

THE TIOPS4 DOCUMENTATION FILES				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>
				Mandatory Landmark -> <b>RRRR</b>
				Landmark that may be skipped -> <b>RRRR</b>
				Special automatic generated Landmark for surgical stages -> <b>RRRR</b>
Complete Landmark Reference	European notation	USA equivalent	Definitions	
<b>Lateral Landmarks</b>			Jens Bjoern-Joergensen, DDS, Ib Leth Nielsen, DDS, 2011/11	
<b>FilmReference</b>				
FilmReference1	re1		Vertical X-ray reference point 1 - Created automatically on digital images	<b>RRRR</b>
FilmReference2	re2		Vertical X-ray reference point 2 - Created automatically on digital images	<b>RRRR</b>
<b>AnteriorCranialBase</b>				
Nasion	n	N, Na	Anteriormost point of the frontonasal suture	<b>RRRR</b>
CranBasRef1	cbr1		Point is identical to <b>n</b> on the stage 1 headfilm - Created automatically on subsequent Stages	<b>RRRR</b>
SellaAnterior	sa		Intersection of the anterior contour of sella turcica and the <b>NSL</b> - Transferred to subsequent Stages	<b>RRRR</b>
CranBasRef2	cbr2		Point is identical to <b>sa</b> on all films - Created automatically on subsequent Stages	<b>RRRR</b>
Sella	s		Center of Sella Turcica. The upper limit is defined by a line from the tuberculum to dorsum sella	<b>RRRR</b>
<b>MedialCranialBase</b>				
Basion	ba		Most postero-inferior point on the anterior margin of foramen magnum	<b>RRRR</b>
<b>Snake1-6</b>				
Snake1a-e/...../6a-e	sn#l		6 x 5 free utility points to mark bony structures	<b>RRRR</b>
<b>FrankfortLine</b>				
Orbitale	or		Deepest point of the infraorbital margin	<b>RRRR</b>
Porion	po		Most superior point of the ear rods of the cephalostat	<b>RRRR</b>
<b>LeftFrankfortLine</b>				
OrbitaleLeft ...	orl ...		Left side landmarks	<b>RRRR</b>
<b>CervicalColumn</b>				
SecondCervicalVertebraApex	scap		Apex of the odontoid proces of the second cervical vertebra	<b>RRRR</b>
SecondCervicalVertebraTangent	sctg		Tangent point of the <b>CVT</b> of the odontoid process of the second cervical vertebra	<b>RRRR</b>
SecondCervicalVertebraInf	scip		Most inferio-posterior point of the corpus of the second cervical vertebra	<b>RRRR</b>
FourthCervicalVertebraInf	fcip		Most inferio-posterior point of the corpus of the fourth cervical vertebra	<b>RRRR</b>
<b>NasalBone</b>				
NasalApex	na		The tip of the nasal bone	<b>RRRR</b>
<b>Calvarium</b>				
Vertex	v		The uppermost point of the calvarium	<b>RRRR</b>
<b>CoronoidProcess</b>				
CoroniodaealOcclLevel	coo		The intersection of the anterior contour of the mandibular ramus and the functional occlusal plane - <b>Olf</b>	<b>RRRR</b>
CoroniodaealCurvature	coc		Deepest point on the anterior contour of the mandibular ramus	<b>RRRR</b>
CoroniodaeusAnt	coa		Tangent point of the anterior contour of the coronoid process through the <b>coo</b>	<b>RRRR</b>
CoroniodaeusSup	cos		Superiormost point of the coronoid process	<b>RRRR</b>
CoroniodaeusPost	cop		Tangent point of the posterior contour of the coronoid process through the <b>cot</b>	<b>RRRR</b>
CoroniodaealTranssection	cot		Intersection of the coronoid process and the posterior contour of the pterygomaxillary fissure	<b>RRRR</b>
IncisuraCoroniodaea	coi		Deepest point of the mandibular sigmoid notch	<b>RRRR</b>
<b>MandibularCondyle</b>				
ArticulareAnt	ara		Intersection of the external contour of the cranial base and the anterior contour of the condyle	<b>RRRR</b>
CondyleonSup	cds		Superiormost point of the condylar head	<b>RRRR</b>
Condyleon	cd	Co	Superio-posteriormost point of the condylar head	<b>RRRR</b>
CondyleonPost	cdp		Posteriormost point of the condylar head	<b>RRRR</b>

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<b>PosteriorMandible</b>								
