

# nabc language for gregorio

A  
AL II

L-le- lú- ia. V. Ve- ni Sancte

Spí- ri- tus, replé tu- ó- rum corda fi-dé- li- um: et tu- i a-mór-

is in e- is ignem ac- cénde.

M- nes \* qui in Chris- to bapti- zá- ti es- tis, Chris- tum in-  
du- í- stis, al- le- lú- ia.

The nabc language provides the ability to describe some adiastematic 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 adiastematic neumes in gabc, the header should contain nabc-lines: 1; line, like:

```
nabc-lines: 1;
(f3) AL(ef~|ta>)le(fg/hggf|peclhgpi)lú(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 nabcinterelementspace skip to the right
- `` move by nabclargerspace skip to the left
- ` move by nabcinterelementspace 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	ql ↙ 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
cl ↗ clavis	pf ↗ porrectus flexus	tg .. trigonus	or ↙ oriscus	
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 clavis the table shows two different glyphs, the ancus cl> ↗ and then another neume - cl>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 strophæ
  - 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 suisut1sux1  stands for a punctum, followed by tractulus, followed by liquescens stropha.

The *significant letter descriptor* consists of the letters `1s`, 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:

lsal <i>z</i> altius	lsiv <i>zv</i> iusum valde	lss <i>r</i> sursum
lsam <i>mm</i> altius mediocriter	lsk <i>k</i> klenche	lssb <i>rt</i> sursum bene
lsb <i>t</i> bene	lsl <i>t</i> levare	lssc <i>rc</i> sursum celeriter
lsc <i>c</i> celeriter	lslb <i>tt</i> levare bene	lssimil <i>finit</i> <i>t</i> similiter
lscm <i>cm</i> celeriter mediocriter	lslc <i>tc</i> levare celeriter	lssimul <i>simul</i> simul
lscō <i>ω</i> coniunguntur	lslen <i>lēn</i> leniter	lssm <i>cm</i> sursum mediocriter
lscw <i>—</i> celeriter (wide form)	lslm <i>lm</i> levare mediocriter	lsst <i>rt</i> sursum tenere
lsd <i>d</i> deprimatur	lslp <i>tp</i> levare parvum	lssta <i>z</i> statim
lse <i>e</i> equaliter	lslt <i>tr</i> levare tenere	lst <i>r</i> tenere
lseq <i>q</i> equaliter	lsm <i>m</i> mediocriter	lstb <i>dt</i> tenere bene
lsew <i>—</i> equaliter (wide form)	lsmoll <i>mollt</i> molliter	lstm <i>tm</i> tenere mediocriter
lsfid <i>ad</i> fideliter	lsp <i>r</i> parvum	lstw <i>—</i> tenere (wide form)
lsfr <i>f</i> frendor	lspar <i>par</i> paratim	lsv <i>v</i> valde
lsg <i>g</i> gutture	lspfec <i>perfec</i> perfecte	lsvol <i>vt</i> volubiliter
lsi <i>i</i> iusum	lspm <i>pm</i> parvum mediocriter	lsx <i>x</i> expectare
lsim <i>im</i> iusum mediocriter	lspulcre <i>pulcre</i> pulcre	

Finally a commented example of a nabc snippet:

```po///pe>2lse7ls13qlhh!vshhppt1sut2ql>ppu3

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

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

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

*pe>21se7ls13* 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 ~~-ud-~~ 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.

ql>ppu3  is a 3 loop liquefuent 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 stropha, 2 loops quilisma and gravis removed:

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

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                                    | lsnl ↗ 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) |                                      | liquef. augment. | dimi nut.    |
| virga              | / vi           | / vilsc3 vilst1 vipp1lsc2                  | / vi-           |                       |                                  | / viM                                | / vi>            |              |
| tractulus          | - ta           | - talsc3 talst2                            |                 |                       |                                  | / taM                                | / ta>            |              |
| punctum            | · pu           |                                            |                 |                       |                                  | / ,                                  | / ,              | st visuisux1 |
| gravis             | ˇ gr           |                                            |                 |                       |                                  |                                      |                  |              |
| clivis             | ˘ cl           | ˘ cllsc3 clst2 cl-lst2                     | ˘ cl- clS-      | ˘ clS clS1            |                                  | / clM                                | / cl>            | / cl-        |
| pes                | ˘ pe           |                                            | ˘ pe- pe-1      | ˘ peS                 | / peG                            | / peG                                | / pe>1 pe>2      | / pe-        |
| porrectus          | ˘ po           | ˘ polsc2                                   | ˘ po- po-1      |                       | / poG                            |                                      | / po>            | / po-        |
| torculus           | ˘ to           | ˘ tolsc3 tolsc4lst3 tolst2                 | ˘ to- to-1      | ˘ toS toS1 toS2 toS3  | / toG                            | / toM toM1                           | / to>            | / to>        |
| climacus           | ˘ ci ci1       | ˘ cilsc3 cilst2                            | ˘ ci-           | ˘ ciS ciS1 visutisu2  | / ciG ciG1                       | / ciM                                | / ci>            | / ci-        |
| scandicus          | ˘ sc           |                                            | ˘ sc-           | ˘ scS                 | / scG scG1                       | / scM1                               | / sc>            | / sc-        |
| porrectus flexus   | ˘ pf           | ˘ pf1sc2 pf1sc2 pf1st2                     | ˘ pf-           | ˘ pfS                 | / sfM                            |                                      | / pf>            | / pf-        |
| pes subbipunctis   | ˘ pesu2        | ˘ vipp1su2lsc3                             | ˘ pesu2 pe-isu2 | ˘ pesu2 peSsu2 peSut2 | / pesu1su2                       | / vi-!ci pesu1suw1                   | / to>            |              |
| scandicus flexus   | ˘ sf           | ˘ sflsc3                                   | ˘ sf-           | ˘ sfS                 | / vi-tohk pecqli                 |                                      | / 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-         |                       |                                  |                                      | ' ts>            |              |
| trigonus           | .. tg tg1      |                                            |                 | .. tgS tgS1 tgS3      |                                  |                                      | ' tg>            |              |
| bigirga & trivirga | // bv tv       |                                            | // bv- tv-      |                       |                                  |                                      | / bv>            |              |
| pressus            | ˘ pr pi        | ˘ prlsc2 pr-lsc2 prlst2<br>˘ pilsc2 pilst2 | ˘ pr-           |                       |                                  | / prM                                | / pr> pi>        | / vs>        |
| virga strata       | ˘ vs           | ˘ vs1sc3 vs1st2                            | ˘ vs-           |                       |                                  |                                      |                  | / or>        |
| oriscus            | ˘ or           |                                            |                 |                       |                                  |                                      |                  | / ta>        |
| salicus            | ˘ sa sa1       | ˘ salsfr1 saM1lsfr1                        | ˘ sa- sa-1      |                       |                                  | / saM                                | / sa> sa->1      | / pe>2       |
| pes quassus        | ˘ pq           | ˘ pqlsfr1                                  | ˘ pq-           |                       |                                  |                                      | / pq>            |              |
| quilisma           | ˘ q1 q1        |                                            | ˘ q1- q1-       |                       |                                  |                                      |                  | / q1> q1>    |
| 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) |                                                                                                              |                                      |                          |
| uncinus                  | un             |                                            |                                  |                                                                                                              |                                      |                          |
| punctum                  | pu             |                                            |                                  |                                                                                                              |                                      |                          |
| virga                    | vi             | ✓ ✓ ✓ ✓                                    | viS vipp2su2vihh                 |                                                                                                              |                                      | ρ<br>vi>1                |
| tractulus                | ta             | ✓ ✓                                        | ds ts                            | ✓                                                                                                            | ✓                                    | ✓<br>ta>2                |
| clivis                   | cl             |                                            |                                  | ✓                                                                                                            | ✓                                    | ✓<br>cl> cl>1            |
| pes                      | pe             |                                            |                                  | ✓                                                                                                            | ✓                                    | ✓<br>pe>1                |
| porrectus                | po             |                                            |                                  | ✓                                                                                                            | ✓                                    | ✓<br>po>                 |
| torculus                 | to             | ○                                          | toS1                             | ✓                                                                                                            | ✓                                    | ✓<br>to>                 |
| climacus                 | ci             | ⋮                                          | pusuisun1 visu2 unsun2           | ✓                                                                                                            | ✓                                    | ✓<br>cl>1                |
| scandicus                | sc sc1         | ✓ ✓ ✓                                      | vippn1pp1 vippn2                 | ✓                                                                                                            | ✓                                    | ✓<br>vi>1pp2             |
| porrectus flexus         | pf1            | ✓                                          | pfS                              | ✓ ✓                                                                                                          | ✓                                    | ✓<br>pf>                 |
| (pes subbipunctis)       | tosu1          | ✓                                          | tosun1                           | ✓ ✓                                                                                                          | ✓                                    | ✓<br>unlsts2~puhisuisun1 |
| scandicus flexus         | sf             | ✓                                          |                                  | ✓ ✓                                                                                                          | ✓                                    | ✓<br>unhdlst2~pelst2clhh |
| torculus resupinus       | tr             | ✓                                          | trS                              | ✓ ✓                                                                                                          | ✓                                    | ✓<br>tr> pe`ta>          |
| clivis + pes or torculus | cl!pe cl!to    | →                                          | toS!pe                           | ✓                                                                                                            | ✓                                    | ✓<br>or>                 |
| oriscus                  | or ori         | isolated &<br>at the syllabic articulation |                                  | ✓<br>ql<br>oc oc!vi pq pq1<br>tg<br>cl1!or cl1!pi cl1!pi!vi cl1!pi!cl cl1!pi!to<br>to!or<br>sa sa1<br>vs vsG | ✓<br>pe!or                           |                          |
| quilisma                 | ql ql!cl ql!po |                                            |                                  |                                                                                                              |                                      |                          |
| pes stratus              | pt1            |                                            |                                  |                                                                                                              |                                      |                          |

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            | //      | //      | clsc3    | ^o | missing | pe!vi           | //      | //      |
| bv-           | //      | //      | cllst2   | ^o | missing | pe-             | /       | /       |
| bv-sut2       | //      | missing | clpp2    | ^o | missing | pe-1            | /       | /       |
| bv>           | //      |         | clppt1   | ^o | missing | pe-1su1sut1     | /       | /       |
| ci            | /.      |         | clppt2   | ^o | missing | pe-1su1sut2     | /       | /       |
| ci-           | /.      |         | cl~      | ^o | missing | pe-1su1suu1     | /       | /       |
| ci-pp2        | /.      |         | ds       | ^o | missing | pe-1su1suu2     | /       | /       |
| ci1           | /.      |         | ds-      | ^o | missing | pe-1su1suw1     | /       | /       |
| ci>           | /.      |         | ds>      | ^o | missing | pe-1su2         | /       | /       |
| ciG           | /       |         | dslsx6   | ^o | missing | pe-1sut1suw1    | /       | missing |
| ciG1          | /       |         | gr       | ^o | missing | pe-1sut1sux1    | /       |         |
| ciM           | /       |         | gr-      | ^o | missing | pe-1sut2        | /       |         |
| ciM-          | /       |         | gr-lsc6  | ^o | missing | pe-1sut3        | /       |         |
| ciS           | /       |         | lsal     | ^o | missing | pe-1suu1su2     | /       | missing |
| ciS1          | /       |         | lsam     | ^o | missing | pe-1suw2        | /       |         |
| ciSppt1       | /       |         | lsb      | ^o | missing | pe->            | /       |         |
| cilsc3        | /       | missing | lsc      | ^o | missing | pe->1           | /       |         |
| cippt1        | /       |         | lscm     | ^o | missing | pe-su1sut1      | /       |         |
| cippt1lsc3    | /       | missing | lsco     | ^o | missing | pe-su2          | /       |         |
| cippu1        | /       |         | lscw     | ^o | missing | pe-su2suy1      | /       |         |
| cippu1lsc3    | /       | missing | lsd      | ^o | missing | pe-su3sut1      | /       |         |
| ci~           | /       |         | lse      | ^o | missing | pe-su4          | /       |         |
| cl            | /       |         | lseq     | ^o | missing | pe>             | /       |         |
| cl!cl>1       | /       |         | lsew     | ^o | missing | pe>1            | /       |         |
| cl!cls        | /       |         | lsfid    | ^o | missing | pe>2            | /       |         |
| cl!clsut2     | /       |         | lsfr     | ^o | missing | pe>ppt1         | missing |         |
| cl!pi         | /       |         | lsg      | ^o | missing | peG             | /       |         |
| cl!pilsc1lst3 | /       | missing | lsi      | ^o | missing | peS             | /       |         |
| cl!pilsc2     | /       | missing | lsim     | ^o | missing | peSsu1sux1      | /       |         |
| cl!po         | /       |         | lsiv     | ^o | missing | peSsu2          | /       |         |
| cl!po-1       | /       |         | lsk      | ^o | missing | peSsut1su2      | /       |         |
| cl!po>        | /       |         | lsl      | ^o | missing | peSsut2         | /       |         |
| cl!po>ppt1    | /       |         | lslb     | ^o | missing | peSsut3         | /       |         |
| cl!pr         | /       |         | lslc     | ^o | missing | peppt1          | /       |         |
| cl-           | /       |         | lslen    | ^o | missing | pesu1sut1       | /       |         |
| cl!pi         | /       |         | lslm     | ^o | missing | pesu1sut2       | /       | missing |
| cl-1su2       | /       |         | lslp     | ^o | missing | pesu1sut3       | /       |         |
| cl->          | /       |         | lslt     | ^o | missing | pesu1suu1       | /       |         |
| cl->1         | /       |         | lsm      | ^o | missing | pesu1suu1w1     | /       |         |
| cl-lst2       | /       | missing | lsmoll   | ^o | missing | pesu1sux1       | /       |         |
| cl-ppt1       | /       | missing | lsp      | ^o | missing | pesu2           | /       |         |
| cl-ppt2       | /       | missing | lspar    | ^o | missing | pesu2sut1       | /       |         |
| cl>           | /       |         | lspfec   | ^o | missing | pesu2suv1       | /       |         |
| cl>1          | /       |         | lspm     | ^o | missing | pesu3           | /       |         |
| cl>pp2        | /       | missing | lspulcre | ^o | missing | pesut2          | /       |         |
| cl>ppt2       | /       |         | lss      | ^o | missing | pesuvsu1su1sut1 | /       |         |
| clM           | /       |         | lssb     | ^o | missing | pe~             | /       |         |
| clM-          | /       |         | lssc     | ^o | missing | pf              | /       |         |
| clMpp2        | missing |         | lssimil  | ^o | missing | pf!cl-          | /       |         |
| clS           | /       |         | lssimul  | ^o | missing | pf!clM-         | /       |         |
| clS-          | /       |         | lssm     | ^o | missing | pf!clM-ppt1     | /       |         |
| clS-1         | /       |         | lsst     | ^o | missing | pf!cl~          | /       |         |
| clS-su2       | /       |         | lssta    | ^o | missing | pf!cl~ppt1      | /       |         |
| clS1          | /       |         | lst      | ^o | missing | pf!pr           | /       |         |
| clSsu1sut1    | /       |         | lstb     | ^o | missing | pf-f            | /       |         |
| clSsu2        | /       |         | lstm     | ^o | missing | pf1lsc2         | /       | missing |
| clSsut1       | /       |         | lstw     | ^o | missing | pf>             | /       |         |
| clSsut1sux1   | missing |         | lsv      | ^o | missing | pfG             | /       |         |
| clSsut2       | /       |         | lsvol    | ^o | missing | pfM             | /       |         |
| clSuu1su2     | /       | missing | lsx      | ^o | missing | pfM-            | /       |         |
| clSsux1       | missing |         | or       | ^o | missing | pfMsut1         | /       |         |
|               |         | missing | pe       | ^o | missing | pfMsuu1         | missing |         |

