

# nabc language for gregorio

CO II

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 stropha
- y gravis with episema

Only subpunctis are normally used in neume classification, the prepunctis is a nabc concept to describe the rising sequence of punctis, tractulis etc. in the left low corner of some neume. While e.g. vipp2 ↗ describes the same neume as sc ↗, the former form allows better control on how many punctis or tractulis or tractulis with episema etc. there are. Some examples: ppt3 ↘ stands for 3 raising tractulis with episema, while suisut1sux1 ↘ stands for a punctum, followed by tractulus, followed by liquescens stropha.

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

1 ↗ left upper corner	2 ↗ above the neume	3 ↗ right upper corner
4 ↙ to the left of the neume		6 ↛ to the right of the neume
7 ↙ left bottom corner	8 ↘ below the neume	9 ↚ right bottom corner

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

lsal ↗ altius	lsiv ↗ iusum valde	lss ↗ sursum
lsam ↗ altius mediocriter	lsk ↗ klenche	lssb ↗ sursum bene
lsb ↗ bene	lsl ↗ levare	lssc ↗ sursum celeriter
lsc ↗ celeriter	lslb ↗ levare bene	lssimil ↗ simuliter
lscm ↗ celeriter mediocriter	lslc ↗ levare celeriter	lssimul ↗ simul
lscn ↗ coniunguntur	lslen ↗ leniter	lssm ↗ sursum mediocriter
lscw ↗ celeriter (wide form)	lslm ↗ levare mediocriter	lsst ↗ sursum tenere
lsd ↗ deprimatur	lslp ↗ levare parvum	lssta ↗ statim
lse ↗ equaliter	lslt ↗ levare tenere	lst ↗ tenere
lseq ↗ equaliter	lsm ↗ mediocriter	lstb ↗ tenere bene
lsew ↗ equaliter (wide form)	lsmoll ↗ molliter	lstm ↗ tenere mediocriter
lsfid ↗ fideliter	lsp ↗ parvum	lstw ↗ tenere (wide form)
lsfr ↗ frendor	lspar ↗ paratim	lsv ↗ valde
lsg ↗ guttura	lspfec ↗ perfecte	lsvol ↗ volubiliter
lsi ↗ iusum	lspm ↗ parvum mediocriter	lsx ↗ expectare
lsim ↗ iusum mediocriter	lspulcre ↗ pulcre	

Finally a commented example of a nabc snippet:

```po///pe>2lse71s13qlhh!vshhppt1sut2ql>ppu3

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

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

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

pe>2lse71s13 ↗ stands for the 3rd augmentive liquescent form of podatus (epiphonus with tractulus, see the following page) at the default pitch, with equaliter in the low left corner and levare in the upper right corner.

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

ql>ppu3 ↗ is a 3 loop liquescent quilisma with 3 tractulis with episema before it.

The *basic glyph descriptor* for Laon neumes is very similar to the one used for St. Gall neumes, but with uncinus and oriscus-clivis added and 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) |                                      | liquefcence | augment.  |
| virga              | / vi           | vilsc3 vilst1 vipp1lsc2                | vi-                        |                    |                                  | / viM                                | vi>         |           |
| tractulus          | - ta           | talsc3 talst2                          |                            |                    |                                  | / taM                                | ta>         |           |
| punctum            | · pu           |  |                            |                    |                                  | / puM                                | , ; st      | visuisux1 |
| gravis             | \ gr           |  |                            |                    |                                  | / grM                                | \ gr>       |           |
| clivis             | o cl           | cllsc3 cllst2 cl-lst2                  | cl- clS-                   | clS clS1           |                                  | / clM                                | o cl>       | cl-       |
| pes                | ✓ pe           |  | pe- pe-1                   | pes                | peG                              | / peM                                | ✓ pe>1      | pe-2      |
| porrectus          | N po           | polsc2                                 | po- po-1                   |                    | poG                              | / poM                                | N po>       | po-       |
| torculus           | S to           | tolsc3 tolsc4lst3 tolst2               | to- to-1                   | toS toS1 toS2 toS3 | toG                              | / toM                                | S to>       | pe>       |
| climacus           | T ci ci1       | cilsc3 cilst2                          | ci-                        | ciS ciS1 visutisu2 | ciG ciG1                         | / ciM                                | T ci>       | ci-       |
| scandicus          | C sc           |  | sc-                        | scS                | scG scG1                         | / scM                                | C sc>       | sc-       |
| porrectus flexus   | M pf           | pflsc2 pf1lsc2 pf1st2                  | pf-                        | pfs                | sfM                              | / pfM                                | M pf>       | pf-       |
| pes subbipunctis   | ✓ pesu2        | vippt1su2lsc3                          | pe-su2 pe-1su2<br>pe-1sut2 | peSu2 peSut2       | toSut1                           | / pesu1su2                           | ✓ pesu1su1  | to>       |
| scandicus flexus   | .. sf          | sflsc3                                 | sf-                        | sfS                |                                  | / sfM                                | .. ppt2     | sc>       |
| torculus resupinus | N tr           | trlsc2 trlst2                          | tr-1                       | trS                | trG trG1 trG2                    | / trM                                | N 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 | // III bv tv   |  | bv- tv-                    |                    |                                  |                                      | // bv>      |           |
| pressus            | pr pi          | prlsc2 pr-lsc2 prlst2<br>pilsc2 pilst2 | pr-                        |                    |                                  | / prM                                | pr> pi>     | vs>       |
| virga strata       | vs or          | vs1sc3 vs1st2                          | vs-                        |                    |                                  |                                      | vs>         | or>       |
| oriscus            | s sa           | salsfr1 saM1sfr1                       | sa- sa-1                   |                    |                                  |                                      | s or>       |           |
| salicus            | sa sa1         |  |                            |                    |                                  |                                      | sa> sa->1   | pe>2      |
| pes quassus        | pq             | pqlsfr1                                | pq-                        |                    |                                  |                                      | pq>         |           |
| quilisma           | ql qi          |  | ql- qi-                    |                    |                                  |                                      | ql> qi>     |           |
| pes stratus        | pt             |  |                            |                    |                                  |                                      |             |           |

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

| Name of Symbols          | Simple Symbols | Symbols differentiated by               |   |                                   | Symbols indicating a special meaning |                |
|--------------------------|----------------|---|---|-----------------------------------|--------------------------------------|----------------|
|                          |                | the modification<br>of the mark         | the addition<br>of the grouping<br>(neumatic break)   | the addition<br>of letters        | melodic                              | phonetic       |
|                          |                |   |   |                                   |                                      | Liquescence    |
| uncinus                  | un             |   |   |                                   |                                      |                |
| punctum                  | pu             |   |   |                                   |                                      |                |
| virga                    | vi             | viS vipp2su2vihh                        |   |                                   | ρ                                    | vi>1           |
| tractulus                | ta             | ds ts                                   |   | talst2 ts1sc2lst2                 | ta>2                                 |                |
| clivis                   | cl             |   |   | clsn9 cl1st9 clGlsa5              | cl> cl1>1                            | vi> ta>2       |
| pes                      | pe             |   |   | pelasn3 pelst2 pelsc2             | pe>1                                 | ta>            |
| porrectus                | po             |   |   |                                   | poM                                  | po>            |
| torculus                 | to             | toS1                                    |   | toGlsa5 toSlsa5 toSsun1sa5 tolst9 | to>                                  |                |
| climacus                 | ci             | pusuisuni visu2 unsun2                  |   | visu2lst3                         |                                      | cl>1           |
| scandicus                | sc sc1         | vippnippi1 vippn2                       | pevh1   | sc1st2 pelst2vihl pelsa2vihl      | vi>1pp2                              | ta>ppn1 ta>pp2 |
| porrectus flexus         | pf1            | pfS                                     | unhg`to po`un   | unhg1st2`to po`unsa2              | pfM                                  | pf>            |
| (pes subbipunctis)       | tosu1          | tosun1                                  | vippn1su2 unppn1sun2  | tosuilsc5 tosunilsa5              |                                      |                |
| scandicus flexus         | sf             |   | visuisuni   | unlst2`puhisuisuni                |                                      |                |
| torculus resupinus       | tr             | trS                                     | poppn1 pe`peg   | trS1sc1 trlst3 trlst9             | tr>                                  | pe`ta>         |
| clivis + pes or torculus | cl!pe cl!to    | → toS!pe                                | toS!to  |                                   |                                      | or>            |
| oriscus                  | or or1         | isolated & at the syllabic articulation | 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 |                                   |                                      |                |
| quilisma                 | ql ql!cl ql!po |   |   |                                   | pe!or                                |                |
| 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            | // | // | cllst2   | ꝑ  | missing         | pe-          | ꝑ |         |
| bv-           | ꝑ  | ꝑ  | clpp2    | ꝑꝑ | pe-1            | ꝑ            | ꝑ | ✓       |
| bv-sut2       | ꝑꝑ | ꝑ  | clppt1   | ꝑꝑ | pe-1su1sut1     | ꝑ            | ꝑ | ✓       |
| bv>           | ꝑꝑ | ꝑ  | clppt2   | ꝑꝑ | pe-1su1sut2     | ꝑ            | ꝑ | ✓       |
| ci            | ꝑ. | ꝑ. | cl~      | ꝑ  | pe-1su1suu1     | ꝑ            | ꝑ | ✓       |
| ci-           | ꝑ. | ꝑ. | ds       | ꝑ  | pe-1su1suu2     | ꝑ            | ꝑ | ✓       |
| ci-pp2        | ꝑ. | ꝑ. | ds-      | ꝑ  | pe-1su1suw1     | ꝑ            | ꝑ | ✓       |
| ci1           | ꝑ. | ꝑ. | ds>      | ꝑ  | pe-1su2         | ꝑ            | ꝑ | ✓       |
| ci>           | ꝑ. | ꝑ. | dslsx6   | ꝑꝑ | missing         | pe-1sut1suw1 | ꝑ | missing |
| ciG           | ꝑ  | ꝑ  | gr       | ꝑ  | pe-1sut1sux1    | ꝑ            | ꝑ | ✓       |
| ciG1          | ꝑ  | ꝑ  | gr-      | ꝑ  | pe-1sut2        | ꝑ            | ꝑ | ✓       |
| ciM           | ꝑ  | ꝑ  | gr-lsc6  | ꝑ  | missing         | pe-1sut3     | ꝑ | ✓       |
| ciM-          | ꝑ  | ꝑ  | lsal     | ꝑ  | pe-1suu1su2     | ꝑ            | ꝑ | missing |
| ciS           | ꝑ. | ꝑ. | lsam     | ꝑꝑ | pe-1suw2        | ꝑ            | ꝑ | ✓       |
| ciS1          | ꝑ. | ꝑ. | lsb      | ꝑ  | pe->            | ꝑ            | ꝑ | ✓       |
| ciSppt1       | ꝑ. | ꝑ. | lsc      | ꝑ  | pe->1           | ꝑ            | ꝑ | ✓       |
| cilsc3        | ꝑ. | ꝑ  | lscm     | ꝑꝑ | pe-su1sut1      | ꝑ            | ꝑ | ✓       |
| cipp1         | ꝑ. | ꝑ  | lscs     | ꝑ  | pe-su2          | ꝑ            | ꝑ | ✓       |
| cipp1llsc3    | ꝑ. | ꝑ  | lscw     | ꝑ  | missing         | pe-su2suy1   | ꝑ | ✓       |
| cipp1u        | ꝑ. | ꝑ  | lsd      | ꝑ  | missing         | pe-su3sut1   | ꝑ | ✓       |
| cipp1u1sc3    | ꝑ. | ꝑ  | lse      | ꝑ  | pe-su4          | ꝑ            | ꝑ | ✓       |
| ci~           | ꝑ  | ꝑ  | lseq     | ꝑ  | missing         | pe>          | ꝑ | ✓       |
| cl            | ꝑ  | ꝑ  | lsew     | ꝑ  | missing         | pe>1         | ꝑ | ✓       |
| cl!cl>1       | ꝑꝑ | ꝑ  | lsfid    | ꝑ  | missing         | pe>2         | ꝑ | ✓       |
| cl!cls        | ꝑꝑ | ꝑ  | lsfr     | ꝑ  | pe>ppt1         | ꝑ            | ꝑ | ✓       |
| cl!clsut2     | ꝑꝑ | ꝑ  | lsg      | ꝑ  | peG             | ꝑ            | ꝑ | /       |
| cl!pi         | ꝑ  | ꝑ  | lsi      | ꝑ  | peS             | ꝑ            | ꝑ | ✓       |
| cl!pilsc1lst3 | ꝑ  | ꝑ  | lsim     | ꝑ  | peSsu1sux1      | ꝑ            | ꝑ | ✓       |
| cl!pilsc2     | ꝑ  | ꝑ  | lsiv     | ꝑ  | missing         | peSsu2       | ꝑ | ✓       |
| cl!po         | ꝑ  | ꝑ  | lsk      | ꝑ  | peSsut1su2      | ꝑ            | ꝑ | ✓       |
| cl!po-1       | ꝑ  | ꝑ  | lsl      | ꝑ  | peSsut2         | ꝑ            | ꝑ | ✓       |
| cl!po>        | ꝑ  | ꝑ  | lslb     | ꝑ  | peSsut3         | ꝑ            | ꝑ | ✓       |
| cl!po>ppt1    | ꝑ  | ꝑ  | lslc     | ꝑ  | peppt1          | ꝑ            | ꝑ | ✓       |
| cl!pr         | ꝑ  | ꝑ  | lslen    | ꝑ  | missing         | pesu1sut1    | ꝑ | ✓       |
| cl-           | ꝑ  | ꝑ  | lslm     | ꝑ  | pesu1sut2       | ꝑ            | ꝑ | missing |
| cl!pi         | ꝑ  | ꝑ  | lslp     | ꝑ  | pesu1sut3       | ꝑ            | ꝑ | ✓       |
| cl-1su2       | ꝑ  | ꝑ  | lslt     | ꝑ  | pesu1suu1       | ꝑ            | ꝑ | ✓       |
| cl->          | ꝑ  | ꝑ  | lsm      | ꝑ  | pesu1suw1       | ꝑ            | ꝑ | ✓       |
| cl->1         | ꝑ  | ꝑ  | lsmoll   | ꝑ  | pesu1sux1       | ꝑ            | ꝑ | ✓       |
| cl-lst2       | ꝑ  | ꝑ  | lsp      | ꝑ  | pesu2           | ꝑ            | ꝑ | ✓       |
| cl-ppt1       | ꝑ  | ꝑ  | lspar    | ꝑ  | missing         | pesu2sut1    | ꝑ | missing |
| cl-ppt2       | ꝑ  | ꝑ  | lspfec   | ꝑ  | missing         | pesu2suv1    | ꝑ | ✓       |
| cl>           | ꝑ  | ꝑ  | lspm     | ꝑ  | pesu3           | ꝑ            | ꝑ | ✓       |
| cl>1          | ꝑ  | ꝑ  | lspulcre | ꝑ  | missing         | pesut2       | ꝑ | ✓       |
| cl>pp2        | ꝑ  | ꝑ  | lss      | ꝑ  | pesuvsu1su1sut1 | ꝑ            | ꝑ | ✓       |
