

< 105 > 1222 December 25 Brescia area [northern Italy]

sources 1 Documents [parchments]

ACapBs, *Pergamene*, filza +6, 1223; ASMi, *Diplomatico*, Pergam. fondi, *Brescia*, S.Giovanni, no.74, no.75; *Cremona*, S.Lorenzo, no.166; *Leno*, S.Benedetto, no.94; ASMi, *Diplomatico*, Pergam. fondi, Pergam. varie prov. Brescia, no.96;

Papal letters

Honorius III, *Ep. Sel.* (ed. Rodenberg 1883), 9 January 1225: nos. 264, 265, 266, pp.189-91; 6 May 1226: no.295, p.215

Annals, chronicles and *Notulae*

Italy *Ann. Bergom.*, p.332; *Ann. Brix.* (cod. B), p.818; *Ann. Brix.* (cod. C), p.818; *Ann. Cremon.*, p.14; *Ann. Mant.*, p.21; *Ann. Mediol. brev.*, p.391; *Ann. S.Iustin. Patav.*, p.152; *Ann. S.Trin. Veron.*, p.6; *Ann. Veron. ant.*, p.57; *Ann. Veteres*, p.91; Bonav. Bagnor., *Sermo III*, 9, p.583; *Chron. Marchie Tarv.*, p.7; *Chron. Parm.*, p.9; *Chron. Fav.*, p.150; Codagnello, *Ann.*, p.72; *Lib. not. sanct. Med.*, col.59b; *Liber Regim. Pad.*, p.77; March. Scriba, *Ann.*, pp.187-8; Milioli, *Liber*, p.504; *Notae S.Georgii Mediol.*, p.389; Paris. Cerea, *Ann.*, p.6; Rolandino, *Chron.*, pp.30-1; Salimb. Adam, *Cron.*, pp.34, 586; *Notula* added to the manuscript of the *Chronica* of Dandolo (in Muratori 1728, cols.343-4, note); *Notula* by witness from Ferrara (in Baroni 1969, p.54); ACapMo, O.III.13, *Notula*; Verse composition from the Piacenza area (in Holder-Egger 1891, p.480); BAVat, Pal. Lat. 927, *Calend.*, fol.216r.; Verse composition in codex CX in the BCapVr (in Cipolla 1890, p.352 and in Turrini 1978-79, pp.10-1); Verse composition in *Addimentum* to Sicard, *Cron.*, pp.182-3

Europe Albricus, *Chron.*, p.912; *Ann. de Margan*, p.429; *Ann. Dorens.*, p.527; *Ann. Dunstapl.*, p.505; *Ann. Mell. cont.*, p.623; *Ann. Scheftl.*, p.338; Caes. Heisterb., *Dial.*, II, p.251; *Catalog. Imp. et Pont.*, p.115; *Chron. Magni presb. Cont. Reichersp.*, p.527; *Chron. Montis Ser.*, p.200; *Chron. regia Colon.*, p.252; Chounr. Schir., *Ann.*, p.632; Emo, *Chron.*, p.498; Ralph Cogg., *Hist.*, p.358; Thomas Eccl., *De adv.*, pp.562-3; Thomas Spal., *Hist.*, p.580

inscriptions

1) at the old church of S.Nazaro in Campo, Milan (in Magistretti and Monneret de Villard 1917, col.59b); 2) on the bell-tower of the church of S.Mauro at Costozza (Vicenza)

sources 2

BAriosteafa, Da Marano, cl.I, 534, *Cron.*; Agazzari, *Chron.*, p.22; Aliprandi, *Aliprandi.*, p.114; *Ann. vet. Mutin.*, col.58; Battagli, *Marcha*, p.7; *Chron. Est.*, p.11; *Chron. Pont. et Imp. Mant.*, p.219; Mussi, *Chron.*, cols.459-60; *Cron. Bologn.*, p.86; *Cron. Ramp.*, II, pp.85-8;

- Cron. Varign.*, p.86; *Frag. Mem. pot. Mutinae*, p.188; Galvan. Flamma, *Manip.*, col.668; *Gesta Lucan. (Ann. Lucen.)*, pp.302-3; Giov. Bazz., *Chron.*, p.14; Griffoni, *Mem.*, p.8; Iacopo Varag., *Cron.*, p.374; Malvezzi, *Chron.*, p.900; Marzagaia, *De mod. gest.*, p.57; Villola, *Chron.*, p.85; *Quaedam scitu*, col.736; Riccob. Ferr., *Compil.*, p.247; Riccob. Ferr., *Pomar.*, col.127; Sanudo, *Le Vite*, p.539; Tol. Lucca, *Ann.*, p.111; Ventura, *Mem.*, col.734; Pagliarino, *Cron.*, p.35; *Vita Honorii Papae III*, p.569
- historiography Zagata (ed. 1745); Corio (1503); Giustiniani (1537); Alberti (1541); Buoni (1571); Sigonio (1578); Campo (1585); Capriolo (1585); Saraina (1586); Cavitelli (1588); Bonifaccio (1591); Morigia (1591); Sigonio (1591); Codagli (1592); Dalla Corte (1594); Ghirardacci (1596); Vizani (1602); Donesmondi (1612); Montemerlo (1618); Possevino (1628); Panvinio (1648); Faleoni (1649); Campi (1651); Faino (1658); Palladio degli Olivi (1660); Riccioli (1669); Lancellotti (1673); Calvi (1676); Maresti (1678); Tatti (1683); Aurelio da Genova (1720); Marcantonio (1728); Biancolini (1749, 1760); Muratori (1762); Paganetto (1766); Poggiali (1766); Ardesco Molina (1774); Molina (1776); Castellini (1784); Rovelli (1794); Affò (1795); Gallicciolli (1795); Savioli (1795); Carli (1796); Tonelli (1797); Volta (1807); Figari (1810); Dal Verme (1828); Rossi A.D. (1829); Semeria (1838); Bravo (1840); Canobbio (1840); Righi (1840); Gionta (1844); Alizeri (1846); Muzzi (1846); Panciroli (1846); Giulini (1854); Grandi (1856); Moroni (1856); Odorici (1856); Nicoletti (1862); Gargantini (1874); Salice (1874); Di Manzano (1879); Remondini (1882); Poncini (1884); Rossi G.(1886); Capponi (1887); Tassoni (1888); Winkelmann (1889); Gallo (1890); Lucchini (1894); Valentini (1896); Remondini and Remondini (1897); Podestà (1901); Neugebauer (1904); Candreia (1905); Enlart (1910); Fainelli (1911); Enlart (1922); Castagna (1924a, b); Labò (1932); Salvi (1932); Grosso (1933a, b); Mor (1934); Pesce (1959); Pistarino (1961); Bosisio (1963); Polonio (1963); Panazza (1964); Trentini (1970); Ceschi (1974); Pesenti (1976); Folgheraiter (1976); Pelligrini (1977); Cavallari (1979); Nardini (1979); Sisto (1979); Turrini (1979); Pizzi (1981); Russo (1981); Murolo (1982); Pasquini (1982)
- literature Guidoboni *et al.* (1985); Guidoboni (1986); Guidoboni and Boschi (1989); Guidoboni (1995); Guidoboni (1997); Guidoboni and Ciuccarelli (2003b)
- comets and eclipses*: Oppolzer (1887); Ho Peng Yoke (1962); Maffei (1987); Yeomans (1991)
- catalogues d. Bonito (1691); von Hoff (1840); Perrey (1848); Perrey (1850); Mallet (1853); Reginus (1880); Mercalli (1883, 1897); Baratta (1901); Guidi (1915); Zanon (1937); Grumel (1958); Alexandre (1990); \*Boschi *et al.* (1995, 1997, 2000)
- catalogues p. Giorgetti and Iaccarino (1971); Carrozzo *et al.* (1973); Postpischl (1985); CPTI (1999)

### History of the earthquake's interpretation

The study of this earthquake now has its own history, which merits a brief survey. The earthquake passed from the monastic chronicle tradition into the erudite historiography of modern times, and from there into the first catalogues of historical earthquakes (from Bonito 1691 to Baratta 1901), and it has gradually become more specifically identified with Brescia, acquiring increasingly catastrophic characteristics.

Baratta (1901) located it at Brescia, and there it remained up to and including the 1970s, when Italian scholars looked at it again. When the first parametric catalogues of historical earthquakes were compiled, the urgent need to give it numerical attributes resulted in its receiving a city of Brescia location and an epicentral intensity of grade XI MCS (Giorgetti and Iaccarino 1971; Carrozzo *et al.* 1973).

Since this earthquake, together with that of 1117 (see above), was a very destructive event for the Po Plain, it was subjected to thorough reinvestigation in the years 1983-85 (macroseismic studies for the nuclear sites in Italy, Guidoboni *et al.* 1985). On that occasion, large-scale research was carried out into documentary sources, chronicles and inscriptions, in order to establish an accurate picture of this event.

The research threw light on the particular cultural context within which the earthquake occurred, namely the campaign against heresy, of which Brescia was one of the principal centres in the 13th century. Only by carefully examining the original sources

(papal documents and chronicles compiled by direct witnesses) has it been possible to redefine the seismic scenario concerned. It should also be pointed out that the previous overvaluated interpretation of the earthquake led to a striking local sense of alarm about seismic risk in Brescia.