|                |         |         |                     |         |  |   |                   |            |         |
|----------------|---------|---------|---------------------|---------|--|---|-------------------|------------|---------|
| pfS            |         | m       | pt                  | s       |  | ✓ | ql!vsppt1sut2     | -wz        | -wz     |
| pflsc2         | ✓       | missing | pu                  | .       |  | . | ql!vssu2          | wz         | wz      |
| pflst2         | ✓       | missing | qi                  | w       |  | w | ql!vssu3          | wz         | wz      |
| pf~            | ✓       | missing | qi!cl               | w       |  | w | ql!vssut2         | wz         | wz      |
| pi             | ✓       | missing | qi!cl-              | w       |  | w | ql-               | w          | w       |
| pi>            | ✓       | missing | qi!cl>              | w       |  | w | ql-ppt1           | w          | w       |
| piM            | missing | missing | qi!clppt1           | w       |  | w | ql-ppt1su1sut2    | wz         | wz      |
| pilsc2         | ✓       | missing | qi!po               | w       |  | w | ql-ppt1su1suum1   | wz         | wz      |
| pilst2         | ✓       | missing | qi!po>              | w       |  | w | ql-ppt1su1sux1    | wz         | wz      |
| pisu1          | ✓       | missing | qi!vs               | w       |  | w | ql-ppt1su2        | wz         | wz      |
| pisut1         | ✓       | missing | qi!vsppt1           | w       |  | w | ql-ppt1su3        | wz         | wz      |
| po             | ✓       | missing | qi!vsppt1sut2       | w       |  | w | ql-ppt1sut2suum1  | wz         | wz      |
| po-            | ✓       | missing | qi!vsppt1su2        | w       |  | w | ql-ppt1suum1      | wz         | wz      |
| po-1           | ✓       | missing | qi!vssu1sut2        | w       |  | w | ql-ppt2su1suv1su2 | wz         | wz      |
| po-1pp2su1sux1 | ✓       | missing | qi!vssu2            | w       |  | w | ql-su1sut1        | wz         | wz      |
| po-1su1sux1    | ✓       | missing | qi-                 | w       |  | w | ql-su1sut2        | wz         | wz      |
| po-1su2        | ✓       | missing | qi-ppt1su1sut2      | w       |  | w | ql-su1suum1       | wz         | wz      |
| po-2           | ✓       | missing | qi-ppt1suum1su1sut2 | w       |  | w | ql-su1suum2       | wz         | wz      |
| po>            | ✓       | missing | qi-su1sut2          | w       |  | w | ql-su1suv1su2     | wz         | wz      |
| poG            | ✓       | missing | qi-su1sux1          | w       |  | w | ql-su1sux1        | wz         | wz      |
| poG-           | ✓       | missing | qi-su2              | w       |  | w | ql-su2            | wz         | wz      |
| poG-1          | ✓       | missing | qi-su2              | w       |  | w | ql-su3            | wz         | wz      |
| poG1           | ✓       | missing | qi-su3              | w       |  | w | ql-sut1sux1       | wz         | wz      |
| polsc2         | ✓       | missing | qi-su1su1sut2       | w       |  | w | ql-sut2           | wz         | wz      |
| posu1sut1      | ✓       | missing | qi>                 | w       |  | w | ql-sut2suum1      | wz         | wz      |
| posu2          | ✓       | missing | qi>ppt1             | w       |  | w | ql-su2            | wz         | wz      |
| po~            | ✓       | missing | qippt1              | w       |  | w | ql>               | w          | w       |
| pp1            | .       | missing | qippt2sut2          | w       |  | w | ql>ppt1           | w          | w       |
| pp2            | .       | missing | qisu2               | w       |  | w | missing           | qlppt1     | w       |
| pp3            | .       | missing | qisut1sux1          | w       |  | w | missing           | qlppt1su2  | wz      |
| pp4            | .       | missing | qisut2              | w       |  | w | missing           | qlppt1sut3 | wz      |
| pp5            | ✓       | missing | ql                  | w       |  | w | qlsu2             | wz         | missing |
| ppt1           | -       | missing | ql!cl               | w       |  | w | qlsut2            | wz         | wz      |
| ppt2           | -       | missing | ql!cl!cl>           | w       |  | w | qlsut3            | wz         | wz      |
| ppt3           | -       | missing | ql!cl!cl>ppt1       | w       |  | w | sa                | w          | w       |
| ppt4           | -       | missing | ql!cl!pi            | w       |  | w | sa!cl             | w          | w       |
| ppt5           | -       | missing | ql!cl!pippt1        | w       |  | w | sa!cl-            | w          | w       |
| ppu1           | -       | missing | ql!cl-              | w       |  | w | sa!cl>            | w          | w       |
| ppu2           | -       | missing | ql!cl->             | w       |  | w | sa!clS-1          | w          | w       |
| ppu3           | -       | missing | ql!cl->ppt1         | w       |  | w | sa!clS1           | w          | w       |
| ppu4           | -       | missing | ql!cl-ppt1          | w       |  | w | sa!clS1sc2        | w          | missing |
| ppu5           | -       | missing | ql!cl>              | w       |  | w | sa-               | w          | w       |
| pq             | ✓       | ✓       | ql!cl>ppt1          | w       |  | w | sa-1              | w          | w       |
| pq!cl          | ✓       | ✓       | ql!clM              | w       |  | w | sa->1             | w          | w       |
| pq!cl-         | ✓       | ✓       | ql!cls              | missing |  | w | sa-lsfr1          | w          | missing |
| pq!cl>         | ✓       | ✓       | ql!cls-2            | w       |  | w | sa-su2sut1        | w          | w       |
| pq-            | ✓       | ✓       | ql!cls-2ppt1        | w       |  | w | sa1               | w          | w       |
| pq-su2         | ✓       | ✓       | ql!cls-2ppt1sut1    | w       |  | w | sa1!cl->          | w          | w       |
| pq>            | ✓       | ✓       | ql!cls-2sut1        | w       |  | w | sa1!cl>           | w          | w       |
| pqS            | ✓       | ✓       | ql!clppt1           | w       |  | w | sa>               | w          | w       |
| pqS-           | ✓       | ✓       | ql!pf               | w       |  | w | sa>1              | w          | missing |
| pqS>           | ✓       | ✓       | ql!pf-              | w       |  | w | sa>2              | w          | w       |
| pqlsfr1        | ✓       | missing | ql!po               | w       |  | w | saG               | w          | w       |
| pr             | ✓       | missing | ql!po-1             | w       |  | w | saM               | w          | w       |
| pr-            | ✓       | missing | ql!po-1ppt1         | w       |  | w | saM-1             | w          | w       |
| pr-lsc3        | ✓       | missing | ql!po>              | w       |  | w | saM-4             | w          | w       |
| pr>            | ✓       | missing | ql!po~              | w       |  | w | saM1              | w          | w       |
| prM            | ✓       | missing | ql!po~ppt1          | w       |  | w | saM2              | w          | w       |
| prlsc2         | ✓       | missing | ql!vs               | w       |  | w | saM3              | w          | w       |
| prlst2         | ✓       | missing | ql!vsppt1           | w       |  | w | saM4              | w          | w       |
| pr~            | ✓       | missing | ql!vsppt1su2        | w       |  | w |                   |            |         |

|                |  |         |              |   |         |            |   |
|----------------|--|---------|--------------|---|---------|------------|---|
| saM5           |  | missing | sut1sux1     | ✓ | ✓       | to>pp2     | ✓ |
| saM5ppt1       |  | missing | sut2         | ✓ | ✓       | toG        | ✓ |
| salsfr1        |  | missing | sut2su2      | ✓ | ✓       | toM        | ✓ |
| sapp1          |  |         | sut2suum1    | ✓ | ✓       | toM-       | ✓ |
| sa~            |  |         | sut2sux1     | ✓ | ✓       | toM1       | ✓ |
| sc             |  |         | sut2suy1     | ✓ | ✓       | toM2       | ✓ |
| sc-            |  |         | sut3         | ✓ | ✓       | toM2-      | ✓ |
| sc-1           |  | missing | sut3suw1     | ✓ | ✓       | toM3       | ✓ |
| sc1            |  |         | sut3suy1     | ✓ | ✓       | toS        | ✓ |
| sc>            |  |         | sut4         | ✓ | ✓       | toS1       | ✓ |
| scG            |  |         | suu1         | ✓ | ✓       | toS2       | ✓ |
| scG-1          |  |         | suu1s1sut2   | ✓ | ✓       | missing    | ✓ |
| scG1           |  |         | suu1su2      | ✓ | ✓       | toS2su2    | ✓ |
| scM            |  | missing | suu2         | ✓ | ✓       | toS2sut1   | ✓ |
| scM1           |  |         | suu2su2      | ✓ | ✓       | toS2sut2   | ✓ |
| scM2           |  |         | suu3         | ✓ | ✓       | toS2sux1   | ✓ |
| scS            |  |         | suv1         | ✓ | ✓       | toS3       | ✓ |
| sc~            |  |         | suv1s1sut1   | ✓ | ✓       | toS3lst2   | ✓ |
| sf             |  |         | suv1su2      | ✓ | ✓       | toS4       | ✓ |
| sf-            |  |         | suw2         | ✓ | ✓       | toSsu2     | ✓ |
| sf>            |  | missing | ta           | ✓ | ✓       | tolsc3     | ✓ |
| sfG            |  | missing | ta-          | ✓ | ✓       | tolsc4lst3 | ✓ |
| sfG1           |  | missing | ta>          | ✓ | ✓       | tolst2     | ✓ |
| sfM            |  |         | ta>ppt1      | ✓ | ✓       | toppt1     | ✓ |
| sfM1           |  | missing | talsc3       | ✓ | ✓       | toppu1     | ✓ |
| sfS            |  |         | talst2       | ✓ | ✓       | missing    | ✓ |
| sflsc3         |  |         | tg           | ✓ | ✓       | tr         | ✓ |
| st             |  | missing | tg1          | ✓ | ✓       | missing    | ✓ |
| st-            |  |         | tgM          | ✓ | ✓       | tr-        | ✓ |
| st>            |  |         | tgS          | ✓ | ✓       | missing    | ✓ |
| stS            |  |         | tgS-         | ✓ | ✓       | tr-1       | ✓ |
| su1            |  |         | tgS1         | ✓ | ✓       | tr-1su2    | ✓ |
| su1sut1        |  |         | tgS2         | ✓ | ✓       | tr-2       | ✓ |
| su1sut1su1sut1 |  |         | tgS3         | ✓ | ✓       | tr-3       | ✓ |
| su1sut1su2     |  |         | tgS4         | ✓ | ✓       | tr-~       | ✓ |
| su1sut1sux1    |  |         | tgSuum1      | ✓ | ✓       | tr-~1      | ✓ |
| su1sut1suy1    |  |         | tgsuu1       | ✓ | ✓       | tr>        | ✓ |
| su1sut2        |  |         | to           | ✓ | ✓       | trG        | ✓ |
| su1sut2su1     |  |         | to!ciG       | ✓ | ✓       | trG1       | ✓ |
| su1sut3        |  |         | to!ciGhh     | ✓ | ✓       | trG2       | ✓ |
| su1suum1       |  |         | to!cl        | ✓ | ✓       | trM        | ✓ |
| su1suum1su1    |  |         | to!cl!cl     | ✓ | ✓       | trS        | ✓ |
| su1suum1su2    |  |         | to!cl!cl!cl  | ✓ | ✓       | trS-       | ✓ |
| su1suum2       |  |         | to!cl!pi     | ✓ | ✓       | missing    | ✓ |
| su1suv1        |  |         | to!cl!po     | ✓ | ✓       | trS1       | ✓ |
| su1suv1su2     |  |         | to!cl!po-1   | ✓ | ✓       | trSsut2    | ✓ |
| su1suw1        |  |         | to!cl-       | ✓ | ✓       | trlst2     | ✓ |
| su1sux1        |  |         | to!cl-!cl-   | ✓ | ✓       | trsu3      | ✓ |
| su2            |  |         | to!cl-1      | ✓ | ✓       | tr~        | ✓ |
| su2sut1        |  |         | to!cls       | ✓ | ✓       | ts         | ✓ |
| su2suv1        |  |         | to!pi        | ✓ | ✓       | ts-        | ✓ |
| su2suw1        |  |         | to!po        | ✓ | ✓       | ts>        | ✓ |
| su2sux1        |  |         | to!posu2     | ✓ | ✓       | tsM        | ✓ |
| su3            |  |         | to!pr        | ✓ | ✓       | tsM-       | ✓ |
| su3sut1        |  |         | to-          | ✓ | ✓       | tslsx6     | ✓ |
| su4            |  |         | to-1         | ✓ | ✓       | tv         | ✓ |
| su5            |  |         | to-1su1      | ✓ | ✓       | tv-        | ✓ |
| sut1           |  |         | to-1su2      | ✓ | ✓       | vi         | ✓ |
| sut1su1sux1    |  | missing | to-1suum1    | ✓ | ✓       | vi-        | ✓ |
| sut1su2        |  |         | to-1suy1     | ✓ | ✓       | vi-ci      | ✓ |
| sut1suum1      |  |         | to-1suum2    | ✓ | ✓       | vi-vi!vi   | ✓ |
| sut1suw1       |  |         | to-1suum1su2 | ✓ | ✓       | vi-vi-!vi  | ✓ |
|                |  |         | to->         | ✓ | ✓       | vi->       | ✓ |
|                |  |         | to>          | ✓ | ✓       | vi-lst3    | ✓ |
|                |  |         | to>1         | ✓ | ✓       | vi-pp2     | ✓ |
|                |  |         | to>2         | ✓ | ✓       | vi-pp4     | ✓ |
|                |  |         |              |   | missing | vi-ppt2    | ✓ |
|                |  |         |              |   | missing | vi-ppt3    | ✓ |

|                |         |               |  |            |  |         |
|----------------|---------|---------------|--|------------|--|---------|
| vi-su1sut1     |         | vi>pp2        |  | visu2      |  |         |
| vi-su1sut1su2  |         | vi>ppt2       |  | visu2lsc3  |  | missing |
| vi-su1sut2     |         | vi>ppt3       |  | visu2sut1  |  |         |
| vi-su1sut2su1  |         | vilsc3        |  | visu2suw1  |  |         |
| vi-su1suum1    |         | vilst1        |  | visu2sux1  |  |         |
| vi-su1suum1su1 |         | vipp2         |  | visu3      |  |         |
| vi-su1suum1su2 |         | vipp3         |  | visu5      |  |         |
| vi-su1suum2    |         | vipp4         |  | visut1su2  |  |         |
| vi-su1suw1     | missing | vippt1su1sut1 |  | visut1sux1 |  |         |
| vi-su1sux1     |         | vippt1su2     |  | visut2     |  |         |
| vi-su2         |         | vippt1su2lsc3 |  | visut2su2  |  |         |
| vi-su2sut1     |         | vippt2        |  | visut2sux1 |  | missing |
| vi-su2suw1     | missing | vippt3        |  | visut2suy1 |  |         |
| vi-su2sux1     |         | vippu1su2     |  | visut3     |  |         |
| vi-su3         |         | vippu1su2lsc3 |  | visut3suw1 |  |         |
| vi-su4         |         | visu1sut1     |  | visut3suy1 |  |         |
| vi-sut1su2     |         | visu1sut1sut1 |  | visut4     |  |         |
| vi-sut1suum1   |         | visu1sut1su2  |  | visuu1su2  |  |         |
| vi-sut1sux1    | missing | visu1sut1sux1 |  | visuu2su2  |  |         |
| vi-sut2        |         | visu1sut1suy1 |  | visuv1su2  |  |         |
| vi-sut2sux1    | missing | visu1sut2     |  | vs         |  |         |
| vi-sut3        |         | visu1suum1    |  | vs-        |  |         |
| vi-sut4        |         | visu1suum1su2 |  | vs->       |  |         |
| vi-suum1su2    |         | visu1suv1     |  | vs>        |  |         |
| vi-suum2       |         | visu1suw1     |  | vslsc3     |  | missing |
| vi-suum3       |         | visu1sux1     |  | vslst2     |  | missing |
| vi>            |         |               |  | vs~        |  |         |