| cl>ppt2       | ꝑ  | ꝑ  | lssb     | ꝑ  | pe~             | ꝑ            | ꝑ | ✓       |
| clM           | ꝑ  | ꝑ  | lssc     | ꝑ  | pf              | ꝑ            | ꝑ | ✓       |
| clM-          | ꝑ  | ꝑ  | lssimil  | ꝑ  | pf!cl-          | ꝑ            | ꝑ | ✓       |
| clMpp2        | ꝑ  | ꝑ  | lssimul  | ꝑ  | missing         | pf!clM-      | ꝑ | ✓       |
| clS           | ꝑ  | ꝑ  | lssm     | ꝑ  | cm              | ꝑ            | ꝑ | ✓       |
| clS-          | ꝑ  | ꝑ  | lsst     | ꝑ  | pf!clM-ppt1     | ꝑ            | ꝑ | ✓       |
| clS-1         | ꝑ  | ꝑ  | lssta    | ꝑ  | missing         | pf!cl~       | ꝑ | ✓       |
| clS-su2       | ꝑ  | ꝑ  | lst      | ꝑ  | missing         | pf!cl~ppt1   | ꝑ | ✓       |
| clS1          | ꝑ  | ꝑ  | lstb     | ꝑ  | pe!pr           | ꝑ            | ꝑ | ✓       |
| clSsu1sut1    | ꝑ  | ꝑ  | lstm     | ꝑ  | pf-             | ꝑ            | ꝑ | ✓       |
| clSsu2        | ꝑ  | ꝑ  | lstw     | ꝑ  | missing         | pf1lsc2      | ꝑ | missing |
| clSsut1       | ꝑ  | ꝑ  | lsv      | ꝑ  | pe>             | ꝑ            | ꝑ | ✓       |
| clSsut1sux1   | ꝑ  | ꝑ  | lsvol    | ꝑ  | pfG             | ꝑ            | ꝑ | ✓       |
| clSsut2       | ꝑ  | ꝑ  | lx       | ꝑ  | missing         | pfM          | ꝑ | ✓       |
| clSsut1       | ꝑ  | ꝑ  | or       | ꝑ  | peF             | ꝑ            | ꝑ | ✓       |
| clSsut1       | ꝑ  | ꝑ  | or>      | ꝑ  | missing         | pfM-         | ꝑ | ✓       |
| clSsut1       | ꝑ  | ꝑ  | pe       | ꝑ  | peMsut1         | ꝑ            | ꝑ | ✓       |
| clSsut1       | ꝑ  | ꝑ  | pe!vi    | ꝑ  | peMsuu1         | ꝑ            | ꝑ | missing |
| clSsut1       | ꝑ  | ꝑ  |          |    | pfS             | ꝑ            | ꝑ | ✓       |

|                |         |                  |   |   |                   |         |
|----------------|---------|------------------|---|---|-------------------|---------|
| pflsc2         | missing | pu               | . | . | ql-ppt1su1sut2    | missing |
| pflst2         | missing | qi               | ~ | ~ | ql-ppt1su1suum    | missing |
| pf~            | missing | qi!cl            | ~ | ~ | ql-ppt1su1sux1    | missing |
| pi             | missing | qi!cl-           | ~ | ~ | ql-ppt1su2        | missing |
| pi>            | missing | qi!cl>           | ~ | ~ | ql-ppt1su3        | missing |
| piM            | missing | qi!clppt1        | ~ | ~ | ql-ppt1sut2suum   | missing |
| pilsc2         | missing | qi!po            | ~ | ~ | ql-ppt1suum       | missing |
| pilst2         | missing | qi!po>           | ~ | ~ | ql-ppt2su1suv1su2 | missing |
| pisu1          | missing | qi!vs            | ~ | ~ | ql-su1sut1        | missing |
| pisut1         | missing | qi!vsspt1        | ~ | ~ | ql-su1sut2        | missing |
| po             | missing | qi!vsspt1su2     | ~ | ~ | ql-su1suum        | missing |
| po-            | missing | qi!vssu2         | ~ | ~ | ql-su1suum        | missing |
| po-1           | missing | qi-              | ~ | ~ | ql-su1suv1su2     | missing |
| po-1pp2su1sux1 | missing | qi-ppt1su1sut2   | ~ | ~ | ql-su1sux1        | missing |
| po-1su1sut1    | missing | qi-su1sut2       | ~ | ~ | ql-su2            | missing |
| po-1su2        | missing | qi-su1sux1       | ~ | ~ | ql-su3            | missing |
| po-2           | missing | qi-su2           | ~ | ~ | ql-sut1sux1       | missing |
| po>            | missing | qi-sut2          | ~ | ~ | ql-sut2           | missing |
| poG            | missing | qi-sut3          | ~ | ~ | ql-sut2suum       | missing |
| poG-           | missing | qi>              | ~ | ~ | ql-suu2           | missing |
| poG-1          | missing | qi>ppt1          | ~ | ~ | ql>               | missing |
| poG1           | missing | qipp1            | ~ | ~ | ql>ppt1           | missing |
| polsc2         | missing | qipp1sut2        | ~ | ~ | qlppt1            | missing |
| posu1sut1      | missing | qisu2            | ~ | ~ | qlppt1su2         | missing |
| posu2          | missing | qisut1sux1       | ~ | ~ | qlppt1sut3        | missing |
| po~            | missing | qisut2           | ~ | ~ | qlsu2             | missing |
| pp1            | missing | ql               | ~ | ~ | qlsut2            | missing |
| pp2            | missing | ql!cl            | ~ | ~ | qlsut3            | missing |
| pp3            | missing | ql!cl!cl>        | ~ | ~ | sa                | missing |
| pp4            | missing | ql!cl!cl>ppt1    | ~ | ~ | sa!cl             | missing |
| pp5            | missing | ql!cl!pi         | ~ | ~ | sa!cl-            | missing |
| ppt1           | missing | ql!cl!pippt1     | ~ | ~ | sa!cl>            | missing |
| ppt2           | missing | ql!cl-           | ~ | ~ | sa!cls-1          | missing |
| ppt3           | missing | ql!cl->          | ~ | ~ | sa!cls1           | missing |
| ppt4           | missing | ql!cl->ppt1      | ~ | ~ | sa!cls1lsc2       | missing |
| ppt5           | missing | ql!cl-ppt1       | ~ | ~ | sa-               | missing |
| ppu1           | missing | ql!cl->          | ~ | ~ | sa-1              | missing |
| ppu2           | missing | ql!cl>ppt1       | ~ | ~ | sa->1             | missing |
| ppu3           | missing | ql!clM           | ~ | ~ | sa-lsfr1          | missing |
| ppu4           | missing | ql!clMppt1       | ~ | ~ | sa-su2sut1        | missing |
| ppu5           | missing | ql!clS           | ~ | ~ | sa1               | missing |
| pq             | missing | ql!clS-2         | ~ | ~ | sa1!cl->          | missing |
| pq!cl          | missing | ql!clS-2ppt1     | ~ | ~ | sa1!cl>           | missing |
| pq!cl-         | missing | ql!clS-2ppt1sut1 | ~ | ~ | sa>               | missing |
| pq!cl>         | missing | ql!clS-2sut1     | ~ | ~ | sa>1              | missing |
| pq-            | missing | ql!clppt1        | ~ | ~ | sa>2              | missing |
| pq-su2         | missing | ql!pf            | ~ | ~ | saG               | missing |
| pq>            | missing | ql!pf-           | ~ | ~ | saM               | missing |
| pqS            | missing | ql!po            | ~ | ~ | saM-1             | missing |
| pqS-           | missing | ql!po-1          | ~ | ~ | saM-4             | missing |
| pqS>           | missing | ql!po-1ppt1      | ~ | ~ | saM1              | missing |
| pqlsfr1        | missing | ql!po>           | ~ | ~ | saM2              | missing |
| pr             | missing | ql!poppt1        | ~ | ~ | saM3              | missing |
| pr-            | missing | ql!po~           | ~ | ~ | saM4              | missing |
| pr-lsc3        | missing | ql!po~ppt1       | ~ | ~ | salsfr1           | missing |
| pr>            | missing | ql!vs            | ~ | ~ | sapp1             | missing |
| prM            | missing | missing          | ~ | ~ | sa~               | missing |
| prlsc2         | missing | ql!vsupt1        | ~ | ~ | sc                | missing |
| prlst2         | missing | ql!vsupt1su2     | ~ | ~ | sc-               | missing |
| pr~            | missing | ql!vsupt1sux1    | ~ | ~ | sc-1              | missing |
| pt             | missing | ql-ppt1          | ~ | ~ | missing           | missing |

|              |         |              |         |                |  |         |
|--------------|---------|--------------|---------|----------------|--|---------|
| sc1          |         | sut4         |         | toS2su2        |  |         |
| sc>          |         | suu1         |         | toS2sut1       |  |         |
| scG          |         | suu1su2      |         | toS2sut2       |  |         |
| scG-1        |         | suu2         |         | toS2sux1       |  |         |
| scG1         |         | suu2su2      |         | toS3           |  |         |
| scM          | missing | suu3         |         | toS3lst2       |  | missing |
| scM1         | ✓       | suv1         |         | toS4           |  |         |
| scM2         | ✓       | suv1s1sut1   |         | toSs2          |  |         |
| scS          | ✓       | suv1su2      |         | tolsc3         |  | missing |
| sc~          | ✓       | suw2         |         | tolsc4lst3     |  | missing |
| sf           | ✓       | ta           |         | tolst2         |  | missing |
| sf-          | ✓       | ta-          |         | toppt1         |  |         |
| sf>          | missing | ta>          |         | toppu1         |  |         |
| sfG          | missing | ta>ppt1      |         | tr             |  |         |
| sfG1         | missing | talsc3       |         | missing        |  |         |
| sfM          | ✓       | talst2       |         | tr-            |  |         |
| sfM1         | missing | tg           |         | tr-1           |  |         |
| sfS          | ✓       | tg1          |         | tr-1su2        |  |         |
| sflsc3       | ✓       | tgM          |         | tr-2           |  | missing |
| st           |         | tgS          |         | tr-3           |  |         |
| st-          |         | tgS-         |         | tr~            |  |         |
| st>          |         | tgS1         |         | tr~1           |  |         |
| stS          |         | tgS2         | missing | tr>            |  |         |
| su1          | .       | tgS3         |         | trG            |  |         |
| su1sut1      |         | tgS4         |         | trG1           |  |         |
| su1sut1sut1  |         | tgSuu1       |         | trG2           |  |         |
| su1sut1su2   |         | tgsuu1       |         | trM            |  |         |
| su1sut1sux1  |         | to           |         | trS            |  |         |
| su1sut1suy1  |         | to!ciG       |         | trS-           |  |         |
| su1sut2      |         | to!ciGhh     |         | trS1           |  |         |
| su1sut2su1   |         | to!cl        |         | trSs2          |  |         |
| su1sut3      |         | to!cl!cl     |         | trlst2         |  | missing |
| su1suum1     |         | to!cl!cl!cl  |         | trsu3          |  | missing |
| su1suum1su1  |         | to!cl!pi     |         | tr~            |  |         |
| su1suum1su2  |         | to!cl!po     |         | ts             |  |         |
| su1suum2     |         | to!cl!po-1   |         | ts-            |  |         |
| su1suv1      |         | to!cl-       |         | ts>            |  |         |
| su1suv1su2   |         | to!cl!-cl-   |         | tsM            |  |         |
| su1suw1      |         | to!cl-1      |         | tsM-           |  |         |
| su1sux1      |         | to!cls       |         | tslsx6         |  | missing |
| su2          |         | to!pi        |         | tv             |  |         |
| su2sut1      |         | to!po        |         | tv-            |  |         |
| su2suv1      |         | to!posu2     |         | vi             |  |         |
| su2suw1      |         | to!pr        |         | vi-            |  |         |
| su2sux1      |         | to-          |         | vi!ci          |  |         |
| su2suy1      |         | to-1         |         | vi!vi!vi       |  |         |
| su3          |         | to-1su1      |         | vi!vi-vi       |  |         |
| su3sut1      |         | to-1su2      |         | vi->           |  |         |
| su4          |         | to-1suum1    |         | vi-lst3        |  | missing |
| su5          |         | to-1suum1su2 |         | vi-pp2         |  |         |
| sut1         |         | to->         |         | vi-pp4         |  |         |
| sut1sut1sux1 | missing | to>          |         | vi-ppt2        |  |         |
| sut1su2      |         | to>1         |         | vi-ppt3        |  |         |
| sut1suum1    |         | to>2         |         | vi-su1sut1     |  |         |
| sut1suum1    |         | to>pp2       |         | vi-su1sut1su2  |  |         |
| sut1suum1    |         | toG          |         | vi-su1sut2     |  |         |
| sut2         |         | toM          |         | vi-su1sut2su1  |  |         |
| sut2su2      |         | toM-         | missing | vi-su1suum1    |  |         |
| sut2suum1    |         | toM1         |         | vi-su1suum1su1 |  |         |
| sut2sux1     | missing | toM2         | missing | vi-su1suum1su2 |  |         |
| sut2suy1     |         | toM2-        | missing | vi-su1suum2    |  |         |
| sut3         |         | toM3         |         | vi-su1suv1     |  | missing |
| sut3suum1    |         | toS          |         | vi-su1suv1     |  |         |
| sut3suy1     |         | toS1         |         | vi-su1sux1     |  |         |
|              |         | toS2         |         | vi-su2         |  |         |

|             |         |                  |  |            |         |
|-------------|---------|------------------|--|------------|---------|
| vi-su2sut1  |         | vipp4            |  | visu2sux1  |         |
| vi-su2suw1  | missing | vippt1su1sut1    |  | visu3      |         |
| vi-su2sux1  |         | vippt1su2        |  | visu5      |         |
| vi-su3      |         | vippt1su2lsc3    |  | missing    |         |
| vi-su4      |         | vippt2           |  | visut1su2  |         |
| vi-sut1su2  |         | vippt3           |  | visut1sux1 |         |
| vi-sut1sux1 |         | vippu1su2        |  | visut2     |         |
| vi-sut1     | missing | vippu1su2lsc3    |  | visut2su2  |         |
| vi-sut2sux1 | missing | visu1sut1        |  | visut2sux1 | missing |
| vi-sut3     |         | visu1sut1su1sut1 |  | visut2suy1 |         |
| vi-sut4     |         | visu1sut1su2     |  | visut3     |         |
| vi-su1su2   |         | visu1sut1sux1    |  | visut3suw1 |         |
| vi-su2      |         | visu1sut1suy1    |  | visut3suy1 |         |
| vi-su2su2   |         | visu1sut2        |  | visut4     |         |
| vi-su3      |         | visu1suum1       |  | visuu1su2  |         |
| vi>         |         | visu1suv1        |  | visuu2su2  |         |
| vi>pp2      |         | visu1suw1        |  | visuv1su2  |         |
| vi>ppt2     |         | visu1sux1        |  | vs         |         |
| vi>ppt3     |         | visu2            |  | vs-        |         |
| vilsc3      |         | visu2lsc3        |  | vs->       |         |
| vilst1      | missing | visu2sut1        |  | vs>        |         |
| vipp2       |         | visu2suw1        |  | vslsc3     |         |
| vipp3       |         |                  |  | vilst2     | missing |
|             |         |                  |  | vs~        |         |

Table with nabc strings and corresponding grelaon glyphs:

|                    |                   |               |   |                    |
|--------------------|-------------------|---------------|---|--------------------|
| bv                 | cl1!pi>           | lst           | = | pelsm2             |
| bvlsa2             | cl1!pilsm3lsa6    | lsth          | = | pelsn2             |
| bvsun4             | cl1!pilsn8        | ltdo          | = | pelsn3             |
| ci                 | cl1!pilsn9        | ltdr          | = | pelsst1lsm4        |
| cilsf1             | cl1!pilst9        | ltdx          | = | pelsst2            |
| cilsn8             | cl1!pipp2         | lti           | = | pelst2             |
| cl                 | cl>               | ltps          | = | pesu2              |
| cl!cl!cl           | cl>1              | ltqm          | = | pesu2lst3          |