Articulare	ar		The intersection of the external contour of the cranial base and the posterior contour of the condyle					
RamusLineSup	rls		Deepest point of the posterior contour of the mandibular ramus					
RamusLineInf	rli		Tangent point to the posterior contour of the mandibular ramus through the <b>ar</b>					
Gonion	go		Intersection of the gonial contour and a line dividing the angle between the <b>ML</b> and <b>RL</b>					
MandibularLinePost	mlp		Tangent point to the inferior contour of the mandible through <b>gn</b>					
Antegonion	ag		Superiormost point of the antegonial notch in relation to <b>ML</b>					
MandibularLineAnt	mlla		Tangent point of the inferior contour of the mandible through <b>mlp</b>					
<b>LeftCoronoidProcess</b>								
CoroniodaealOcclLevel ....	cool ...		Left side landmarks					
<b>LeftMandibularCondyle</b>								
ArticulareAntLeft ....	aral ...		Left side landmark					
CondyleonLeft	cdl		Left side landmark					
<b>LeftPosteriorMandible</b>								
ArticulareLeft	arl ...		Left side landmarks					
<b>AnteriorMandible</b>								
Supramentale	sm	<b>B point</b>	Posteriormost point of the anterior contour of the mandibular symphysis / lower alveolar process					
Suprapogonion	spg		Tangent point to the anterior contour of the mandibular symphysis through <b>sm</b>					
Pogonion	pg	<b>Pg, Pog</b>	Tangent point the anterior contour of the mandibular symphysis through <b>n</b>					
Prognathion	pgn	<b>Gn</b>	Point on the mandibular symphysis at the greatest distance from <b>cd</b>					
Gnathion	gn	<b>Me</b>	Inferiormost point of the mandibular symphysis					
Symphyseon	sym		Posteriormost point of the mandibular symphysis					
<b>MandibularReferenceLine</b>								
MandibularRef1	ma1		Mandibular reference point 1 - Anterior					
MandibularRef2	ma2		Mandibular reference point 2 - Posterior - Suggestion: <b>ma1 / ma2</b> should be placed on a line through <b>spg</b>					
<b>LeftMandibular RefLine</b>								
MandibularRef1Left ....	ma1l ...		Left side landmarks					
<b>Maxilla</b>								
Pterygomaxillare	pt	<b>PNS</b>	Intersection point of the nasal floor and posterior contour of the maxilla					
Palation	pal		Point where the <b>asi</b> meets the palatal contour when <b>ILs</b> is rotated with center in <b>isi</b>					
Subspinale	ss	<b>A point</b>	Posteriormost point of the anterior contour of the maxilla / the upper alveolar process					
SpinalPoint	sp	<b>ANS</b>	Apex of anterior nasal spine					
<b>Maxillary ReferenceLine</b>								
MaxillarRef1	mx1		Maxilla Reference point 1 - Anterior					
MaxillarRef2	mx2		Maxilla Reference point 2 - Posterior - Suggestion: <b>mx1 / mx2</b> should be placed on the line <b>sp - sa</b>					
<b>AnteriorMaxillaryReference</b>								
AntMaxillarRef1	nl1		Surgical reference point defined as the posteriormost point of the anterior segment of the maxilla along <b>NL</b>					
AntMaxillarRef2	nl2		Surgical reference point defined as the anteriormost point of the posterior part of the maxilla along <b>NL</b>					
<b>LeftMaxilla</b>								
PterygomaxillareLeft	ptl		Left side landmark					
<b>LeftMaxillaryRefLine</b>								
MaxillarRef1Left ....	mx1l ...		Left side landmarks					

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				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>				
<b>LowerIncisor</b>								
IncisalInfIncisor	iii	LIE	Midpoint of the incisal edge of the most prominent lower incisor - Corresponds to the LowerArch <b>ref1</b>					
ApexInfIncisor	a ii		Apex of the lower incisor defined by the apex point of the tooth template					
<b>LeftLowerIncisor</b>								
IncisalInfIncisorLeft	iiil		Midpoint of the incisal edge of the lower left incisor					