Table with nabc strings and corresponding grelaon glyphs:

|                    |  |                     |  |               |  |                    |
|--------------------|--|---------------------|--|---------------|--|--------------------|
| bv                 |  | cl1!pi!tosun1       |  | lssimpl       |  | pelsa2             |
| bvlsa2             |  | cl1!pi!vi           |  | lssp          |  | pelsc2             |
| bvsun4             |  | cl1!pi>             |  | lsst          |  | pelsl2             |
| ci                 |  | cl1!pilsm3lsa6      |  | lst           |  | pelsm2             |
| cilsf1             |  | cl1!pilsn8          |  | lsth          |  | pelsn2             |
| cilsn8             |  | cl1!pilsn9          |  | ltdo          |  | pelsn3             |
| cl                 |  | cl1!pilst9          |  | ltdr          |  | pelsst1lsm4        |
| cl!cl!cl           |  | cl1!cl!cl1          |  | ltdx          |  | pelsst2            |
| cl!cl!cl!llsn9     |  | cl1!cl!cl!llsn9     |  | lti           |  | pelst2             |
| cl!cl!clsun1lsa5   |  | cl1!cl!clsun1lsa5   |  | ltps          |  | pesu2              |
| cl!cl!pi           |  | cl1!cl!pi           |  | ltqm          |  | pesu2lst3          |
| cl!cl!pi!vi        |  | cl1!cl!pi!vi        |  | ltsb          |  | pesu2sun1          |
| cl!cl!po           |  | cl1!cl!po           |  | ltse          |  | pesun3             |
| cl!cl!to           |  | cl1!cl!to           |  | ltsj          |  | pesun3lss1lsa3     |
| cl!or              |  | cl1!or              |  | ltsl          |  | pf                 |
| cl!orpp2           |  | cl1!orpp2           |  | ltsn          |  | pf1                |
| cl!pe              |  | cl1!pe              |  | ltsp          |  | pf2                |
| cl!pelsc2          |  | cl1!pelsc2          |  | ltsr          |  | pf>                |
| cl!pelsn7          |  | cl1!pelsn7          |  | ltst          |  | pf>1               |
| cl!pelst2          |  | cl1!pelst2          |  | ltus          |  | pf>2               |
| cl!pi!vi>          |  | cl1!pi!vi>          |  | oc            |  | pfM                |
| cl!po              |  | cl1!po              |  | oc!cl         |  | pfMlsmd3           |
| cl!popp3           |  | cl1!popp3           |  | oc!clM        |  | pfS                |
| cl!to              |  | cl1!to              |  | oc!pe         |  | pfppn1ppq1sun1lsa5 |
| cl!to!cl!cl        |  | cl1!to!cl!cl        |  | oc!pe!pu      |  | pfsun1             |
| cl!to!pi           |  | cl1!to!pi           |  | oc!vi         |  | pfsun1lsn5         |
| cl!to!pi!cl        |  | cl1!to!pi!cl        |  | oclst8        |  | pf~                |
| cl!to!pi!clpp2     |  | cl1!to!pi!clpp2     |  | or            |  | pf-1               |
| cl!to!pi!clpp2lsn9 |  | cl1!to!pi!clpp2lsn9 |  | or1           |  | pi                 |
| cl!to!pipp2        |  | cl1!to!pipp2        |  | or>           |  | po                 |
| cl!to>             |  | cl1!to>             |  | or>lsa1       |  | po>                |
| cl!tolst9          |  | cl1!tolst9          |  | orlst3        |  | po>1               |
| cl!topp2           |  | cl1!topp2           |  | orsu1sun1     |  | poG                |
| cl!toppz1su1sun1   |  | cl1!toppz1su1sun1   |  | orsu1sun2lst5 |  | po>pp2             |
| cl!tosu1           |  | cl1!tosu1           |  | orsu1sun1lst2 |  | po>ppn1            |
| cl!tosu1lsc6       |  | cl1!tosu1lsc6       |  | orsu1sun1lst3 |  | po>ppn1ppz1        |
| cl!tosu1lsc6lst8   |  | cl1!tosu1lsc6lst8   |  | orsu1sun1lst4 |  | poG                |
| cl!tosun1lsa5      |  | cl1!tosun1lsa5      |  | pe            |  | poM                |
| cl1!or             |  | cl1!or              |  | pe!or         |  | poMsun1            |
| cl1!orlsc3         |  | cl1!orlsc3          |  | pe!pu         |  | polsf2lst3         |
| cl1!orlss3         |  | cl1!orlss3          |  | pe!ta         |  | polst2             |
| cl1!orpp2          |  | cl1!orpp2           |  | pe!ta>2lsa2   |  | popp2              |
| cl1!orsun1         |  | cl1!orsun1          |  | pe!talsa2     |  | popp2su1sux1       |
| cl1!orsun1lsa5     |  | cl1!orsun1lsa5      |  | pe!talsc1lst2 |  | poppn1             |
| cl1!pi             |  | cl1!pi              |  | pe!un         |  | posu1sun1          |
| cl1!pi!cl          |  | cl1!pi!cl           |  | pe!unlsc2     |  | posun1lsa5         |
| cl1!pi!orsun1      |  | cl1!pi!orsun1       |  | pe>           |  | posux1             |
| cl1!pi!pesu2       |  | cl1!pi!pesu2        |  | pe>1          |  | posux1lsa5         |
| cl1!pi!pi!vi       |  | cl1!pi!pi!vi        |  | pe>1lsa6      |  | posu1sun1          |
| cl1!pi!pisun1lsa5  |  | cl1!pi!pisun1lsa5   |  | peG           |  | posu1lsa5          |
| cl1!pi!to          |  | cl1!pi!to           |  | peG1          |  | pp1                |
| cl1!pi!tosu1       |  | cl1!pi!tosu1        |  | peGlsa6       |  | pp2                |
|                    |  |                     |  | peGlsf1       |  | pp2ppn1            |
|                    |  |                     |  |               |  | pp3                |

|                  |                    |             |                  |   |
|------------------|--------------------|-------------|------------------|---|
| pp4              | ql!cl!tr>ppz1      | qlsux1      | to               | ለ |
| ppn1             | ql!clppn1          | sa          | to!cl            | ለ |
| ppn1pp1          | ql!po              | sa1         | to!cl!cl         | ለ |
| ppn1pp1ppz1      | ql!po>             | sa1lsc4     | to!cl!clls9      | ለ |
| ppn1ppq1         | ql!po>ppn1         | sa1lsc6     | to!cl!clsu1      | ለ |
| ppn1ppz1         | ql!polsa1lsa3lsa9  | sa1sun1lsa5 | to!cl!clsun2     | ለ |
| ppn1ppz1ppq1     | ql!polsm1          | sa>         | to!cl!clsun2lsa5 | ለ |
| ppn2             | ql!poppn1          | salsc4      | to!cl!orsun1     | ለ |
| ppn2ppz1         | ql!popppn1lst2     | salsc6      | to!cl!pi         | ለ |
| ppn2ppz1ppq1     | ql!poppn1sun1      | sc          | to!cl>1          | ለ |
| ppn3             | ql!poppn1sux1      | sc1         | to!clM           | ለ |
| ppn3ppz1         | ql!popppz1         | sc1lsc4     | to!clsu1sun1     | ለ |
| ppn4             | ql!popppz1lsa3     | sclst2      | to!clsu1sun1lsm6 | ለ |
| ppq1             | ql!popppz1su1sun1  | sf          | to!clsu2         | ለ |
| ppz1             | ql!posu1sun1       | sfG         | to!clsu2lsn6     | ለ |
| ppz1ppq1         | ql!posun1          | su1         | to!clsun1        | ለ |
| pq               | ql!posun1          | su1sun1     | to!clsun1lsa5    | ለ |
| pq1              | ql!posux1          | su1sun1su2  | to!or            | ለ |
| pr               | ql>                | su1sun2     | to!orlsc6        | ለ |
| pt1              | ql>ppn1            | su1sux1     | to!orlst3        | ለ |
| pt1ppn1          | ql>ppn1lsc3        | su2         | to!orsun1lsa5    | ለ |
| pt2              | qllsst2            | su2sun1     | to!pi!cl         | ለ |
| pt3              | qlppn1             | su3         | to!pi!cl!pi!pi   | ለ |
| pu               | qlppn1ppz1         | su4         | to!po            | ለ |
| pu1              | qlppn1ppz1lst2     | sun1        | to!pohd          | ለ |
| pulsnt3          | qlppn1ppz1su1sun1  | sun1su1     | to!to            | ለ |
| puppp1su1sun1    | qlppn1ppz1sun1lsa5 | sun1su1sun1 | to!to!pi!clpp2   | ለ |
| puppp1su2        | qlppn1su1sun1      | sun1su2     | to!toppn1sun1    | ለ |
| puppp2su1sun1    | qlppn1su1sun2      | sun2        | to!tosun1        | ለ |
| puppp2su2        | qlppn1su2lsn1      | sun2su1     | to>              | ለ |
| puppn1su1sun2    | qlppn1su1sun2      | sun3        | to>2             | ለ |
| puppn1su1sun2    | qlppn1su2sun2      | sun4        | to>2lsa3         | ለ |
| puppn1su2        | qlppn1su2lsn1      | sux1        | to>2lsc1lsa3     | ለ |
| pusu1sun1        | qlppn1sun1         | ta          | to>lsa5          | ለ |
| pusu1sun1lsf1    | qlppn1sun1lsc5     | ta>         | to>pp2           | ለ |
| pusu1sun1lst7    | qlppn1su2          | ta>1        | toG              | ለ |
| pusu1sun2        | qlppn1su2lsn1      | ta>2        | toGlsa1lst8      | ለ |
| pusu1sun2ls5     | qlppn1sun1         | ta>lsc2     | toGlsa5          | ለ |
| pusu2sun1        | qlppn1sun1lsc5     | ta>lsn2     | toS              | ለ |
| pusu3            | qlppn1sun1su2      | ta>pp2      | toS!pe           | ለ |
| pusu4            | qlppn2sun1         | ta>ppn1     | toS!to           | ለ |
| ql               | qlppn2sun2         | tasu2       | toS!tolst9       | ለ |
| ql!cl            | qlppn2sun1lsa5     | tg          | toS1             | ለ |
| ql!cl!or         | qlppz1su1sun1      | tg!cl       | toSlsa5          | ለ |
| ql!cl!orppn1ppz1 | qlppz1su2          | tg!cl>1     | toSsun1lsa5      | ለ |
| ql!cl!to         | qlsu1sun1          | tg!cllsn9   | tolsf4           | ለ |
| ql!cl!to!or      | qlsu1sux1          | tg!or       | tolsn8           | ለ |
| ql!cl!to!orsun1  | qlsu2              | tglsn8      | tolnsnt2lst9     | ለ |
| ql!cl!tolst6     | qlsun1             | tglst9      | tolst9           | ለ |
| ql!cl!toppn1     | qlsun1lsa5         | tgsun1lsa5  | tolsth8          | ለ |
| ql!cl!tosu3      | qlsun1su2          |             | topp1su1         | ለ |
| ql!cl!tosu3lst6  | qlsun2             |             | topp1su1lsa6     | ለ |
| ql!cl!tr>        | qlsun2lsa5         |             | topp2            | ለ |
|                  |                    |             | topp2sun1        | ለ |

|                   |                        |                   |                        |
|-------------------|------------------------|-------------------|------------------------|
| 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             | un1lst8                | vi>               | vippn2lst3lsa4         |
| tosu2lst6         | un1ppn1ppq1sun2        | vi>1              | vippn2ppz1ppq1         |
| tosun1            | un1ppn1sun1su2lsa5     | vi>1lsa2lsc8      | vippn2ppz1ppq1lst2lsa8 |
| tosun1lsa5        | un1ppn1sun2            | vi>1pp2           | vippn2ppz1sun1lsa5     |
| tosun1su1sun1     | un1sun1su1sun1lsa3lsc4 | vi>1ppn1ppz1ppq1  | vippn2sun1lsa4         |
| tosun1su2lsn3lst6 | un1sun1su2             | vi>1ppz1ppq1      | vippn3                 |
| tosun2            | un1sun1su2lsa5         | vi>2              | vippn3su4              |
| tosun2lsa6        | un1sun2                | vi>lsa6           | vippn3sun1lsa5         |
| to~               | un1sun2su2             | vi>lsc6           | vippn4                 |
| tr                | un2                    | viS               | vippq1                 |
| tr>               | un2lsm1                | vilss1            | vippz1ppq1             |
| trS               | unlsm1                 | vilss2            | visu1sun1              |
| trSlsc1           | unlsm2lss3lst8         | vilsst1           | visu1sun1su1           |
| trlss1lss3        | unlst1                 | vilst1            | visu1sun1su1lst6       |
| trlst3lshp7       | unlst2                 | vilst2            | visu1sun2              |
| trs2              | unlst8                 | vilst2lsa8        | visu1sun1su2lss1lst6   |
| trs2lst3lsm8      | unppn1ppz1sun1         | vilst9            | visu1sun2lsc2          |
| trsun1lsa3lsa5    | unppn1ppz1sun1lsa5     | vipp2ppn1         | visu1sun2lsa5          |
| trsun1lsa5        | unppn1sun1su2          | vipp2su2          | visun1su1sun1          |
| trsun1su2         | unppn1sun2             | vipp2sun1lsa5     | vs                     |
| trsun1su2lsa3     | unppn1sun2lsa5         | vipp3             | vsG                    |
| trsun2            | unppn1sux1             | vipp3lsn3         |                        |
| trsun2lsa5        | unppn1sux1lsa5         | vipp4             |                        |
| trsux1            | unppn3sun1lsa5         | vipp4lst2         |                        |
| trsux1lsa5        | unsun1su1              | vippn1pp1ppz1     |                        |
| trsux1lst8        | unsun1su1lst2lsc6      | vippn1pp1ppz1lst8 |                        |
| ts                | unsun1su2              | vippn1pp1su1sun2  |                        |
| ts1               | unsun2                 | vippn1ppq1        |                        |
| ts>               | unsun2lsa5             | vippn1ppz1ppq1    |                        |
| ts>1              | unsun2                 | vippn1su1         |                        |
| ts>lsc2           | unsun2                 | vippn1su1sun1     |                        |
| ts>lsc6           | unsun2lsa5             |                   |                        |
| tslsa2            | unsun2su1              |                   |                        |
| tslsc2lst2        | unsun2su1              |                   |                        |

# 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.

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## 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  
C46O 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 Iubilate 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  
C78O Oculi omnium GT343  
C79L Leatatus 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 praevenisti GT509

C134B Benedicte 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 Benedicte gentes Domino GT231