| cl!cl!cllsn9       | cl>1pp2           | ltsb          | = | pesu2sun1          |
| cl!cl!clsun1lsa5   | cl>lsa5           | ltse          | = | pesun3             |
| cl!cl!pi           | clG               | ltsj          | = | pesun3lss1lsa3     |
| cl!cl!pi!vi        | clG1              | ltsl          | = | pf                 |
| cl!cl!po           | clGlsa5           | ltsn          | = | pf1                |
| cl!cl!to           | clGlsnl2          | ltsp          | = | pf2                |
| cl!or              | clM               | ltsr          | = | pf>                |
| cl!orpp2           | clLshn8           | ltst          | = | pf>1               |
| cl!pe              | clLsm2            | ltus          | = | pf>2               |
| cl!pelsc2          | clLsn8            | oc            | = | pfM                |
| cl!pelsn7          | clLsn9            | oc!cl         | = | pfMlsmd3           |
| cl!pelst2          | clLsns2           | oc!pe         | = | pfS                |
| cl!pil!vi>         | clLsst6           | oc!pe!pu      | = | pfppn1ppq1sun1lsa5 |
| cl!po              | clLsst8           | oc!vi         | = | pfsun1             |
| cl!popp3           | clLst9            | ocG           | = | pfsun1lsn5         |
| cl!to              | clLsu2sun1lst6    | ocG1          | = | pf~                |
| cl!to!cl!cl        | clLsu3lst5        | ocGlsa5       | = | pf~1               |
| cl!to!pi           | clLsun1lst5       | oclst8        | = | pi                 |
| cl!to!pi!cl        | ds                | or            | = | po                 |
| cl!to!pi!clpp2     | ds1               | or1           | = | po>                |
| cl!to!pi!clpp2lsn9 | ds1!clsu1sun1     | or>lsa1       | = | po>1               |
| cl!to!pipp2        | ds1!clsu1sun1lst5 | orlst3        | = | po>pp2             |
| cl!to>             | ds1!clsun2        | orsu1sun1     | = | po>ppn1            |
| cl!tolst9          | ds1!clsun2lst5    | orsu1sun1lsc2 | = | po>ppz1            |
| cl!topp2           | ds1!ds1           | orsu1sun1lsc3 | = | poG                |
| cl!toppz1su1sun1   | ds1!ts            | pe            | = | poM                |
| cl!tosu1           | ds1!ts1           | pe!or         | = | poMsun1            |
| cl!tosu1lsc6       | ds1pp3            | pe!pu         | = | polsf2lst3         |
| cl!tosu1lsc6lst8   | dslst2            | pe!ta         | = | polst2             |
| cl!tosun1lsa5      | dslst8            | pe!ta>2       | = | popp2              |
| cl1!or             | lsa               | pe!ta>2lsa2   | = | popp2su1sux1       |
| cl1!orlsc3         | lsc               | pe!talsa2     | = | popn1              |
| cl1!orlss3         | lseq              | pe!talsc1lst2 | = | posu1sun1          |
| cl1!orpp2          | lseq-             | pe!un         | = | posun1lsa5         |
| cl1!orsun1         | lsequ             | pe!unlsc2     | = | posux1             |
| cl1!orsun1lsa5     | lsf               | pe>           | = | posux1lsa5         |
| cl1!pi             | lsh               | pe>1          | = | pp1                |
| cl1!pi!cl          | lshn              | pe>1lsa6      | = | pp2                |
| cl1!pi!orsun1      | lshp              | peG           | = | pp2ppn1            |
| cl1!pi!pesu2       | lsl               | peG1          | = | pp3                |
| cl1!pi!pi!vi       | lsm               | peGlsa6       | = | pp4                |
| cl1!pi!pisun1lsa5  | lsmd              | peGlsf1       | = | ppn1               |
| cl1!pi!to          | lsn               | pelsa2        | = | ppn1pp1            |
| cl1!pi!tosu1       | lsnl              | pelsc2        | = | ppn1pp1ppz1        |
| cl1!pi!tosun1      | lsnt              | pelsl2        | = | ppn1ppq1           |
| cl1!pi!vi          | lss               |               |   |                    |
|                    | lssimp            |               |   |                    |
|                    | lssimpl           |               |   |                    |
|                    | lssp              |               |   |                    |
|                    | lsst              |               |   |                    |

|                  |                    |              |                        |                 |
|------------------|--------------------|--------------|------------------------|-----------------|
| ppn1ppz1         | ql!po>ppn1         | sa1sun1lsa5  | to!cl!clsun2lsa5       | M <sub>1</sub>  |
| ppn1ppz1ppq1     | ql!polsa1lsa3lsa9  | sa>          | to!cl!orsun1           | M <sub>2</sub>  |
| ppn2             | ql!polsm1          | salsc4       | to!cl!pi               | M <sub>3</sub>  |
| ppn2ppz1         | ql!poppn1          | salsc6       | to!cl>1                | M <sub>4</sub>  |
| ppn2ppz1ppq1     | ql!poppn1lst2      | sc           | to!clM                 | M <sub>5</sub>  |
| ppn3             | ql!poppn1sun1      | sc1          | to!clsu1sun1           | M <sub>6</sub>  |
| ppn3ppz1         | ql!poppn1sux1      | sc1lsc4      | to!clsu1sun1lsm6       | M <sub>7</sub>  |
| ppn4             | ql!poppz1          | sclst2       | to!clsu2               | M <sub>8</sub>  |
| ppq1             | ql!poppz1lsa3      | sf           | to!clsu2lsn6           | M <sub>9</sub>  |
| ppz1             | ql!poppz1su1sun1   | sfG          | to!clsun1              | M <sub>10</sub> |
| ppz1ppq1         | ql!posu1sun1       | su1          | to!clsun1lsa5          | M <sub>11</sub> |
| pq               | ql!posun1          | su1sun1      | to!or                  | M <sub>12</sub> |
| pq1              | ql!posux1          | su1sun1su1   | to!orlsc6              | M <sub>13</sub> |
| pr               | ql>                | su1sun2      | to!orlst3              | M <sub>14</sub> |
| pt1              | ql>ppn1            | su1sux1      | to!orsun1lsa5          | M <sub>15</sub> |
| pt1ppn1          | ql>ppn1lsc3        | su2          | to!pi!cl               | M <sub>16</sub> |
| pt2              | ql>ppn1lsc3        | su2sun1      | to!pi!cl!pi!orsun1lsa5 | M <sub>17</sub> |
| pt3              | qllsst2            | su3          | to!pi!cl!pi!pi         | M <sub>18</sub> |
| pu               | qlppn1             | su4          | to!po                  | M <sub>19</sub> |
| pu1              | qlppn1ppz1         | sun1         | to!pohd                | M <sub>20</sub> |
| pulsnt3          | qlppn1ppz1lst2     | sun1su1      | to!to                  | M <sub>21</sub> |
| pupp1su1sun1     | qlppn1ppz1su1sun1  | sun1su1sun1  | to!to!pi!cl            | M <sub>22</sub> |
| pupp1su2         | qlppn1ppz1sun1     | sun1su2      | to!to!pi!clpp2         | M <sub>23</sub> |
| pupp1su1sun2     | qlppn1ppz1sun1lsa5 | sun2         | to!toppn1sun1          | M <sub>24</sub> |
| puppz1su1sun2    | qlppn1su1sun1      | sun2su1      | to!tosun1              | M <sub>25</sub> |
| puppz1su2        | qlppn1su1sun2      | sun3         | to>                    | M <sub>26</sub> |
| pusu1sun1        | qlppn1su2lsn1      | sun4         | to>2                   | M <sub>27</sub> |
| pusu1sun1lsf1    | qlppn1su1sun2      | sux1         | to>2lsa3               | M <sub>28</sub> |
| pusu1sun1lst7    | qlppn1su2          | ta           | to>2lsc1lsa3           | M <sub>29</sub> |
| pusu1sun2        | qlppn1su2lsn1      | ta>          | to>lsa5                | M <sub>30</sub> |
| pusu1sun2lsa5    | qlppn1sun1         | ta>1         | to>pp2                 | M <sub>31</sub> |
| pusu2sun1        | qlppn1sun1lsc5     | ta>2         | toG                    | M <sub>32</sub> |
| pusu3            | qlppn1sun1su2      | ta>lsc2      | toGlsa1lst8            | M <sub>33</sub> |
| pusu4            | qlppn2sun1         | ta>lsa2      | toGlsa5                | M <sub>34</sub> |
| ql               | qlppn2sun2         | ta>pp2       | toS                    | M <sub>35</sub> |
| ql!cl            | qlppn2sun2lsa5lsa5 | tasu2        | toS!pe                 | M <sub>36</sub> |
| ql!cl!or         | qlppz1su1sun1      | tg           | toS!to                 | M <sub>37</sub> |
| ql!cl!orppn1ppz1 | qlppz1su2          | tg!cl        | toS!tolst9             | M <sub>38</sub> |
| ql!cl!to         | qlsu1sun1          | tg!cl>1      | toS1                   | M <sub>39</sub> |
| ql!cl!to!or      | qlsu1sux1          | tg!cllsn9    | toSlsa5                | M <sub>40</sub> |
| ql!cl!to!orsun1  | qlsu2              | tg!or        | toSsun1lsa5            | M <sub>41</sub> |
| ql!cl!tolst6     | qlsu1              | tg!linsn8    | tolsf4                 | M <sub>42</sub> |
| ql!cl!toppn1     | qlsu1lsa5          | tglst9       | tolsn8                 | M <sub>43</sub> |
| ql!cl!tosu3      | qlsu1su2           | tgsun1lsa5   | tolnst2lst9            | M <sub>44</sub> |
| ql!cl!tosu3lst6  | qlsu2              | to           | tolst9                 | M <sub>45</sub> |
| ql!cl!tr>        | qlsu2lsa5          | to!cl        | tolsth8                | M <sub>46</sub> |
| ql!cl!tr>ppz1    | qlsux1             | to!cl!cl     | topp1su1               | M <sub>47</sub> |
| ql!clppn1        | sa                 | to!cl!cllst9 | topp1su1lsa6           | M <sub>48</sub> |
| ql!po            | sa1                | to!cl!clsu1  | topp2                  | M <sub>49</sub> |
| ql!po>           | sa1lsc4            | to!cl!clsun2 | topp2sun1              | M <sub>50</sub> |
|                  | sa1lsc6            |              | toppn3ppz1sun1         | M <sub>51</sub> |

|                   |  |                        |                   |                        |
|-------------------|--|------------------------|-------------------|------------------------|
| tosu2             |  | un1ppn1ppq1sun2        | unsux1            | vippn2                 |
| tosu2lst6         |  | un1ppn1sun1su2lsa5     | vi                | vippn2lsa4             |
| tosun1            |  | un1ppn1sun2            | vi>               | vippn2lsc4             |
| tosun1lsa5        |  | un1sun1su1sun1lsa1lsc4 | vi>1              | vippn2lsc8             |
| tosun1su1sun1     |  | un1sun1su1sun1lsa3lsc6 | vi>1lsa2lsc8      | vippn2lst3lsa4         |
| tosun1su2lsn3lst6 |  | un1sun1su2             | vi>1pp2           | vippn2ppz1ppq1         |
| tosun2            |  | un1sun1su2lsa5         | vi>1ppz1ppq1      | vippn2ppz1ppq1lst2lsa8 |
| tosun2lsa6        |  | un1sun2                | vi>2              | vippn2ppz1sun1lsa5     |
| to~               |  | un1sun2su2             | vi>lsa6           | vippn2sun1             |
| tr                |  | un2                    | vi>lsc6           | vippn2sun1lsa4         |
| tr>               |  | un2lsm1                | viS               | vippn3                 |
| trS               |  | unlsm1                 | vilss1            | vippn3su4              |
| trSlsc1           |  | unlsm2lss3lst8         | vilss2            | vippn3sun1lsa5         |
| trlss1lss3        |  | unlsm1                 | vilsst1           | vippn4                 |
| trlst3lshp7       |  | unlsm2lss3lst8         | vilst1            | vippq1                 |
| trs2              |  | unlsm1                 | vilst2            | vippz1ppq1             |
| trs2lst3lsm8      |  | unlsm2lss3lst8         | vilst2lsa8        | visu1sun1              |
| trsun1lsa3lsa5    |  | unlsm1                 | vilst9            | visu1sun1lsa5          |
| trsun1lsa5        |  | unppn1ppz1sun1         | vipp2ppn1         | visu1sun1lsa6          |
| trsun1su2         |  | unppn1ppz1sun1lsa5     | vipp2su2          | visu1sun1su1           |
| trsun1su2lsa3     |  | unppn1sun1su2          | vipp2sun1lsa5     | visu1sun1su1lst6       |
| trsun2            |  | unppn1sun2             | vipp3             | visu1sun1su2           |
| trsun2lsa5        |  | unppn1sun2lsa5         | vipp3lsn3         | visu1sun2lsa5          |
| trsux1            |  | unppn1sux1             | vipp4             | visu1sun2lsa6          |
| trsux1lsa5        |  | unppn1sux1lsa5         | vipp4lst2         | visu1sun2lsa7          |
| trsux1lst8        |  | unppn3sun1lsa5         | vippn1pp1         | vs                     |
| ts                |  | unsun1su1              | vippn1pp1ppz1     | vsG                    |
| ts1               |  | unsun1su1lst2lsc6      | vippn1pp1ppz1lst8 |                        |
| ts>               |  | unsun1su2              | vippn1pp1su1sun2  |                        |
| ts>1              |  | unsun2                 | vippn1ppq1        |                        |
| ts>lsc2           |  | unsun2lsa5             | vippn1ppz1ppq1    |                        |
| ts>lsc6           |  | unsun2su1              | vippn1su1         |                        |
| tslsa2            |  | unsun2su2              | vippn1su1sun1     |                        |
| tslsc2lst2        |  | unsun3                 | vippn1su1sun1lst2 |                        |
| tssun1lsa5        |  | unsun3lsa3             | vippn1su2         |                        |
| tv                |  | unsun3lsa6             | vippn1sux1        |                        |
| tvlsm2            |  |                        |                   |                        |
| un                |  |                        |                   |                        |
| un!clG            |  |                        |                   |                        |
| un1               |  |                        |                   |                        |
| un1lst8           |  |                        |                   |                        |

# 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>   | H428A Ascendens Iesus AM593   |
| 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> | H443V Venite exultemus NRXXXVIII  |
| H16A Aspiciebam in visu NR111  | <b>St. Gall codex 339</b>   |
| H16M Missus est Gabriel NR111  | 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>  |
| H16V Ave Maria NR113   | 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>   |
| H22S Sicut mater consolator NR127  | 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>   |
| H23E Egregieatur Dominus de Samaria NR129  | 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>   |
| H25E Ecce mitto Angelum AM201  | G8E Exulta satis OT11   |
| H26G Grata facta est NR25*   | G9A Alleluia Veni Domine GT36   |
| H28Q Qui venturus est NR134  | G11P Puer natus est GT47  |
| H29E Ecce radix Jesse NR137  | G11V Viderunt omnes GT48  |
| H32N Nascetur nobis NR149  | G12T Tui sunt caeli OT18  |
| H33I Iuravi dicit Dominus NR151  | G20I Jubilate Deo universa terra GT227  |
| H34F Festina ne tardaveris NR130   | G22D Domine quinque talenta GT515   |
| H35G Germinaverunt campi NR144   | G25P Posuisti Domine GT477  |
| H36A Adnuntiatum est   | G30E Exsurge quare obdormis GT91  |
| H48B Beata et venerabilis  | G35D Domine vivifica me OT31  |
| H50Q Quem vidistis pastores AM240  | G42D Domine Deus salutis OT112  |
| H72V Venit lumen tuum AM290  | G44P Precatus est Moyses GT317  |
| H72H Hodie in Iordane NR229  | G45D Domine in auxilium OT106   |
| H73O Omnes de Saba NR237   | G51I Intende voci GT280   |
| H73S Stella ista NR242   | G51S Si ambulabem GT125   |
| H74I Illuminare, illuminare NR236  | G57F Factus est Dominus GT119   |
| H75I In columbae specie NR231  | G89D Domine Deus in simplicitate OT159  |
| H75V Videntes stellam NR242  | G113A Alleluia. Dilexit Andream GT625   |
