

The nabc language provides the ability to describe some adiaستمatic neumes, for now just the St. Gallen and Laon (Metz notation family) style. The language is partially based on Dom Eugène Cardine’s Table of neumatic signs, but for more complex neumes doesn’t always match how the neumes are called; instead attempts to make it easier to compose complex neumes from basic glyphs. To describe adiaستمatic neumes in gabc, the header should contain nabc-lines: 1; line, like:

```
nabc-lines: 1;
(f3) AL(ef~|ta>)le(fg/hggf|peclhgpilú(ef~|ta>)ia.(f.|ta-) (,)
(ii//|bv-|gh!ivHG//|vi-hhppu2su1sut1|fhg/|to|eef.|pt) (;)
```

The nabc snippets are then separated by | character from gabc snippets or other nabc snippets. Every gabc snippet may be followed by multiple nabc snippets. The maximum number of consecutive nabc snippets is the number declared in the header field nabc-lines: x;. After reaching that number of consecutive nabc snippets another gabc snippet followed by nabc snippets can follow. A single nabc snippet is not split into multiple lines, so for larger melismatic pieces it is desirable to synchronize the gabc snippets with corresponding nabc snippets. With nabc-lines: 1; the gabc and nabc snippets form an alternating pattern, like (gabc|nabc|gabc|nabc|gabc), in this case the last gabc snippet does not have any corresponding nabc neumes. With nabc-lines: 2; the snippets ordering could be e.g. (gabc|nabc1|nabc2|gabc|nabc1).

Each nabc snippet consists of a sequence of *complex neume descriptors*. Each *complex neume descriptor* consists of optional *horizontal spacing adjustment descriptor*, then *complex glyph descriptor*, optionally followed by a sequence of *subpunctis and prepunctis descriptors*, optionally followed by a sequence of *significant letter descriptors*.

The *horizontal spacing adjustment descriptor* consists of a sequence of horizontal spacing adjustment characters / and `.

- // move by nabclargerspace skip to the right
- / move by nabcinterelementsplace skip to the right
- `` move by nabclargerspace skip to the left
- ` move by nabcinterelementsplace skip to the left

The *complex glyph descriptor* consists of a *glyph descriptor*, optionally followed by a sequence of other *glyph descriptors*, all separated by the ! character. This is used to describe more complex glyphs, where certain basic glyphs are connected together.

Each *glyph descriptor* consists of a *basic glyph descriptor*, followed by optional *glyph modifiers*, followed by optional *pitch descriptor*.

The following description is for the St. Gall family of neumes, when using the gregall or gresgmodern fonts. For details on Laon (Metz notation family) neumes see 4.

The *basic glyph descriptor* is a two-letter string from the following table:

vi ✓ virga	po ✓ porrectus	tr ✓ torculus resupinus	tv // trivirga	pq ✓ pes quassus
pu . punctum	to ✓ torculus	st , stropha	pr ✓ pressus maior	q1 ✓ quilisma (3 loops)
ta . tractulus	ci ✓ climacus	ds .. distropha	pi ~ pressus minor	qi ✓ quilisma (2 loops)
gr \ gravis	sc ✓ scandicus	ts ... tristropha	vs ✓ virga strata	pt ✓ pes stratus
c1 ✓ clivis	pf ✓ porrectus flexus	tg : trigonus	or ✓ oriscus	ni nihil
pe ✓ pes	sf ✓ scandicus flexus	bv ✓ bivirga	sa ✓ scandicus	

The glyph modifiers is a possibly empty sequence of following characters optionally followed by a number:






- S modification of the mark
- G modification of the grouping (neumatic break)
- M melodic modification
- - addition of episema
- > augmentive liquescence
- ~ diminutive liquescence





If Dom Cardine’s table contains multiple glyphs with the same modifiers, a positive number is added afterwards. E.g. for augmentive liquescent clivis the table shows two different glyphs, the ancus c1> ✓ and then another neume - c1>1 ✓, the first neume does not contain any number after it, while the 1 indicates first variant.

The *pitch descriptor* allows to specify the vertical position of the neume. There are no staves, so the vertical position is only rough. For pitches the same letters as in gabc are used, a through n and p. If the *pitch descriptor* is missing, the default is hf, otherwise it consists of the letter h followed by the pitch letter. Within the *complex glyph descriptor*, each *basic glyph descriptor* has its own pitch, but in the current fonts there are no glyphs with different relative pitches, so if you use a *pitch descriptor* on any of the *basic glyph descriptors* in the *complex glyph descriptor*, it is best to use the same one on all the other *basic glyph descriptors* in the same *complex glyph descriptor*.









The *subpunctis and prepunctis descriptor* consists of the letters su for subpunctis or pp for prepunctis, followed optionally by a modifier letter from the following table and finally a mandatory positive number of repetitions. If the modifier letter is missing, it is a punctum.

- t . tractulus

















































- u  tractulus with episema
- v  tractulus with double episema
- w  , gravis
- x  , liquescens stropha
- y  , gravis with episema

Only subpunctis are normally used in neume classification, the prepunctis is a nabc concept to describe the rising sequence of punctis, tractulis etc. in the left low corner of some neume. While e.g. `vipp2`  describes the same neume as `sc` , the former form allows better control on how many punctis or tractulis or tractulis with episema etc. there are. Some examples: `ppt3`  stands for 3 raising tractulis with episema, while `su1sut1sux1`  stands for a punctum, followed by tractulus, followed by liquescens stropha.

The *significant letter descriptor* consists of the letters `ls`, followed by a shorthand of the significant letter or common group of them, followed by a number - a rough position relative to the *complex glyph descriptor* glyph with prepunctis and subpunctis attached to it. If more than one *significant letter descriptor* is used on the same *complex neume descriptors* for the same position, then they are ordered in the order they are written in the nabc snippet at that position. The position numbers are:

- | | | |
|--|---|--|
| 1  left upper corner | 2  above the neume | 3  right upper corner |
| 4  to the left of the neume | | 6  to the right of the neume |
| 7  left bottom corner | 8  below the neume | 9  right bottom corner |

The shorthands, including the `ls` prefix, which should be followed by the above mentioned position digit:


<code>lsa1</code>  altius	<code>lsiv</code>  iusum valde	<code>lss</code>  sursum
<code>lsam</code>  altius mediocriter	<code>lsk</code>  klenche	<code>lssb</code>  sursum bene
<code>lsb</code>  bene	<code>lsl</code>  levare	<code>lssc</code>  sursum celeriter
<code>lsc</code>  celeriter	<code>lslb</code>  levare bene	<code>lssimil</code>  similiter
<code>lscm</code>  celeriter mediocriter	<code>lslc</code>  levare celeriter	<code>lssimul</code>  simul
<code>lscw</code>  coniunguntur	<code>lslm</code>  levare leniter	<code>lssm</code>  sursum mediocriter
<code>lscw</code>  celeriter (wide form)	<code>lslm</code>  levare mediocriter	<code>lssm</code>  sursum mediocriter
<code>lsd</code>  deprimatur	<code>lslp</code>  levare parvum	<code>lssm</code>  sursum tenere
<code>lse</code>  equaliter	<code>lslt</code>  levare tenere	<code>lsta</code>  statim
<code>lse</code>  equaliter	<code>lsm</code>  mediocriter	<code>lst</code>  tenere
<code>lsew</code>  equaliter (wide form)	<code>lsmoll</code>  molliter	<code>lstb</code>  tenere bene
<code>lsfid</code>  fideliter	<code>lsp</code>  parvum	<code>lstm</code>  tenere mediocriter
<code>lsfr</code>  frendor	<code>lspar</code>  paratim	<code>lstm</code>  tenere (wide form)
<code>lsg</code>  gutture	<code>lspfec</code>  perfecte	<code>lsv</code>  valde
<code>lsi</code>  iusum	<code>lspm</code>  parvum mediocriter	<code>lsvol</code>  volubiliter
<code>lsim</code>  iusum mediocriter	<code>lspulcre</code>  pulcre	<code>lsx</code>  expectare