E158D Domine ad adiuvandum OT42

E161S Sipientes 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 Confirmata 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 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0390_001/max">http://www.e-codices.unifr.ch/en/download/csg-0390_001/max</a>   | H424M Magnificat                                                                                                                                                                                                                                                                        |
| H195 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0391_001/max">http://www.e-codices.unifr.ch/en/download/csg-0391_001/max</a> | H428A Ascendens Iesus AM593                                                                                                                                                                                                                                                             |
| H16A Aspiciebam in visu NR111                                                                                                              | H443V Venite exsultemus NRXXXVIII                                                                                                                                                                                                                                                       |
| H16M Missus est Gabriel NR111                                                                                                              | <b>St. Gall codex 339</b>                                                                                                                                                                                                                                                               |
| H16V Ave Maria NR113                                                                                                                       | G1 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0339_033/max">http://www.e-codices.unifr.ch/en/download/csg-0339_033/max</a>                                                                                                                                                |
| H22S Sicut mater consolator NR127                                                                                                          | G56 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0339_088/max">http://www.e-codices.unifr.ch/en/download/csg-0339_088/max</a>                                                                                                                                               |
| H23E Egregietur Dominus de Samaria NR129                                                                                                   | G57 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0339_088a/max">http://www.e-codices.unifr.ch/en/download/csg-0339_088a/max</a>                                                                                                                                             |
| H25E Ecce mitto Angelum AM201                                                                                                              | G58 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0339_089/max">http://www.e-codices.unifr.ch/en/download/csg-0339_089/max</a>                                                                                                                                               |
| H26G Grata facta est NR25*                                                                                                                 | G8E Exulta satis OT11                                                                                                                                                                                                                                                                   |
| H28Q Qui venturus est NR134                                                                                                                | G9A Alleluia Veni Domine GT36                                                                                                                                                                                                                                                           |
| H29E Ecce radix Jesse NR137                                                                                                                | G11P Puer natus est GT47                                                                                                                                                                                                                                                                |
| H32N Nascetur nobis NR149                                                                                                                  | G11V Viderunt omnes GT48                                                                                                                                                                                                                                                                |
| H33I Iuravi dicit Dominus NR151                                                                                                            | G12T Tui sunt caeli OT18                                                                                                                                                                                                                                                                |
| H34F Festina ne tardaveris NR130                                                                                                           | G20I Jubilate Deo universa terra GT227                                                                                                                                                                                                                                                  |
| H35G Germinaverunt campi NR144                                                                                                             | G22D Domine quinque talenta GT515                                                                                                                                                                                                                                                       |
| H36A Adnuntiatum est                                                                                                                       | G25P Posuisti Domine GT477                                                                                                                                                                                                                                                              |
| H48B Beata et venerabilis                                                                                                                  | G30E Exsurge quare obdormis GT91                                                                                                                                                                                                                                                        |
| H50Q Quem vidistis pastores AM240                                                                                                          | G35D Domine vivifica me OT31                                                                                                                                                                                                                                                            |
| H72V Venit lumen tuum AM290                                                                                                                | G42D Domine Deus salutis OT112                                                                                                                                                                                                                                                          |
| H72H Hodie in Iordane NR229                                                                                                                | G44P Precatus est Moyses GT317                                                                                                                                                                                                                                                          |
| H73O Omnes de Saba NR237                                                                                                                   | G45D Domine in auxilium OT106                                                                                                                                                                                                                                                           |
| H73S Stella ista NR242                                                                                                                     | G51I Intende voci GT280                                                                                                                                                                                                                                                                 |
| H74I Illuminare, illuminare NR236                                                                                                          | G51S Si ambulabem GT125                                                                                                                                                                                                                                                                 |
| H75I In columbae specie NR231                                                                                                              | G57F Factus est Dominus GT119                                                                                                                                                                                                                                                           |
| H75V Videntes stellam NR242                                                                                                                | G89D Domine Deus in simplicitate OT159                                                                                                                                                                                                                                                  |
| H77S Stella ista AM291                                                                                                                     | G113A Alleluia. Dilexit Andream GT625                                                                                                                                                                                                                                                   |
| H77A Ab Oriente AM297                                                                                                                      | G116C Cantabo Domino GT283                                                                                                                                                                                                                                                              |
| H87E Exaudi Deus                                                                                                                           | G126D Alleluia. Domine Deus meus GT282                                                                                                                                                                                                                                                  |
| H103S Spes nostra salus NR512                                                                                                              | G128A Alleluia. Attendite popule                                                                                                                                                                                                                                                        |
| H103M Magnus Dominus NR516                                                                                                                 | G132A Alleluia. Mirabilis Dominus GT462                                                                                                                                                                                                                                                 |
| H104T Te Deum patrem                                                                                                                       | G132V Alleluia. Vox exultationis                                                                                                                                                                                                                                                        |
| H112S Stans a dextris AM798                                                                                                                | G139A Asperges me Domine                                                                                                                                                                                                                                                                |
| H114C Corde et animo AM1033                                                                                                                | G140O Oremus dilectissimi nobis                                                                                                                                                                                                                                                         |
| H114N Nativitas tua AM1035                                                                                                                 | G141O Omnipotens Deus                                                                                                                                                                                                                                                                   |
| H118G Gaude, Maria Virgo NR130*                                                                                                            | <b>St. Gall codex 376</b>                                                                                                                                                                                                                                                               |
| H119C Cum inducerent                                                                                                                       | N1 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0376_001/max">http://www.e-codices.unifr.ch/en/download/csg-0376_001/max</a>                                                                                                                                                |
| H173I Insurrexerunt in me NR364                                                                                                            | N39H Hodie cantandus est nobis                                                                                                                                                                                                                                                          |
| H173C Contumelias et terrores NR365                                                                                                        | N53A Audite fratres dilecti                                                                                                                                                                                                                                                             |
| H179L Liberavit Dominus ARII183                                                                                                            | N59N Nativitatem venerandam                                                                                                                                                                                                                                                             |
| H179A Amicus meus osculi NR381                                                                                                             | N65G Glorialis laus tua Deus                                                                                                                                                                                                                                                            |
| H179I Iudas mercator NR382                                                                                                                 | N67G Gloria in excelsis Deo                                                                                                                                                                                                                                                             |
| H179U Unus ex discipulis NR383                                                                                                             | N68G Gloria in excelsis Deo                                                                                                                                                                                                                                                             |
| H180U Una hora non potuistis NR388                                                                                                         | N69G Gloria in excelsis Deo                                                                                                                                                                                                                                                             |
| H219T Tradiderunt me NR408                                                                                                                 | N73G Kyrie eleison                                                                                                                                                                                                                                                                      |
| H219I Iesum tradidit impius NR409                                                                                                          | N86D Dilexisti iustitiam GT498                                                                                                                                                                                                                                                          |
| H225M Mulieres sedentes AM449                                                                                                              | N100T Tui sunt caeli OT18                                                                                                                                                                                                                                                               |
| H266D Domino si in tempore                                                                                                                 | N171D Deus exaudi orationem GT107                                                                                                                                                                                                                                                       |
| H269S Spiritus Sanctus                                                                                                                     | N221N Alleluia. Non vos relinquam GT242                                                                                                                                                                                                                                                 |
| H269D Dum complerentur NR493                                                                                                               | N270A Alleluia. Benedictus es GT375                                                                                                                                                                                                                                                     |
| H269R Repleti sunt omnes NR494                                                                                                             | N293A Alleluia. Sancti tui, Domine, benedicent GT463                                                                                                                                                                                                                                    |
| H270S Spiritus Domini AM520                                                                                                                | N296V Alleluia. Veni Sancte Spiritus GT263                                                                                                                                                                                                                                              |
| H271L Loquebantur variis AM521                                                                                                             | N363C Carmen suo dilecto                                                                                                                                                                                                                                                                |
| H297B Beatam me dicent NR [172]                                                                                                            | N368L Letamente canamus Domino nostro                                                                                                                                                                                                                                                   |
| H305H Hodie nata est NR279*                                                                                                                | N372O O quam mira sunt Deus                                                                                                                                                                                                                                                             |
| H305G Gloriosae virginis Mariae NR279*                                                                                                     | <b>St. Gall codex 374</b>                                                                                                                                                                                                                                                               |
| H306N Nativitas gloriosae NR280*                                                                                                           | A1 = <a href="http://www.e-codices.unifr.ch/en/download/csg-0374_001/max">http://www.e-codices.unifr.ch/en/download/csg-0374_001/max</a>                                                                                                                                                |
| H307N Nativitas tua NR281*                                                                                                                 | A17T Tui sunt caeli OT18                                                                                                                                                                                                                                                                |
| H307F Felix namque NR [171]                                                                                                                | A22V Vox in Rama GT638                                                                                                                                                                                                                                                                  |
| H320R Regem confessorum                                                                                                                    | A26F Fili quid fecisti GT51                                                                                                                                                                                                                                                             |
| H322B Beatus Gallus zelo                                                                                                                   | A56C Custodi me Domine GT304                                                                                                                                                                                                                                                            |
| H322C Columbanus itaque beato                                                                                                              | A127E Exultabunt sancti OT143                                                                                                                                                                                                                                                           |
| H323B Beatus Gallus cum                                                                                                                    | A167O Oravi Deum meum OT107                                                                                                                                                                                                                                                             |
| H323D Domine Iesu Christe                                                                                                                  | A174A Alleluia. Eripe me GT308                                                                                                                                                                                                                                                          |
| H324P Pater sanctus                                                                                                                        | <b>Bamberg, lit. 6, Gradual of St. Emmeram</b>                                                                                                                                                                                                                                          |
| H324V Vir Deo plenus                                                                                                                       | B9v = <a href="http://bsbsbb.bsb.lrz-muenchen.de/~db/0000/sbb00000128/images/index.html?id=0000128&amp;no=19&amp;seite=22&amp;signatur=Msc.Lit.6">http://bsbsbb.bsb.lrz-muenchen.de/~db/0000/sbb00000128/images/index.html?id=0000128&amp;no=19&amp;seite=22&amp;signatur=Msc.Lit.6</a> |
| H325I Iste sanctus digne                                                                                                                   | B9vA Anima nostra GT466                                                                                                                                                                                                                                                                 |
| 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]                                                                                                   |                                                                                                                                                                                                                                                                                         |

|                  |            |           |               |
|------------------|------------|-----------|---------------|
| <b>virga</b>     |            |           |               |
| /                | vi         | C780      | tu            |
| /                | vilsc3     | C82R      | testamentum   |
| /                | vilst1     | E29E      | rex           |
| /                | vi-        | C80Q      | montes        |
| /                | vi>        | C27E      | eius          |
| /                | vi-lst3    | H50Q      | Quem          |
| /                | vi->       | E20E      | sanctus       |
|                  |            |           | 2.166x        |
| <b>tractulus</b> |            |           |               |
| -                | ta         | C26A      | Domine        |
| -                | talsc3     | E262S     | saeculum      |
| -                | talst2     | C56D      | Desiderium    |
| -                | ta-        | C81E      | antiquis.     |
| -                | ta>        | C25U      | et            |
| -                | su1 Cf. ✓  | pesu2suv1 |               |
|                  |            |           | 2.166x        |
| <b>punctum</b>   |            |           |               |
| .                | pu         | C137A     | Audi          |
| Cf.              | st         |           |               |
| Cf. ✓            | ci>        |           |               |
|                  |            |           |               |
| <b>gravis</b>    |            |           |               |
| /                | gr         | H271L     | Loquebantur   |
| /                | gr-        | H270S     | Spiritus      |
| /                | gr-lsc6    | H270S     | replevit      |
|                  |            |           |               |
| <b>clivis</b>    |            |           |               |
| /                | cl         | C780      | sperant       |
| /                | cllsc3     | C26A      | nobis         |
| /                | cllst2     | C25U      | exspectant    |
| /                | cl-lst2    | C52P      | pretios.      |
| /                | cl-        | C780      | omnium        |
| /                | cls-       | C81E      | opem          |
| /                | cls        | C780      | opportuno.    |
| /                | cls1       | H424M     | potentiam     |
| /                | clM        | C148V     | nostro        |
| Cf. ↗            | cl>        |           |               |
| ↪                | cl>1       | H36A      | virginis      |
| Cf. ↗            | vi>        |           |               |
| ↪                | cl->1      | H50Q      | natum         |
| ↪                | cl->       | H50Q      | angelorum     |
| ↪                | clM-       | C27Q      | super         |
| ↪                | cls-1      | H428A     | navem         |
|                  |            |           |               |
| <b>pes</b>       |            |           |               |
| /                | pe         | C80Q      | Domine        |
| /                | pe-        | C80Q      | aeternum      |
| /                | pe-1       | C64Q      | Scapulis      |
| /                | peS        | C780      | in            |
| /                | peG        | B9vA      | erepta        |
| Cf. ↗            | peG        |           |               |
| ↪                | pe>        | C100C     | germine       |
| ↪                | pe>1       | C27E      | eius          |
| ↪                | pe>2       | C71L      | misericordia  |
| ↪                | pe->       | N296V     | tuorum        |
| Cf. ↗            | ta>        |           |               |
| ↪                | pe->1      | H35G      | Germinaverunt |
|                  |            |           | 0.5x          |
|                  |            |           | 1.7x          |
| <b>orrectus</b>  |            |           |               |
| /                | po         | C139B     | super         |
| /                | polsc2     | C82R      | iudica        |
| /                | 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        |
| /                | tolsc4lst3 | E125P     | Domine,       |
| /                | tolst2     | C74B      | misericordiam |
| /                | to-        | G44P      | animae        |
| /                | to-1       | C139A     | nostrorum     |
| /                | toS        | C38A      | hodie         |
| /                | toS1       | E205R     | Resurrexi,    |
| /                | toS2       | E161S     | Sitientes     |
| /                | toS3       | C104V     | circumfodit   |
| /                | toG        | G12T      | eius          |
| /                | toM        | C49I      | servum        |
| /                | toM1       | H22S      | auxilium      |
| /                | toM3       | C39B      | mirabile      |
| /                | to>        | C26A      | misericordiam |
|                  |            |           | 0.5x          |
|                  |            |           | 1.75x         |
|                  |            |           | 1.71x         |

|                  |                  |               |                     |        |
|------------------|------------------|---------------|---------------------|--------|
| Cf. ↗            | pe>              |               |                     |        |
| ↗                | toS3lst2         | 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            |        |
| ↗                | ci>              | C460          | orta                |        |
| ↗                | cl>              | C79L          | domum               |        |
| ↗                | visuv1su2        | C35Q          | nos                 |        |
| ↗                | visut3           | C38T          | meo                 |        |
| ↗                | visu1suu1        | C26D          | laetitia.           |        |
| ↗                | visut4           | C25U          | me.                 |        |
| ↗                | cl-1su2          | C40A          | magna               |        |
| ↗                | visu1su1t2       | C43L          | Domine              |        |
| ↗                | visu1su1v1       | C53S          | terrae.             |        |
| ↗                | visu1su1s2       | C56D          | eius                |        |
| ↗                | visu2su2         | H103S         | salus               |        |
| ↗                | vi-su2su2        | H103S         | o                   |        |
| ↗                | visu2suw1        | G113A         | Alleluia            | 0.85x  |
| ↗                | visut2su2        | G128A         | Alleluia            | 0.85x  |
| ↗                | visut3suw1       | C153S         | dicent.             |        |
| ↗                | visu1su1sux1     | G126D         | salvum              | 0.85x  |
| ↗                | visu1su1s2       | N39H          | puer                |        |
| ↗                | visu1su1su1t1    | N39H          | generavit           |        |
| ↗                | vi-suisut1su2    | N39H          | enim                |        |
| ↗                | visut1sux1       | N59N          | filium              |        |
| ↗                | clSsuisut1       | N65G          | tui                 |        |
| ↗                | vi-su4           | N68G          | Amen.               |        |
| ↗                | vi-suisut2su1    | N73K          | Christe             |        |
| ↗                | visu1su1suy1     | N221N         | Alleluia.           |        |
| ↗                | visut3suy1       | N293A         | dicent.             |        |
| ↗                | visut2suy1       | N363C         | sacro               | 1.25x  |
| ↗                | visu5            | N368L         | fornacibus          | 1.25x  |
| ↗                | 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             |        |
| ↗                | clSsut2          | E51R          | suscipient          | 2.0x   |
| ↗                | clSsuu1su2       | H390C         | surrecturus         | 1.5x   |
| ↗                | vi-sut3          | H269D         | dicentes            |        |
| ↗                | vi-suisut1 Cf. ↗ | vi-suisut1su2 | minus subpunctis    |        |
| ↗                | vi-su2sut1       | N296V         | alleluia            |        |
| ↗                | vi-suisux1       | 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-suisuu1       | H114C         | gloriam             | 1.71x  |
| ↗                | vi-suisuu1su2    | H114N         | nobilis             | 1.71x  |
| ↗                | vi-suisut2       | H324P         | aetatis             | 2.0x   |
| ↗                | vi-su3           | H307F         | natalem             | 2.0x   |
| ↗                | vi-sut1suu1      | 325I          | peregrinatione      | 2.0x   |
| <b>scandicus</b> |                  |               |                     |        |
| ↗                | 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            |        |

|                           |                 |           |                   |        |
|---------------------------|-----------------|-----------|-------------------|--------|
| ↗                         | vi>ppt3         | E2R       | non               | 2.166x |
| ↗                         | cl>ppt2         | H730      | annuntiantes      |        |
| ↗                         | vi-!vi!vi       | E155B     | Benedicte         | 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   |
| <b>porrectus flexus</b>   |                 |           |                   |        |
| ↗                         | pf              | C27E      | sacrificia        |        |
| ↗                         | pflsc2          | C58D      | intendentes       |        |
| ↗                         | pflsc2          | 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. ↗           | E34I      | eum               | 2.166x |
| <b>pes subbipunctis</b>   |                 |           |                   |        |
| ↗                         | 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           |        |
| ↗                         | vipp1su2        | 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. ↗           | pesu1suu1 | Deus              |        |
| ↗                         | pesu3           | C27Q      | regis             |        |
| ↗                         | vipp1su1sut1    | C40V      | omnes             |        |
| ↗                         | vipp1su2        | C74B      | Altissime.        |        |
| ↗                         | pesu1sut3       | C60S      | venti.            |        |
| ↗                         | pesu2suv1       | C60C      | Sana              |        |
| ↗                         | pesu2sut1       | E213C     | Alleluia.         | 2.0x   |
| ↗                         | pesu1sut2       | E213C     | Alleluia.         | 2.0x   |
| ↗                         | vipp1su2lsc3    | C32B      | caeli             |        |
| ↗                         | pe-1su1suu1     | C61I      | pascuae           |        |
| ↗                         | peSsu1sx1       | G89D      | filii             | 0.85x  |
| ↗                         | pe-su3sut1      | N270A     | saecula.          |        |
| ↗                         | pe-1sut1suw1    | H72V      | orta              |        |
| ↗                         | peSsut3         | C460      | Jerusalem         |        |
| ↗                         | pesut2          | H77S      | magi              |        |
| ↗                         | pe-1suw2        | E255S     | Domini            | 2.133x |
| ↗                         | peSsu1su2       | E13P      | Domine            | 2.133x |
| ↗                         | pesu1su1        | H25E      | angelum           | 1.7x   |
| ↗                         | pe-1su1suw1     | H29E      | deprecabuntur     | 1.7x   |
| ↗                         | pesu1sut1 Cf. ↗ | pesu1su1  | 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          |        |
| ↗                         | pesu1su1sut1    | C139A     | Alleluia          |        |
| <b>scandicus flexus</b>   |                 |           |                   |        |
| ↗                         | sf              | C64Q      | habitat           |        |
| ↗                         | sflsc3          | C27E      | Deus              |        |
| ↗                         | sf-             | C39B      | est               |        |
| ↗                         | sfS             | C97D      | Deus              |        |
| ↗                         | toppu1          | C103C     | Cantemus          |        |
| ↗                         | Cf. ↗           | sfM       |                   |        |
| ↗                         | Cf. ↗           | sc>       |                   |        |
| ↗                         | to>pp2          | E324R     | testamentum       | 2.0x   |
| <b>torculus resupinus</b> |                 |           |                   |        |
| ↗                         | tr              | C25U      | edoce             |        |
| ↗                         | trlst2          | E69P      | eius              |        |
| ↗                         | tr-1            | C20T      | meo               |        |

|       |                     |          |                 |        |
|-------|---------------------|----------|-----------------|--------|
| /     | trM                 | E336I    | resistere       | 2.166x |
| /     | tr>                 | C82V     | nonconfundentur |        |
| /     | tr~                 | C60S     | Altissimus      |        |
| /     | tr--                | C27Q     | et              |        |
| /     | tr--1               | C107A    | Alleluia.       |        |
| /     | trS-                | C89T     | pedes,          |        |
| /     | trS1                | E26L     | eeiieue         | 2.166x |
| /     | tr-3                | H323D    | honore          | 2.0x   |
| /     | trsus3              | C95D     | eius.           |        |
|       | <b>strophia</b>     |          |                 |        |
| ,     | st                  | C80Q     | commovebitur    |        |
| ,     | st-                 | C52P     | Desiderium      |        |
| ,     | stS                 | E263V    | est.            | 2.166x |
| ,     | st>                 | C49I     | servum          |        |
|       | <b>distropha</b>    |          |                 |        |
| "     | ds                  | C460     | super           |        |
| "     | dslsx6              | C45S     | forma           |        |
| "     | ds-                 | C81E     | Domine          |        |
| /     | ds>                 | C38A     | Alleluia        |        |
|       | <b>tristropha</b>   |          |                 |        |
| ..."  | ts                  | C80Q     | Dominus         |        |
| ..."  | tslsx6              | C44D     | mansuetudinem   |        |
| ..."  | ts-                 | C150L    | ibimus          |        |
| ,"    | tsM                 | C62M     | anima           |        |
| ,"    | ts>                 | C62M     | conculcantes    |        |
| ,"    | tsM-                | A26F     | ego             |        |
|       | <b>trigonos</b>     |          |                 |        |
| :     | tg                  | C80Q     | aeternum        |        |
| :     | tg1                 | C81E     | antiquis.       |        |
| :     | tgS                 | C139B    | omnibus         |        |
| :     | tgS1                | N171D    | mei             |        |
| :     | tgS3                | C61I     | laetitia.       |        |
| :     | tgM                 | C118C    | Dominus         |        |
| :     | tgS-                | C118C    | Dominus         |        |
| :     | tgS4                | C86D     | mei             |        |
|       | <b>bivirga</b>      |          |                 |        |
| /     | bv                  | C26D     | Propterea       |        |
| /     | bv-                 | C82B     | populus         |        |
| /     | bv>                 | H33I     | montes          |        |
|       | <b>trivirga</b>     |          |                 |        |
| ///   | tv                  | C56D     | pretioso        |        |
| ///   | tv-                 | C61I     | eius.           |        |
|       | <b>pressus</b>      |          |                 |        |
| /     | pr                  | C26A     | Alleluia        |        |
| /     | pi                  | C82R     | Domine,         |        |
| /     | 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. S | or>                 |          |                 |        |
|       | <b>virga strata</b> |          |                 |        |
| /     | vs                  | C148A    | generatio       |        |
| /     | vslsc3              | C39B     | nomine          |        |
| /     | vslst2              | E195D    | suis,           | 2.166x |
| /     | vs-                 | C82B     | Domini          |        |
| /     | vs>                 | C64Q     | pennis          |        |
| Cf. / | ta>                 |          |                 |        |
| /     | vs->                | A22V     | Rama            |        |
|       | <b>oriscus</b>      |          |                 |        |
| S     | or                  | H112S    | candidior       |        |
| S     | 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 |        |

