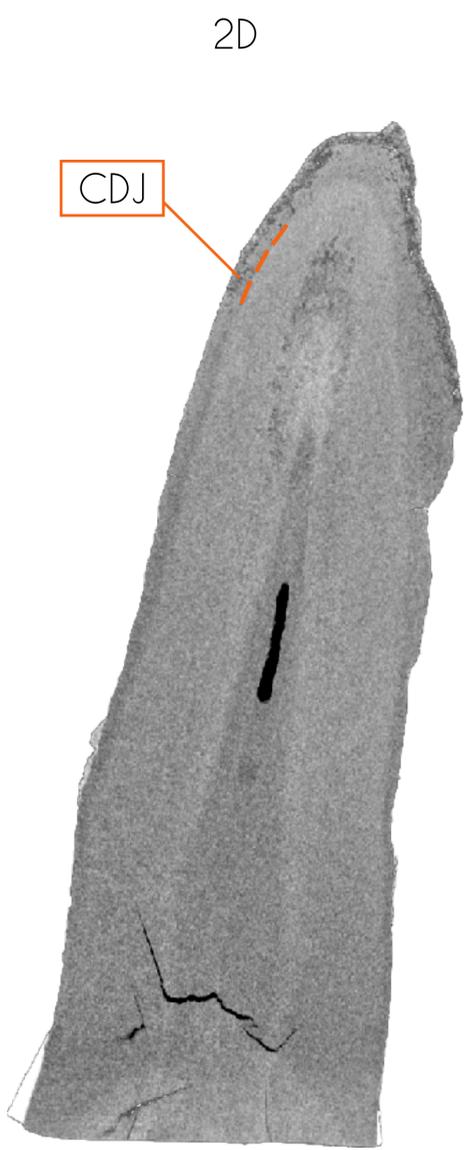
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URI 1	7	2	2	-	0	0	3.2.M	0	0	0	1

URI1



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

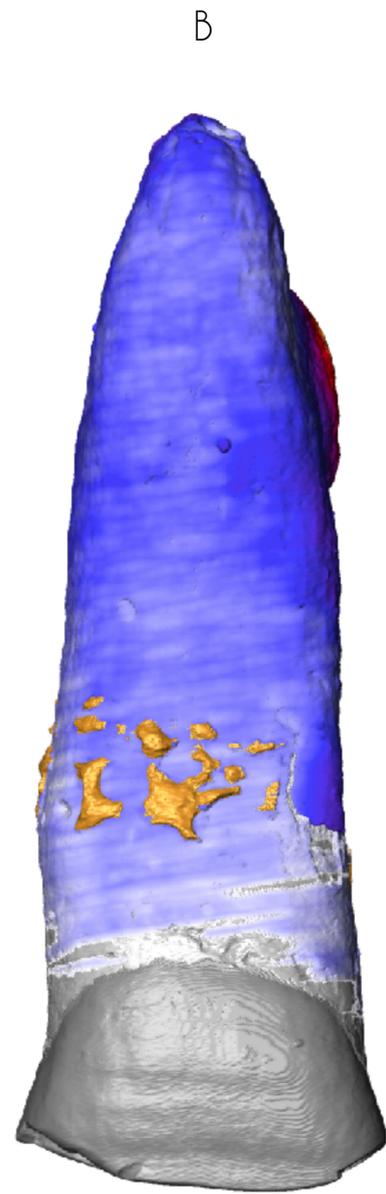
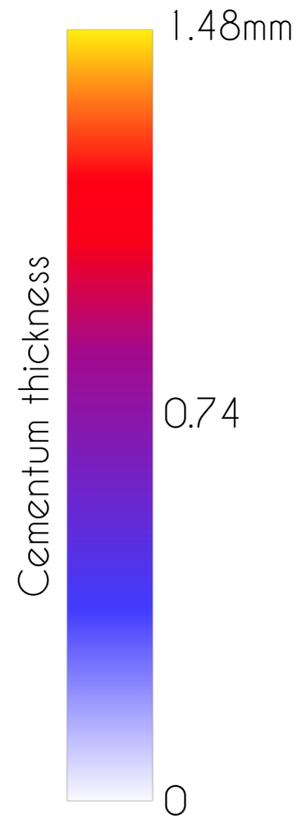
Sp479_11



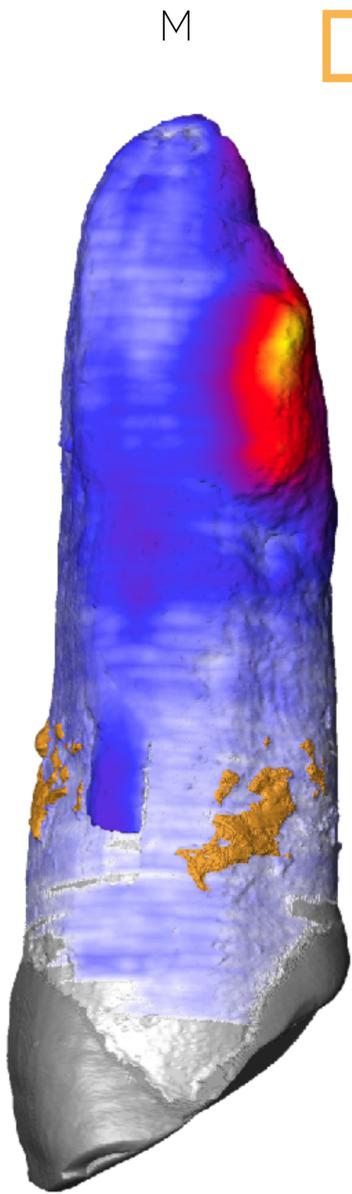
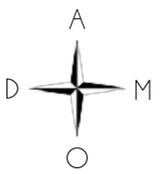
2D

CDJ

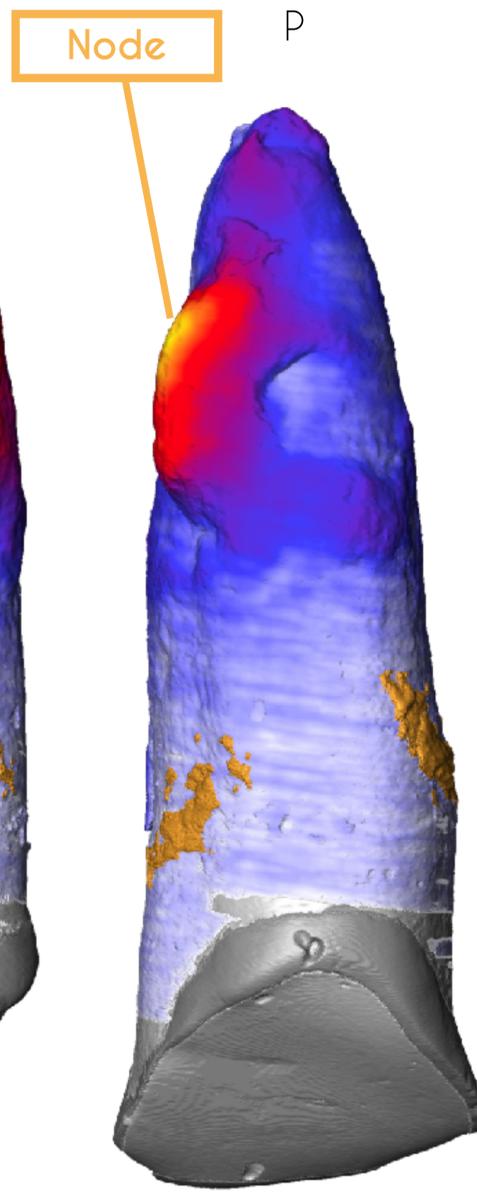
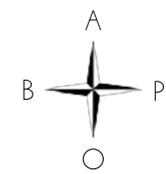
0 2 mm



B

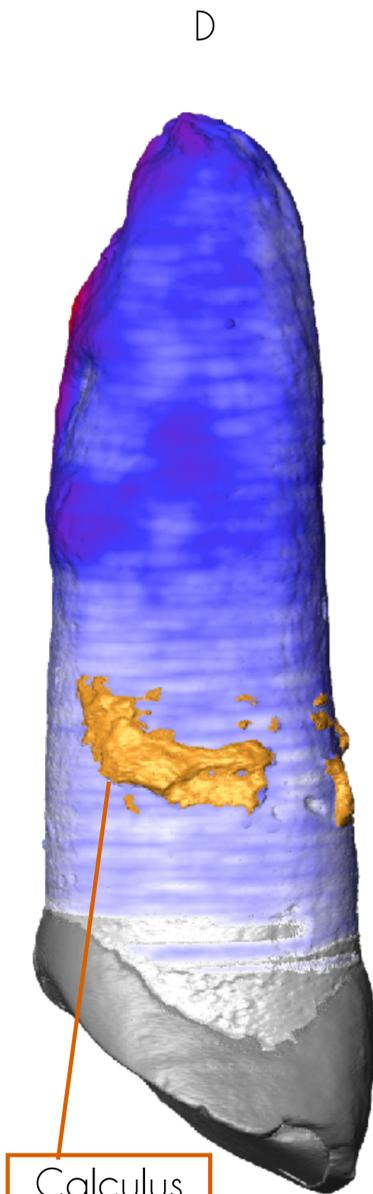


M



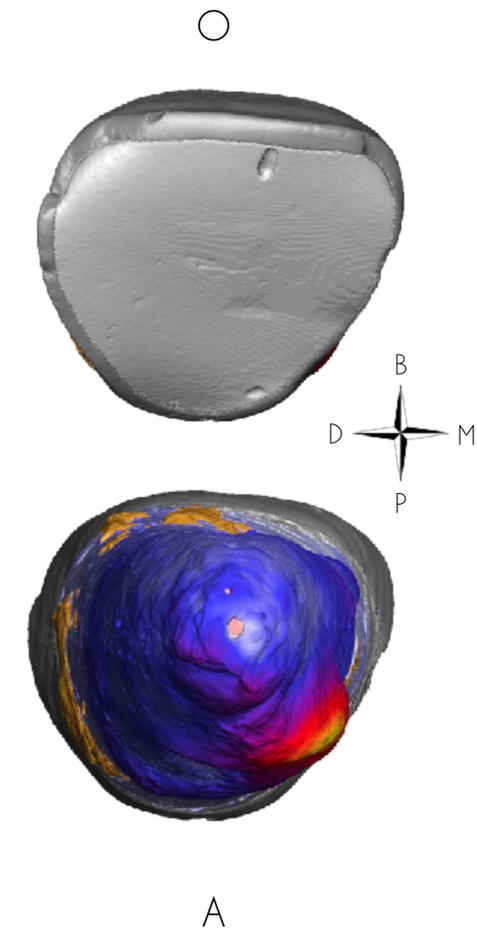
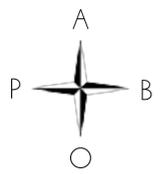
Node

P



D

Calculus



O

A

Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1480	1>	<	Yes	NOD (m>)

MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 PREF LOC: preferential location;
 NOD: node;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

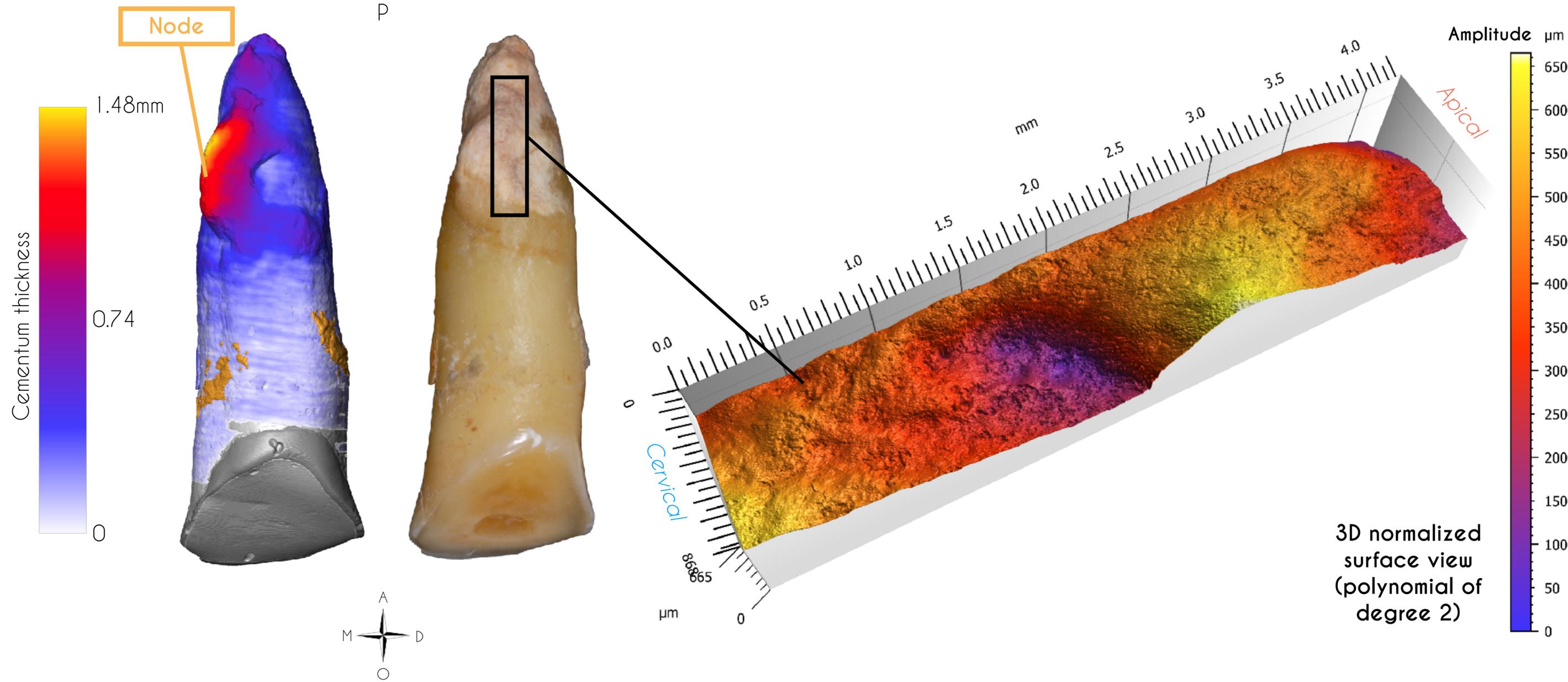
URI1

Hyperfunctional

UR11

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1310	5.24%	1.67mm	3.04mm	2/5	2	Blue	1.47	1.61	10%

Sp479_11



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1 m>	665	+S2	NOD

LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);

MAX VE: maximum vertical elevation;

ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

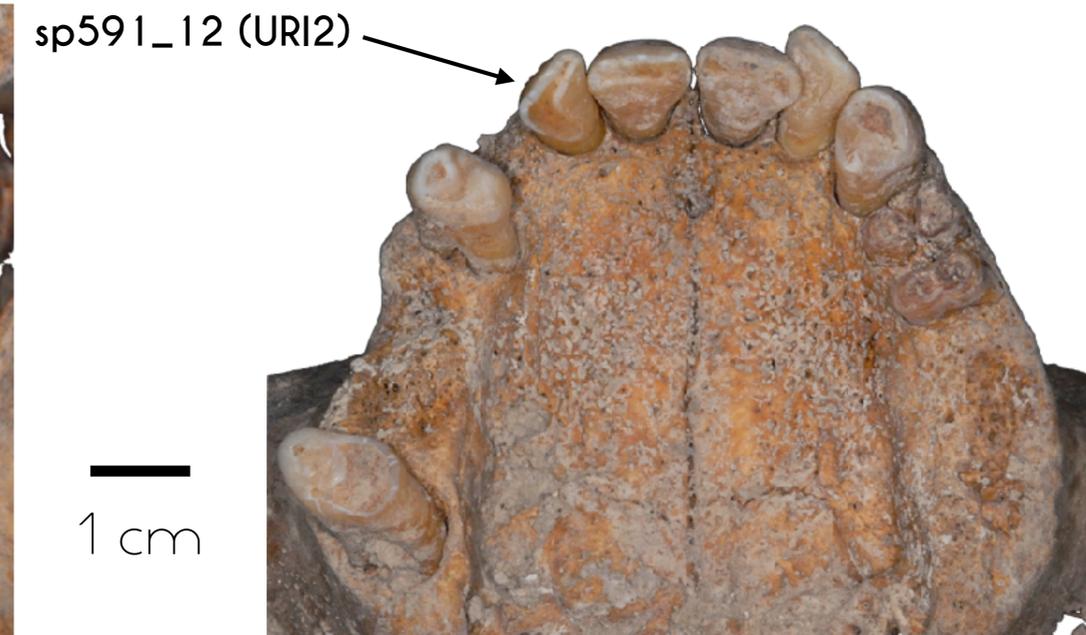
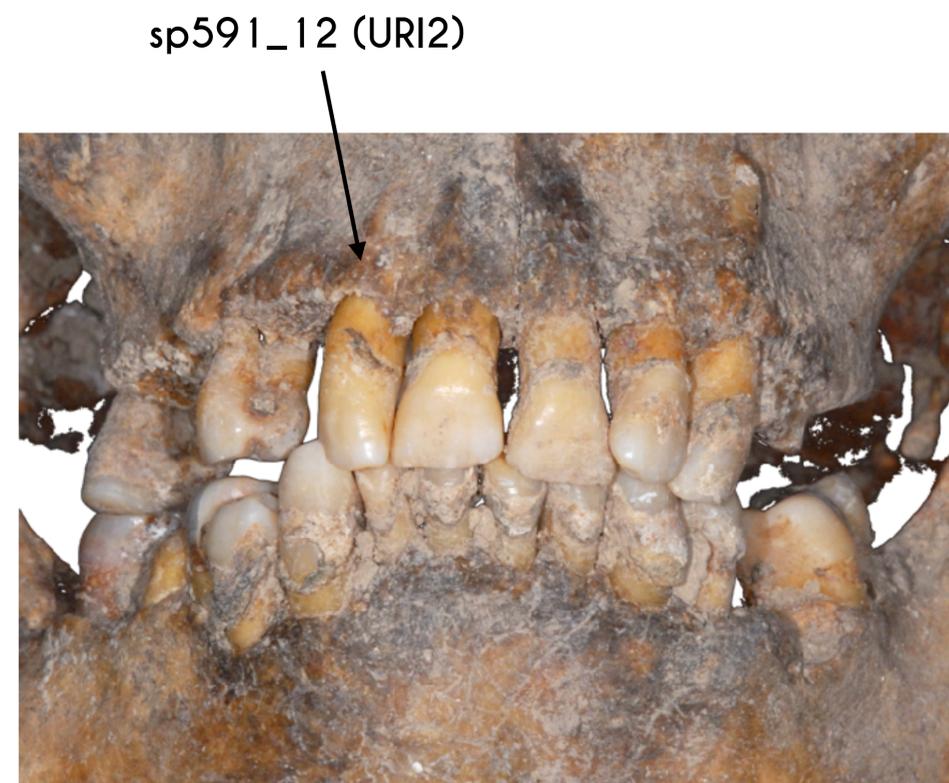
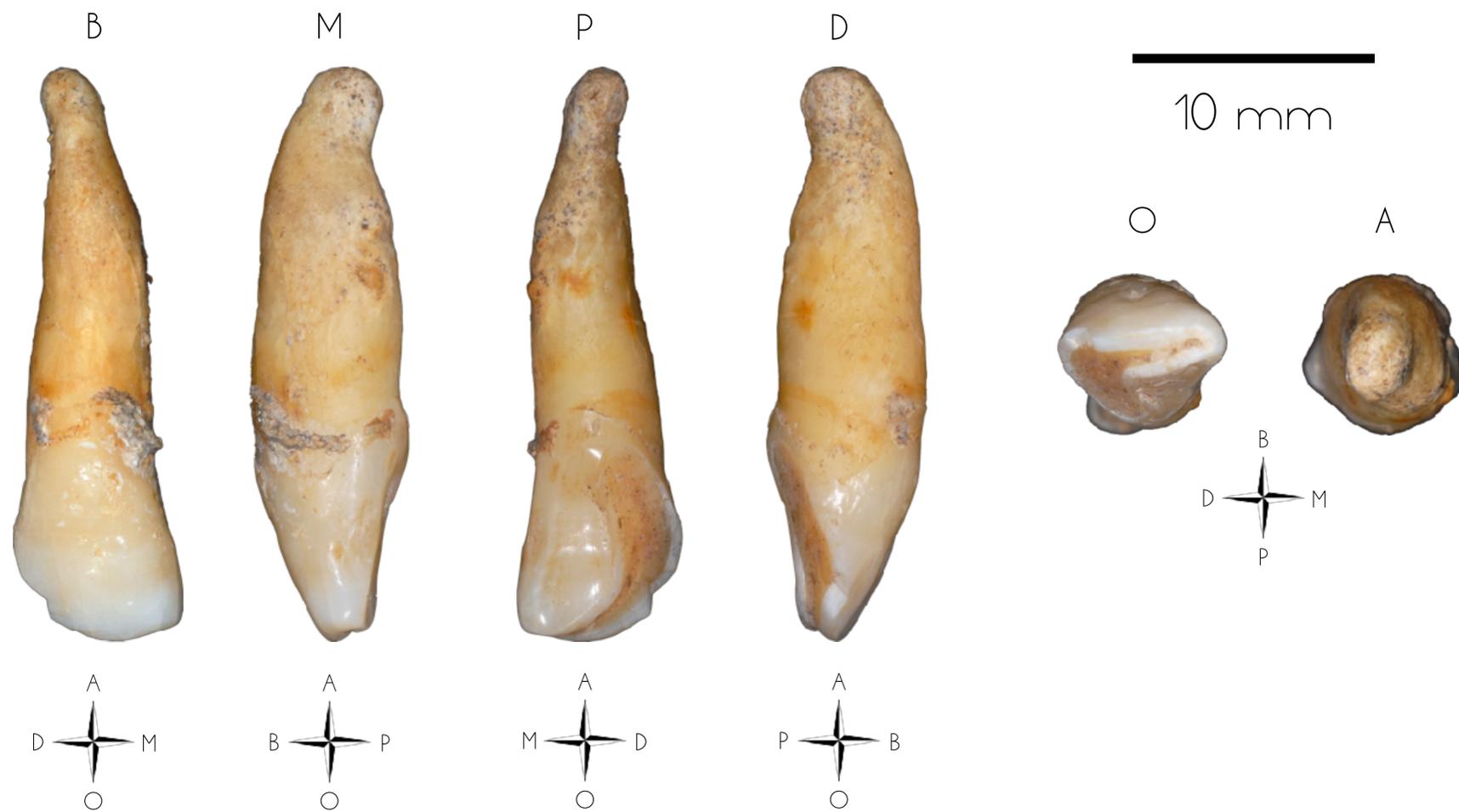
NOD: node

Hyperfunctional

Sp591_12

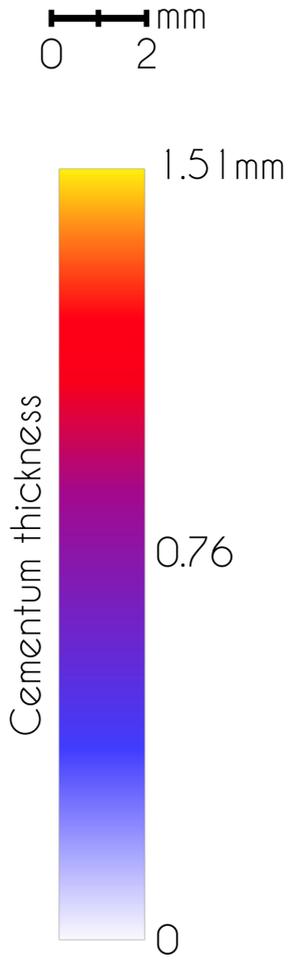
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URI2	5	4	6	-	0	0	1.1.m	0	0	1d	1

URI2

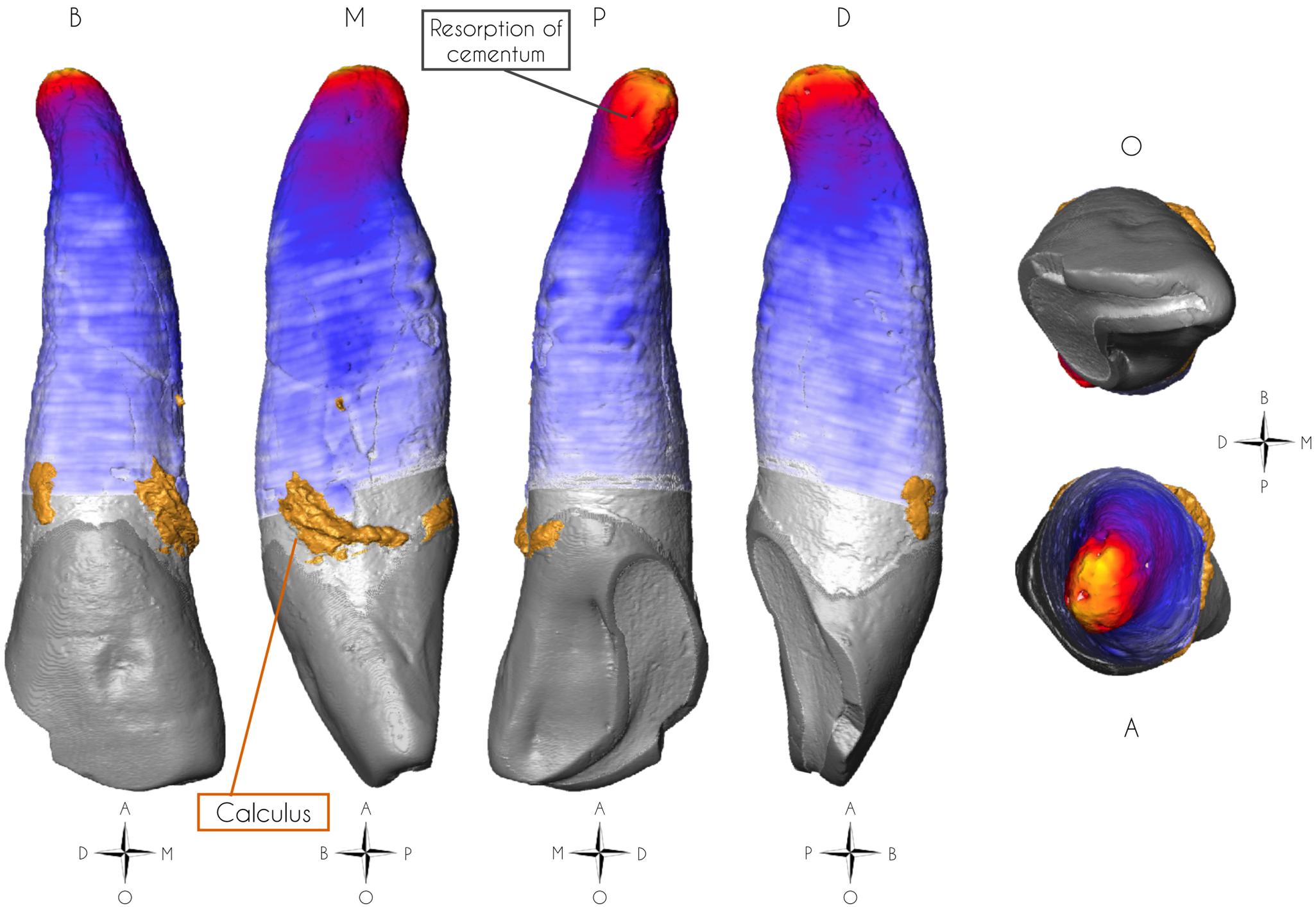


DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp591_12



URI2



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1510	1>	<	Yes	FR (1>)

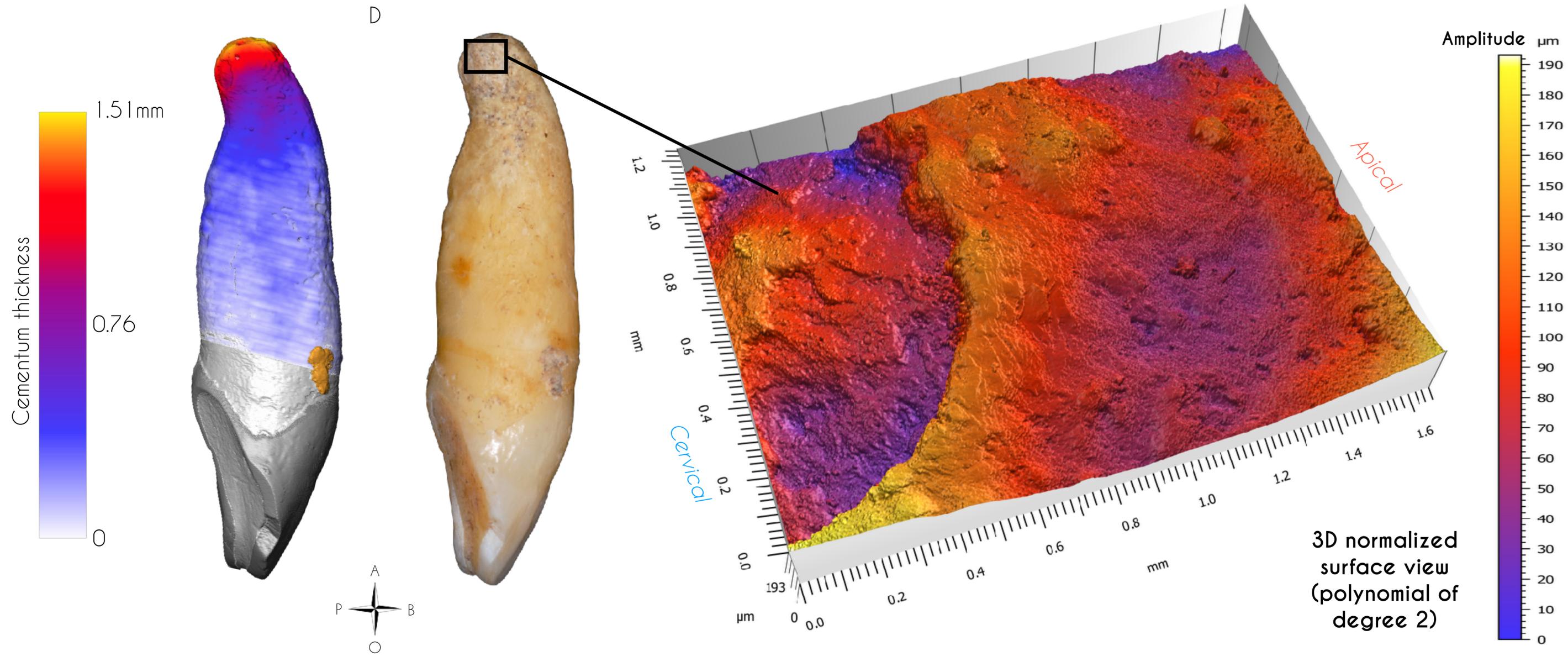
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
FR: fracture of cementum;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Hyperfunctional

URI2

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
PD	804	6.02%	1.67mm	1.25mm	2/2	2	Blue	1.47	1.61	10 %