Nihil - `ni` is an artificial empty base glyph around which it is possible to place significant letters and/or subpunctis and/or prepunctis. Finally a commented example of a nabc snippet:


```
``po///pe>2lse7ls13qlhh!vshhppt1sut2q1>ppu3
```




`````` stands for a negative horizontal skip (move to the left) by `nabcinterelements` and `nabclargerspace`.

`po`  is a basic *porrectus*, at the default pitch (height `hf`).






























`///` stands for a horizontal skip (move to the right) by two times `nabclargerspace`.

`pe>2lse7ls13`  stands for the 3rd augmentive liquescent form of *podatus* (*epiphonus* with *tractulus*, see the following page) at the default pitch, with *equaliter* in the low left corner and *levare* in the upper right corner.





`qlhh!vshhppt1sut2`  stands for a 3 loop *quilisma* joined with *virga strata*, both at relative pitch 2 above the default one, with a single *tractulus* before it and two *subpunctis* - *tractulis*.

`q1>ppu3`  is a 3 loop liquescent *quilisma* with 3 *tractulis* with *episema* before it.

The *basic glyph descriptor* for Laon neumes is very similar to the one used for St. Gall neumes, but with uncinus and oriscus-clivis added and strophia, 2 loops quilisma and gravis removed:























un  uncinus	po  porrectus	ds  distropha	or  oriscus
vi  virga	to  torculus	ts  tristropha	sa  scandicus
pu  punctum	ci  climacus	tg  trigonus	pq  pes quassus
ta  tractulus	sc  scandicus	bv  bivirga	ql  quilisma
gr  gravis	pf  porrectus flexus	tv  trivirga	pt  pes stratus
cl  clivis	sf  scandicus flexus	pr  pressus maior	ni  nihil
oc  oriscus-clivis	tr  torculus resupinus	pi  pressus minor	
pe  pes		vs  virga strata	

The *subpunctis and prepunctis descriptor* consists of the letters su for subpunctis or pp for prepunctis, followed optionally by a modifier letter from the following table and finally a mandatory positive number of repetitions. If the modifier letter is missing, it is a punctum.
















- n  uncinus
- q  quilisma
- z  virga
- x  cephalicus

The *significant letter descriptor* for Laon neumes allows another position, 5, which stands for inside the neume. The exact position of the letter depends on the glyph, if there is no glyph with the neume inside of it, it can't be positioned inside the neume.

The shorthands, including the ls prefix, which should be followed by the above mentioned position digit for Laon neumes are:

lsa  augete	lsn1  non levare
lsc  celeriter	lsnt  non tenere
lseq  equaliter	lsm  mediocriter
lseq-  equaliter	lsmd  mediocriter
lsequ  equaliter	lss  sursum
lsf  fastigium	lssimp  simpliciter
lsh  humiliter	lssimpl  simpliciter
lshn  humiliter nectum	lssp  sursum parum
lshp  humiliter parum	lsst  sursum tenere
lsl  levare	lst  tenere
lsn  non (tenere), negare, nectum, naturaliter	lsth  tenere humiliter

For the Tironian notes the form of the *significant letter descriptor* starts with the lt prefix followed by letters from the following list, followed by above mentioned position digit (5 can't be used):

lti  iusum	ltsj  subjice
ltdo  deorsum	ltsl  saltim
ltdr  devertit	ltsn  sonare
ltdx  devexum	ltsp  supra
ltps  prode sub eam (trade subtus)	ltsr  sursum
ltqm  quam mox	ltst  saltate (salte)
ltsb  sub	ltus  ut supra
ltse  seorsum	

Names of Symbols	Simple Symbols	Symbols differentiated by				Symbols indicating a special meaning		
		the addition		the modification		melodic	phonetic	
		of letters	of episemas	of the mark	of the grouping (neumatic break)		augment.	diminut.
virga	vi	vilsc3 vilst1 vippt1lsc2	vi-				vi>	
tractulus	ta	talsc3 talst2					ta>	
punctum	pu						st visuisux1	
gravis	gr							
clivis	cl	cl1sc3 cl1st2 cl1-1st2	cl- clS-	clS clS1		clM	cl> cl>1	cl-
pes	pe		pe- pe-1	peS	peG	peG	pe> pe>1 pe>2	pe-
porrectus	po	polsc2	po- po-1		poG		po>	po-
torculus	to	to1sc3 to1sc41st3 to1st2	to- to-1	toS toS1 toS2 toS3	toG	toM toM1	to>	to>
climacus	ci ci1	cilsc3 cilst2	ci-	ciS ciS1 visut1su2	ciG ciG1	ciM	ci>	ci-
scandicus	sc		sc-	scS	scG scG1	scM1	sc>	sc-
	sc1		vi-hevi-hivi-hm			vihevihivihm		
porrectus flexus	pf	pflsc2 pfl1sc2 pflst2	pf-	pfS	pfM	pfM	pf>	pf-
pes subbipunctis	pesu2	vippt1su2lsc3	pe-su2 pe-1su2 pe-1sut2	peSsu2 peSsut2	vippt1su2 toS2sut1	vi-!ci pesu1suw1	pesu1sux1	to>
scandicus flexus	sf	sflsc3	sf-	sfS	vi-tohk peclhi	sfM	cl>ppt2	sc>
torculus resupinus	tr	trlsc2 trlst2	tr-1	trS	trG trG1 trG2	trM	tr>	tr-
apostropha	st		st-	stS			st>	
distropha	ds	ds-lsx6	ds-				ds>	
tristropha	ts	ts-lsx6	ts-			tsM	ts>	
trigonus	tg tg1			tgS tgS1 tgS3		tgM		ds>
bigirga & trivirga	bv tv		bv- tv-				bv>	
pressus	pr pi	prlsc2 pr-lsc2 prlst2 pilsc2 pilst2	pr-			prM	pr> pi>	vs> or>
virga strata	vs	vslsc3 vslst2	vs-				vs>	ta>
oriscus	or						or>	
salicus	sa sa1	salsfr1 saM1l1sfr1	sa- sa-1		saG	saM saM1 saM2	sa> sa->1	pe>2
pes quassus	pq	pqlsfr1	pq-				pq>	
quilisma	ql qi		ql- qi-				ql> qi>	
pes stratus	pt							

Table from Cardine's Gregorian Semiology, pp. 12-13 with nabc strings and gregall glyphs.

Name of Symbols	Simple Symbols	Symbols differentiated by			Symbols indicating a special meaning		
		the modification		the addition of letters	melodic	phonetic	
		of the mark	of the grouping (neumatic break)			Liquescence	
				augment.	diminut.		
uncinus	un						
punctum	pu						
virga	vi	viS vipp2su2vihh				vi>1	
tractulus	ta	ds ts		talst2 tslsc2lst2		ta>2	
clivis	cl		clG	c1l1sn9 c1l1st9 c1G1sa5	clG1 clM	cl> cl>1	vi> ta>2
pes	pe		peG	pelsn3 pelst2 pelsc2		pe>1	ta>
porrectus	po		poG		poM	po>	
torculus	to	toS1	toG	toG1sa5 toS1sa5 toSsun11sa5 tolst9		to>	
climacus	ci	pusu1sun1 visu2 unsun2		visu2lst3			cl>1
scandicus	sc sc1	vippn1pp1 vippn2	pevihl	sclst2 pelst2vihl pelsa2vihl		vi>1pp2	ta>ppn1 ta>pp2
porrectus flexus	pf1	pfS	unhg'to po'un	unhg1st2'to po'unlsa2	pfM	pf>	
(pes subbipunctis)	tosu1	tosun1	vippn1su2 unppn1sun2	tosu11sc5 tosun11sa5			
			visulsun1	un1st2'puhisu1sun1			
scandicus flexus	sf		unhd'to sfG	unhd1st2'to pelst2clhh			
torculus resupinus	tr	trS	poppn1 pe'peG	trS1sc1 tr1st3 tr1st9		tr>	pe'ta>
			tovihg toGvihg				
clivis + pes or torculus	cl!pe cl!to	→ toS!pe	toS!to				
oriscus	or or1	isolated & at the syllabic articulation	ql			or>	
			oc oc!vi pq pq1				
		inside the neume	tg				
			cl1!or cl1!pi cl1!pi!vi cl1!pi!cl cl1!pi!to				
			to!or				
			sa sal				
			vs vsG				
quilisma	ql ql!cl ql!po						
pes stratus		pt1			pe!or		

Table from Cardine's Gregorian Semiology, pp. 14-15 with nabc strings and grelaon glyphs.

Table with nabc strings and corresponding gregall and gresgmodern glyphs:

bv		//	clSsut1sux1	missing		lsvol		missing
bv-		//	clSsut2			lsx		
bv-sut2		missing	clSsuu1su2		missing	ni		
bv-sut3sux1		missing	clSsux1	missing		or		
bv>		//	cllsc3		missing	or>		
ci		∴	cllst2		missing	pe		
ci-		∴	clpp2			pe!vi		
ci-pp2		∴	clppt1			pe-		
ci1		∴	clppt2			pe-1		
ci>		∴	cl~			pe-1su1sut1		
ciG		∴	ds			pe-1su1sut2		
ciG1		∴	ds-			pe-1su1suu1		
ciM		∴	ds>			pe-1su1suu2		
ciM-		∴	dslsx6		missing	pe-1su1suw1		
ciS		∴	gr			pe-1su2		
ciS1		∴	gr-			pe-1sut1suw1		missing
ciSppt1		∴	gr-lsc6		missing	pe-1sut1sux1		
cilsc3		missing	lsal			pe-1sut2		
cippt1		∴	lsam			pe-1sut3		
cippt1lsc3		missing	lsb			pe-1suu1su2		missing
cippu1		∴	lsc			pe-1suw2		
cippu1lsc3		missing	lscm			pe->		
ci~		∴	lscw		missing	pe->1		
cl		∴	lscw		missing	pe-su1sut1		
cl!cl>1		∴	lsd		missing	pe-su2		
cl!clS		∴	lse			pe-su2suy1		
cl!clSsut2		∴	lseq		missing	pe-su3sut1		
cl!pi		∴	lseq		missing	pe-su4		
cl!pilsclst3		missing	lseq		missing	pe>		
cl!pilsclst2		missing	lseq		missing	pe>1		
cl!pisu1		missing	lseq		missing	pe>2		
cl!pisu1st2		missing	lseq		missing	pe>ppt1	missing	
cl!po		∴	lseq		missing	peG		
cl!po-1		∴	lseq		missing	peS		
cl!po>		∴	lseq		missing	peSppt2		missing
cl!po>ppt1		∴	lseq		missing	peSppt2sut5		missing
cl!pr		∴	lseq		missing	peSsu1sux1		
cl-		∴	lseq		missing	peSsu2		
cl!pi		∴	lseq		missing	peSsut1su2		
cl-1su2		∴	lseq		missing	peSsut1suy1		missing
cl->		∴	lseq		missing	peSsut2		
cl->1		∴	lseq		missing	peSsut3		
cl-lst2		missing	lseq		missing	peSsut5		missing
cl-ppt1	missing	∴	lseq		missing	peppt1		
cl-ppt2		∴	lseq		missing	pesu1sut1		
cl>		∴	lseq		missing	pesu1sut2		missing
cl>1		∴	lseq		missing	pesu1sut3		
cl>pp2	missing	∴	lseq		missing	pesu1suu1		
cl>ppt2		∴	lseq		missing	pesu1suw1		
clM		∴	lseq		missing	pesu1sux1		
clM-		∴	lseq		missing	pesu2		
clMpp2	missing	∴	lseq		missing	pesu2sut1		missing
clS		∴	lseq		missing	pesu2suv1		
clS-		∴	lseq		missing	pesu3		
clS-1		∴	lseq		missing	pesut2		
clS-2		missing	lseq		missing	pesuv1su1sut1		
clS-su2		∴	lseq		missing	pe~		
clS1		∴	lseq		missing	pf		
clSsu1sut1		∴	lseq		missing	pf!cl-		
clSsu2		∴	lseq		missing	pf!clM-		
clSsut1		∴	lseq		missing	pf!clM-ppt1		
			lseq		missing	pf!cl~		

pf!cl~ppt1			pqS-		ql!clS-2sut1	
pf!pr			pqS>		ql!clSppt1	missing
pf-			pqlsfr1	missing	ql!clppt1	
pf1lsc2		missing	pr		ql!pf	
pf>			pr-		ql!pf-	
pfG			pr-lsc3	missing	ql!po	
pfM			pr>		ql!po-1	
pfM-	missing		prM		ql!po-1ppt1	
pfMsut1			prlsc2	missing	ql!po>	
pfMsuu1	missing		prlst2	missing	ql!poppt1	
pfS			prl~		ql!po~	
pf1lsc2		missing	pr~		ql!po~ppt1	
pf1st2		missing	pt		ql!vs	
pf~			pu		ql!vsppt1	
pi			qi		ql!vsppt1su2	
pi>			qi!cl		ql!vsppt1sut2	
piM	missing		qi!cl-		ql!vssu2	
piM1		missing	qi!cl->	missing	ql!vssu3	
piM1sut1		missing	qi!cl>		ql!vssut2	
pilsc2		missing	qi!clppt1		ql-	
pilst2		missing	qi!po		ql->	missing
pisu1			qi!po>	missing	ql-ppt1	
pisut1			qi!vs		ql-ppt1su1sut2	
po			qi!vsppt1		ql-ppt1su1suu1	
po-			qi!vsppt1su1sut2	missing	ql-ppt1su1sux1	
po-1			qi!vsppt1su2		ql-ppt1su2	
po-1pp2su1sux1			qi!vssu1sut2	missing	ql-ppt1su3	
po-1su1sux1			qi!vssu2		ql-ppt1sut2su1	missing
po-1su2			qi-		ql-ppt1sut2suu1	
po-2	missing		qi-ppt1su1sut2		ql-ppt1suu2	
po>			qi-ppt1suu1su1sut2	missing	ql-ppt2su1suv1su2	
poG			qi-su1sut2		ql-su1sut1	
poG-			qi-su1sux1		ql-su1sut2	