Only since the research of the 1980s, therefore, has a reliable macroseismic picture of the event been available, as well as a more accurate analysis of the problems and limitations of the evidence dating to the time of the event (Guidoboni 1986; Guidoboni and Boschi 1989; Guidoboni 1995). An analysis of the historical and cultural context has thus been vitally important in arriving at a fresh assessment of this earthquake and stripping away the almost “mythical” and symbolic connotations which surrounded it.

### **Chronology**

It should be noted that most sources date the earthquake to 25 December 1223, adopting the Nativity style in which the year began on Christmas Day. Hence the number of the year is advanced by one in the period 25-31 December.

The sources do not entirely agree as to the time of day when the earthquake occurred. Some suggest the third hour, others the sixth, and yet others the ninth (i.e. 9:15, 11:30 and 13:45 UT). Most, however, converge on an intermediate time: between the sixth and ninth hours, or after the celebration of solemn mass, or else at lunch time (roughly between 11:30 and 13:40 UT). It is likely that there were two shocks, the first of which was the stronger. A contemporary source from Ferrara in fact specifically states that there was a second shock towards vespers (roughly between 15:00 and 15:50 UT).

During the night of 28 December, another earthquake was felt in Milan. There followed a number of further minor shocks which caused the inhabitants of Brescia to camp out in the open. These persisted for thirty or forty days.

Many contemporary chronicles report that this earthquake was accompanied by two astronomical phenomena: a passing comet and an eclipse of the moon. The former can be identified as Halley's comet, whose passage was recorded by Chinese, Korean and Japanese observers during the months of September and October 1222 (Ho Peng Yoke 1962, p.191; Yeomans 1991, p.397; Maffei 1987, pp.220-4). And there was indeed an eclipse of the moon on 22 October in that year (Oppolzer 1887, p.362).

### **Aspect of the historical context: Brescia as a town to be “taken down”**

Around the 1220s, Brescia was going through a phase of particular political and religious tension. Internal struggles between factions were endemic in the Italian city states of the time, and in the case of Brescia they had even led to the direct involvement of pope Honorius III (1216-1227) and the emperor Frederick II (1220-1250). For in addition to the traditional rivalry between the nobility and “popular” organisations, there was now a much tougher struggle in progress between a group of forces aiming to defend the “heretics”, who were mainly but not exclusively drawn from the nobility, and a group which remained faithful to the Church of Rome. The Brescia heretics (Albigenses and Waldenses) were fiercely attacked by both the emperor Frederick II and pope Honorius III, who was intent on combating every sign of heresy by any means available to him.

Brescia was thus outlawed by Frederick II in 1221, because the city council had ejected a pro-imperial *podestà* Matteo da Correggio and replaced him with Oberto Gambarà, a Brescian accused of heresy by the pope. The internal struggle reached an extreme of violence in 1224, when the heretical faction attempted military action against catholic churches and buildings owned by enemy families. These internal wars provide an explanation for the widespread damage suffered by the most typical urban buildings, though in making accusations against the heretics, Honorius III was quite capable of using earthquake effects for ideological purposes, holding the heretics responsible for all damage, and not mentioning earthquake effects as such.

In spite of this internal political turbulence, Brescia was enjoying considerable economic and urban expansion. Towards the mid-13th century — a few decades after the earthquake — the city walls were doubled, and years before that, the commune had begun to purchase the buildings situated around the main square in order to erect a new town hall (*palazzo pubblico*). Studies carried out by the Archaeological Superintendency of Brescia have confirmed that widespread use was made of timber both in load-bearing structures and roofs, often alongside light materials such as lath and plaster.

### **General effects of the earthquake**

When the earthquake struck on 25 December 1222, Brescia was thus in the midst of violent political turmoil. The major damage zone included the city of Brescia itself and, more particularly, diocesan territory to the south. However, the documentary evidence we have found does not confirm the image of “total destruction” suggested by the narrative sources. In the urban area, the earthquake seems mostly to have affected the upper parts of buildings, but not the load-bearing structures of the principal city buildings. In all probability, partial collapses and other damage did occur, and must be added to the effects of the turbulent political situation in the city. However, the damage zone has to be extended beyond the city itself, for the most serious destruction occurred in the southern part of the ancient diocese (Lower diocese of Brescia). Damage were less severe in the diocesan territory to the north (Upper diocese of Brescia).

The ancient diocese of Brescia (see fig. 53) corresponds to the present-day province of Brescia as regards land to the north of the city, but in the south it was bounded by the river Oglio and a stretch of territory beyond the river Chiese, including some localities which subsequently came to be within the present-day dioceses of Verona and Mantua. The ancient diocese of Brescia was thus quite large, stretching from the foothills of the Alps to the marshy and wooded areas beside the river Po, and it included land farther south than the present-day province. The castle of Marano was badly damaged, as was the village of Lazise, which stood close to the frontier between the territory of Brescia and that of Verona. As far as the Veneto is concerned, the bell-tower of the church of S.Mauro at Costozza was probably damaged. Many unidentified buildings were damaged at Modena. The roof of the cathedral of S.Pietro in Bologna is recorded as having collapsed without causing injury; but it may be that the damage attributed to the earthquake was in fact due to the roof's chronic instability. Further roof collapses are in fact recorded a few years after the earthquake. In Milan, the earthquake produced a crack in the old church of S.Nazaro. The inhabitants fled the city and lived in tents for more than eight days for fear of shocks. In Venice, bells rang of their own accord, and one side of the monastery of S.Giorgio was damaged. At Ferrara, the earthquake was described as “great”, and was followed by another on the same day. There was severe panic, but no effects other than fear are recorded.

The people of Parma fled the city in great panic; but no damage is reported. In Verona, people fled from the old Roman arena, where festivities were being held. Everyone in Genoa was frightened, and immediately after the earthquake they went in procession through the city. In Padua and Reggio Emilia, the earthquake is described as “great” or “very great”; but no specific effects are recorded. Many people were struck with terror in Bergamo and Como. The earthquake was also felt in Romagna and Tuscany.

### **Historical sources: an overall view**

#### ARCHIVAL DOCUMENTS

There is evidence of damage in the countryside around Brescia in a document drawn up by the bishop of Brescia on 12 June 1223 (Archivio Capitolare, Museo Diocesano d'Arte Sacra, Brescia, *Pergamene*, filza +6).

An examination of the principal document collections concerning Lombard and Brescian territory in the 13th century led to the discovery of some indirect evidence of the 1222 earthquake in the *Diplomatico* archives in the State Archives in Milan. For the most part, these are deeds involved in civil suits where it was important either to put a date to one's recollections, or to refer to situations known to all the principal parties, such as a major earthquake.

Two deeds relating to Brescian territory (an exact dating is not possible) specifically refer to the earthquake for dating purposes, but without mentioning actual damage. The first of these is evidence provided by witnesses for the counts of Magazano, and is preserved amongst the parchments of S.Benedetto at Leno (no.94); in the second, it is established that the mill channels at Leno are to be restored to the state they were in before the earthquake. The second is preserved amongst the parchments of S.Giovanni and S.Luca in Brescia (no.75).

In a parchment dated 31 March 1235 concerning litigation between the Bocca and Gonzaga families (*Pergamene varie della provincia di Brescia*, no.96), reference is made both to damage to the church of S.Agata, situated near the Brescia city gate, and to the cost of repairing houses in the city; but it is not specifically stated whether the damage was attributable to the earthquake or to other causes.

A 1236 parchment from the church of S.Lorenzo in Cremona (no.166) was drawn up in the monastery of S.Tommaso, perhaps because the church was not in a fit state for use. There are some notes in the margin of certain contemporary liturgical codices which provide important evidence towards establishing a general picture of the earthquake's effects. On the cover of codex O.III.13 in the Archivio Capitolare (Cathedral Archives) in Modena (see fig. 52), there is a *Notula* which records earthquake damage in Modena and the surrounding area, as well as at Brescia, which is described as having been "destroyed".

There is also a note in a liturgical calendar from the monastery of SS.Trinità in Verona (Biblioteca Apostolica Vaticana, *Palatini Latini*, 927, fol.216r.) which is couched in more general terms but is important for establishing where damage occurred: it mentions the *terrae* of Brescia as suffering the worst damage.

There are also four letters written by pope Honorius III (dated 9 January 1225 and 6 May 1226), which are extremely important for the light they throw on the political and religious situation at Brescia, though they do not refer directly to the earthquake.