|       |                      |                    |              |        |
|-------|----------------------|--------------------|--------------|--------|
| Cf. / | pe>2                 |                    |              |        |
| /     | sa!cls1              | C80Q               | sicut        |        |
| /     | sa!cls1              | C27Q               | tuam         |        |
| /     | sa!cls1sc2           | C46B               | Deus         |        |
| /     | sa-lsfr1             | C134B              | nomen        | 0.85x  |
| /     | sai!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    |        |
| /     | 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           |        |
|       | <b>pes stratus</b>   |                    |              |        |
| /     | pt                   | G1400              | ae           | 0.85x  |
|       | <b>subpunctis</b>    |                    |              |        |
| /     | su2 Cf. /            | ci                 |              |        |
| /     | su3 Cf. /            | ci1                |              |        |
| /     | su1sut1 Cf. /        | ciS                |              |        |
| /     | su2 Cf. /            | ciS1               |              |        |
| /     | suu1su2 Cf. /        | visuu1su2          |              |        |
| /     | suu1su1 Cf. /        | ciM                |              |        |
| /     | suisux1 Cf. /        | ci>                |              |        |
| /     | suisut2 Cf. /        | visu1sut2          |              |        |
| /     | su1suu1 Cf. /        | visu1suu1          |              |        |
| /     | su2suw1 Cf. /        | visu2suw1          |              |        |
| /     | su2sux1 Cf. /        | vi-su2sux1         |              |        |
| /     | sut1su2 Cf. /        | visut1su2          |              |        |
| /     | sut1su1 Cf. /        | pe-1sut1suu1       |              |        |
| /     | sut3 Cf. /           | visut3             |              |        |
| /     | suvi1su2 Cf. /       | visu1su2           |              |        |
| /     | su4 Cf. /            | visut4             |              |        |
| /     | suisuv1 Cf. /        | visu1suv1          |              |        |
| /     | suu2su2 Cf. /        | vi-su2su2          |              |        |
| /     | suu1suu1sut2 Cf. /   | qi-ppt1suu1su1sut2 |              |        |
| /     | sut2su2 Cf. /        | visut2su2          |              |        |
| /     | suisut3 Cf. /        | pesu1sut3          |              |        |
| /     | su2suv1 Cf. /        | pesu2suv1          |              |        |
| /     | sut3suw1 Cf. /       | visut3suw1         |              |        |
| /     | suisut1sut1 Cf. /    | visu1sut1sux1      |              |        |
| /     | suisut1su2 Cf. /     | visu1sut1su2       |              |        |
| /     | suisut1su1sut1 Cf. / | visu1sut1su1sut1   |              |        |
| /     | sut1sux1 Cf. /       | visut1sux1         |              |        |
| /     | su4 Cf. /            | vi-su4             |              |        |
| /     | suisut2su1 Cf. /     | vi-su1sut2su1      |              |        |
| /     | suisut1su1 Cf. /     | visu1sut1suy1      |              |        |
| /     | sut3suy1 Cf. /       | visut3suy1         |              |        |
| /     | sut2su1 Cf. /        | visut2suy1         |              |        |
| /     | su5 Cf. /            | visu5              |              |        |
| /     | suisu1su2 Cf. /      | visu1suu1su2       |              |        |
| /     | suisu2 Cf. /         | vi-su1suu2         |              |        |
| /     | suisu1su1 Cf. /      | vi-su1suu1su1      |              |        |
| /     | suisut1 Cf. /        | pe-su3sut1         |              |        |
| /     | suu2 Cf. /           | ql-ppt1suu2        |              |        |
| /     | suisut1 Cf. /        | vi-su2sut1         |              |        |
| /     | suisu1 Cf. /         | pe-su2suy1         |              |        |
| /     | suw2 Cf. /           | pe-1suw2           |              |        |
| /     | suisuu1 Cf. /        | ql-ppt1sut2suu1    |              |        |

|                            |                                                                                  |                                     |        |  |
|----------------------------|----------------------------------------------------------------------------------|-------------------------------------|--------|--|
| suisuv1su2 Cf. <i>✓</i>    | ql-ppt2su1suv1su2                                                                |                                     |        |  |
| sutisuui Cf. <i>✓</i>      | vi-sutisuui                                                                      |                                     |        |  |
| suvis1suts1 Cf. <i>✓</i>   | pesuv1suisuts1                                                                   |                                     |        |  |
| <b>prepunctis</b>          |                                                                                  |                                     |        |  |
| pp2 Cf. <i>✓</i>           | vi-pp2                                                                           |                                     |        |  |
| ppu2 Cf. <i>✓</i>          | scS                                                                              |                                     |        |  |
| ppt2 Cf. <i>✓</i>          | sfS                                                                              |                                     |        |  |
| ppu3                       | C47I Sede                                                                        |                                     |        |  |
| ppu4                       | C58A Domine                                                                      |                                     |        |  |
| ppu5                       | C50G confregit                                                                   |                                     |        |  |
| pp4                        | C780 escam                                                                       |                                     |        |  |
| pp3 Cf. <i>✓</i>           | pp4                                                                              |                                     |        |  |
| ppt3 Cf. <i>✓</i>          | vi>ppt3                                                                          |                                     |        |  |
| ppt4                       | N69G amin.                                                                       |                                     |        |  |
| ppt5                       | A56C videant                                                                     |                                     |        |  |
| pp1 Cf. <i>✓</i>           | vi-pp2                                                                           |                                     |        |  |
| <b>combined glyphs</b>     |                                                                                  |                                     |        |  |
| cl!pi                      | C82R Domine                                                                      |                                     |        |  |
| cl!pilsc1lst3              | C89T manum                                                                       |                                     |        |  |
| cl!pilsc2                  | C149A cantabo                                                                    |                                     |        |  |
| 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>    |                                     |        |  |
| cl!cl                      | C148A Domine                                                                     |                                     |        |  |
| cl!cl!cl> Cf. <i>✓</i>     | cl!cl!cl>ppt1 minus tractulus                                                    |                                     |        |  |
| cl!cl!pi Cf. <i>✓</i>      | cl!cl!pippt1 minus tractulus                                                     |                                     |        |  |
| cl!pf-                     | G42D mane <span style="border: 1px solid black; padding: 2px;">0.85x</span>      |                                     |        |  |
| cl!pf                      | G35D Domine                                                                      |                                     |        |  |
| cl!cl-                     | C26A Alleluia                                                                    |                                     |        |  |
| cl!clM Cf. <i>✓</i>        | cl!clMppt1 minus tractulus                                                       |                                     |        |  |
| cl!cl-> Cf. <i>✓</i>       | cl!cl->ppt1 minus tractulus                                                      |                                     |        |  |
| cl!cl>                     | H26L salva <span style="border: 1px solid black; padding: 2px;">0.5x</span>      |                                     |        |  |
| cl!po                      | C148V nostro                                                                     |                                     |        |  |
| cl!po-1                    | C148A Alleluia.                                                                  |                                     |        |  |
| cl!po>                     | H33I terram                                                                      |                                     |        |  |
| cl!vs                      | C148A refugium                                                                   |                                     |        |  |
| cl!vssu2 Cf. <i>✓</i>      | cl!vssu2 minus tractulus                                                         |                                     |        |  |
| cl!vssut2 Cf. <i>✓</i>     | cl!vssut2 minus tractulus                                                        |                                     |        |  |
| qi!vs Cf. <i>✓</i>         | qi!vssu2 minus subbipunctis                                                      |                                     |        |  |
| qi!vssu2 Cf. <i>✓</i>      | qi!vssu2 minus tractulus                                                         |                                     |        |  |
| qi!vssu1suts2 Cf. <i>✓</i> | qi!vssu1suts2 minus tractulus                                                    |                                     |        |  |
| ql-su1suts1 Cf. <i>✓</i>   | ql-ppt1su1suts1 minus tractulus                                                  |                                     |        |  |
| ql-su1suts2 Cf. <i>✓</i>   | ql-ppt1su1suts2 minus tractulus                                                  |                                     |        |  |
| qisut2                     | E166C sermones <span style="border: 1px solid black; padding: 2px;">2.0x</span>  |                                     |        |  |
| qisut2 Cf. <i>✓</i>        | qippt2suts2 minus tractulus                                                      |                                     |        |  |
| ql-su3 Cf. <i>✓</i>        | ql-ppt1su3 minus tractulus                                                       |                                     |        |  |
| qlsuts3 Cf. <i>✓</i>       | qlppt1suts3 minus tractulus                                                      |                                     |        |  |
| qlsu2 Cf. <i>✓</i>         | qlppt1su2 minus tractulus                                                        |                                     |        |  |
| ql-su2 Cf. <i>✓</i>        | ql-ppt1su2 minus tractulus                                                       |                                     |        |  |
| ql-sut2                    | H73S cedebat                                                                     |                                     |        |  |
| ql-su1sux1 Cf. <i>✓</i>    | ql-ppt1su1sux1 minus tractulus                                                   |                                     |        |  |
| ql-su1suts2 Cf. <i>✓</i>   | ql-ppt1su1suts2 minus tractulus                                                  |                                     |        |  |
| ql-sut1sux1                | H72H complacui                                                                   |                                     |        |  |
| ql-su2 Cf. <i>✓</i>        | ql-ppt1suu2 minus tractulus                                                      |                                     |        |  |
| ql-sut2suts1 Cf. <i>✓</i>  | ql-ppt1suts2suts1 minus tractulus                                                |                                     |        |  |
| qi-su2                     | H73S cedebat                                                                     |                                     |        |  |
| qi-pst1suts2 Cf. <i>✓</i>  | qi-ppt1su1suts2 minus tractulus                                                  |                                     |        |  |
| qi-su1suts2 Cf. <i>✓</i>   | qi-ppt1su1suts2 minus tractulus                                                  |                                     |        |  |
| qi-su1sux1                 | H26G certamine <span style="border: 1px solid black; padding: 2px;">1.7x</span>  |                                     |        |  |
| ql-su1suts2                | 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!po                      | H87E Deus                                                                        |                                     |        |  |
| qi!po>                     | H173C adversum <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 laetitiae.                                                                  |                                     |        |  |
| ql>ppt1                    | C38T virtutis                                                                    |                                     |        |  |
| qi>ppt1                    | C60S terram.                                                                     |                                     |        |  |
| qisut1sux1                 | H269S linguarum                                                                  |                                     |        |  |
| qlsuts2                    | H269D alleluia                                                                   |                                     |        |  |
| qi-sut2                    | H269D alleluia                                                                   |                                     |        |  |
| qi-pst1suts1suts2          | H269R magnalia                                                                   |                                     |        |  |
| qi!cl!cl>ppt1              | ql!cl!cl>ppt1                                                                    | E133I corda                         | 2.166x |  |
| qi!cl!pi                   | ql!cl!pi                                                                         | E31T maris                          | 2.166x |  |
| qi!cl-ppt1                 | ql!cl-ppt1                                                                       | C40A terram.                        |        |  |
| qi!clMppt1                 | ql!clMppt1                                                                       | E324R tuum                          | 2.166x |  |
| qi!cl->ppt1                | ql!cl->ppt1                                                                      | G132A Alleluia.                     | 0.85x  |  |
| qi!cls-2ppt1suts1          | ql!cls-2ppt1suts1                                                                | E3D et.                             | 2.0x   |  |
| qi!cls-2suts1 Cf. <i>✓</i> | ql!cls-2suts1 Cf. <i>✓</i>                                                       | q1!cls-2ppt1suts1 minus tractulus   |        |  |
| qi!cls-2ppt1 Cf. <i>✓</i>  | ql!cls-2ppt1 Cf. <i>✓</i>                                                        | q1!cls-2ppt1suts1 minus tractulus   |        |  |
| qi!cls-2 Cf. <i>✓</i>      | ql!cls-2 Cf. <i>✓</i>                                                            | q1!cls-2ppt1suts1 minus 2 tractulus |        |  |
| qi!poppt1                  | ql!poppt1                                                                        | C59D Domine.                        |        |  |
| qi!po-1ppt1                | ql!po-1ppt1                                                                      | C58A homo.                          |        |  |
| qi!po-ppt1                 | ql!po-ppt1                                                                       | H179L pauperem                      |        |  |
| qi!po~ Cf. <i>✓</i>        | ql!po~ Cf. <i>✓</i>                                                              | q1!po~ minus tractulus              |        |  |
| qi!ppt1sux2                | ql!ppt1sux2                                                                      | H72V Jerusalem                      |        |  |
| qi!ppt1sux1sux1            | ql!ppt1sux1sux1                                                                  | H730 Reges                          |        |  |
| qi!ppt1suts2               | ql!ppt1suts2                                                                     | H75I patris                         |        |  |
| qi!ppt1suts2               | ql!ppt1suts2                                                                     | H72H Hic                            |        |  |
| qi!vssu1suts2suts1         | ql!vssu1suts2suts1                                                               | H16M altissimi                      | 1.7x   |  |
| qi!vssu1suts2              | ql!vssu1suts2                                                                    | H730 Domino                         |        |  |
| qi!vssu1suts2 Cf. <i>✓</i> | ql!vssu1suts2 Cf. <i>✓</i>                                                       | q1!vssu1suts2 minus subbipunctis    |        |  |
| qi!vssu1suts2              | ql!vssu1suts2                                                                    | H73S gaudio                         |        |  |
| qi!vssu1suts2              | ql!vssu1suts2                                                                    | H74I Domini                         |        |  |
| qi!vssu1suts2              | ql!vssu1suts2                                                                    | H392L viderent                      | 1.5x   |  |
| qi-suts3                   | qi-suts3                                                                         | H322B in                            | 2.0x   |  |
| qi!ppt1suisuu1             | qi!ppt1suisuu1                                                                   | H305H David                         | 2.0x   |  |
| qi!ppt1suisu3              | qi!ppt1suisu3                                                                    | H323D subire                        | 2.0x   |  |
| qlppt1suts3                | qlppt1suts3                                                                      | H305G Redemptorem                   | 2.0x   |  |
| qlppt1suts2                | qlppt1suts2                                                                      | E166C secundum                      | 2.0x   |  |
| ql-ppt2su1suv1su2          | ql-ppt2su1suv1su2                                                                | H306N illustrat                     | 2.0x   |  |
| ql-su1suts1                | ql-su1suts1                                                                      | H307F iustitiae                     | 2.0x   |  |
| qippt2suts2                | qippt2suts2                                                                      | H297B generationes                  | 2.0x   |  |
| qi!vssu3                   | qi!vssu3                                                                         | H443V ei                            | 2.0x   |  |
| to!ciG                     | to!ciG                                                                           | E51R eum                            | 2.0x   |  |
| to!ciG                     | to!ciG                                                                           | C28T gloriae.                       |        |  |
| to!cl                      | to!cl                                                                            | C84T pupillo                        |        |  |
| to!cl!cl!cl                | to!cl!cl!cl                                                                      | C64Q sepavit,                       |        |  |
| to!cl!po                   | to!cl!po                                                                         | E31T veritas                        | 2.166x |  |
| to!cl!po-1                 | to!cl!po-1                                                                       | N100T veritas                       |        |  |
| to!cl!pi                   | to!cl!pi                                                                         | C45S mea                            |        |  |
| to!cl-                     | to!cl-                                                                           | N86D propterea                      |        |  |
| to!cl!-cl-                 | to!cl!-cl-                                                                       | C54A Adducentur                     |        |  |
| to!cl-1                    | to!cl-1                                                                          | C45S filii                          |        |  |
| to!cls                     | to!cls                                                                           | C43A terram.                        |        |  |
| to!cl!cl                   | to!cl!cl                                                                         | C43A Domini,                        |        |  |
| to!po                      | to!po                                                                            | C64Q sagitta                        |        |  |
| to!posu2                   | to!posu2                                                                         | C49I eo,                            |        |  |
| to!pr                      | to!pr                                                                            | G11V Deo                            | 0.85x  |  |
| to!pi                      | to!pi                                                                            | C60C tui.                           |        |  |
| toSsu2                     | toSsu2                                                                           | H72H mihi                           |        |  |
| pf!cl-                     | pf!cl-                                                                           | G51I meus                           |        |  |
| pf!clM- Cf. <i>✓</i>       | pf!clM- Cf. <i>✓</i>                                                             | pf!clM-ppt1 minus tractulus         |        |  |
| pf!pr                      | pf!pr                                                                            | G9A Alleluia                        |        |  |
| cl!po> Cf. <i>✓</i>        | cl!po> Cf. <i>✓</i>                                                              | cl!po>ppt1 minus tractulus          |        |  |
| cl!cl>1                    | cl!cl>1                                                                          | N67G mundi                          |        |  |
| cl!clSut2                  | cl!clSut2                                                                        | E256C psallite                      | 2.166x |  |
| cl!cls Cf. <i>✓</i>        | cl!cls Cf. <i>✓</i>                                                              | cl!clsSut2 minus 2 tractulis        |        |  |
| cl!po                      | cl!po                                                                            | C26A nobis.                         |        |  |
| cl!po-1                    | cl!po-1                                                                          | H119C in                            |        |  |
| tr-1su2                    | tr-1su2                                                                          | H730 dona                           |        |  |
| trSsu2                     | trSsu2                                                                           | H305H devotissime                   | 2.0x   |  |
| ci-pp2                     | ci-pp2                                                                           | H73S magno                          |        |  |
| toSsu2                     | toSsu2                                                                           | H73S eam                            |        |  |
| toS2sut2                   | toS2sut2                                                                         | C150L dicta                         |        |  |
| to-1su2                    | to-1su2                                                                          | H322C ostendere                     | 2.0x   |  |
| to-1su1                    | to-1su1                                                                          | H323B Gallus                        | 2.0x   |  |
| to-1suu1                   | to-1suu1                                                                         | H173I me                            | 1.8x   |  |
| to-1suu1suts1              | to-1suu1suts1                                                                    | H324V cognovi                       | 2.0x   |  |
| po-1pp2su1sux1             | po-1pp2su1sux1                                                                   | H323D desiderium                    | 2.0x   |  |
| po-1su1sux1 Cf. <i>✓</i>   | po-1su1sux1 Cf. <i>✓</i>                                                         | po-1pp2su1sux1 minus bipunctis      |        |  |
| pisu1                      | pisu1                                                                            | H307N annuntiavit                   | 2.0x   |  |
| pisut1                     | pisut1                                                                           | C153B Alleluia                      |        |  |
| pq-su2                     | pq-su2                                                                           | C132D praetioso                     |        |  |
| pe!vi                      | pe!vi                                                                            | C57B qui                            |        |  |
| tgsuu1                     | tgsuu1                                                                           | C49I eum.                           |        |  |
| tgSsuu1                    | tgSsuu1                                                                          | C57B nimis.                         |        |  |
| bv-sut2                    | bv-sut2                                                                          | H179U fuisset.                      |        |  |
| sa-su2suts1                | sa-su2suts1                                                                      | C49I eum                            | 1.75x  |  |