poG-1	missing		qi-su2		ql-su1suu1	
poG1	missing		qi-sut2		ql-su1suu2	
polsc2		missing	qi-sut3		ql-su1suv1su2	
posu1sut1		missing	qi-suu1su1sut2	missing	ql-su1sux1	
posu2			qi>		ql-su2	
po~			qi>ppt1		ql-su3	
pp1			qippt1		ql-sut1sux1	
pp2			qippt2sut2		ql-sut2	
pp3			qisu2	missing	ql-sut2su1	missing
pp4			qisut1sux1		ql-sut2suu1	
pp5	missing		qisut2		ql-suu2	
ppt1			ql		ql>	
ppt2			ql!cl		ql>ppt1	
ppt3			ql!cl!cl>		qlppt1	
ppt4			ql!cl!cl>ppt1		qlppt1su2	missing
ppt5			ql!cl!pi		qlppt1sut3	
ppu1			ql!cl!pippt1		qlsu2	missing
ppu2			ql!cl-		qlsut2	
ppu3			ql!cl->		qlsut3	
ppu4			ql!cl->ppt1		sa	
ppu5			ql!cl-ppt1		sa!cl	
pq			ql!cl>	missing	sa!cl-	
pq!cl			ql!cl>1		sa!cl>	
pq!cl-			ql!cl>ppt1		sa!clS-1	
pq!cl>			ql!clM		sa!clS1	
pq-			ql!clMppt1		sa!clS1lsc2	missing
pq-su2			ql!clS		sa-	
pq>			ql!clS-2		sa-1	
pqS			ql!clS-2ppt1		sa->1	
			ql!clS-2ppt1sut1			



sa-lsfr1		missing	su1suu1su2		to!ciGhh		missing
sa-su1sut1		missing	su1suu2		to!cl		
sa-su2sut1			su1suv1		to!cl!cl		
sa1			su1suv1su2		to!cl!cl!cl		
sa1!cl->			su1suw1		to!cl!pi		
sa1!cl>			su1sux1		to!cl!po		
sa>			su2		to!cl!po-1		
sa>1	missing		su2sut1		to!cl-		
sa>2			su2suv1		to!cl!cl-		
saG			su2suw1		to!cl-1		
saM			su2sux1		to!cl->		missing
saM-1			su2suy1		to!cl>		missing
saM-4			su3		to!clM		missing
saM1			su3sut1		to!clMlss8		missing
saM2			su4		to!clS		
saM3			su5		to!pi		
saM4			sut1		to!po		
saM5		missing	sut1su1sux1	missing	to!posu2		
saM5ppt1		missing	sut1su2		to!pr		
saM6		missing	sut1suu1		to-		
salsfr1		missing	sut1suw1		to-1		
sapp1		missing	sut1sux1		to-1su1		
sa~			sut2		to-1su2		
sc			sut2su2		to-1suu1		missing
sc-			sut2suu1		to-1suu1su2		
sc-1	missing		sut2sux1	missing	to->		
sc1			sut2suy1		to>		
sc>			sut3		to>1		
scG			sut3suw1		to>2		missing
scG-1			sut3sux1		to>pp2		
scG1			sut3suy1		toG		
scM	missing		sut4		toM		
scM1			sut5		toM-	missing	
scM2			suu1		toM1		
scS			suu1su1sut2		toM2	missing	
sc~			suu1su2		toM2-	missing	
sf			suu1sut1su2		toM3		
sf-			suu2		toS		
sf>	missing		suu2su2		toS!cl		missing
sfG	missing		suu3		toS!cl-		missing
sfG1	missing		suu5		toS!cl-lsi8		missing
sfM			suv1		toS!cllsi8		missing
sfM1	missing		suv1su1sut1		toS1		
sfS			suv1su2		toS2		
sflsc3		missing	suw2		toS2su2		
st			ta		toS2sut1		
st-			ta-		toS2sut2		
st>			ta>		toS2sux1		
stS			ta>ppt1		toS3		
su1			talsc3		toS3lst2		missing
su1sut1			talst2		toS4	missing	
su1sut1su1sut1			tg		toSsu2		
su1sut1su2			tg1		tolsc3		missing
su1sut1sux1			tgM		tolsc4lst3		missing
su1sut1suy1			tgS		tolst2		missing
su1sut2			tgS-		toppt1	missing	
su1sut2su1			tgS1		toppu1		
su1sut3			tgS2		tr		
su1suu1			tgS3	missing	tr-	missing	
su1suu1su1			tgS4		tr-1		
			tgSsuu1		tr-1su2		
			tgsuu1		tr-2	missing	
			to		tr-3		
			to!ciG		tr~		

tr~1			vi-su1suw1			visu1sut1su1sut1	
tr>			vi-su1sux1			visu1sut1su2	
trG			vi-su2			visu1sut1sux1	
trG1			vi-su2sut1			visu1sut1suy1	
trG2			vi-su2suw1	missing		visu1sut2	
trM			vi-su2sux1			visu1suu1	
trS			vi-su3			visu1suu1su2	
trS-			vi-su4			visu1suv1	
trS1			vi-sut1su2			visu1suw1	
trSsut2			vi-sut1suu1			visu1sux1	
trlst2		missing	vi-sut1sux1	missing		visu2	
trsu3		missing	vi-sut2			visu2lsc3	missing
tr~			vi-sut2sux1	missing		visu2sut1	missing
ts			vi-sut3			visu2suw1	
ts-			vi-sut3sux1		missing	visu2sux1	
ts>			vi-sut4			visu3	
tsM			vi-suu1su2			visu5	
tsM-			vi-suu1sut1su2		missing	visu1su2	
tsM>		missing	vi-suu2			visu1sux1	
tslsx6		missing	vi-suu2su2			visut2	
tv			vi-suu3			visut2su2	
tv-			vi>			visut2sux1	missing
vi			vi>pp2			visut2suy1	
vi-			vi>ppt2			visut3	
vi-!ci			vi>ppt3			visut3suw1	
vi-!vi!vi			vilsc3		missing	visut3suy1	
vi-!vi-!vi			vilst1		missing	visut4	
vi->			vipp2			visuu1su2	
vi-lst3		missing	vipp3			visuu2su2	
vi-pp2			vipp4			visuu3	missing
vi-pp4			vippt1su1sut1			visuu5	missing
vi-ppt2			vippt1su2			visuv1su2	
vi-ppt3			vippt1su2lsc3		missing	vs	
vi-su1sut1			vippt2			vs-	
vi-su1sut1su2			vippt2suu5		missing	vs->	
vi-su1sut2			vippt3			vs>	
vi-su1sut2su1			vippu1su2			vs-lsc3	missing
vi-su1suu1			vippu1su2lsc3		missing	vslst2	missing
vi-su1suu1su1			visu1sut1			vs~	
vi-su1suu1su2							
vi-su1suu2							



pp4	ql!cl!tr>ppz1	qlsux1	to
ppn1	ql!clppn1	sa	to!cl
ppn1pp1	ql!po	sa1	to!cl!cl
ppn1pp1ppz1	ql!po>	sa1lsc4	to!cl!cllst9
ppn1ppq1	ql!po>ppn1	sa1lsc6	to!cl!clsu1
ppn1ppz1	ql!polisa1lsa3lsa9	sa1sun1lsa5	to!cl!clsun2
ppn2	ql!polism1	sa>	to!cl!clsun2lsa5
ppn2ppz1	ql!poppn1	salsc4	to!cl!orsun1
ppn2ppz1ppq1	ql!poppn1lst2	salsc6	to!cl!pi
ppn3	ql!poppn1sun1	sc	to!cl>1
ppn3ppz1	ql!poppn1sux1	sc1	to!clM
ppn4	ql!poppz1	sc1lsc4	to!clsu1sun1
ppq1	ql!poppz1lsa3	sclst2	to!clsu1sun1lsm6
ppz1	ql!poppz1su1sun1	sf	to!clsu2
ppz1ppq1	ql!posu1sun1	sfG	to!clsu2lsn6
pq	ql!posun1	su1	to!clsun1
pq1	ql!posux1	su1sun1	to!clsun1lsa5
pr	ql>	su1sun1su1	to!or
pt1	ql>ppn1	su1sun1su2	to!orlsc6
pt1ppn1	ql>ppn1lsc3	su1sun2	to!orlst3
pt2	qlsst2	su1sux1	to!orsun1lsa5
pt3	qlppn1	su2	to!pi!cl
pu	qlppn1ppz1	su2sun1	to!pi!cl!pi!orsun1lsa5
pu1	qlppn1ppz1lst2	su3	to!pi!cl!pi!pi
pulsnt3	qlppn1ppz1su1sun1	su4	to!po
pupp1su1sun1	qlppn1ppz1sun1	sun1	to!pohd
pupp1su2	qlppn1ppz1sun1lsa5	sun1su1	to!to
pupp2su1sun1	qlppn1su1sun1	sun1su1sun1	to!to!pi!cl
pupp2su2	qlppn1su1sun2	sun1su2	to!to!pi!clpp2
puppn1su1sun2	qlppn1su2	sun2	to!toppn1sun1
puppz1su1sun2	qlppn1su2lsn1	sun2su1	to!tosun1
puppz1su2	qlppn1sun1	sun2su2	to>
pusu1sun1	qlppn1sun1lsc5	sun3	to>2
pusu1sun1lsf1	qlppn1sun1su2	sun4	to>2lsa3
pusu1sun1lst7	qlppn1sun1su2	sux1	to>2lsc1lsa3
pusu1sun2	qlppn1sun1su2	ta	to>lsa5
pusu1sun2lsa5	qlppn1sun1su2	ta>	to>pp2
pusu2sun1	qlppn1sun1su2	ta>1	toG
pusu3	qlppn1sun1su2	ta>2	toGlsa1lst8
pusu4	qlppn1sun1su2	ta>2lsc2	toGlsa5
ql	qlppn1sun1su2	ta>lsn2	toS
ql!cl	qlppn1sun1su2	ta>pp2	toS!pe
ql!cl!or	qlppn1sun1su2	ta>ppn1	toS!to
ql!cl!orppn1ppz1	qlppn1sun1su2	tasu2	toS!tolst9
ql!cl!to	qlppn1sun1su2	tg	toS1
ql!cl!to!or	qlppn1sun1su2	tg!cl	toSlsa5
ql!cl!to!orsun1	qlppn1sun1su2	tg!cl>1	toSsun1lsa5
ql!cl!tolst6	qlppn1sun1su2	tg!c!lsn9	tolsf4
ql!cl!toppn1	qlppn1sun1su2	tg!or	tolsn8
ql!cl!tosu3	qlppn1sun1su2	tglsn8	tolst2lst9
ql!cl!tosu3lst6	qlppn1sun1su2	tg!st9	tolst9
ql!cl!tr>	qlppn1sun1su2	tg!st9	tolsth8
	qlppn1sun1su2	tg!st9	topp1su1
	qlppn1sun1su2	tg!st9	topp1su1lsa6
	qlppn1sun1su2	tg!st9	topp2
	qlppn1sun1su2	tg!st9	topp2sun1

toppn3ppz1sun1	tssun1lsa5	unsun2su2	vippn1su1sun1lst2
tosu1	tv	unsun3	vippn1su2
tosu1lsc5	tvlsm2	unsun3lsa3	vippn1sux1
tosu1sun1	un	unsun3lsa6	vippn2
tosu1sun1lsc6lst7	un!clG	unsux1	vippn2lsa4
tosu1sun1lsn6	un1	vi	vippn2lsc4
tosu2	un1ppn1ppq1sun2	vi>	vippn2lst3lsa4
tosu2lst6	un1ppn1sun1su2lsa5	vi>1	vippn2ppz1ppq1
tosun1	un1ppn1sun2	vi>1sa2lsc8	vippn2ppz1ppq1lst2lsa8
tosun1lsa5	un1sun1su1sun1lsa1lsc4	vi>1pp2	vippn2ppz1sun1lsa5
tosun1su1sun1	un1sun1su1sun1lsa3lsc6	vi>1ppn1ppz1ppq1	vippn2sun1
tosun1su2lsn3lst6	un1sun1su2	vi>2	vippn2sun1lsa4
tosun2	un1sun1su2lsa5	vi>lsa6	vippn3
tosun2lsa6	un1sun2	vi>lsc6	vippn3su4
to~	un1sun2su2	viS	vippn3sun1lsa5
tr	un2	vilss1	vippn4
tr>	un2lsm1	vilss2	vippq1
trS	unlsm1	vilsst1	vippz1ppq1
trSlsc1	unlsm2lss3lst8	vilst1	visu1sun1
trlss1lss3	unlst1	vilst2	visu1sun1su1
trlst3lshp7	unlst2	vilst2lsa8	visu1sun1su1lst6
trs2	unlst8	vilst9	visu1sun1su2
trs2lst3lsm8	unppn1ppz1sun1	vipp2ppn1	visu1sun1su2lss1lst6
trs2lst3lsa5	unppn1ppz1sun1lsa5	vipp2su2	visu1sun2
trs2lst3lsu2	unppn1sun1su2	vipp2sun1lsa5	visu1sun2
trs2lst3lsa3	unppn1sun2	vipp3	visu1sun2lsa5
trs2lst3lsu2	unppn1sun2lsa5	vipp3lsn3	visu1sun2lsa6
trs2lst3lsa5	unppn1sux1	vipp4	visu2
trs2lst3lsu1	unppn1sux1lsa5	vipp4lst2	visun1su1sun1
trs2lst3lsa5	unppn3sun1lsa5	vippn1pp1	visun1su1sun1lst6
trs2lst3lst8	unsun1su1	vippn1pp1ppz1	vs
ts	unsun1su1lst2lsc6	vippn1pp1ppz1lst8	vsG
ts1	unsun1su2	vippn1pp1su1sun2	
ts>	unsun2	vippn1ppq1	
ts>1	unsun2	vippn1ppz1ppq1	
ts>lsc2	unsun2lsa5	vippn1su1	
ts>lsc6	unsun2su1	vippn1su1sun1	
tslsa2			
tslsc2lst2			

# manuscript sources of the gregall font

The list of glyphs uses following abbreviations for manuscript references; the page number is always for the start of some antiphon, responsory, mass propers, even when the actual neume is on a later page. At the end of lines, GT stands for Graduale Triplex, Solesmes, 1979, OT for Offertoriale Triplex, Solesmes, 1985, AM for Antiphonale Monasticum, Solesmes, 1934, ARII for Antiphonale Romanum II, Solesmes, 2009 and NR for Nocturnale Romanum, Hartker Verlag, 2002, followed by page number which also contains the corresponding propers, antiphons or responsories.

Most of the glyphs taken from the e-codices Virtual Manuscript Library of Switzerland, <http://www.e-codices.unifr.ch/en>, with permission from Stiftsbibliothek, St. Gallen <http://www.stibi.ch/> and Stiftsbibliothek, Einsiedeln <http://kloster-einsiedeln.ch/>, the picture fragments from there are only present in the font source file to help drawing the glyphs.

## Cantatorium codex 359

C1 = [http://www.e-codices.unifr.ch/en/download/csg-0359\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0359_001/max)  
C25U Universi GT16  
C26A Alleluia Ostende GT16  
C26D Dilexisti iustitiam GT499  
C27E Ex Sion GT18  
C27Q Qui sedes GT22  
C28A Alleluia. Excita Domine GT23  
C28T Tollite portas GT25  
C32B Benedictus es in firmamento GT664  
C35Q Qui regis Israel intende  
C37A Alleluia. Veni, Domine GT36  
C38T Tecum principium GT42  
C38A Alleluia Dominus dixit GT43  
C39B Benedictus qui GT45  
C40A Alleluia Dies sanctificatus GT49  
C40V Viderunt omnes GT48  
C42A Alleluia. Hic est discipulus GT636  
C43A Anima nostra GT453  
C43L Laus tibi Christe  
C44E Ecce sacerdos GT486  
C44D Diffusa est gratia GT408  
C45S Speciosus forma GT54  
C460 Omnes de Saba GT57  
C46B Benedictus Dominus GT257  
C46A Alleluia Vidimus stellam GT58  
C47I Iuravit Dominus GT486  
C49I Inveni David GT445  
C50G Gloriosus Deus GT456  
C52T Timebunt gentes GT265  
C52P Posuisti Domine GT477  
C53S Suscepimus Deus GT360  