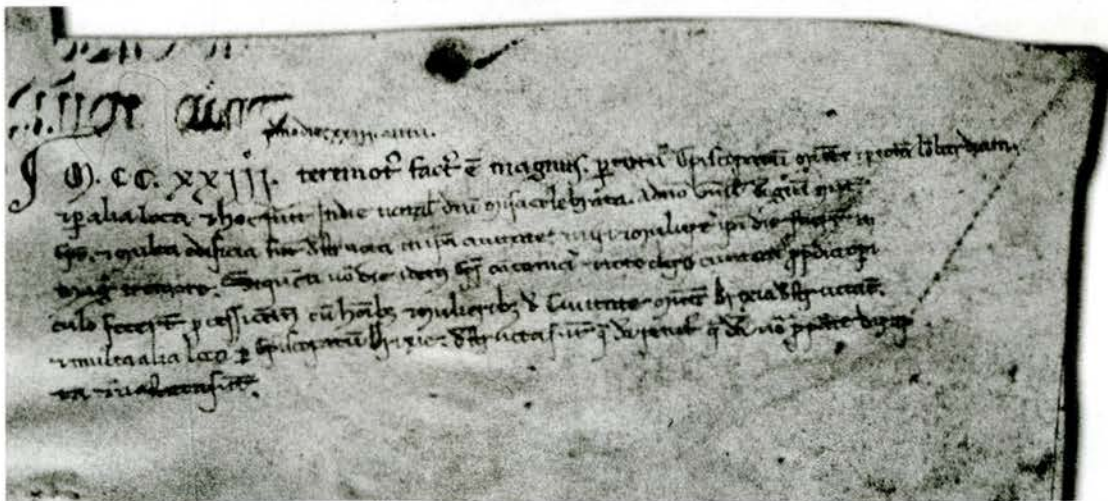


fig. 52 Cover of codex: a contemporary *Notula* which records damage caused by the earthquake of 25 December 1222 at Modena and Brescia, and in the diocese of Brescia (Archivio Capitolare, Modena, codex O.III.13).

There are a great many contemporary chronicles of different types which provide original and independent information about the earthquake: chronicles, short verse compositions and annals.

The sources from Italy are mostly town chronicles and annals, some of which provide explicit information in relation to the town concerned. This local character is quite different from what we find in the chronicle of Salimbene de Adam, a Franciscan friar. He was one of the most penetrating chroniclers of Italian town life in the 13th century, and his work is also important for the diffusion it enjoyed in later centuries. Salimbene records a great many details about the effects of this earthquake in Parma, Reggio and Brescia. And his account is enhanced by what his mother told him of the earthquake in Parma, where she was living when the earthquake occurred. Salimbene was born on 9 October 1221, and so was scarcely more than a year old at the time of the earthquake. News of the earthquake of 25 December 1222 made a deep impression in the principal monasteries of Europe, whether in German, Frankish or Anglo-Saxon regions, as one can tell from the numerous annals which record it. The monks of the Cistercian order showed a particular interest. Many chronicles are fairly imprecise about its location, but most agree in indicating "*Lombardia*" (or "*Longobardia*") as the region most affected. This term denoted an area much larger than the present-day region of Lombardy. Ancient *Lombardia* included part of Emilia (but not Romagna) and part of the Veneto; and in some cases it was simply a general term for northern Italy. Some annals provide more local information and specify that Brescia was the worst affected town. In certain cases, they provide information and even details about towns which are not mentioned in other chronicles from Italy (e.g. Como and Bergamo). Of the many chronicle sources selected, 27 of those dating to the 13th and 14th centuries and making use of earlier sources, now lost, are from Italy, and 14 from elsewhere in Europe.

#### INSCRIPTIONS

A record of the earthquake has been found in two inscriptions.

- 1 – on an altar in the old church of S.Nazaro in Campo in Milan; but the original has been lost because the old church was demolished around 1490, and the present-day Santuario di S.Maria dei Miracoli, also known as S.Maria presso S.Celso, has been built in its place. However, the text is preserved in a manuscript in the Biblioteca Capitolare in Milan, edited by Magistretti and Monneret de Villard (1917, col.59b).
- 2 – the second inscription may date to the 14th century, and is built into the base of the old bell-tower at the church of S.Mauro at Costozza (province of Vicenza). It records not only the earthquake of 1222 (1223, Nativity style), but also those of 1117 and 1348.

#### **Earthquake's effects by locality, based only on primary sources**

(in descending order of seriousness of effects; see parameters, p.259)

Set out below is a description of the effects of the earthquake and reactions to it in the localities and areas where it struck. Thirteenth century sources are given, together with slightly later (14th century) chronicles which make use of earlier sources now lost and can therefore be considered reliable and important.

#### **Brescia and its diocese**

As indicated in most contemporary sources from Italy and elsewhere in Europe, Brescia was the worst affected town. However, information which we have discovered in documents and chronicles does not confirm the image of "total destruction" which narrative sources suggest. We find instead that the impact of the earthquake was quite complex. In the urban area, on the one hand, the earthquake of 25 December seems to have principally affected the upper parts of buildings — such as chimneys, cornices and projecting decorative elements — but not the load-bearing structures of

the principal city buildings, whether secular or ecclesiastical. On the other hand, it becomes clear that extra-urban areas suffered the worst damage. Some sources in fact extend the damage zone to the diocese. No names of specific places are given, but the information concerned is confirmed by a decision to eliminate the seventeenth canonicate, in order to limit costs, some of which were attributable to the earthquake.

We can be sure that Brescia's towers were not completely destroyed, because there is a reliable document of 1225 from the papal chancery containing an order from Honorius III to demolish towers belonging to heretic noblemen and to lower those of their supporters. Such an order would not have made sense if the towers had already been destroyed in the earthquake.

In a letter of 1225, pope Honorius III attributed the destruction of certain churches to these same heretics. Furthermore, the description of the earthquake by the famous chronicler Salimbene de Adam also provides a picture of limited effects; and we have to remember that he had heard oral accounts of the event, having been born the year before (1221). We can deduce that the city of Brescia was not destroyed, not only because the pope gave orders for towers to be demolished, and because the overall documentary evidence does not support such a view, but also because Salimbene tells us that many roof-tops and ornamental elements remained in position. In fact, he actually states that the people of Brescia acquired the habit of laughing every time the top of a building collapsed, because they had become so accustomed to aftershocks in the months succeeding the earthquake.

The image of a highly destructive earthquake whose energy was concentrated into the shock of 25 December and destroyed the city of Brescia, gives way, therefore, to one of a long but not very violent seismic sequence. In all probability the earthquake added partial collapses and further damage to what had already been brought about by the turbulent political situation in the city. Finally, test excavations carried out within the urban area by the Archaeological Superintendency of Brescia confirm the absence of extensive restoration work ascribable to the early 13th century at the churches of S.Salvatore and S.Giulia; and they also confirm the presence of original structures at the base of many 12th and 13th century houses. Brescia and its diocese are the places for which we have most evidence, for there are documentary, chronicle and *Notulae* sources.

#### DOCUMENTARY SOURCES FOR BRESCIA AND ITS DIOCESE

There is evidence of damage in the Brescian countryside in instructions issued on 12 June 1223 by the bishop of Brescia (Archivio Capitolare, Museo Diocesano d'Arte Sacra, Brescia, *Pergamene*, filza +6) for the elimination of the seventeenth canonicate in his diocese, in order to reduce costs:

"For these reasons, beloved in God, with grateful acknowledgement of your just requests which closely coincide with the possibilities examined by your above-mentioned Church, which is burdened as much by earthquake damage as by many other expenses, we order by means of this present letter, whose contents must be adhered to in the future, that from now on this same church shall be limited to just sixteen canons, even though there are at present seventeen, since it is the custom that only sixteen have church service duties. [...]. Given at Brescia, on the day before the Ides of June [12 June], in the year 1223 since the birth of Our Lord Jesus Christ, in the eleventh indiction".

*Ea propter dilecti in Domino vestris iustis postulationibus grato concurrentes assensu facultatibus predictae Ecclesie vestre diligenter inspectis, que tam terremotuum ruinis, quam multis aliis dispendiis plurimum aggravatur, pagina presenti statuimus, et futuris in ipsa decernimus temporibus observandum, ut eadem de cetero sedenario Canonorum numero solummodo sit contenta; non obstante eo quod decem et septem sitis ad presens qui consuevistis sedecim tantum esse in ipsa divinis obsequis mancipati. [...] Datum Brixie, II idus junii, anno a nativitate Domini Nostri Jesu Christi millesimo ducentesimo vigesimo tertio, indictione undecima.*

On the cover of codex O.III.13, in the Archivio Capitolare at Modena, there is a quite interesting *Notula* providing further evidence of damage in the diocese of Brescia: “1223. There was a great earthquake [...]; it happened on Christmas Day [...] Brescia was destroyed, as well as many other places in the diocese of Brescia. Some places were completely destroyed, whole others suffered only partial collapses or damage”.

*M.CC.XXJJJ. teremotus factus est magnus [...] hoc fuit in die natalis [...] Brixia destructa est et multa alia loca per episcopatum brixie. Destructa sunt quedam penitus quedam vero pro parte dirupta et vastata sunt.*

An annotation in a liturgical calendar from the monastery of SS.Trinità in Verona (Biblioteca Apostolica Vaticana, *Palatinus Latinus* 927, fol.216r.) mentions the dependent villages of the city of Brescia as worst affected:

“In the year 1223, on Christmas Day, a Sunday, at the ninth hour, there were great earthquakes which made the whole earth shake, and indeed especially in the villages belonging to the city of Brescia a great many churches and not a few houses were immediately reduced to ruins”.