ApexInfIncisorLeft	aiil		Apex of the left lower incisor defined by the apex point of the tooth template					
<b>LowerCanine</b>								
CuspInfCanine	cic		Cusp tip of the lower canine					
ApexInfCanine	aic		Apex of the lower canine					
<b>LowerMolar</b>								
MesialInfMolar	mim		Mesial contact point of the (right/average) lower molar					
RootInfMolar	rim		Root point of the lower molar defined by the root point of the tooth template					
<b>LeftLowerMolar</b>								
MesialInfMolarLeft	miml		Left side landmark					
RootInfMolarLeft	riml		Left side landmark					
<b>LowerDentitionReferences</b>								
LowerDentitionRefPoint	idr		Point defining the position of the right side dorsal mandibular dentition on the X-Ray and the dental model					
LowerDentitionRefPointLeft	idrl		Point defining the position of the left side dorsal mandibular dentition on the X-Ray and the dental model					
<b>UpperIncisor</b>								
IncisalSupIncisor	isi	UIE	Midpoint of the incisal edge of the most prominent upper incisor - Corresponds to the UpperArch <b>ref1</b> point					
ApexSupIncisor	asi		Apex of the upper incisor defined by the apex point of the tooth template					
<b>LeftUpperIncisor</b>								
IncisalSupIncisorLeft	isil		Midpoint of the incisal edge of the left upper incisor					
ApexSupIncisorLeft	asil		Apex of the left upper incisor defined by the apex point of the tooth template					
<b>UpperCanine</b>								
CuspSupCanine	csc		Cusp tip of the upper canine					
ApexSupCanine	asc		Apex of the upper canine					
<b>UpperBicuspid</b>								
CuspSupBicuspid	csp		Cusp tip of the upper (second) bicuspid					
ApexSupBicuspid	asp		Apex of the upper (second) bicuspid					
<b>UpperMolar</b>								
MesialSupMolar	msm		Mesial contact point of the (right/average) upper molar					
RootSupMolar	rsm		Root point of the upper molar defined by the root point of the tooth template					
<b>LeftUpperMolar</b>								
MesialSupMolarLeft	msml		Left side landmark					
RootSupMolarLeft	rsml		Left side landmark					
<b>UpperDentitionReferences</b>								
UpperDentitionRefPoint	sdr		Point defining the position of the right side dorsal maxillary dentition on the X-Ray and the dental model					
UpperDentitionRefPointLeft	sdrl		Point defining the position of the left side dorsal maxillary dentition on the X-Ray and the dental model					
<b>AnteriorOcclusalPlane</b>								
BicuspidOcclPoint	pop		Cusp tip of the first lower premolar					
<b>LeftAnteriorOcclusalPlane</b>								
BicuspidOcclPointLeft	popl		Left side landmark					

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<b>PhotoLandmarks</b>				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>					
<b>UpperFace</b>									
FrontalTangent	ft		Frontal tangent point of <b>NFL</b>						
SupraGlabellareSoft	sgs		Deepest point of the soft tissue fossa supraglabellaris						
GlabellaSoft	gs		Anteriormost point of the soft tissue glabella						
NasionSoft	ns		Deepest point in the the soft tissue fronto-nasal curvature						
DorsumNasi	dn		Point located at the greatest convexity or concavity of the dorsum nasi						
UpperNasalTangent	unt		Nasal tangent point of <b>NFL</b>						
Pronasale	prn		Prominentmost point on the apex of the nose						
LowerNasalTangent	lnt		Nasal tangent point of <b>NCL - E line</b>						
NasalSeptumTangent	nst		Anterior tangent point of the tangent to the nasal septum through <b>sn</b>						
Subnasale	sn		Deepest point of the naso-labial curvature						
<b>UpperLip</b>									
SubspinaleSoft	sss		Dorsalmost point of the upper lip contour						
ProLabraleSup	pls		The prolabium border of the upper lip						
LabraleSup	ls		Prominentmost point on the prolabium of the upper lip in relation to <b>FAPS</b>						
