



Regnum Francorum Online

Regnum Francorum Online – Interactive maps and
sources of early medieval Europe 614-918

<http://www.francia.ahlfeldt.se>

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Aim of the database

Use online source-documents to build a virtual source-collection of Late Antiquity and Early Medieval Europe, implemented as an event-centered geographical information system

Online editions of sources

METTENSIA
II
CARTULAIRE
DE
L'ABBAYE DE GORZE

MS. 826 DE LA BIBLIOTHÈQUE DE METZ

PUBLIÉ PAR
A. D'HERBOMEZ



PARIS
C. KLINCKSIECK
LIBRAIRE DE LA SOCIÉTÉ NATIONALE DES ANTIQUAIRES DE FRANCE
11, RUE DE LILLE, 11
1898

New characteristics:

Persistent and unique
identifiers to online digital
resources

Internet Archive

www.archive.org

identifier:

[cartulairedelab00stadgoog](https://archive.org/details/cartulairedelab00stadgoog)

Google Books

books.google.com

identifier: [Nmw8AAAAIAAJ](https://books.google.com/books?id=Nmw8AAAAIAAJ)

Online source-documents

CARTULAIRE DE L'ABBAYE DE GORZE.

5

2.

Metz, 25 mai 754.

Chrodegang, évêque de Metz, donne à l'abbaye de Gorze divers biens à Vanault-le-Châtel, Sponville, Vic, Metz, etc.

Cartulaire, p. 4 et 5. — Publ. par Dom Calmet, *Histoire de Lorraine*, t. II, col. c, et par Meurisse, *Histoire des évêques de Metz*, p. 167.

SCRIPTUM DONNI GRODEGANI DE WASNAO ET DE ALIIS LOCIS.

In nomine Patris, et Filii, et Spiritus sancti. Ego Chrodegangus, ac si indignus si non opere vel nomine, gratia Dei Metensis episcopus, una cum comite et voluntate illustrissimi viri Pippini, inclyti regis, senioris nostri, et cum consensu omnium parium nostrorum, abbatum, presbiterorum, diaconorum, subdiaconorum, vel omnis cleri nostri, seu et hominum Sancti Stephani ecclesie Metensis, vel illorum laicorum bonorum qui ibidem in servitio Sancti Stephani esse videntur, cogitavi casu humane fragilitatis qualiter peccata nostra, donante Domino, possimus abluere, et ad eterna gaudia pervenire. Idcirco donamus, de rebus Sancti Stephani, ad illam basilicam sancti Petri,

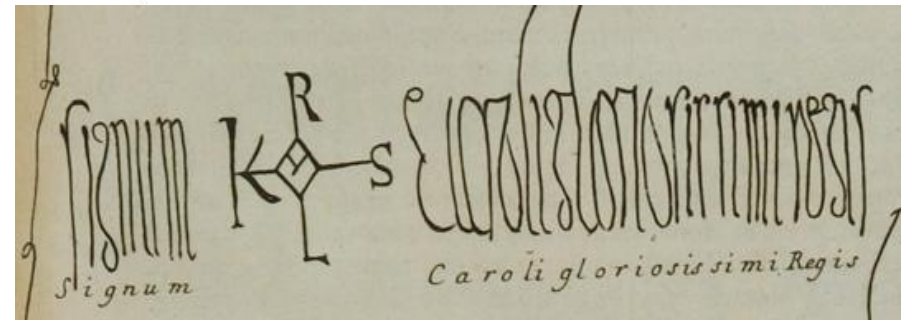
Direct links to individual documents by page or number

books.google.com/books?id=Nmw8AAAAIAAJ&pg=PA5

URL to other pages can be constructed without visiting the digital library

Medieval source-documents

- Charters
- Polyptyques
- Narrative sources
- Coins
- Inscriptions
- Other sources



Over 14,000 source-documents concerning late antiquity and early medieval Europe have been referenced in *Regnum Francorum Online*