*Anno MCCXXIII Nativitatis Domini die dominica ad nonam horam terremotus magnus fuerunt qui terram totam tremere fecerunt, maxime vero brixie urbis terris quam plures ecclesie domique [...] non pauci subito ruerunt.*

We find the earthquake being used for dating purposes in evidence provided by witnesses for the counts of Magazano (Archivio di Stato, Milan, *Diplomatico*, Pergamene per fondi, Leno, San Benedetto, no.94). One witness said he was twenty when the earthquake occurred:

“Teodaldo de Ardricis [gave evidence] that he was 20 years old when the earthquake occurred, and he said that since the earthquake he had seen that Silva and Magazano were in the service of and employed by the counts and men of Asola [...]”.

*Teudaldus de Ardricis se habere XX annos quando terremotus fuit et a terremotu infra dicit se vidisse Silvam et Magazanum teneri et usari per comites et per homines Asule [...].*

The second positive piece of evidence is to be found in another 13th century parchment from the churches of S.Giovanni and S.Luca in Brescia (no.75). It sets out that the mill channels of the Leno mill should be restored to the state they were in *before* the earthquake:

“The prior of the church of S.Giovanni Fuori le Mura, together with his brethren, maintains that the church of S.Giovanni is and will be burdened and damaged by the construction carried out by the prior of S.Luca and his brethren [...] Those of S.Giovanni say that the old mill must have four channels with all the necessary equipment for the said channels [...] and that the channels must be as wide as they were before the earthquake”.

*Credit dominus prepositus ecclesie Sancti Johannis de Foris cum suis fratribus ecclesiam Sancti Johannis gravatam esse et damnificatam et fieri per edifficationem quam facit dominus prepositus de Sancto Lucha cum suis fratribus [...] Item dicunt illi de Sancto Johanne quod molendinum vetus debet habere quatuor canallea cum omnibus instrumentis convenientibus ad dictas canalles [...] quae canallia sint eiusdem ad latitudinis qualis erant ante terremotum.*

In a parchment dated 31 March 1235 concerning litigation between the Bocca and Gonzaga families (*Pergamene varie della provincia di Brescia*, no.96), mention is made not only of damage to the church of S.Agata, near the Brescia city gate, but also of the cost of repairing houses in the city. But we are not told whether the damage was caused by the earthquake or not:

“[...] paid or given to one of the men from Gambarara in connection with repairs to the



church of S.Agata [...] ten *librae imperiales* for restoring and repairing houses in the commune of Brescia”.

[...] *expense vel date alicui illorum de Gambara occasione refectionis ecclesie Sante Agathe [...] X libras imperiales pro optatione et refectione domorum comunium Brixie.*

#### CHRONICLE SOURCES FOR BRESCIA AND ITS DIOCESE

We have already mentioned the chronicle compiled by the Franciscan friar Salimbene de Adam as being the most detailed in its description of earthquake effects at Brescia: “In the year of Our Lord 1222 [...] And in that same year, on Christmas Day, there was a very great earthquake [...] And this earthquake was felt throughout Lombardy and Tuscany. But it was known in particular as the Brescia earthquake because it was strongest there, to the extent that the people of Brescia left the city and camped in tents, for fear that buildings would fall on top of them. And many houses, towers and fortified villages belonging to the Brescians collapsed in the earthquake. And the people of Brescia grew so accustomed to that earthquake that when the top of some tower or house fell down, they looked on and laughed out loud. [At this point Salimbene transcribes a verse composition].

And the patriarch of Antioch, who was of the family of the Roberti of Reggio, died at Lyons. He had been bishop of Brescia at the time of the great earthquake. And hearing the shouts of a Franciscan who was staying with him when he was bishop, he came out of his chamber, and immediately afterwards the chamber collapsed in the earthquake shock. He thus realised that this was the grace of God, and so he became totally devoted to Him”.

*Anno Domini MCCXXII [...] Et in eodem anno in nativitate domini nostri Iesu Christi fuit maximus terremotus [...] Et fuit iste terremotus per totam Lombardiam et Tusciam. Et appellatus fuit terremotus Brixie specialiter, quia plus viguit ibi, ita quod egressi Brixenses de civitate morabantur extra in papilionibus, ne edificia caderent super eos. Et plures domus turres et castra Brixensium corruerunt ex illo terremotu. Et ita erant Brixenses assuefacti ex illo terremotu, quod, quando cadebat pynaculum alicuius turris vel domus, aspiciebant et cum clamore ridebant. [...]*

*Et patriarcha Antiochenus obiit apud Lugdunum, qui fuit de Robertis de Regio; et tempore magni terremotus erat episcopus Brixensis. Et cum ad clamorem cuiusdam fratris Minoris, qui morabatur cum eo, dum episcopus esset, cameram fuisset egressus, et post egressus inmediate ex concussione terremotus camera cecidisset, ita hoc beneficium cognovit a Deo, quod totaliter est conversus ad ipsum.*

Some of the information provided by Salimbene is recorded in similar terms by Alberto Milioli, a contemporary of his who worked as a notary for the commune of Reggio. The annals of Brescia, on the other hand, are extremely terse. In the *Annales Brixenses* (“Codex B”, p.818), which were compiled in the abbey of S.Pietro at Brescia, we read: “There was so great an earthquake that it damaged houses, towers, churches, towns and villages, and the destruction caused great harm to many people in Brescia and its diocese, and it happened on Christmas Day”.

*Terremotus sic magnus fuit, quod subruit domos turres ecclesias castella et civitates, quarum ruina multi mortales oppressi sunt Brixie et per eius episcopatum, et fuit in die Natalis.*

The version of the same annals in “Codex C” (p.818) is even more telegraphic: “1223. A great earthquake on Christmas Day”.

*1223. In die nativitatis terremotus magnus.*

Almost all the town chronicles of northern Italy refer to seismic effects at Brescia. The

earthquake is also recorded in late 13th century notes added to a liturgical calendar from the church of S.Giorgio in Milan (*Notae S.Georgii Mediolanenses*):

"On the eighth day before the Calends of January 1223 [25 December 1222], on Sunday at about the sixth hour, there was a great earthquake throughout Italy; and almost all the city of Brescia was reduced to ruins, and almost all the diocese was destroyed, and many men, women and children died in that city".

*8 Kalendas Ianuarii 1223. die dominico circa horam sextam fuit terre motus magnus per totam Ytaliā; et fere tota civitas Brixiensis devastata fuit et episcopatum totum destructum fere, et multi homines et pueri et femine mortui sunt in illa civitate.*

The only place actually named in the *Annales Bergomates* (first half of the 13th century) is Brescia:

"In the year 1222. [...] In the same year, on Christmas Day, at about the sixth hour, there was a very great earthquake, and especially in Brescia and its district countless buildings collapsed, and many men and women were killed".

*An. MCCXXII. [...] Eodem anno in die nativitatis Domini circa horam sextam fuit terremotus maximus, et precipue in Brixia et districtu eius innumerabilia edificia corruerunt, et multi homines et mulieres mortui sunt.*

The *Annales* compiled by Parisio da Cerea, a contemporary writer who worked as a notary in Verona, make a brief reference to Brescia after recording damage in the Verona area:

"1223. On 25 December, Christmas Day, at the third hour, there was an earthquake in Lombardy and everywhere else on earth [...] and most of the walls and houses in the city of Brescia collapsed".

*1223. 25 Decembris in festo nativitatis domini Iesu Christi hora tertiarum fuit terrae motus in Lombardia undique super terram [...] et maior pars murorum et domorum civitatis Brixiae cecidit.*

The other 13th century Veronese annals make no mention of Verona, at least explicitly, but almost all mention Brescia. The *Annales S.Trinitatis Veronenses*, compiled from the second quarter of the 12th century onwards, record:

"1223. On Christmas Day, a Sunday, before the ninth hour, there were great earthquakes, which caused the whole earth to shake. Especially in the city of Brescia, a great many towers, churches and quite a few people's houses immediately collapsed".

*1223. in natali Domini, die dominico, ante horam nonam terre motus magni fuerunt, qui terram totam tremere fecerunt. Maxime vero Brixie urbis turres quam plures, ecclesie domusque hominum non pauci subito ruerunt.*

The *Annales Veronenses antiqui* and the *Annales Veteres*, both of which were compiled in the second half of the 13th century, are briefer. The *Annales Veronenses antiqui* record: "In this [year, 1223], on Christmas Day, there was a very great earthquake and the towers of Brescia collapsed and nearly all the city of Brescia was destroyed".

*Hoc, die Nativitatis Domini, fuit maximus terremotus et turres Brixie ceciderunt et pene tota civitas Brixie diruta fuit.*

The *Annales Veteres* state:

"1223. On Christmas Day there was a great earthquake".

*M.CC.XXIIJ. Die nativitatis domini magnus terremotus fuit.*

Codex CX in the Biblioteca Capitolare at Verona (ed. Cipolla 1890, p.533; ed. Turrini 1978-79, pp.10-1) contains a short verse composition:

"In the year of Our Lord 1223, when he [Pecorario] ruled over Verona, all those who

were celebrating Christmas in Lombardy felt an earthquake. Then the towers of Brescia collapsed and nearly all its houses were reduced to ruins”.