**significative letters**

|                |         |       |             |                       |        |
|----------------|---------|-------|-------------|-----------------------|--------|
| <i>lsm</i>     | lsam    | C87E  | abstraxisti | altius                |        |
| <i>lsal</i>    | lsal    | E20E  | Sion,       | altius mediocriter    | 2.166x |
| <i>lsb</i>     | lsb     | C39B  | Domino      | bene                  |        |
| <i>lsc</i>     | lsc     | C27E  | eius        | celeriter             |        |
| <i>lscw</i>    | lscw    | C148V | nostro.     | celeriter (wide form) |        |
| <i>lscm</i>    | lscm    | C134B | nomen       | coniunguntur          |        |
| <i>lscm</i>    | lscm    | C58A  | oblivio     | celeriter mediocriter |        |
| <i>lsd</i>     | lsd     | E11C  | Virgo       | deprimatur            | 1.85x  |
| <i>lse</i>     | lse     | C84T  | adiutor     | equaliter             |        |
| <i>lsew</i>    | lsew    | H266D | si          | equaliter (wide form) |        |
| <i>lseq</i>    | lseq    | C64Q  | viis        | equaliter             |        |
| <i>lsfid</i>   | lsfid   | E16B  | Domino      | fideliter             | 2.166x |
| <i>lsfr</i>    | lsfr    | C58A  | non         | frendor               |        |
| <i>lsg</i>     | lsg     | C27Q  | ovem        | gutture               |        |
| <i>lsi</i>     | lsi     | C87E  | Domine      | iusum                 |        |
| <i>lsim</i>    | lsim    | E336I | universa    | iusum mediocriter     | 2.166x |
| <i>lsiv</i>    | lsiv    | E92I  | misericors  | iusum valde           | 2.166x |
| <i>lsk</i>     | lsk     | C62M  | confidit    | klenge                |        |
| <i>lsl</i>     | lsl     | C38T  | Tecum       | levare                |        |
| <i>lslb</i>    | lslb    | C58A  | non         | levare bene           |        |
| <i>lslc</i>    | lslc    | E151A | ab          | levare celeriter      | 2.166x |
| <i>lslen</i>   | lslen   | C59D  | servitui.   | leniter               |        |
| <i>lslm</i>    | lslm    | C38T  | Tecum       | levare mediocriter    |        |
| <i>lslp</i>    | lslp    | E161S | dicit       | levare parvum         | 2.166x |
| <i>lslt</i>    | lslt    | E148L | Laudate     | levare tenete         | 2.0x   |
| <i>lsm</i>     | lsm     | C38T  | principium  | mediocriter           |        |
| <i>lsmoll</i>  | lsmoll  | E33V  | fines       | molliter              | 2.166x |
| <i>lsp</i>     | lsp     | C64Q  | altissimi   | parvum                |        |
| <i>lspar</i>   | lspar   | E104S | miserere    | paratim               | 2.166x |
| <i>lspfec</i>  | lspfec  | E2D   | fructum     | perfecte              | 2.166x |
| <i>lspm</i>    | lspm    | C40V  | suam.       | parvum mediocriter    |        |
| <i>lpulcre</i> | lpulcre | E64L  | hac         | pulcre                | 2.0x   |
| <i>lss</i>     | lss     | C27E  | sanctos     | sursum                |        |
| <i>lssb</i>    | lssb    | C40V  | iustitiam   | sursum bene           |        |
| <i>lssc</i>    | lssc    | C84T  | Tibi        | sursum celeriter      |        |
| <i>lssimil</i> | lssimil | E193D | ne          | similiter             | 2.166x |
| <i>lssimul</i> | lssimul | E42A  | sumus.      | simul                 | 2.166x |
| <i>lssm</i>    | lssm    | C59D  | Si          | sursum mediocriter    |        |
| <i>lsst</i>    | lsst    | C87E  | Domine      | sursum tenere         |        |
| <i>lssta</i>   | lssta   | C27E  | Congregate  | statim                |        |
| <i>lst</i>     | lst     | C39B  | Domino      | tenete                |        |
| <i>lstw</i>    | lstw    | C58A  | non         | tenete (wide form)    |        |
| <i>lstb</i>    | lstb    | C39B  | Domino      | tenete bene           |        |
| <i>lstm</i>    | lstm    | E3D   | tu          | tenete mediocriter    | 2.166x |
| <i>lsv</i>     | lsv     | E1310 | semper      | valde                 | 2.0x   |
| <i>lsvol</i>   | lsvol   | C58A  | aeternum    | volubiliter           |        |
| <i>lsx</i>     | 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 = <a href="http://manuscrit.ville-laon.fr/_app/_visualisation.php?cote=Ms239&amp;vue=9">http://manuscrit.ville-laon.fr/_app/_visualisation.php?cote=Ms239&amp;vue=9</a> | L78H Hoc corpus GT170                     |
| L8U Universi qui te GT16                                                                                                                                                   | L80S Sperent in te omnes GT286            |
| L8A Ad te Domine levavi OT5                                                                                                                                                | L81E Exaltabo te Domine GT112             |
| L8D Dominus dabit GT17                                                                                                                                                     | L81R Eripe me de inimicis GT129           |
| L9E Ex Sion species GT18                                                                                                                                                   | L82O Omnia quae fecisti GT342             |
| L10I Ierusalem surge GT20                                                                                                                                                  | L82T Tollite hostias GT272                |
| L11Q Qui sedes, Domine GT22                                                                                                                                                | L84B Benedictus es, Domine OT48           |
| L13A Ave Maria GT36                                                                                                                                                        | L90D Deus Deus meus GT144                 |
| L14P Prope es tu Domine GT24                                                                                                                                               | L92E Exsurge Domine GT150                 |
| L140 Ostende nobis GT31                                                                                                                                                    | L93E Erubescant et revereantur GT152      |
| L17H Hodie scietis GT38                                                                                                                                                    | L93G Ego autem dum mihi GT152             |
| L18L Laetentur caeli GT44                                                                                                                                                  | L94C Custodi me Domine GT154              |
| L19B Benedictus qui venit GT45                                                                                                                                             | L95D Domine, exaudi orationem GT172       |
| L20P Puer natus est GT47                                                                                                                                                   | L99P Popule meus quid GT176               |
| L24D Dextera Domini GT194                                                                                                                                                  | L101V Vinea facta est GT188               |
| L24T Timebunt gentes GT265                                                                                                                                                 | L103R Resurrexi GT196                     |
| L25L Laetabitur iustus GT473                                                                                                                                               | L103H Haec dies GT196                     |
| L25M Mirabantus omnes GN232                                                                                                                                                | L103P Alleluia Pascha nostrum GT197       |
| L28G Gaudeamus omnes GT545                                                                                                                                                 | L103T Terra tremuit GT199                 |
| L31D De profundis GT673                                                                                                                                                    | L104I Introduxit vos Dominus GT200        |
| L33S Sciant gentes GT88                                                                                                                                                    | L105A Angelus Dominus GT217               |
| L33C Commovisti Domine GT89                                                                                                                                                | L105N Angelus Dominus GT201               |
| L33P Perfice gressus OT90                                                                                                                                                  | L106S Surrexit Dominus GT207              |
| L34E Esto mihi in Deum GT275                                                                                                                                               | L107H Haec dies GT206                     |
| L35T Tu es Deus GT244                                                                                                                                                      | L109P Populus acquisitionis GT210         |
| L37M Misericordia omnium GT62                                                                                                                                              | L112D Deus Deus meus GT224                |
| L37S Misericere mei Deus GT63                                                                                                                                              | L1120 Omnes qui in Christo GT61           |
| L38I Iacta cogitatum GT285                                                                                                                                                 | L113E Ego sum pastor GT224                |
| L40Q Qui habitat GT73                                                                                                                                                      | L114C Cantate Domino GT225                |
| L43L Levabo oculos meos GT78                                                                                                                                               | L114V Vocem iucunditatis GT229            |
| L43S Scapulis suis GT77                                                                                                                                                    | L117R Repleti sumus GT441                 |
| L43I Sicut oculi servorum GT77                                                                                                                                             | L118E Ego sum vitis vera GT228            |
| L44D Domine refugium GT79                                                                                                                                                  | L122N Non vos relinquam GT232             |
| L44I Dirigatur oratio GT340                                                                                                                                                | L122V Viri Galilaei OT172                 |
| L45R Reminiscere miserationum GT81                                                                                                                                         | L123A Ascendit Deus GT237                 |
| L53C Confitemini Domino GT158                                                                                                                                              | L123E Exaudi Domine vocem GT241           |
| L54A Adiutor meus GT86                                                                                                                                                     | L125U Ultimo festivitatis GT251           |
| L54B Benedicat Dominum OT88                                                                                                                                                | L125S Spiritus Domini GT252               |
| L56D Deus in adiutorium GT315                                                                                                                                              | L126F Factus est repente GT256            |
| L56S Salvum fac populum GT354                                                                                                                                              | L128S Spiritus ubi vult spirat GT218      |
| L56I Iustus Dominus GT93                                                                                                                                                   | L132E Ecce quam bonum GT351               |
| L56P Propitiatus esto Domine GT288                                                                                                                                         | L136A Amen dico vobis quod vos GT436      |
| L58A Ad Dominum dum tribularer GT282                                                                                                                                       | L138S Semel iuravi GT492                  |
| L60E Exsurge Domine GT96                                                                                                                                                   | L144C Clamaverunt iusti GT454             |
| L60A Ad te levavi GT97                                                                                                                                                     | L149E Ego dixi Domine GT279               |
| L61I Iustitiae Domini GT309                                                                                                                                                | L149C Cantabo Domino qui bona GT283       |
| L64O Oculi omnium GT343                                                                                                                                                    | L152S Sicut in holocausto GT299           |
| L64D Domine fac tecum OT37                                                                                                                                                 | L152I Inclina aurem tuam GT300            |
| L67Q Qui biberit aquam GT99                                                                                                                                                | L164D De profundis GT368                  |
| L67S Si ambulem GT125                                                                                                                                                      | L168I Iubilate Deo GT258                  |
| L68N Nemo te condemnavit GT124                                                                                                                                             | L168S Specie tua GT416                    |
| L68Q Qui confidunt GT109                                                                                                                                                   | L168L Laudate Deum GT262                  |
| L71D Dum sanctificatus fueris GT249                                                                                                                                        | L169A Adorabo ad templum GT270            |
| L72B Benedicite gentes GT231                                                                                                                                               | L173D Deus iudex iustus GT286             |
| L75V Videns Dominus GT124                                                                                                                                                  | L174D Domine in virtute tua GT292         |
| L76E Eripe me Domine GT121                                                                                                                                                 | L174I In te Domine speravi GT296          |
| L77S Saepe expugnauerunt GT122                                                                                                                                             | L174O Omnes gentes plaudite manibus GT298 |
| L77C Confitebor tibi Domine GT123                                                                                                                                          | L174T Te dece hymnus GT305                |

| uncinus   |                |              |                  |
|-----------|----------------|--------------|------------------|
| un        | L78H           | testamenti   |                  |
| un1       | L78H           | calix        |                  |
| un2 Cf. ↗ | un2lsm1        | minus letter |                  |
| ↗         | un2lsm1        | L820         | fecisti          |
| ↗         | unlsm1         | L75V         | qui              |
| ↗         | unlst1         | L103R        | alleluia         |
| ↗         | unlst2         | L820         | fac              |
| ↗         | unlst8         | L24D         | opera            |
| ↗         | unlst8         | L1120        | Christo          |
| ↗         | unlsm2lss3lst8 | L43S         | scuto            |
| punctum   |                |              |                  |
| .         | pu             | L820         | iudicio          |
| ,         | pu1            | L56D         | revereantur      |
| ;         | pulsnt3        | L75V         | flentes          |
| virga     |                |              |                  |
| ✓         | vi             | L820         | Domine           |
| ✓         | viS Cf. ↗      | vipp2su2     | minus punctis    |
| ✓         | vi>            | L78H         | in               |
| ✓         | vi>1 Cf. ↗     | vi>1lsa2lsc8 | minus letters    |
| ✓         | vi>2           | L820         | nobiscum         |
| ✓         | vilst1         | L78H         | meam             |
| ✓         | vilst2         | L95D         | meus             |
| ✓         | vilst9         | L105A        | quaeritis,       |
| ✓         | vilss1         | L103P        | Alleluia.        |
| ✓         | vilss2         | L95D         | avertas          |
| ✓         | vilsst1        | L103P        | Alleluia.        |
| ✓         | vilst2lsa8     | L95D         | eius.            |
| ✓         | vi>lsa6        | L78H         | testamenti       |
| ✓         | vi>lsc6        | L56D         | adiuvandum       |
| ✓         | vi>1lsa2lsc8   | L126F        | loquentes        |
| tractulus |                |              |                  |
| ✓         | ta             | L24T         | tuam.            |
| ✓         | ta>            | L78H         | dicit            |
| ✓         | ta>1           | L820         | mandatis         |
| ✓         | ta>2           | L90D         | sancto           |
| ✓         | ta>lsn12       | L45R         | dominentur       |
| ✓         | ta>lsc2        | L90D         | Libera           |
| pes       |                |              |                  |
| ✓         | pe             | L78H         | commemorationem  |
| ✓         | peG            | L78H         | vobis            |
| ✓         | pe>            | L95D         | exaudi           |
| ✓         | pe>1           | L78H         | sanguine         |
| ✓         | peG1           | L67S         | tua,             |
| ✓         | pelsa2         | L820         | peccavimus       |
| ✓         | pelsc2         | L67S         | tuus,            |
| ✓         | pelsl2         | L43L         | iustitiam        |
| ✓         | pelsm2         | L81E         | meam,            |
| ✓         | pelsn2         | L149C        | qui              |
| ✓         | pelsn3         | L125S        | replevit         |
| ✓         | pelsst1        | L103P        | immolatum        |
| ✓         | pelsst1lsm4    | L44I         | Elevatio         |
| ✓         | pelst2         | L103H        | saeculum         |
| ✓         | peGlsf1        | L67S         | non              |
| ✓         | peGlsa6        | L109P        | vocavit          |
| ✓         | pe>1lsa6       | L114V        | alleluia         |
| orrectus  |                |              |                  |
| ✓         | po             | L78H         | facite           |
| ✓         | poG            | L64D         | mecum            |
| ✓         | poM Cf. ↗      | poMsun1      | minus uncinus    |
| ✓         | po> Cf. ↗      | po>pp2       | minus prepunctis |
| ✓         | po>1           | L81E         | descendentibus   |
| ✓         | polsf2lsts3    | L95D         | meus             |
| ✓         | polst2         | L103H        | saeculum         |
| clivis    |                |              |                  |
| ✓         | cl Cf. ↗       | cllsn9       | minus letter     |
| ✓         | clG            | L78H         | hoc              |
| ✓         | clG1           | L105N        | accedens         |
| ✓         | clGlsa5        | L820         | obedivimus       |
| ✓         | clGlsn12       | L44I         | Elevatio         |
| ✓         | clM            | L78H         | quotiescumque    |
| ✓         | cl>            | L75V         | monumentum       |
| ✓         | cl>1           | L34E         | locum            |
| ✓         | clllshn8       | L640         | imples           |
| ✓         | clllsn8        | L95D         | velociter        |
| ✓         | clllsn9        | L67S         | tua,             |
| ✓         | clllsst8       | L640         | imples           |
| ✓         | clllst9        | L95D         | tempus           |