| H77S Stella ista AM291   | G116C Cantabo Domino GT283  |
| H77A Ab Oriente AM297  | G126D Alleluia. Domine Deus meus GT282  |
| H87E Exaudi Deus   | G128A Alleluia. Attendite popule  |
| H103S Spes nostra salus NR512  | G132A Alleluia. Mirabilis Dominus GT462   |
| H103M Magnus Dominus NR516   | G132V Alleluia. Vox exultationis  |
| H104T Te Deum patrem   | G139A Asperges me Domine  |
| H112S Stans a dextris AM798  | G140O Oremus dilectissimi nobis   |
| H114C Corde et animo AM1033  | G141O Omnipotens Deus   |
| H114N Nativitas tua AM1035   | <b>St. Gall codex 376</b>   |
| H118G Gaude, Maria Virgo NR130*  | 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>  |
| H119C Cum inducerent   | N39H Hodie cantandus est nobis  |
| H173I Insurrexerunt in me NR364  | N53A Audite fratres dilecti   |
| H173C Contumelias et terrores NR365  | N59N Nativitatem venerandam   |
| H179L Liberavit Dominus ARII183  | N65G Gloriatis laus tua Deus  |
| H179A Amicus meus osculi NR381   | N67G Gloria in excelsis Deo   |
| H179I Iudas mercator NR382   | N68G Gloria in excelsis Deo   |
| H179U Unus ex discipulis NR383   | N69G Gloria in excelsis Deo   |
| H180U Una hora non potuistis NR388   | N73G Kyrie eleison  |
| H219T Tradiderunt me NR408   | N86D Dilexisti iustitiam GT498  |
| H219I Iesum tradidit impius NR409  | N100T Tui sunt caeli OT18   |
| H225M Mulieres sedentes AM449  | N171D Deus exaudi orationem GT107   |
| H266D Domino si in tempore   | N221N Alleluia. Non vos relinquam GT242   |
| H269S Spiritus Sanctus   | N270A Alleluia. Benedictus es GT375   |
| H269D Dum complerentur NR493   | N293A Alleluia. Sancti tui, Domine, benedicent GT463  |
| H269R Repleti sunt omnes NR494   | N296V Alleluia. Veni Sancte Spiritus GT263  |
| H270S Spiritus Domini AM520  | N363C Carmen suo dilecto  |
| H271L Loquebantur variis AM521   | N368L Letanente canamus Domino nostro   |
| H297B Beatam me dicent NR[172]   | N372O O quam mira sunt Deus   |
| H305H Hodie nata est NR279*  | <b>St. Gall codex 374</b>   |
| H305G Gloriosae virginis Mariae NR279*   | 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>  |
| H306N Nativitas gloriosae NR280*   | A17T Tui sunt caeli OT18  |
| H307N Nativitas tua NR281*   | A22V Vox in Rama GT638  |
| H307F Felix namque NR[171]   | A26F Fili quid fecisti GT51   |
| H320R Regem confessorum  | A56C Custodi me Domine GT304  |
| H322B Beatus Gallus zelo   | A127E Exultabunt sancti OT143   |
| H322C Columbanus itaque beato  | A1670 Oravi Deum meum OT107   |
| H323B Beatus Gallus cum  | A174A Alleluia. Eripe me GT308  |
| H323D Domine Iesu Christe  | <b>Bamberg, lit. 6, Gradual of St. Emmeram</b>  |
| H324P Pater sanctus  | B9v = <a href="http://bsbsbb.bsb.lrz-muenchen.de/~db/0000/sbb00000128/images/index.html?id=00000128no=19&amp;seite=22&amp;signatur=Msc.Lit.6">http://bsbsbb.bsb.lrz-muenchen.de/~db/0000/sbb00000128/images/index.html?id=00000128no=19&amp;seite=22&amp;signatur=Msc.Lit.6</a> |
| H324V Vir Deo plenus   | B9vA Anima nostra GT466   |
| H325I Iste sanctus digne   |   |
| H367V Viri sancti NR[54]   |   |
| H424M Magnificat   |   |

|                  |           |               |               |      |
|------------------|-----------|---------------|---------------|------|
| <b>virga</b>     |           |               |               |      |
| vi               | C780      | tu            |               |      |
| vilsc3           | C82R      | testamentum   |               |      |
| vilst1           | E29E      | rex           | 2.166x        |      |
| vi-              | C80Q      | montes        |               |      |
| vi>              | C27E      | eius          |               |      |
| vi-lst3          | H50Q      | Quem          |               |      |
| vi->             | E20E      | sanctus       | 2.166x        |      |
| <b>tractulus</b> |           |               |               |      |
| ta               | C26A      | Domine        |               |      |
| talsc3           | E262S     | saeculum      | 2.166x        |      |
| talst2           | C56D      | Desiderium    |               |      |
| ta-              | C81E      | antiquis.     |               |      |
| ta>              | C25U      | et            |               |      |
| su1 Cf. ✓        | pesu2suv1 |               |               |      |
| <b>punctum</b>   |           |               |               |      |
| pu               | C137A     | Audi          |               |      |
| Cf. ✓            |           |               |               |      |
| Cf. ✓            |           |               |               |      |
| <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      | pretiosio.    |               |      |
| cl-              | C780      | omnium        |               |      |
| cls-             | C81E      | opem          |               |      |
| c1S              | C780      | opportuno.    |               |      |
| c1S1             | H424M     | potentiam     |               |      |
| c1M              | C148V     | nostro        |               |      |
| Cf. ✓            | cl>       |               |               |      |
| ✓                | cl>1      | H36A          | virginis      |      |
| Cf. ✓            | vi>       |               |               |      |
| ✓                | cl->1     | H50Q          | natum         |      |
| ✓                | cl->      | H50Q          | angelorum     |      |
| ✓                | c1M-      | C27Q          | super         |      |
| ✓                | c1S-1     | H428A         | navem         |      |
| <b>pes</b>       |           |               |               |      |
| pe               | C80Q      | Domine        |               |      |
| pe-              | C80Q      | aeternum      |               |      |
| pe-1             | C64Q      | Scapulis      |               |      |
| peS              | C780      | in            |               |      |
| peG              | B9vA      | erepta        | 0.5x          |      |
| Cf. ✓            | peG       |               |               |      |
| ✓                | pe>       | C100C         | germine       |      |
| ✓                | pe>1      | C27E          | eius          |      |
| ✓                | pe>2      | C71L          | misericordia  |      |
| Cf. ✓            | pe->      | N296V         | tuorum        |      |
| ✓                | pe->1     | H35G          | Germinaverunt | 1.7x |
| <b>porrectus</b> |           |               |               |      |
| po               | C139B     | super         |               |      |
| polsc2           | C82R      | iudica        |               |      |
| po-              | G20I      | anime         | 0.85x         |      |
| 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,       | 2.166x        |      |
| tolst2           | C74B      | misericordiam |               |      |
| to-              | G44P      | animae        |               |      |
| to-1             | C139A     | nostrorum     |               |      |
| toS              | C38A      | hodie         |               |      |

|                 |                  |  |                                |               |        |
|-----------------|------------------|--|--------------------------------|---------------|--------|
| ✓               | toS1             |  | E205R                          | Resurrexi,    | 0.5x   |
| ✓               | toS2             |  | E161S                          | Sitientes     | 1.75x  |
| ✓               | toS3             |  | C104V                          | circumfodit   |        |
| ✓               | toG              |  | G12T                           | eius          |        |
| ✓               | toM              |  | C49I                           | servum        |        |
| ✓               | toM1             |  | H22S                           | auxilium      |        |
| ✓               | toM3             |  | C39B                           | mirabile      | 1.71x  |
| ✓               | to>              |  | C26A                           | misericordiam |        |
| Cf. ✓           | pe>              |  |                                |               |        |
| ✓               | toS1st2          |  | 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           |        |
| ✓               | visuisuu1        |  | C26D                           | laetitia.     |        |
| ✓               | visut4           |  | C25U                           | me.           |        |
| ✓               | cl-1su2          |  | C40A                           | magna         |        |
| ✓               | visuisut2        |  | C43L                           | Domine        |        |
| ✓               | visuisuv1        |  | C53S                           | terrae.       |        |
| ✓               | visuu1su2        |  | C56D                           | eius          |        |
| ✓               | visuu2su2        |  | H103S                          | salus         |        |
| ✓               | vi-su2su2        |  | H103S                          | o             |        |
| ✓               | visu2suw1        |  | G113A                          | Alleluia      | 0.85x  |
| ✓               | visut2su2        |  | G128A                          | Alleluia      | 0.85x  |
| ✓               | visut3suw1       |  | C153S                          | dicent.       |        |
| ✓               | visu1sut1sux1    |  | G126D                          | salvum        | 0.85x  |
| ✓               | visu1sut1su2     |  | N39H                           | puer          |        |
| ✓               | visu1sut1suisut1 |  | N39H                           | generavit     |        |
| ✓               | vi-su1sut1su2    |  | N39H                           | enim          |        |
| ✓               | visut1sux1       |  | N59N                           | filium        |        |
| ✓               | clSsu1sut1       |  | N65G                           | tui           |        |
| ✓               | vi-su4           |  | N68G                           | Amen.         |        |
| ✓               | vi-su1sut2su1    |  | N73K                           | Christe       |        |
| ✓               | visu1sut1suy1    |  | N221N                          | Alleluia.     |        |
| ✓               | visut3suy1       |  | N293A                          | dicent.       |        |
| ✓               | visut2suy1       |  | N363C                          | sacro         | 1.25x  |
| ✓               | visu5            |  | N368L                          | fornacibus    | 1.25x  |
| ✓               | visuisuu1su2     |  | 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   |
| ✓               | vi-sut3          |  | H269D                          | dicentes      |        |
| ✓               | vi-su1sut1 Cf. ✓ |  | vi-su1sut1su2 minus subpunctis |               |        |
| ✓               | vi-su2sut1       |  | N296V                          | alleluia      |        |
| ✓               | vi-su1sux1       |  | E373B                          | Sanctum       | 2.133x |
| ✓               | vi-su2sux1       |  | C49I                           | eum           |        |
| ✓               | vi-sut4          |  | H16A                           | servient      | 1.7x   |
| ✓               | vi-su2           |  | H23E                           | ecce          | 1.7x   |
| ✓               | vi-su3           |  | H35G                           | veniet        | 1.7x   |
| ✓               | visu2sux1        |  | H48B                           | mater         | 1.7x   |
| ✓               | vi-sut1su2       |  | H22S                           | elegi         | 1.71x  |
| ✓               | vi-su1suum1      |  | H114C                          | gloriam       | 1.71x  |
| ✓               | vi-su1suu1su2    |  | H114N                          | nobilis       | 1.71x  |
| ✓               | vi-su1sut2       |  | 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                    |        |
| Cf. pe>                 |                           |                             |        |
| vi-pp2                  | C26A                      | Domine                      |        |
| vi-ppt3                 | C27E                      | veniet.                     |        |
| scM2                    | C44E                      | Ecce                        |        |
| vi>ppt3                 | E2R                       | non                         | 2.166x |
| cl>ppt2                 | H730                      | annuntiantes                |        |
| vi-!vi!vi               | E155B                     | Benedicite                  | 2.166x |
| vipp3                   | 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. po>                 |                           |                             |        |
| pfMsut1                 | E34I                      | eum                         | 2.166x |
| <b>pes subbipunctis</b> |                           |                             |        |
| pesu2                   | C81E                      | antiquis.                   |        |
| vipp1su2lsc3            | C61T                      | solus:                      |        |
| pe-su2                  | H73S                      | adoraverunt                 |        |
| pe-1su2                 | C64Q                      | habitat                     |        |
| pe-1sut2                | H104T                     | confitemur                  |        |
| pe-1sut1suw1            | H219I                     | videret                     | 1.63x  |
| peSsu2                  | A17T                      | eius                        |        |
| peSsu2                  | C27E                      | sanctos                     |        |
| vipp1su2                | C56B                      | benedicetur.                |        |
| toS2sut1                | C139A                     | Alleluia                    |        |
| vi-!ci                  | E272M                     | cognovisti                  | 2.166x |
| pesu1suw1               | G8E                       | plebem                      |        |
| pe-suisut1              | N296V                     | alleluia                    |        |
| pe-su2suy1              | N296V                     | alleluia                    |        |
| pe-1sut3                | H179A                     | malum                       |        |
| Cf. to>                 |                           |                             |        |
| pesu1suu1               | C27E                      | Deus                        |        |
| pesu3                   | C27Q                      | regis                       |        |
| vipp1su1sut1            | C40V                      | omnes                       |        |
| vippisu2                | 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                     |        |
| peSsu1sux1              | G89D                      | filii                       | 0.85x  |
| pe-su3sut1              | N270A                     | saecula.                    |        |
| pe-1sut1sux1            | H72V                      | orta                        |        |
| peSsu3                  | C460                      | Jerusalem                   |        |
| pesut2                  | H77S                      | magi                        |        |