Sp591_12



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1d	192	-R2	FR

Atypical SA: fracture of cementum

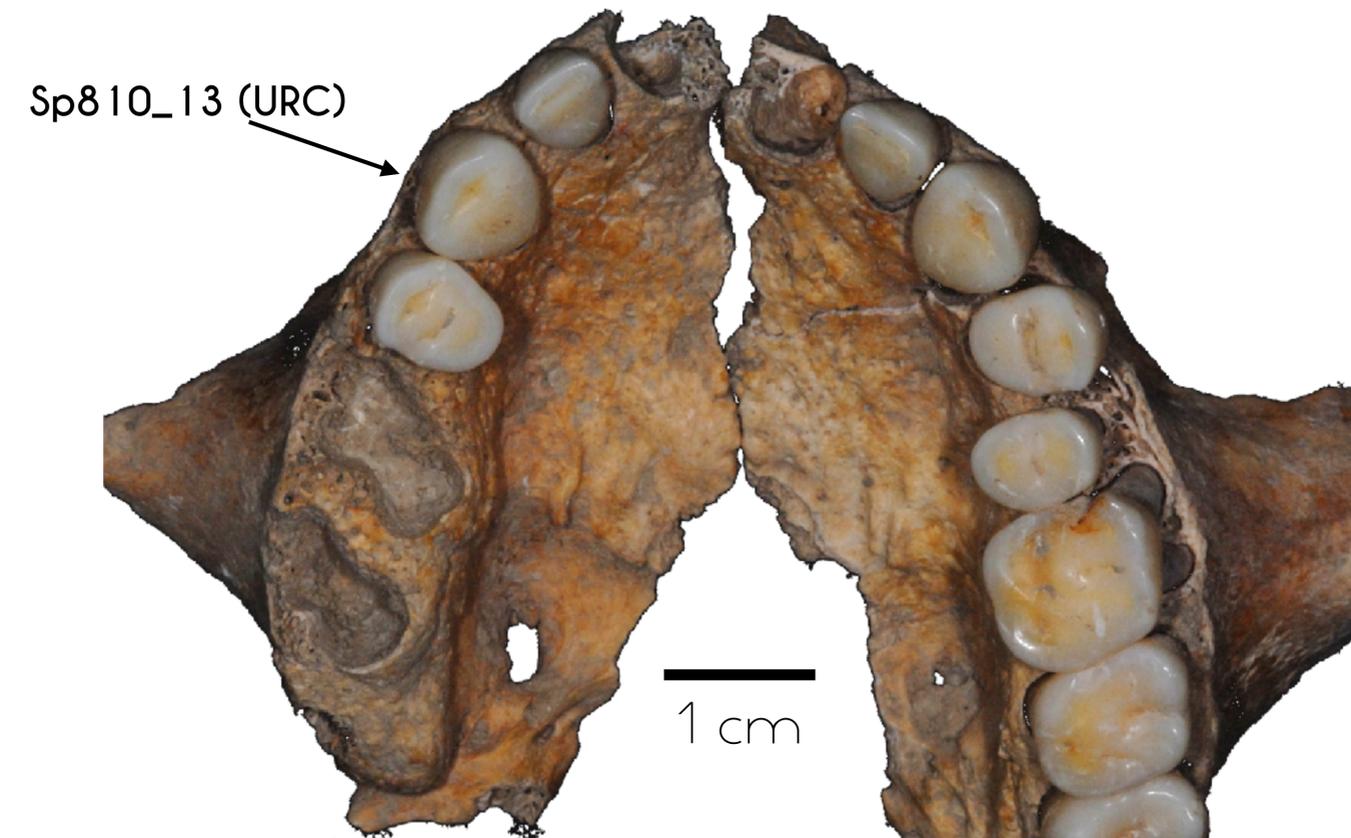
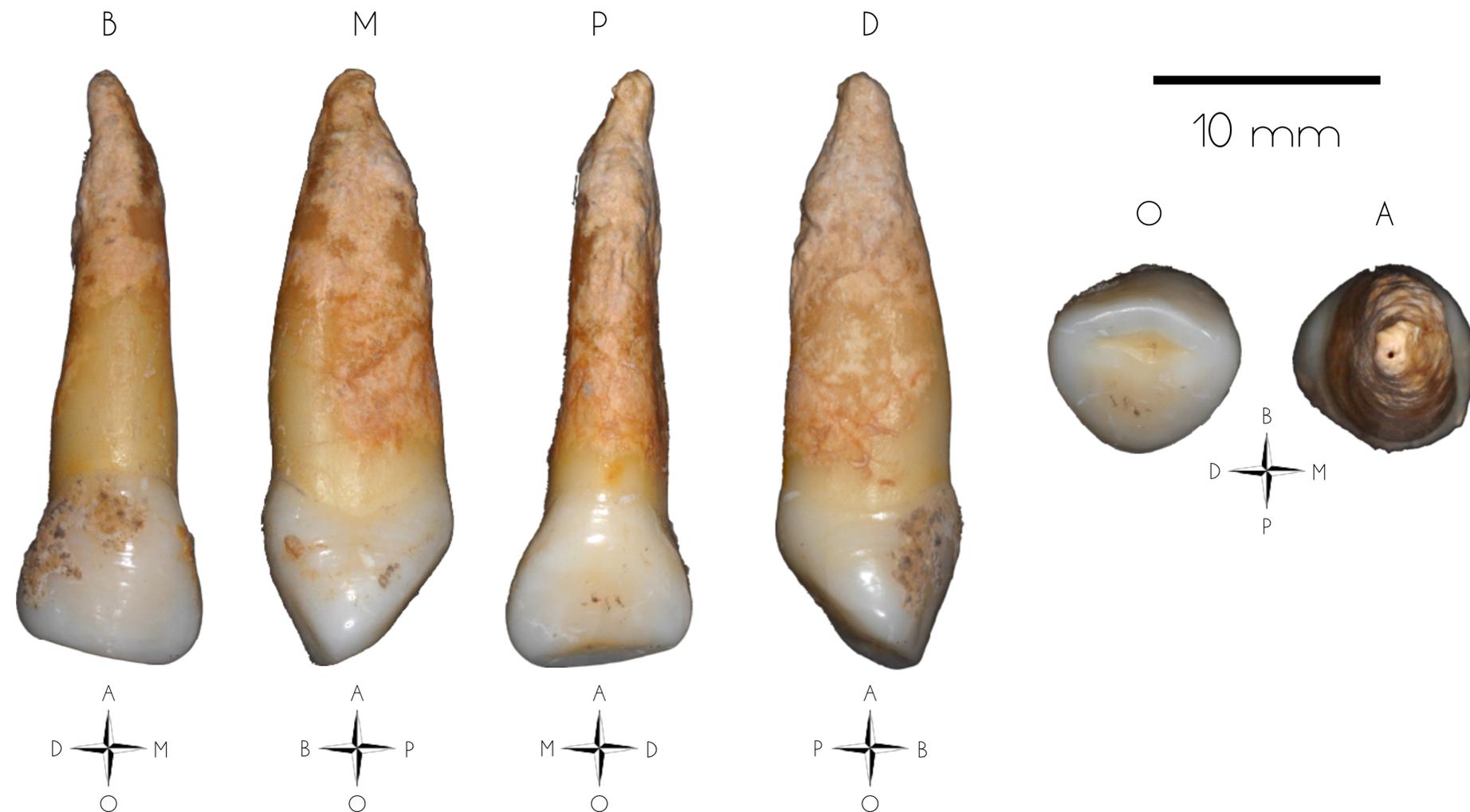
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
FR: fracture of cementum

Hyperfunctional

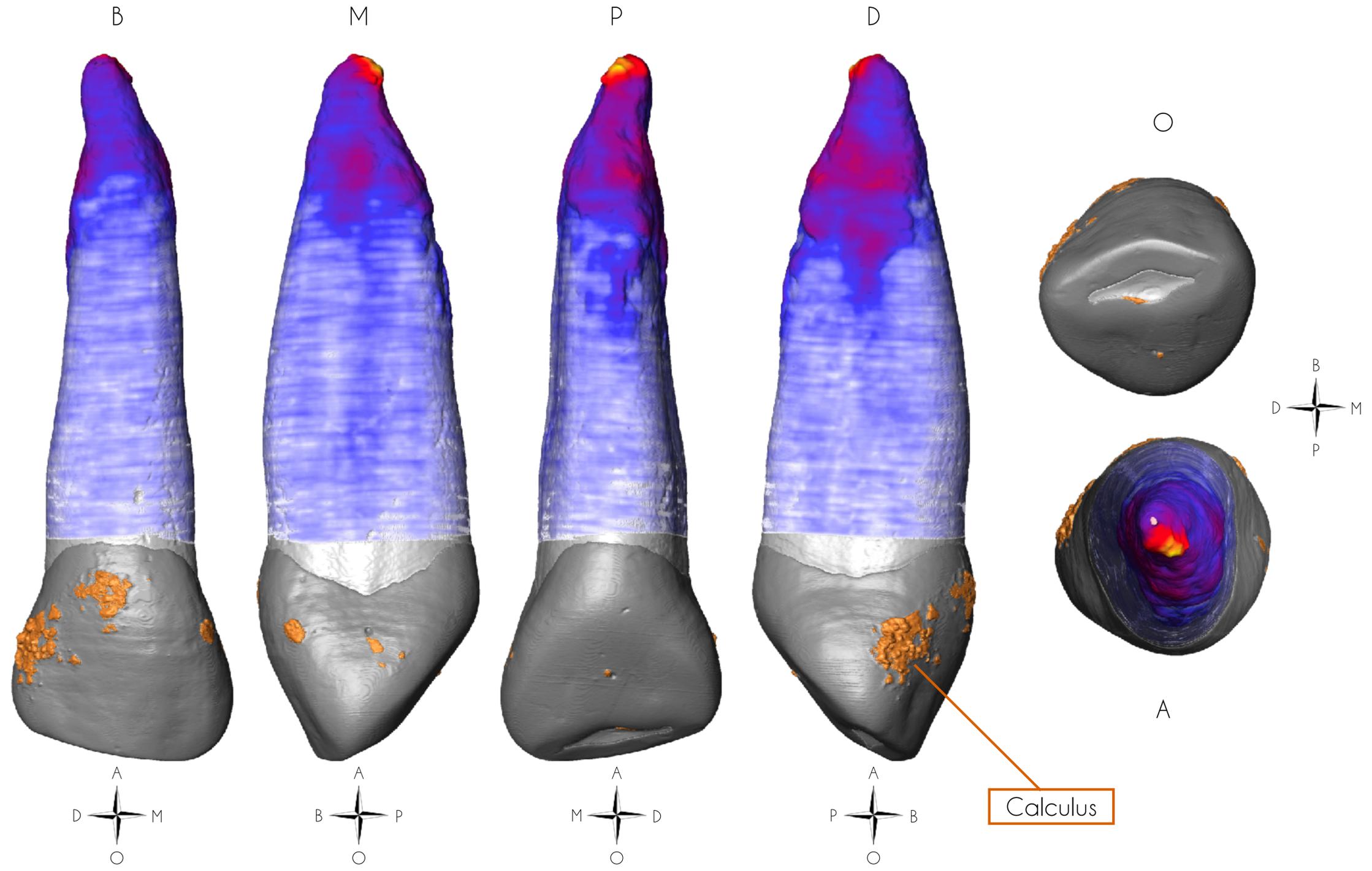
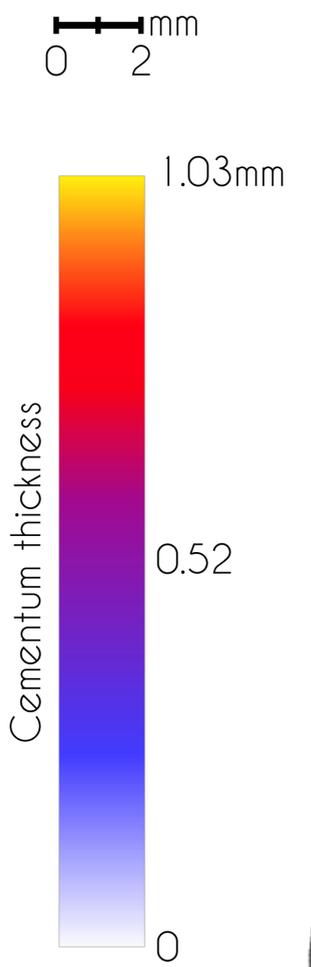
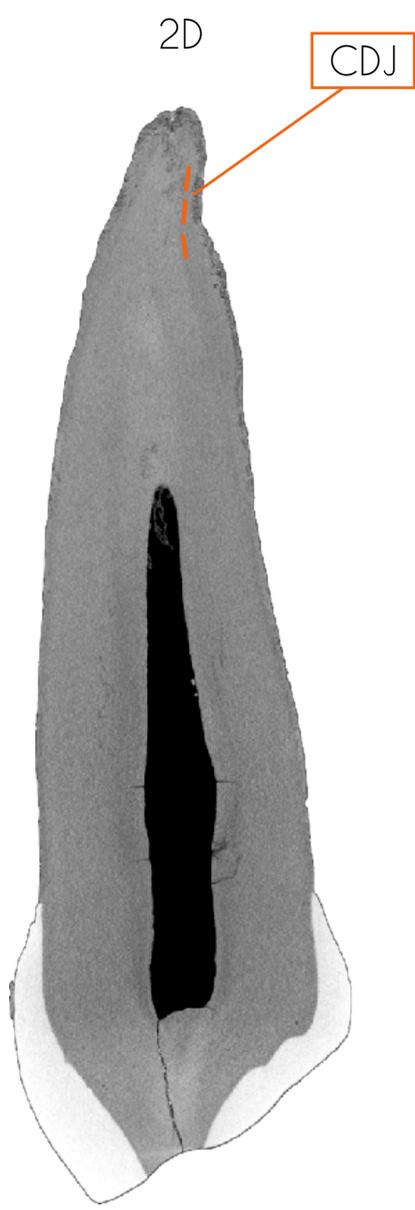
Sp810_13

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URC	3	2	2	-	0	0	1.3.m	0	0	0	NA

URC



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist



Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1030	1>	<	Yes	-

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;

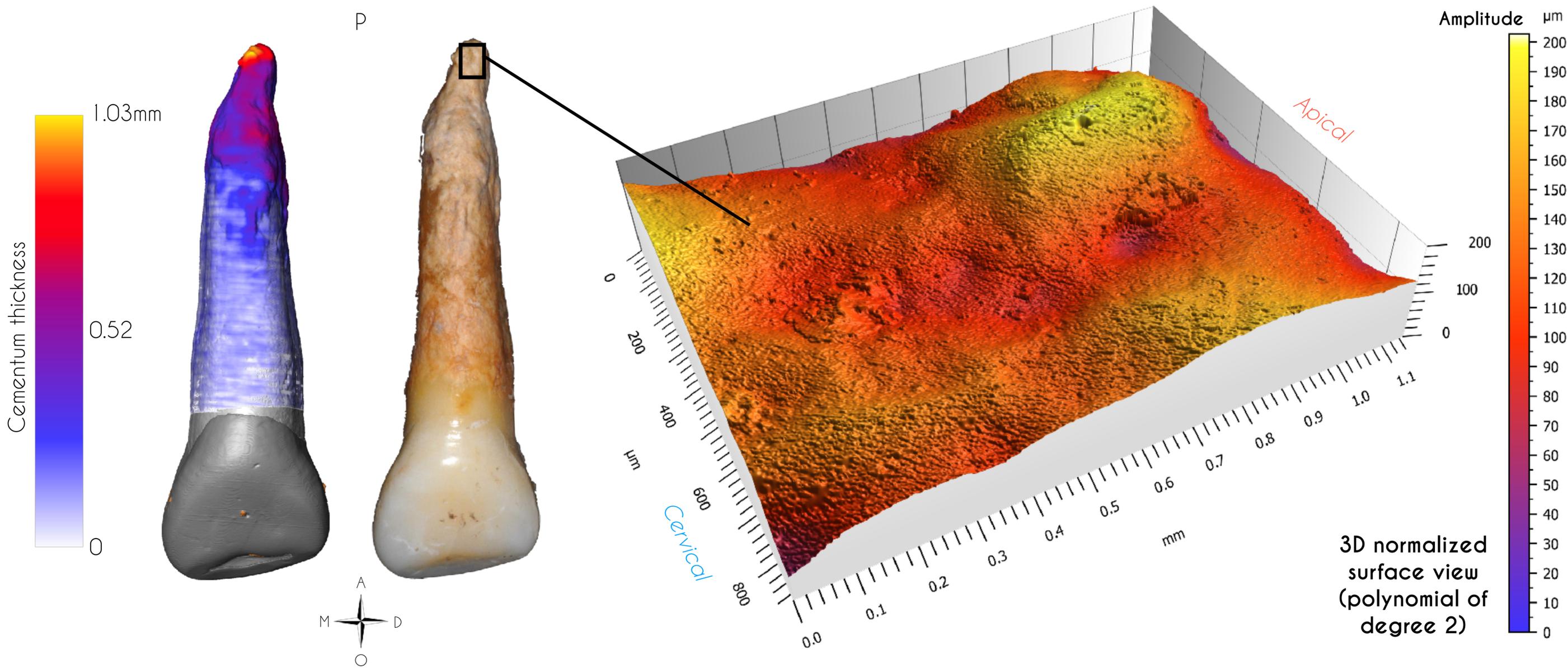
URC

Hyperfunctional

URC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
P	721	6.02%	0.88mm	1.25mm	1/2	2	Blue	1.5	1.8	10%

Sp810_13



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1>	200	-R1	-

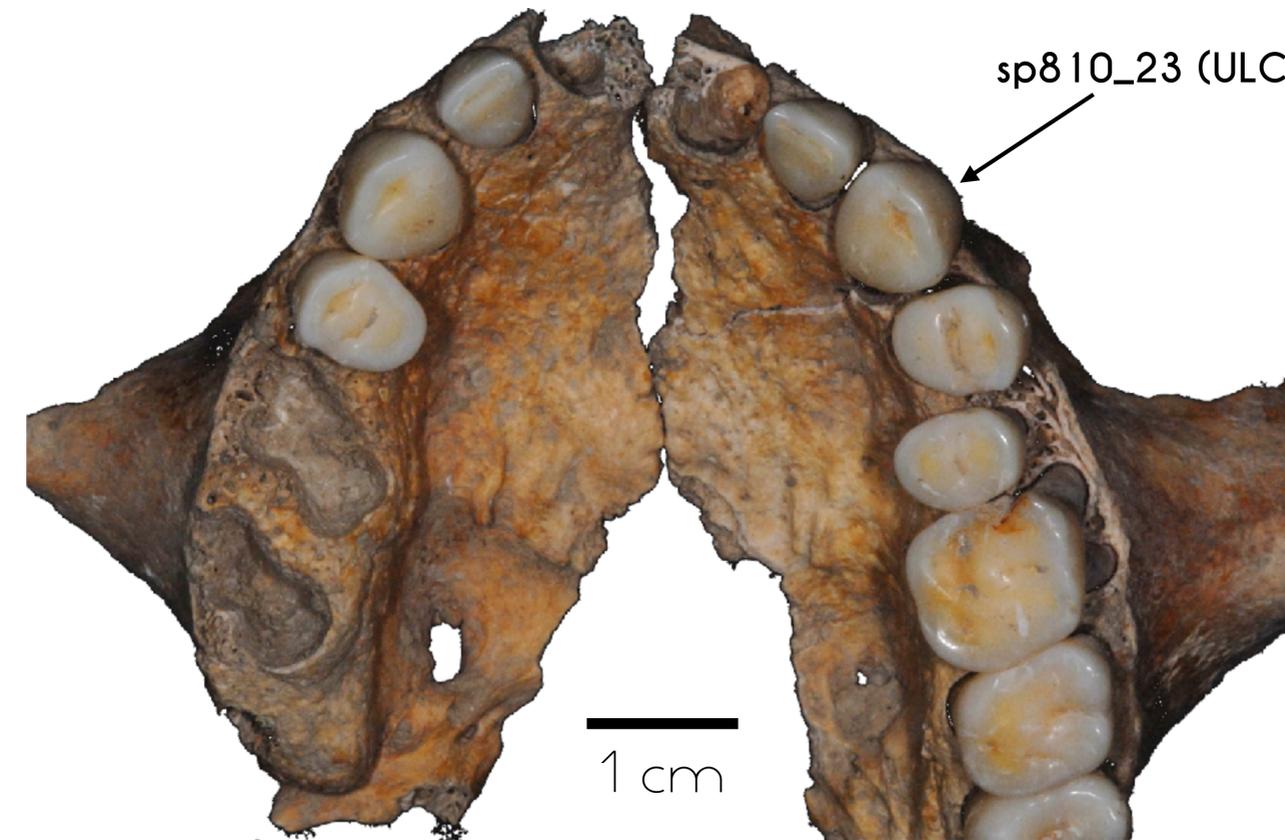
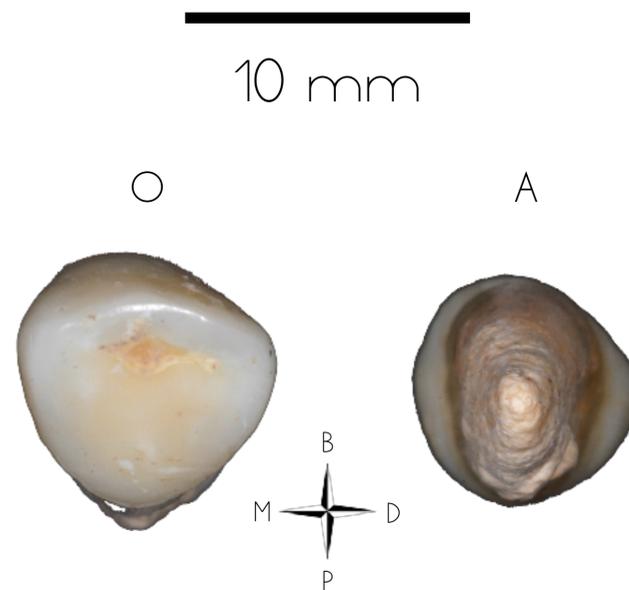
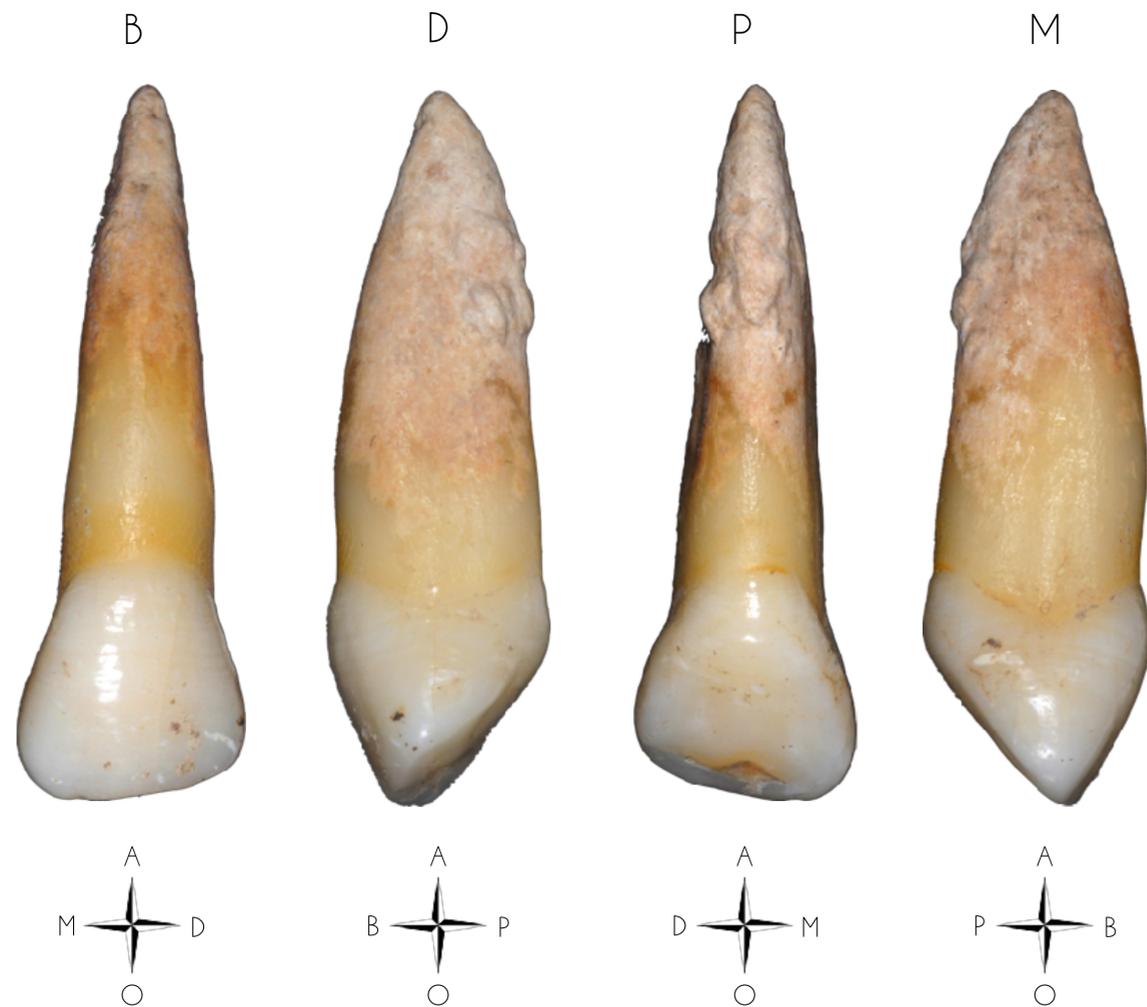
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hyperfunctional

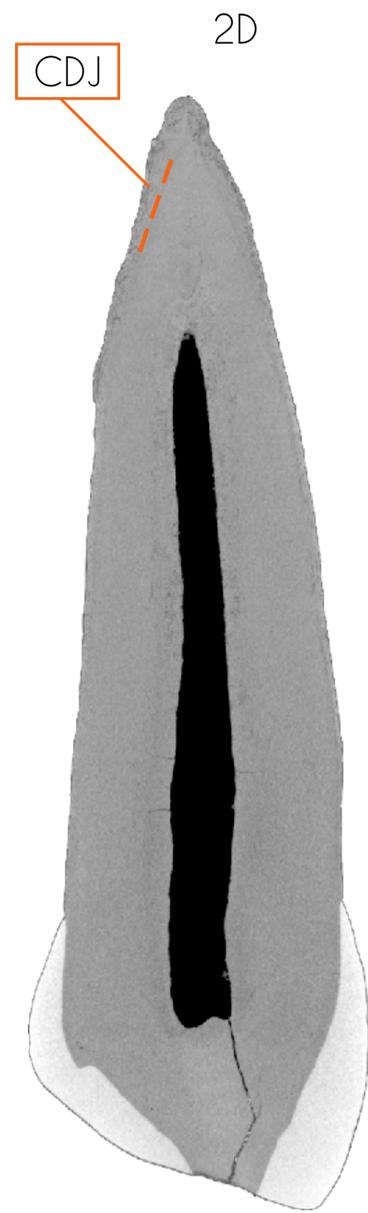
Sp810_23

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
ULC	3	2	2	-	0	0	3.2.m	0	0	0	NA

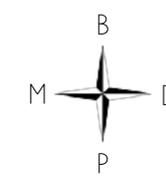
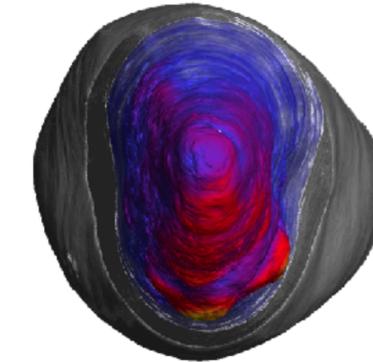
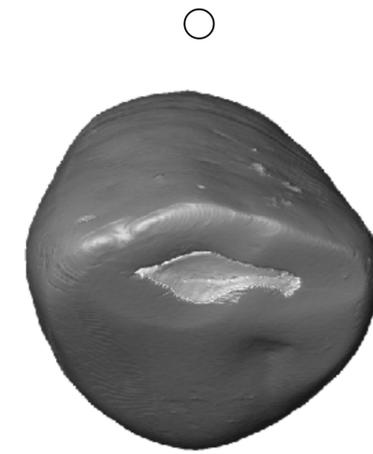
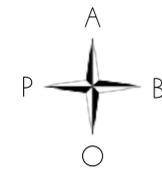
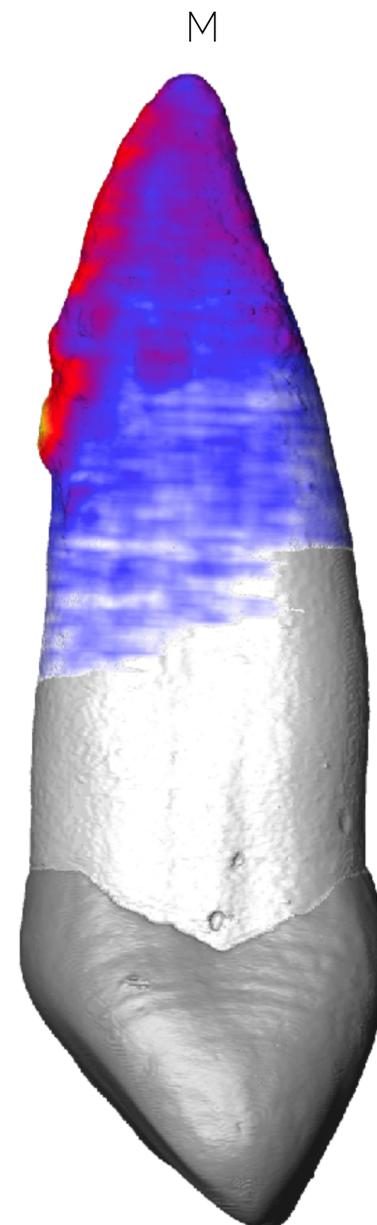
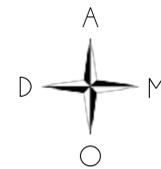
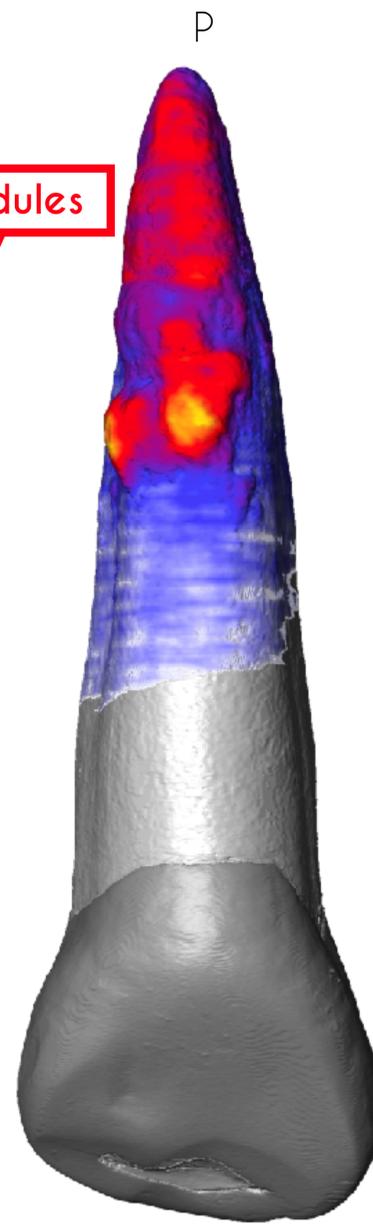
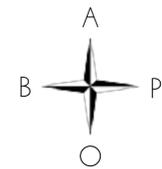
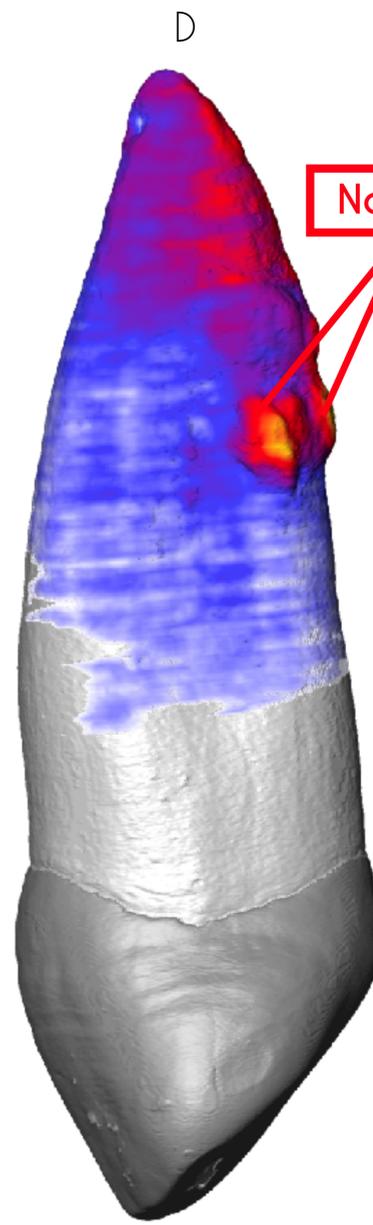
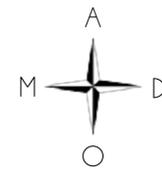
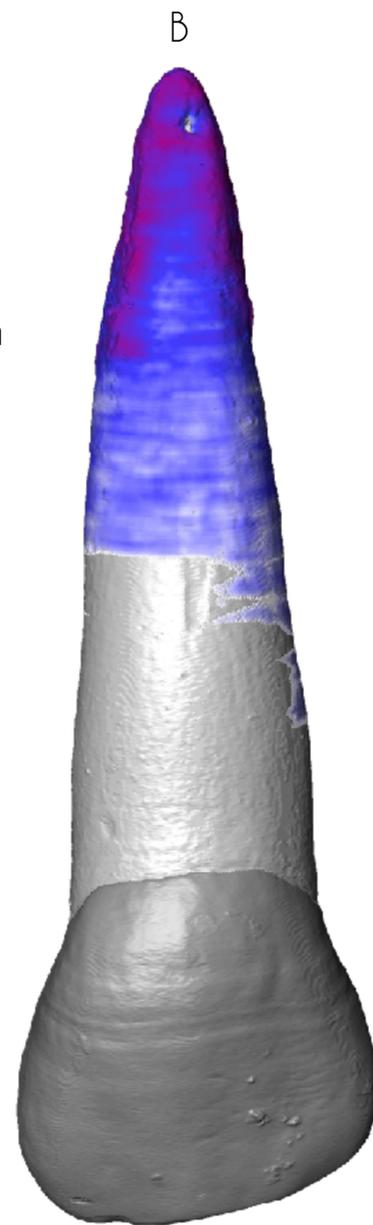
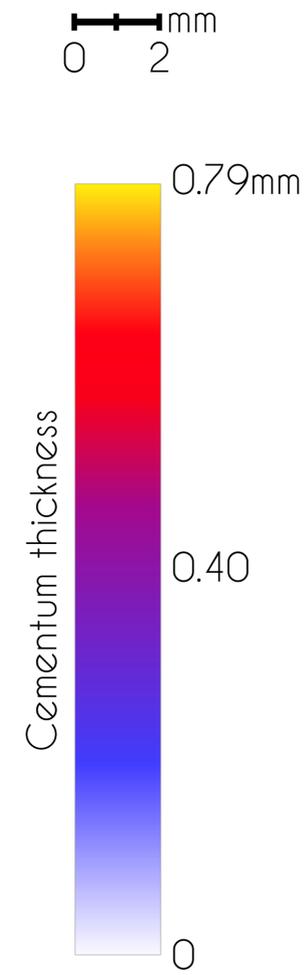
ULC



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist



ULC



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
790	2>	<	Yes	Nds (>)