| cl>lsa5               | L71D                 | effundam      |
|-----------------------|----------------------|---------------|
| <b>oriscus-clivis</b> |                      |               |
| oc                    | L78H                 | sanguine      |
| ocG                   | L56D                 | Deus          |
| ocG1                  | L11Q                 | veniet        |
| ocGls5                | L103T                | resurgeret    |
| oclst8                | L95D                 | Domine        |
| <b>torculus</b>       |                      |               |
| to                    | L78H                 | pro           |
| toS                   | L56S                 | populum       |
| toS1                  | L68N                 | Nemo          |
| toG                   | L78H                 | tradetur      |
| to>                   | L67S                 | mortis        |
| to                    | L37M                 | et            |
| tolsf4                | L95D                 | tempus        |
| tolsn8                | L44I                 | vespertinum.  |
| tolst9                | L103P                | Alleluia.     |
| tolsth8               | L56I                 | Dominus,      |
| tolsns21st9           | L92E                 | me            |
| toGls1lst8            | L109P                | alleluia.     |
| toGls5                | L68N                 | condemnabo    |
| toSls5                | L77S                 | enim          |
| to>lsa5               | L118E                | in            |
| to>2ls3               | L67Q                 | salientis     |
| to>2lsc1lsa3          | L104I                | terram        |
| <b>climacus</b>       |                      |               |
| ci                    | L95D                 | eius.         |
| unsun2                | L820                 | da            |
| unsun3                | L103P                | immolatus     |
| unsux1                | L169A                | sanctum       |
| unsun1su2             | L109P                | tenebris      |
| pusu1sun1             | L78H                 | tradetur      |
| pusu1sun2             | L95D                 | Sion          |
| pusu2sun1             | L95D                 | eius.         |
| visu1sun1             | L95D                 | faciem        |
| visu1sun2             | L40Q                 | latere        |
| visu1sun2lsa5         | L174D                | et            |
| visu1sun2lsa6         | L174D                | et            |
| visu1sun1su1 Cf. 1    | visu1sun1su1lst6     | minus letter  |
| visu1sun1su1lst6      | L105N                | descendit     |
| visu1sun1su2 Cf. 2    | visu1sun1su2lss1lst6 | minus letters |
| visu1sun1su2lss1lst6  | L168I                | Alleluia.     |
| visu2                 | L95D                 | misereberis   |
| visun1su1sun1         | L60E                 | conspectu     |
| visun1su1sun1lst6     | L35T                 | virtutem      |
| cilsf1                | L95D                 | Sion          |
| cilsn8                | L58A                 | iniquis,      |
| pusu1sun1lsf1         | L95D                 | mei           |
| pusu1sun2lsa5         | L67S                 | timebo        |
| pusu1sun1lst7         | L60E                 | homo          |
| pusu3                 | L640                 | escam         |
| pusu4                 | L92E                 | persequntur.  |
| unsun2su1             | L640                 | escam         |
| unsun1su1 Cf. 3       | unsun1su1lst2lsc6    | minus letters |

|                           |                              |                     |
|---------------------------|------------------------------|---------------------|
| unsun1su1lst2lsc6         | L11Q                         | deducis             |
| unsun2lsa5                | L19B                         | mirabile            |
| unsun3lsa3                | L24T                         | gentes              |
| unsun3lsa6                | L24T                         | tuam.               |
| unsun2su2                 | L169A                        | confitebor          |
| un1sun2su2                | L136A                        | aeternam            |
| un1sun1su1sun1lsa1lsc4    | L60E                         | retrorsum           |
| un1sun1su1sun1lsa3lsc6    | L60E                         | retrorsum           |
| un1sun1su2 Cf. <i>¶</i>   | un1sun1su2lsa5 minus letter  |                     |
| un1sun1su2lsa5            | L107H                        | Domini              |
| <b>scandicus</b>          |                              |                     |
| sc Cf. <i>¶</i>           |                              | sclst2 minus letter |
| sc1                       | L820                         | quia                |
| sclst2                    | L78H                         | quotiescumque       |
| sc1lsc4                   | L109P                        | vocavit             |
| <b>porrectus flexus</b>   |                              |                     |
| pf                        | L78H                         | corpus              |
| pf1                       | L95D                         | exaudi              |
| pf2                       | L101V                        | Sorec,              |
| pfs                       | L56D                         | festina             |
| pfM Cf. <i>¶</i>          | pfMlsmd3 minus letter        |                     |
| pfMlsmd3                  | L81E                         | meam,               |
| pf>                       | L164D                        | ad                  |
| pf>1                      | L90D                         | miserunt            |
| pf>2                      | L104I                        | alleluia,           |
| pf                        | L95D                         | clamor              |
| pf 1                      | L31D                         | ad                  |
| <b>pes subcipunctis</b>   |                              |                     |
| tosu1                     | L820                         | Domine              |
| tosun1                    | L95D                         | fumus               |
| tosun2                    | L105N                        | revolvit            |
| vippn1su2                 | L820                         | misericordiae       |
| topp1su1 Cf. <i>¶</i>     | topp1su1lsa6 minus letter    |                     |
| topp1su1lsa6              | L95D                         | ad                  |
| pesu2 Cf. <i>¶</i>        | pesu2lst3 minus letter       |                     |
| pesu2lst3                 | L152I                        | eruas               |
| pesun3 Cf. <i>¶</i>       | pesun3lss1lsa3 minus letters |                     |
| pesun3lss1lsa3            | L67S                         | medio               |
| pesu2sun1                 | L24T                         | terrae              |
| tosun1lsa5                | L67S                         | tua,                |
| tosu1lsc5                 | L19B                         | venit               |
| toSsun1lsa5               | L138S                        | luna                |
| tosun1su1sun1             | L33S                         | venti.              |
| tosun1su2lssn3lst6        | L112D                        | nomine              |
| tosun2lsa6                | 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,             |
| trlst3lshp7               | L109P                        | alleluia.           |
| trlss1lss3                | L103P                        | Christus.           |
| trSlsc1                   | L103P                        | nostrum             |
| <b>distropha</b>          |                              |                     |
| ds Cf. <i>¶</i>           | dslst2 minus letter          |                     |
| dslst2                    | L95D                         | meam                |
| dslst8                    | L71D                         | effundam            |
| ds1 Cf. <i>¶</i>          | ds1pp3 minus prepunctis      |                     |

| tristropha          |                      |               |       |
|---------------------|----------------------|---------------|-------|
| ts                  | L820                 | fac           |       |
| ts1                 | L76E                 | Eripe         |       |
| ts>                 | L56D                 | adiuvandum    |       |
| ts>1                | L103R                | alleluia      |       |
| tslsa2              | L13A                 | tecum         |       |
| tslsc2lst2          | L58A                 | Domine,       |       |
| ts>lsc2             | L103R                | alleluia      |       |
| ts>lsc6             | L103T                | dum           |       |
| trigonus            |                      |               |       |
| tg                  | L67S                 | tua,          |       |
| tg1sn8              | L67S                 | mala          |       |
| tg1st9              | L103R                | alleluia      |       |
| bivirga             |                      |               |       |
| bv                  | L820                 | Domine        |       |
| bvlsa2              | L820                 | nobis         |       |
| trivirga            |                      |               |       |
| tv                  | L103H                | bonus         |       |
| tv1sm2              | L44I                 | Elevatio      |       |
| pressus             |                      |               |       |
| pr                  | L95D                 | veniat        |       |
| pi Cf. 7            | cl1!pi               | minus clivis  |       |
| virga strata        |                      |               |       |
| vs                  | L64D                 | Deus          |       |
| vsG                 | L64D                 | suavis        |       |
| oriscus             |                      |               |       |
| or Cf. 8            | ocG                  | minus uncinus |       |
| or1st3              | L103P                | Alleluia.     |       |
| or1 Cf. 9           | ocG1                 | minus uncinus |       |
| or> Cf. 10          | or>lsa1              | minus letter  |       |
| or>lsa1             | L103R                | alleluia,     |       |
| salicus             |                      |               |       |
| sa                  | L820                 | nomini        |       |
| sa1                 | L78H                 | novi          |       |
| sa>1                | L9E                  | sanctos       |       |
| salsc4              | L93G                 | exsurge       |       |
| salsc6              | L93G                 | autem,        |       |
| salsc4              | L81E                 | salvasti      |       |
| salsc6              | L113E                | bonus,        |       |
| pes quassus         |                      |               |       |
| pq                  | L103H                | eius.         |       |
| pq1                 | L169A                | Alleluia.     | L174T |
| quilisma            |                      |               |       |
| ql Cf. 11           | ql1sst2              | minus letter  |       |
| ql1sst2             | L53C                 | Domine,       |       |
| ql> Cf. 12          | ql>ppn1              | minus uncinus |       |
| pes stratus         |                      |               |       |
| pt1                 | L13A                 | ventris       |       |
| pt2                 | L8U                  | confundentur, |       |
| pt3                 | L94C                 | Domine.       |       |
| subpunctis          |                      |               |       |
| su1 Cf. 13          | cl1!pi!tosu1         |               |       |
| su1sun1 Cf. 14      | cl!toppz1su1sun1     |               |       |
| su1sun1su1 Cf. 15   | visu1sun1su1lst6     |               |       |
| su1sun1su2 Cf. 16   | visu1sun1su2lss1lst6 |               |       |
| su1sun2 Cf. 17      | pusu1sun2            |               |       |
| su1sux1 Cf. 18      | popp2su1sux1         |               |       |
| su2 Cf. 19          | cl1!pi!pesu2         |               |       |
| su2sun1 Cf. 20      | clsu2sun1lst6        |               |       |
| su3 Cf. 21          | pusu3                |               |       |
| su4 Cf. 22          | pusu4                |               |       |
| sun1 Cf. 23         | cl1!pi!orsun1        |               |       |
| sun1sun1 Cf. 24     | unsun1su1lst2lsc6    |               |       |
| sun1sun1sun1 Cf. 25 | visun1su1sun1        |               |       |
| sun1su2 Cf. 26      | qlppn1sun1su2        |               |       |
| sun2 Cf. 27         | qlsun2               |               |       |
| sun2su1 Cf. 28      | unsun2su1            |               |       |
| sun2su2 Cf. 29      | unsun2su2            |               |       |

| sun3 Cf. 30         | unsun3                         |
|---------------------|--------------------------------|
| sun4 Cf. 31         | bvsun4                         |
| sux1 Cf. 32         | posux1                         |
| prepunctis          |                                |
| pp1 Cf. 33          | pupp1su2                       |
| pp2 Cf. 34          | cl1!pipp2                      |
| pp2ppn1 Cf. 35      | vipp2ppn1                      |
| pp3 Cf. 36          | vipp3lsn3                      |
| pp4 Cf. 37          | vipp4lsts2                     |
| ppn1 Cf. 38         | po>ppn1                        |
| ppn1pp1 Cf. 39      | vippn1pp1                      |
| ppn1pp1ppz1 Cf. 40  | vippn1pp1ppz1sts8              |
| ppn1ppq1 Cf. 41     | vippn1ppq1                     |
| ppn1ppz1 Cf. 42     | ql!cl!orppn1ppz1               |
| ppn2 Cf. 43         | vippn2lsts3lsa4                |
| ppn2ppz1 Cf. 44     | vippn2ppz1sun1lsa5             |
| ppn2ppz1ppq1 Cf. 45 | vippn2ppz1ppq1lsts2lsa8        |
| ppn3 Cf. 46         | unppn3sun1lsa5                 |
| ppn3ppz1 Cf. 47     | toppn3ppz1sun1                 |
| ppn4 Cf. 48         | vippn4                         |
| ppq1 Cf. 49         | vippq1                         |
| ppz1 Cf. 50         | puppz1su2                      |
| ppz1ppq1 Cf. 51     | vi>1ppz1ppq1                   |
| combined glyphs     |                                |
| pe!ta Cf. 52        | pe!talsa2 minus letter         |
| pe!talsa2           | L820 iudicio                   |
| pe!talsc1lst2       | L114C revelavit                |
| pe!un Cf. 53        | pe!unlsc2 minus letter         |
| pe!unlsc2           | L95D meam                      |
| pe!pu               | L95D eius.                     |
| pe!ta>2 Cf. 54      | 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. 55    | qlppn1su2lsn11 minus letters   |
| qlppn1su2lsn11      | L75V mortuus.                  |
| qlppn1sun1sc5       | L54B quoniam                   |
| qlppn1su1sun1       | L107H fecit                    |
| qlsu1sun1           | L43L tua                       |
| qlsu1sux1           | L71D aquam                     |
| qlsu2               | L67S tua,                      |
| qlsux1              | L53C quoniam                   |
| qlsun1su2           | L44I mearum                    |
| qlsun1 Cf. 56       | qlsun1lsa5 minus letter        |
| qlsun1lsa5          | L40Q millia                    |
| qlsun2              | L122N alleluia.                |
| qlsun2lsla5         | L125U alleluia.                |
| ql!po               | L820 obedivimus                |
| ql!poppz1 Cf. 57    | ql!poppz1lsa3 minus letter     |
| ql!poppz1lsa3       | L95D Domine,                   |
| ql!poppn1           | L43L Domine,                   |
| ql!posu1sun1 Cf. 58 | ql!poppz1su1sun1 minus uncinus |
| ql!poppz1su1sun1    | L43L mandata                   |
| ql!posu1 Cf. 59     | ql!poppn1sun1 minus uncinus    |
| ql!poppn1sun1       | L61I Iustitiae                 |
| ql!poppn1lst2       | L103P Alleluia.                |
| ql!posux1 Cf. 60    | ql!poppn1sux1 minus uncinus    |
| ql!poppn1sux1       | L61I corda,                    |