Difficulties

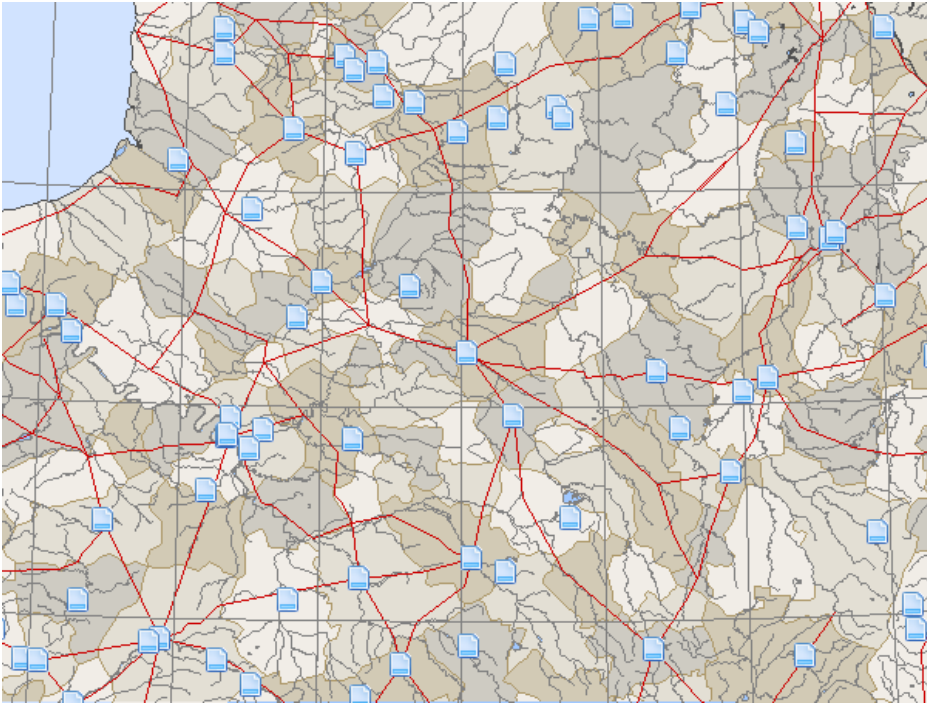
- Lack of meta-data in existing databases that describe both the editions and source-documents
- Images of book-pages (not text)
- Optical character recognition (OCR)
- Full-text search in the body of OCR-text
- Sources not fully indexed in the digital libraries. Sources are missing in search engines
- Different formats (image, OCR-text, plain text, formatted text, csv-documents, XML-documents)
- “Persistant” links are subject to change, individual documents are not link-able, machine readable links only

The challenge of digital libraries

- Digital Monumenta Germaniae historica
 - Gallica, Bibliotheque national de France
 - Google Books
 - Internet Archive
 - CCE: cartae cluniacenses electronicae. Datenbank der Urkunden der Abtei Cluny (802-1300)
 - Chartae Burgundiae Medii Aevi – CBMA
 - Monasterium.Net
 - Codice diplomatico della Lombardia medievale
- more libraries...

How to utilize these resources?

Geo-referenced sources



- Map symbols of sources are interactive and shows full bibliographic information and direct links to one or more online copies
- Referenced to locations, institutions and territories (geo-referenced), as well as persons
- More than 800 online source-editions

Referencing events in time, space and by agency

CARTULAIRE DE L'ABBAYE DE GORZE. 5

2.

Metz, 25 mai 754.

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- Source document: Cartulaire Gorze, no. 2, page 5.
- Event: Donation
- Issuer: Chrodegang, bishop of Metz
- Place and time of issue: Metz, 754, 25th of May
- Recipient: Monastery Gorze
- Possessions: Vanault-le-Châtel, Sponville, Vic, Metz etc.

Several events in one source- document

1. Donation of possessions belonging to the church of Metz by bishop Chrodegang to *cella*, later monastery, Gorze
2. Previous foundation of *cella* Gorze by Chrodegang
3. Previous *beneficium* of a *cella* in Metz held by a certain Dodo

Events

A chain of related actions distinguished in time and space, by agency, (intention or aim)

- One or more agents can be involved and have different roles (issuer, donator, charter witness, writer, judge)
- The event can take place in one or more locations
- One or more locations can be concerned or mentioned in the event, (possessions, institutions, royal estates etc.)