*Ano domini ducenti / mille erant viginti / et tres, con ille rexit / veronam cum teremotum / cunti samsere / longonbardiam qui coluere / festa natalis / brisie ture tunc cecidere / domos omnes fere ruere.*

The earthquake is recorded as “very great” in the *Chronicon Marchiae Tarvisinae et Lombardiae*, a compilation made in the second half of the 13th century by a monk from the monastery of S.Giustina in Padua:

“In the year of Our Lord 1223, on Christmas Day, between the sixth and ninth hours, there was a very great earthquake; but of the towns in Italy it was at the city of Brescia that the incredible shaking caused the most harm to property, houses and people”.

*Anno Domini 1223 in die natalis Domini, inter sextam et nonam horam per totam Italiam factus est maximus terre motus; sed super urbes Italiae civitas brixienis incredibiliter conquassata maximum dampnum sustinuit in rebus, domibus et personis.*

A longer report appears in the *Chronica in factis et circa facta Marchie Trivixane*, compiled in the third quarter of the 13th century by Rolandino, a notary from Padua:

“Throughout Italy the earth trembled, mountain peaks were shaken by the force of the earthquake for almost an hour, on Christmas Day, immediately after the solemn celebration of mass, with the result that many houses and palaces collapsed, and people were killed in the towns; and the destruction was so great at Brescia that the inhabitants thought the whole city would be swallowed up. And this earthquake occurred at the end of the year of Our Lord 1222”.

*In partibus namque Ytalie universis terra tremuit, iuga moncium sunt commota propter vehemenciam terre motus, durantis fere per unam horam, in ipsa die natalis Domini, statim post missarum sollempnia celebrata, adeo quod multe domus et pallacia corruerunt, homines perierunt per civitates; et in Brixia maxime tanta ruina fuit, quod Brixienenses timuerunt quodammodo ne tota civitas sit submersa. Et hic terre motus fuit completis annis Domini MCCXXII.*

In another verse composition from the Piacenza area (published by Holder-Egger 1891, p.480), written on the occasion of the 1222 earthquake, we read:

“When the earth shook.

It was during the year 1222 when the earth trembled and shook in the month of December, on Christmas Day itself, and the shaking began at the sixth hour. The whole of Brescia lay in a heap of ruins. Houses, towers and castles lie in ruins. Praise, therefore, to the guardian who controls all things, who saves, protects and helps whoever he wishes”.

*Quando terra tremuit.*

*Viginti duo currebant et mille ducenti / Tempore, quo quassa terraque mota fuit, / Decembri mense, Domini quoque nativitate, / Hora sextena cepit adesse tremor. / Brixia tota fere iacuit sub mole ruine, / Domus et turres, castra vulsaque iacent. / Ergo laudetur custos, qui cuncta gubernat, / Qui vult quos servat, protegit atque iuvat.*

There is a brief reference to Brescia in the *Annales Ianuenses* (pp.187-8), an official chronicle compiled by the notaries of the commune, in this case Marchisio Scriba:

“Brescia was indeed most severely affected by this same earthquake which involved the whole of Italy, suffering both the destruction of houses and the death of men”.

*Brixia vero ex visitatione ipsius terre motus, qui fere totam Ytaliam occupavit, tam murorum destructione, quam virorum occisione maximam persecutionem persensit.*

In the continuation of the *Chronicon Faventinum* for the years 1219-1236 by Tolosano, who was a canon at Faenza cathedral (Romagna), it is recorded that the earthquake also

affected Romagna, and that there were two thousand victims in Brescia and its diocese: "In the year of Our Lord 1222, on Christmas Day, a violent earthquake was felt at the third hour in Romagna and Lombardy, and especially in Brescia and its diocese, where it killed at least two thousand men, women and children. The damage to houses and towers was such that the city was almost destroyed".

*Anno Domini MCCXXII, die nativitatis Domini, venit vehemens terremotus hora tercię in Romania et Lombardia, et maxime in Brixia et eius episcopatu, qui bene MM inter viros et mulieres, pueros et puellas interemit; civitas, cum domibus et turribus dirupta, fere est dissipata.*

Two Franciscan writers, Thomas, bishop of Spalato and Thomas of Eccleston, refer to the earthquake within the context of the preaching of St. Francis.

In 1222, Thomas, the future bishop of Spalato, was a student at Bologna, and on 15 August he heard St. Francis preach there:

"At this time in Liguria, Emilia and the March of the Veneto, there was a great and horrendous earthquake on Christmas Day, at about the third hour, with the result that many buildings were razed to the ground. Indeed, a large part of the city of Brescia was destroyed, and a great multitude of people, especially heretics, were crushed and killed".

*His temporibus factus est terremotus magnus et oribilis in die nativitatis Domini circha oram terciam per Liguriam, Emiliam et per marchiam Veneticam, ita ut multa edificia ad terram ruerent. Civitas vero Brixiana ex magna parte sui prostrata est, multa que ominum multitudo et maxima ereticorum oppressa est et extinta.*

In his *Liber de adventu Minorum in Angliam*, compiled around 1258-59, the chronicler Thomas of Eccleston records evidence from his fellow Franciscan Martin of Barton, that, in Bologna, St. Francis predicted an earthquake, which was subsequently identified as the one in the Brescia area almost five months later, on 25 December 1222:

"At that time Friar Martin of Barton also came to England. He was fortunate enough to see St. Francis frequently [...]. He also told us that a friar who was praying at Brescia on Christmas Day was found unharmed in the ruins of the church during the earthquake which St. Francis had predicted and caused to be announced by the friars in all the schools in Bologna by means of a letter written in common Latin. This earthquake occurred before the war undertaken by the emperor Frederick, and it lasted for forty days, with the result that all the mountains in Lombardy were shaken".

*Venit quoque in Angliam tunc temporis Frater Martinus de Barton, qui beatum Franciscum frequenter videre meruit [...] Dixit quoque quod frater quidam, qui stetit in oratione Brixiae in Die Natali Domini in tremore quem praedixerat Sanctus Franciscus, et per omnes scholas Bononiae per fratres praedicari fecerat, per literam in qua fuit plurimum Latinum, et ecclesia corruit, ob ruinam lapidum, illaesus inventus est. Hic terrae motus ante guerram Frederici per continuos xl dies factus est, ita ut moverentur omnes montes Lumbardiae.*

There is also a reference to St. Francis' prediction in a sermon by Bonaventura of Bagnoregio (*Opera Omnia*, tome 9, p.583).

Further details can also be found in German, Frankish and Anglo-Saxon chronicles. Chapter 49 in the contemporary *Dialogus miraculorum* by the Cistercian monk Caesarius of Heisterbach (diocese of Cologne in Germany) deals with the Brescia earthquake of 25 December 1222. The number of victims he gives, however, is very exaggerated:

"During Advent, the Milanese heretics and those who were in Brescia sent many cart-loads of food. On Christmas Day itself, however, while they were banqueting, the Lord shook the earth, and as buildings fell he brought about the death of more than twelve

thousand people. Others fled into the countryside, and when they heard the cries of the dying, they did not dare to return to the city to help them. [...] Nor is that surprising. So many towers and other buildings collapsed that no less than the end of the world itself seemed imminent”.

*In Adventu Domini haeretici Mediolanenses haeretici qui erant in Brixa, multa plaustra cum victualibus transmiserunt. In ipsa vero die Nativitatis Domini dum convivarent, Dominus terram concussit, et cadentibus aedificis plus quam duodecim millia hominum extinxit. Alii fugientes in campum cum audirent clamores morientium, non fuerunt ausi redire in civitatem ad illorum succursum. [...] Nec mirum. Tot turres, tot aedificia corruerunt, ut nihil aliud, nisi finis mundi instare videretur.*

After briefly mentioning an earthquake at Cologne on 11 January 1223, the continuation of the *Chronica regia Coloniensis* (or *Annales Colonienses Maximi*) for the years 1220-1238, compiled in the monastery of St. Pantaleon, provides much greater detail about that of Christmas Day 1222:

“In the year of Our Lord 1222 [...]. In Lombardy, too, there was such an earthquake on Christmas Day itself, striking twice a day for two days, that churches and other buildings were destroyed in many places, priests and other men were killed, almost the whole city of Brescia and its people were destroyed, rocks were wrenched from mountains, fortified villages were reduced to ruins, and in this way dreadful calamities and disasters occurred. In Rome, furthermore, earth mixed with blood was seen to rain from the clouds”.

*Anno Domini 1222 [...] in Longobardia eciam talis terre motus fuit ipsa die natalis Domini, per duas ebdomadas quottidie bis perdurans, ut in pluribus locis edificia et ecclesias everteret, homines cum sacerdotibus opprimeret, Brixiam quoque civitatem fere totam cum populo obrueret, rupes de montibus evelleret, castra deiceret, et sic inauditas calamitates et miserias perpetraret. Rome eciam terra mixta sanguine visa est de nubibus pluere.*

Brescia is also mentioned in the annals of Klosterneuburg (in the diocese of Passau). These are a continuation of the *Annales Mellicenses*, which were compiled around 1142-43 and continued by various authors up to 1233 (*Continuatio Claustroneoburgensis tertia*). We read there:

“In the year 1223. There was a great earthquake in Longobardia, such as had never been seen before. A city called Brescia was razed to the ground and many people perished there”.