| pe-1suw2                | E255S                     | Domini                      | 2.133x |
| peSsu1su2               | E13P                      | Domine                      | 2.133x |
| pesu1sux1               | H25E                      | angelum                     | 1.7x   |
| pe-1su1suw1             | H29E                      | deprecabuntur               | 1.7x   |
| pesu1sut1 Cf.           |                           | pesu1sut3 minus 2 tractulis |        |

|                           |       |                 |        |
|---------------------------|-------|-----------------|--------|
| pe-1su1sut1               | H306N | de              | 2.0x   |
| pe-1su1sut2               | H305G | Mariae          | 2.0x   |
| pe-1su1suu2               | H305G | vidente         | 2.0x   |
| pe-1suu1su2               | H180U | exhortabamini   | 1.75x  |
| pe-su4                    | C139A | Alleluia        |        |
| 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            | 2.0x   |
| tr-1                      | C38T  | meo             |        |
| trS                       | C58A  | Domine          |        |
| trG                       | E336I | fecisti         | 2.166x |
| trG1                      | G25P  | ei              |        |
| trG2                      | E147L | Laetare         | 2.166x |
| trM                       | E336I | resistere       | 2.166x |
| tr>                       | C82V  | nonconfundentur |        |
| tr~                       | C60S  | Altissimus      |        |
| tr--                      | C27Q  | et              |        |
| tr--1                     | C107A | Alleluia.       |        |
| trS-                      | C89T  | pedes,          |        |
| trS1                      | E26L  | eeiieue         | 2.166x |
| tr-3                      | H323D | honore          | 2.0x   |
| trsut3                    | C95D  | eius.           |        |
| <b>stropha</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  | concultantes    |        |
| tsM-                      | A26F  | ego             |        |
| <b>trigonus</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        |           |       |
| <i>Cf.</i> ↗        | vs>         |               |           |       |
| <i>Cf.</i> ↘        | or>         |               |           |       |
| <b>virga strata</b> |             |               |           |       |
| vs                  | C148A       | generatio     |           |       |
| vslsc3              | C39B        | nomine        |           |       |
| vslst2              | E195D       | suis,         | 2.166x    |       |
| vs-                 | C82B        | Domini        |           |       |
| vs>                 | C64Q        | pennis        |           |       |
| <i>Cf.</i> ↗        | ta>         |               |           |       |
| <i>Cf.</i> ↘        | vs->        |               |           |       |
|                     | A22V        | Rama          |           |       |
| <b>oriscus</b>      |             |               |           |       |
| or                  | H112S       | candidior     |           |       |
| or>                 | C148V       | salutari      |           |       |
| <b>salicus</b>      |             |               |           |       |
| sa                  | C27E        | super         |           |       |
| sa1                 | C148A       | Alleluia.     |           |       |
| salsfr1             | E3D         | Deus          | 2.166x    |       |
| sa-                 | C25U        | tuas          |           |       |
| sa-1                | G30E        | tribulationis |           |       |
| saG                 | C107A       | Alleluia.     |           |       |
| saM                 | H16V        | venient       | 1.7x      |       |
| saM1                | H23E        | homo          | 1.71x     |       |
| saM2                | C27Q        | regis         |           |       |
| saM4                | E10P        | omnis         | 2.166x    |       |
| sa>                 | C27E        | sanctos       |           |       |
| sa->1               | H77A        | magi          |           |       |
| <i>Cf.</i> ↗        | pe>2        |               |           |       |
| <i>Cf.</i> ↘        | sa!cls1     | C80Q          | sicut     |       |
| <i>Cf.</i> ↗        | sa!cls-1    | C27Q          | tuam      |       |
| <i>Cf.</i> ↘        | sa!cls1lsc2 | C46B          | Deus      |       |
| <i>Cf.</i> ↗        | sa-lsfr1    | C134B         | nomen     |       |
| <i>Cf.</i> ↘        | sa!cl>      | G45D          | respexit  | 0.85x |
| <i>Cf.</i> ↗        | sa!cl>      | G22D          | euge      | 0.85x |
| <i>Cf.</i> ↘        | sa!cl       | G1410         | fortitudo | 0.85x |
| <i>Cf.</i> ↗        | saM-1       | G139A         | Domine    | 0.85x |
| <i>Cf.</i> ↘        | sa!cl-      | G132V         | Alleluia. | 0.85x |
| <i>Cf.</i> ↗        | saM3        | N53A          | fratres   |       |
| <i>Cf.</i> ↘        | saM-4       | N296V         | amoris    |       |
| <i>Cf.</i> ↗        | sa>2        | H73S          | viderunt  |       |
| <i>Cf.</i> ↘        | sa1!cl->    | H32N          | eius      | 1.7x  |
| <i>Cf.</i> ↗        | sapp1       | H320R         | venite    | 2.0x  |
| <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   |               |           |       |
| su1suw1 Cf. ↗       | ciM         |               |           |       |
| su1sus1 Cf. ↗       | ci>         |               |           |       |
| su1sut2 Cf. ↗       | visu1sut2   |               |           |       |

|                      |                   |
|----------------------|-------------------|
| su1suu1 Cf. ↗        | visu1suu1         |
| su2suw1 Cf. ↗        | visu2suw1         |
| su2sus1 Cf. ↗        | vi-su2sus1        |
| sut1su2 Cf. ↗        | visut1su2         |
| sut1suw1 Cf. ↗       | pe-1sut1suw1      |
| sut3 Cf. ↗           | visut3            |
| suv1su2 Cf. ↗        | visuv1su2         |
| sut4 Cf. ↗           | visut4            |
| su1sut1 Cf. ↗        | visu1sut1         |
| suu2su2 Cf. ↗        | vi-su2su2         |
| sut2su2 Cf. ↗        | visut2su2         |
| su1sut3 Cf. ↗        | pesu1sut3         |
| su2suw1 Cf. ↗        | pesu2suw1         |
| sut3suw1 Cf. ↗       | visut3suw1        |
| su1sut1su1 Cf. ↗     | visu1sut1su1      |
| su1sut1su2 Cf. ↗     | visu1sut1su2      |
| su1sut1su1sut1 Cf. ↗ | visu1sut1su1sut1  |
| sut1su1 Cf. ↗        | visut1su1         |
| su4 Cf. ↗            | vi-su4            |
| su1sut2su1 Cf. ↗     | vi-su1sut2su1     |
| su1sut1suy1 Cf. ↗    | visu1sut1suy1     |
| sut3suy1 Cf. ↗       | visut3suy1        |
| sut2suy1 Cf. ↗       | visut2suy1        |
| su5 Cf. ↗            | visu5             |
| su1suu1su2 Cf. ↗     | visu1suu1su2      |
| su1suu2 Cf. ↗        | vi-su1suu2        |
| su1suu1su1 Cf. ↗     | vi-su1suu1su1     |
| su3sut1 Cf. ↗        | pe-su3sut1        |
| suu2 Cf. ↗           | ql-ppt1suu2       |
| su2sut1 Cf. ↗        | vi-su2sut1        |
| su2suy1 Cf. ↗        | pe-su2suy1        |
| suw2 Cf. ↗           | pe-1suw2          |
| su2suu1 Cf. ↗        | ql-ppt1sut2suu1   |
| suu3 Cf. ↗           | vi-su3            |
| su1 Cf. ↗            | ci                |
| sut1 Cf. ↗           | ciS1              |
| su1suu1su2 Cf. ↗     | ql-ppt2su1suu1su2 |
| sut1suu1 Cf. ↗       | vi-sut1suu1       |
| suu1su1sut1 Cf. ↗    | pesu1suu1sut1     |

|                   |                |
|-------------------|----------------|
| <b>prepunctis</b> |                |
| pp2 Cf. ↗         | vi-pp2         |
| ppu2 Cf. ↗        | scS            |
| ppt2 Cf. ↗        | sfS            |
| ppu3              | C47I Sede      |
| ppu4              | C58A Domine    |
| ppu5              | C50G confredit |
| pp4               | C780 escam     |
| pp3 Cf. ↗         | pp4            |
| ppt3 Cf. ↗        | vi>ppt3        |
| ppt4              | N69G amin.     |
| ppt5              | A56C videant   |
| pp1 Cf. ↗         | vi-pp2         |

|                        |                               |
|------------------------|-------------------------------|
| <b>combined glyphs</b> |                               |
| cl!pi                  | C82R Domine                   |
| cl!pilsc1lsc3          | C89T manum                    |
| cl!pilsc2              | C149A cantabo                 |
| cl!pr                  | G51S ipsa 0.85x               |
| cl-!pi                 | E35E illis 2.166x             |
| ql!cl                  | C148A Domine                  |
| ql!cl!cl> Cf. ↗        | ql!cl!cl>ppt1 minus tractulus |
| ql!cl!pi Cf. ↗         | ql!cl!pi ppt1 minus tractulus |
| ql!pf-                 | G42D mane 0.85x               |
| ql!pf                  | G35D Domine                   |
| ql!cl-                 | C26A Alleluia                 |
| ql!clM Cf. ↗           | ql!clM ppt1 minus tractulus   |
| ql!cl-> Cf. ↗          | ql!cl->ppt1 minus tractulus   |
| ql!cl>                 | H26L salva 0.5x               |
| ql!po                  | C148V nostro                  |
| ql!po-1                | C148A Alleluia.               |
| ql!po>                 | H33I terram                   |
| ql!vs                  | C148A refugium                |

|   |  |
|---|--|
| ql!vssu2 Cf. <i>...<sup>2</sup></i>     | ql!vsppt1su2 minus tractulus   |
| ql!vssut2 Cf. <i>...<sup>2</sup></i>    | ql!vsppt1sut2 minus tractulus  |
| qi!vs Cf. <i>...<sup>2</sup></i>        | qi!vssu2 minus subbipunctis  |
| qi!vssu2 Cf. <i>...<sup>2</sup></i>     | qi!vsppt1su2 minus tractulus   |
| ql-su1su1 Cf. <i>...<sup>2</sup></i>    | ql-ppt1su1su1 minus tractulus  |
| ql-su1su1su2 Cf. <i>...<sup>2</sup></i> | ql-ppt2su1su1su2 minus tractulus   |
| qisu2                                   | E166C sermones <span style="border: 1px solid black; padding: 2px;">2.0x</span>    |
| qisut2 Cf. <i>...<sup>2</sup></i>       | qippt2sut2 minus tractulus   |
| ql-su3 Cf. <i>...<sup>2</sup></i>       | ql-ppt1su3 minus tractulus   |
| qlsut3 Cf. <i>...<sup>2</sup></i>       | qlppt1sut3 minus tractulus   |
| qlsu2 Cf. <i>...<sup>2</sup></i>        | qlppt1su2 minus tractulus  |
| ql-su2 Cf. <i>...<sup>2</sup></i>       | ql-ppt1su2 minus tractulus   |
| ql-sut2                                 | H73S cedebat   |
| ql-su1sux1 Cf. <i>...<sup>2</sup></i>   | ql-ppt1su1sux1 minus tractulus   |
| ql-su1sut2 Cf. <i>...<sup>2</sup></i>   | ql-ppt1su1sut2 minus tractulus   |
| ql-sut1sux1                             | H72H complacui   |
| ql-su2 Cf. <i>...<sup>2</sup></i>       | ql-ppt1su2 minus tractulus   |
| ql-sut2suu1 Cf. <i>...<sup>2</sup></i>  | ql-ppt1sut2suu1 minus tractulus  |
| qi-su2                                  | H73S cedebat   |
| qi-su1sut2 Cf. <i>...<sup>2</sup></i>   | qi-ppt1su1sut2 minus tractulus   |
| qi-su1sux1                              | H26G certamine <span style="border: 1px solid black; padding: 2px;">1.7x</span>    |
| ql-su1suu2                              | H34F facinora <span style="border: 1px solid black; padding: 2px;">1.71x</span>    |
| qi!cl                                   | C82B spiritu   |
| qi!cl-                                  | C148A factus   |
| qi!cl>                                  | H77S Magi  |
| qi!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  |
| qlsut2                                  | H269D alleluia   |
| qi-sut2                                 | H269D alleluia   |
| qi-ppt1su1sut2                          | H269R magnalia   |
| ql!cl>ppt1                              | H730 aurum   |
| ql!clppt1                               | C39B Domini:   |
| ql!cl!cl>ppt1                           | E133I corda <span style="border: 1px solid black; padding: 2px;">2.166x</span>     |
| ql!cl!pippt1                            | E31T maris <span style="border: 1px solid black; padding: 2px;">2.166x</span>      |
| ql!cl-ppt1                              | C40A terram.   |
| ql!clMppt1                              | E324R tuum <span style="border: 1px solid black; padding: 2px;">2.166x</span>      |
| ql!cl->ppt1                             | G132A Alleluia. <span style="border: 1px solid black; padding: 2px;">0.85x</span>  |
| ql!clS-2ppt1sut1                        | E3D et. <span style="border: 1px solid black; padding: 2px;">2.0x</span>           |
| ql!clS-2sut1 Cf. <i>...<sup>2</sup></i> | ql!clS-2ppt1sut1 minus tractulus   |
| ql!clS-2ppt1 Cf. <i>...<sup>2</sup></i> | ql!clS-2ppt1sut1 minus tractulus   |
| ql!clS-2 Cf. <i>...<sup>2</sup></i>     | ql!clS-2ppt1sut1 minus 2 tractulis   |
| ql!poppt1                               | C59D Domine.   |
| ql!po-1ppt1                             | C58A homo.   |
| ql!po~ppt1                              | H179L pauperem   |
| ql!po~ Cf. <i>...<sup>2</sup></i>       | ql!po~ minus tractulus   |
| ql-ppt1su2                              | H72V Jerusalem   |
| ql-ppt1su1sux1                          | H730 Reges   |
| ql-ppt1su1sut2                          | H75I patris  |
| ql-ppt1suu2                             | H72H Hic   |
| ql-ppt1sut2suu1                         | H16M altissimi <span style="border: 1px solid black; padding: 2px;">1.7x</span>    |
| ql!vspp1su2                             | H730 Domino  |
| ql!vspp1 Cf. <i>...<sup>2</sup></i>     | ql!vspp1su2 minus subbipunctis   |
| ql!vspp1sut2                            | H73S gaudio  |
| qi!vspp1su2                             | H74I Domini  |
| qi-sut3                                 | H322B in <span style="border: 1px solid black; padding: 2px;">2.0x</span>          |
| ql-ppt1su1suu1                          | H305H David <span style="border: 1px solid black; padding: 2px;">2.0x</span>       |
| ql-ppt1su3                              | H323D subire <span style="border: 1px solid black; padding: 2px;">2.0x</span>      |
| qlppt1sut3                              | H305G Redemptorem <span style="border: 1px solid black; padding: 2px;">2.0x</span> |
| qlppt1su2                               | E166C secundum <span style="border: 1px solid black; padding: 2px;">2.0x</span>    |
| ql-ppt2su1su1su2                        | H306N illustrat <span style="border: 1px solid black; padding: 2px;">2.0x</span>   |
| ql-su1sut1                              | H307F iustitiae <span style="border: 1px solid black; padding: 2px;">2.0x</span>   |
| qippt2sut2                              | H297B generations <span style="border: 1px solid black; padding: 2px;">2.0x</span> |
| ql!vssu3                                | H443V ei <span style="border: 1px solid black; padding: 2px;">2.0x</span>          |
| to!ciG                                  | E51R eum <span style="border: 1px solid black; padding: 2px;">2.0x</span>          |

|  |  |
|--|--|
| to!ciG                                 | C28T gloriae.  |
| to!cl                                  | C84T pupillo   |
| to!cl!cl                               | C64Q sepativ,  |
| to!cl!po                               | E31T veritas <span style="border: 1px solid black; padding: 2px;">2.166x</span>    |
| to!cl!po-1                             | N100T veritas  |
| to!cl!pi                               | C45S mea   |
| to!cl-                                 | N86D propterea   |
| to!cl-!cl-                             | C54A Adducentur  |
| to!cl-1                                | C45S filii   |