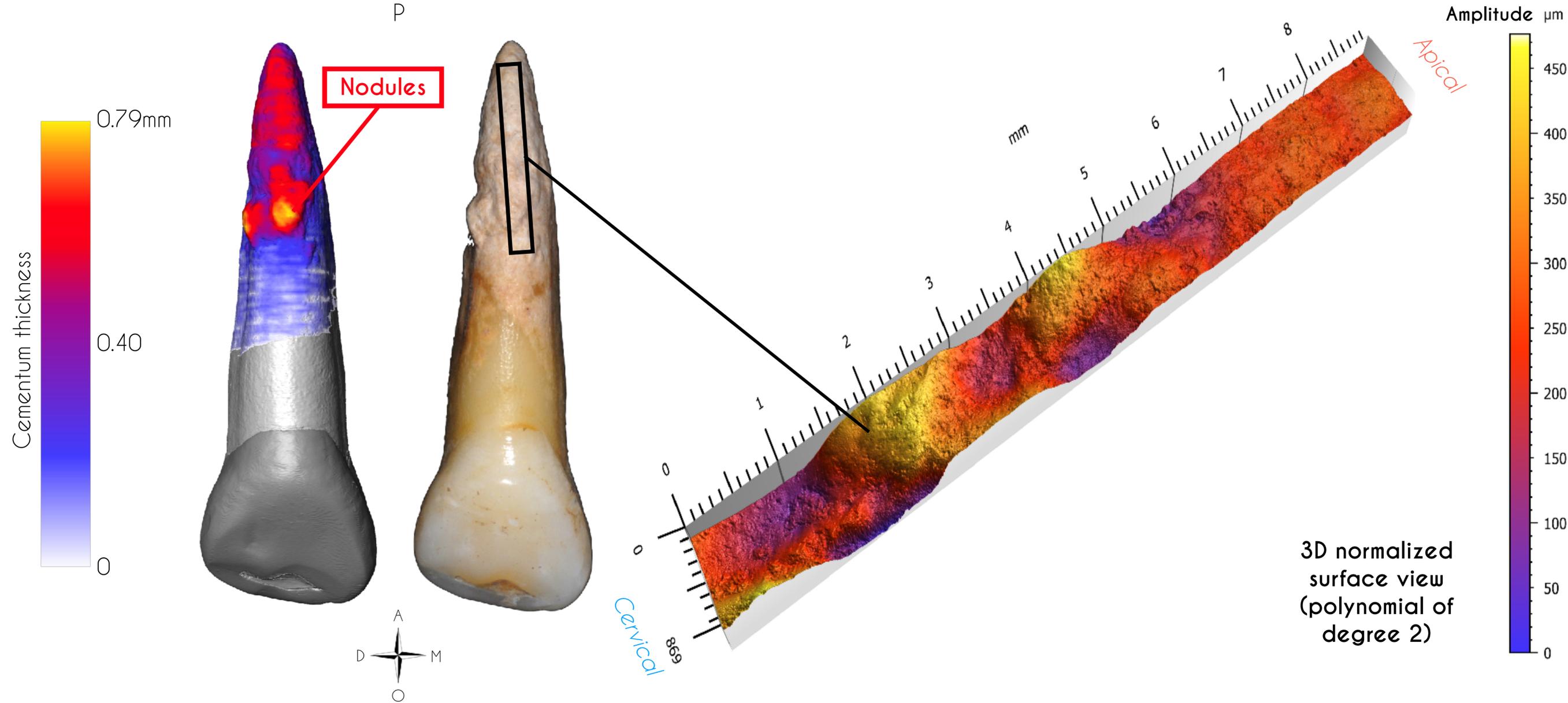
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
Nds: nodules;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Hyperfunctional

ULC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
P	1788	5.50%	0.88mm	8.98mm	1/15	2	Blue	1.5	1.8	10%

Sp810_23



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
2>	475	+S2	Nds

LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);

MAX VE: maximum vertical elevation;

ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

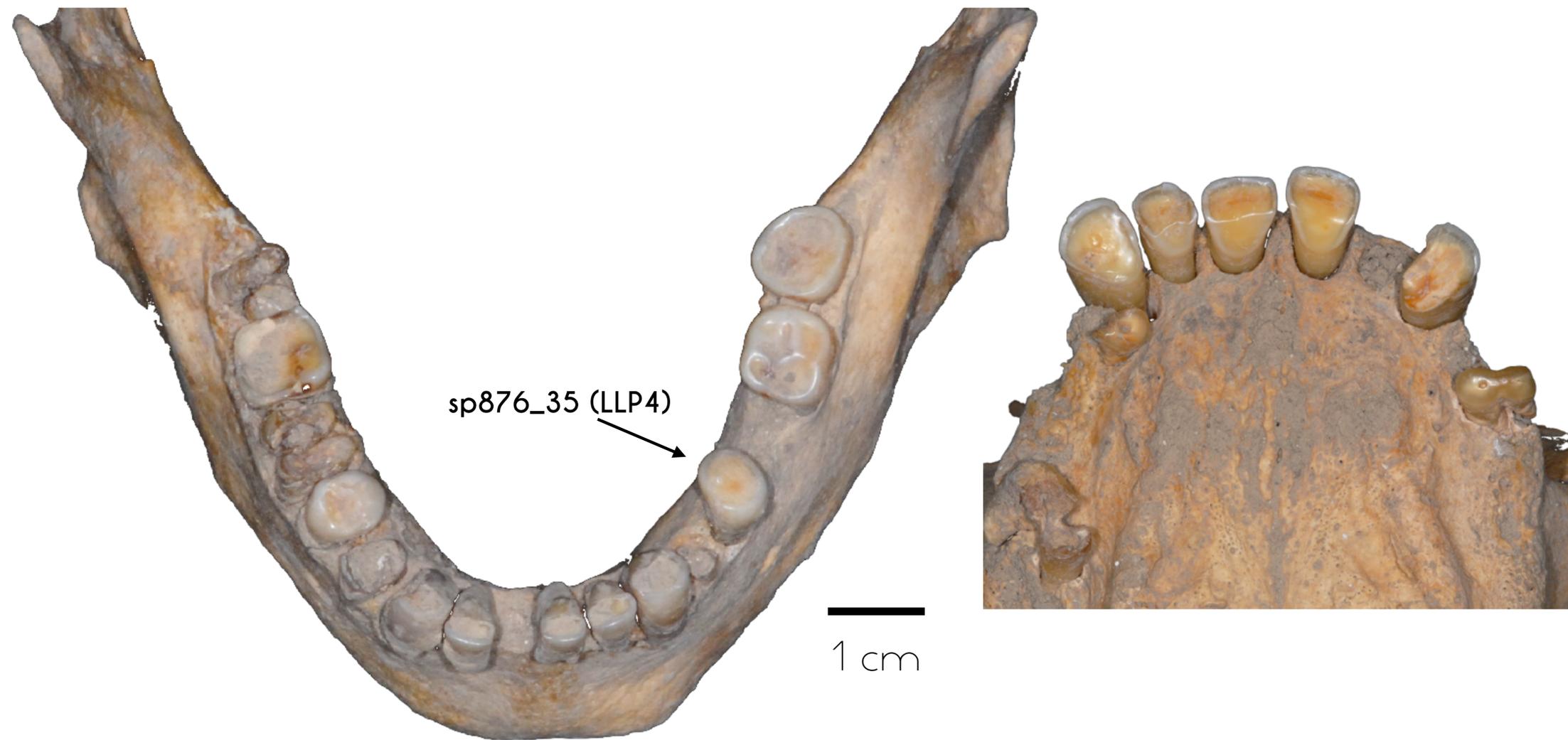
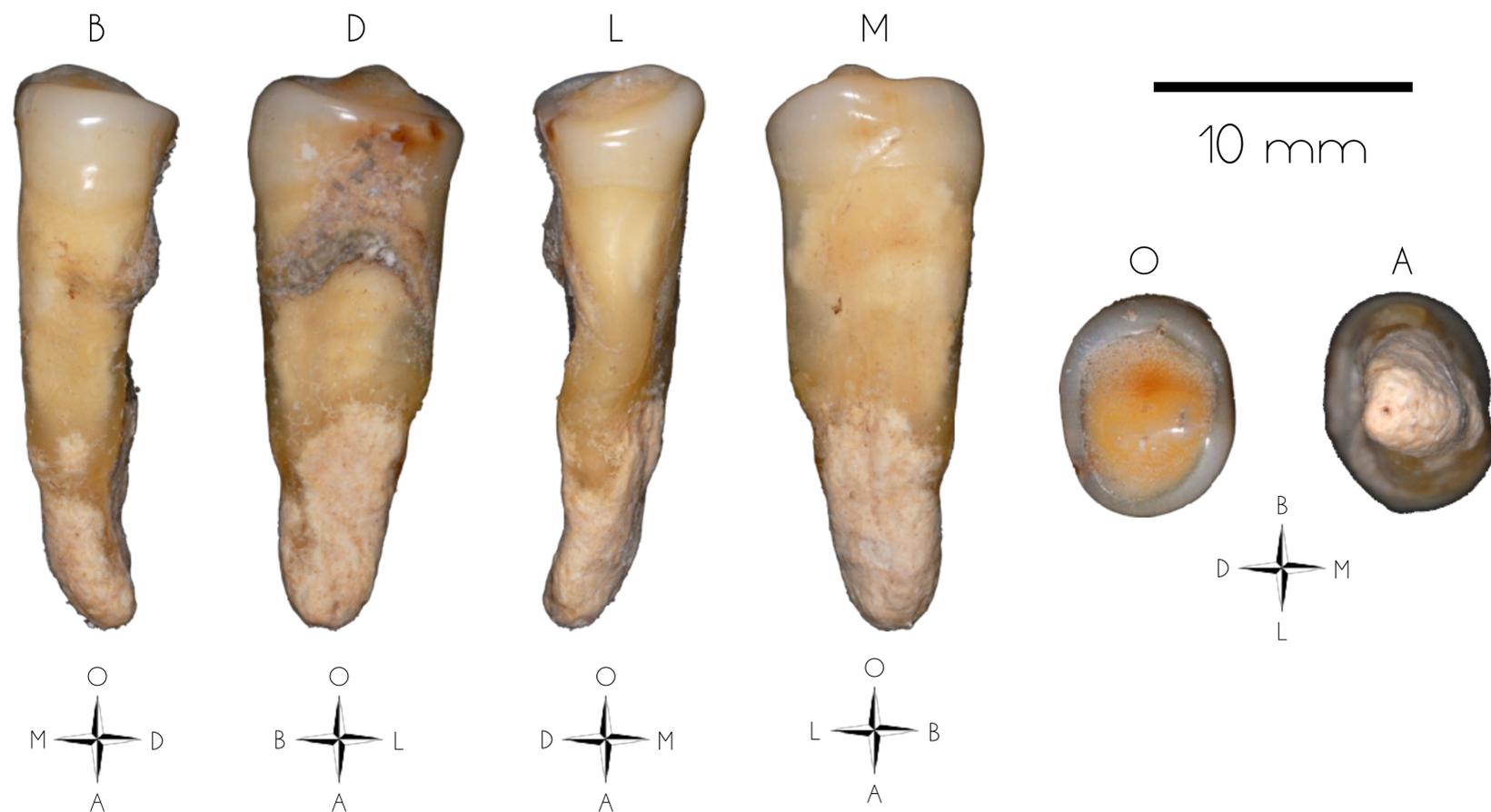
Nds: nodules

Hyperfunctional

Sp876_35

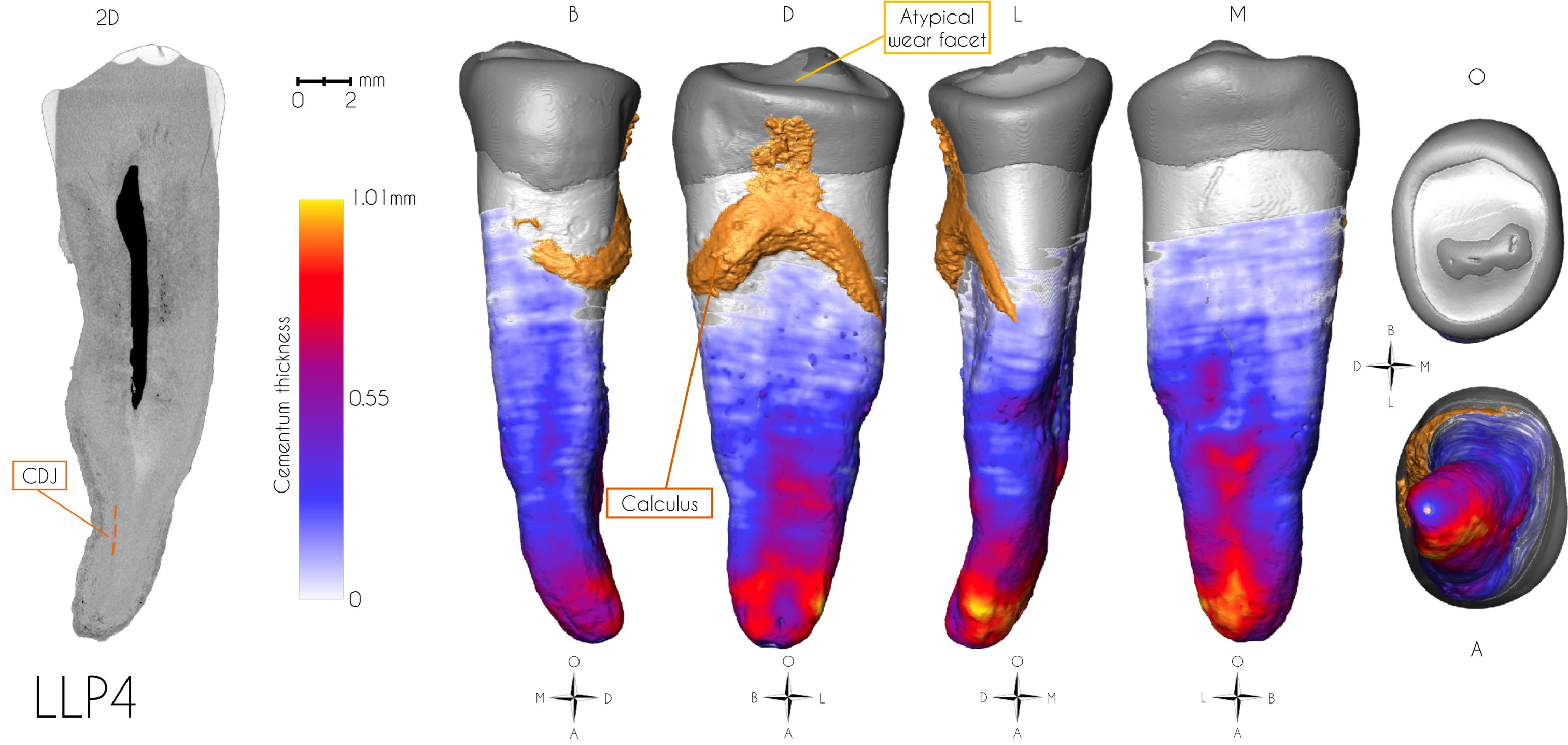
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP4	6	2	6	-	0	0	1.2.m	0	1	2	2

LLP4



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp876_35



Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1010	1>	<	Yes	-

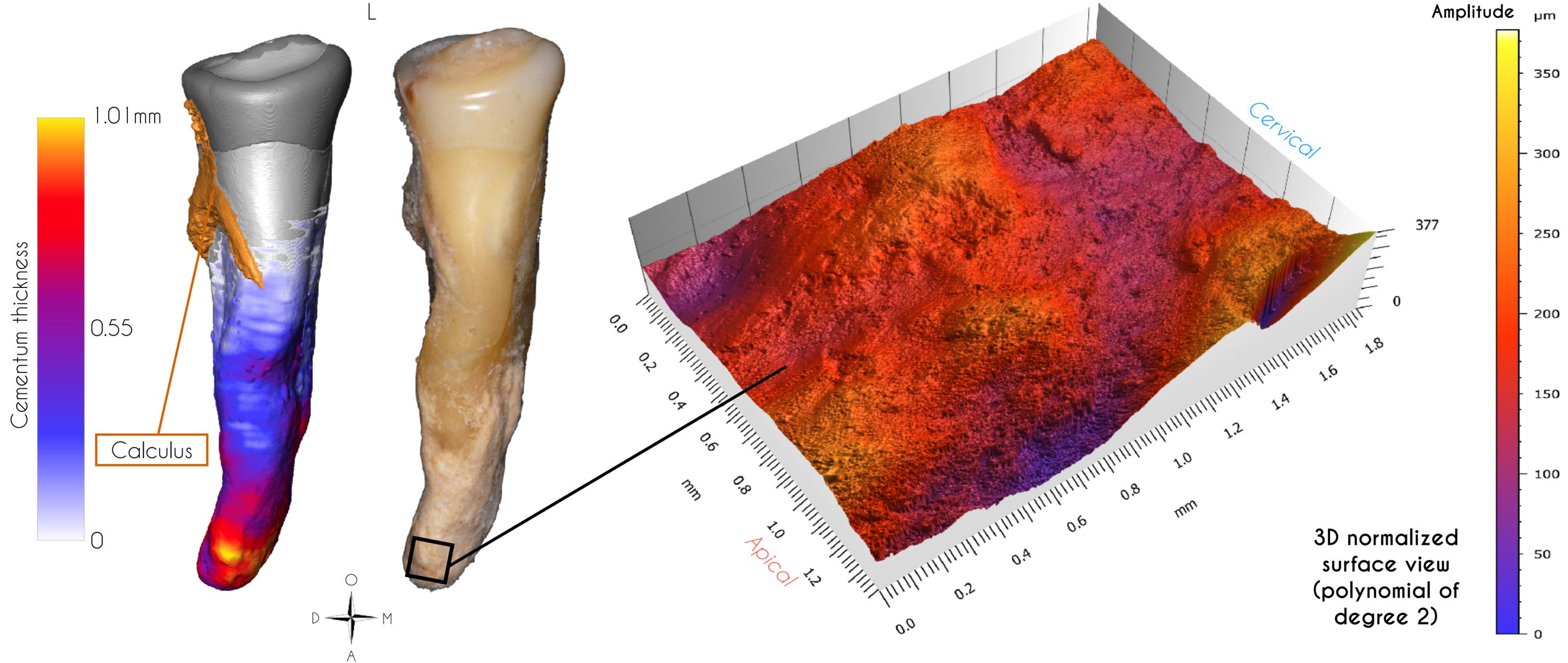
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;

Hyperfunctional

LLP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
LM	1304	5.76%	1.67mm	1.85mm	2/3	2	Blue	1.47	1.61	10%

Sp876_35



Confocal microscopy - Topography 3D maps

LOC MAX	MAX VE (μm)	ST	Note
1>	250	+R2	-

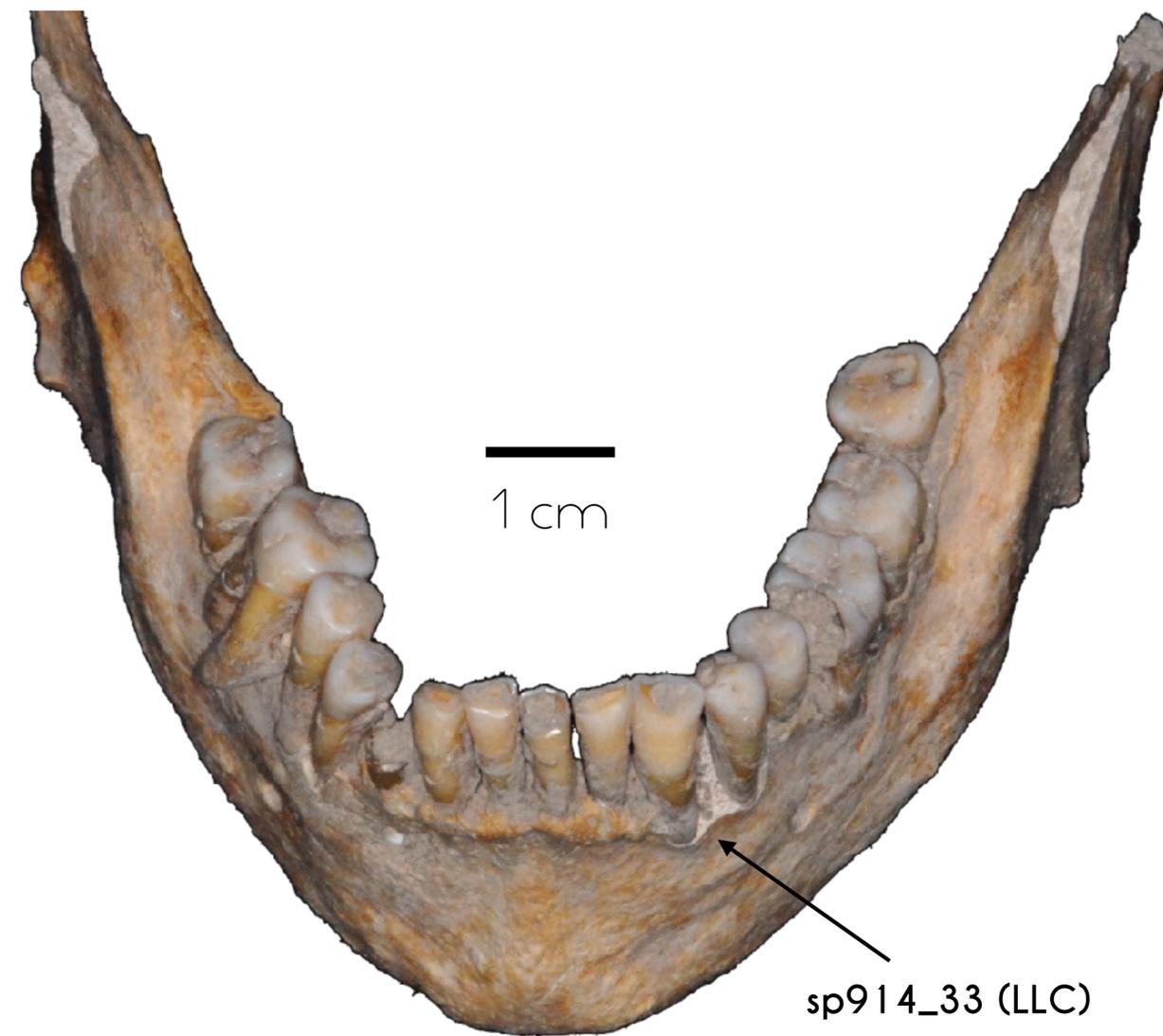
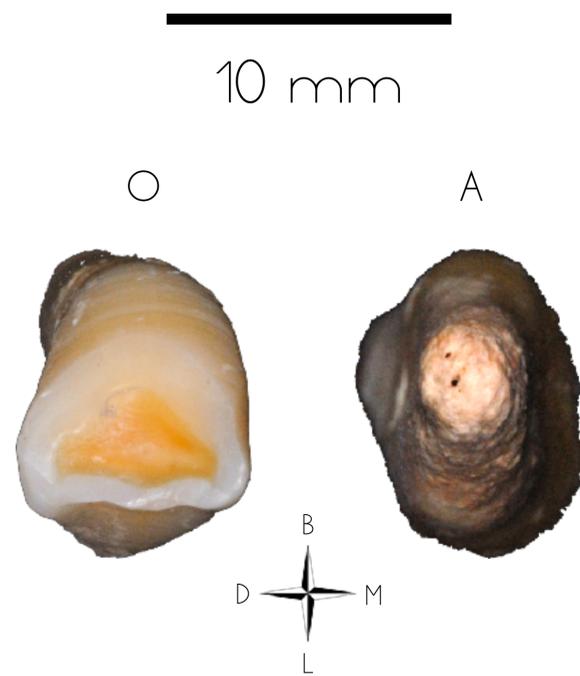
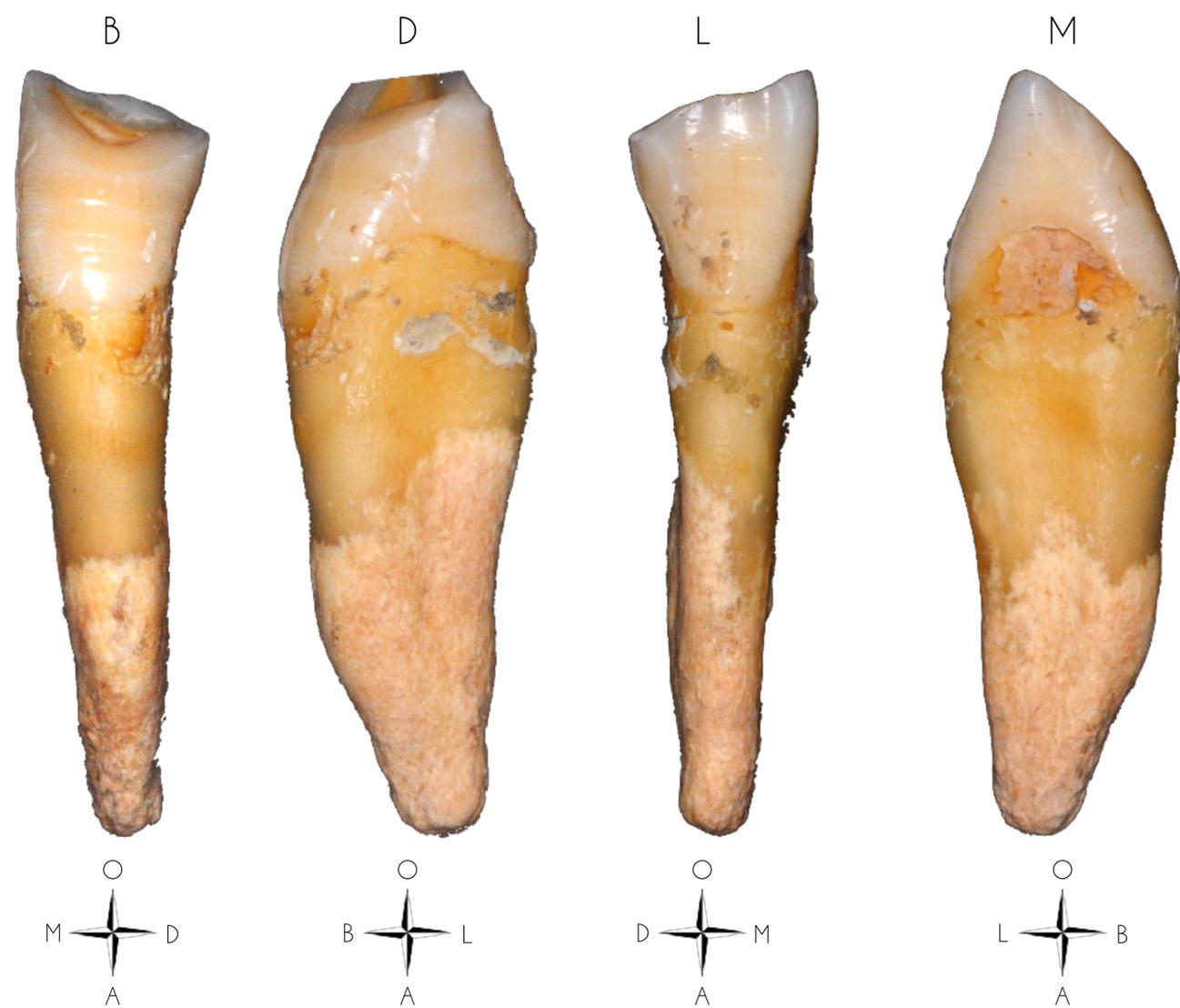
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hyperfunctional

Sp914_33

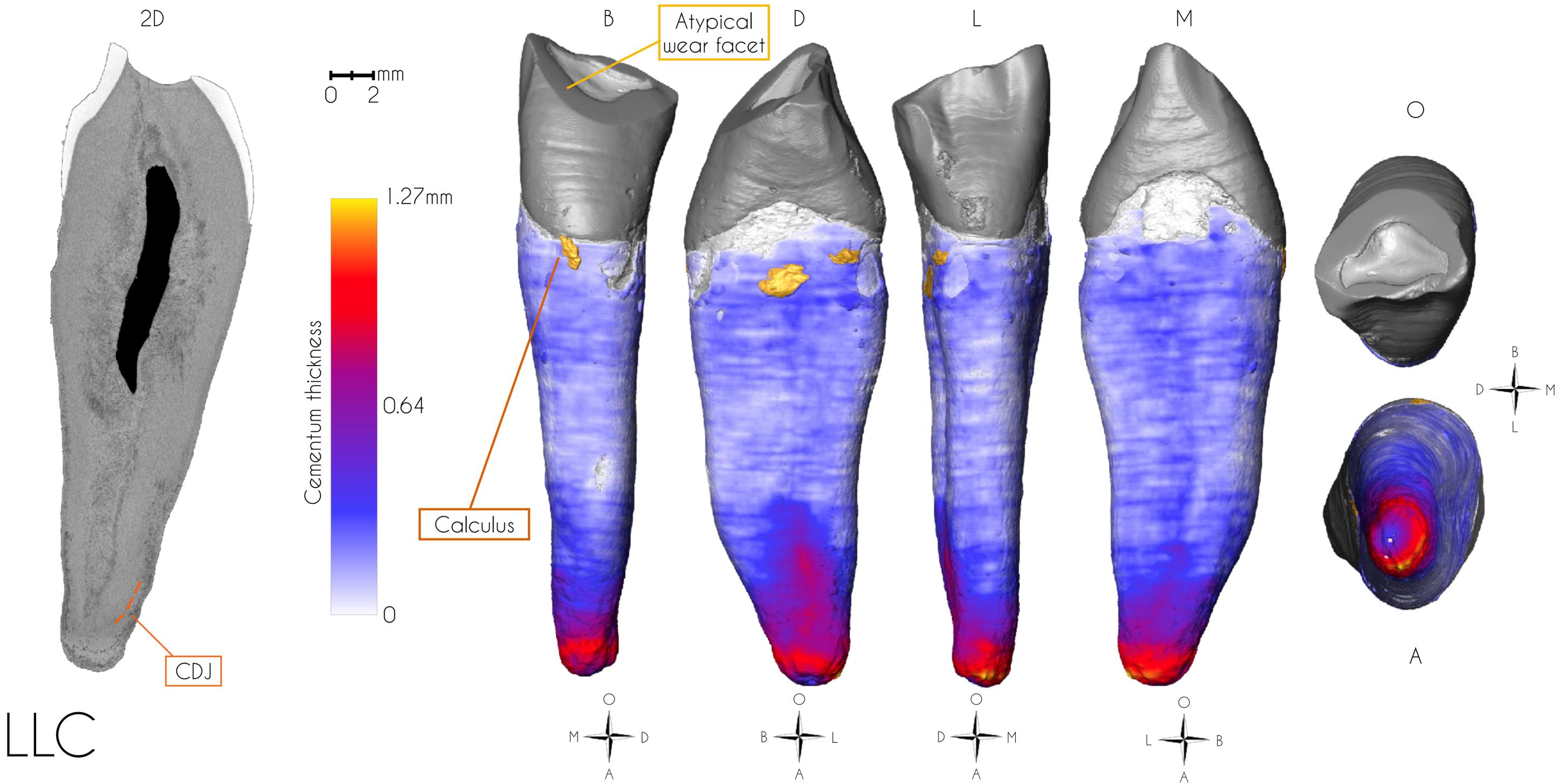
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLC	4	4	4	-	0	0	1.2.m	0	0	0	NA

LLC



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp914_33



Microtomography - Thickness 3D maps				
MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1270	1>	No	Yes	-

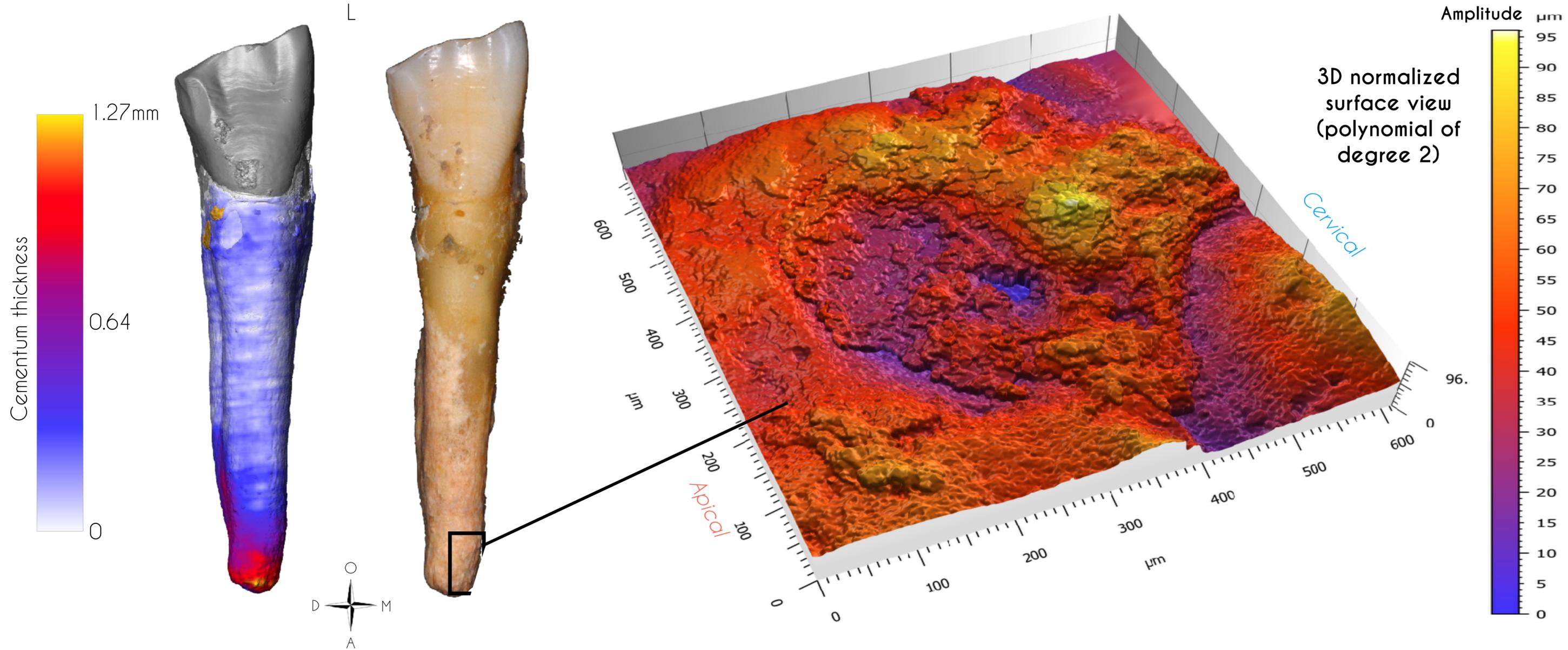
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;

Hyperfunctional

LLC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
LM	241	4.91%	1.67mm	1.85mm	2/3	2	Blue	1.47	1.61	10%