|                     |                                        |                        |                               |                                      |                               |
|---------------------|----------------------------------------|------------------------|-------------------------------|--------------------------------------|-------------------------------|
| ql!polsm1           | L103P                                  | immolatus              | vipp3lsn3                     | L152S                                | Sicut                         |
| ql!polsa1lsa3lsa9   | L56P                                   | nostris                | vippn1pp1                     | L11Q                                 | Israel,                       |
| ql!po> Cf.          | ql!po>ppn1 minus uncinus               | vippn1pp1su1sun2       | L40Q                          | volante                              |                               |
| ql!po>ppn1          | L60A                                   | ancillae               | vippn3su4                     | L173D                                | Alleluia.                     |
| ql!cl!              | L43L                                   | doceas                 | vipp4 Cf.                     | vipp4lst2 minus letter               |                               |
| ql!cl!to Cf.        | ql!cl!tolst6 minus letter              | vipp4lst2              | L13A                          | Ave                                  |                               |
| ql!cl!tolst6        | L95D                                   | me.                    | vippz1ppq1                    | L40Q                                 | lapidem                       |
| ql!cl!to!or Cf.     | ql!cl!to!orsun1 minus uncinus          | vippn1ppq1             | L33S                          | venti.                               |                               |
| ql!cl!to!orsun1     | L19B                                   | nobis.                 | vippn1ppz1ppq1                | L101V                                | Israel                        |
| ql!cl!toppn1        | L72B                                   | vitam,                 | vippn1pp1ppz1 Cf.             | vippn1pp1ppz1lst8 minus letter       |                               |
| ql!cl!tosu3 Cf.     | ql!cl!tosu3lst6 minus letter           | vippn1pp1ppz1lst8      | L25M                          | ore                                  |                               |
| ql!cl!tosu3lst6     | L82T                                   | hostias,               | vippn2ppz1ppq1 Cf.            | vippn2ppz1ppq1lst2lsa8 minus letters |                               |
| ql!cl!or Cf.        | ql!cl!orppn1ppz1 minus uncinus & virga | vippn2ppz1ppq1lst2lsa8 | L169A                         | confitebor                           |                               |
| ql!cl!orppn1ppz1    | L109P                                  | Populus                | vippn2ppz1sun1lsa5            | L173D                                | Alleluia.                     |
| ql!cl!tr> Cf.       | ql!cl!tr>ppz1 minus virga              | vippn3sun1lsa5         | L173D                         | Alleluia.                            |                               |
| ql!cl!tr>ppz1       | L54B                                   | vias                   | vippq1                        | L168S                                | regna.                        |
| ql!clppn1           | L54B                                   | a                      | cl1!or Cf.                    | cl1!orlss3 minus letter              |                               |
| qlppn1              | L820                                   | nomini                 | cl1!orlss3                    | L60E                                 | iudicentur                    |
| qlppn1ppz1          | L820                                   | gloriam                | cl1!orlsc3                    | L60E                                 | conspectu                     |
| qlppn1ppz1lst2      | L820                                   | da                     | cl1!pi                        | L95D                                 | avertas                       |
| qlppn1ppz1sun1 Cf.  | qlppn1ppz1sun1lsa5 minus letter        | cl1!pi>                | cl1!pi>to                     | L53C                                 | misericordia                  |
| qlppn1ppz1sun1lsa5  | L54B                                   | mihi                   | cl1!pi>vi                     | L820                                 | fecisti                       |
| qlppn1ppz1su1sun1   | L43I                                   | dominorum              | cl1!pi>vi>                    | L95D                                 | Domine,                       |
| qlppn2sun1 Cf.      | qlppn2sun1lsa5 minus letter            | cl1!pi>cl              | cl1!pi>cl                     | L67S                                 | Virga                         |
| qlppn2sun1lsa5      | L53C                                   | Beati                  | cl1!pi>pesu2                  | L640                                 | implebis                      |
| qlppn2sun2 Cf.      | qlppn2sun21lsa5lsa5 minus letters      | cl1!pilsm3lsa6         | L61I                          | dulciora                             |                               |
| qlppn2sun21lsa5lsa5 | L122V                                  | sic                    | cl1!pilsn8                    | L174I                                | me                            |
| qlppz1su2           | L40Q                                   | draconem.              | cl1!pilsn9                    | L53C                                 | iudicium,                     |
| qlppz1su1sun1       | L53C                                   | nos                    | cl1!pilst9                    | L640                                 | Aperis                        |
| ql>ppn1             | L95D                                   | confixia               | cl1!pipp2                     | L90D                                 | Longe                         |
| ql>ppn1lsc3         | L90D                                   | speraverunt            | cl1!pi>orsun1                 | L60A                                 | Deum                          |
| popp2               | L820                                   | multitudinem           | cl1!po                        | L90D                                 | Israel.                       |
| popp2su1sux1        | L8U                                    | confundentur,          | cl1!popp3                     | L67S                                 | es,                           |
| posux1              | L20P                                   | eius                   | cl1!to                        | L22V                                 | ascendentem                   |
| posu1lsa5           | L114V                                  | alleluia,              | cl1!tosu1                     | L17H                                 | eius.                         |
| posu1lsa5           | L123A                                  | alleluia.              | cl1!tosu1lsc6                 | L17H                                 | eius.                         |
| poMsun1             | L81E                                   | meos                   | cl1!tosu1lsc6lst8             | L81E                                 | me                            |
| posu1sun1           | L123E                                  | alleluia.              | cl1!topp2                     | L64D                                 | misericordia                  |
| vippn1su1           | L56D                                   | Deus                   | cl1!topp1su1sun1              | L35T                                 | Israel                        |
| vippn1sux1          | L53C                                   | Memento                | cl1!tolst9                    | L56I                                 | dilexit                       |
| vippn1su1sun1       | L45R                                   | tuae,                  | cl1!to>                       | L56I                                 | aequitatem                    |
| vippn1su1sun1lst2   | L95D                                   | Domine,                | cl1!tosu1lsa5                 | L164D                                | meam.                         |
| vippn2sun1 Cf.      | vippn2sun1lsa4 minus letter            | cl1!to>pi Cf.          | cl1!to>pipp2 minus prepunctis | L33C                                 | cl1!to>pipp2 minus prepunctis |
| vippn2sun1lsa4      | L44I                                   | mea                    | cl1!to>pi>                    | L77S                                 | arcus,                        |
| vippn2 Cf.          | vippn2lsa4 minus letter                | cl1!to>pi>cl           | cl1!to>pi>cl                  | L33C                                 | arcus,                        |
| vippn2lsc4          | L56D                                   | quaerunt               | cl1!to>pi>clpp2               | L68Q                                 | Sion                          |
| vippn2lsa4          | L44I                                   | Elevatio               | cl1!to>pi>clpp21sn9           | L81R                                 | meis,                         |
| vippn2lst31lsa4     | L103P                                  | Alleluia.              | cl1!to>cl!cl                  | L95D                                 | Domine,                       |
| vippn3              | L38I                                   | Domino,                | to!cl!cl Cf.                  | to!cl!cllst9 minus letter            |                               |
| vippn4              | L60E                                   | homo                   | to!cl!cl Cf.                  | to!cl!clsun2 Cf.                     |                               |
| vipp2ppn1           | L13A                                   | gratia                 | to!cl!cllst9                  | L43L                                 | tuam                          |
| cl!pe Cf.           | cl!pelsc2 minus letter                 | to!cl!clsun1           | L8A                           | invocavite.                          |                               |
| cl!pelst2           | L95D                                   | sum                    | to!cl!clsun1                  | L33P                                 | meam.                         |
| cl!pelsc2           | L105A                                  | Domini                 | to!cl!pi                      | L84B                                 | iniqui                        |
| cl!pelsn7           | L103H                                  | ea.                    | to!cl!orsun1                  | L114V                                | terrae                        |
| vipp2su2            | L43L                                   | mihi                   | to!clsun1                     | L54B                                 | quoniam                       |
| vipp2sun1lsa5       | L168L                                  | eum                    | to!clsun1lsa5                 | L11Q                                 | Ioseph.                       |
| vipp3 Cf.           | vipp3lsn3 minus letter                 | to!clsu2 Cf.           | to!clsu21sn6 minus letter     |                                      |                               |
|                     |                                        | to!clsu21sn6           | L8D                           | dabit                                |                               |
|                     |                                        | to!clsu1sun1 Cf.       | to!clsu1sun1lsm6 minus letter |                                      |                               |
|                     |                                        | to!clsu1sun1lsm6       | L24D                          | opera                                |                               |
|                     |                                        | clsu2sun1lst6          | L35T                          | tuam.                                |                               |

|                        |                                 |                    |                      |                           |                                 |
|------------------------|---------------------------------|--------------------|----------------------|---------------------------|---------------------------------|
| to!clM                 | L77C                            | corde              | tosu1sun1lsn6        | L19B                      | venit                           |
| to!cl>1                | L77C                            | tuum,              | tosu2 Cf. ↗          |                           | tosu2lst6 minus letter          |
| to!po                  | L84B                            | Appropinquaverunt  | tosu2lst6            | L37M                      | tu                              |
| to!pohd                | L105A                           | quaeritis,         | tgsun1lsa5           | L103H                     | quoniam                         |
| to!to Cf. ↗            | to!toppn1sun1 minus 2x uncinus  | cl!cl!clsun1lsa5   | L103P                | Alleluia.                 |                                 |
| to!tosun1 Cf. ↗        | to!toppn1sun1 minus uncinus     | cl!cl!cl Cf. ↗     |                      | cl!cl!cllsn9 minus letter |                                 |
| to!toppn1sun1          | L43L                            | discam             | cl!cl!cllsn9         | L31D                      | Domine                          |
| to!to!pi!cl Cf. ↗      | to!to!pi!clpp2 minus prepunctis | cl!cl!pi           | L54B                 | commovear                 |                                 |
| to!to!pi!clpp2         | L60A                            | nostrum,           | cl!cl!pi!vi          | L123A                     | Dominus                         |
| toS!to                 | L53C                            | Confitemini        | cl!cl!to             | L149E                     | meam,                           |
| toS!tolst9             | L90D                            | Deus,              | cl!cl!po             | L81R                      | insurgentibus                   |
| toS!pe                 | L123E                           | Exaudi,            | cl1!pi!pi!vi         | L54B                      | es                              |
| to!or                  | L67S                            | Domine.            | cl1!pi!pisun1lsa5    | L1740                     | plaudite                        |
| to!orsun1lsa5          | L8U                             | Domine.            | cl1!pi!tosu1         | L37S                      | mei                             |
| to!orlst3              | L114V                           | audiatur,          | cl1!pi!tosu1         | L1740                     | plaudite                        |
| to!orlsc6              | L152S                           | taurorum,          | sa1sun1lsa5          | L11Q                      | tuam                            |
| to!pi!cl               | L31D                            | est,               | trsun2 Cf. ↗         |                           | trsun2lsa5 minus letter         |
| to!pi!cl!pi!pi         | L40Q                            | millia             | trsun2lsa5           | L13A                      | Ave                             |
| to!pi!cl!pi!orsun1lsa5 | L40Q                            | speravit,          | trsux1 Cf. ↗         |                           | trsux1lsa5 minus letter         |
| oc!vi Cf. ↗            | oc!visun1 minus uncinus         | trsux1lsa5         | L20P                 | eius,                     |                                 |
| oc!visun1              | L95D                            | Domine,            | trsux1lst8           | L136A                     | aeternam                        |
| orsu1sun1              | L94C                            | Domine.            | trsux1lsa5           | trsux1lsa5                | trsux1lsa5 minus letters        |
| orsu1sun1lsc2          | L94C                            | Domine.            | trsux1lst8           | L136A                     | vobis                           |
| orsu1sun1lsc3          | L94C                            | inquis             | trsux1lsa5           | trsux1lsa5                | trsux1lsa5 minus letter         |
| un!clG                 | L95D                            | exaudi             | trsux1lsa5 Cf. ↗     | L149C                     | Domini                          |
| topp2                  | L95D                            | meus               | bvsun4               | L18L                      | terra                           |
| topp2sun1              | L45R                            | tuarum,            | trsux1lsa5 Cf. ↗     |                           | trsux1lsa5 minus letter         |
| toppn3ppz1sun1         | L58A                            | me.                | trsux1lsa5           | L8U                       | me.                             |
| to>pp2                 | L90D                            | insipientiam       | oc!cl                | L31D                      | Domine.                         |
| pupp2su1sun1           | L95D                            | sunt.              | oc!clM               | L77S                      | peccatorum.                     |
| pupp2su2               | L93E                            | me.                | oc!pe!pu             | L53C                      | tuo.                            |
| pupp1su2               | L640                            | opportuno.         | tg!cl                | L31D                      | est,                            |
| pupp1su1sun1           | L58A                            | clamavi,           | tg!cl>1              | L33C                      | eius,                           |
| puppn1su1sun2          | L40Q                            | mille,             | tg!cllsn9            | L68Q                      | Sion                            |
| puppz1su1sun2          | L40Q                            | mille,             | tg!or                | L77C                      | tibi                            |
| puppz1su2              | L168S                           | tua                | unppn1sun2           | L40Q                      | Cadent                          |
| ds1!ds1                | L43L                            | meos,              | unppn1sun2lsa5       | L123E                     | quaesivi                        |
| ds1!ts                 | L67S                            | mecum              | unppn1sunux1         | L72B                      | eius                            |
| ds1!ts1                | L60E                            | tuo.               | unppn1sunux1lsa5     | L24D                      | exaltavit                       |
| c1!orsun1              | L43L                            | considerabo        | unppn1sun1su2        | L58A                      | Domine,                         |
| c1!orsun1lsa5          | L8U                             | fac                | unppn1ppz1sun1 Cf. ↗ |                           | unppn1ppz1sun1lsa5 minus letter |
| c1!or Cf. ↗            | c1!orpp2 minus prepunctis       | unppn1ppz1sun1lsa5 | L80S                 | habitat                   |                                 |
| c1!orpp2               | L93G                            | induebam           | unppn3sun1lsa5       | L24D                      | fecit                           |
| c1!orpp2               | L103R                           | mirabilis          | ta>ppn1              | L95D                      | et                              |
| ds1!clsun2 Cf. ↗       | ds1!clsun2lst5 minus letter     | ta>pp2             | L33C                 | ut                        |                                 |
| ds1!clsun2lst5         | L43L                            | doceas             | pt1ppn1              | L99P                      | tuo.                            |
| ds1!clsu1sun1 Cf. ↗    | ds1!clsu1sun1lst5 minus letter  | tssun1lsa5         | L24D                 | dextera                   |                                 |
| ds1!clsu1sun1lst5      | L56S                            | Salvum             | cl>1pp2              | L114C                     | alleluia,                       |
| ds1pp3                 | L149E                           | tibi.              | tasu2                | L24T                      | tuam.                           |
| vi>1pp2                | L67S                            | umbrae             |                      |                           |                                 |
| vi>1ppz1ppq1           | L40Q                            | custodiant         |                      |                           |                                 |
| vi>1ppn1ppz1ppq1       | L106S                           | Alleluia.          |                      |                           |                                 |
| pfsun1 Cf. ↗           | pfsun1lsn5 minus letter         |                    |                      |                           |                                 |
| pfsun1lsn5             | L67S                            | tua,               |                      |                           |                                 |
| pfpnn1ppq1sun1lsa5     | L123A                           | Deus               |                      |                           |                                 |
| un1ppn1ppq1sun2        | L1120                           | estis,             |                      |                           |                                 |
| un1sun2 Cf. ↗          | un1ppn1ppq1sun2 minus uncinus   |                    |                      |                           |                                 |
|                        |                                 | & quilisma         |                      |                           |                                 |
| un1ppn1sun2            | L1120                           | Christum           |                      |                           |                                 |
| un1ppn1sun1su2lsa5     | L152I                           | accelera,          |                      |                           |                                 |
| clsun1lst5             | L44I                            | vespertinum.       |                      |                           |                                 |
| clsu3lst5              | L60E                            | tuo.               |                      |                           |                                 |
| tosu1sun1 Cf. ↗        | tosu1sun1lsn6 minus letter      |                    |                      |                           |                                 |
| tosu1sun1lsc6lst7      | L109P                           | vocavit            |                      |                           |                                 |

**significative letters**

|   |            |                    |                                              |
|---|------------|--------------------|----------------------------------------------|
| ꝑ | lsa Cf. ꝑ  | vi>lsa6            | augete                                       |
| ꝑ | lsc Cf. ꝑ  | pe!unlsc2          | celeriter                                    |
| ꝑ | lseq       | L78H hic           | equaliter                                    |
| ꝑ | lseq-      | L78H quotiescumque | equaliter                                    |
| ꝑ | lsequ      | L56D confundantur  | equaliter                                    |
| ꝑ | lsf Cf. ꝑ  | polsf21st3         | fastigium                                    |
| ꝑ | lsh        | L44D a             | humiliter                                    |
| ꝑ | lshn Cf. ꝑ | cl1shn8            | humiliter nectum                             |
| ꝑ | lshp Cf. ꝑ | tr1st31shp7        | humiliter parum                              |
| ꝑ | lsl Cf. ꝑ  | pelsl2             | levare                                       |
| ꝑ | lsn Cf. ꝑ  | cl1sn9             | non (tenere), negare,<br>nectum, naturaliter |
| ꝑ | lsnl Cf. ꝑ | clGlsnl2           | non levare                                   |
| ꝑ | lsnt Cf. ꝑ | pulsnt3            | non tenere                                   |
| ꝑ | lsm        | L67S Virga         | mediocriter                                  |
| ꝑ | lsmd       | L820 da            | mediocriter                                  |
| ꝑ | lss        | L95D tempus        | sursum                                       |
| ꝑ | lssimp     | L8U Domine,        | simpliciter                                  |
| ꝑ | lssimpl    | L81R insurgentibus | simpliciter                                  |
| ꝑ | lssp       | L54Ae Domine,      | sursum parum                                 |
| ꝑ | lsst Cf. ꝑ | pelsst1lsm4        | sursum tenere                                |
| ꝑ | lst Cf. ꝑ  | clsun1lst5         | tenere                                       |
| ꝑ | lsth Cf. ꝑ | tolsth8            | tenere humiliter                             |

**tironian notes**

|   |      |                    |                              |
|---|------|--------------------|------------------------------|
| ꝑ | lti  | L78H pro           | iustum                       |
| ꝑ | ltdo | L140 misericordiam | deorsum                      |
| ꝑ | ltdr | L132E descendit    | devertit                     |
| ꝑ | ltdx | L122V intuerentus  | devexum                      |
| ꝑ | ltps | L128S veniat,      | prode sub eam (trade subtus) |
| ꝑ | ltqm | L118E sum          | quam mox                     |
| ꝑ | ltsb | L11Q et            | sub                          |
| ꝑ | ltse | L144C corde        | seorsum                      |
| ꝑ | ltsj | L164D meam         | subjice                      |
| ꝑ | ltsl | L117R delectati    | saltim                       |
| ꝑ | ltsn | L17H gloriam       | sonare                       |
| ꝑ | ltsp | L10I Ierusalem     | supra                        |
| ꝑ | ltsr | L14P et            | sursum                       |
| ꝑ | ltst | L25L omnes         | saltate (salte)              |
| ꝑ | ltus | L17H eius.         | ut supra                     |