C53A Alleluia. Adorabo ad templum GT270  
C54A Audi filia GT417  
C56B Beatus vir GT475  
C56D Desiderium animae GT432  
C57B Beatus vir GT481  
C58A Adiutor GT69  
C59D De profundis GT673  
C60S Sciant gentes GT88  
C60C Commovisti Domine GT89  
C61T Tu es Deus GT275  
C61I Iubilare Domino GT185  
C62M Miserere mei GT63  
C64Q Qui habitat GT73  
C67D Dirigatur GT340  
C71L Laudate Dominum GT187  
C73P Propitius esto GT288  
C74B Bonum est GT327  
C780 Oculi omnium GT343  
C79L Laetatus sum GT336  
C80Q Qui confidunt GT109  
C81E Exsurge Domine GT114  
C82B Beata gens GT333  
C82R Respice Domine GT320  
C82V Venite filii GT298  
C84T Tibi Domine GT118  
C87E Exaltabo te GT112  
C88T Tollite hostias GT272  
C89T Tenuisti manum GT133  
C95D Domine exaudi GT172  
C97D Domine audivi  
C100C Crux fidelis GT182  
C103C Cantemus Domino GT186  
C104V Vinea facta GT188  
C107A Alleluia Pascha nostrum GT197  
C118C Clamaverunt iusti GT454  
C122I In omnem terram GT427  
C123C Constitues eos GT426

C132D Domine praevenerunt GT509  
C134B Benedicite Dominum GT608  
C137A Audi filia GT406  
C139A Alleluia Benedictus es GT375  
C139B Benedictus es GT372  
C145L Liberasti nos GT366  
C148A Alleluia Domine refugium GT321  
C148Q Alleluia Quoniam Deus GT327  
C148V Alleluia Venite GT324  
C149A Alleluia. Paratum cor meum GT344  
C150L Alleluia Laetatus GT19  
C153S Alleluia Sancti tui, Domine, benedicent GT463  
C153B Alleluia Beatus vir qui suffert GT511  
C154A Alleluia Gaudete iusti GT430

## Einsiedeln codex 121

E1 = [http://www.e-codices.unifr.ch/en/download/sbe-0121\\_001/max](http://www.e-codices.unifr.ch/en/download/sbe-0121_001/max)  
E2R Respice in me OT5  
E2D Dominus dabit GT17  
E3D Deus tu convertens GT20  
E10P Prope est Dominus GT35  
E11C Confortamini OT9  
E13P Prope es tu GT24  
E16B Benedictus es  
E20E Exsulta satis GT28  
E23T Tollite portas OT14  
E26L Lux fulgebit GT44  
E29E Exsulta filia sion GT47  
E31T Tui sunt caeli OT18  
E33V Viderunt omnes GT50  
E34I In virtute tua OT152  
E35E Elegerunt apostoli OT161  
E39E Exiit sermo inter GT636  
E42A Anima nostra GT466  
E51R Reges tharsis OT21  
E64L Laetamini in Domino OT140  
E69P Posuisti Domine GT477  
E75G Gaudeamus omnes GT545  
E82D De profundis GT673  
E92I Immutemur GT65  
E104S Sicut oculi GT77  
E125P Precatus est Moyses GT317  
E130I Illumina oculos GT290  
E131O Oculi mei semper GT96  
E133I Iustitiae Domini GT309  
E147L Laetare Ierusalem GT108  
E148L Laudate Dominum GT110  
E155B Benedicite gentes Domino GT231  
E158D Domine ad adiuvandum OT42  
E161S Sitientes venite GT114  
E162F Factus est Dominus GT119  
E166C Confitebor tibi Domine OT44  
E173E Eripe me GT129  
E193D Domine, exaudi orationem OT53  
E195D Dominus Iesus GT165  
E205R Resurrexi GT196  
E213C Alleluia Christus resurgens GT226  
E248V Viri Galilaei GT235  
E255S Spiritus Domini GT252  
E256C Confirma hoc OT79  
E262S Sapientiam sanctorum GT452  
E272M Mihi autem nimis OT128  
E293V Vindica Domine  
E320I Inclina aurem GT300  
E327O Oravi Deum meum OT107  
E324R Respice, Domine GT320  
E336I In voluntate tua GT346  
E339S Si iniquitates GT350  
E373B Benedictus es GT372  
**Hartker codex 390/391**

H1 = [http://www.e-codices.unifr.ch/en/download/csg-0390\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0390_001/max)  
H195 = [http://www.e-codices.unifr.ch/en/download/csg-0391\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0391_001/max)  
H16A Aspiciebam in visu NR111  
H16M Missus est Gabriel NR111  
H16V Ave Maria NR113  
H22S Sicut mater consolator NR127  
H23E Egredietur Dominus de Samaria NR129  
H24S Super solium David AM206  
H25E Ecce mitto Angelum AM201  
H26G Grata facta est NR25\*  
H28Q Qui venturus est NR134  
H29E Ecce radix Jesse NR137  
H30T Tu es qui venturus es AM199  
H32N Nascetur nobis NR149  
H33I Iuravi dicit Dominus NR151  
H34F Festina ne tardaveris NR130  
H35G Germinaverunt campi NR144  
H36A Adnuntiatum est  
H430 Orietur sicut sol AM234  
H45H Hodie nobis caelorum NR162  
H48B Beata et venerabilis  
H49C Confirmatum est cor Virginis NR208  
H50Q Quem vidistis pastores AM240  
H72V Venit lumen tuum AM290  
H72H Hodie in Iordane NR229  
H730 Omnes de Saba NR237  
H73S Stella ista NR242  
H74I Illuminare, illuminare NR236  
H75I In columbae specie NR231  
H75V Videntes stellam NR242  
H77S Stella ista AM291  
H77A Ab Oriente AM297  
H87E Exaudi Deus  
H103S Spes nostra salus NR512  
H103M Magnus Dominus NR516  
H104T Te Deum patrem  
H112S Stans a dextris AM798  
H114C Corde et animo AM1033  
H114N Nativitas tua AM1035  
H118G Gaude, Maria Virgo NR130\*  
H119C Cum inducerent  
H153V Vado ad patrem  
H173I Insurrexerunt in me NR364  
H173C Contumelias et terrores NR365  
H179L Liberavit Dominus ARII183  
H179A Amicus meus osculi NR381  
H179I Iudas mercator NR382  
H179U Unus ex discipulis NR383  
H180U Una hora non potuistis NR388  
H219T Tradiderunt me NR408  
H219I Iesum tradidit impius NR409  
H225M Mulieres sedentes AM449  
H239R Redemptor noster  
H259O O crux splendor AM898  
H266D Domino si in tempore  
H269S Spiritus Sanctus  
H269D Dum complerentur NR493  
H269R Repleti sunt omnes NR494  
H270S Spiritus Domini AM520  
H271L Loquebantur variis AM521  
H296S Sicut cedrus exaltata NR [165]  
H297B Beatam me dicent NR [172]  
H305H Hodie nata est NR278\*  
H305G Gloriosae virginis Mariae NR279\*  
H306N Nativitas gloriosae NR280\*  
H307N Nativitas tua NR281\*  
H307F Felix namque NR [171]  
H316N Numquid scis  
H320R Regem confessorum  
H322B Beatus Gallus zelo  
H322C Columbanus itaque beato  
H323B Beatus Gallus cum  
H323D Domine Iesu Christe  
H324P Pater sanctus  
H324V Vir Deo plenus  
H325I Iste sanctus digne  
H328F Fundata est domus NR [140]  
H334I In civitate Domini  
H338D Dixerunt discipuli  
H367V Viri sancti NR [54]  
H390C Credo quod Redemptor NR [186]

H392L Libera me Domine de viis NR [200]  
H392I Libera me Domine de morte NR [201]  
H398E Emitte Domine sapientiam NR571  
H401A Audi fili mi  
H405S Scio Domine  
H406D Desiderium meum  
H406A Auditum auris  
H407P Peto Domine NR587  
H411D Domine rex NR599  
H411C Conforta me NR597  
H414E Exaudiat Dominus NR602  
H424M Magnificat  
H428A Ascendens Iesus AM593  
H443V Venite exsultemus NRXXVIII

#### St. Gall codex 339

G1 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_033/max](http://www.e-codices.unifr.ch/en/download/csg-0339_033/max)  
G56 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_088/max](http://www.e-codices.unifr.ch/en/download/csg-0339_088/max)  
G57 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_088a/max](http://www.e-codices.unifr.ch/en/download/csg-0339_088a/max)  
G58 = [http://www.e-codices.unifr.ch/en/download/csg-0339\\_089/max](http://www.e-codices.unifr.ch/en/download/csg-0339_089/max)  
G8E Exulta satis OT11  
G9A Alleluia Veni Domine GT36  
G11P Puer natus est GT47  
G11V Viderunt omnes GT48  
G12T Tui sunt caeli OT18  
G20I Iubilare Deo universa terra GT227  
G22D Domine quinque talenta GT515  
G25P Posuisti Domine GT477  
G30E Exsurge quare obdormis GT91  
G35D Domine vivifica me OT31  
G42D Domine Deus salutis OT112  
G44P Precatus est Moyses GT317  
G45D Domine in auxilium OT106  
G51I Intende voci GT280  
G51S Si ambulabem GT125  
G57F Factus est Dominus GT119  
G89D Domine Deus in simplicitate OT159  
G113A Alleluia. Dilexit Andream GT625  
G116C Cantabo Domino GT283  
G126D Alleluia. Domine Deus meus GT282  
G128A Alleluia. Attendite popule  
G132A Alleluia. Mirabilis Dominus GT462  
G132V Alleluia. Vox exultationis  
G139A Asperges me Domine  
G140O Oremus dilectissimi nobis  
G141O Omnipotens Deus

#### St. Gall codex 376

N1 = [http://www.e-codices.unifr.ch/en/download/csg-0376\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0376_001/max)  
N39H Hodie cantandus est nobis  
N53A Audite fratres dilecti  
N59N Nativitatem venerandam  
N65G Gloriatu laus tua Deus  
N67G Gloria in excelsis Deo  
N68G Gloria in excelsis Deo  
N69G Gloria in excelsis Deo  
N73G Kyrie eleison  
N86D Dilexisti iustitiam GT498  
N100T Tui sunt caeli OT18  
N171D Deus exaudi orationem GT107  
N221N Alleluia. Non vos relinquam GT242  
N270A Alleluia. Benedictus es GT375  
N293A Alleluia. Sancti tui, Domine, benedicent GT463  
N296V Alleluia. Veni Sancte Spiritus GT263  
N363C Carmen suo dilecto  
N368L Letamente canamus Domino nostro  
N372O O quam mira sunt Deus

#### St. Gall codex 374

A1 = [http://www.e-codices.unifr.ch/en/download/csg-0374\\_001/max](http://www.e-codices.unifr.ch/en/download/csg-0374_001/max)  
A17T Tui sunt caeli OT18  
A22V Vox in Rama GT638  
A26F Fili quid fecisti GT51  
A56C Custodi me Domine GT304  
A127E Exultabunt sancti OT143  
A167O Oravi Deum meum OT107  
A174A Alleluia. Eripe me GT308

#### Bamberg, lit. 6, Gradual of St. Emmeram

B9v = <http://bsbsbb.bsb.lrz-muenchen.de/~db/0000/sbb00000128/images/index.html?id=00000128no=19&seite=22&signatur=Msc.Lit.6>  
B9vA Anima nostra GT466

	<b>virga</b>			
/	vi	C780	tu	
/	vilsc3	C82R	testamentum	
/	vilst1	E29E	rex	2.166x
/	vi-	C80Q	montes	
/	vi>	C27E	eius	
/	vi-1st3	H50Q	Quem	
/	vi->	E20E	sanctus	2.166x
	<b>tractulus</b>			
-	ta	C26A	Domine	
-	talsc3	E262S	saeculum	2.166x
-	talst2	C56D	Desiderium	
-	ta-	C81E	antiquis.	
-	ta>	C25U	et	
-	suv1 Cf. 1/2	pesu2suv1		
	<b>punctum</b>			
.	pu	C137A	Audi	
Cf. 1/2	st			
Cf. 1/2	ci>			
	<b>gravis</b>			
/	gr	H271L	Loquebantur	
/	gr-	H270S	Spiritus	
/	gr-lsc6	H270S	replevit	
	<b>clivis</b>			
/	cl	C780	sperant	
/	cllsc3	C26A	nobis	
/	cll1st2	C25U	exspectant	
/	cl-1st2	C52P	pretioso.	
/	cl-	C780	omnium	
/	clS-	C81E	opem	
/	clS	C780	opportuno.	
/	clS1	H424M	potentiam	
/	clM	C148V	nostro	
Cf. 1/2	cl>			
/	cl>1	H36A	virginis	
Cf. 1/2	vi>			
/	cl->1	H50Q	natum	
/	cl->	H50Q	angelorum	
/	clM-	C27Q	super	