*Anno 1223. In Longobardia terre motus factus est magnus, qualis nec antea aliquando. Civitas quedam nomine Brixia funditus est subversa, et multi homines in ea perierunt.*

There is also a brief reference to the earthquake in a chronicle compiled by a contemporary Cistercian monk, Albricus of Triumfontium (Troisfontaines, in the diocese of Châlons in France):

“In the year 1222 [...] On Christmas Eve thunder was heard and there was an earthquake in Italy, but it was particularly violent at the city of Brescia, almost half of which was reduced to ruins, and everyone was buried in the ruins in that part of the city [...]”.

*Anno 1222 [...] In vigilia natalis Domini auditum est tonitruum et fuit terre motus in Italia, sed violentior in civitate Brixa, cuius pars fere media subvertitur, absorptis omnibus in ea parte [...].*

In the early 13th century, Abbot Ralph of the Cistercian monastery of Coggeshall (in the diocese of London) mentions Brescia and three other unspecified towns:

“1223. There was so great an earthquake in Italy that some towns, that is to say Brescia and three others, were reduced to ruins and swallowed up with their inhabitants”.

1223. *Terre motus factus est magnus in Italia, ita quod quedam civitates, id est Brixia cum aliis quibusdam tribus, subverse sint et absorte cum habitatoribus suis.*

The *Annales* of the Cistercian monastery of Margan (in the diocese of Llandaff in Wales) seem to progressively focus in on the location of the earthquake:

“1222 [...] In that year there was a great earthquake in many places across the seas, which caused some towns to be shaken to their foundations, together with their inhabitants. Amongst these was a certain city in Longobardia called Brescia, most of which was destroyed with its churches on Christmas night, with the death of almost two thousand people”.

1222 [...] *Fuitque eodem anno terremotus magnus multis in locis in transmarinis partibus, ex quo urbes aliquae subrute sunt funditus cum hominibus in illis degentibus; inter quas erat quedam urbs in Longobardia nomine Brisa, ex qua pars maxima in nocte natalis Domini subversa est cum ecclesiis, ubi quoque perierunt fere duo milia hominum.*

The *Annales* of Dunstable (in the diocese of Lincoln in England) record:

“1223 [...] There was so great an earthquake in various places in Italy and Apulia that the city of Brescia was destroyed. Several thousand people died there under the walls and buildings, while others fled and founded a new city near the site of the old one”.

1223 [...] *Factus est terremotus magnus diversis locis in Italia et Apulia, ita quod civitas Brissiensis demollita est. In qua pleraque milia hominum sub muris et palatiis perierunt, alii autem fugientes novam civitatem iuxta situm veteris fundaverunt.*

#### **Marano di Valpolicella and Lazise (Verona)**

The castle of Marano collapsed, as well as the houses of the inhabitants of Lazise.

The source for both these places is the *Annales* compiled by Parisio da Cerea, a contemporary notary from Verona:

“1223. At the third hour on 25 December, Christmas Day, there was an earthquake in Lombardy and everywhere else on earth [...]. And the castle of Marano collapsed, as did the houses of the people of Lazise [...]”.

1223. 25 Decembris in festo nativitatis domini Iesu Christi hora tertiarum fuit terrae motus in Lombardia undique super terram, [...]. Et castru de Marano, et domus illorum de Lazisio cecidit [...].

#### **Modena and its diocese**

Many unspecified buildings suffered serious damage, and the inhabitants were very frightened. The Bishop organised a procession the day after the earthquake. Our source is a *Notula* written on the cover of codex O.III.13 in the Archivio Capitolare at Modena:

“1223. There was a great earthquake throughout the diocese of Modena and throughout Lombardy, and elsewhere. It happened on Christmas Day, when mass was celebrated by bishop Guglielmo of Modena to give thanks to God. Many buildings were destroyed in that city, and men and women lived in great terror that day. The following day the bishop, with the canons and all the clergy of the city made a procession in connection with this danger, together with the men and women of the city of Modena”.

*M.CC.XXJJJ. terremotus factus est magnus per totum episcopatum mutine et per totam lombardiam et per alia loca et hoc fuit in die natalis domini missa celebrata a domino guillelmo dei gratia mutinensi episcopo et multa edificia sunt destructa in ipsa civitate et viri et mulieres ipsa die fuerunt in magno tremore. Sequenti vero die idem episcopus cum canonicis et toto clero civitatis pro predicto periculo fecerunt processionem cum hominibus et mulieribus de civitate mutine.*

### Costozza (Vicenza)

There is an inscription, possibly dating to the 14th century, at the base of the bell-tower of the church of S.Mauro at Costozza, which records the date of the earthquake. It seems likely that this refers to damage suffered by the bell-tower itself, in which a number of different stages of construction can be found:

“1223 At the time of the earthquake [...]”.

*MCCXXIII T(em)p(ore) t(er)remoti [...].*

The inscription also gives the dates of the earthquakes of 1117 and 1348.

### Bologna

There was an earthquake described as “great” or “very great”. Everybody fled from the cathedral of S.Pietro, where the bishop was celebrating Christmas mass. The earliest source is the chronicle of Pietro Villola, dating to the second half of the 14th century. There are three separate passages in which the event is recorded (II, pp.85, 87):

“1222. [...] Also in that year, on Christmas Day, there was a great earthquake at dinner time and suddenly the roof of the church of S.Pietro collapsed after mass had been celebrated and the clergy had brought the service to an end. [...]”

1223. [...] In that year, while the bishop was celebrating mass at the altar in S.Pietro, there was a great earthquake in the whole of Italy and everyone fled from the church [...] In that year on Christmas Day there was a very great earthquake”.

*Mccxxii. [...] Item eo anno in die natalis fuit magnus teramotus ora prandii et tuc statim cecidit copertura ecclesie sancti Petri dicta missa et separatis clericis ab officio. [...]*

*Mccxxiii. [...] Eo anno cum cantaretur missa per episcopum ad altare sancti Petri fuit teramotus magnus per totam Ytaliam et homnes fugierunt de eclexia. [...]*

*Eo anno in die nativitatis Domini nostri Yhesu Christi fuit maximus terremotus.*

The church of S.Pietro had been completed about forty years earlier, in 1182. It was a three-nave church with a trussed wooden roof. In 1228, the roof collapsed again without there being any direct external cause, which suggests a fault in construction. It is possible, then, that the collapse in 1222 was also principally caused by truss failure: the strong earthquake felt at Bologna probably caused the supporting walls to sway, thereby loosening the truss beams and causing them to fall. Another possibility is that the Bolognese chroniclers have combined two separate events which actually occurred six years apart: the Brescia earthquake and the collapse of the roof of S.Pietro. In which case, there will have been just one roof collapse, in 1228, not caused by the earthquake (see Guidoboni and Ciuccarelli 2003b, pp.299-303, 341).

### Ferrara

There was an earthquake described as “great”, followed by another on the same day. Much panic ensued. A chronicler writing in the second half of the 14th century records that many chimneys fell down. An anonymous eye-witness of the earthquake (in Baroni 1969, p.54) reports:

“In the eleventh indiction. On Christmas Day in the year of Our Lord 1223, between the ninth and sixth hours, while everyone was dining, there was a great earthquake which lasted for about half an hour [word crossed out]: we all thought we would be killed. This was at Ferrara. On that same day, which was a Sunday, there was another earthquake at the hour of vespers”.

*Indicione XI. Anno Domini milesimo ducentesimo XX tertio in die natalis Domini, prandentibus omnibus inter oram nonam et sextam fuit terremotus magnus fere media hora: credebamus omnes mori. Et hoc fuit Ferrarie. Similiter die illo, hora vespertina fuit alius terremotus et fuit die dominico.*

Later evidence from the 14-15th century chronicler Giacomo da Marano (Biblioteca Comunale Ariostea, Ferrara, cl.I, 534) records that chimneys fell down: "On the said 25 December [1222], between the ninth hour and vespers there was a horrendous and very great earthquake at the city of Ferrara. It lasted for more than half an hour and caused many chimneys to fall down in the city, and the earthquake was felt in many places in Italy, where it did a great deal of harm".

*Nel dito 25 dicembre tra nona e Vespro trete uno horribile et grandissimo terremoto in la Cittade di Ferrara el quale durò più di una mezza hora e fece cadere molti camini in la Cittade, el quale terremoto fu sentito in molti luochi de Italia dove fece infiniti mali.*

#### **Milan**

The earthquake of 25 December 1222 produced a crack in the old church of S.Nazaro in Campo (now the Santuario di S.Maria dei Miracoli, also known as S.Maria presso S.Celso). On 28 December 1222, another shock was felt. The people of Milan abandoned the city and lived in tents for more than eight days, for fear of further shocks. The sources are three chronicles. Two are contemporary, and the third dates to the 13th-14th century. The only source to record the earthquake of 28 December 1222 as well, is the *Annales Mediolanenses breves*, compiled about 1228:

"1223. On Christmas Day, a Sunday, at about the ninth hour, the earth shook in the city of Milan. On the fourth day following [Wednesday 28 December], the earth shook again, at night".