Sp914_33



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1>	95	+R1	-

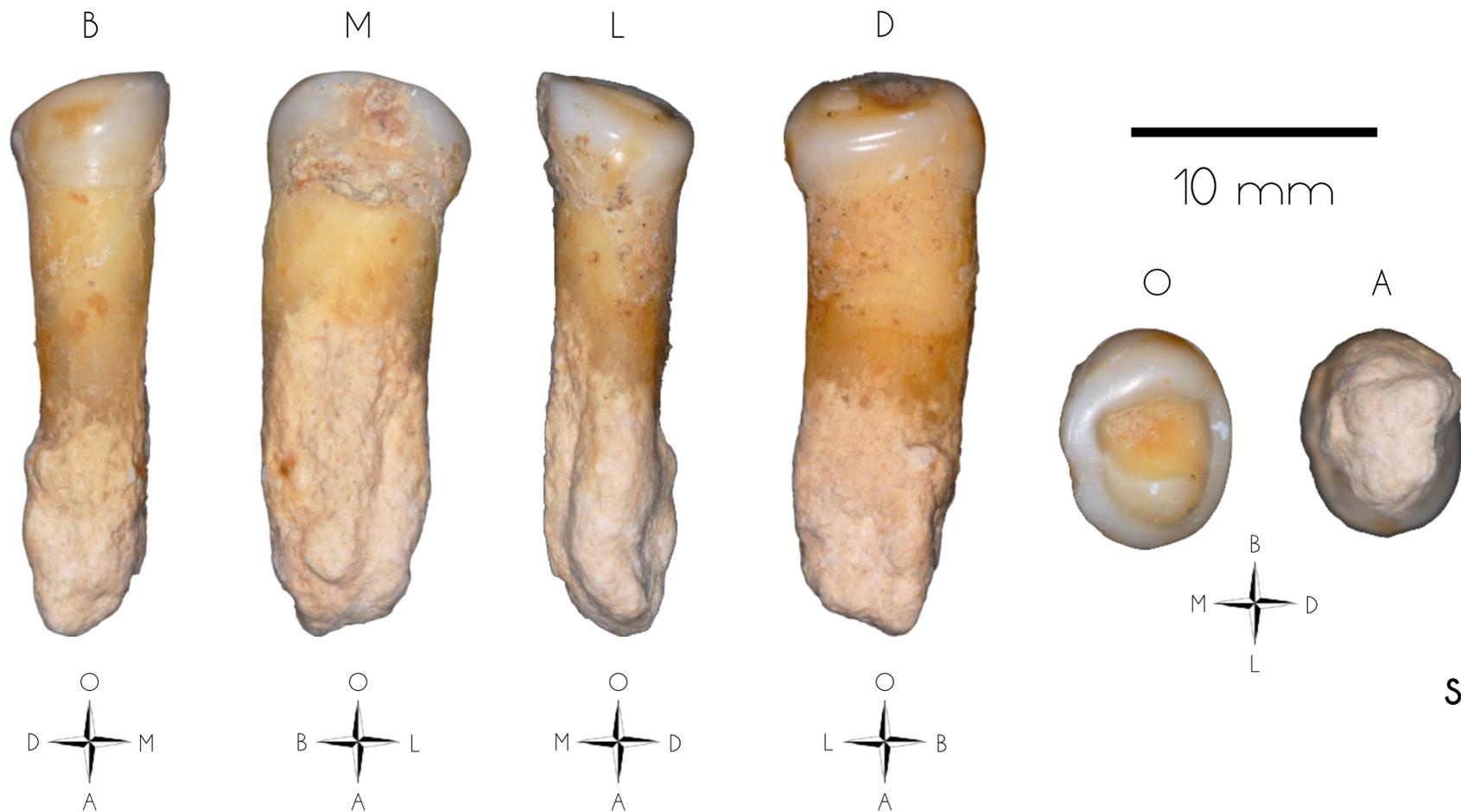
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hyperfunctional

Sp1010_44

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LRP3	5	4	6	-	0	0	3.2.M	0	0	1d	NA

LRP3



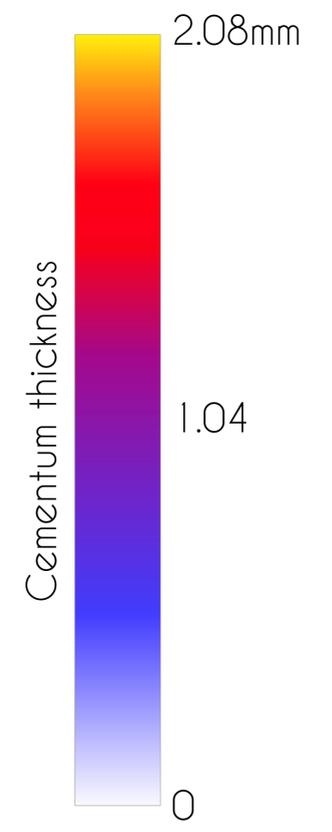
DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp1010_44

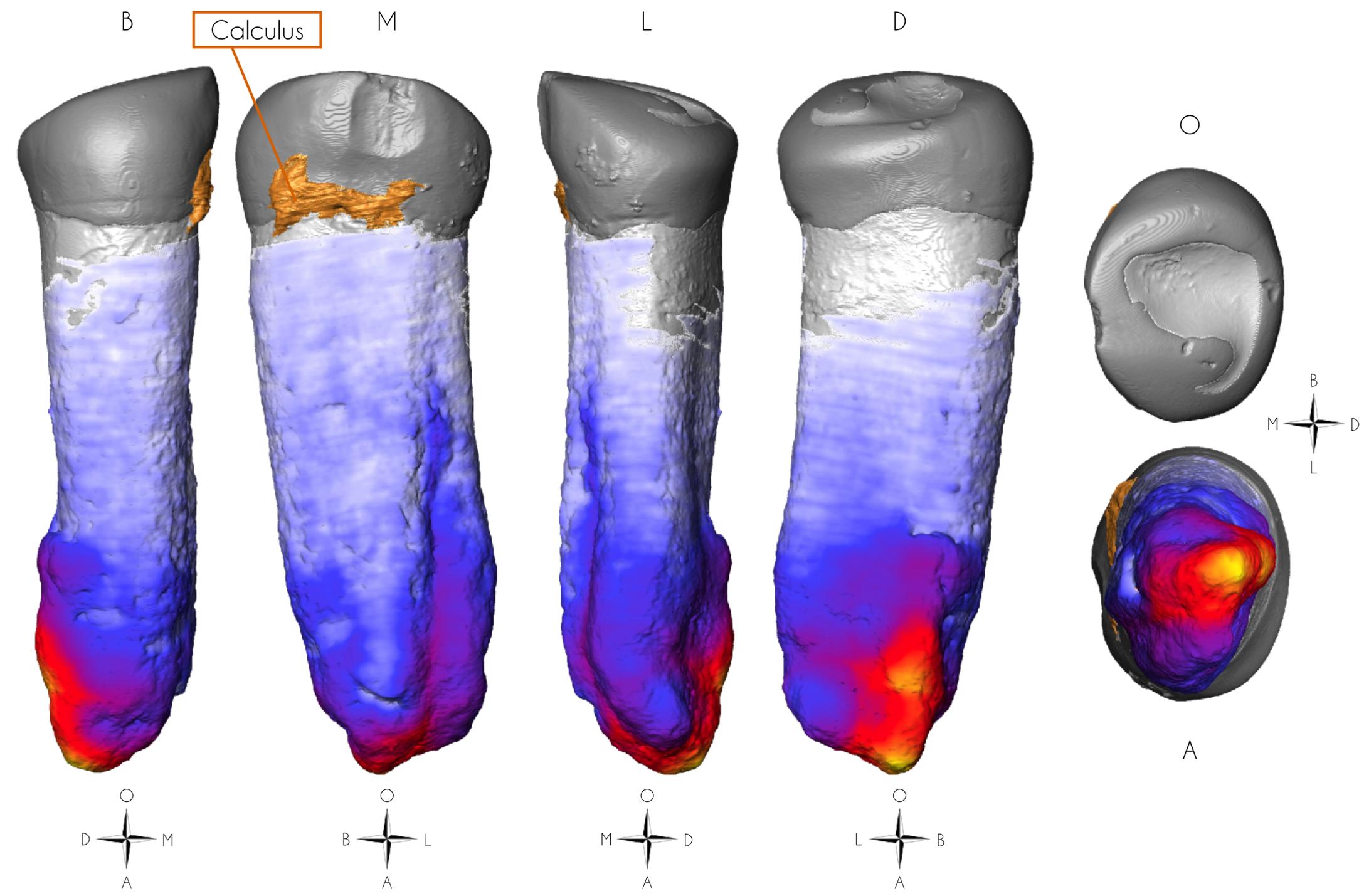


LRP3

2mm
0 2



2 Roots



Microtomography - Thickness 3D maps				
MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
2080	1 d	m	Yes	2 roots

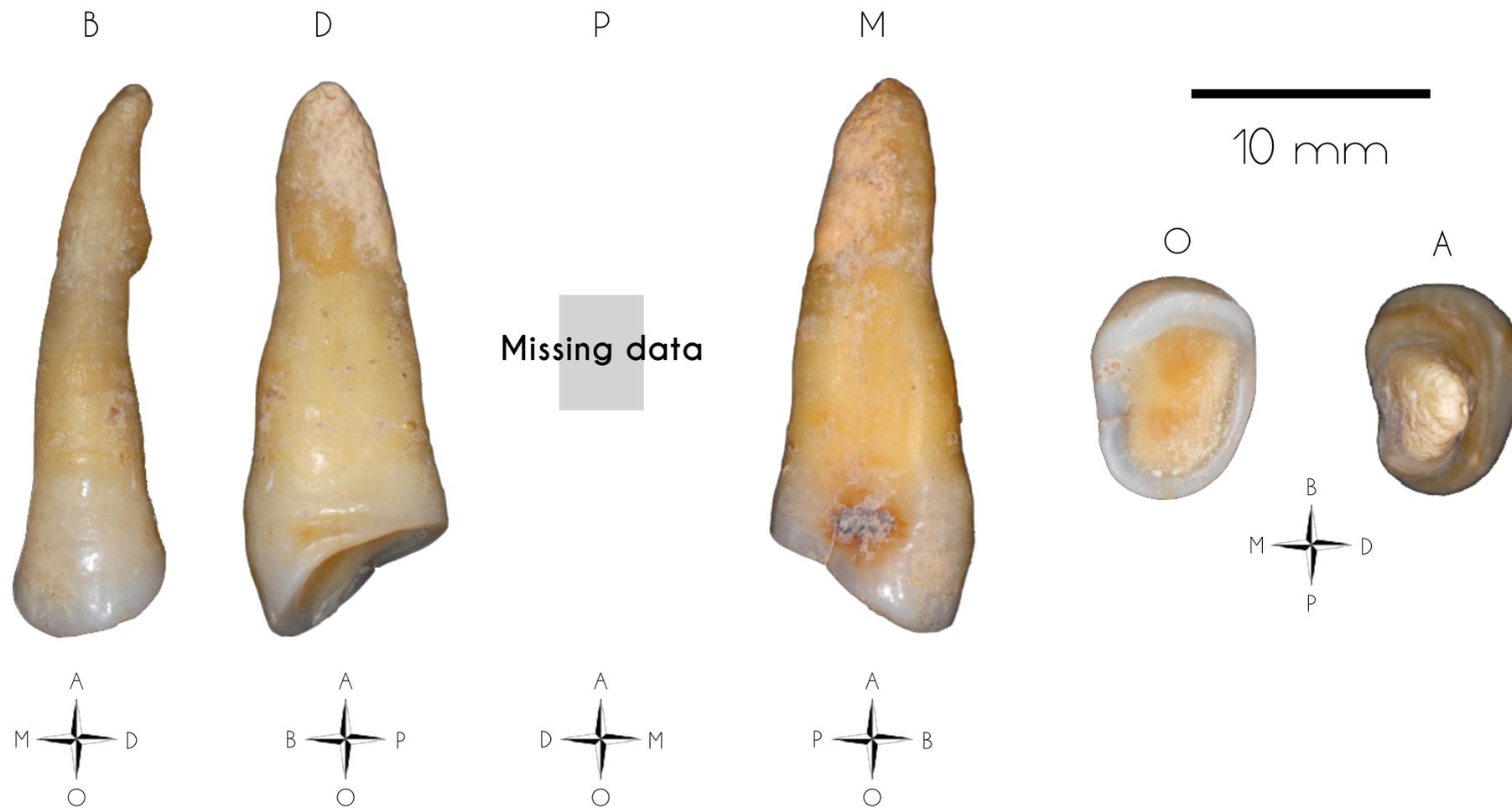
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)
PREF LOC: preferential location;

Excluded

Sp1172_24

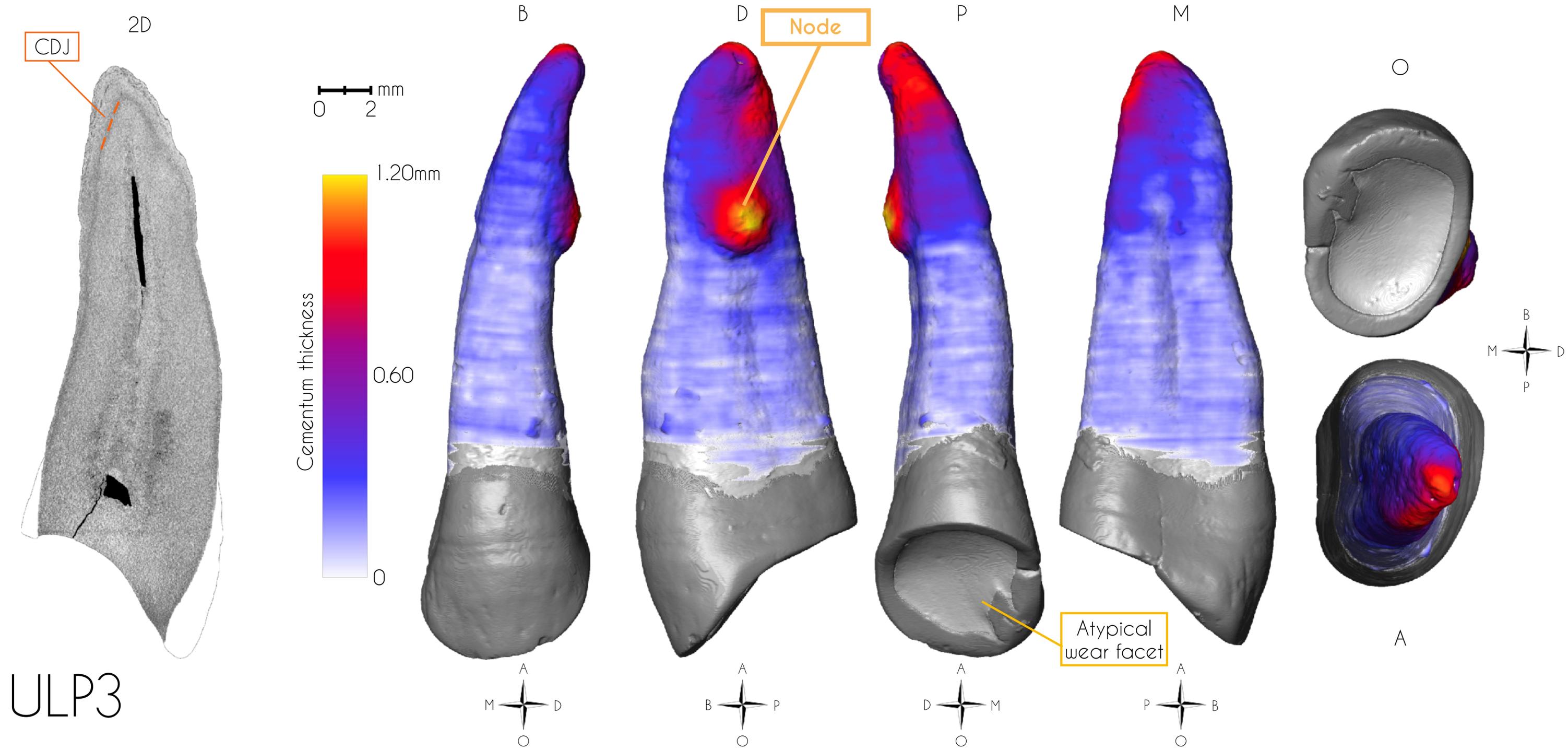
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
ULP3	6	2	4	-	0	0	3.2.M	0	0	1d	1

ULP3



DEG: degree; **DIR:** direction; **FOR:** form - **CAR:** carious lesion - **Pulp EXP:** pulp exposure - **IMP:** impaction - **FEN:** fenestration; **CAL:** calculus; **NT:** tooth loss in neighbouring teeth; **ANTA:** antagonist

Sp1172_24



ULP3

Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1200	2d	<	Yes	NOD (d)

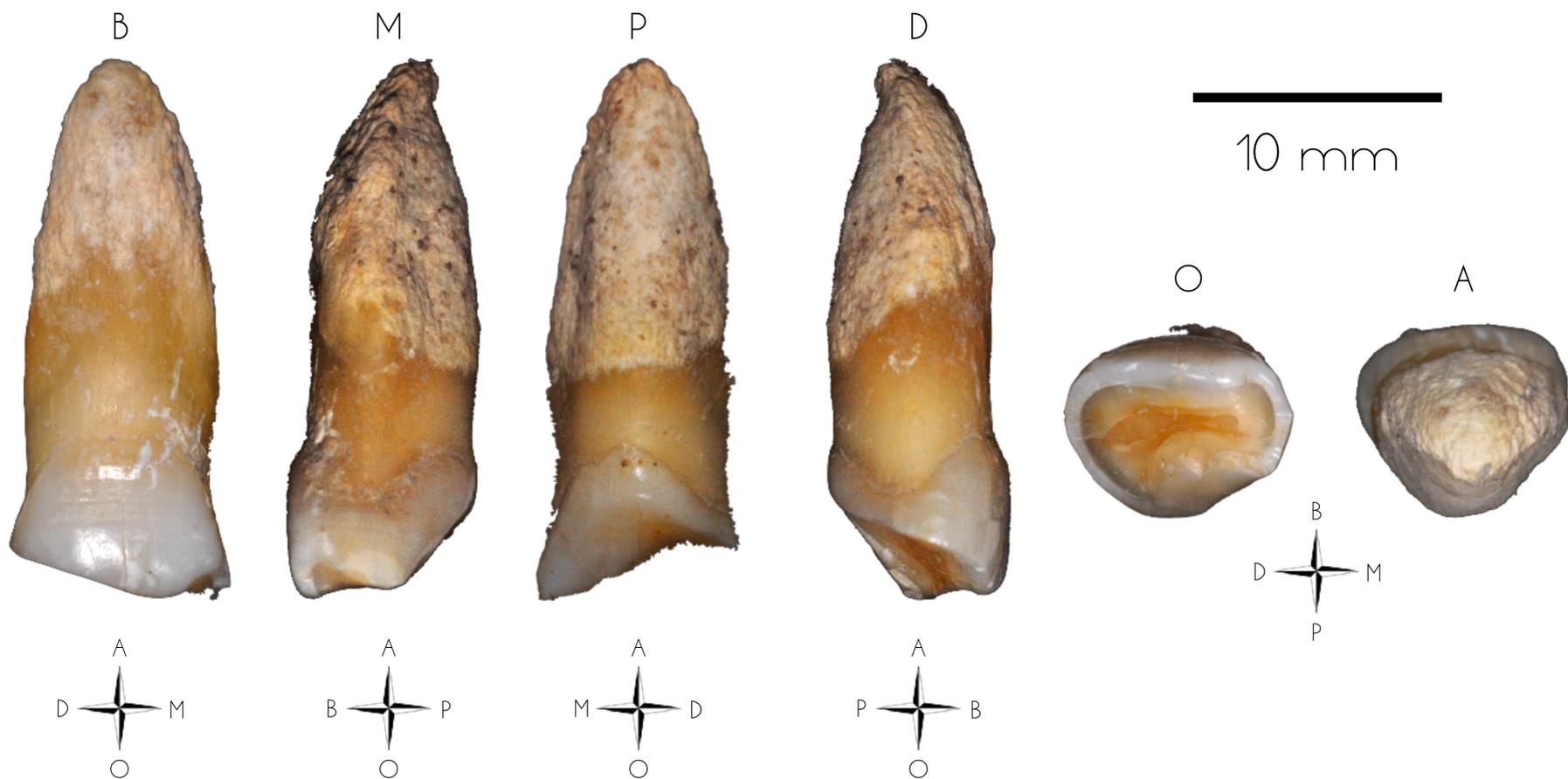
MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 PREF LOC: preferential location;
 NOD: node;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Hyperfunctional

Sp1135_11

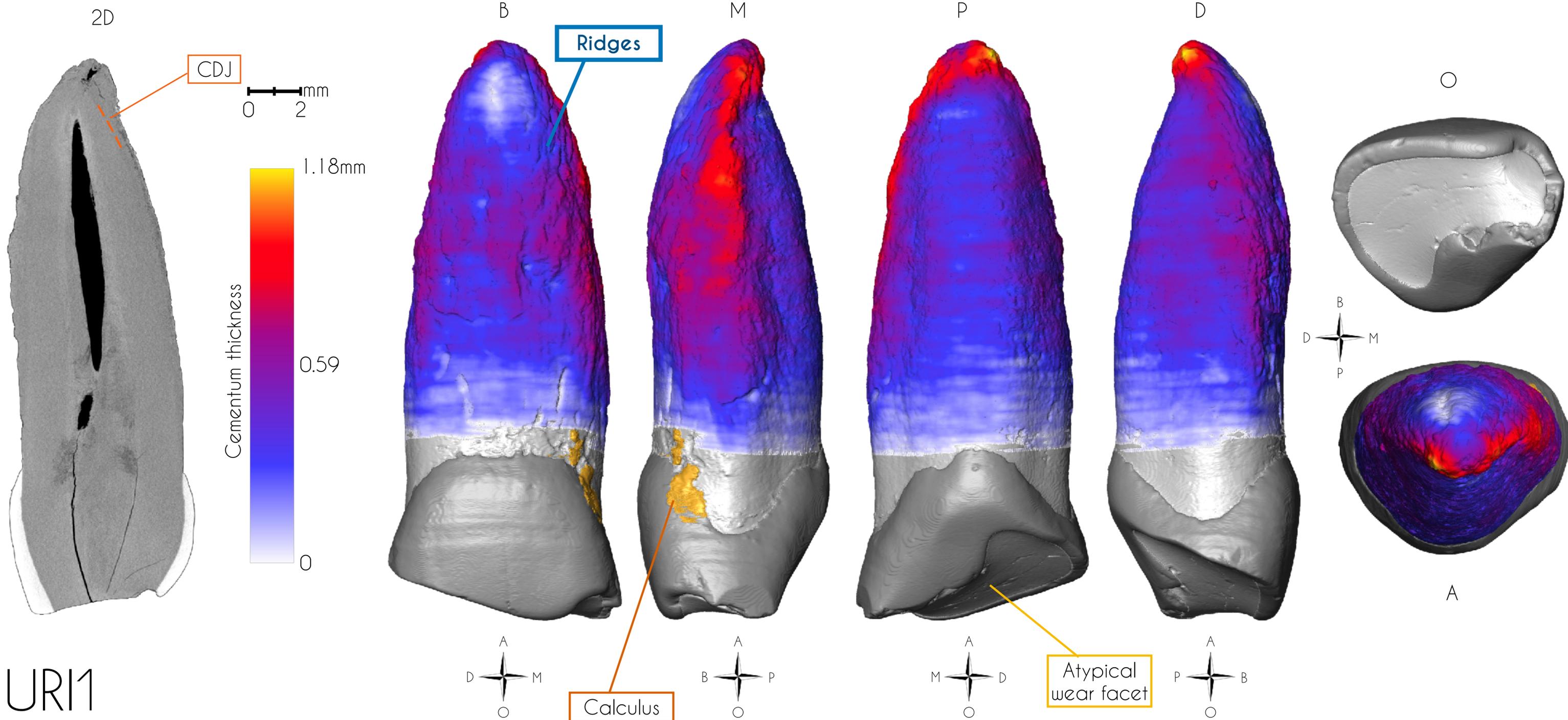
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URI 1	6	4	5	-	0	0	1.3.m	0	0	0	1

URI1



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp1135_11



Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1180	1 > d +2m	1 <	Yes	RID (<)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
RID: ridges;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

URI1

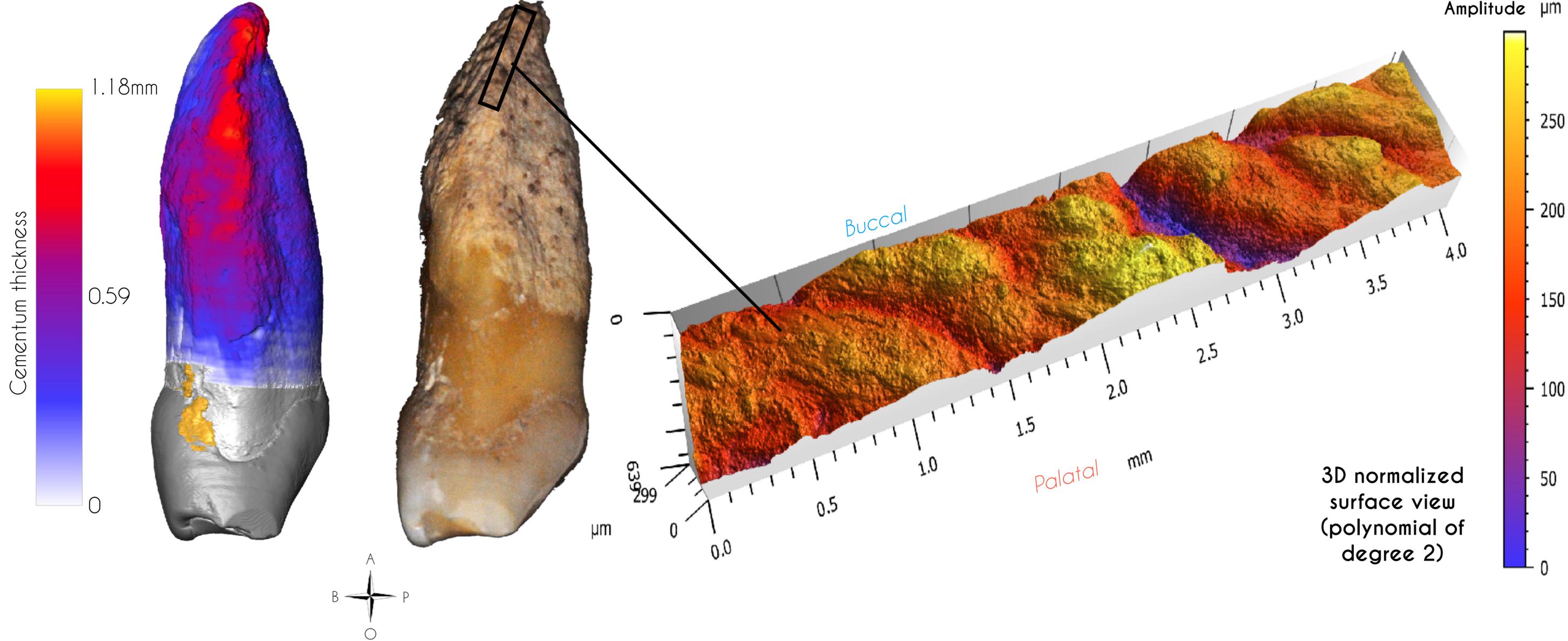
Hyperfunctional

UR11

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1143	5.90%	0.88mm	4.23mm	1/7	2	Blue	1.49	1.79	10 %

Sp1135_11

M



Confocal microscopy - Topography 3D maps

LOC MAX	MAX VE (μm)	ST	Note
1 m	300	+R1	-

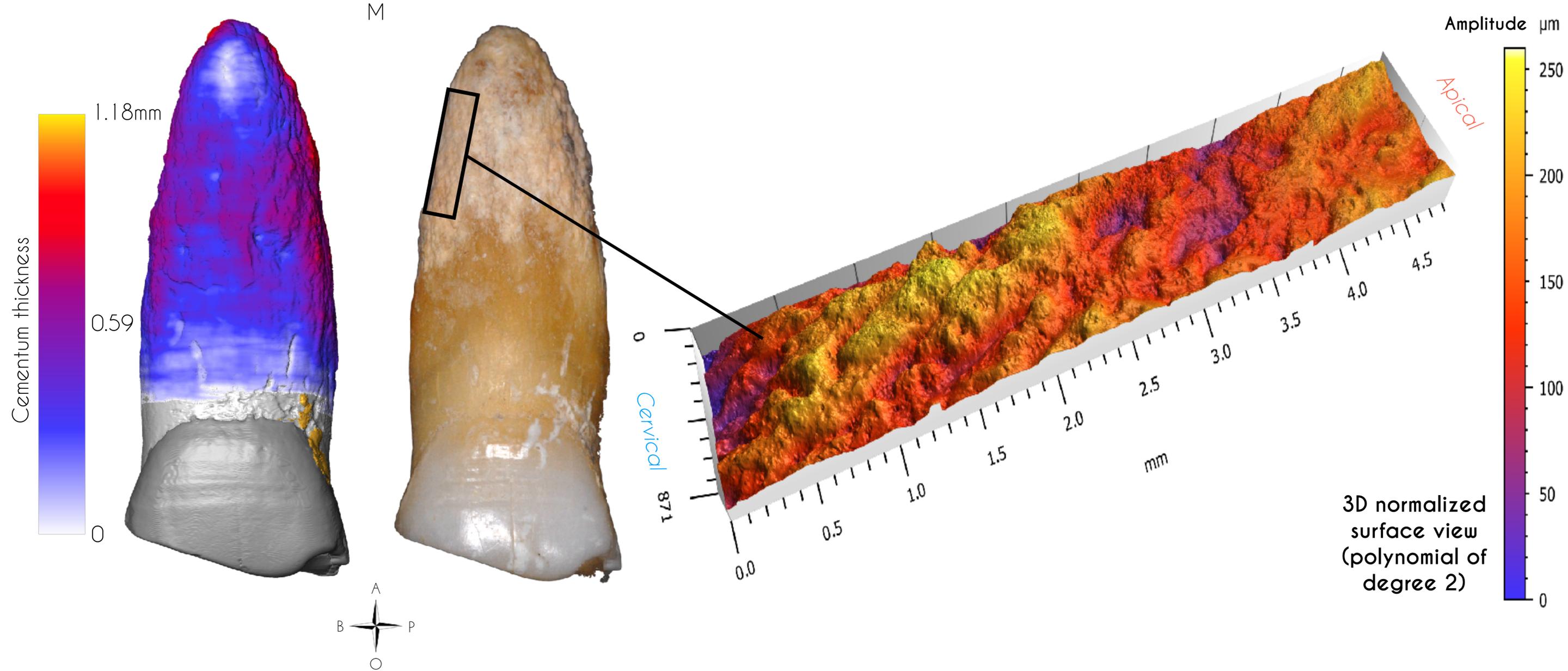
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Hyperfunctional

UR11

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
BD	759	5.22%	0.88mm	4.82mm	1/8	2	Blue	1.5	1.8	10%

Sp1135_11



Confocal microscopy - Topography 3D maps			
OF	MAX VE (μm)	SA	Note
2<d	260	+R1	RID

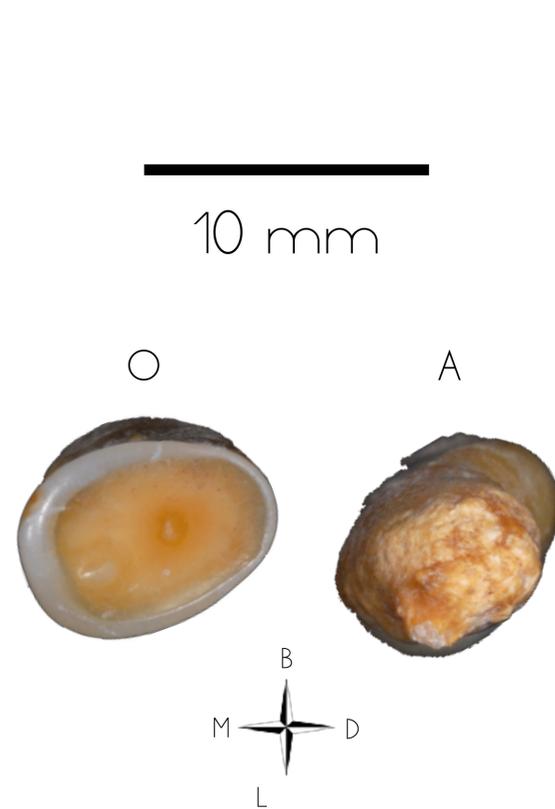
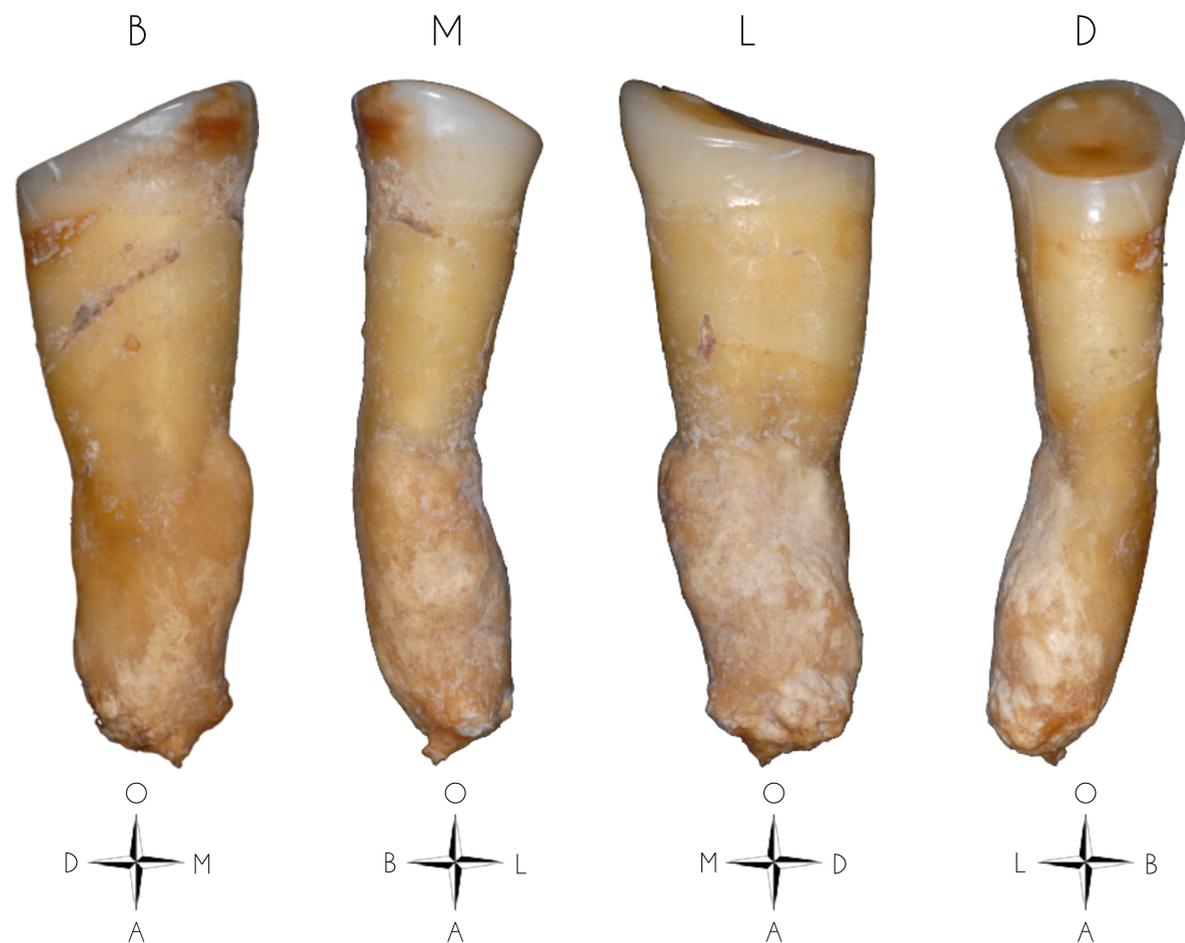
OF: other face (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
 MAX VE: maximum vertical elevation;
 ST: surface texture; : scored (+) if it is high, (-) if it is low; S: smooth or R: rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
 RID: ridges