LabialSupTangent	lst		Tangent point to the prolabium of a tangent parallel to the line <b>ls - sts</b>						
StomionSup	sts		Most postero-inferior point of the prolabium of the upper lip						
<b>Commissura</b>									
CommissLabrale	col		The labial commissure						
<b>LowerLip</b>									
StomionInf	sti		Most postero-superior point on the prolabium of the lower lip						
LabialInfTangent	lit		Tangent point to the prolabium of a tangent parallel to the line <b>li - sti</b>						
LabraleInf	li		Prominentmost point on the prolabium of the lower lip in relation to <b>FAPS</b>						
ProLabraleInf	pli		The prolabium border of the lower lip						
LowerLabialTangent	llt		Superior tangent point to the lower lip through <b>sms</b>						
Sublabiale	sl		Point dividing the curvature between <b>llt</b> and <b>sms</b>						
<b>LowerFace</b>									
SupramentaleSoft	sms		Deepest point of the mento-labial sulcus						
PogonionSoft	pgs		Tangent point to the anterior contour of the chin through <b>ns</b>						
ChinTangent	ct		Tangent point to the chin of the <b>NCL - E line</b>						
PrognathionSoft	pns		Soft tissue point overlying <b>pgn</b>						
GnathionSoft	gns		Soft tissue point overlying <b>gn</b>						
Submentale	sme		Deepest point in the submental-neck curvature						
<b>Hyoideon</b>									
Hyoideon	hy		Most antero-superior point of the body of the hyoid bone						
<b>Adenoids</b>									
TuberMaxillae	tu		Posteriormost point of the maxillary turberosity						
AdenoidProminence1	ad1		Point at the shortest distance from <b>tu</b> at the pharyngeal adenoid prominence						
AdenoidProminence2	ad2		Point at the shortest distance from <b>pm</b> at the pharyngeal adenoid prominence						
<b>BulbusOculi</b>									
BulbusOculiInf	ori								
BulbusOculiSup	ors								
BulbusOculiPost	orp								
<b>LeftBulbusOculi</b>									
BulbusOculiInfLeft	oril								
BulbusOculiSupLeft	orsl								
BulbusOculiPostLeft	orpl								

Complete Landmark Reference	European notation	USA equivalent	Definitions
<b>Calculated Landmarks</b>			
<b>Teeth</b>			
Infradentale	id		Most antero-superior point on the lower alveolar margin
Prosthion	pr		Most antero-inferior point on the upper alveolar margin
IdealIncisalContact	iic		Ideal contact point of <b>iii</b> on the lingual surface of the upper incisor
CuspLowerMolar	cim		Medial cusp tip of the lower molar
CuspUpperMolar	csm		Mesial cusp tip of the upper molar
<b>Reference Lines</b>			
TrueVerticalLine	VER		Line parallel line the anterior margin of the film - through <b>re1</b> and <b>re2</b>
TrueHorizontalLine	HOR		Horizontal line based on the assumption that the film is registering the natural head balance
NasionSellaLine	NSL		Line through <b>n(cbr1)</b> and <b>sa(cbr2)</b>
CervicalVertebraeTangent	CVT		Line through <b>sctg</b> and <b>fcip</b>
OdontoidProcessTangent	OPT		Line through <b>sctg</b> and <b>scip</b>
RamusLineAr	RLar		Line through <b>ar</b> and <b>rli</b>
MandibularLine	ML		Line through <b>gn</b> and <b>mlp</b>
MandibularTangent	MT		Line through <b>mlla</b> and <b>mlp</b>
MandibularBaseLine	MBLar		Line through <b>pgn</b> and <b>ar</b>
ChinLine	CL		Line through <b>id</b> and <b>pg</b>
ChinTangentLine	CTL		Line through <b>sm</b> and <b>spg</b>
NasalLine	NL		Line through <b>sp</b> and <b>pm</b>
FacialPlane	FAP		Line through <b>n</b> and <b>spg</b>
MaxillaryMandibularLine	MML		Line through <b>ss</b> and <b>pg</b>
MaxillaryMandibularBaseLine	MMBL		Line through <b>ss</b> and <b>sm</b>
FunctionalOcclusalPlane	Olf		Line through <b>pop</b> and <b>cim</b>
UpperOcclusalPlane	Ols		Line through <b>isi</b> and <b>csm</b>
LowerOcclusalPlane	Oli		Line through <b>iii</b> and <b>cim</b>