*1223. Die dominico in nativitate Domini circa horam nonam terra tremuit in Mediolani civitate. Item in sequenti quarta feria tremuit in nocte.*

In the *Liber notitiae sanctorum Mediolani* (Milan, ed. 1917, col.59B), the only damage mentioned is that at S.Nazaro in Campo. Mention is also made of an inscription inside the church, now no longer in existence. The building was in fact demolished around 1490, and the present-day Santuario di S.Maria dei Miracoli, also known as S.Maria presso S.Celso, was erected on the site:

"[St.Basilides] was once buried there with St.Cyrinus and St.Nabor. Consequently, in 1221 [he means 1222], because a wall of S.Nazaro in Campo was cracked in an earthquake, those who were to build another wall base inside say that they found the saints' bodies on that occasion. So they built an altar on top, and what happened is written there.

1223 years had at that time gone by since the beginning, when there was a very violent earthquake in the world: churches, houses, towers and villages disappeared from city to city".

*[...] iacuit olim cum sanctis cirino et nabore. quapropter anno domini MCCXXI propter terremotum cum esset murum scisum ecclesie sancti nazarii in campo volentes facere intus altum pedem muri. dicunt quia tunc inuerunt corpora sanctorum. Unde super factum est altare et ibi. ita est scriptum.*

*Annorum numerus tunc fluxit ab ortu / Ducenti viginti tres cum mille fuere. / Qua terremotus profusus fluxit in orbe / Templata domus turre terre fluxere per urbes.*

Further details are recorded in the contemporary *Dialogus miraculorum* by the Cistercian monk Caesarius of Heisterbach (diocese of Cologne in Germany):

"During Advent, the Milanese heretics and those of Brescia sent many cartloads of food. And as they were banqueting on Christmas Day, the Lord shook the earth [...] The Milanese then abandoned their city, and lived for more than eight days in tents for fear of that same earthquake".

*In Adventu Domini haeretici Mediolanenses haeretici qui erant in Brixa, multa plaustra cum victualibus transmiserunt. In ipsa vero die Nativitatis Domini dum convivarent,*



*Dominus terram concussit, [...] Mediolanenses vero civitatem suam deserentes, plus quam octo dies in tentoriis habitabant, timore eiusdem terraemotus.*

The earthquake is recorded in general terms and with a reference to Brescia in notes added to a liturgical calendar dating to the late 13th century, from the church of S.Giorgio (*Notae S.Georgii Mediolanenses*).

#### **Padua**

There was an earthquake which is described as "great" (or "very great"); but no specific effects are mentioned. Of 13th century Paduan sources, the briefest is the *Liber Regiminum Paduae*, which makes use of old city annals for the period 1174-1267. But it does mention Padua by name:

"1222 [...] And the following day, which was Christmas Day, there was a great earthquake at Padua".

*MCCXXII [...] Et die sequenti nativitatis Domini fuit magnus terremotus in Padua.*

The other Paduan sources from the second half of the 13th century are the *Chronicon Marchiae Tarvisinae et Lombardiae* and the *Chronica in factis et circa facta Marchie Trivixane* by a notary called Rolandino. They do not mention Padua by name, but they do record earthquake effects at Brescia.

#### **Venice**

Church bells rang of their own accord. One side of the monastery of S.Giorgio collapsed. Our sources are three contemporary chronicles from German and Anglo-Saxon areas, and a note in the margin of a 14th century codex. Damage to the monastery of S.Giorgio is mentioned in a note added to the manuscript of the chronicle of Andrea Dandolo (published by Muratori, 1728, cols.343-4, note):

"Elsewhere [I have read that] in the year 1223 on Christmas Day, a Sunday, there was a great earthquake at Venice, which destroyed one side of the monastery of S.Giorgio".

*Alibi anno MCCXXIII in die Nativitatis Dominicae fuit Venetiis terraemotus ingens quo unum latus Monasterii Sancti Georgii fuit dirutum.*

There is a brief mention of the earthquake in the contemporary *Dialogus miraculorum* by the Cistercian monk Caesarius of Heisterbach (diocese of Cologne in Germany):

"During Advent, the Milanese heretics and those of Brescia sent many cartloads of food. And as they were banqueting on Christmas Day, the Lord shook the earth [...] at Venice [...] and in many other provinces and cities at that same time earthquakes struck terror into many people".

*In Adventu Domini haeretici Mediolanenses haeretici qui erant in Brixa, multa plaustra cum victualibus transmiserunt. In ipsa vero die Nativitatis Domini dum convivarent, Dominus terram concussit, [...] in Venetia [...] et in aliis multis provinciis atque civitatibus eodem tempore multos terruerunt terraemotus.*

There is general information about the earthquake in the *Chronicon Montis Sereni* (from Lauterberg in the diocese of Merseburg), compiled around 1227-30:

"1222. There was a great earthquake in all the transalpine provinces [...], as well as at Venice and in many other maritime towns. It began at midday on Christmas Day and lasted until the eighth day after that [1 January 1223]; and it caused the destruction of many buildings and great trouble for men. Then blood mixed with rain was also seen to fall".

*1222. Terre motus magnus per omnes Transalpinas provincias [...], preterea Veneciis et in pluribus aliis maritimis civitatibus factus est, qui die media natalis Domini incipiens usque in octavam eiusdem duravit, de quo multorum edificiorum ruinas et*

*hominum oppressiones contigit provenire. Sanguis eciam cum pluvia postmodum descendere visus est.*

There is more information in the *Annales* of Dunstable (in the diocese of Lincoln in England), which record the detail of bells ringing:

“1223 [...] There was a great earthquake in various places in Italy [...] In Venice, too, the earth shook, to the extent that church bells rang out of their own accord, as though men had pulled on them”.

*1223 [...] Factus est terremotus magnus diversis locis in Italia [...] Venetiis autem adeo terra tremuit, quod ecclesiarum campane ex solo terre motu tamquam hominum tractu sonuerunt.*

### **Verona**

All those who were in the ancient Roman arena fled outside. The only source to mention the city of Verona by name is the *Annales* compiled by the contemporary Veronese notary Parisio da Cerea:

“1223. At the third hour on 25 December, Christmas Day, there was an earthquake in Lombardy and everywhere else on earth, and all those who were in the arena of the commune of Verona for entertainment and pleasure, fled outside”.

*1223. 25 Decembris in festo nativitatis domini Iesu Christi hora tertiarum fuit terrae motus in Lombardia undique super terram, et omnes personae quae erant in arena communis Veronae causa tripudii et solatii, fugerunt extra dictam arenam.*

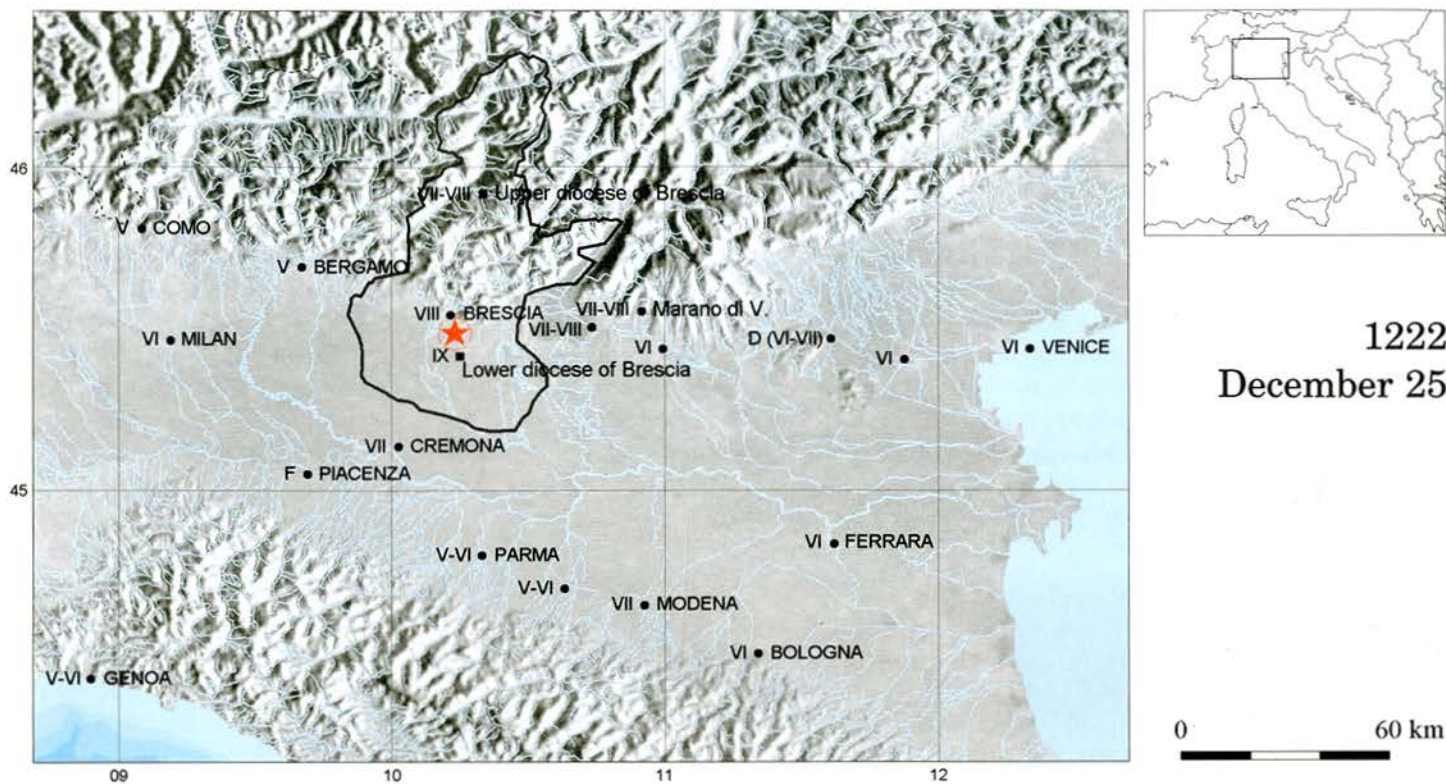
The other 13th century Veronese annals do not mention Verona, at least not explicitly, and in almost all cases the only city named is Brescia. The sources concerned are the *Annales S.Trinitatis Veronenses*, compiled from the second quarter of the 12th century onwards; the *Annales Veronenses antiqui* and the *Annales Veteres*, both of which were compiled in the second half of the 13th century. Another source is a codex in the Biblioteca Capitolare in Verona (ed. Turrini 1978-79) containing a brief verse composition.