Hyperfunctional

Sp583_45

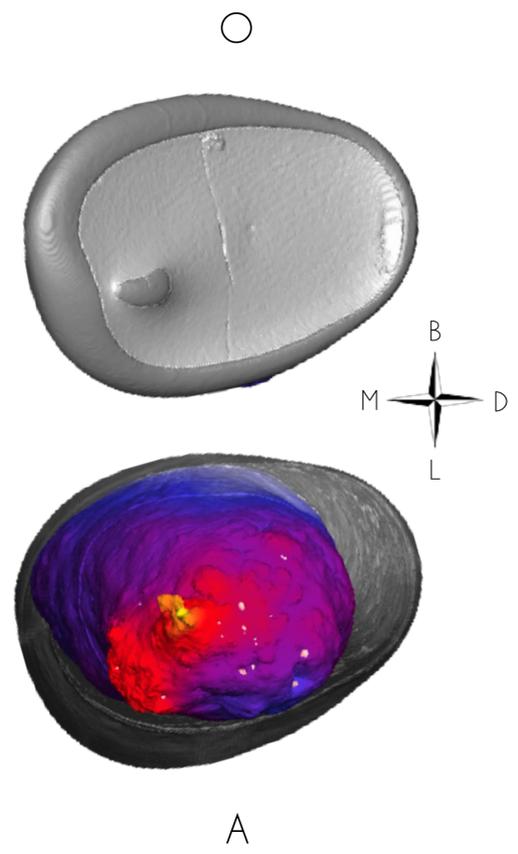
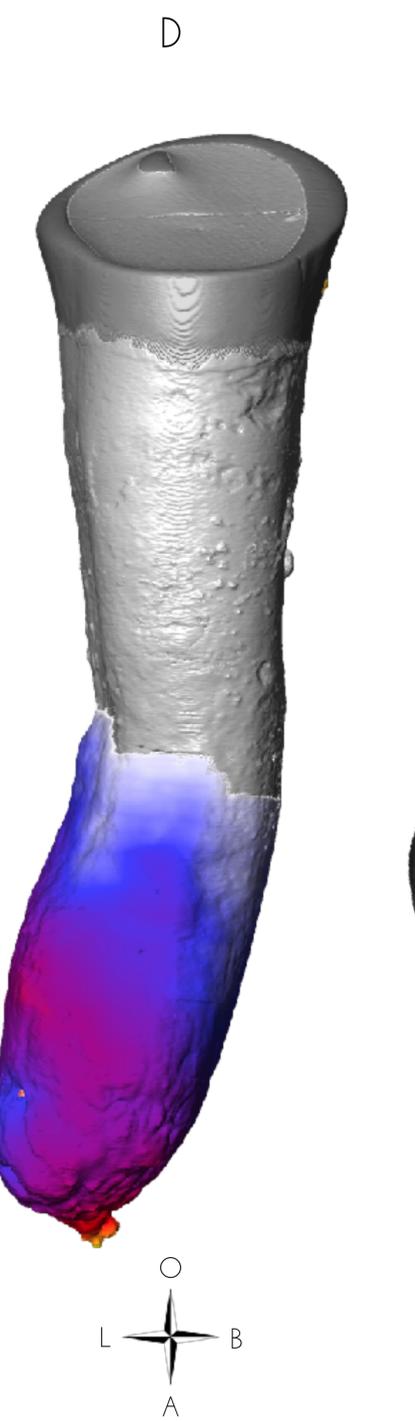
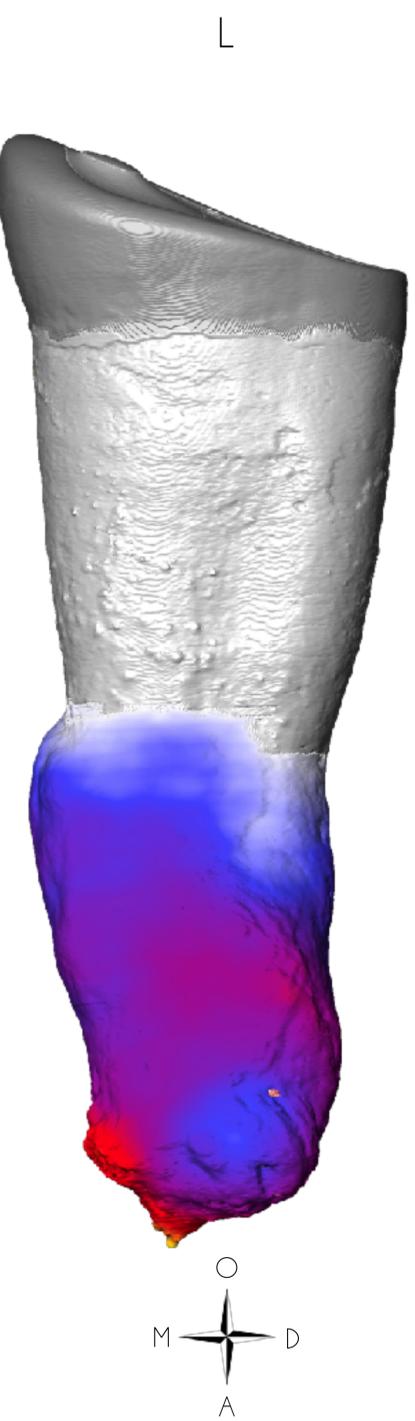
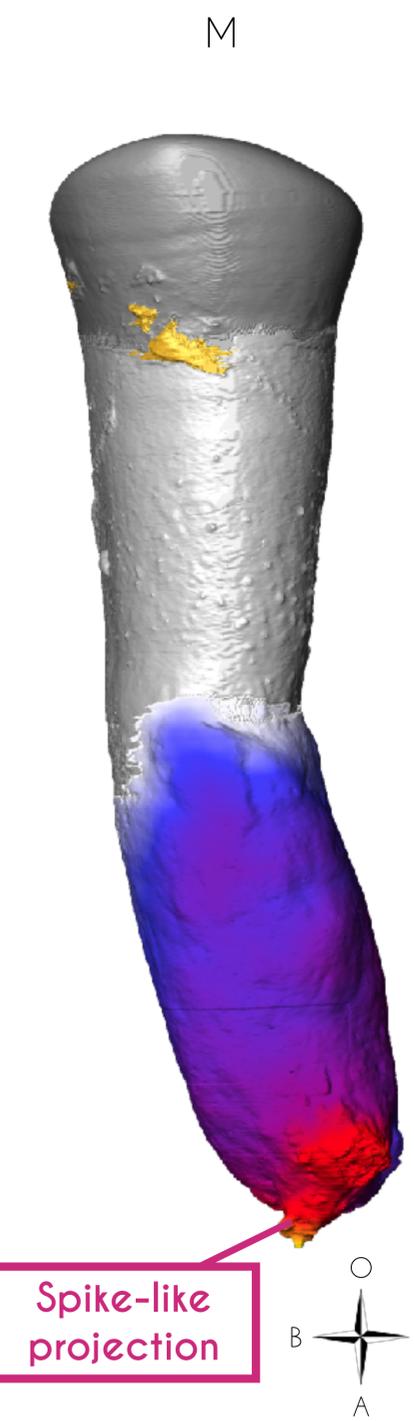
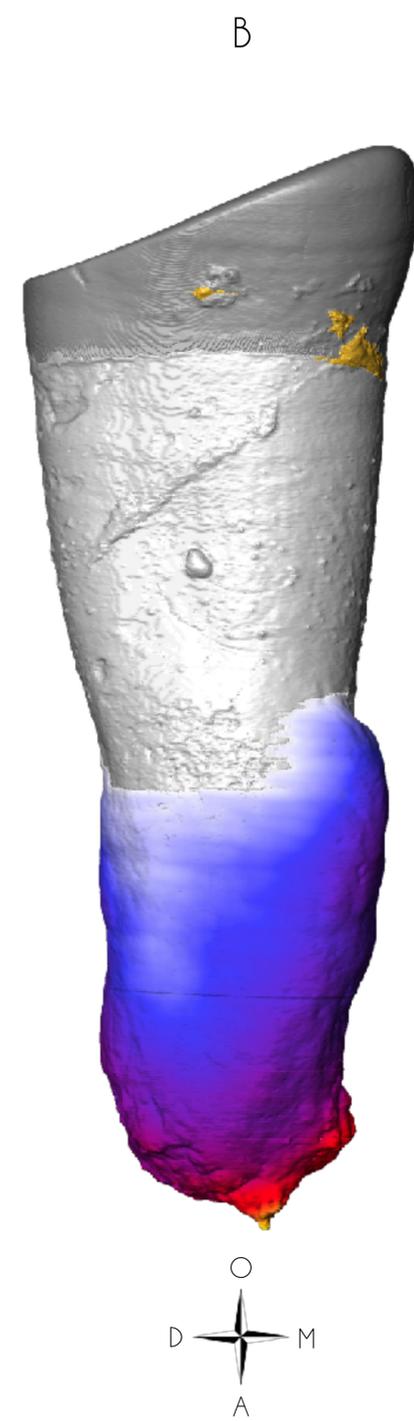
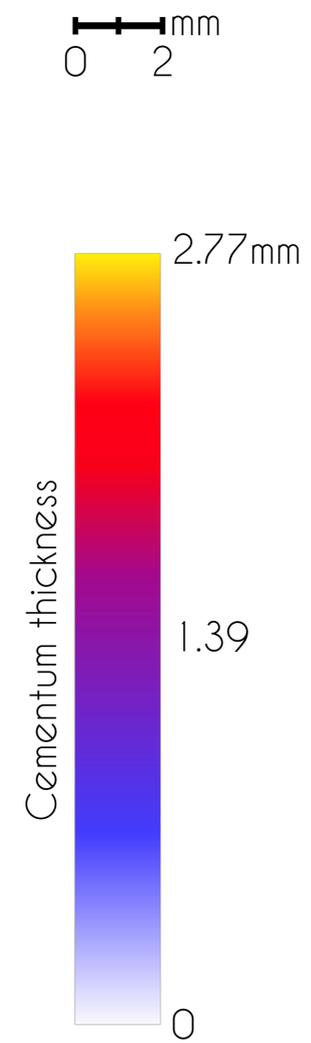
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LRP4	6	4	2	-	0	0	3.2.M	0	1	1d	2

LRP4



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp583_45



Microtomography - Thickness 3D maps				
MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
2770	1	<	Yes	LSP (1)

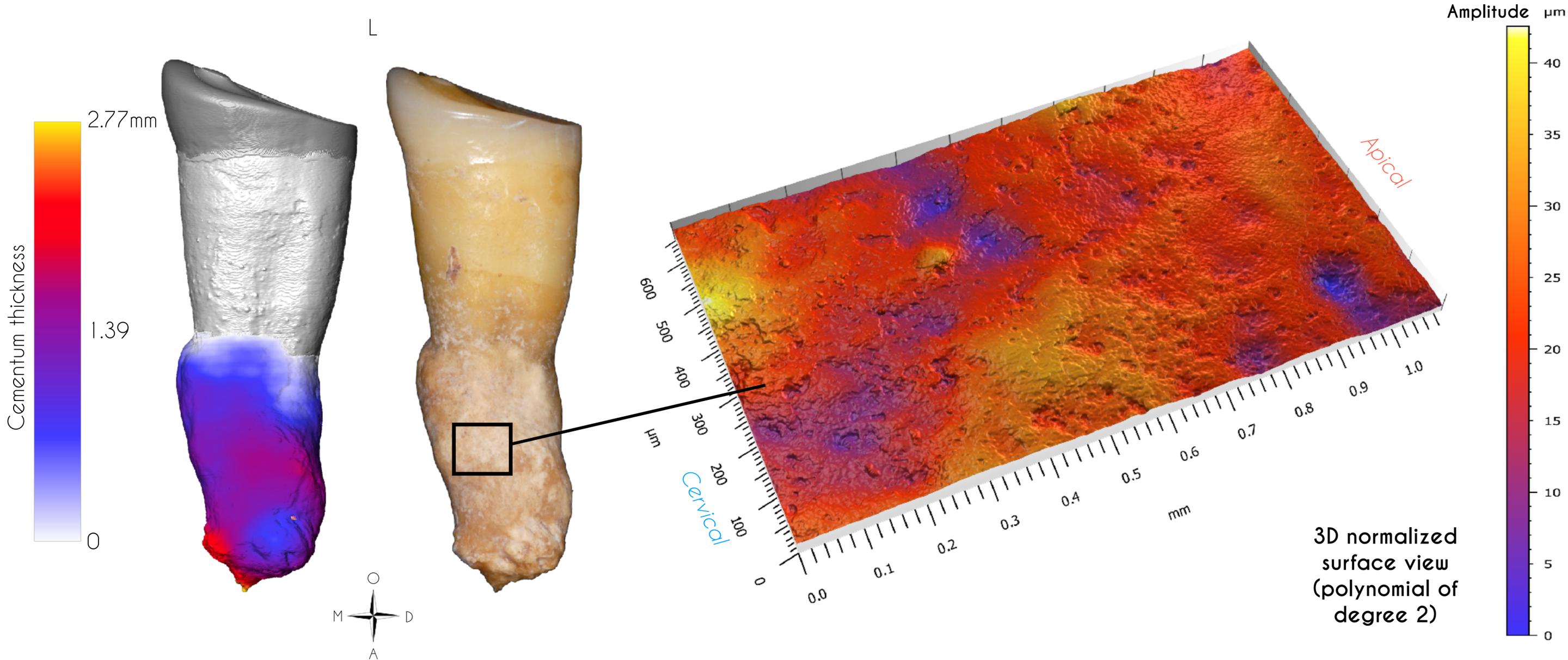
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
LSP: localised spike-like projection;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Mixed

LRP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
L	417	4.97%	2.46mm	1.85mm	3/3	2	Blue	1.47	1.61	10%

Sp583_45



Confocal microscopy - Topography 3D maps

OF	MAX VE (μm)	ST	Note
2>	43	-S2	-

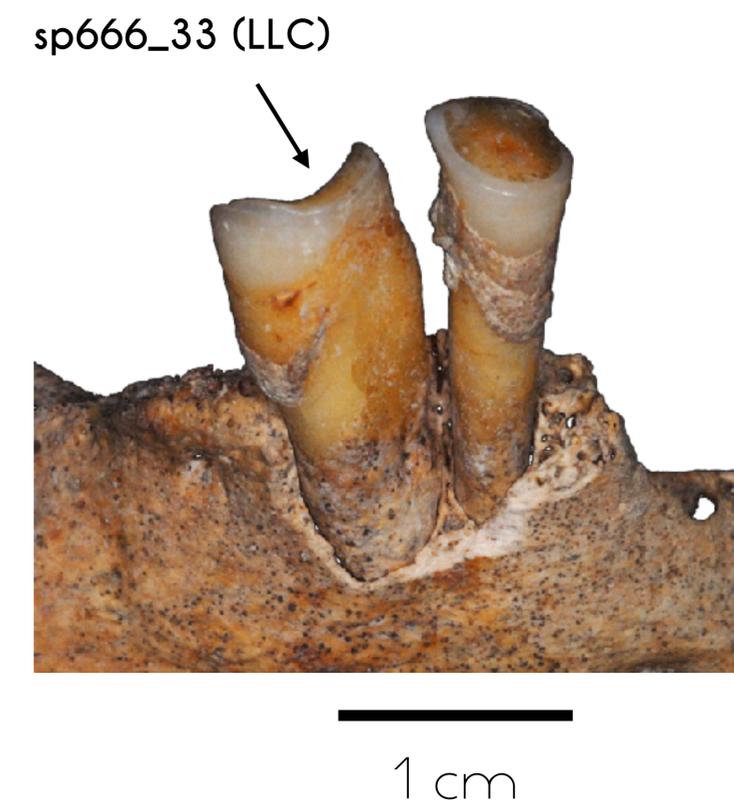
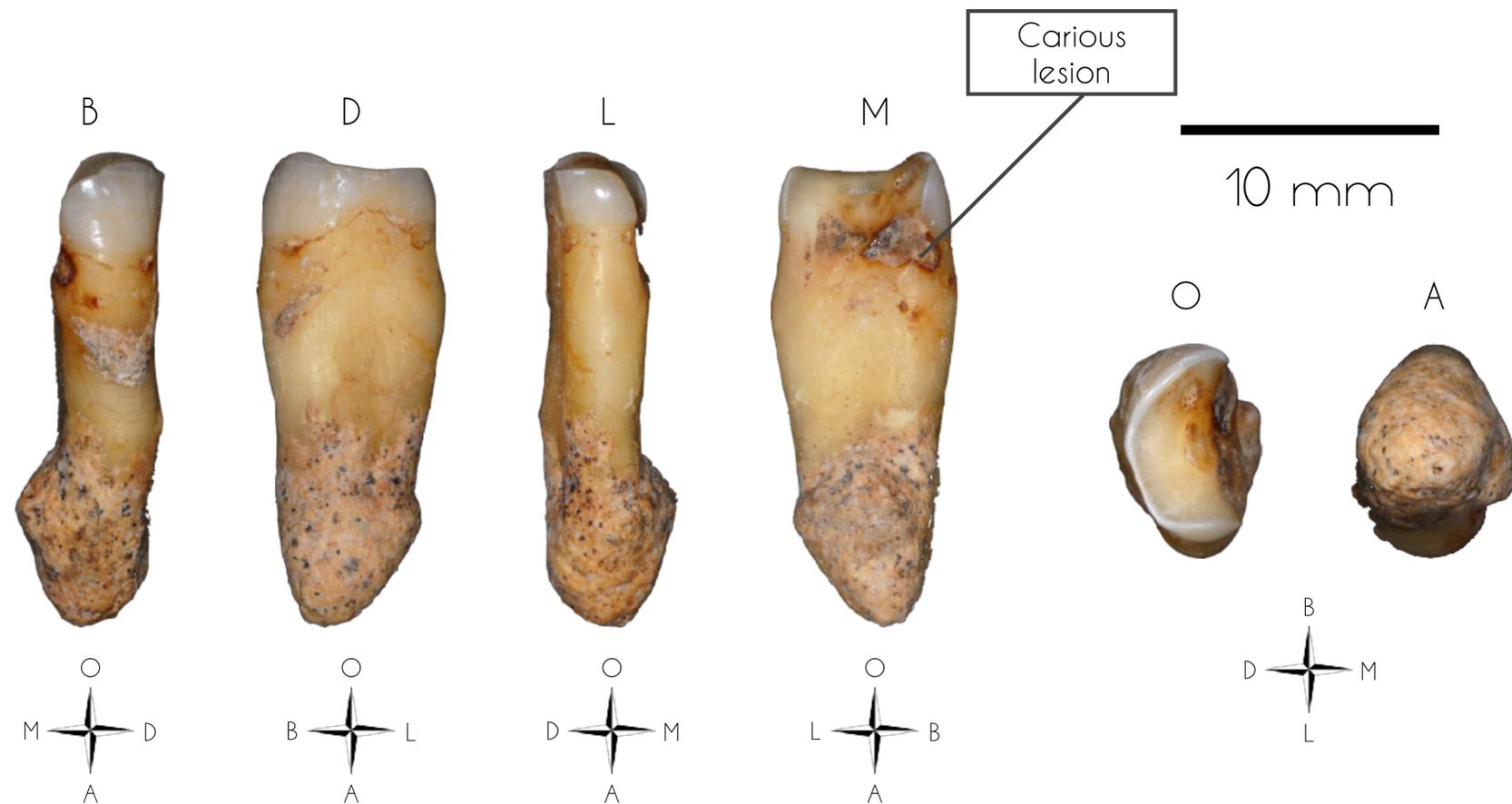
OF: other face (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Mixed

Sp666_33

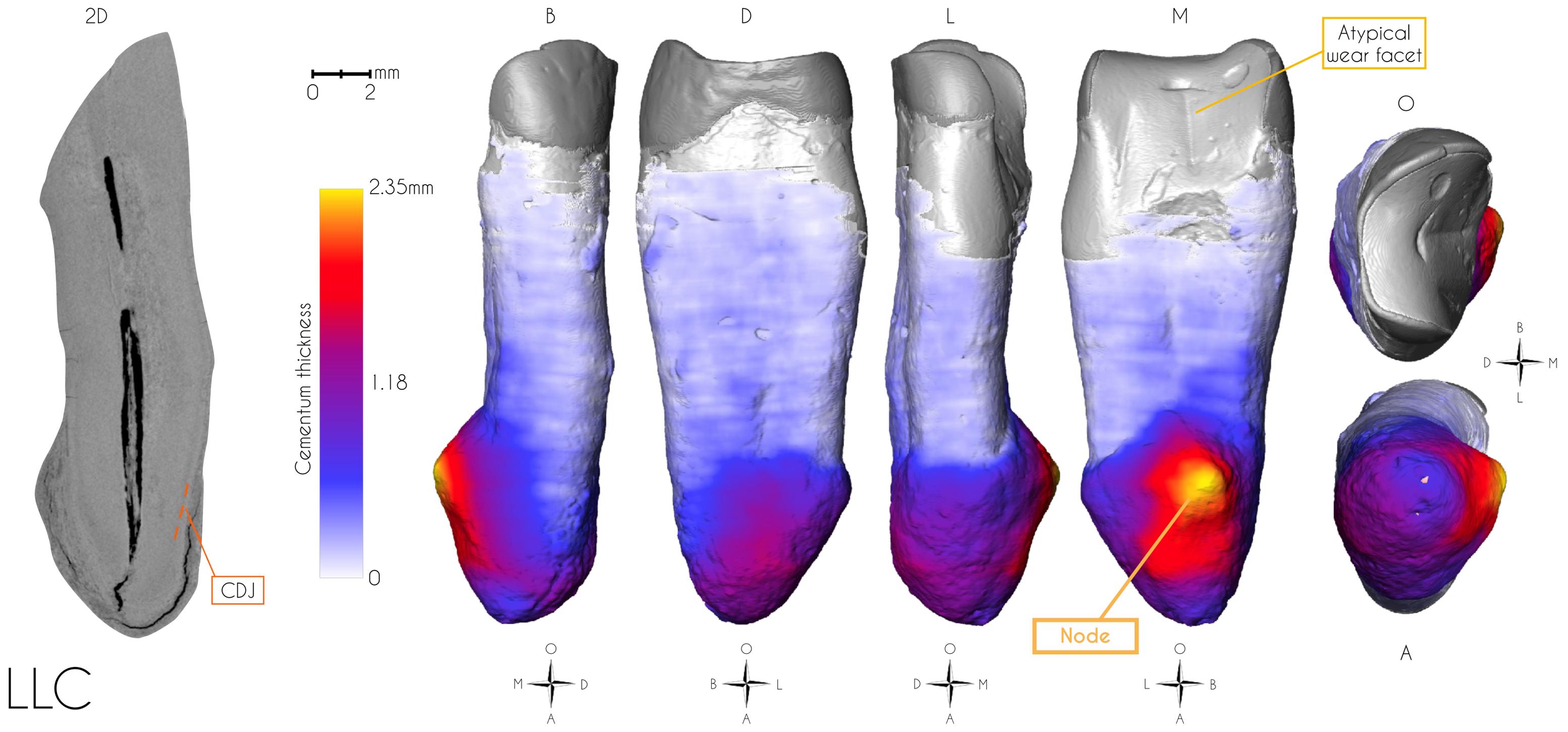
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLC	7	5	6	2/2	0	0	3.2.M	0	1	1m	NA

LLC



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp666_33



Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
2350	1m	<	Yes	NOD + CAR (m)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
NOD: node;
CAR: carious lesion
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

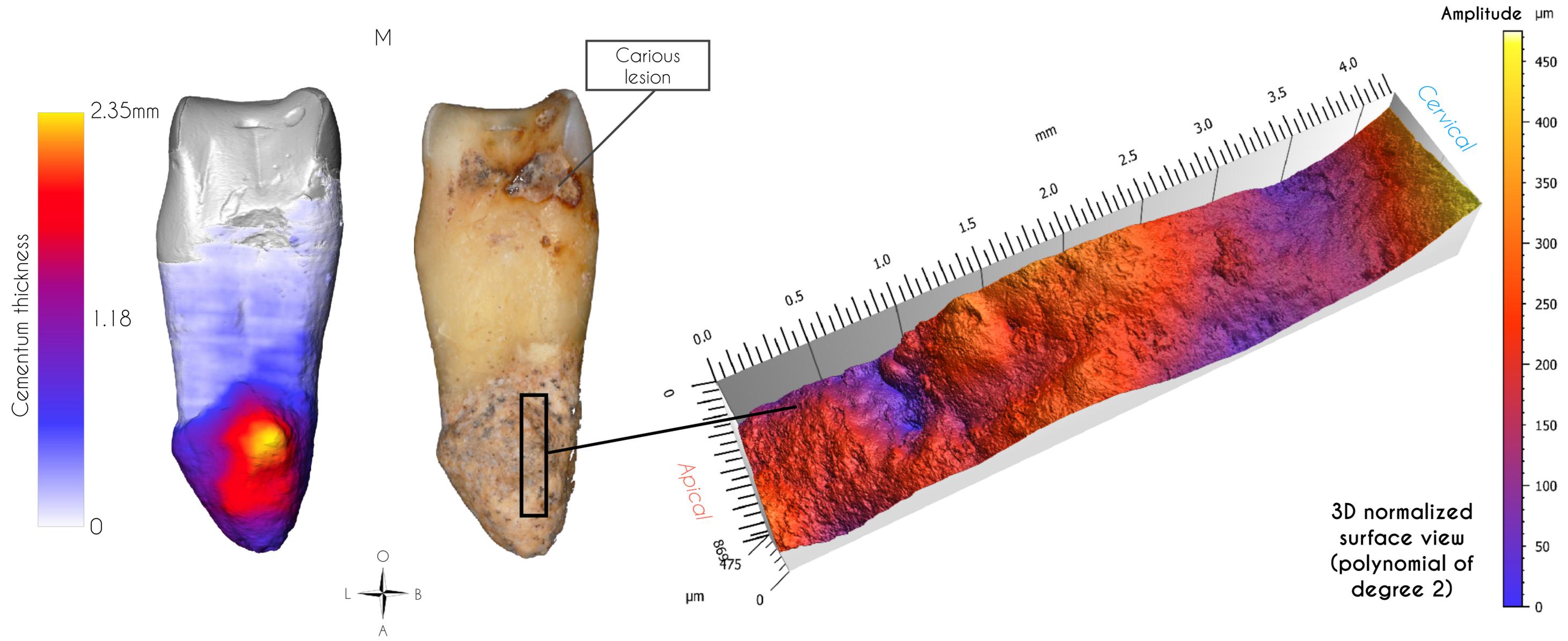
Mixed

LLC

LLC

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1731	6.02%	0.88mm	4.23	1/7	2	Blue	1.5	1.8	10%

Sp666_33



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1m	475	+S2	NOD

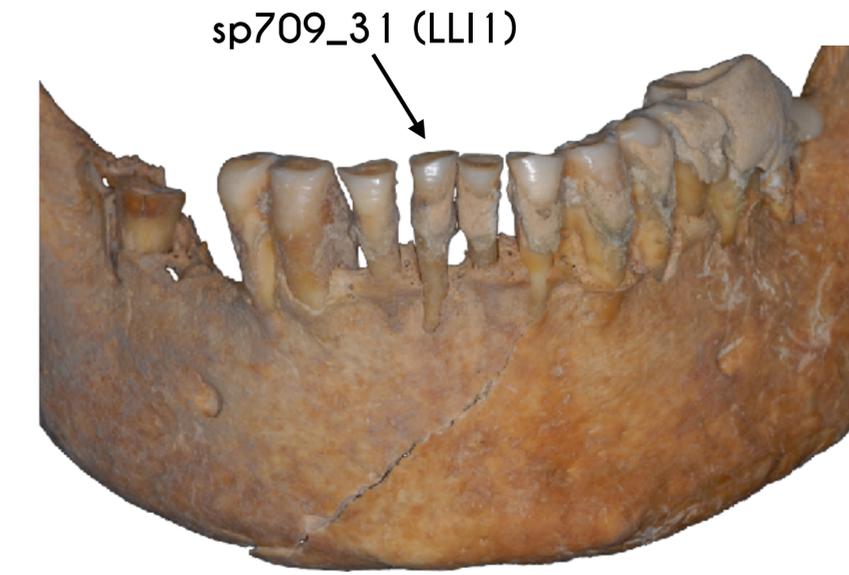
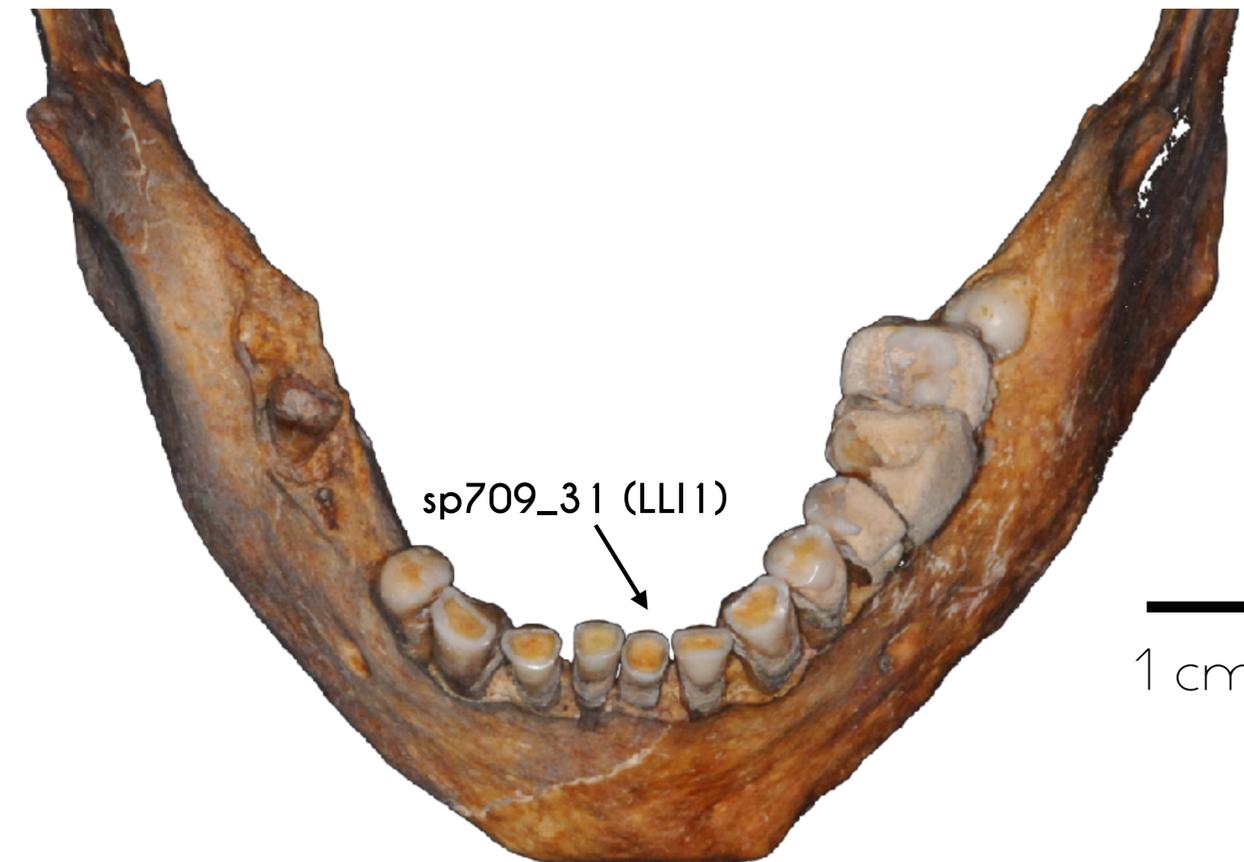
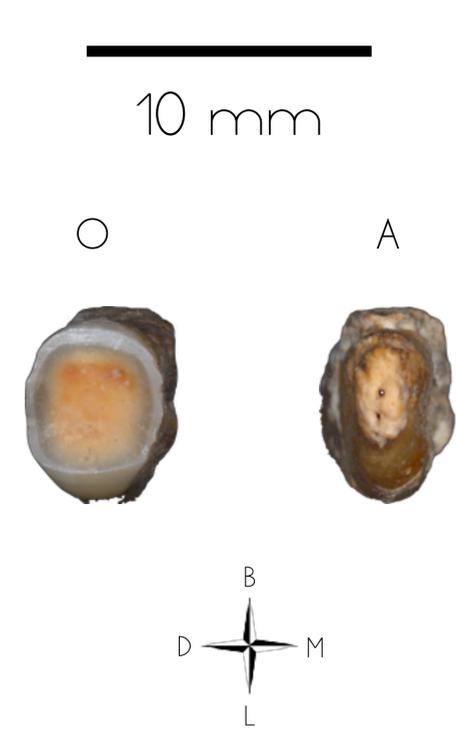
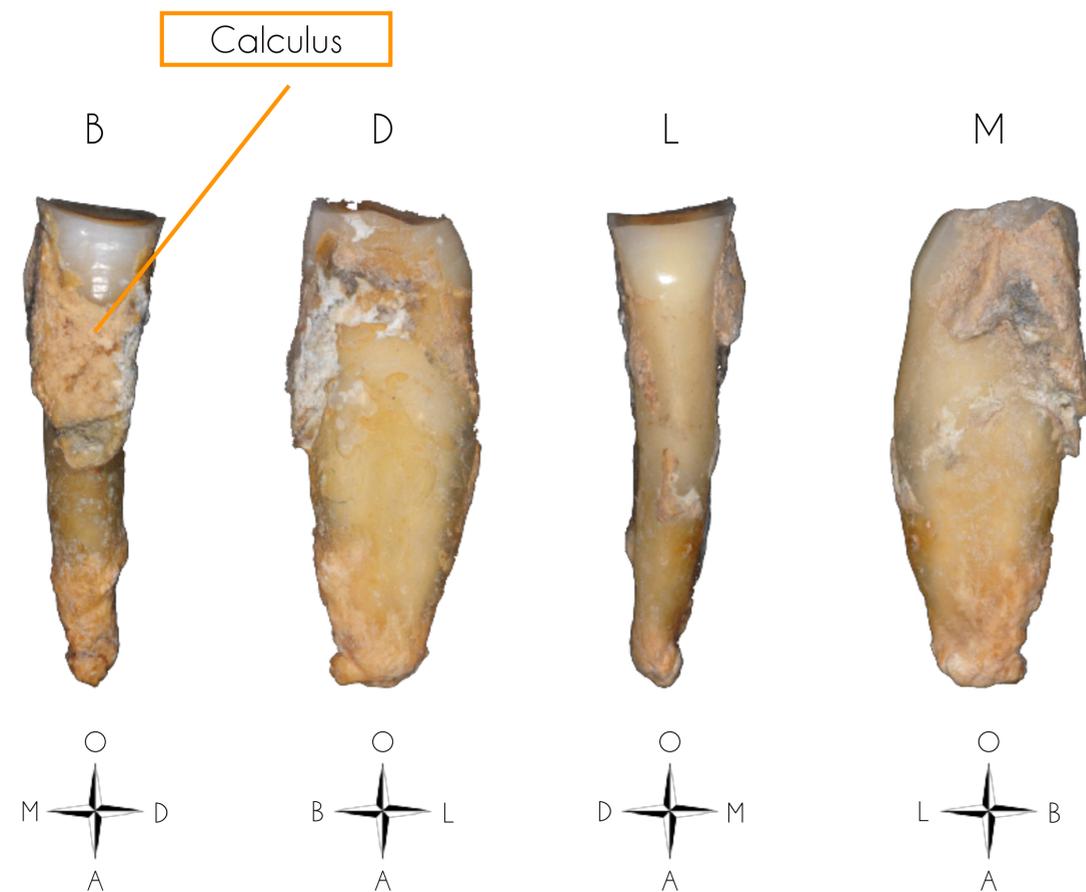
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
NOD: nodes