IncisalLineSuperior	ILs		Line through <b>isi</b> and <b>asi</b>
IncisalLineInferior	ILi		Line through <b>iii</b> and <b>aii</b>
SoftTissueFacialPlane	FAPS		Line through <b>ns</b> and <b>pgs</b>
NoseFrontalLine	NFL		Line through <b>ft</b> and <b>unt</b>
NoseChinLine	NCL		Line through <b>lnt</b> and <b>ct</b>

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<b>Frontal Landmarks</b>				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>					
<b>Symmetry Reference</b>									
Reference1	ref1		Point above the orbitae reflecting the midsagittal axis of the antero-posterior view						
Reference2	ref2		Point below the chin reflecting the midsagittal axis of the antero-posterior view						
<b>Calvarium</b>									
ExternCranContFron1	eccf1		Intersection of radius 1 and the external contour of the calvarium - nine o'clock						
ExternCranContFron10	eccf10		Intersection of radius 10 and the external contour of the calvarium - ten thirty						
ExternCranContFron19	eccf19		Intersection of radius 19 and the external contour of the calvarium - twelve o'clock						
ExternCranContFron28	eccf28		Intersection of radius 28 and the external contour of the calvarium - two thirty						
ExternCranContFron37	eccf37		Intersection of radius 37 and the external contour of the calvarium - three o'clock						
<b>Orbitae</b>									
LatOrbit	lo		Intersection of the inominate line and the orbital margin on the right side						
LatOrbitLeft	lol		Intersection of the inominate line and the orbital margin on the left side						
MedOrbit	mo		Point on the medial contour of the orbital margin of the right side that is closest to the median plane						
MedOrbitLeft	mol		Point on the medial contour of the orbital margin of the left side that is closest to the median plane						
<b>Zygomae</b>									
ZygomalArch	zal		The lateralmost point of the zygomatic arch on the right side						
ZygomalArchLeft	zal		The lateralmost point of the zygomatic arch on the left side						
<b>Cavum Nasi</b>									
CavumNasi	cn		The lateralmost point of the bony nasal cavity on the right side						
CavumNasiLeft	cnl		The lateralmost point of the bony nasal cavity on the left side						
<b>Maxilla</b>									
SpinalPointFron	spf		Midpoint of the Maxilla located at the anterior nasal spine						
EctoMaxil	em		Point located on the lateral contour of the maxilla on the right side that is closest to the median plane						
EctoMaxilLeft	eml		Point located on the lateral contour of the maxilla on the left side that is closest to the median plane						
<b>Mandible</b>									
Mastoidale	ms		Inferiormost point on the mastoid process on the right side						
MastoidaleLeft	msl		Inferiormost point on the mastoid process on the left side						
AntegonionFron	agf		Superiormost point of the antegonial notch on the right side of the mandible						
AntegonionFronLeft	agfl		Superiormost point of the antegonial notch on the left side of the mandible						
GnathionFron	gnf		Midpoint of the mandible located by projecting the mental spine to the lower border of the mandible						
<b>UpperIncisors</b>									
MesSupIncFron	msif		Mesial contact point of the upper right central incisor						
ApexSupIncFron	asif		Apex of the upper right central incisor						
MesSupIncFronLeft	msifl		Mesial contact point of the upper left central incisor						
ApexSupIncFronLeft	asifl		Apex of the upper left central incisor						
<b>UpperMolars</b>									
CuspSupMolFron	csmf		Buccal cusp tip of the upper right first molar.						
RootSupMolFron	rsmf		Point at the level of the root of the upper right first molar reflecting the tooth axis inclination						
CuspSupMolFronLeft	csmfl		Buccal cusp tip of the upper left first molar.						