/	clS-1	H428A	navem	
/	clS-2	H334I	suavissimus	2.0x
	<b>pes</b>			
/	pe	C80Q	Domine	
/	pe-	C80Q	aeternum	
/	pe-1	C64Q	Scapulis	
/	peS	C780	in	
/	peG	B9vA	erepta	0.5x
Cf. 1/2	peG			
/	pe>	C100C	germine	
/	pe>1	C27E	eius	
/	pe>2	C71L	miser cordia	
/	pe->	N296V	tuorum	
Cf. 1/2	ta>			
/	pe->1	H35G	Germinaverunt	1.7x
	<b>porrectus</b>			
/	po	C139B	super	
/	polsc2	C82R	iudica	0.85x
/	po-	G20I	anime	
/	po-1	C26A	tuum	
/	poG	C40V	salutare	
/	po>	C80Q	commovebitur	
/	po~	C58A	aeternum	
/	poG-	A1670	meum	
/	posu2	C460	gloria	
/	po-1su2	H269R	alleluia	
/	posu1sut1	C80Q	saeculum.	
	<b>torculus</b>			
/	to	C780	Domine	
/	tolsc3	C39B	nomine	
/	tolsc41st3	E125P	Domine,	2.166x
/	tolst2	C74B	miser cordiam	
/	to-	G44P	animae	
/	to-1	C139A	nostrorum	
/	toS	C38A	hodie	

/	toS1	E205R	Resurrexi,	0.5x
/	toS2	E161S	Sitientes	1.75x
/	toS3	C104V	circumfodit	
/	toG	G12T	eius	
/	toM	C49I	servum	
/	toM1	H22S	auxilium	1.71x
/	toM3	C39B	mirabile	
/	to>	C26A	miser cordiam	
Cf. 1/2	pe>			
/	toS31st2	C59D	tuae	
/	pq!cl-	C87E	sanasti	
/	to>1	E130I	obdormiam	2.166x
/	to>2	H219T	fortes:	1.63x
/	to->	E158D	respexit	2.166x
/	toS2sux1	C460	Surge	
	<b>climacus</b>			
/	ci	C26A	tuum	
/	ci1	G73P	gentes	
/	cilsc3	C74B	tuo	
/	ci-	C81E	nos	
/	ciS	C81E	Domine	
/	ciS1	C139A	Deus	
/	visut1su2	C53A	Adorabo	
/	ciG	C64Q	lapidem	
/	ciG1	C42A	ille	
/	ciM	C154A	Alleluia	
/	ciM-	H24S	aeternum	2.0x
/	ci>	C460	orta	
/	cl>	C79L	domum	
/	visuv1su2	C35Q	nos	
/	visut3	C38T	meo	
/	visu1suu1	C26D	laetitia.	
/	visut4	C25U	me.	
/	cl-1su2	C40A	magna	
/	visu1sut2	C43L	Domine	
/	visu1suv1	C53S	terrae.	
/	visuu1su2	C56D	eius	
/	visuu2su2	H103S	salus	
/	visuu3	H316N	erit	2.0x
/	vi-suu2su2	H103S	o	
/	visu2suw1	G113A	Alleluia	0.85x
/	visut2su2	G128A	Alleluia	0.85x
/	visut3suw1	C153S	dicent.	
/	visu1sut1sux1	G126D	salvum	0.85x
/	visu1sut1su2	N39H	puer	
/	visu1sut1su1sut1	N39H	generavit	
/	vi-su1sut1su2	N39H	enim	
/	visut1sux1	N59N	filium	
/	clSsu1sut1	N65G	tui	
/	vi-su4	N68G	Amen.	
/	vi-su1sut2su1	N73K	Christe	
/	visu1sut1suy1	N221N	Alleluia.	
/	visut3suy1	N293A	dicent.	
/	visut2suy1	N363C	sacro	1.25x
/	visu5	N368L	fornacibus	1.25x
/	visuu5 Cf. 1/2		vippt2suu5 minus prepunctis	
/	visu1suu1su2	N3720	erogatione	1.25x
/	vi-su1suu2	A174A	meus	
/	vi-su1suu1su1	A174A	Alleluia.	
/	vi-sut2	H74I	illuminare	
/	clS-su2	C46A	eius	
/	vi-su1su2	H75I	sanctus	
/	vi-suu1sut1su2	H328F	tibi	2.0x
/	clSsut2	E51R	suscipiant	2.0x
/	clSsuu1su2	H390C	surrecturus	1.5x
/	vi-sut3	H269D	dicentes	
/	vi-su1sut1 Cf. 1/2		vi-su1sut1su2 minus subpunctis	
/	vi-su2sut1	N296V	alleluia	
/	vi-su1sux1	E373B	Sanctum	2.133x
/	vi-su2sux1	C49I	eum	
/	vi-sut4	H16A	servient	1.7x
/	vi-suu2	H23E	ecce	1.7x
/	vi-suu3	H35G	veniet	1.7x
/	visu2sux1	H48B	mater	1.7x



vi-sut1su2	H22S	elegi	1.71x
vi-su1suu1	H114C	gloriam	1.71x
vi-su1suu1su2	H114N	nobis	1.71x
vi-su1sut2	H324P	aetatis	2.0x
vi-su3	H307F	natalem	2.0x
vi-sut1suu1	325I	peregrinatione	2.0x
vi-sut3sux1 Cf.	bv-sut3sux1	minus virga	

#### scandicus

sc	G11P	imperium	0.85x
sc1 Cf.	vipp4	minus first punctum	
sc-	C123C	terram	
scS	C154A	Alleluia	
scG	H179I	Iudas	
scG1	C52P	Posuisti	
scM1	C67D	Domine	
sc>	C26A	Alleluia	
Cf. pe>2			
vi-pp2	C26A	Domine	
vi-ppt3	C27E	veniet.	
scM2	C44E	Ecce	
vi>ppt3	E2R	non	2.166x
cl>ppt2	H730	annuntiantes	
vi-!vi!vi	E155B	Benedicite	2.166x
vippt3	G1400	ae	0.85x
vi-pp4	C154A	rectos	
vi-!vi-!vi	H118G	erubescat	
vipp4	A127E	eum	
vi>ppt2	H75V	apertis	
scG-1	H225M	Mulieres	1.6x

#### porrectus flexus

pf	C27E	sacrificia	
pflsc2	C58D	intendentes	
pf1lsc2	C61I	Ipse	
pflst2	C122I	fines	
pf-	C81E	antiquis.	
pfS	G116C	tribuit	0.85x
sfM	E248V	alleluia,	2.166x
pfM	E39E	manere	2.166x
pf>	C95D	manducare	
Cf. po>			
pfMsut1	E34I	eum	2.166x

#### pes subbipunctis

pesu2	C81E	antiquis.	
vippt1su2lsc3	C61T	solus:	
pe-su2	H73S	adoraverunt	
pe-1su2	C64Q	habitat	
pe-1sut2	H104T	confitemur	
pe-1sut1suw1	H219I	videret	1.63x
peSsu2	A17T	eius	
peSsut2	C27E	sanctos	
peSsut1suy1	H316N	erit	2.0x
vippt1su2	C56B	benedicetur.	
toS2sut1	C139A	Alleluia	
vi-!ci	E272M	cognovisti	2.166x
pesu1suw1	G8E	plebem	
pe-su1sut1	N296V	alleluia	
pe-su2suy1	N296V	alleluia	
pe-1sut3	H179A	malum	
Cf. to>			
pesu1suu1	C27E	Deus	
pesu3	C27Q	regis	
vippt1su1sut1	C40V	omnes	
vippu1su2	C74B	Altissime.	
pesu1sut3	C60S	venti.	
pesu2suv1	C60C	Sana	
pesu2sut1	E213C	Alleluia.	2.0x
pesu1sut2	E213C	Alleluia.	2.0x
vippu1su2lsc3	C32B	caeli	
pe-1su1suu1	C61I	pascuae	
peSsu1sux1	G89D	fili	0.85x
pe-su3sut1	N270A	saecula.	
pe-1sut1sux1	H72V	orta	
peSsut3	C460	Jerusalem	
pesut2	H77S	magi	

pe-1suw2	E255S	Domini	2.133x
peSsut1su2	E13P	Domine	2.133x
pesu1sux1	H25E	angelum	1.7x
pe-1su1suw1	H29E	deprecabuntur	1.7x
pesu1sut1 Cf.	pesu1sut3	minus 2 tractulis	
pe-1su1sut1	H306N	de	2.0x
pe-1su1sut2	H305G	Mariae	2.0x
pe-1su1suu2	H305G	vidente	2.0x
pe-1suu1su2	H180U	exhortabamini	1.75x
pe-su4	C139A	Alleluia	
pesuv1su1sut1	C139A	Alleluia	

#### scandicus flexus

sf	C64Q	habitat	
sflsc3	C27E	Deus	
sf-	C39B	est	
sfS	C97D	Deus	
toppu1	C103C	Cantemus	
Cf. sfM			
sc>			
to>pp2	E324R	testamentum	2.0x

#### torculus resupinus

tr	C25U	edoce	
tr1st2	E69P	eius	2.0x
tr-1	C38T	meo	
trS	C58A	Domine	
trG	E336I	fecisti	2.166x
trG1	G25P	ei	
trG2	E147L	Laetare	2.166x
trM	E336I	resistere	2.166x
tr>	C82V	nonconfundentur	
tr~	C60S	Altissimus	
tr--	C27Q	et	
tr--1	C107A	Alleluia.	
trS-	C89T	pedes,	
trS1	E26L	ecieieue	2.166x
tr-3	H323D	honore	2.0x
trsu3	C95D	eius.	

#### stroph

st	C80Q	commovebitur	
st-	C52P	Desiderium	
stS	E263V	est.	2.166x
st>	C49I	servum	

#### distropha

ds	C460	super	
ds1sx6	C45S	forma	
ds-	C81E	Domine	
ds>	C38A	Alleluia	

#### tristropha

ts	C80Q	Dominus	
ts1sx6	C44D	mansuetudinem	
ts-	C150L	ibimus	
tsM	C62M	anima	
ts>	C62M	conculcantes	
tsM-	A26F	ego	
tsM>	H45H	aeterna	2.0x

#### trigonus

tg	C80Q	aeternum	
tg1	C81E	antiquis.	
tgS	C139B	omnibus	
tgS1	N171D	mei	
tgS3	C61I	laetitia.	
tgM	C118C	Dominus	
tgS-	C118C	Dominus	
tgS4	C86D	mei	

#### bivirga

bv	C26D	Propterea	
bv-	C82B	populus	
bv>	H33I	montes	

#### trivirga

tv	C56D	pretioso	
tv-	C61I	eius.	

#### pressus

pr	C26A	Alleluia	
pi	C82R	Domine,	

piM1 Cf.	piM1sut1 minus subpunctis		
prlsc2	E339S	Si	2.166x
pr-lsc3	C122I	Dei	
prlst2	C145L	tuo	
pilsc2	C122I	Dei	
pilst2	C26A	Alleluia	
pr-	C59D	Si	
prM	E173E	insurgentibus	2.166x
pr>	H72H	in	
pi>	H103M	Magnus	
Cf.	vs>		
Cf.	or>		
<b>virga strata</b>			
vs	C148A	generatio	
vslsc3	C39B	nomine	
vslst2	E195D	suis,	2.166x
vs-	C82B	Domini	
vs>	C64Q	pennis	
ta>			
vs->	A22V	Rama	
<b>oriscus</b>			
or	H112S	candidior	
or>	C148V	salutari	
<b>salicus</b>			
sa	C27E	super	
sa1	C148A	Alleluia.	
salsfr1	E3D	Deus	2.166x
sa-	C25U	tuas	
sa-1	G30E	tribulationis	
saG	C107A	Alleluia.	
saM	H16V	venient	1.7x
saM1	H23E	homo	1.71x
saM2	C27Q	regis	
saM4	E10P	omnis	2.166x
saM5 Cf.	saM5ppt1 minus tractulus		
saM6	H153V	dicam	2.0x
sa>	C27E	sanctos	
sa->1	H77A	magi	
Cf.	pe>2		
sa!clS1	C80Q	sicut	
sa!clS-1	C27Q	tuam	
sa!clS1lsc2	C46B	Deus	
sa-lsfr1	C134B	nomen	
sa!cl>	G45D	respexit	0.85x
sa!cl>	G22D	euge	0.85x
sa!cl	G1410	fortitudo	0.85x
saM-1	G139A	Domine	0.85x
sa!cl-	G132V	Alleluia.	0.85x
saM3	N53A	fratres	
saM-4	N296V	amoris	
sa>2	H73S	viderunt	
sa!cl->	H32N	eius	1.7x
sapp1	H320R	venite	2.0x
saM5ppt1	H392I	de	1.5x
<b>pes quassus</b>			
pq	C27E	sacrificia.	
pqlsfr1	C150L	nostri	
pq-	C148V	nostro	
pq>	C84T	pupillo	
pqS	C52T	maiestate	
pqS>	H424M	potentiam	
pqS-	H411C	os	2.0x
pq!cl>	G57F	firmamentum	0.85x
pq!cl	E23T	Domini	2.166x
<b>quilisma</b>			
ql	C80Q	commovebitur	
qi	C103C	Hic	
ql-	C148A	generatio	
qi-	H28Q	veniet.	
ql>	C40V	gentium	
qi>	C28A	et	
ql->	H430	Salvator	2.0x
<b>pes stratus</b>			
pt	C140Q	et	0.85x

<b>subpunctis</b>			
su2 Cf.		ci	
su3 Cf.		ci1	
su1sut1 Cf.		ciS	
sut2 Cf.		ciS1	
suu1su2 Cf.		visu1su2	
su1suw1 Cf.		ciM	
su1sux1 Cf.		ci>	
su1sut2 Cf.		visu1sut2	
su1suu1 Cf.		visu1suu1	
su2suw1 Cf.		visu2suw1	
su2sux1 Cf.		vi-su2sux1	
sut1su2 Cf.		visut1su2	
sut1suw1 Cf.		pe-1sut1suw1	
sut3 Cf.		visut3	
suv1su2 Cf.		visuv1su2	
sut4 Cf.		visut4	
sut5 Cf.		peSpt2sut5	
su1suv1 Cf.		visu1suv1	
suu2su2 Cf.		vi-su2su2	
suu1su1sut2 Cf.		qi-ppt1suu1su1sut2	
suu1sut1su2 Cf.		vi-su1sut1su2	
sut2su2 Cf.		visut2su2	
su1sut3 Cf.		pesu1sut3	
su2suv1 Cf.		pesu2suv1	
sut3suw1 Cf.		visut3suw1	
sut3sux1 Cf.		bv-sut3sux1	
su1sut1sux1 Cf.		visu1sut1sux1	
su1sut1su2 Cf.		visu1sut1su2	
su1sut1su1sut1 Cf.		visu1sut1su1sut1	
sut1sux1 Cf.		visut1sux1	
su4 Cf.		vi-su4	
su1sut2su1 Cf.		vi-su1sut2su1	
su1sut1suy1 Cf.		visu1sut1suy1	
sut3suy1 Cf.		visut3suy1	
sut2suy1 Cf.		visut2suy1	
su5 Cf.		visu5	
su1suu1su2 Cf.		visu1suu1su2	
su1suu2 Cf.		vi-su1suu2	
su1suu1su1 Cf.		vi-su1suu1su1	
su3sut1 Cf.		pe-su3sut1	
suu2 Cf.		ql-ppt1suu2	
su2sut1 Cf.		vi-su2sut1	
su2suy1 Cf.		pe-su2suy1	
suw2 Cf.		pe-1suw2	
sut2suu1 Cf.		ql-ppt1sut2suu1	
suu3 Cf.		vi-su3	
suu5 Cf.		vippt2suu5	
su1 Cf.		ci	
sut1 Cf.		ciS1	
su1suv1su2 Cf.		ql-ppt2su1suv1su2	
sut1suu1 Cf.		vi-sut1suu1	
suv1su1sut1 Cf.		pesuv1su1sut1	
<b>prepunctis</b>			
pp2 Cf.		vi-pp2	
ppu2 Cf.		scS	
ppt2 Cf.		sfs	
ppu3	C47I	Sede	
ppu4	C58A	Domine	
ppu5	C50G	confregit	
pp4	C780	escam	
pp3 Cf.		pp4	
ppt3 Cf.		vi>ppt3	
ppt4	N69G	amin.	
ppt5	A56C	videant	
pp1 Cf.		vi-pp2	
<b>combined glyphs</b>			
cl!pi	C82R	Domine	
cl!pilscl1st3	C89T	manum	
cl!pilscl2	C149A	cantabo	
cl!pisu1st2	H30T	pauperes	2.0x

cl!pisu1 Cf. <sup>T</sup>	cl!pisu1st2 minus letter
cl!pr	G51S ipsa <span style="border: 1px solid black; padding: 2px;">0.85x</span>
cl!pi	E35E illis <span style="border: 1px solid black; padding: 2px;">2.166x</span>
ql!cl	C148A Domine
ql!cl!cl> Cf. <sup>u</sup>	ql!cl!cl>ppt1 minus tractulus
ql!cl!pi Cf. <sup>u</sup>	ql!cl!pippt1 minus tractulus
ql!pf-	G42D mane <span style="border: 1px solid black; padding: 2px;">0.85x</span>
ql!pf	G35D Domine
ql!cl-	C26A Alleluia
ql!clM Cf. <sup>u</sup>	ql!clMppt1 minus tractulus
ql!cl-> Cf. <sup>u</sup>	ql!cl->ppt1 minus tractulus