Mixed

Sp709_31

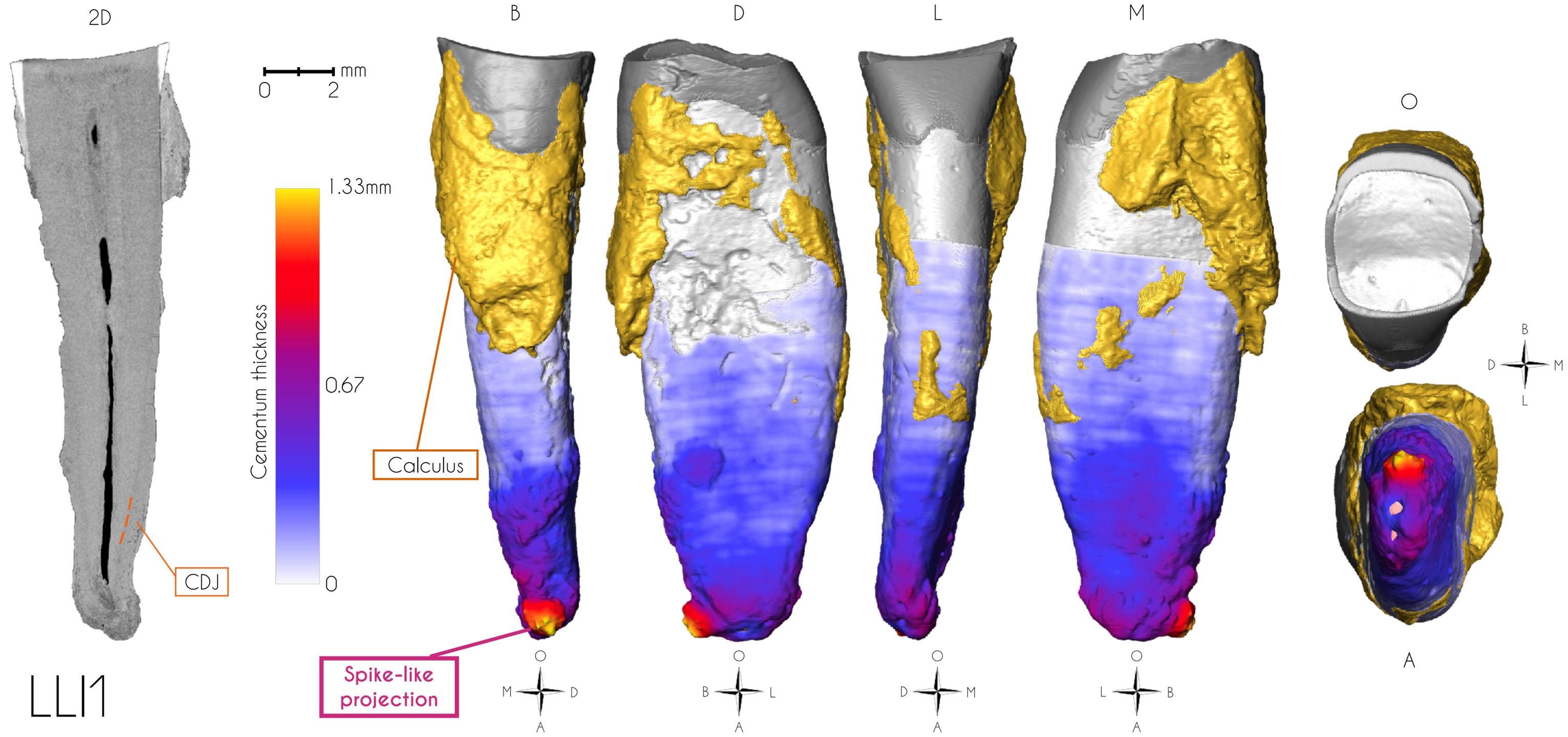
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLI1	6	6	4	-	0	0	3.1.m	0	1	0	NA

LLI1



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp709_31



Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1330	1<	No	Yes	LSP (<)

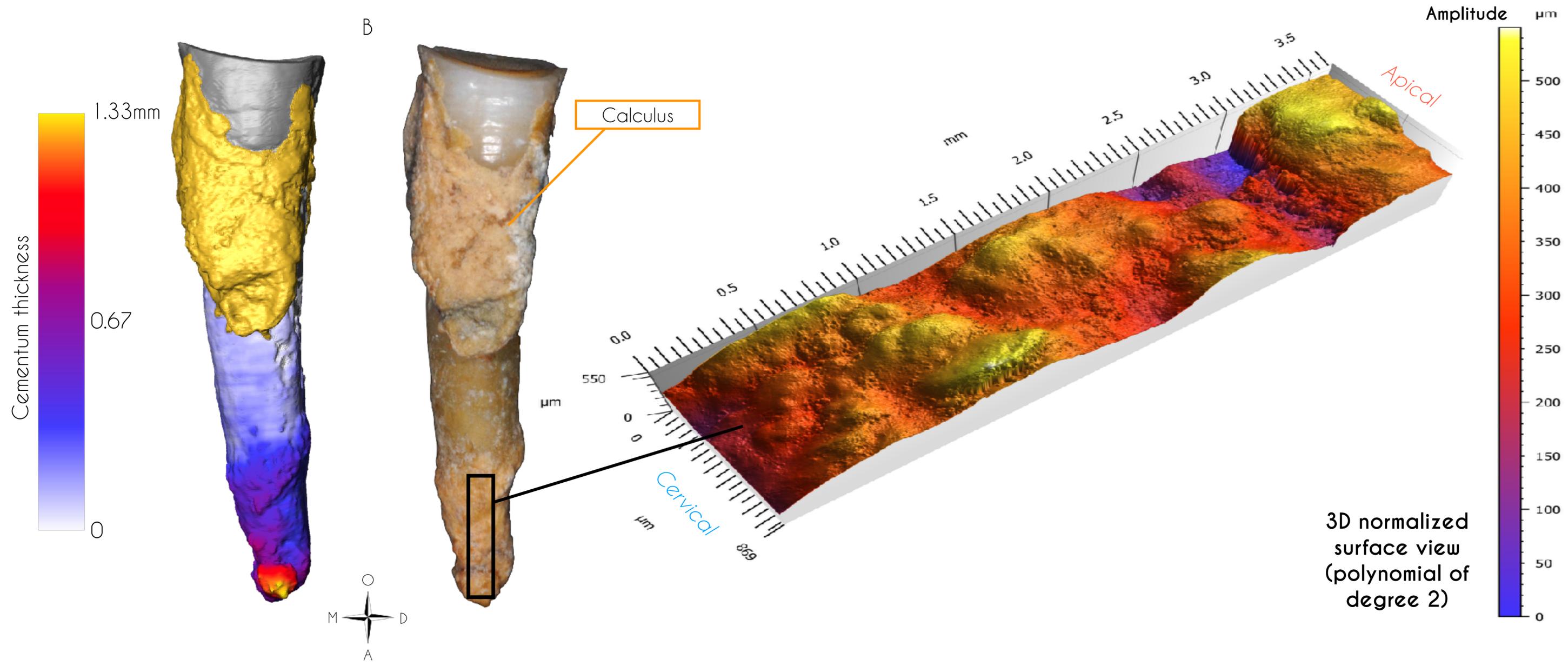
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
LSP: localised spike-like projection;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Mixed

LL1

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
B	808	7.07%	0.88mm	2.44mm	1/4	2	Blue	1.5	1.8	10%

Sp709_31



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (µm)	ST	Note
<	550	+R1	LSP

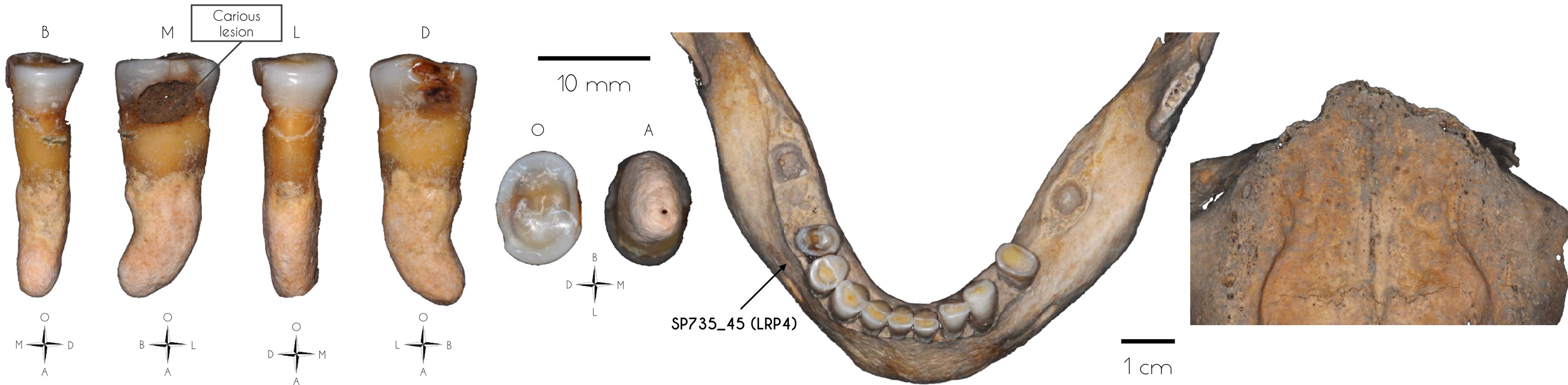
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
LSP: localised spike-like projection

Mixed

Sp735_45

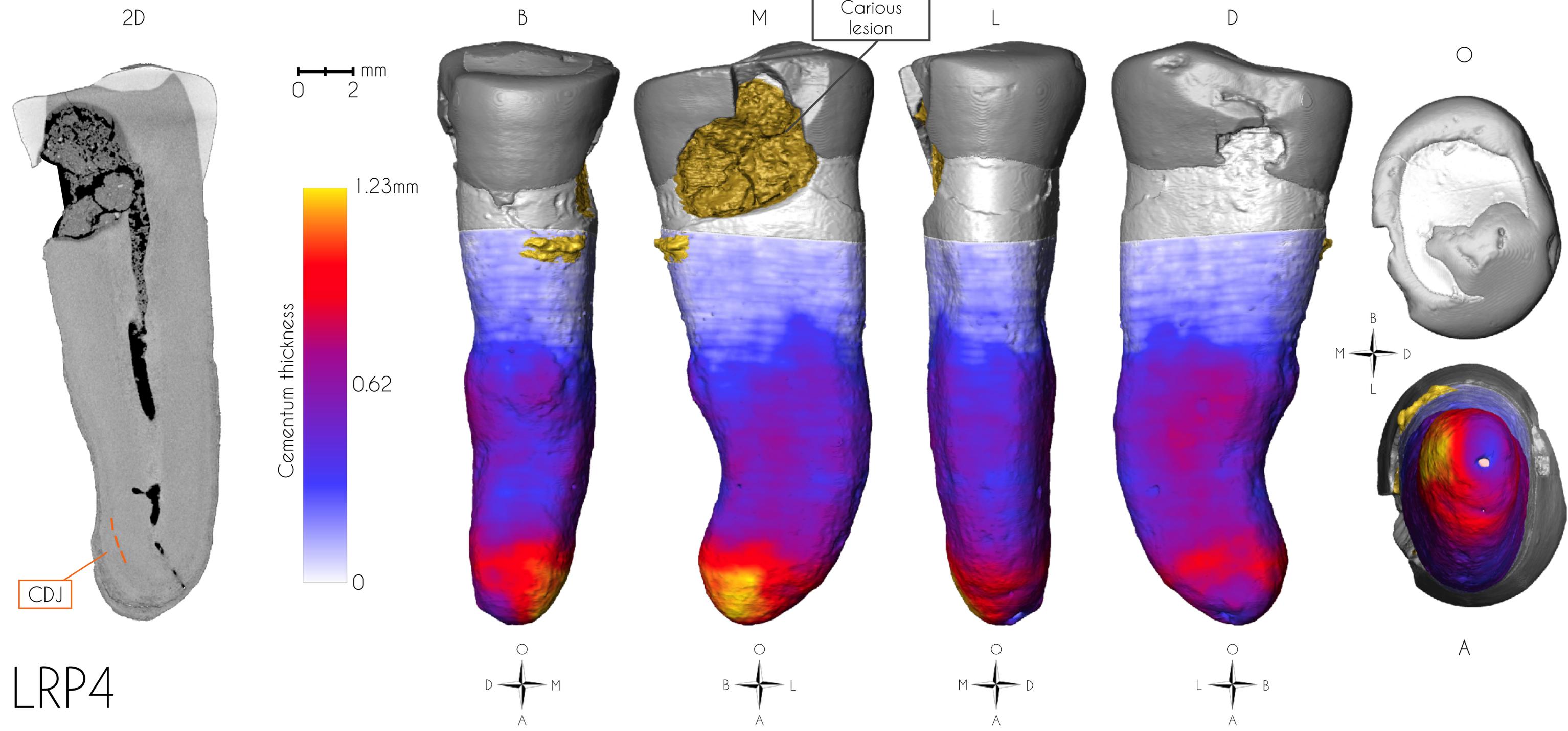
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LRP4	4	6	3	2/4	C	0	1.2.M	0	0	1d	2

LRP4



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp735_45



Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1230	1m	No	Yes	CAR (m)

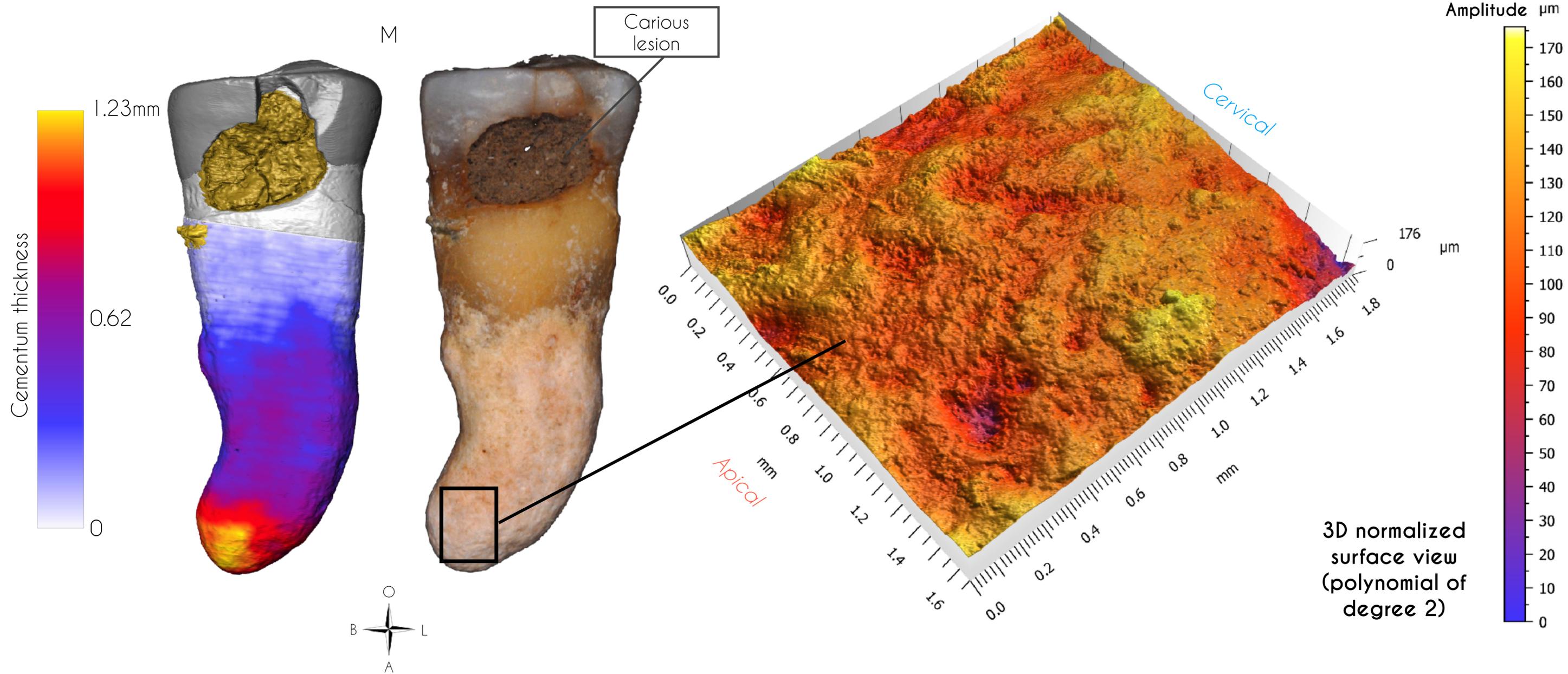
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
CAR: carious lesion;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Mixed

LRP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1038	5.15%	1.67mm	1.85mm	2/3	2	Blue	1.5	1.8	10%

Sp735_45



Confocal microscopy - Topography 3D maps

LOC MAX	MAX VE (μm)	ST	Note
1 m	175	-R1	-

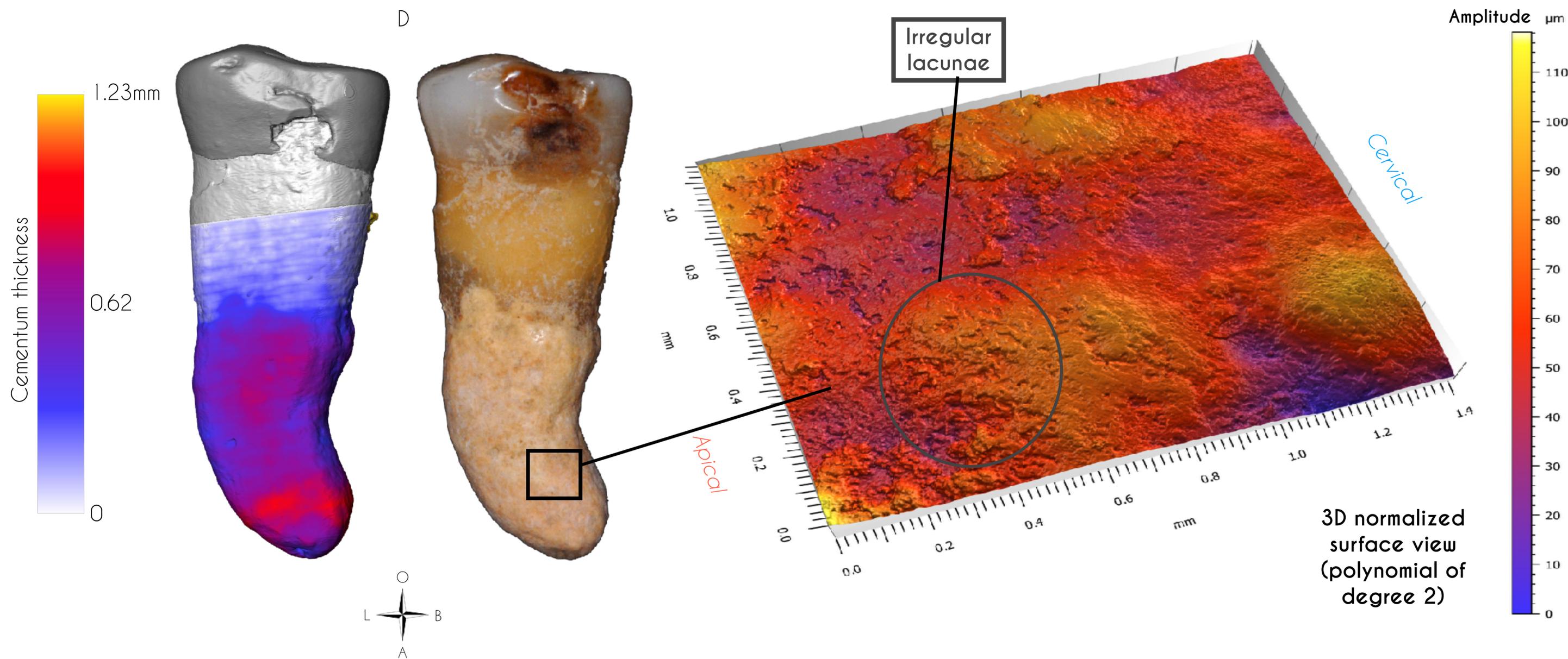
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Mixed

LRP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	715	4.19%	1.67mm	1.25mm	2/2	2	Blue	1.5	1.8	10%

Sp735_45



Confocal microscopy - Topography 3D maps			
OF	MAX VE (μm)	ST	Note
D	118	-S2	IL

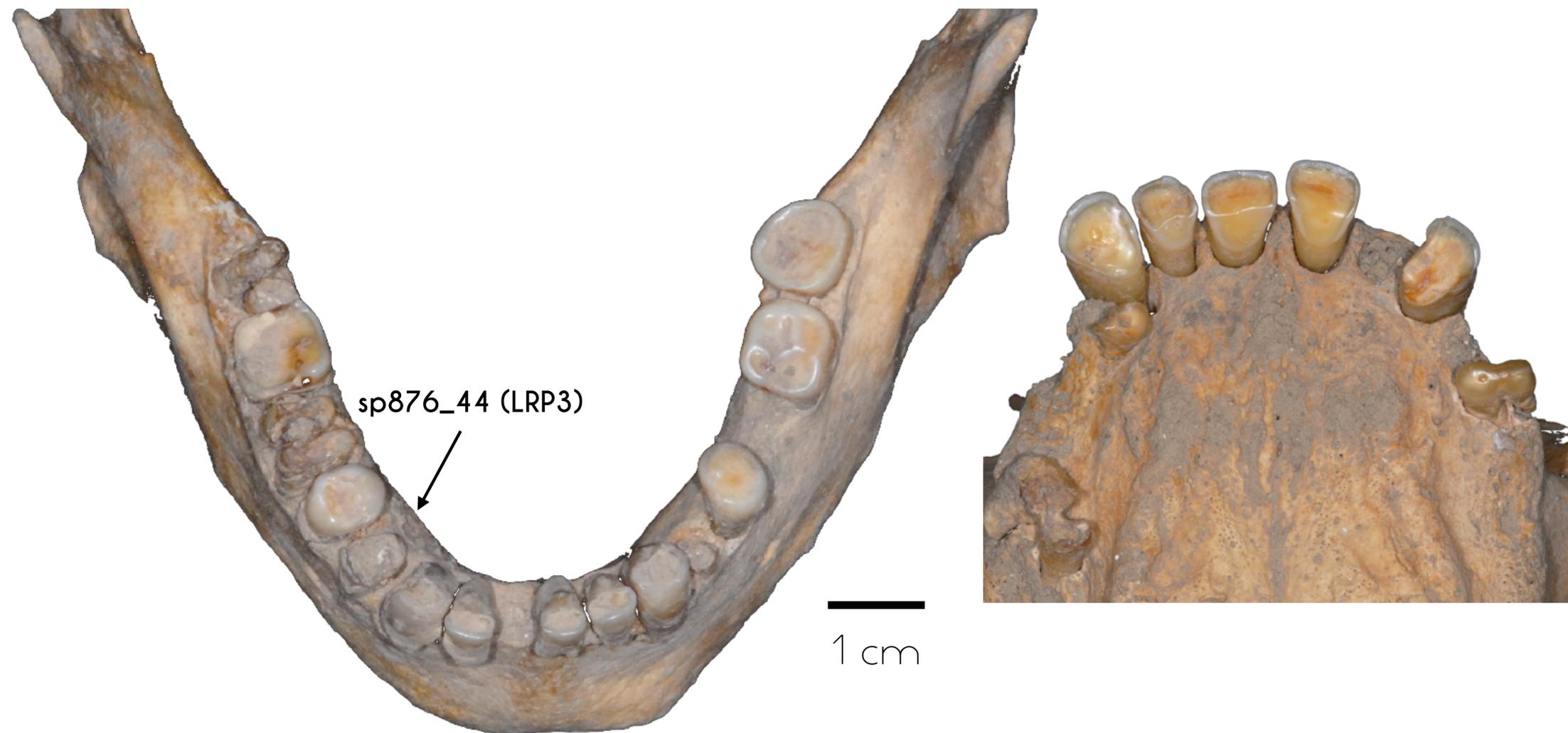
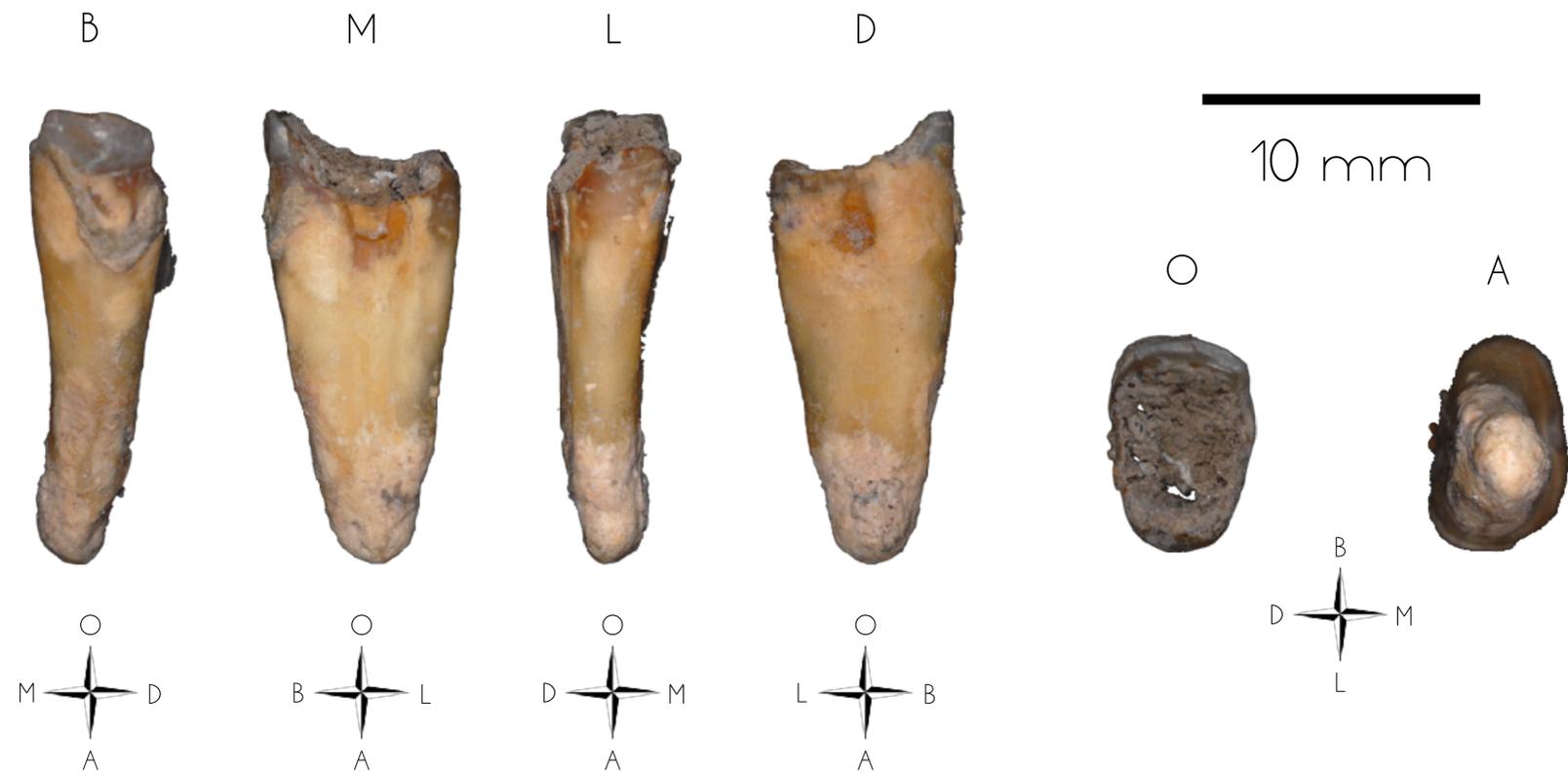
OF: other face (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.
IL: irregular lacunae