RootSupMolFronLeft	rsmfl		Point at thelevel of thr root of the upper left first molar reflecting the tooth axis inclination						

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<b>LowerIncisors</b>								
MesInfIncFron	miif		Mesial contact point of the lower right central incisor					
ApexInfIncFron	aiif		Apex of the lower right central incisor					
MesInfIncFronLeft	miifl		Mesial contact point of the lower left central incisor					
ApexInfIncFronLeft	aiifl		Apex of the lower left central incisor					
<b>LowerMolars</b>								
CuspInfMolFron	cimf		Buccal cusp tip of the lower right first molar.					
RootInfMolFron	rimf		Point at the root level of the lower right first molar reflecting the tooth axis inclination					
CuspInfMolFronLeft	cimfl		Buccal cusp tip of the lower left first molar.					
RootInfMolFronLeft	rimfl		Point at the level of the root of the lower left first molar reflecting the tooth axis inclination					
<b>Complete Landmark Reference</b>	European	USA	Definitions					
<b>Calculated Landmarks</b>								
<b>Orbitae</b>								
OrbitalCenter	lom		The center point of the line connecting <b>lo</b> and <b>lol</b>					
<b>UpperIncisors</b>								
IncisalSupIncFron	isif		Midpoint of the incisal edge of the upper right central incisor					
IncisalSupIncFronLeft	isifl		Midpoint of the incisal edge of the upper left central incisor					
<b>LowerIncisors</b>								
IncisalInfIncFron	iiif		Midpoint of the incisal edge of the lower right central incisor					
IncisalInfIncFronLeft	iiifl		Midpoint of the incisal edge of the lower left central incisor					
<b>Complete Landmark Reference</b>	European	USA	Definitions					
<b>Reference Lines</b>								
SymmetryAxisLine	SAL		Line through <b>ref1</b> and <b>ref2</b>					
SymmetryHorizontalLine	SHL		Line through <b>ref1</b> perpendicular on <b>SAL</b>					
OrbitalLine	ORL		Line through <b>lo</b> and <b>lol</b>					
MaxillaryMandibularLineFron	MMLf		Line through <b>spf</b> and <b>gnf</b>					
IncisalLineSupFron	ILsf		Line through <b>isif</b> and <b>asif</b>					
IncisalLineInfFron	ILif		Line through <b>iiif</b> and <b>aiif</b>					

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<b>Lower Arch Landmarks</b>				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>				
<b>Symmetry Axis</b>								
Reference1	ref1		Point on the symmetry axis at the level of the incisal edge of the incisors - Corresponds to <b>iii</b>					
Reference2	ref2		Point on the symmetry axis just behind the last molar					
<b>LeftFirstMolar</b>								
I6distal	I6d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left first molar					
I6buccal	I6b		Buccalmost point at the buccal fissure location of the left first molar					
I6mesial	I6m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left first molar					
I6lingual	I6l		Lingualmost point at the lingual fissure location of the left first molar					
L6Cusp	L6C		Medial cusp tip of the left first molar - Corresponds to L6F on the left upper first molar					
<b>LeftMolarArchPoint</b>								
LMMesArch	LMM		Point defining the perimeter arch just mesial to the left first molar - Corresponds to <b>I6m</b> , when molar in arch					
<b>LeftSecondPremolar</b>								
I5distal	I5d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left second premolar					
I5mesial	I5m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left second premolar					
<b>LeftFirstPremolar</b>								
I4distal	I4d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left first premolar					
I4mesial	I4m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left first premolar					
<b>LeftPremolarContact</b>								
LPCusp	LPC		Cusp tip of the left first premolar - Corresponds to LPF on the left upper first premolar					
<b>LeftCanine</b>								
I3distal	I3d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left canine					
I3buccal	I3b		Buccalmost point of the left canine					
I3mesial	I3m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left canine					
I3lingual	I3l		Lingualmost point the left canine					
L3Cusp	L3C		Cusp tip of the left canine					
<b>LeftCanineArchPoint</b>								
LCMesArch	LCM		Point defining the perimeter arch just mesial to the left canine - Corresponds to <b>I3m</b> , when canine in arch					
<b>LeftSecondIncisor</b>								
I2distal	I2d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left lateral incisor					
I2mesial	I2m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left lateral incisor					
<b>LeftFirstIncisor</b>								