ql!cl>	H26L salva <span style="border: 1px solid black; padding: 2px;">0.5x</span>
ql!cl>1	H411D nomen <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql!po	C148V nostro
ql!po-1	C148A Alleluia.
ql!po>	H33I terram
ql!vs	C148A refugium
ql!vssu2 Cf. <sup>u</sup>	ql!vsppt1su2 minus tractulus
ql!vssut2 Cf. <sup>u</sup>	ql!vssppt1sut2 minus tractulus
qi!vs Cf. <sup>u</sup>	qi!vssu2 minus subbipunctis
qi!vssu2 Cf. <sup>u</sup>	qi!vsppt1su2 minus tractulus
qi!vssu1sut2 Cf. <sup>u</sup>	qi!vsppt1su1sut2 minus tractulus
ql-su1suu1 Cf. <sup>u</sup>	ql-ppt1su1suu1 minus tractulus
ql-su1suv1su2 Cf. <sup>u</sup>	ql-ppt2su1suv1su2 minus tractulis
qisu2	E166C sermones <span style="border: 1px solid black; padding: 2px;">2.0x</span>
qisut2 Cf. <sup>u</sup>	qippt2sut2 minus tractulis
ql-su3 Cf. <sup>u</sup>	ql-ppt1su3 minus tractulus
qlsut3 Cf. <sup>u</sup>	qlppt1sut3 minus tractulus
qlsu2 Cf. <sup>u</sup>	qlppt1su2 minus tractulus
ql-su2 Cf. <sup>u</sup>	ql-ppt1su2 minus tractulus
ql-sut2	H73S cedebat
ql-su1sux1 Cf. <sup>u</sup>	ql-ppt1su1sux1 minus tractulus
ql-su1sut2 Cf. <sup>u</sup>	ql-ppt1su1sut2 minus tractulus
ql-sut1sux1	H72H complacui
ql-suu2 Cf. <sup>u</sup>	ql-ppt1suu2 minus tractulus
ql-sut2su1 Cf. <sup>u</sup>	ql-ppt1sut2su1 minus tractulus
ql-sut2suu1 Cf. <sup>u</sup>	ql-ppt1sut2suu1 minus tractulus
qi-su2	H73S cedebat
qi-su1sut2 Cf. <sup>u</sup>	qi-ppt1su1sut2 minus tractulus
qi-su1su1sut2 Cf. <sup>u</sup>	qi-ppt1su1su1sut2 minus tractulus
qi-su1sux1	H26G certamine <span style="border: 1px solid black; padding: 2px;">1.7x</span>
ql-su1suu2	H34F facinora <span style="border: 1px solid black; padding: 2px;">1.71x</span>
qi!cl	C82B spiritu
qi!cl-	C148A factus
qi!cl>	H77S Magi
qi!cl->	H2590 sanctor <span style="border: 1px solid black; padding: 2px;">2.0x</span>
qi!po	H87E Deus
qi!po>	H173C aduersum <span style="border: 1px solid black; padding: 2px;">1.9x</span>
pf!clM-ppt1	E3270 narante <span style="border: 1px solid black; padding: 2px;">2.166x</span>
cl!po>ppt1	E3270 narante <span style="border: 1px solid black; padding: 2px;">2.166x</span>
qlppt1	C38T Sede
qippt1	C37A Domine
qi!clppt1	C88T hostias,
ql-ppt1	C26D laetitia.
ql>ppt1	C38T virtutis
qi>ppt1	C60S terram.
qisut1sux1	H269S linguarum
qlsut2	H269D alleluia
qi-sut2	H269D alleluia
qi-ppt1su1sut2	H269R magnalia
qi-ppt1suu1su1sut2	H392L visitasti <span style="border: 1px solid black; padding: 2px;">1.5x</span>
ql!cl>ppt1	H730 aurum
ql!clppt1	C39B Domini:
ql!cl!cl>ppt1	E133I corda <span style="border: 1px solid black; padding: 2px;">2.166x</span>
ql!cl!pippt1	E31T maris <span style="border: 1px solid black; padding: 2px;">2.166x</span>
ql!cl-ppt1	C40A terram.
ql!clMppt1	E324R tuum <span style="border: 1px solid black; padding: 2px;">2.166x</span>
ql!cl->ppt1	G132A Alleluia. <span style="border: 1px solid black; padding: 2px;">0.85x</span>
ql!clSppt1	H239R qui <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql!clS Cf. <sup>u</sup>	ql!clSppt1 minus tractulus
ql!clS-2ppt1sut1	E3D et. <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql!clS-2sut1 Cf. <sup>u</sup>	ql!clS-2ppt1sut1 minus tractulus
ql!clS-2ppt1 Cf. <sup>u</sup>	ql!clS-2ppt1sut1 minus tractulus
ql!clS-2 Cf. <sup>u</sup>	ql!clS-2ppt1sut1 minus 2 tractulis

ql!poppt1	C59D Domine.
ql!po-1ppt1	C58A homo.
ql!po~ppt1	H179L pauperem
ql!po~ Cf. <sup>u</sup>	ql!po~ minus tractulus
ql-ppt1su2	H72V Jerusalem
ql-ppt1su1sux1	H730 Reges
ql-ppt1su1sut2	H75I patris
ql-ppt1suu2	H72H Hic
ql-ppt1sut2su1	H414E faciat <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql-ppt1sut2suu1	H16M altissimi <span style="border: 1px solid black; padding: 2px;">1.7x</span>
ql!vsppt1su2	H730 Domino
ql!vsppt1 Cf. <sup>u</sup>	ql!vsppt1su2 minus subbipunctis
ql!vsppt1sut2	H73S gaudio
qi!vsppt1su2	H74I Domini
qi!vsppt1su1sut2	H392L viderent <span style="border: 1px solid black; padding: 2px;">1.5x</span>
qi-sut3	H322B in <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql-ppt1su1suu1	H305H David <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql-ppt1su3	H323D subire <span style="border: 1px solid black; padding: 2px;">2.0x</span>
qlppt1sut3	H305G Redemptorem <span style="border: 1px solid black; padding: 2px;">2.0x</span>
qlppt1su2	E166C secundum <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql-ppt2su1suv1su2	H306N illustrat <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql-su1sut1	H307F iustitiae <span style="border: 1px solid black; padding: 2px;">2.0x</span>
qippt2sut2	H297B generationes <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ql!vssu3	H443V ei <span style="border: 1px solid black; padding: 2px;">2.0x</span>
to!ciG	E51R eum <span style="border: 1px solid black; padding: 2px;">2.0x</span>
to!ciG	C28T gloriae.
to!cl	C84T pupillo
to!cl!cl!cl	C64Q sepavit,
to!cl>	H407P huius <span style="border: 1px solid black; padding: 2px;">2.0x</span>
to!cl!po	E31T veritas <span style="border: 1px solid black; padding: 2px;">2.166x</span>
to!cl!po-1	N100T veritas
to!cl!pi	C45S mea
to!cl-	N86D propterea
to!cl-!cl-	C54A Adducentur
to!cl-1	C45S filiis
to!cl->	H49C aeternum <span style="border: 1px solid black; padding: 2px;">2.0x</span>
to!clS	C43A terram.
to!clM1ss8	H406D mihi <span style="border: 1px solid black; padding: 2px;">2.0x</span>
to!clM Cf. <sup>u</sup>	to!clM1ss8 minus letter
to!cl!cl	C43A Domini,
to!po	C64Q sagitta
to!posu2	C49I eo,
to!pr	G11V Deo <span style="border: 1px solid black; padding: 2px;">0.85x</span>
to!pi	C60C tui.
toSsu2	H72H mihi
toS!cl-lsi8	H398E Domine <span style="border: 1px solid black; padding: 2px;">2.0x</span>
toS!cl- Cf. <sup>u</sup>	toS!cl-lsi8 minus letter
toS!cl1si8	H398E sapientiam <span style="border: 1px solid black; padding: 2px;">2.0x</span>
toS!cl Cf. <sup>u</sup>	toS!cl1si8 minus letter
pf!cl-	G51I meus
pf!clM- Cf. <sup>u</sup>	pf!clM-ppt1 minus tractulus
pf!pr	G9A Alleluia
cl!po> Cf. <sup>u</sup>	cl!po>ppt1 minus tractulus
cl!cl>1	N67G mundi
cl!clSsut2	E256C psallite <span style="border: 1px solid black; padding: 2px;">2.166x</span>
cl!clS Cf. <sup>u</sup>	cl!clSsut2 minus 2 tractulis
cl!po	C26A nobis.
cl!po-1	H119C in
tr-1su2	H730 dona
trSsut2	H305H devotissime <span style="border: 1px solid black; padding: 2px;">2.0x</span>
ci-pp2	H73S magno
toS2su2	H73S eam
toS2sut2	C150L dicta
to-1su2	H322C ostendere <span style="border: 1px solid black; padding: 2px;">2.0x</span>
to-1su1	H323B Gallus <span style="border: 1px solid black; padding: 2px;">2.0x</span>
to-1suu1	H173I me <span style="border: 1px solid black; padding: 2px;">1.8x</span>
to-1suu1su2	H324V cognovi <span style="border: 1px solid black; padding: 2px;">2.0x</span>
po-1pp2su1sux1	H323D desiderium <span style="border: 1px solid black; padding: 2px;">2.0x</span>
po-1su1sux1 Cf. <sup>u</sup>	po-1pp2su1sux1 minus bipunctis
pisu1	H307N annuntiavit <span style="border: 1px solid black; padding: 2px;">2.0x</span>
pisut1	C153B Alleluia
piM1sut1	H338D ad <span style="border: 1px solid black; padding: 2px;">2.0x</span>
pq-su2	C132D praetioso
pe!vi	C57B qui

ts	tgsuu1	C49I	eum.	
ts	tgSsuu1	C57B	nimis.	
ts	bv-sut2	H179U	fuisset.	1.75x
ts	bv-sut3sux1	H406A	favilla	2.0x
ts	sa-su1sut1	H296S	electa	2.0x
ts	sa-su2sut1	C49I	eum	
ts	peSppt2sut5	H401A	multiplicentur	2.0x
ts	peSppt2 Cf. ✓		peSppt2sut5 minus subpunctis	
ts	peSsut5 Cf. ✓		peSppt2sut5 minus prepunctis	
ts	vippt2suu5	H405S	me	2.0x

#### significantive letters

am	lsam	C87E	abstraxisti	altius	
z	lsal	E20E	Sion,	altius mediocriter	2.166x
t	lsb	C39B	Domino	bene	
c	lsc	C27E	eius	celeriter	
c	lscw	C148V	nostro.	celeriter (wide form)	
o	lSCO	C134B	nomen	coniunguntur	
cm	lscm	C58A	oblivio	celeriter mediocriter	
d	lsd	E11C	Virgo	deprimatur	1.85x
e	lse	C84T	adiutor	equaliter	
e	lseq	H266D	si	equaliter (wide form)	
q	lseq	C64Q	viis	equaliter	
fid	lsfid	E16B	Domino	fideliter	2.166x
f	lsfr	C58A	non	frendor	
g	lsg	C27Q	ovem	guttare	
i	lsi	C87E	Domine	iusum	
im	lsim	E336I	universa	iusum mediocriter	2.166x
iv	lsiv	E92I	misericors	iusum valde	2.166x
k	lsk	C62M	confidit	klenge	
l	lsl	C38T	Tecum	levare	
lb	lslb	C58A	non	levare bene	
lc	lslc	E151A	ab	levare celeriter	2.166x
len	lslen	C59D	servitui.	leniter	
lm	lslm	C38T	Tecum	levare mediocriter	
lp	lslp	E161S	dicit	levare parvum	2.166x
lt	lslt	E148L	Laudate	levare tenete	2.0x
m	lsm	C38T	principium	mediocriter	
moll	lsmoll	E33V	finis	molliter	2.166x
p	lsp	C64Q	altissimi	parvum	
par	lspar	E104S	miserere	paratim	2.166x
pfec	lspfec	E2D	fructum	perfecte	2.166x
pm	lspm	C40V	suam.	parvum mediocriter	
pulcre	lspulcre	E64L	hac	pulcre	2.0x
r	lss	C27E	sanctos	sursum	
rb	lssb	C40V	iustitiam	sursum bene	
rc	lssc	C84T	Tibi	sursum celeriter	
simil	lssimil	E193D	ne	similiter	2.166x
simul	lssimul	E42A	sumus.	simul	2.166x
sm	lssm	C59D	Si	sursum mediocriter	
st	lsst	C87E	Domine	sursum tenere	
st	lssta	C27E	Congregate	statim	
t	lst	C39B	Domino	tenete	
t	lstw	C58A	non	tenete (wide form)	
tb	lstb	C39B	Domino	tenete bene	
tm	lstm	E3D	tu	tenete mediocriter	2.166x
v	lsv	E1310	semper	valde	2.0x
vot	lsvol	C58A	aeternum	volubiliter	
x	lsx	C87E	me:	expectare	

# manuscript sources of the grelaon font

The list of glyphs uses following abbreviations for manuscript references; the page number is always for the start of some antiphon, responsory, mass propers, even when the actual neume is on a later page. At the end of lines, GT stands for Graduale Triplex, Solesmes, 1979, OT for Offertoriale Triplex, Solesmes, 1985, GN for Graduale Novum de Dominicis et Festis, Conbrio Verlag Regensburg, 2011, followed by page number which also contains the corresponding propers, antiphons or responsories.

All the grelaon font glyphs taken from the LAON\_BM\_ms239 codex with the permission from the Bibliothèque municipale de la ville de Laon <http://manuscrit.ville-laon.fr>, the picture fragments from there are only present in the font source file to help drawing the glyphs.