Mixed

Sp876_44

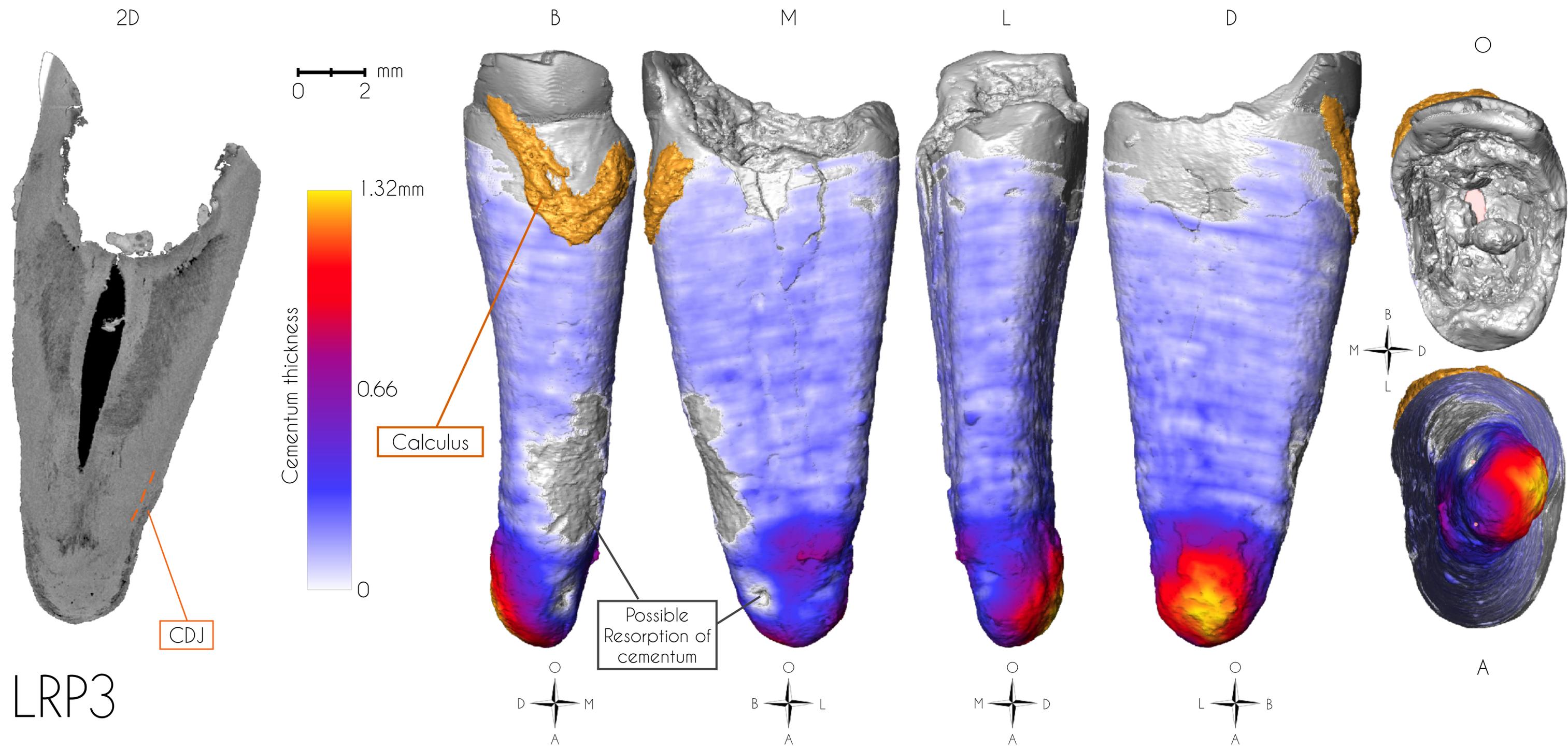
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LRP3	NA	NA	NA	1/4	M	0	1.4.m	0	1	0	2

LRP3



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp876_44



Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1320	1d	No	Yes	RES (m<)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
RES: resorption of cementum;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

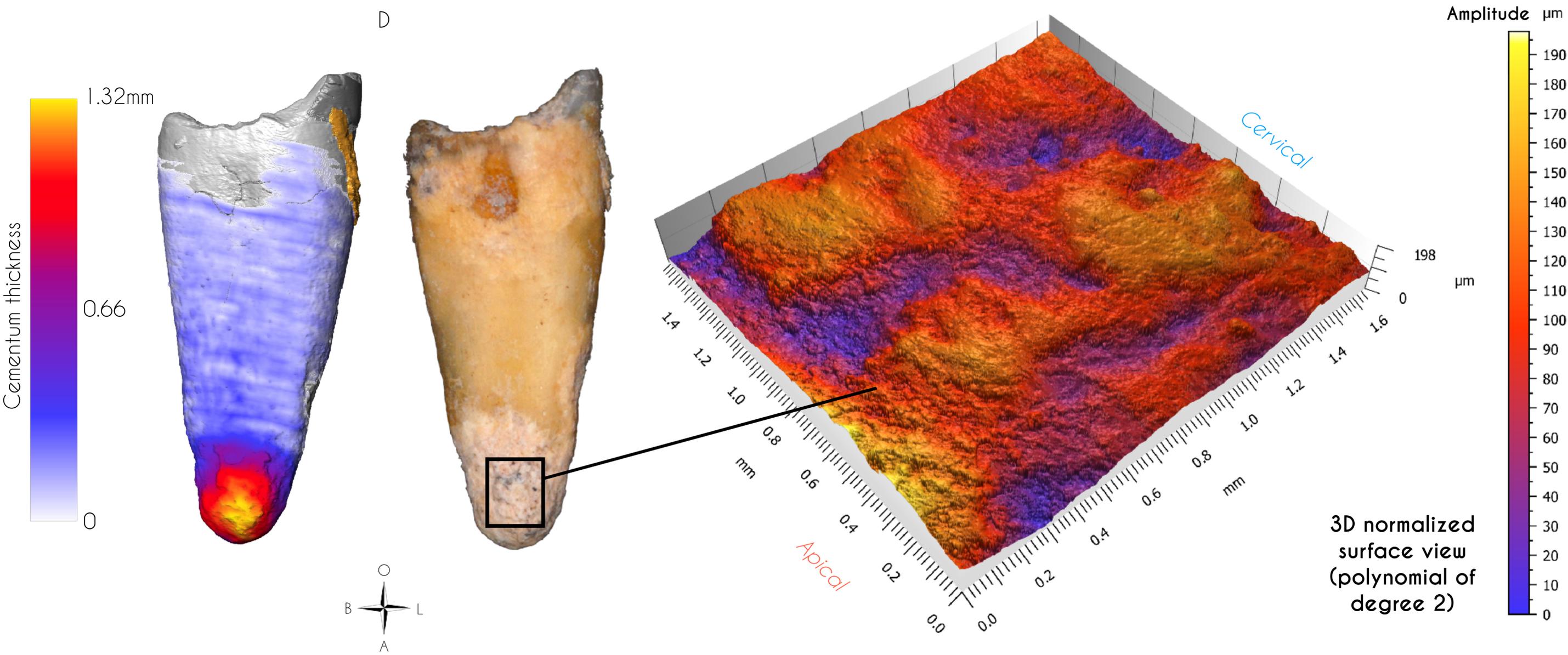
Mixed

LRP3

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	945	5.48%	1.67mm	1.85mm	2/3	2	Blue	1.47	1.61	10%

Sp876_44

D



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
1d	200	+R2	-

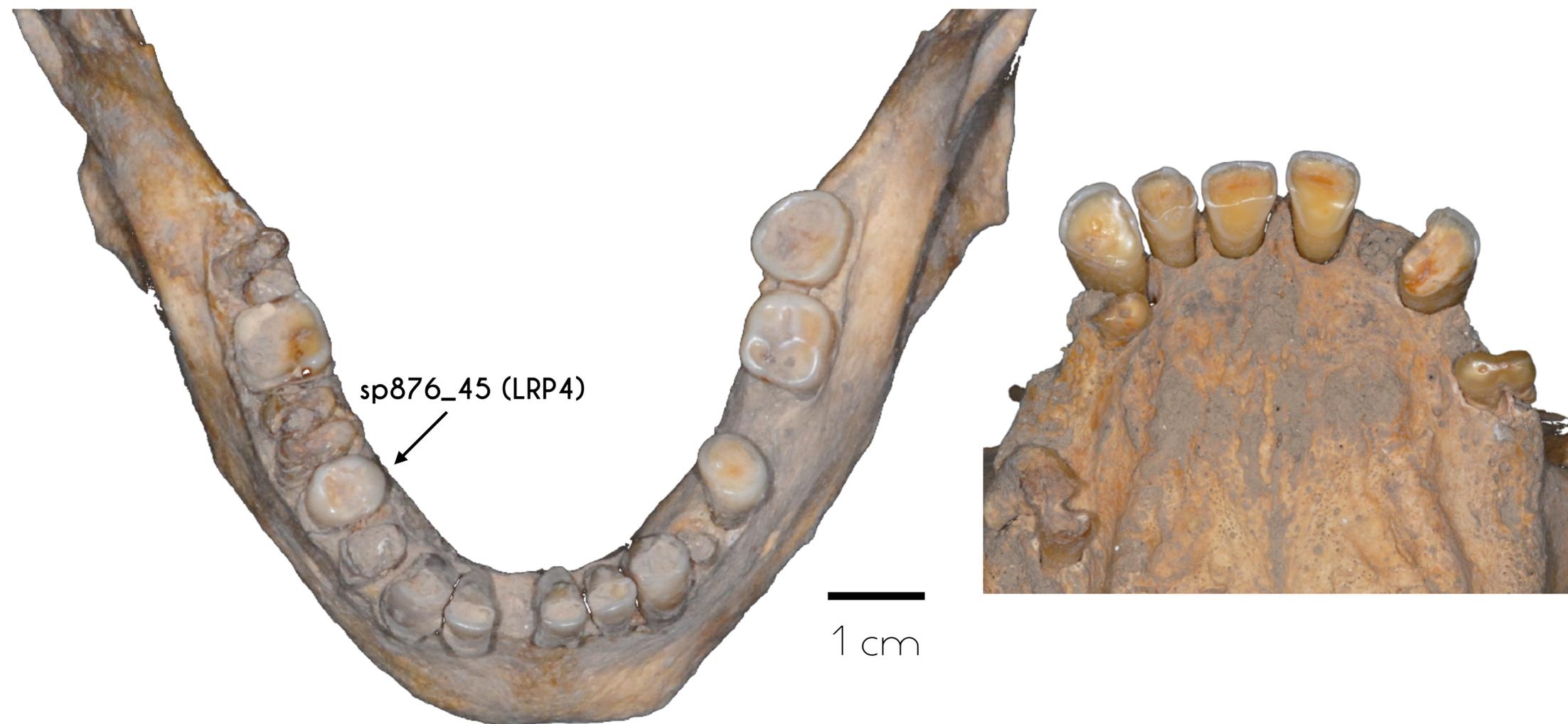
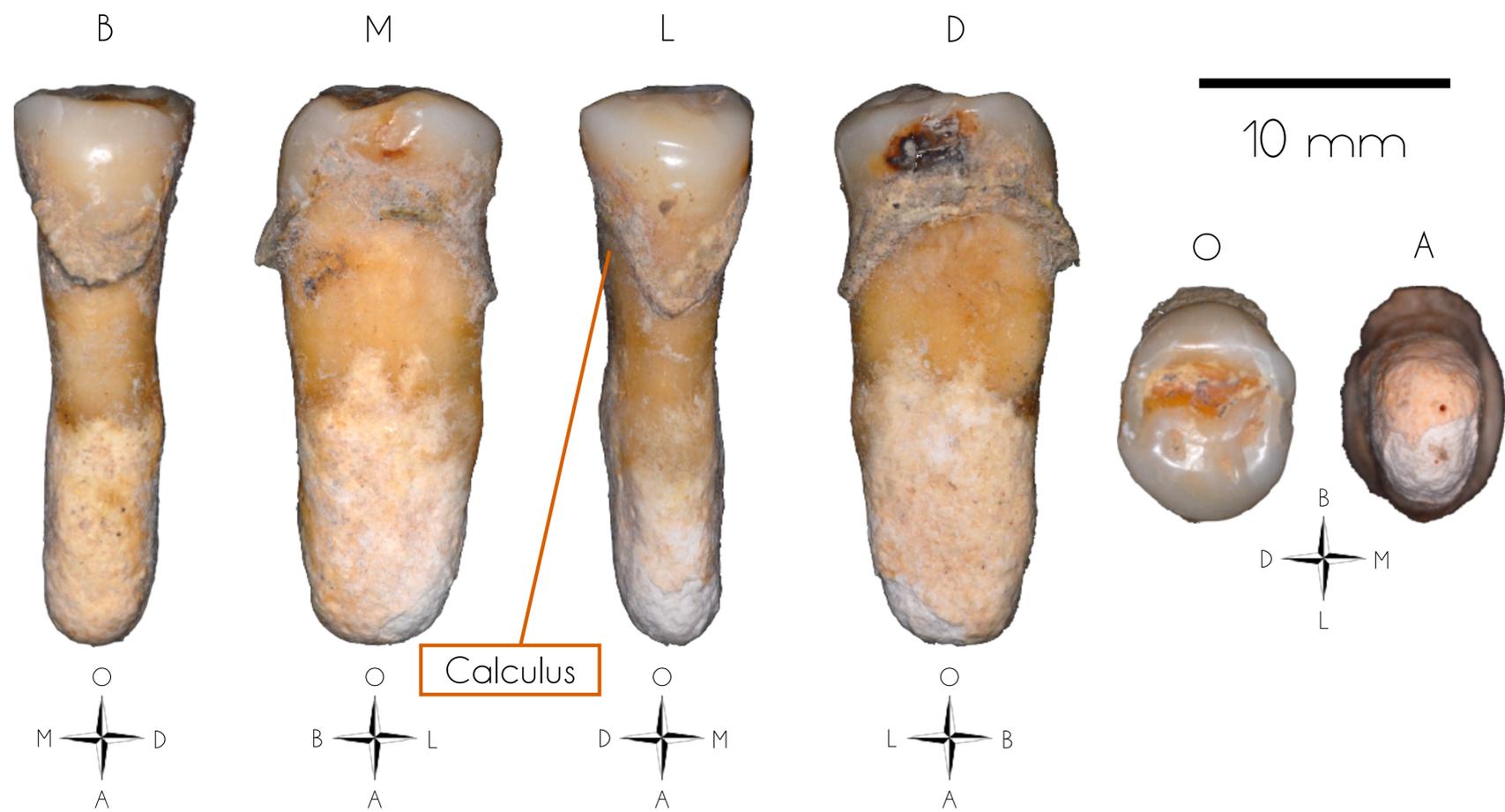
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Mixed

Sp876_45

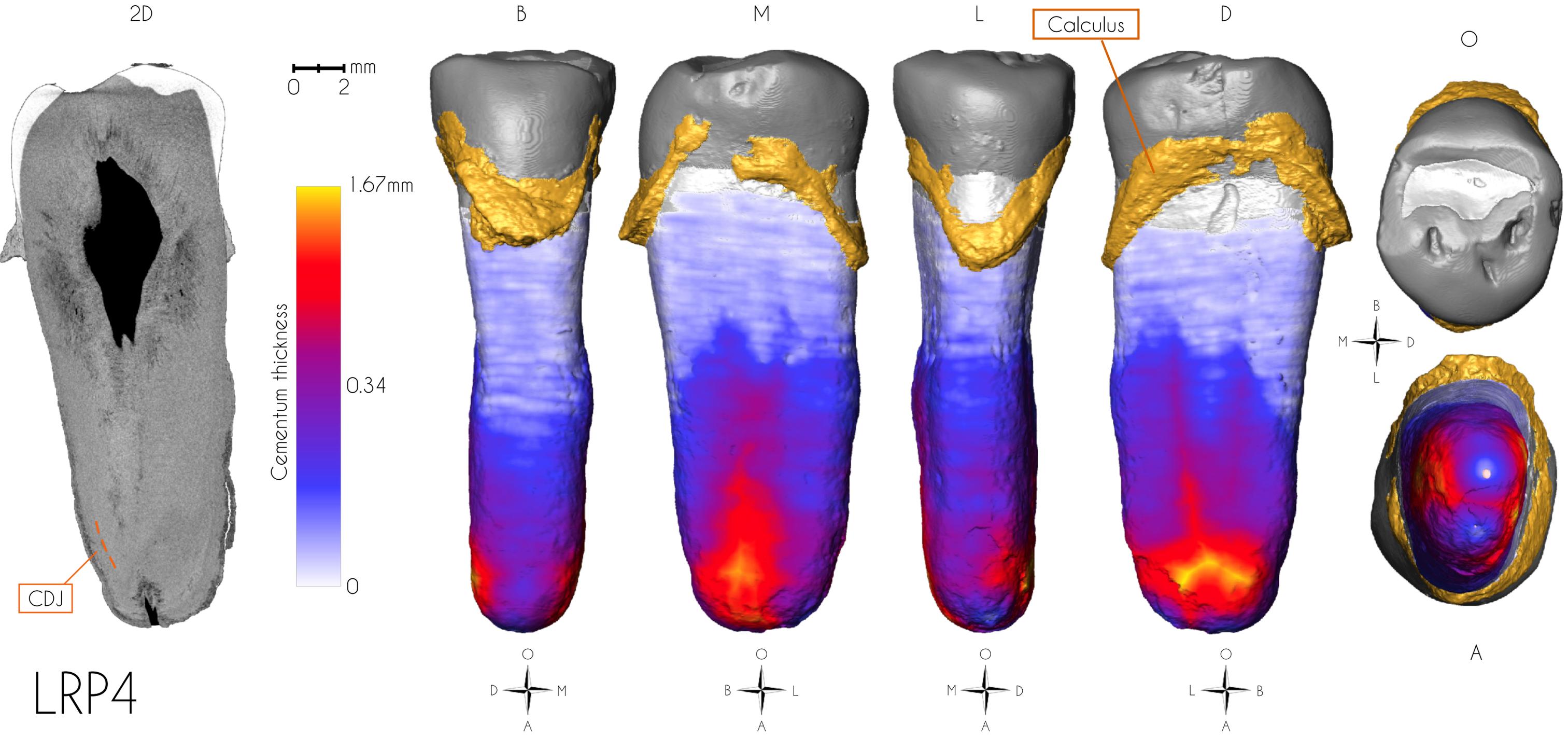
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
4	6	3	2/2	0	0	0	1.2.M	0	1	0	2

LRP4



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp876_45



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1670	1d	<	No	FR (1>)

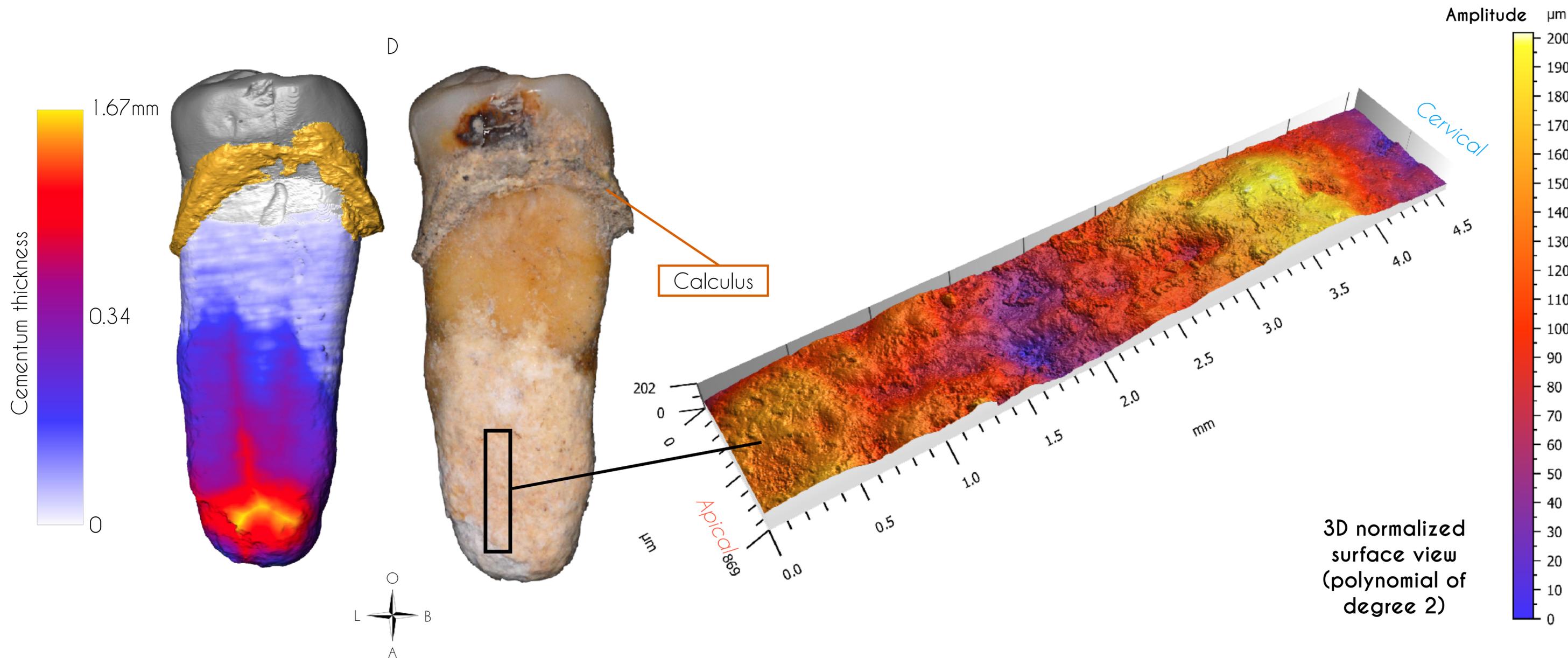
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
FR: fracture of cementum;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

Mixed

LRP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
D	511	4.9%	0.88mm	4.82mm	1/8	2	Blue	1.5	1.8	10%

Sp876_45



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (µm)	ST	Note
2d	200	+R2	-

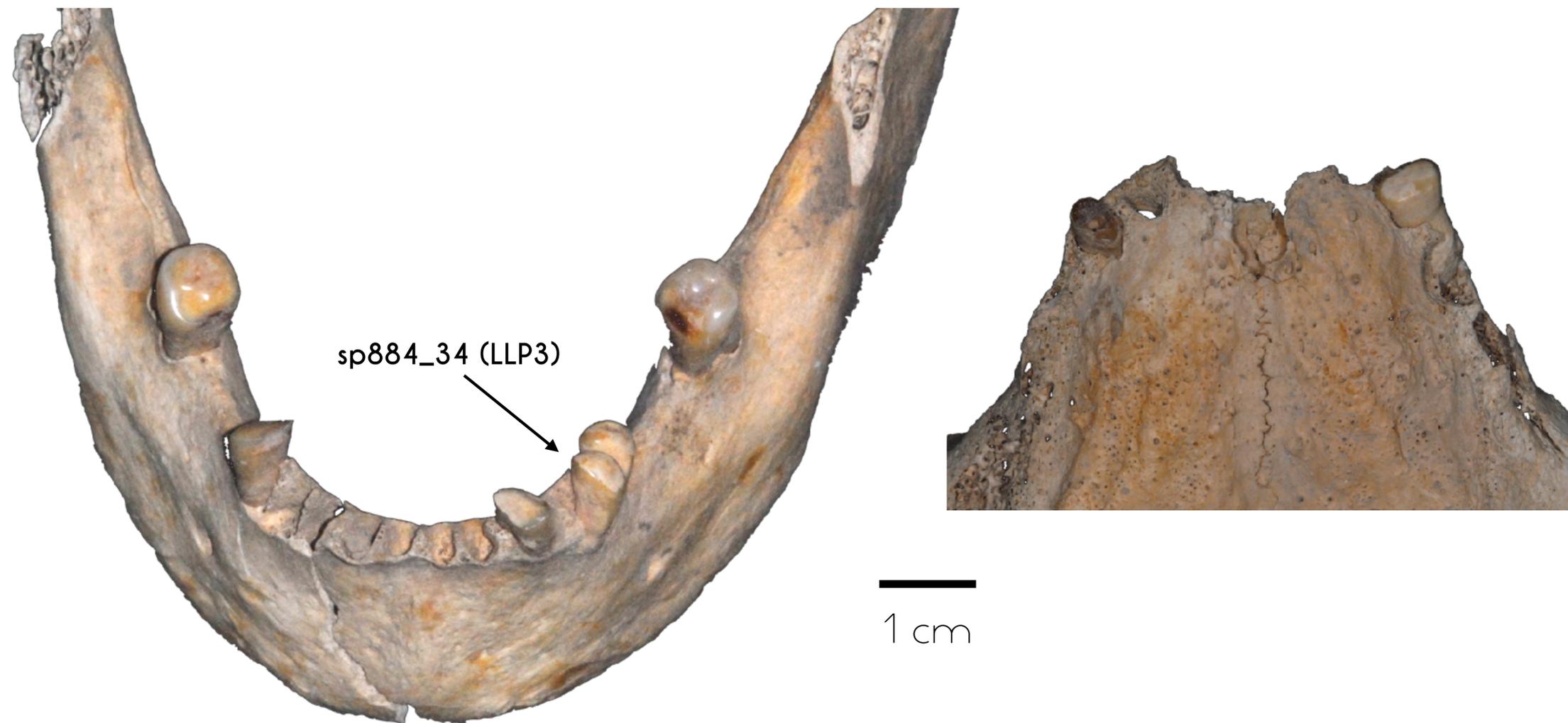
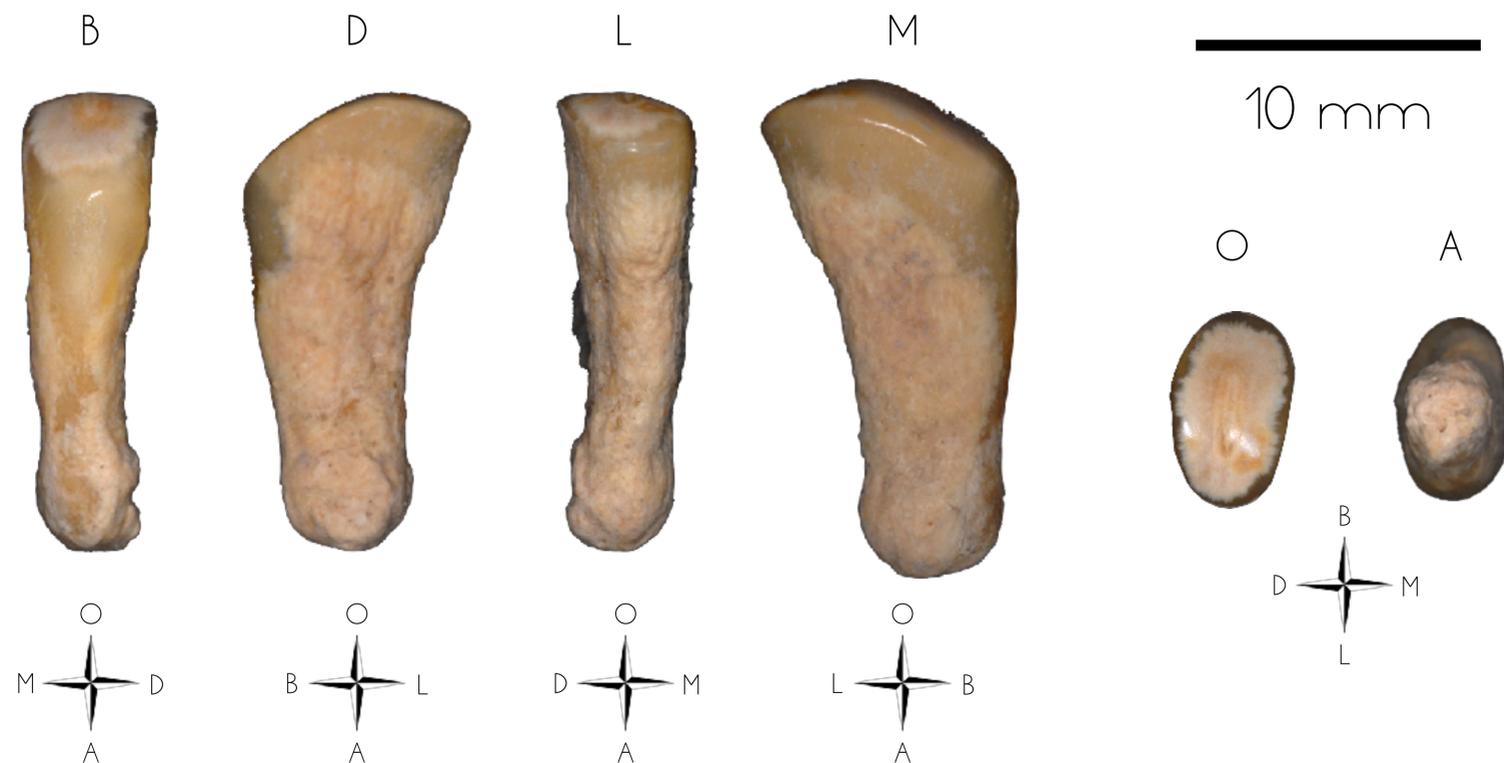
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Mixed

Sp884_34

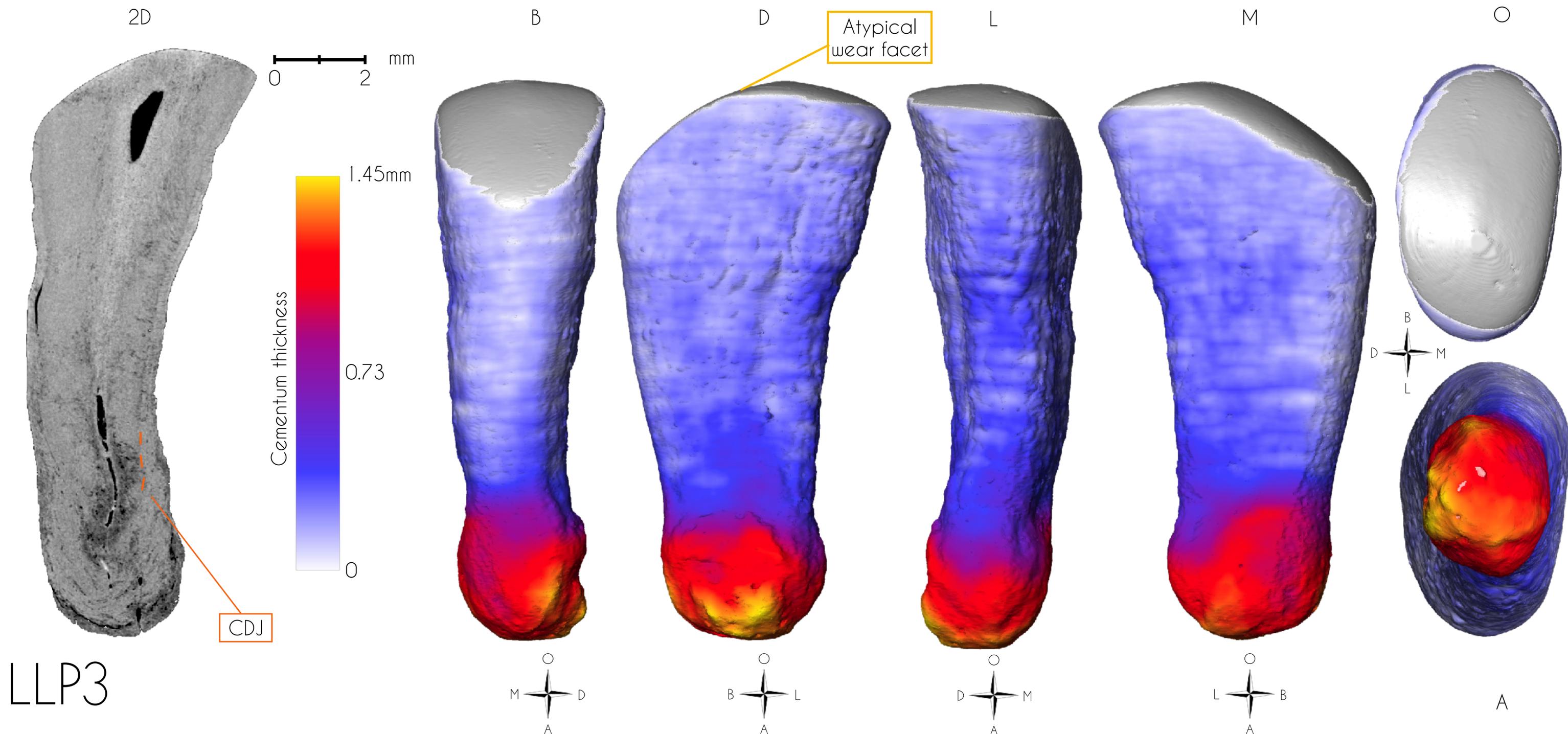
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP3	8	3	6	-	0	0	3.4.M	0	0	1m	1

LLP3



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp884_34



Microtomography - Thickness 3D maps				
MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1450	d	No	No	W

MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 PREF LOC: preferential location;
 W: atypical wear facet;
 (m: mesial; d: distal)