I1distal	I1d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left central incisor					
I1buccal	I1b		Buccalmost point of the left central incisor					
I1mesial	I1m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left central incisor					
I1lingual	I1l		Lingualmost point the left central incisor					
<b>ArchCenterPoint</b>								
ArchMidline	LIM		The midpoint of the perimeter arch placed on the symmetry axis at the level at the incisor contact points					
<b>RightFirstIncisor</b>								
r1mesial	r1m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right central incisor					
r1buccal	r1b		Buccalmost point of the right central incisor					
r1distal	r1d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right central incisor					
r1lingual	r1l		Lingualmost point the right central incisor					

Complete Landmark Reference	European notation	USA equivalent	Definitions						
<b>Lower Arch Landmarks</b>				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>					
<b>RightSecondIncisor</b>									
r2mesial	r2m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right lateral incisor						
r2distal	r2d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right lateral incisor						
<b>RightCanineArchPoint</b>									
RCMesArch	RCM		Point defining the perimeter arch just mesial to the right canine - Corresponds to <b>r3m</b> , when canine in arch						
<b>RightCanine</b>									
r3mesial	r3m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right canine						
r3buccal	r3b		Buccalmost point of the right canine						
r3distal	r3d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right canine						
r3lingual	r3l		Lingualmost point the right canine						
R3Cusp	R3C		Cusp tip of the right canine						
<b>RightPremolarContact</b>									
RPCusp	RPC		Cusp tip of the right first premolar - Corresponds to RPF on the right upper first bicuspid						
<b>RightFirstPremolar</b>									
r4mesial	r4m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right first premolar						
r4distal	r4d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right first premolar						
<b>RightSecondPremolar</b>									
r5mesial	r5m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right second premolar						
r5distal	r5d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right second premolar						
<b>RightMolarArchPoint</b>									
RMMesArch	RMM		Point defining the perimeter arch just mesial to the right first molar-Corresponds to <b>r6m</b> , when molar in arch						
<b>RightFirstMolar</b>									
r6mesial	r6m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right first molar						
r6buccal	r6b		Buccalmost point at the buccal fissure location of the right first molar						
r6distal	r6d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right first molar						
r6lingual	r6l		Lingualmost point at the lingual fissure location of the right first molar						
R6Cusp	R6C		Medial cusp tip of the right first molar - Corresponds to R6F on the right upper first molar						
<b>Complete Landmark Reference</b>									
	European notation	USA equivalent	Definitions						
<b>Reference Lines</b>									
SymmetryAxisLine	SAL		Line through <b>ref1</b> and <b>ref2</b>						

Complete Landmark Reference	European notation	USA equivalent	Definitions					
<b>Upper Arch Landmarks</b>				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>				
<b>Symmetry Axis</b>								
Reference1	ref1		Point on the symmetry axis at the level of the incisal edge of the incisors - Corresponds to <b>isi</b>					
Reference2	ref2		Point on the symmetry axis just behind the last molar					
<b>RightFirstMolar</b>								
r6distal	r6d		Distal point at the maximum diameter parallel to the mesio-distal axis of the right first molar					
r6buccal	r6b		Buccalmost point at the buccal fissure location of the right first molar					
r6mesial	r6m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right first molar					
r6lingual	r6l		Lingualmost point at the lingual fissure location of the right first molar					
R6Fossa	L6F		The central fossa of the right first molar - Corresponds to <b>R6C</b> on the right lower first molar					
<b>RightMolarArchPoint</b>								
RMMesArch	RMM		Point defining the arch perimeter just mesial to the right first molar - Corresponds to <b>r6m</b> of an aligned molar					
<b>RightSecondPremolar</b>								
r5distal	r5d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right second premolar					
r5mesial	r5m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right second premolar					