## Graduale Laudunensis, codex 239

L1 = [http://manuscrit.ville-laon.fr/\\_app/\\_visualisation.php?cote=Ms239&vue=9](http://manuscrit.ville-laon.fr/_app/_visualisation.php?cote=Ms239&vue=9)

L8U Universi qui te GT16  
L8A Ad te Domine levavi OT5  
L8D Dominus dabit GT17  
L9E Ex Sion species GT18  
L10I Ierusalem surge GT20  
L11Q Qui sedes, Domine GT22  
L13A Ave Maria GT36  
L14P Prope es tu Domine GT24  
L14O Ostende nobis GT31  
L17H Hodie sciētis GT38  
L18L Laetentur caeli GT44  
L19B Benedictus qui venit GT45  
L20P Puer natus est GT47  
L24D Dexterā Domini GT194  
L24T Timebunt gentes GT265  
L25L Laetabitur iustus GT473  
L25M Mirabantur omnes GN232  
L28G Gaudeamus omnes GT545  
L31D De profundis GT673  
L33S Sciant gentes GT88  
L33C Commovisti Domine GT89  
L33P Perfice gressus OT90  
L34E Esto mihi in Deum GT275  
L35T Tu es Deus GT244  
L37M Misereris omnium GT62  
L37S Miserere mei Deus GT63  
L38I lacta cogitatum GT285  
L40Q Qui habitat GT73  
L43L Levabo oculos meos GT78  
L43S Scapulis suis GT77  
L43I Sicut oculi servorum GT77  
L44D Domine refugium GT79  
L44I Dirigatur oratio GT340  
L45R Reminiscere miserationum GT81  
L53C Confitemini Domino GT158  
L54A Adiutor meus GT86  
L54B Benedicam Dominum OT88  
L56D Deus in adiutorium GT315  
L56S Salvum fac populum GT354  
L56I Iustus Dominus GT93  
L56P Propitius esto Domine GT288  
L58A Ad Dominum dum tribularer GT282  
L60E Exsurge Domine GT96  
L60A Ad te levavi GT97  
L61I Iustitiae Domini GT309  
L64O Oculi omnium GT343  
L64D Domine fac mecum OT37  
L67Q Qui biberit aquam GT99  
L67S Si ambulem GT125  
L68N Nemo te condemnavit GT124  
L68Q Qui confidunt GT109  
L71D Dum sanctificatus fuero GT249  
L72B Benedicite gentes GT231  
L75V Videns Dominus GT124  
L76E Eripe me Domine GT121  
L77S Saepe expugnaverunt GT122  
L77C Confitebor tibi Domine GT123

L78H Hoc corpus GT170  
L80S Sperent in te omnes GT286  
L81E Exaltabo te Domine GT112  
L81R Eripe me de inimicis GT129  
L82O Omnia quae fecisti GT342  
L82T Tollite hostias GT272  
L84B Benedictus es, Domine OT48  
L90D Deus Deus meus GT144  
L92E Exsurge Domine GT150  
L93E Erubescant et vereantur GT152  
L93G Ego autem dum mihi GT152  
L94C Custodi me Domine GT154  
L95D Domine, exaudi orationem GT172  
L99P Popule meus quid GT176  
L101V Vineā facta est GT188  
L103R Resurrexi GT196  
L103H Haec dies GT196  
L103P Alleluia Pascha nostrum GT197  
L103T Terra tremuit GT199  
L104I Introduxit vos Dominus GT200  
L105A Angelus Dominus GT217  
L105N Angelus Dominus GT201  
L106S Surrexit Dominus GT207  
L107H Haec dies GT206  
L109P Populus acquisitionis GT210  
L112D Deus Deus meus GT224  
L112O Omnes qui in Christo GT61  
L113E Ego sum pastor GT224  
L114C Cantate Domino GT225  
L114V Vocem iucunditatis GT229  
L117R Repleti sumus GT441  
L118E Ego sum vitis vera GT228  
L122N Non vos relinquam GT232  
L122V Viri Galilaei OT172  
L123A Ascendit Deus GT237  
L123E Exaudi Domine vocem GT241  
L125U Ultimo festivitatis GT251  
L125S Spiritus Domini GT252  
L126F Factus est repente GT256  
L128S Spiritus ubi vult spirat GT218  
L132E Ecce quam bonum GT351  
L136A Amen dico vobis quod vos GT436  
L138S Semel iuravi GT492  
L144C Clamaverunt iusti GT454  
L149E Ego dixi Domine GT279  
L149C Cantabo Domino qui bona GT283  
L152S Sicut in holocausto GT299  
L152I Inclina aurem tuam GT300  
L164D De profundis GT368  
L168I Iubilare Deo GT258  
L168S Specie tua GT416  
L168L Laudate Deum GT262  
L169A Adorabo ad templum GT270  
L173D Deus iudes iustus GT286  
L174D Domine in virtute tua GT292  
L174I In te Domine speravi GT296  
L174O Omnes gentes plaudite manibus GT298  
L174T Te dece hymnus GT305

	<b>uncinus</b>		
u	un	L78H	testamenti
u	un1	L78H	calix
u	un2 Cf. 7	un2lsm1	minus letter
u	un2lsm1	L820	fecisti
u	unlsm1	L75V	qui
u	unlst1	L103R	alleluia
u	unlst2	L820	fac
u	unlst8	L24D	opera
u	un1lst8	L1120	Christo
u	unlsm2lss3lst8	L43S	scuto
	<b>punctum</b>		
.	pu	L820	iudicio
.	pu1	L56D	revereantur
.	pulsnt3	L75V	flentes
	<b>virga</b>		
v	vi	L820	Domine
v	viS Cf. 7	vipp2su2	minus punctis
v	vi>	L78H	in
v	vi>1 Cf. 7	vi>1lsa2lsc8	minus letters
v	vi>2	L820	nobiscum
v	vilst1	L78H	meam
v	vilst2	L95D	meus
v	vilst9	L105A	quaeritis,
v	vilss1	L103P	Alleluia.
v	vilss2	L95D	avertas
v	vilstst1	L103P	Alleluia.
v	vilst2lsa8	L95D	eius.
v	vi>lsa6	L78H	testamenti
v	vi>lsc6	L56D	adiuvandum
v	vi>1lsa2lsc8	L126F	loquentes
	<b>tractulus</b>		
t	ta	L24T	tuam.
t	ta>	L78H	dicit
t	ta>1	L820	mandatis
t	ta>2	L90D	sancto
t	ta>lsn12	L45R	dominentur
t	ta>2lsc2	L90D	Libera
	<b>pes</b>		
p	pe	L78H	commemorationem
p	peG	L78H	vobis
p	pe>	L95D	exaudi
p	pe>1	L78H	sanguine
p	peG1	L67S	tua,
p	pelsa2	L820	peccavimus
p	pelsc2	L67S	tuus,
p	pels12	L43L	iustitiam
p	pelsm2	L81E	meam,
p	pelsn2	L149C	qui
p	pelsn3	L125S	replevit
p	pelsst1	L103P	immolatum
p	pelsst1lsm4	L44I	Elevatio
p	pelst2	L103H	saeculum
p	peGlsf1	L67S	non
p	peGlsa6	L109P	vocavit
p	pe>1lsa6	L114V	alleluia
	<b>porrectus</b>		
p	po	L78H	facite
p	poG	L64D	mecum
p	poM Cf. 7	poMsun1	minus uncinus
p	po> Cf. 7	po>pp2	minus prepunctis
p	po>1	L81E	descendentibus
p	polsf2lst3	L95D	meus
p	polst2	L103H	saeculum
	<b>clivis</b>		
c	cl Cf. 7	c1lsn9	minus letter
c	clG	L78H	hoc
c	clG1	L105N	accedens
c	clGlsa5	L820	obedivimus
c	clGlsn12	L44I	Elevatio
c	clM	L78H	quotiescumque
c	cl>	L75V	monumentum
c	cl>1	L34E	locum
c	c1lshn8	L640	imples

c	c1lsn8	L95D	velociter
c	c1lsn9	L67S	tua,
c	c1lssst8	L640	imples
c	c1lst9	L95D	tempus
c	c1lssst6	L43L	mirabilia
c	c1lsm2	L45R	nobis
c	c1lsnt2	L92E	me
c	cl>lsa5	L71D	effundam
	<b>oriscus-clivis</b>		
o	oc	L78H	sanguine
o	ocG	L56D	Deus
o	ocG1	L11Q	veniet
o	ocGlsa5	L103T	resurgeret
o	oclst8	L95D	Domine
	<b>torculus</b>		
t	to	L78H	pro
t	toS	L56S	populum
t	toS1	L68N	Nemo
t	toG	L78H	tradetur
t	to>	L67S	mortis
t	to	L37M	et
t	tolstf4	L95D	tempus
t	tolstn8	L44I	vespertinum.
t	tolst9	L103P	Alleluia.
t	tolst8	L56I	Dominus,
t	tolst2lst9	L92E	me
t	toGlsa1lst8	L109P	alleluia.
t	toGlsa5	L68N	condemnabo
t	toSlsa5	L77S	enim
t	to>lsa5	L118E	in
t	to>2lsa3	L67Q	salientis
t	to>2lsc1lsa3	L104I	terram
	<b>climacus</b>		
c	ci	L95D	eius.
c	unsun2	L820	da
c	unsun3	L103P	immolatus
c	unsux1	L169A	sanctum
c	unsun1su2	L109P	tenebris
c	pusu1sun1	L78H	tradetur
c	pusu1sun2	L95D	Sion
c	pusu2sun1	L95D	eius.
c	visu1sun1	L95D	faciem
c	visu1sun2	L40Q	latere
c	visu1sun2lsa5	L174D	et
c	visu1sun2lsa6	L174D	et
c	visu1sun1su1 Cf. 7	visu1sun1su1lst6	minus letter
c	visu1sun1su1lst6	L105N	descendit
c	visu1sun1su2 Cf. 7	visu1sun1su2lss1lst6	minus letters
c	visu1sun1su2lss1lst6	L168I	Alleluia.
c	visu2	L95D	misereberis
c	visu1su1sun1	L60E	conspectu
c	visu1su1sun1lst6	L35T	virtutem
c	cilsf1	L95D	Sion
c	cilsn8	L58A	iniquis,
c	pusu1sun1lsf1	L95D	mei
c	pusu1sun2lsa5	L67S	timebo
c	pusu1sun1lst7	L60E	homo
c	pusu3	L640	escam
c	pusu4	L92E	persequuntur.
c	unsun2su1	L640	escam
c	unsun1su1 Cf. 7	unsun1su1lst2lsc6	minus letters

unsun1su11st2lsc6	L11Q	deducis
unsun21sa5	L19B	mirabile
unsun31sa3	L24T	gentes
unsun31sa6	L24T	tuam.
unsun2su2	L169A	confitebor
un1sun2su2	L136A	aeternam
un1sun1su1sun11sa11lsc4	L60E	retrorsum
un1sun1su1sun11sa3lsc6	L60E	retrorsum
un1sun1su2 Cf.	un1sun1su21sa5	minus letter
un1sun1su21sa5	L107H	Domini
<b>scandicus</b>		
sc Cf.	sc1st2	minus letter
sc1	L820	quia
sc1st2	L78H	quotiescumque
sc1lsc4	L109P	vocavit
<b>porrectus flexus</b>		
pf	L78H	corpus
pf1	L95D	exaudi
pf2	L101V	Sorec,
pfS	L56D	festina
pfM Cf.	pfM1smd3	minus letter
pfM1smd3	L81E	meam,
pf>	L164D	ad
pf>1	L90D	miserunt
pf>2	L104I	alleluia,
pf	L95D	clamor
pf 1	L31D	ad
<b>pes subbipunctis</b>		
tosu1	L820	Domine
tosun1	L95D	fumus
tosun2	L105N	revolvit
vippn1su2	L820	misericordiae
topp1su1 Cf.	topp1su11sa6	minus letter
topp1su11sa6	L95D	ad
pesu2 Cf.	pesu21st3	minus letter
pesu21st3	L152I	eruas
pesun3 Cf.	pesun31ss11sa3	minus letters
pesun31ss11sa3	L67S	medio
pesu2sun1	L24T	terrae
tosun11sa5	L67S	tua,
tosu11sc5	L19B	venit
toSsun11sa5	L138S	luna
tosun1su1sun1	L33S	venti.
tosun1su21sn31st6	L112D	nomine
tosun21sa6	L123A	alleluia.
<b>scandicus flexus</b>		
sf	L78H	meo
sfG	L33C	eam.
<b>torculus resupinus</b>		
tr	L78H	sumitis
trS	L95D	Domine,
tr>	L64D	diligent
poppn1	L820	vero
po>ppn1	L820	secundum
po>ppn1ppz1	L18L	faciem
po>pp2	L28G	angeli,
trlst31shp7	L109P	alleluia.
tr1ss11ss3	L103P	Christus.
trS1sc1	L103P	nostrum
<b>distropha</b>		
ds Cf.	ds1st2	minus letter
ds1st2	L95D	meam
ds1st8	L71D	effundam
ds1 Cf.	ds1pp3	minus prepunctis

<b>tristropha</b>			
ts	L820	fac	
ts1	L76E	Eripe	
ts>	L56D	adiuvandum	
ts>1	L103R	alleluia	
ts1sa2	L13A	tecum	
ts1sc21st2	L58A	Domine,	
ts>1sc2	L103R	alleluia	
ts>1sc6	L103T	dum	
<b>trigonus</b>			
tg	L67S	tua,	
tg1sn8	L67S	mala	
tg1st9	L103R	alleluia	
<b>bivirga</b>			
bv	L820	Domine	
bv1sa2	L820	nobis	
<b>trivirga</b>			
tv	L103H	bonus	
tv1sm2	L44I	Elevatio	
<b>pressus</b>			
pr	L95D	veniat	
pi Cf.	c11!pi	minus clivis	
<b>virga strata</b>			
vs	L64D	Deus	
vsG	L64D	suavis	
<b>oriscus</b>			
or Cf.	ocG	minus uncinus	
or1st3	L103P	Alleluia.	
or1 Cf.	ocG1	minus uncinus	
or> Cf.	or>1sa1	minus letter	
or>1sa1	L103R	alleluia,	
<b>salicus</b>			
sa	L820	nomini	
sa1	L78H	novi	
sa>1	L9E	sanctos	
salsc4	L93G	exsurge	
salsc6	L93G	autem,	
sa11sc4	L81E	salvasti	
sa11sc6	L113E	bonus,	
<b>pes quassus</b>			
pq	L103H	eius.	
pq1	L169A	Alleluia.	L174T
<b>quilisma</b>			
q1 Cf.	q11sst2	minus letter	
q11sst2	L53C	Domine,	
q1> Cf.	q1>ppn1	minus uncinus	
<b>pes stratus</b>			
pt1	L13A	ventris	
pt2	L8U	confundentur,	
pt3	L94C	Domine.	
<b>subpunctis</b>			
su1 Cf.	c11!pi!	tosu1	
su1sun1 Cf.	c1!topp21su1sun1		
su1sun1su1 Cf.	visu1sun1su11st6		
su1sun1su2 Cf.	visu1sun1su21ss11st6		
su1sun2 Cf.	pusu1sun2		
su1sux1 Cf.	popp2su1sux1		
su2 Cf.	c11!pi!	pesu2	
su2sun1 Cf.	clsu2sun11st6		
su3 Cf.	pusu3		
su4 Cf.	pusu4		
sun1 Cf.	c11!pi!	orsun1	
sun1su1 Cf.	unsun1su11st2lsc6		
sun1su1sun1 Cf.	visun1su1sun1		