| to!cls                                 | C43A terram.   |
| to!cl!cl                               | C43A Domini,   |
| to!po                                  | C64Q sagitta   |
| to!posu2                               | C49I eo,   |
| to!pr                                  | G11V Deo <span style="border: 1px solid black; padding: 2px;">0.85x</span>         |
| to!pi                                  | C60C tui.  |
| toSsu2                                 | H72H mihi  |
| pf!cl-                                 | G51I meus  |
| pf!clM- Cf. <i>...<sup>2</sup></i>     | pf!clM-ppt1 minus tractulus  |
| pf!pr                                  | G9A Alleluia   |
| cl!po> Cf. <i>...<sup>2</sup></i>      | cl!po>ppt1 minus tractulus   |
| cl!cl>1                                | N67G mundi   |
| cl!clsut2                              | E256C psallite <span style="border: 1px solid black; padding: 2px;">2.166x</span>  |
| cl!cls Cf. <i>...<sup>2</sup></i>      | cl!clsut2 minus 2 tractulis  |
| cl!po                                  | C26A nobis.  |
| cl!po-1                                | H119C in   |
| tr-1su2                                | H730 dona  |
| trSsu2                                 | H305H devotissime <span style="border: 1px solid black; padding: 2px;">2.0x</span> |
| ci-pp2                                 | H73S magno   |
| toSsu2                                 | H73S eam   |
| toSsut2                                | C150L dicta  |
| to-1su2                                | H322C ostendere <span style="border: 1px solid black; padding: 2px;">2.0x</span>   |
| to-1su1                                | H323B Gallus <span style="border: 1px solid black; padding: 2px;">2.0x</span>      |
| to-1suu1                               | H173I me <span style="border: 1px solid black; padding: 2px;">1.8x</span>          |
| to-1suu1su2                            | H324V cognovi <span style="border: 1px solid black; padding: 2px;">2.0x</span>     |
| po-1pp2su1sux1                         | H323D desiderium <span style="border: 1px solid black; padding: 2px;">2.0x</span>  |
| po-1su1sux1 Cf. <i>...<sup>2</sup></i> | po-1pp2su1sux1 minus bipunctis   |
| pisu1                                  | H307N annuntiavit <span style="border: 1px solid black; padding: 2px;">2.0x</span> |
| pisut1                                 | C153B Alleluia   |
| pq-su2                                 | C132D practioso  |
| pe!vi                                  | C57B qui   |
| tgsuu1                                 | C49I eum.  |
| tgSsuu1                                | C57B nimis.  |
| bv-sut2                                | H179U fuisset. <span style="border: 1px solid black; padding: 2px;">1.75x</span>   |
| sa-su2sut1                             | C49I eum   |
| <b>significative letters</b>           |  |
| lsam                                   | C87E abstraxisti   |
| lsal                                   | E20E Sion, <span style="border: 1px solid black; padding: 2px;">2.166x</span>      |
| lsb                                    | C39B Domino  |
| lsc                                    | C27E eius  |
| lscw                                   | C148V nostro.  |
| lSCO                                   | C134B nomen  |
| lscm                                   | C58A oblivio   |
| lsd                                    | E11C Virgo   |
| lse                                    | C84T adiutor   |
| lsew                                   | H266D si   |
| lseq                                   | C64Q viis  |
| lsfid                                  | E16B Domino  |
| lsfr                                   | C58A non   |
| lsg                                    | C27Q ovem  |
| lsi                                    | C87E Domine  |
| lsim                                   | E336I universa   |
| lsiv                                   | E92I misericors  |
| lsk                                    | C62M confidit  |
| lsl                                    | C38T Tecum   |
| lslb                                   | C58A non   |
| lslc                                   | E151A ab   |
| lslen                                  | C59D servitui.   |
| lsm                                    | C38T Tecum   |
| lsmoll                                 | E33V fines   |
| lsp                                    | C64Q altissimi   |
| lspar                                  | E104S miserere   |
| lspfec                                 | E2D fructum  |

|               |         |       |            |                    |        |
|---------------|---------|-------|------------|--------------------|--------|
| <i>p̄m</i>    | lspm    | C40V  | suam.      | parvum mediocriter |        |
| <i>pulcre</i> | lpulcre | E64L  | hac        | pulcre             | 2.0x   |
| <i>r</i>      | lss     | C27E  | sanctos    | sursum             |        |
| <i>rb</i>     | lssb    | C40V  | iustitiam  | sursum bene        |        |
| <i>rc</i>     | lssc    | C84T  | Tibi       | sursum celeriter   |        |
| <i>simil</i>  | lssimil | E193D | ne         | similiter          | 2.166x |
| <i>simul</i>  | lssimul | E42A  | sumus.     | simul              | 2.166x |
| <i>sm</i>     | lssm    | C59D  | Si         | sursum mediocriter |        |
| <i>st</i>     | lsst    | C87E  | Domine     | sursum tenere      |        |
| <i>st̄a</i>   | lssta   | C27E  | Congregate | statim             |        |
| <i>st̄</i>    | lst     | C39B  | Domino     | tenete             |        |
| <i>st̄w</i>   | lstw    | C58A  | non        | tenete (wide form) |        |
| <i>st̄b</i>   | lstb    | C39B  | Domino     | tenete bene        |        |
| <i>st̄m</i>   | lstm    | E3D   | tu         | tenete mediocriter | 2.166x |
| <i>s̄v</i>    | lsv     | E1310 | semper     | valde              | 2.0x   |
| <i>s̄vol</i>  | lsvol   | C58A  | aeternum   | volubiliter        |        |
| <i>s̄x</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 = http://manuscrit.ville-laon.fr/_app/_visualisation.php?cote=Ms239&vue=9 | 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 Misericordia mei Deus GT63  | L112O 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 Benedic Domini 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 mecum 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                |

|                   |              |                  |  |
|-------------------|--------------|------------------|--|
| <b>uncinus</b>    |              |                  |  |
| un                | L78H         | testamenti       |  |
| un1               | L78H         | calix            |  |
| un2 Cf. <i>¶</i>  | un21sm1      | minus letter     |  |
| un2lsm1           | L820         | fecisti          |  |
| unlsm1            | L75V         | qui              |  |
| unlst1            | L103R        | alleluia         |  |
| unlst2            | L820         | fac              |  |
| unlst8            | L24D         | opera            |  |
| un1lst8           | L1120        | Christo          |  |
| unlsm2lss31st8    | L43S         | scuto            |  |
| <b>punctum</b>    |              |                  |  |
| pu                | L820         | iudicio          |  |
| pu1               | L56D         | revereantur      |  |
| pulsnt3           | L75V         | flentes          |  |
| <b>virga</b>      |              |                  |  |
| vi                | L820         | Domine           |  |
| viS Cf. <i>¶</i>  | vipp2su2     | minus punctis    |  |
| vi>               | L78H         | in               |  |
| vi>1 Cf. <i>¶</i> | vi>1lsa2lsc8 | minus letters    |  |
| vi>2              | L820         | nobiscum         |  |
| vilst1            | L78H         | meam             |  |
| vilst2            | L95D         | meus             |  |
| vilst9            | L105A        | quaeritis,       |  |
| vilss1            | L103P        | Alleluia.        |  |
| vilss2            | L95D         | avertas          |  |
| vilss1            | L103P        | Alleluia.        |  |
| vilst2lssa8       | L95D         | eius.            |  |
| vi>lsla6          | L78H         | testamenti       |  |
| vi>lsc6           | L56D         | adiuvandum       |  |
| vi>1lsa2lsc8      | L126F        | loquentes        |  |
| <b>tractulus</b>  |              |                  |  |
| ta                | L24T         | tuam.            |  |
| ta>               | L78H         | dicit            |  |
| ta>1              | L820         | mandatis         |  |
| ta>2              | L90D         | sancto           |  |
| ta>lsnl2          | L45R         | dominentur       |  |
| ta>2lsc2          | L90D         | Libera           |  |
| <b>pes</b>        |              |                  |  |
| pe                | L78H         | commemorationem  |  |
| peG               | L78H         | vobis            |  |
| pe>               | L95D         | exaudi           |  |
| pe>1              | L78H         | sanguine         |  |
| peG1              | L67S         | tua,             |  |
| pelsa2            | L820         | peccavimus       |  |
| pelsc2            | L67S         | tuus,            |  |
| pelsl12           | L43L         | iustitiam        |  |
| pelsm2            | L81E         | meam,            |  |
| pelsn2            | L149C        | qui              |  |
| pelsn3            | L125S        | replevit         |  |
| pelsst1           | L103P        | immolatum        |  |
| pelsst1lsm4       | L44I         | Elevatio         |  |
| pelst2            | L103H        | saeculum         |  |
| peGlsf1           | L67S         | non              |  |
| peGls6            | L109P        | vocavit          |  |
| pe>1lsa6          | L114V        | alleluia         |  |
| <b>porrectus</b>  |              |                  |  |
| po                | L78H         | facite           |  |
| poG               | L64D         | mecum            |  |
| poM Cf. <i>¶</i>  | poMsun1      | minus uncinus    |  |
| po> Cf. <i>¶</i>  | po>pp2       | minus prepunctis |  |
| po>1              | L81E         | descendentibus   |  |
| polsf2lst3        | L95D         | meus             |  |
| polst2            | L103H        | saeculum         |  |
| <b>clivis</b>     |              |                  |  |
| cl Cf. <i>¶</i>   | 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            |  |

|                           |                      |               |
|---------------------------|----------------------|---------------|
| cllsn8                    | L640                 | imples        |
| cllsn8                    | L95D                 | velociter     |
| cllsn9                    | L67S                 | tua,          |
| cllsst8                   | L640                 | imples        |
| cllst9                    | L95D                 | tempus        |
| cllsst6                   | L43L                 | mirabilia     |
| cllsm2                    | L45R                 | nobilis       |
| cllsnt2                   | L92E                 | me            |
| cl>1lsa5                  | L71D                 | effundam      |
| <b>oriscus-clivis</b>     |                      |               |
| oc                        | L78H                 | sanguine      |
| ocG                       | L56D                 | Deus          |
| ocG1                      | L11Q                 | veniet        |
| ocGlsa5                   | L103T                | resureret     |
| 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,      |
| tolstn2lst9               | L92E                 | me            |
| toGlsa1lst8               | L109P                | alleluia.     |
| toGlsa5                   | L68N                 | condemnabo    |
| toSls5                    | L77S                 | enim          |
| to>lsla5                  | L118E                | in            |
| to>2lsla3                 | 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. <i>¶</i> | visu1sun1su1lst6     | minus letter  |
| visu1sun1su1lst6          | L105N                | descendit     |
| visu1sun1su2 Cf. <i>¶</i> | visu1sun1su2lss1lst6 | minus letters |
| visu1sun1su2lss1lst6      | L168I                | Alleluia.     |
| visu2                     | L95D                 | misereberis   |
| visu1su1sun1              | L60E                 | conspectu     |
| visu1su1sun1lst6          | 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. <i>¶</i>    | unsun1su1lst2lsc6    | minus letters |

|                           |                |                     |
|---------------------------|----------------|---------------------|
| unsun1su1lst2lsc6         | L11Q           | deducis             |
| unsun2lsa5                | L19B           | mirabile            |
| unsun3lsa3                | L24T           | gentes              |
| unsun3lsa6                | L24T           | tuam.               |
| unsun2su2                 | L169A          | confitebor          |
| un1sun2su2                | L136A          | aeternam            |
| un1sun1su1sun1lsailsc4    | L60E           | retrosum            |
| un1sun1su1sun1lsa3lsc6    | L60E           | retrosum            |
| un1sun1su2 Cf. 7          | un1sun1su2lsa5 | minus letter        |
| un1sun1su2lsa5            | L107H          | Domini              |
| <hr/>                     |                |                     |
| <b>scandicus</b>          |                |                     |
| sc Cf. 7                  |                | sclst2 minus letter |
| sc1                       | L820           | quia                |
| sclst2                    | L78H           | quotiescumque       |
| sc1lsc4                   | L109P          | vocavit             |
| <hr/>                     |                |                     |
| <b>porrectus flexus</b>   |                |                     |
| pf                        | L78H           | corpus              |
| pf1                       | L95D           | exaudi              |
| pf2                       | L101V          | Sorec,              |
| pfS                       | L56D           | festina             |
| pfM Cf. 7                 | pfMlsmd3       | minus letter        |
| pfMlsmd3                  | L81E           | meam,               |
| pf>                       | L164D          | ad                  |
| pf>1                      | L90D           | miserunt            |
| pf>2                      | L104I          | alleluia,           |
| pf                        | L95D           | clamor              |
| pf 1                      | L31D           | ad                  |
| <hr/>                     |                |                     |
| <b>pes subbipunctis</b>   |                |                     |
| tosu1                     | L820           | Domine              |
| tosun1                    | L95D           | fumus               |
| tosun2                    | L105N          | revolvit            |
| vippn1su2                 | L820           | misericordiae       |
| topp1su1 Cf. 7            | topp1su1lsa6   | minus letter        |
| topp1su1lsa6              | L95D           | ad                  |
| pesu2 Cf. 7               | pesu2lst3      | minus letter        |
| pesu2lst3                 | L152I          | eruas               |
| pesun3 Cf. 7              | pesun3lss1lsa3 | minus letters       |