<b>RightFirstPremolar</b>								
r4distal	r4d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right first premolar					
r4mesial	r4m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right first premolar					
<b>RightPremolarContact</b>								
RPCrista	RPF		The midpoint of the mesial crista of the right first premolar - Corresponds to <b>RPC</b> on the lower first premolar					
<b>RightCanine</b>								
r3distal	r3d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right canine					
r3buccal	r3b		Buccalmost point of the right canine					
r3mesial	r3m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right canine					
r3lingual	r3l		Lingualmost point the right canine					
R3Cusp	R3C		Cusp tip of the right canine					
<b>RightCanineArchPoint</b>								
RLCMesArch	RCM		Point defining the perimeter arch just mesial to the right canine - Corresponds to <b>r3m</b> , when canine is in arch					
<b>RightSecondIncisor</b>								
r2distal	r2d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right second incisor					
r2mesial	r2m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right second incisor					
<b>RightFirstIncisor</b>								
r1distal	r1d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the right first incisor					
r1buccal	r1b		Buccalmost point of the right first incisor					
r1mesial	r1m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the right first incisor					
r1lingual	r1l		Lingualmost point the right first incisor					
<b>ArchCenterPoint</b>								
ArchMidline	LIM		The midpoint of the perimeter arch placed on the symmetry axis at the level at the incisor contact points					
<b>LeftFirstIncisor</b>								
l1mesial	l1m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left first incisor					
l1buccal	l1b		Buccalmost point of the left first incisor					
l1distal	l1d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left first incisor					
l1lingual	l1l		Lingualmost point the left first incisor					

Complete Landmark Reference	European notation	USA equivalent	Definitions						
<b>Upper Arch Landmarks</b>				Regimens: Standard (S), Blueprint (B), RightLeftFront (R), SurgArticPlanning (U), Snake(N) -> <b>SBRUN</b>					
<b>LeftSecondIncisor</b>									
I2mesial	I2m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left lateral incisor	■	■	■	■		
I2distal	I2d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left lateral incisor	■	■	■	■		
<b>LeftCanineArchPoint</b>									
LCMesArch	LCM		Point defining the perimeter arch just mesial to the left canine - Corresponds to <b>I3m</b> , when canine is in arch	■	■	■	■		
<b>LeftCanine</b>									
I3mesial	I3m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left canine	■	■	■	■		
I3buccal	I3b		Buccalmost point of the left canine	■	■	■	■		
I3distal	I3d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left canine	■	■	■	■		
I3lingual	I3l		Lingualmost point the left canine	■	■	■	■		
I3Cusp	I3C		Cusp tip of the left canine	■	■	■	■		
<b>LeftPremolarContact</b>									
LPCrista	LPF		The midpoint of the mesial crista of the left first premolar - Corresponds to <b>RPC</b> on the lower first premolar	■	■	■	■		
<b>LeftFirstPremolar</b>									
I4mesial	I4m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left first premolar	■	■	■	■		
I4distal	I4d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left first premolar	■	■	■	■		
<b>LeftSecondPremolar</b>									
I5mesial	I5m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left second premolar	■	■	■	■		
I5distal	I5d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left second premolar	■	■	■	■		
<b>LeftMolarArchPoint</b>									
LMMesArch	LMM		Point defining the perimeter arch just mesial to the left first molar - Corresponds to <b>I6m</b> , when molar is in arch	■	■	■	■		
<b>LeftFirstMolar</b>									
I6mesial	I6m		Mesial point at the maximum diameter that is parallel to the mesio-distal axis of the left first molar	■	■	■	■		
I6buccal	I6b		Buccalmost point at the buccal fissure location of the left first molar	■	■	■	■		
I6distal	I6d		Distal point at the maximum diameter that is parallel to the mesio-distal axis of the left first molar	■	■	■	■		
I6lingual	I6l		Lingualmost point at the lingual fissure location of the left first molar	■	■	■	■		
I6Fossa	I6F		The central fossa of the left first molar - Corresponds to <b>L6C</b> on the left lower first molar	■	■	■	■		
<b>Complete Landmark Reference</b>									
<b>Reference Lines</b>									
SymmetryAxisLine	SAL		Line through <b>ref1</b> and <b>ref2</b>						