sun1su2 Cf.	qlppn1sun1su2		
sun2 Cf.	qlsun2		
sun2su1 Cf.	unsun2su1		
sun2su2 Cf.	unsun2su2		

sun3 Cf.	unsun3
sun4 Cf.	bvsun4
sux1 Cf.	posux1
<b>prepunctis</b>	
pp1 Cf.	pupp1su2
pp2 Cf.	cl1!pipp2
pp2ppn1 Cf.	vipp2ppn1
pp3 Cf.	vipp3lsn3
pp4 Cf.	vipp4lst2
ppn1 Cf.	po>ppn1
ppn1pp1 Cf.	vippn1pp1
ppn1pp1ppz1 Cf.	vippn1pp1ppz11st8
ppn1ppq1 Cf.	vippn1ppq1
ppn1ppz1 Cf.	ql!cl!orppn1ppz1
ppn1ppz1ppq1 Cf.	vi>1ppn1ppz1ppq1
ppn2 Cf.	vippn21st3lsa4
ppn2ppz1 Cf.	vippn2ppz1sun1lsa5
ppn2ppz1ppq1 Cf.	vippn2ppz1ppq11st2lsa8
ppn3 Cf.	unppn3sun1lsa5
ppn3ppz1 Cf.	toppn3ppz1sun1
ppn4 Cf.	vippn4
ppq1 Cf.	vippq1
ppz1 Cf.	puppz1su2
ppz1ppq1 Cf.	vi>1ppz1ppq1
<b>combined glyphs</b>	
pe!ta Cf.	pe!talsa2 minus letter
pe!talsa2	L820 iudicio
pe!talsc11st2	L114C revelavit
pe!un Cf.	pe!unlsc2 minus letter
pe!unlsc2	L95D meam
pe!pu	L95D eius.
pe!ta>2 Cf.	pe!ta>2lsa2 minus letter
pe!ta>2lsa2	L60E gentes
pe!or	L93G induebam
qlppn1sun1	L53C Domino,
qlppn1sun1su2	L820 tibi
qlppn1su1sun2	L95D frixorio
qlppn1su2 Cf.	qlppn1su21sn11 minus letters
qlppn1su21sn11	L75V mortuus.
qlppn1sun1lsc5	L54B quoniam
qlppn1su1sun1	L107H fecit
qlsu1sun1	L43L tua
qlsu1sux1	L71D aquam
qlsu2	L67S tua,
qlsux1	L53C quoniam
qlsun1su2	L44I mearum
qlsun1 Cf.	qlsun1lsa5 minus letter
qlsun1lsa5	L40Q millia
qlsun2	L122N alleluia.
qlsun2lsa5	L125U alleluia.
ql!po	L820 obedivimus
ql!poppz1 Cf.	ql!poppz1lsa3 minus letter
ql!poppz1lsa3	L95D Domine,
ql!poppn1	L43L Domine,
ql!posu1sun1 Cf.	ql!poppz1su1sun1 minus uncinus
ql!poppz1su1sun1	L43L mandata
ql!posun1 Cf.	ql!poppn1sun1 minus uncinus
ql!poppn1sun1	L61I Iustitiae
ql!poppn11st2	L103P Alleluia.
ql!posux1 Cf.	ql!poppn1sux1 minus uncinus
ql!poppn1sux1	L61I corda,

ql!polsm1	L103P immolatus
ql!polsa1lsa3lsa9	L56P nostris
ql!po> Cf.	ql!po>ppn1 minus uncinus
ql!po>ppn1	L60A ancillae
ql!cl	L43L doceas
ql!cl!to Cf.	ql!cl!to1st6 minus letter
ql!cl!to1st6	L95D me.
ql!cl!to!or Cf.	ql!cl!to!orsun1 minus uncinus
ql!cl!to!orsun1	L19B nobis.
ql!cl!toppn1	L72B vitam,
ql!cl!tosu3 Cf.	ql!cl!tosu31st6 minus letter
ql!cl!tosu31st6	L82T hostias,
ql!cl!or Cf.	ql!cl!orppn1ppz1 minus uncinus & virga
ql!cl!orppn1ppz1	L109P Populus
ql!cl!tr> Cf.	ql!cl!tr>ppz1 minus virga
ql!cl!tr>ppz1	L54B vias
ql!clppn1	L54B a
qlppn1	L820 nomini
qlppn1ppz1	L820 gloriam
qlppn1ppz11st2	L820 da
qlppn1ppz1sun1 Cf.	qlppn1ppz1sun1lsa5 minus letter
qlppn1ppz1sun1lsa5	L54B mihi
qlppn1ppz1su1sun1	L43I dominorum
qlppn2sun1 Cf.	qlppn2sun1lsa5 minus letter
qlppn2sun1lsa5	L53C Beati
qlppn2sun2 Cf.	qlppn2sun2lsa51sa5 minus letters
qlppn2sun2lsa51sa5	L122V sic
qlppz1su2	L40Q draconem.
qlppz1su1sun1	L53C nos
ql>ppn1	L95D confrixa
ql>ppn1lsc3	L90D speraverunt
popp2	L820 multitudinem
popp2su1sux1	L8U confundentur,
posux1	L20P eius
posux1lsa5	L114V alleluia,
posun1lsa5	L123A alleluia.
poMsun1	L81E meos
posu1sun1	L123E alleluia.
vippn1su1	L56D Deus
vippn1sux1	L53C Memento
vippn1su1sun1	L45R tuae,
vippn1su1sun11st2	L95D Domine,
vippn2sun1 Cf.	vippn2sun1lsa4 minus letter
vippn2sun1lsa4	L44I mea
vippn2 Cf.	vippn2lsa4 minus letter
vippn21sc4	L56D quaerunt
vippn21sa4	L44I Elevatio
vippn21st3lsa4	L103P Alleluia.
vippn3	L38I Domino,
vippn4	L60E homo
vipp2ppn1	L13A gratia
cl!pe Cf.	cl!pe1sc2 minus letter
cl!pe1st2	L95D sum
cl!pe1sc2	L105A Domini
cl!pe1sn7	L103H ea.
vipp2su2	L43L mihi
vipp2sun1lsa5	L168L eum
vipp3 Cf.	vipp31sn3 minus letter



vipp3lsn3	L152S	Sicut
vippn1pp1	L11Q	Israel,
vippn1pp1su1sun2	L40Q	volante
vippn3su4	L173D	Alleluia.
vipp4 Cf.	vipp41st2	minus letter
vipp41st2	L13A	Ave
vippz1ppq1	L40Q	lapidem
vippn1ppq1	L33S	venti.
vippn1ppz1ppq1	L101V	Israel
vippn1pp1ppz1 Cf.	vippn1pp1ppz11st8	minus letter
vippn1pp1ppz11st8	L25M	ore
vippn2ppz1ppq1 Cf.	vippn2ppz1ppq11st21sa8	minus letters
vippn2ppz1ppq11st21sa8	L169A	confitebor
vippn2ppz1sun11sa5	L173D	Alleluia.
vippn3sun11sa5	L173D	Alleluia.
vippq1	L168S	regna.
cl1!or Cf.	cl1!orlss3	minus letter
cl1!orlss3	L60E	iudicentur
cl1!orlsc3	L60E	conspectu
cl1!pi	L95D	avertas
cl1!pi>	L53C	misericordia
cl1!pi!to	L820	fecisti
cl1!pi!vi	L95D	Domine,
cl!pi!vi>	L67S	Virga
cl1!pi!cl	L640	implebis
cl1!pi!pesu2	L61I	dulciora
cl1!pilsn31sa6	L174I	me
cl1!pilsn8	L53C	iudicium,
cl1!pilsn9	L640	Aperis
cl1!pilst9	L90D	Longe
cl1!pipp2	L60A	Deum
cl1!pi!orsun1	L90D	Israel.
cl!po	L67S	es,
cl!popp3	L122V	ascendentem
cl!to	L17H	eius.
cl!tosu1	L17H	eius.
cl!tosu1lsc6	L81E	me
cl!tosu1lsc61st8	L81E	me
cl!topp2	L64D	misericordia
cl!toppz1su1sun1	L35T	Israel
cl!tolst9	L56I	dilexit
cl!to>	L56I	aequitatem
cl!tosun11sa5	L164D	meam.
cl!to!pi Cf.	cl!to!pipp2	minus prepunctis
cl!to!pipp2	L33C	arcus,
cl!to!pi!cl	L77S	Israel
cl!to!pi!clpp2	L33C	eius,
cl!to!pi!clpp21sn9	L68Q	Sion
cl!to!cl!cl	L81R	meis,
to!cl	L95D	Domine,
to!cl!cl Cf.	to!cl!cl1st9	minus letter
to!cl!clsun2 Cf.	to!cl!clsun21sa5	minus letter
to!cl!clsun21sa5	L43L	tuam
to!cl!cl1st9	L8A	invocavite.
to!cl!clsu1	L33P	meam.
to!cl!pi	L84B	iniqui
to!cl!orsun1	L114V	terrae
to!clsun1	L54B	quoniam
to!clsun11sa5	L11Q	Ioseph.
to!clsu2 Cf.	to!clsu21sn6	minus letter
to!clsu21sn6	L8D	dabit
to!clsuisun1 Cf.	to!clsuisun11sm6	minus letter
to!clsuisun11sm6	L24D	opera
clsu2sun11st6	L35T	tuam.

to!clM	L77C	corde
to!cl>1	L77C	tuum,
to!po	L84B	Appropinquaverunt
to!pohd	L105A	quaeritis,
to!to Cf.	to!toppn1sun1	minus 2x uncinus
to!tosun1 Cf.	to!toppn1sun1	minus uncinus
to!toppn1sun1	L43L	discam
to!to!pi!cl Cf.	to!to!pi!clpp2	minus prepunctis
to!to!pi!clpp2	L60A	nostrum,
toS!to	L53C	Confitemini
toS!tolst9	L90D	Deus,
toS!pe	L123E	Exaudi,
to!or	L67S	Domine.
to!orsun11sa5	L8U	Domine.
to!orlst3	L114V	audiatur,
to!orlsc6	L152S	taurorum,
to!pi!cl	L31D	est,
to!pi!cl!pi!pi	L40Q	millia
to!pi!cl!pi!orsun11sa5	L40Q	speravit,
oc!vi Cf.	oc!visun1	minus uncinus
oc!visun1	L95D	Domine,
orsu1sun1	L94C	Domine.
orsu1sun1lsc2	L94C	Domine.
orsu1sun1lsc3	L94C	iniquis
un!clG	L95D	exaudi
topp2	L95D	meus
topp2sun1	L45R	tuarum,
toppn3ppz1sun1	L58A	me.
to>pp2	L90D	insipientiam
pupp2su1sun1	L95D	sunt.
pupp2su2	L93E	me.
pupp1su2	L640	opportuno.
pupp1su1sun1	L58A	clamavi,
puppn1su1sun2	L40Q	mille,
puppz1su1sun2	L40Q	mille,
puppz1su2	L168S	tua
ds1!ds1	L43L	meos,
ds1!ts	L67S	mecum
ds1!ts1	L60E	tuo.
cl1!orsun1	L43L	considerabo
cl1!orsun11sa5	L8U	fac
cl!or Cf.	cl!orpp2	minus prepunctis
cl!orpp2	L93G	induebam
cl1!orpp2	L103R	mirabilis
ds1!clsun2 Cf.	ds1!clsun21st5	minus letter
ds1!clsun21st5	L43L	doceas
ds1!clsuisun1 Cf.	ds1!clsuisun11st5	minus letter
ds1!clsuisun11st5	L56S	Salvum
ds1pp3	L149E	tibi.
vi>1pp2	L67S	umbrae
vi>1ppz1ppq1	L40Q	custodiant
vi>1ppn1ppz1ppq1	L106S	Alleluia.
pfsun1 Cf.	pfsun11sn5	minus letter
pfsun11sn5	L67S	tua,
pfppn1ppq1sun11sa5	L123A	Deus
un1ppn1ppq1sun2	L1120	estis,
un1sun2 Cf.	un1ppn1ppq1sun2	minus uncinus & quilisma
un1ppn1sun2	L1120	Christum
un1ppn1sun1su21sa5	L152I	accelera,
clsun11st5	L44I	vespertinum.
clsu31st5	L60E	tuo.
tosu1sun1 Cf.	tosu1sun11sn6	minus letter
tosu1sun11sc61st7	L109P	vocavit

tosu1sun1lsn6	L19B	venit
tosu2 Cf. <i>١٢</i>	tosu21st6	minus letter
tosu21st6	L37M	tu
tgsun1lsa5	L103H	quoniam
cl!cl!cl!sun1lsa5	L103P	Alleluia.
cl!cl!cl Cf. <i>١٣</i>	cl!cl!cl!sn9	minus letter
cl!cl!cl!sn9	L31D	Domine
cl!cl!pi	L54B	commovear
cl!cl!pi!vi	L123A	Dominus
cl!cl!to	L149E	meam,
cl!cl!po	L81R	insurgentibus
cl1!pi!pi!vi	L54B	es
cl1!pi!pisun1lsa5	L1740	plaudite
cl1!pi!tosu1	L37S	mei
cl1!pi!tosun1	L1740	plaudite
sa1sun1lsa5	L11Q	tuam
trsun2 Cf. <i>١٤</i>	trsun21sa5	minus letter
trsun21sa5	L13A	Ave
trsunx1 Cf. <i>١٥</i>	trsunx11sa5	minus letter
trsunx11st8	L20P	eius,
trsunx11sa5	L136A	aeternam
trsu2 Cf. <i>١٦</i>	trsu21st31sm8	minus letters
trsu21st31sm8	L136A	vobis
trsun1su2 Cf. <i>١٧</i>	trsun1su21sa3	minus letter
trsun1su21sa3	L149C	Domini
trsun1lsa31sa5	L18L	terra
trsun1lsa5 Cf. <i>١٨</i>	trsun1lsa31sa5	minus letter
bvsun4	L8U	me.
oc!cl	L31D	Domine.
oc!clM	L77S	peccatorum.
oc!pe!pu	L53C	tuo.
tg!cl	L31D	est,
tg!cl>1	L33C	eius,
tg!cl!sn9	L68Q	Sion
tg!or	L77C	tibi
unppn1sun2	L40Q	Cadent
unppn1sun21sa5	L123E	quaesivi
unppn1sux1	L72B	eius
unppn1sux11sa5	L24D	exaltavit
unppn1sun1su2	L58A	Domine,
unppn1ppz1sun1 Cf. <i>١٩</i>	unppn1ppz1sun11sa5	minus letter
unppn1ppz1sun11sa5	L80S	habitat
unppn3sun11sa5	L24D	fecit
ta>ppn1	L95D	et
ta>pp2	L33C	ut
pt1ppn1	L99P	tuo.
tssun1lsa5	L24D	dextera
cl>1pp2	L114C	alleluia,
tasu2	L24T	tuam.

<b>significant letters</b>			
<i>٢٠</i>	lsa Cf. <i>٢٠</i>	vi>lsa6	augete
<i>٢١</i>	lsc Cf. <i>٢١</i>	pe!unlsc2	celeriter
<i>٢٢</i>	lseq	L78H hic	equaliter
<i>٢٣</i>	lseq-	L78H quotiescumque	equaliter
<i>٢٤</i>	lsequ	L56D confundantur	equaliter
<i>٢٥</i>	lsf Cf. <i>٢٥</i>	polsf21st3	fastigium
<i>٢٦</i>	lsh	L44D a	humiliter
<i>٢٧</i>	lshn Cf. <i>٢٧</i>	cl1shn8	humiliter nectum
<i>٢٨</i>	lshp Cf. <i>٢٨</i>	tr1st31shp7	humiliter parum
<i>٢٩</i>	lsl Cf. <i>٢٩</i>	pels12	levare
<i>٣٠</i>	lsn Cf. <i>٣٠</i>	cl1sn9	non (tenere), negare, nectum, naturaliter non levare
<i>٣١</i>	lsnl Cf. <i>٣١</i>	cl1sn12	non tenere
<i>٣٢</i>	lsnt Cf. <i>٣٢</i>	pulsnt3	mediocriter
<i>٣٣</i>	lsm	L67S Virga	mediocriter
<i>٣٤</i>	lsmd	L820 da	mediocriter
<i>٣٥</i>	lss	L95D tempus	sursum
<i>٣٦</i>	lssimp	L8U Domine,	simpliciter
<i>٣٧</i>	lssimpl	L81R insurgentibus	simpliciter
<i>٣٨</i>	lssp	L54Ae Domine,	sursum parum
<i>٣٩</i>	lsst Cf. <i>٣٩</i>	pelsst11sm4	sursum tenere
<i>٤٠</i>	lst Cf. <i>٤٠</i>	clsun11st5	tenere
<i>٤١</i>	lsth Cf. <i>٤١</i>	tolsth8	tenere humiliter
<b>tironian notes</b>			
<i>٤٢</i>	lti	L78H pro	iusum
<i>٤٣</i>	ltdo	L140 misericordiam	deorsum
<i>٤٤</i>	ltdr	L132E descendit	devertit
<i>٤٥</i>	ltdx	L122V intuerentus	devexum
<i>٤٦</i>	ltps	L128S veniat,	prode sub eam (trade subtus)
<i>٤٧</i>	ltqm	L118E sum	quam mox
<i>٤٨</i>	ltsb	L11Q et	sub
<i>٤٩</i>	ltse	L144C corde	seorsum
<i>٥٠</i>	ltsj	L164D meam	subjice
<i>٥١</i>	ltsl	L117R delectati	saltim
<i>٥٢</i>	ltsn	L17H gloriam	sonare
<i>٥٣</i>	ltsp	L10I Ierusalem	supra
<i>٥٤</i>	ltsr	L14P et	sursum
<i>٥٥</i>	ltst	L25L omnes	saltate (salte)
<i>٥٦</i>	ltus	L17H eius.	ut supra