| pesun3lss1lsa3            | L67S           | medio               |
| pesu2sun1                 | L24T           | terrae              |
| tosun1lsa5                | L67S           | tua,                |
| tosu1lsc5                 | L19B           | venit               |
| toSsun1lsa5               | L138S          | luna                |
| tosun1su1sun1             | L33S           | venti.              |
| tosun1su2lsn3lst6         | L112D          | nomine              |
| tosun2lsa6                | L123A          | alleluia.           |
| <hr/>                     |                |                     |
| <b>scandicus flexus</b>   |                |                     |
| sf                        | L78H           | meo                 |
| sfG                       | L33C           | eam.                |
| <hr/>                     |                |                     |
| <b>torculus resupinus</b> |                |                     |
| tr                        | L78H           | sumitis             |
| trS                       | L95D           | Domine,             |
| tr>                       | L64D           | diligent            |
| poppn1                    | L820           | vero                |
| po>poppn1                 | L820           | secundum            |
| po>pnn1ppz1               | L18L           | faciem              |
| po>pp2                    | L28G           | angeli,             |
| trlst3lshp7               | L109P          | alleluia.           |
| trlss1lss3                | L103P          | Christus.           |
| trSlsc1                   | L103P          | nostrum             |
| <hr/>                     |                |                     |
| <b>distropha</b>          |                |                     |
| ds Cf. 7                  | ds1lst2        | minus letter        |
| ds1lst2                   | L95D           | meam                |
| ds1lst8                   | L71D           | effundam            |
| ds1 Cf. 7                 | ds1pp3         | minus prepunctis    |

|                     |                      |               |
|---------------------|----------------------|---------------|
| <b>tristropha</b>   |                      |               |
| 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           |
| <hr/>               |                      |               |
| <b>trigonus</b>     |                      |               |
| tg                  | L67S                 | tua,          |
| tglns8              | L67S                 | mala          |
| tg1st9              | L103R                | alleluia      |
| <hr/>               |                      |               |
| <b>bivirga</b>      |                      |               |
| bv                  | L820                 | Domine        |
| bvlsa2              | L820                 | nobis         |
| <hr/>               |                      |               |
| <b>trivirga</b>     |                      |               |
| tv                  | L103H                | bonus         |
| tv1sm2              | L44I                 | Elevatio      |
| <hr/>               |                      |               |
| <b>pressus</b>      |                      |               |
| pr                  | L95D                 | veniat        |
| pi Cf. 7            | c11!pi               | minus clivis  |
| <hr/>               |                      |               |
| <b>virga strata</b> |                      |               |
| vs                  | L64D                 | Deus          |
| vsG                 | L64D                 | suavis        |
| <hr/>               |                      |               |
| <b>oriscus</b>      |                      |               |
| or Cf. 7            | ocG                  | minus uncinus |
| orlst3              | L103P                | Alleluia.     |
| or1 Cf. 7           | ocG1                 | minus uncinus |
| or> Cf. 7           | or>lsa1              | minus letter  |
| or>                 | L103R                | alleluia,     |
| <hr/>               |                      |               |
| <b>salicus</b>      |                      |               |
| sa                  | L820                 | nomin         |
| sa1                 | L78H                 | novi          |
| sa>1                | L9E                  | sanctos       |
| salsc4              | L93G                 | exsurge       |
| salsc6              | L93G                 | autem,        |
| sa1lsc4             | L81E                 | salvasti      |
| sa1lsc6             | L113E                | bonus,        |
| <hr/>               |                      |               |
| <b>pes quassus</b>  |                      |               |
| pq                  | L103H                | eius.         |
| pq1                 | L169A                | Alleluia.     |
|                     |                      | L174T         |
| <hr/>               |                      |               |
| <b>quilisma</b>     |                      |               |
| ql Cf. 7            | qlsst2               | minus letter  |
| qlsst2              | L53C                 | Domine,       |
| ql> Cf. 7           | ql>ppn1              | minus uncinus |
| <hr/>               |                      |               |
| <b>pes stratus</b>  |                      |               |
| pt1                 | L13A                 | ventris       |
| pt2                 | L8U                  | confundentur, |
| pt3                 | L94C                 | Domine.       |
| <hr/>               |                      |               |
| <b>subpunctis</b>   |                      |               |
| su1 Cf. 7           | c11!pi!tosu1         |               |
| su1sun1 Cf. 7       | c1!toppz1su1sun1     |               |
| su1sun1su1 Cf. 7    | visu1sun1su1lst6     |               |
| su1sun1su2 Cf. 7    | visu1sun1su2lss1lst6 |               |
| su1sun2 Cf. 7       | pusu1sun2            |               |
| su1sux1 Cf. 7       | popp2su1sux1         |               |
| su2 Cf. 7           | c11!pi!pesu2         |               |
| su2sun1 Cf. 7       | clsu2sun1lst6        |               |
| su3 Cf. 7           | pusu3                |               |
| su4 Cf. 7           | pusu4                |               |
| sun1 Cf. 7          | c11!pi!orsun1        |               |
| sun1su1 Cf. 7       | unsun1su1lst2lsc6    |               |
| sun1su1sun1 Cf. 7   | visun1su1sun1        |               |
| sun1su2 Cf. 7       | qlppn1sun1su2        |               |
| sun2 Cf. 7          | qlsun2               |               |
| sun2su1 Cf. 7       | unsun2su1            |               |
| sun2su2 Cf. 7       | unsun2su2            |               |

|                  |                                |
|------------------|--------------------------------|
| sun3 Cf.         | unsun3                         |
| sun4 Cf.         | bvsun4                         |
| sux1 Cf.         | posux1                         |
| <hr/>            |                                |
| prepunctis       |                                |
| pp1 Cf.          | pupp1su2                       |
| pp2 Cf.          | cl1!pipp2                      |
| pp2ppn1 Cf.      | vipp2ppn1                      |
| pp3 Cf.          | vipp3lsn3                      |
| pp4 Cf.          | vipp4lst2                      |
| ppn1 Cf.         | po>ppn1                        |
| ppn1pp1 Cf.      | vippn1pp1                      |
| ppn1pp1ppz1 Cf.  | vippn1pp1ppz1lst8              |
| ppn1ppq1 Cf.     | vippn1ppq1                     |
| ppn1ppz1 Cf.     | ql!cl!orppn1ppz1               |
| ppn1ppz1ppq1 Cf. | vi>1ppn1ppz1ppq1               |
| ppn2 Cf.         | vippn2lst3lsa4                 |
| ppn2ppz1 Cf.     | vippn2ppz1sun1lsa5             |
| ppn2ppz1ppq1 Cf. | vippn2ppz1ppq1lst2lsa8         |
| ppn3 Cf.         | unppn3sun1lsa5                 |
| ppn3ppz1 Cf.     | toppn3ppz1sun1                 |
| ppn4 Cf.         | vippn4                         |
| ppq1 Cf.         | vippq1                         |
| ppz1 Cf.         | puppz1su2                      |
| ppz1ppq1 Cf.     | vi>1ppz1ppq1                   |
| <hr/>            |                                |
| combined glyphs  |                                |
| pe!ta Cf.        | pe!talsa2 minus letter         |
| pe!talsa2        | L820 iudicio                   |
| pe!talsc1lst2    | L114C revelavit                |
| pe!un Cf.        | pe!unlsc2 minus letter         |
| pe!unlsc2        | L95D meam                      |
| pe!pu            | L95D eius.                     |
| pe!ta>2 Cf.      | pe!ta>2lsa2 minus letter       |
| pe!ta>2lsa2      | L60E gentes                    |
| pe!or            | L93G in duebam                 |
| qlppn1sun1       | L53C Domino,                   |
| qlppn1sun1su2    | L820 tibi                      |
| qlppn1su1sun2    | L95D frixorio                  |
| qlppn1su2 Cf.    | qlppn1su2lsn11 minus letters   |
| qlppn1su2lsn11   | L75V mortuus.                  |
| qlppn1sun1lsc5   | L54B quoniam                   |
| qlppn1su1sun1    | L107H fecit                    |
| qlsu1sun1        | L43L tua                       |
| qlsu1sux1        | L71D aquam                     |
| qlsu2            | L67S tua,                      |
| qlsux1           | L53C quoniam                   |
| qlsun1su2        | L44I mearum                    |
| qlsun1 Cf.       | qlsun1lsa5 minus letter        |
| qlsun1lsa5       | L40Q millia                    |
| qlsun2           | L122N alleluia.                |
| qlsun2lsa5       | L125U alleluia.                |
| ql!po            | L820 obediimus                 |
| ql!poppz1 Cf.    | ql!poppz1lsa3 minus letter     |
| ql!poppz1lsa3    | L95D Domine,                   |
| ql!poppn1        | L43L Domine,                   |
| ql!posu1sun1 Cf. | ql!poppz1su1sun1 minus uncinus |
| ql!poppz1su1sun1 | L43L mandata                   |
| ql!posun1 Cf.    | ql!poppn1sun1 minus uncinus    |
| ql!poppn1sun1    | L61I Iustitiae                 |
| ql!poppn1lst2    | L103P Alleluia.                |
| ql!posux1 Cf.    | ql!poppn1sux1 minus uncinus    |
| ql!poppn1sux1    | L61I corda,                    |

|                    |  |               |
|--------------------|--|---------------|
| ql!polsm1          | L103P                                  | immolatus     |
| ql!polsa1lsa3lsa9  | L56P                                   | nostris       |
| ql!po> Cf.         | ql!po>ppn1 minus uncinus               |               |
| ql!po>ppn1         | L60A                                   | ancillae      |
| ql!cl              | L43L                                   | doceas        |
| ql!cl!to Cf.       | ql!cl!tolst6 minus letter              |               |
| ql!cl!tolst6       | L95D                                   | me.           |
| ql!cl!to!or Cf.    | ql!cl!to!orsun1 minus uncinus          |               |
| ql!cl!to!orsun1    | L19B                                   | nobis.        |
| ql!cl!toppn1       | L72B                                   | vitam,        |
| ql!cl!tosu3 Cf.    | ql!cl!tosu3lst6 minus letter           |               |
| ql!cl!tosu3lst6    | L82T                                   | hostias,      |
| ql!cl!or Cf.       | ql!cl!orppn1ppz1 minus uncinus & virga |               |
| ql!cl!orppn1ppz1   | L109P                                  | Populus       |
| ql!cl!tr> Cf.      | ql!cl!tr>ppz1 minus virga              |               |
| ql!cl!tr>ppz1      | L54B                                   | vias          |
| ql!clppn1          | L54B                                   | a             |
| qlppn1             | L820                                   | nomini        |
| qlppn1ppz1         | L820                                   | gloriam       |
| qlppn1ppz1lst2     | L820                                   | da            |
| qlppn1ppz1sun1 Cf. | qlppn1ppz1sun1lsa5 minus letter        |               |
| qlppn1ppz1sun1lsa5 | L54B                                   | mihi          |
| qlppn1ppz1su1sun1  | L43I                                   | dominorum     |
| qlppn2sun1 Cf.     | qlppn2sun1lsa5 minus letter            |               |
| qlppn2sun1lsa5     | L53C                                   | Beati         |
| qlppn2sun2 Cf.     | qlppn2sun2lsa5lsa5 minus letters       |               |
| qlppn2sun2lsa5lsa5 | L122V                                  | sic           |
| qlppz1su2          | L40Q                                   | draconem.     |
| qlppz1su1sun1      | L53C                                   | nos           |
| ql>ppn1            | L95D                                   | confixa       |
| ql>ppn1lsc3        | L90D                                   | speraverunt   |
| popp2              | L820                                   | multitudinem  |
| pop2su1sux1        | L8U                                    | confundentur, |
| posux1             | L20P                                   | eius          |
| posux1lsa5         | L114V                                  | alleluia,     |
| posun1lsa5         | L123A                                  | alleluia.     |
| poMsun1            | L81E                                   | meos          |
| posu1sun1          | L123E                                  | alleluia.     |
| vippn1su1          | L56D                                   | Deus          |
| vippn1sux1         | L53C                                   | Memento       |
| vippn1su1sun1      | L45R                                   | tuae,         |
| vippn1su1sun1lst2  | L95D                                   | Domine,       |
| vippn2sun1 Cf.     | vippn2sun1lsa4 minus letter            |               |
| vippn2sun1lsa4     | L44I                                   | mea           |
| vippn2 Cf.         | vippn21sa4 minus letter                |               |
| vippn2lsc4         | L56D                                   | quaerunt      |
| vippn2lsa4         | L44I                                   | Elevatio      |
| vippn2lst3lsa4     | L103P                                  | Alleluia.     |
| vippn3             | L38I                                   | Domino,       |
| vippn4             | L60E                                   | homo          |
| vipp2ppn1          | L13A                                   | gratia        |
| c1!pe Cf.          | c1!pelsc2 minus letter                 |               |
| c1!pelst2          | L95D                                   | sum           |
| c1!pelsc2          | L105A                                  | Domini        |
| c1!pelsn7          | L103H                                  | ea.           |
| vipp2su2           | L43L                                   | mihi          |
| vipp2sun1lsa5      | L168L                                  | eum           |
| vipp3 Cf.          | vipp3lsn3 minus letter                 |               |

|                        |                                      |              |                        |                                 |                   |
|------------------------|--------------------------------------|--------------|------------------------|---------------------------------|-------------------|