### **Genoa**

The whole population was frightened, and immediately after the earthquake they gathered at the cathedral of S.Lorenzo and from there went in procession through the city. On 1 January 1223, many people abandoned the city and took refuge in the open, for fear of fresh shocks. Our source is a long passage in the *Annales Ianuenses* (pp.187-8), an official chronicle compiled by the notaries of the commune, in this case Marchisio Scriba. Set out below are the most significant parts:

“On Christmas Day, a feast which the whole city [of Genoa] was celebrating, as almost everyone was dining, to general dismay and as a punishment for evildoers, we were visited by Divine Mercy in the form of a great and dangerous earthquake. [...]. When it came to an end, all the people of the city gathered faithfully and devotedly at the church of S.Lorenzo, took up the relics of St.John the Baptist and other saints and carried them round the city with great devotion and mournful chants, to ask the merciful Lord to forgive their sins”.

*In die nativitatis Domini, de cuius celebritate tota civitas congaudebat, ad singulorum terrorem et correctionem malorum, omnibus fere ad prandium discumbentibus, ingenti ac perfido terre motu nos divina clementia visitavit. [...] post quietem cuius universus populus civitatis ad ecclesiam beati Laurentii fideliter et devote concurrans, cepit reliquias beati Iohannis baptiste et aliorum sanctorum, quas cum summa devocione ac lacrimabili voce per civitatem portavit, delictorum veniam a Domino misericordie petiturus.*



1222  
December 25

fig. 53 The line indicates the area covered by the ancient diocese of Brescia.

The earthquake is also mentioned in the reliable *Chronicle of Genoa* by Iacopo da Varagine (p.374), archbishop of Genoa in the second half of the 13th century:

“But in the year of Our Lord 1222, on Christmas Day itself, Genoa and almost all of Italy was struck by so violent an earthquake that buildings collapsed, and in many places the earth split open, with the result that men abandoned their towns and lived in the fields”.

*anno autem Domini .M<sup>o</sup>.CCXXII., in die scilicet natalis Domini, fuit Ianue et in tota fere Ytalia tam vehemens terremotus, ut hedificia caderent et terra in multis partibus scinderetur, propter quod homines civitates deserebant et in campestribus habitabant.*

### Parma

The population fled from the city in terror. There are no reports of damage.

Our sources are the *Cronica* of the Franciscan friar Salimbene de Adam, and the *Chronicon Parmense*, a 14th century chronicle. When the earthquake struck, Salimbene was at Parma, and his account is enhanced by his personal memory of what his mother told him about it. Salimbene was born on 9 October 1221, and was hence little more than a year old at the time of the earthquake:

“In the year of Our Lord 1222 [...] And in that same year, on Christmas Day, there was a very great earthquake [...] My mother used to tell me that when this great earthquake occurred, I was lying in my cradle, and she herself picked up my two sisters one under each arm — for they were small — and leaving me in the cradle, ran to the home of her parents and brothers. For she said she was afraid that the baptistery [of Parma] would fall on top of her, since my house was close to it [...]. In the year of Our Lord 1223 messer Enrico Avvocato of Cremona was *podestà* at Parma. And at the beginning of his term of office in that year, there was a great earthquake on Christmas Day, which people later often called to mind”.

*Anno Domini MCCXXII [...] Et in eodem anno in nativitate domini nostri Iesu Christi fuit maximus terremotus [...] Solita erat mater mea michi referre, quod tempore istius magni terremotus iacebam in cunabulis, et ipsa accepit duas sorores meas, sub qualibet ascella unam — erant enim parvule — et me in cuna dimisso cucurrit ad domum patris et matris et fratrum suorum. Timebat enim, ut dicebat, ne baptisterium super eam caderet, quia ibi iuxta erat domus mea. [...] Anno Domini MCCXXIII dominus Henricus Advocatus de Cremona potestas Parme fuit. Et hoc anno in introitu sui regiminis fuit terremotus magnus in nativitate Domini, qui a posteris ad memoriam frequenter reducitur.*

The *Chronicon Parmense*, which is based on several series of local annals, records the flight of the city's inhabitants:

"And there was a great earthquake throughout Italy in that year [1222]. It happened between the sixth and ninth hour on Christmas Day, and people fled from the city, thinking they were about to die [...]"

*Et illo anno terremotus magnus per totam Ytaliam, et fuit in Nativitate Domini inter sextam et nonam, et homines fugiebant exstra civitatem credentes se subito mori [...].*

#### **Reggio nell'Emilia**

There was an earthquake which the sources describe as "very great", but no damage is recorded. Our sources are the *Cronica* by the Franciscan friar Salimbene de Adam, and the *Liber de temporibus* by the Reggio notary Alberto Milioli. Both these men lived in the 13th century. Since the information they provide is very similar, we quote only the text of Salimbene:

"In the year of Our Lord 1222 [...] And in that same year, on Christmas Day, there was a very great earthquake in the city of Reggio, as messer Niccolò, bishop of Reggio, was preaching in the cathedral of S.Maria. And this earthquake affected the whole of Lombardy and Tuscany".

*Anno Domini MCCXXII [...] Et in eodem anno in nativitate domini nostri Iesu Christi fuit maximus terremotus in civitate Regina, predicante domno Nicholao Regino episcopo in maiori ecclesia sancte Marie. Et fuit iste terremotus per totam Lombardiam et Tusciam.*

#### **Bergamo and Como**

Many people were terror-stricken. The source for both places is the contemporary *Dialogus miraculorum* by the Cistercian monk Caesarius of Heisterbach (diocese of Cologne, in Germany):

"During Advent, the Milanese heretics and those of Brescia sent many cartloads of food. And as they were banqueting on Christmas Day, the Lord shook the earth [...] In Bergamo, Como, Venice [...] and many other provinces and cities at that same time, earthquakes struck terror into many people".

*In Adventu Domini haeretici Mediolanenses haeretici qui erant in Brixa, multa plaustra cum victualibus transmiserunt. In ipsa vero die Nativitatis Domini dum convivarent, Dominus terram concussit [...] In Pergamo, in Cumis, in Venetia [...] et in aliis multis provinciis atque civitatibus eodem tempore multos terruerunt terraemotus.*

The *Annales Bergomates* (first half of the 13th century) record the earthquake in general terms, and make explicit reference only to Brescia:

"In the year 1222. [...] On Christmas Day in the same year at about the sixth hour, there was a very great earthquake [...]"

*An. MCCXXII. [...] Eodem anno in die nativitatis Domini circa horam sextam fuit terremotus maximus [...].*

## Piacenza

We can deduce from two contemporary sources that the earthquake was probably felt here, without any damage being caused. The sources concerned are the *Annales Placentini* by Giovanni Codagnello, chancellor of the city of Piacenza from 1202 to 1230, and another verse composition from the Piacenza area (published by Holder-Egger 1891). The fact that verse compositions were written is evidence of the great celebrity of the event in contemporary culture.

▲ 1222 12 25 11:30-13:40 UT ★ = 45 29 10 14 I<sub>0</sub> = VIII Me = 6.2 Sites: 20

location	lat.	long.	I	location	lat.	long.	I
■ Lower Brescia diocese	45 25	10 15	IX	Padua	45 24	11 53	VI
Brescia	45 33	10 13	VIII	Venice	45 26	12 20	VI
■ Upper Brescia diocese	45 55	10 20	VII-VIII	Verona	45 26	11 00	VI
Lazise	45 30	10 44	VII-VIII	Genoa	44 25	08 54	V-VI
Marano di Valpolic.	45 33	10 55	VII-VIII	Parma	44 48	10 20	V-VI
Modena	44 39	10 56	VII	Reggio nell'Emilia	44 42	10 38	V-VI
Costozza	45 28	11 36	D (VI-VII)	Bergamo	45 42	09 40	V
Bologna	44 30	11 20	VI	Como	45 49	09 05	V
Ferrara	44 50	11 37	VI	Lucca	43 51	10 30	F
Milan	45 28	09 11	VI	Piacenza	45 03	09 42	F