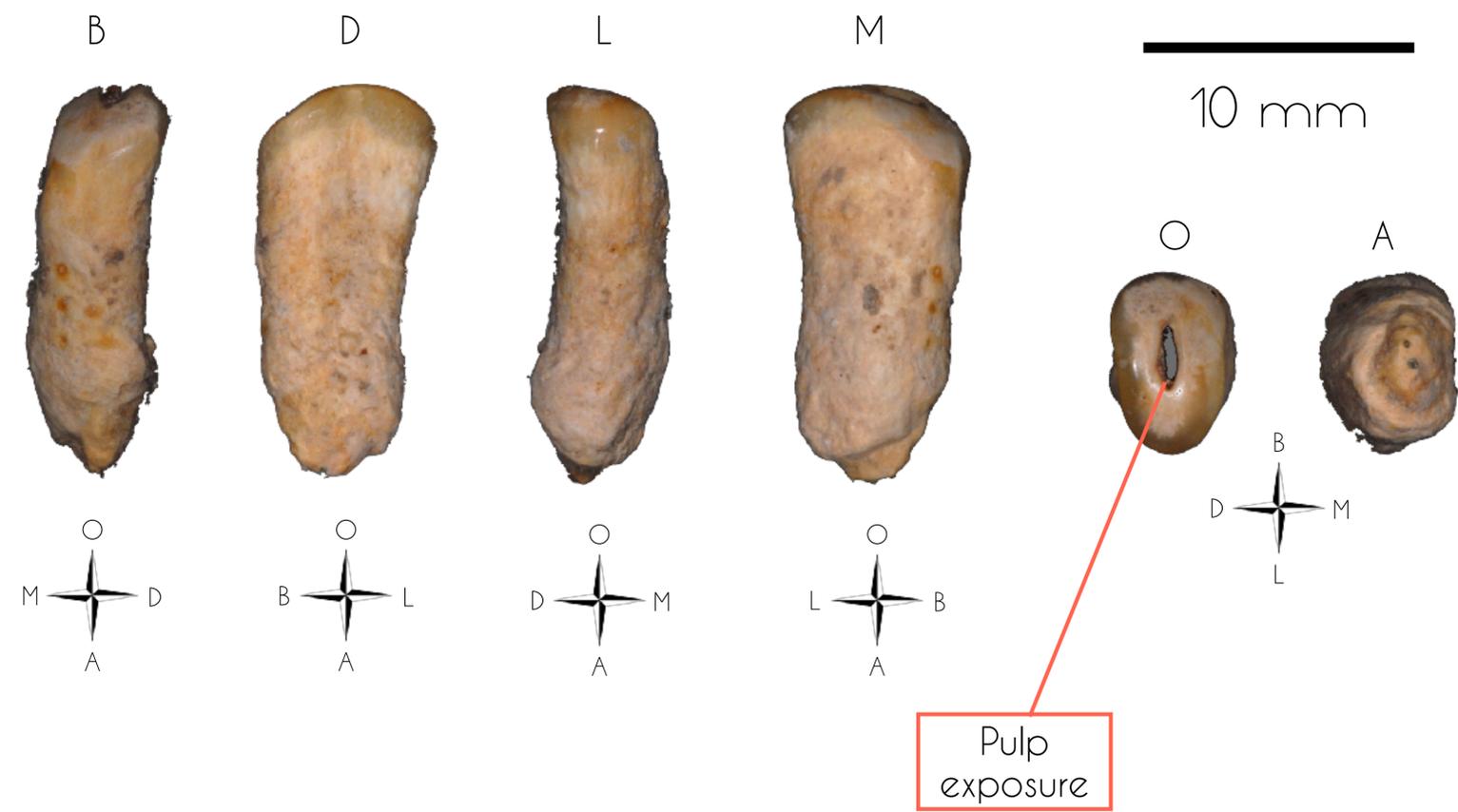
Mixed

LLP3

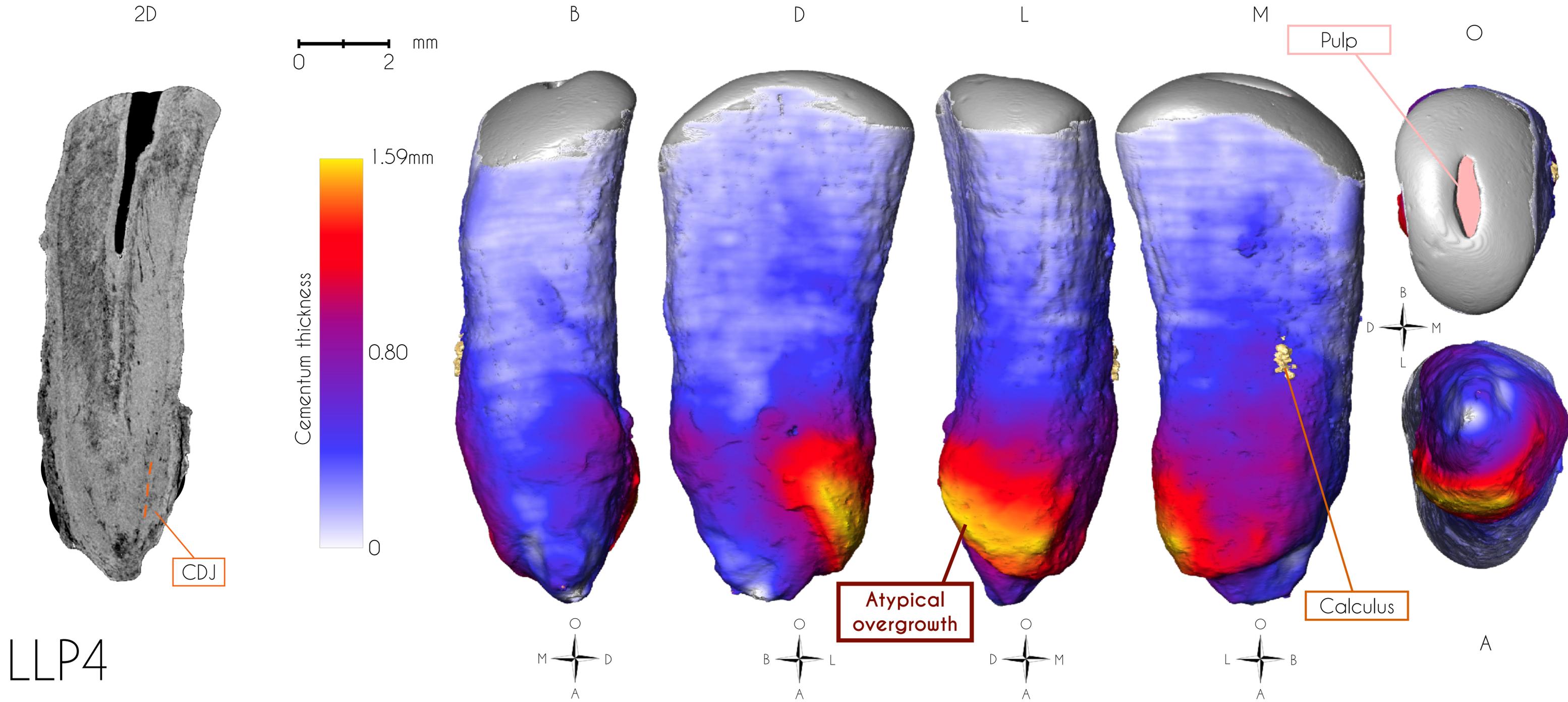
Sp884_35

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP4	8	7	6	-	W	0	3.4.M	0	0	1d	2

LLP4



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure (W: wear) - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist



LLP4

Microtomography - Thickness 3D maps

MAX THI (μm)	LOC MAX	LOC MIN	PREF LOC	Note
1590	d>	<	Yes	OG (>)

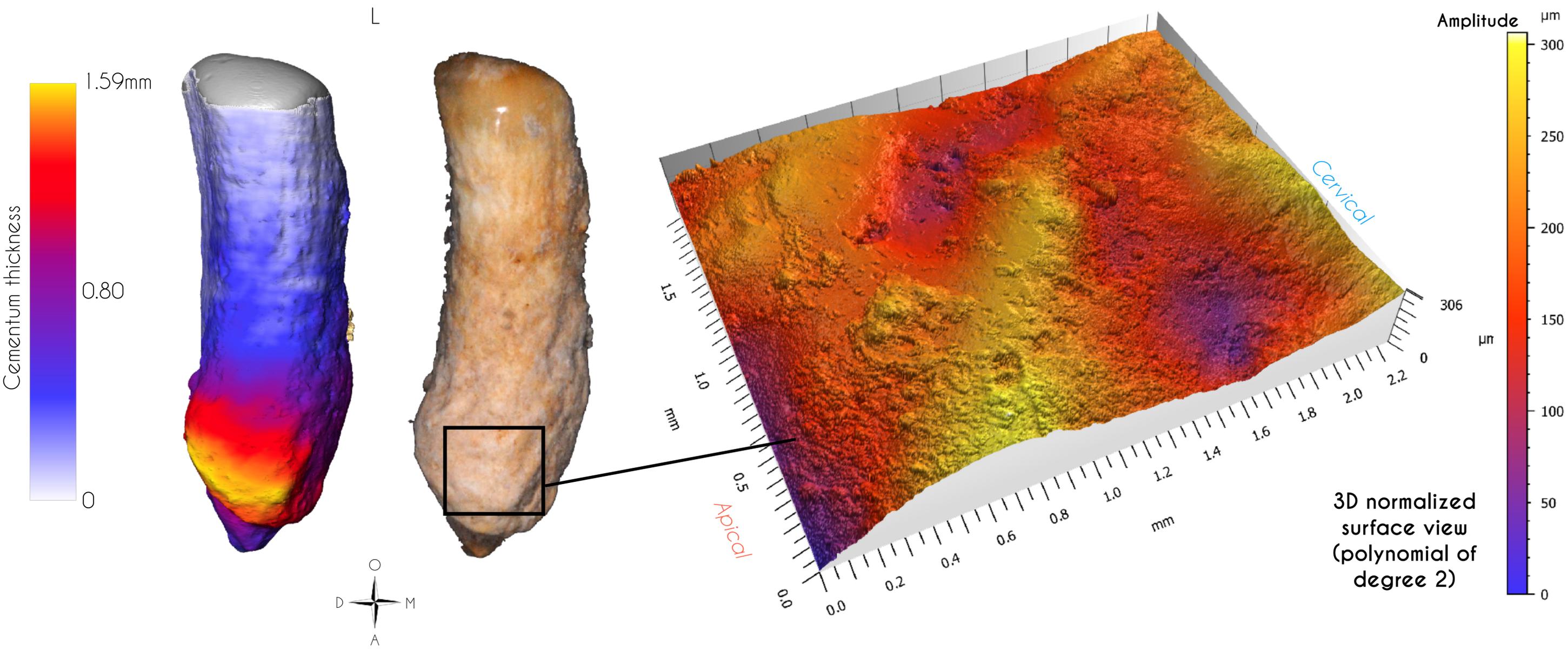
MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
OG: atypical overgrowth;
 (m: mesial; d: distal; <: buccal; >: lingual)

Mixed

LLP4

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
L	1201	6.02%	2.45mm	1.85mm	3/3	2	Blue	1.47	1.61	10 %

Sp884_35



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	ST	Note
>	310	-R2	-

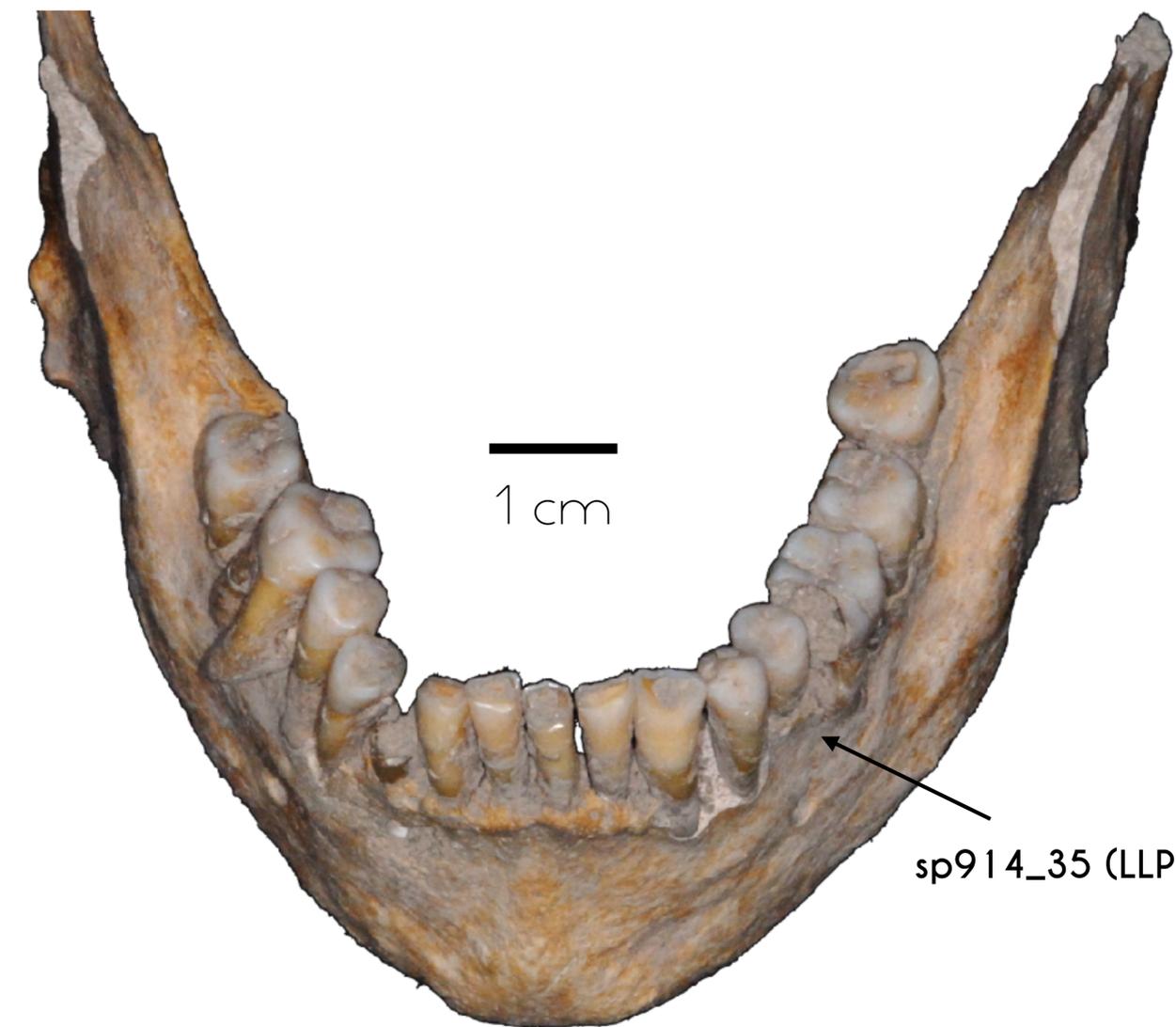
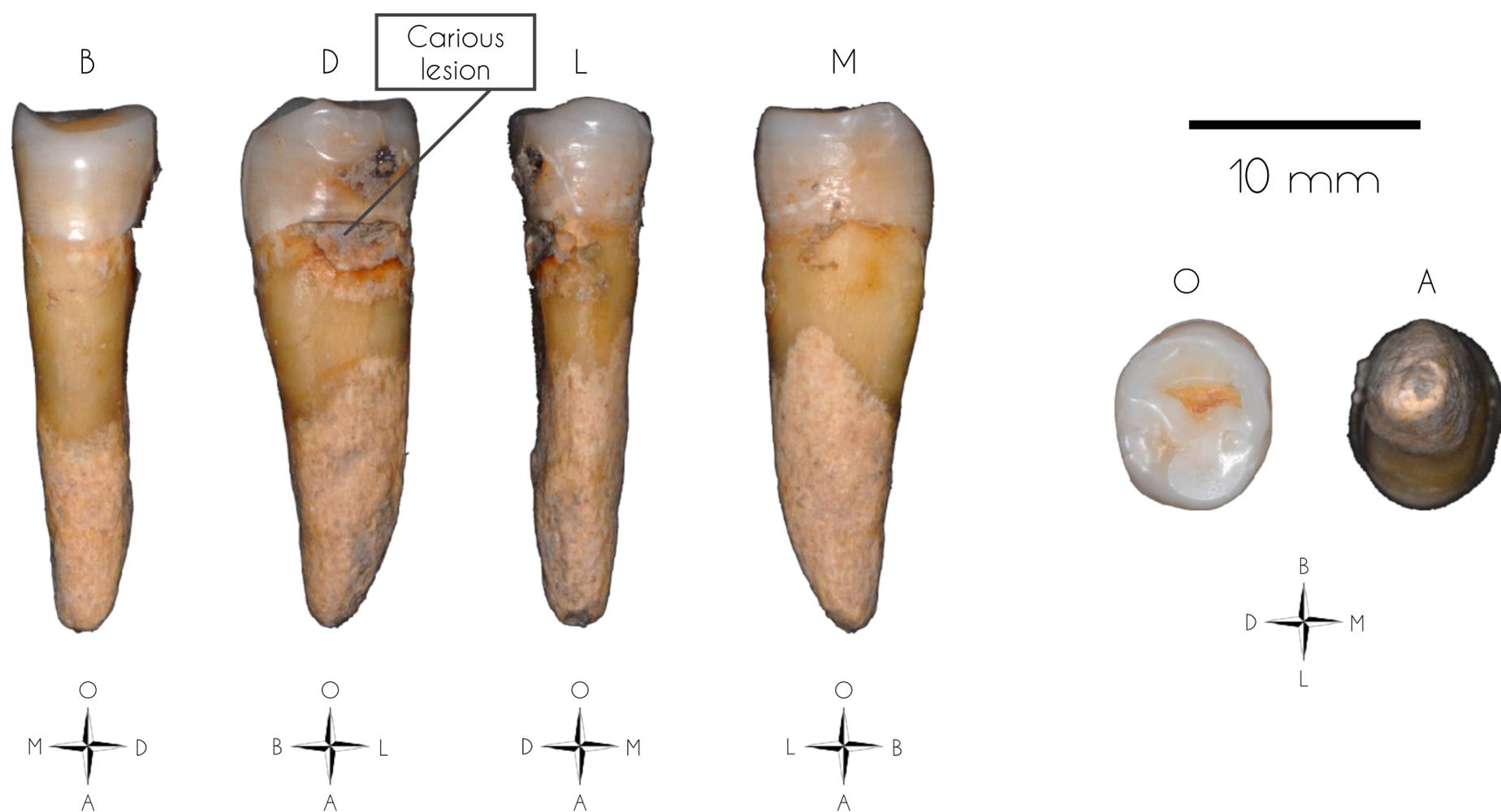
LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Mixed

Sp914_35

Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
LLP4	3	3	3	2/3	0	0	1.2.m	0	0	0	NA

LLP4

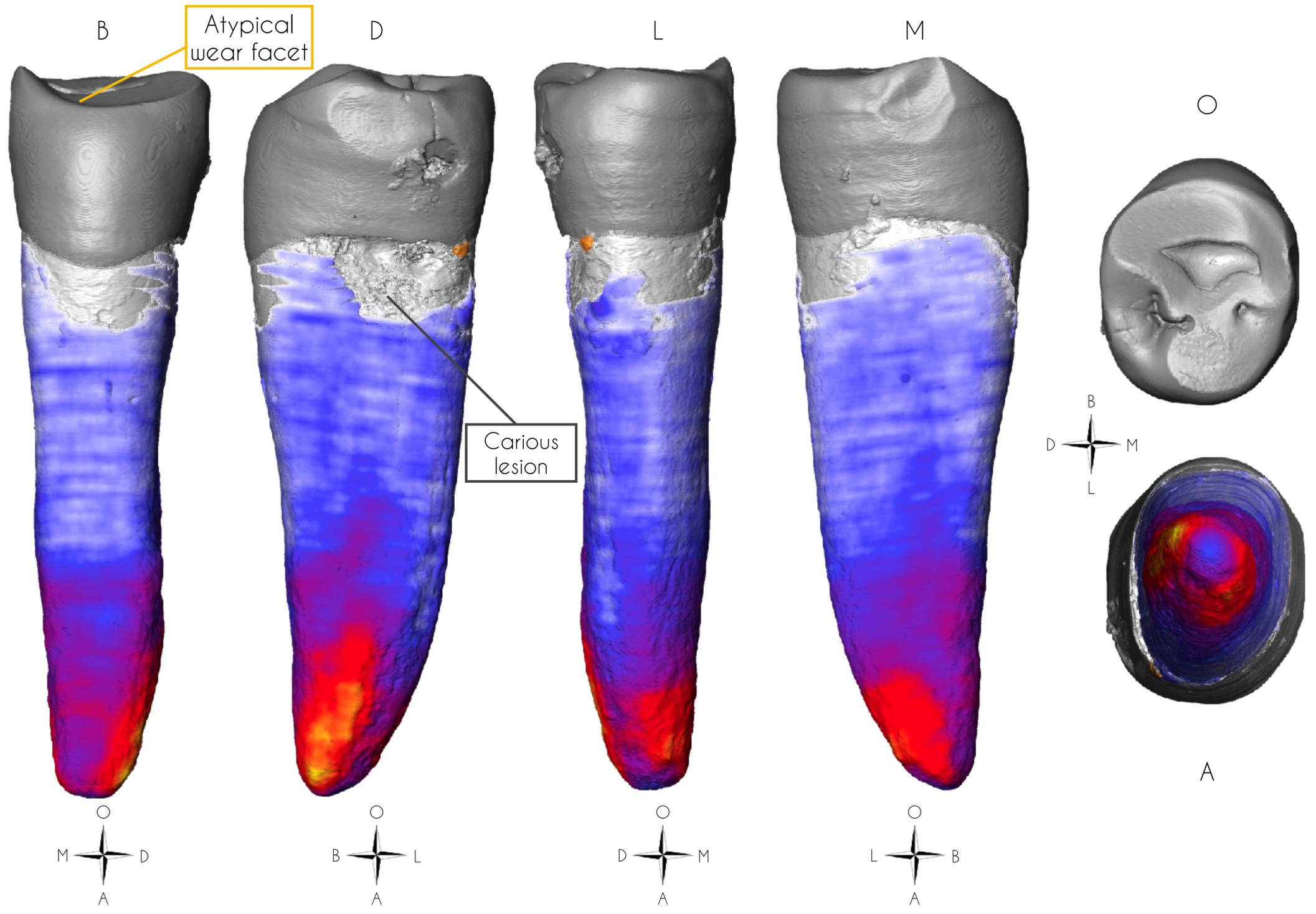
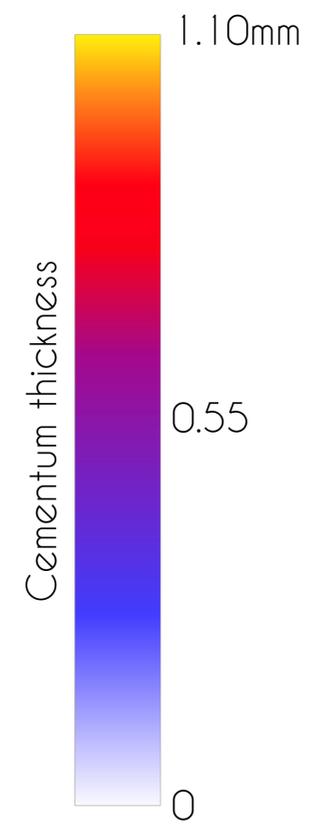
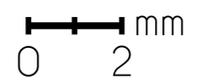


DEG: degree; **DIR:** direction; **FOR:** form - **CAR:** carious lesion - **Pulp EXP:** pulp exposure - **IMP:** impaction - **FEN:** fenestration; **CAL:** calculus; **NT:** tooth loss in neighbouring teeth; **ANTA:** antagonist

Sp914_35



LLP4



Microtomography - Thickness 3D maps

MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1100	1d	No	No	CAR (d)

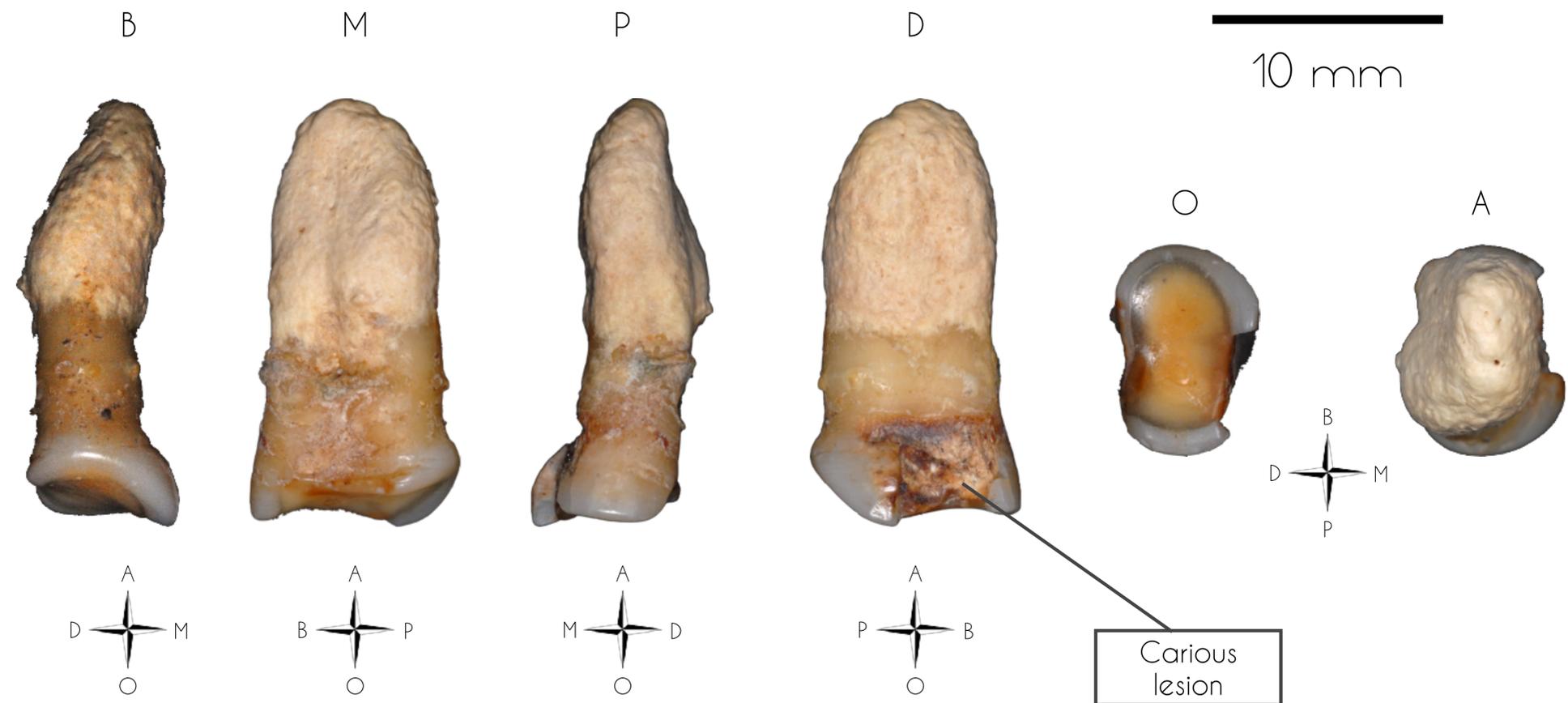
MAX THI: maximum thickness of cementum;
 LOC MAX: location of maximum thickness;
 LOC MIN: location of minimum thickness;
 PREF LOC: preferential location;
 CAR: carious lesion;
 (m: mesial; d: distal)

Mixed

Sp1300_14

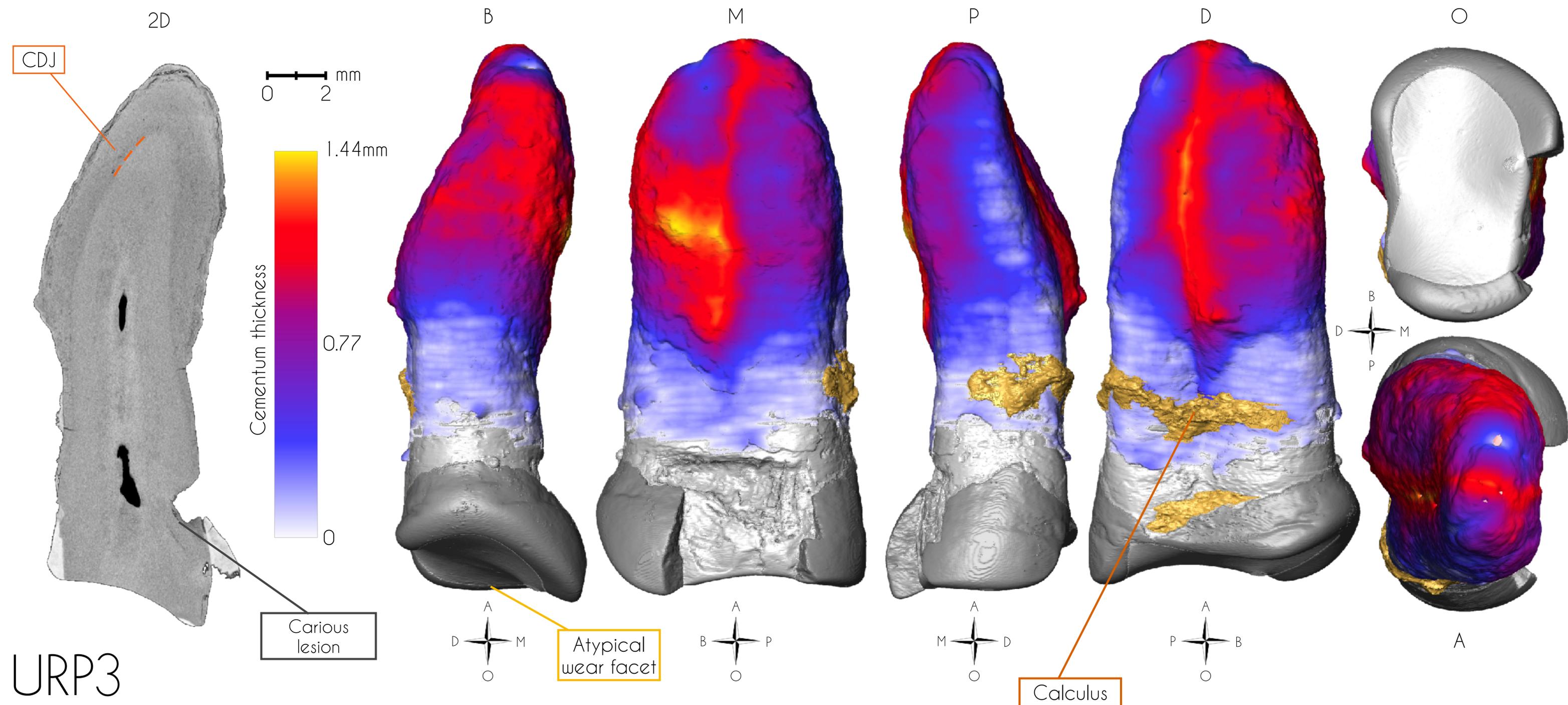
Tooth	Occlusal Wear			CAR Si/Sta	Pulp EXP	IMP	Hypercementosis	Bone Context			
	DEG	DIR	FOR					FEN	CAL	NT	ANTA
URP3	7	4	4	2/2	0	0	1.2.M	0	0	NA	2

URP3



DEG: degree; DIR: direction; FOR: form - CAR: carious lesion - Pulp EXP: pulp exposure - IMP: impaction - FEN: fenestration; CAL: calculus; NT: tooth loss in neighbouring teeth; ANTA: antagonist

Sp1300_14



Microtomography - Thickness 3D maps				
MAX THI (µm)	LOC MAX	LOC MIN	PREF LOC	Note
1440	1 m	>	No	CAR (m)

MAX THI: maximum thickness of cementum;
LOC MAX: location of maximum thickness;
LOC MIN: location of minimum thickness;
PREF LOC: preferential location;
CAR: carious lesion;
 (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual)

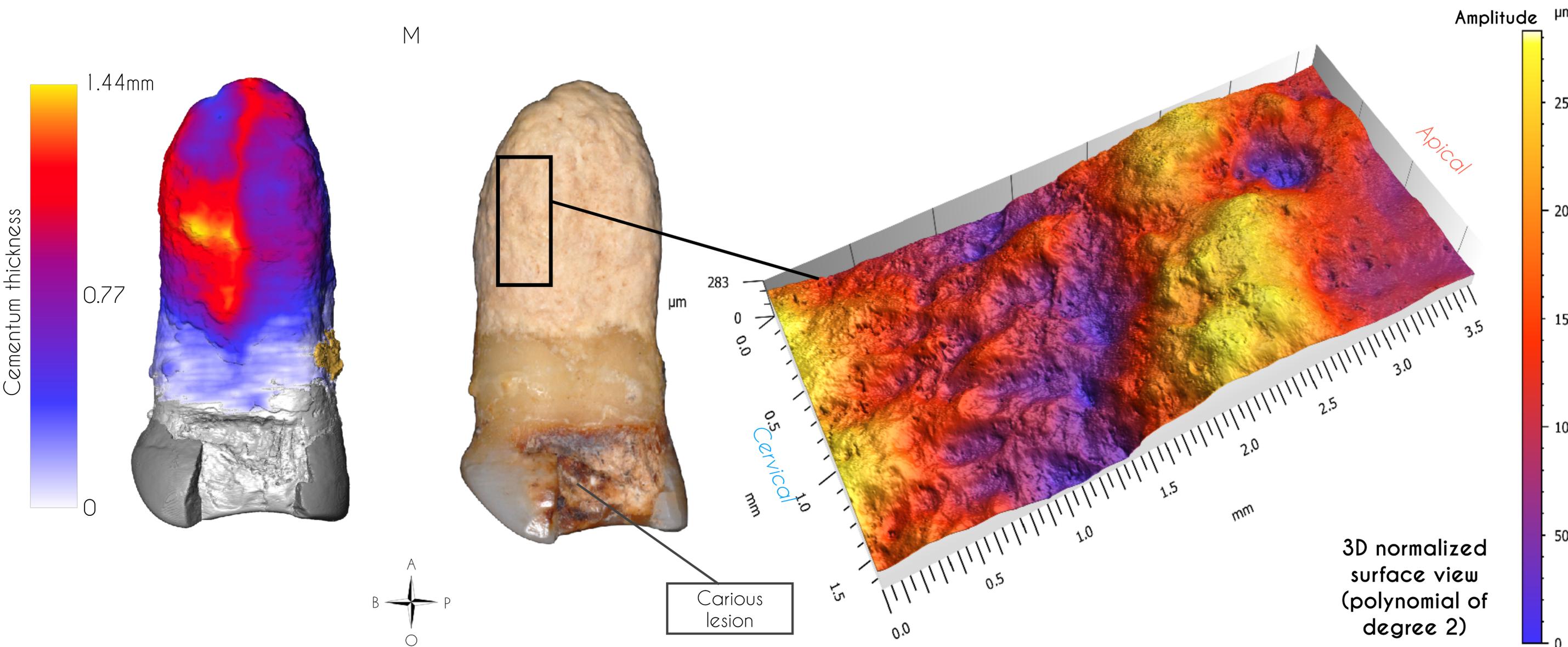
URP3

Mixed

URP3

Face	Range	Light	Width	Height	Columns/Rows	Factor	Led Color	Gain	Gamma	Overlapping
M	1158	6.42%	1.67mm	4.23mm	2/7	2	Blue	1.47	1.61	10%

Sp1300_14



Confocal microscopy - Topography 3D maps			
LOC MAX	MAX VE (μm)	SA	Note
2m	280	+R1	-

LOC MAX: location of maximum thickness (1: apical root third; 2: middle root third; 3: cervical root third; m: mesial; d: distal; <: buccal; >: lingual);
MAX VE: maximum vertical elevation;
ST: surface texture; : scored (+) if it is high, (-) if it is low; **S:** smooth or **R:** rough; the frequency of occurrence of the elevations scored (1) if the frequency is high, (2) if the frequency is low.

Mixed