| vipp3lsn3              | L152S                                | Sicut        | to!clM                 | L77C                            | corde             |
| vippn1pp1              | L11Q                                 | Israel,      | to!cl>1                | L77C                            | tuum,             |
| vippn1pp1su1sun2       | L40Q                                 | volante      | to!po                  | L84B                            | Appropinquaverunt |
| vippn3su4              | L173D                                | Alleluia.    | to!pohd                | L105A                           | quaeritis,        |
| vipp4 Cf. ↗            | vipp4lst2 minus letter               |              | to!to Cf. ↗            | to!toppn1sun1 minus 2x uncinus  |                   |
| vipp4lst2              | L13A                                 | Ave          | to!tosun1 Cf. ↗        | to!toppn1sun1 minus uncinus     |                   |
| vippz1ppq1             | L40Q                                 | lapidem      | to!toppn1sun1          | L43L                            | discam            |
| vippn1ppq1             | L33S                                 | venti.       | to!to!pi!cl Cf. ↗      | to!to!pi!clpp2 minus prepunctis |                   |
| vippn1ppz1ppq1         | L101V                                | Israel       | to!to!pi!clpp2         | L60A                            | nostrum,          |
| vippn1pp1ppz1 Cf. ↗    | vippn1pp1ppz1lst8 minus letter       |              | toS!to                 | L53C                            | Confitemini       |
| vippn1pp1ppz1lst8      | L25M                                 | ore          | toS!tolst9             | L90D                            | Deus,             |
| vippn2ppz1ppq1 Cf. ↗   | vippn2ppz1ppq1lst2lsa8 minus letters |              | toS!pe                 | L123E                           | Exaudi,           |
| vippn2ppz1ppq1lst2lsa8 | L169A                                | confitebor   | to!or                  | L67S                            | Domine.           |
| vippn2ppz1sun1sa5      | L173D                                | Alleluia.    | to!orsun1lsa5          | L8U                             | Domine.           |
| vippn3sun1lsa5         | L173D                                | Alleluia.    | to!orlst3              | L114V                           | audiatur,         |
| vippq1                 | L168S                                | regna.       | to!orlsc6              | L152S                           | taurorum,         |
| cl1!or Cf. ↗           | cl1!orlss3 minus letter              |              | to!pi!cl               | L31D                            | est,              |
| cl1!orlss3             | L60E                                 | iudicentur   | to!pi!cl!pi!pi         | L40Q                            | millia            |
| cl1!orlsc3             | L60E                                 | conspectu    | to!pi!cl!pi!orsun1lsa5 | L40Q                            | speravit,         |
| cl1!pi                 | L95D                                 | avertas      | oc!vi Cf. ↗            | oc!visun1 minus uncinus         |                   |
| cl1!pi>                | L53C                                 | misericordia | oc!visun1              | L95D                            | Domine,           |
| cl1!pi!to              | L820                                 | fecisti      | orsu1sun1              | L94C                            | Domine.           |
| cl1!pi!vi              | L95D                                 | Domine,      | orsu1sun1sc2           | L94C                            | Domine.           |
| cl1!pi!vi>             | L67S                                 | Virga        | orsu1sun1sc3           | L94C                            | iniquis           |
| cl1!pi!cl              | L640                                 | implebis     | un!clG                 | L95D                            | exaudi            |
| cl1!pi!pesu2           | L61I                                 | dulciora     | topp2                  | L95D                            | meus              |
| cl1!pilsm3lsa6         | L174I                                | me           | topp2sun1              | L45R                            | tuarum,           |
| cl1!pilsn8             | L53C                                 | iudicium,    | toppn3ppz1sun1         | L58A                            | me.               |
| cl1!pilsn9             | L640                                 | Aperis       | to>pp2                 | L90D                            | insipientiam      |
| cl1!pilst9             | L90D                                 | Longe        | pupp2su1sun1           | L95D                            | sunt.             |
| cl1!pipp2              | L60A                                 | Deum         | pupp2su2               | L93E                            | me.               |
| cl1!pi!orsun1          | L90D                                 | Israel.      | pupp1su2               | L640                            | opportuno.        |
| cl!po                  | L67S                                 | es,          | pupp1su1sun1           | L58A                            | clamavi,          |
| cl!popp3               | L122V                                | ascendentem  | puppn1su1sun2          | L40Q                            | mille,            |
| cl!to                  | L17H                                 | eius.        | puppz1su1sun2          | L40Q                            | mille,            |
| cl!tosu1               | L17H                                 | eius.        | puppz1su2              | L168S                           | tua               |
| cl!tosu1lsc6           | L81E                                 | me           | ds1!ds1                | L43L                            | meos,             |
| cl!tosu1lsc6lst8       | L81E                                 | me           | ds1!ts                 | L67S                            | mecum             |
| cl!topp2               | L64D                                 | misericordia | ds1!ts1                | L60E                            | tuo.              |
| cl!toppz1su1sun1       | L35T                                 | Israel       | cl1!orsun1             | L43L                            | considerabo       |
| cl!tolst9              | L56I                                 | dilexit      | cl1!orsun1lsa5         | L8U                             | fac               |
| cl!to>                 | L56I                                 | aequitatem   | cl1!or Cf. ↗           | cl!orpp2 minus prepunctis       |                   |
| cl!tosun1lsa5          | L164D                                | meam.        | cl!orpp2               | L93G                            | induebam          |
| cl!to!pi Cf. ↗         | cl!to!pipp2 minus prepunctis         |              | cl1!orpp2              | L103R                           | mirabilis         |
| cl!to!pipp2            | L33C                                 | arcus,       | ds1!clsun2 Cf. ↗       | ds1!clsun2lst5 minus letter     |                   |
| cl!to!pi!cl            | L77S                                 | Israel       | ds1!clsun2lst5         | L43L                            | doceas            |
| cl!to!pi!clpp2         | L33C                                 | eius,        | ds1!clsu1sun1 Cf. ↗    | ds1!clsuisun1lst5 minus letter  |                   |
| cl!to!pi!clpp21sn9     | L68Q                                 | Sion         | ds1!clsu1sun1          | L56S                            | Salvum            |
| cl!to!cl!cl            | L81R                                 | meis,        | ds1!clsu1sun1lst5      | L149E                           | tibi.             |
| to!cl                  | L95D                                 | Domine,      | vi>1pp2                | L67S                            | umbrae            |
| to!cl!cl Cf. ↗         | to!cl!cllst9 minus letter            |              | vi>1ppz1ppq1           | L40Q                            | custodiant        |
| to!cl!clsun2 Cf. ↗     | to!cl!clsun2lsa5 minus letter        |              | vi>1ppn1ppz1ppq1       | L106S                           | Alleluia.         |
| to!cl!clsun2lsa5       | L43L                                 | tuam         | pfsun1 Cf. ↗           | pfsun1lsn5 minus letter         |                   |
| to!cl!cllst9           | L8A                                  | invocavite.  | pfsun1lsn5             | L67S                            | tua,              |
| to!cl!clsu1            | L33P                                 | meam.        | pfpnn1ppq1sun1lsa5     | L123A                           | Deus              |
| to!cl!pi               | L84B                                 | iniqui       | un1ppn1ppq1sun2        | L1120                           | estis,            |
| to!cl!orsun1           | L114V                                | terrae       | un1sun2 Cf. ↗          | un1ppn1ppq1sun2 minus uncinus   |                   |
| to!clsun1              | L54B                                 | quoniam      | un1ppn1sun2            | L1120                           | & quilisma        |
| to!clsun1lsa5          | L11Q                                 | Ioseph.      | un1ppn1sun1su2lsa5     | L152I                           | Christum          |
| to!clsu2 Cf. ↗         | to!clsu2lsn6 minus letter            |              | clsun1lst5             | L44I                            | accelera,         |
| to!clsu2lsn6           | L8D                                  | dabit        | clsu3lst5              | L60E                            | vespertinum.      |
| to!clsu1sun1 Cf. ↗     | to!clsu1sun1lsn6 minus letter        |              | tosu1sun1 Cf. ↗        | tosu1sun1lsn6 minus letter      |                   |
| to!clsu1sun1lsn6       | L24D                                 | opera        | tosu1sun1lsa5          | L109P                           | vocavit           |
| clsu2sun1lst6          | L35T                                 | tuam.        |                        |                                 |                   |

|                             |                    |               |
|-----------------------------|--------------------|---------------|
| tosu1sun1lsn6               | L19B               | venit         |
| tosu2 Cf. <i>¶</i>          | tosu2lst6          | minus letter  |
| tosu2lst6                   | L37M               | tu            |
| tgsun1lsa5                  | L103H              | quoniam       |
| cl!cl!clsun1lsa5            | L103P              | Alleluia.     |
| cl!cl!cl Cf. <i>m</i>       | cl!cl!cllsn9       | minus letter  |
| cl!cl!cllsn9                | L31D               | Domine        |
| cl!cl!pi                    | L54B               | commovear     |
| cl!cl!pi!vi                 | L123A              | Dominus       |
| cl!cl!to                    | L149E              | meam,         |
| cl!cl!po                    | L81R               | insurgentibus |
| cl1!pi!pi!vi                | L54B               | es            |
| cl1!pi!pisun1lsa5           | L1740              | plaudite      |
| cl1!pi!tosu1                | L37S               | mei           |
| cl1!pi!tosu1                | L1740              | plaudite      |
| saisun1lsa5                 | L11Q               | tuam          |
| trsun2 Cf. <i>N</i>         | trsun2lsa5         | minus letter  |
| trsun2lsa5                  | L13A               | Ave           |
| trsux1 Cf. <i>N</i>         | trsux1lsa5         | minus letter  |
| trsux1lst8                  | L20P               | eius,         |
| trsux1lsa5                  | L136A              | aeternam      |
| trsux2 Cf. <i>N</i>         | trsux2lst3lsm8     | minus letters |
| trsux2lst3lsm8              | L136A              | vobis         |
| trsuni1su2 Cf. <i>N</i>     | trsuni1su2lsa3     | minus letter  |
| trsuni1su2lsa3              | L149C              | Domini        |
| trsuni1lsa3lsa5             | L18L               | terra         |
| trsuni1lsa5 Cf. <i>N</i>    | trsuni1lsa3lsa5    | minus letter  |
| bvsun4                      | L8U                | me.           |
| oc!cl                       | L31D               | Domine.       |
| oc!clm                      | L77S               | peccatorum.   |
| oc!pe!pu                    | L53C               | tuo.          |
| tg!cl                       | L31D               | est,          |
| tg!cl>1                     | L33C               | eius,         |
| tg!clsn9                    | L68Q               | Sion          |
| tg!or                       | L77C               | tibi          |
| unppn1sun2                  | L40Q               | Cadent        |
| unppn1sun2lsa5              | L123E              | quaesivi      |
| unppn1sux1                  | L72B               | eius          |
| unppn1sux1lsa5              | L24D               | exaltavit     |
| unppn1sun1su2               | L58A               | Domine,       |
| unppn1ppz1sun1 Cf. <i>¶</i> | unppn1ppz1sun1lsa5 | minus letter  |
| unppn1ppz1sun1lsa5          | L80S               | habitat       |
| unppn3sun1lsa5              | L24D               | fecit         |
| ta>ppn1                     | L95D               | et            |
| ta>pp2                      | L33C               | ut            |
| ptippn1                     | L99P               | tuo.          |
| tssun1lsa5                  | L24D               | dextera       |
| cl>1pp2                     | L114C              | alleluia,     |
| tasu2                       | L24T               | tuam.         |

| significative letters |                   |                    |
|-----------------------|-------------------|--------------------|
| ¶                     | lsa Cf. <i>¶</i>  | vi>lsa6            |
| ·                     | lsc Cf. <i>·</i>  | pe!unlsc2          |
| ¶                     | lseq              | L78H hic           |
| ¶                     | lseq-             | L78H quotiescumque |
| ¶                     | lsequ             | L56D confundantur  |
| ¶                     | lsf Cf. <i>¶</i>  | polsf2lst3         |
| ·                     | lsh               | L44D a             |
| ¶                     | lshn Cf. <i>¶</i> | cl1shn8            |
| ¶                     | lshp Cf. <i>¶</i> | trlst3lshp7        |
| ·                     | lsl Cf. <i>·</i>  | pelsl2             |
| ·                     | lsn Cf. <i>·</i>  | cl1sn9             |
| ·                     | lsnl Cf. <i>·</i> | clG1snl2           |
| ·                     | lsnt Cf. <i>·</i> | pulsnt3            |
| ·                     | lsm               | L67S Virga         |
| ·                     | lsmd              | L820 da            |
| ·                     | lss               | L95D tempus        |
| ·                     | lssimp            | L8U Domine,        |
| ·                     | lssimpl           | L81R insurgentibus |
| ·                     | lssp              | L54Ae Domine,      |
| ·                     | lsst Cf. <i>¶</i> | pelsst1lsm4        |
| ·                     | lst Cf. <i>·</i>  | clsun1lst5         |
| ·                     | lsth Cf. <i>Δ</i> | tolsth8            |

#### tironian notes

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