From the *event* we will try to identify *evidence of* locations, institutions (e.g. bishoprics, monasteries), church patrons, persons and names, medieval territories (*pagus* and *comitatus*), and their relation to the event and to each other.

Types of events

Types of events are related to the purpose of the
”written” sources that have survived

- Royal and private charters and the actions they refer; donations, property exchange, privileges, court decisions, testaments
- *Capitularia, concilia, leges*
- Annales, chronicles (events in *Annales regni Francorum*, Gregory's History of the Franks, Chronicle of Fredegar). A variety of different events.
- Saints lives, series of the office of abbots and bishops, book of deaths
- Royal and church inventories of estates, (polyptyques)
- Coins (issued in the name of rulers, mentioning of the mint or the minter)
- Inscriptions (place of burial, year in the reign of a ruler, status of the person buried)

Conceptual difficulties of events

- Duration of events; day(s), month(s), year(s)
- Medieval conception of time, accuracy of time in sources
- Medieval conception of place, disappeared places, historical notations of place, *in Francia; in Austrasia; in Neustria; Gallia; Germania; Italia; in pago Alsacinse in marca Sigoltesheim in monte Ragulfi; in comitatu Cunradi in pago Logengouue in uilla Banamaden.*
- Events and agency

Technical implementation

- The database application is dynamic. It keep all its data in a SQL-database. The webpages and maps are produces on the fly at the request of the user. Session-id:s and cookies keep track of user selections.
- Statical content, i.e. images, stylesheets and Java-scripts are kept at a different sub-domain, where they can be cached.
- MySQL 5.0 database-server, using the MySQL spatial extensions (spatial column types and index), ANSI → UTF-8
- Apache 2.2 web-server
- Server-script PHP 5. 2 producing maps and webpages at the request of the user. PHP is also responsible for sending request to the database, and retrieving information from the database to the webpage.
- AJAX techniques are frequently used. Partial updates of the web-page in response to user selections and requests, like navigation, retrieving information and source evidence about entities in the database.

Database Implementation

Database *Regnum Francorum Online*:

Reference events and their source-evidence in time, space, by agency, and other meta-data, maintaining quotes from source-documents and link or embed the best available online edition of full-text documents, including our own collection of source-documents (in XML-format)

Database tables

Several database tables:

Base-tables: Source, Event (*temporal*), Person, Name, Location (*geospatial*), Institution, Quotes, Full-text documents (XML).

Evidence-tables: evidence found in events: Evidence of person, name, location, institution, *pagus*, *comitatus*, church-patrons, kinship-relation, office, etc.

Base tables

Source

- **Identifier** (a unique number)
- Title, author(s), editor(s)
- Publisher, city and year
- Type of source: cartulary, source collection (diplomata, charters concerning a modern province, institution, archive, etc.), catalog of coins or inscriptions
- Main language of source (Latin)
- LCCN-identifier → external databases
- Digital library → **source-id:s** (the id of Google Books, Gallica, dMGH etc.)
- URL:s → identifier(s) in external databases

Event (temporal)

- **Identifier** (a unique number)
- Time (Two strings and Julian day counts)
- Type of event (donation, exchange, sale, assembly, siege, battle, murder, imprisonment, exile)
- Source → **source-id**
- Source-document (page, scan or document number, e.g. D Kar. 1 16)
→ external databases
- Origin of source document (original, medieval copy, cartulary-copy, spuria, deperdita)
- Full text → **full-text id**; 800 XML-documents currently maintained in database Regnum Francorum)

Base tables

Location (geospatial)

- **Identifier** (00455)
- Name and alternate name (Ponthion)
- Type of location (*villa*)
- Coordinates (longitude and latitude: 4.7123 48.7589)
- Country and official administrative code (e.g. INSEE, FR/51441) → [external databases](#)
- Province, *civitas* and *pagus* (Châlons-en-Champagne/Perthois) → **institution-id:s**
- Wikipedia, Geonames, Pleiades identifiers
→ [external databases](#), e.g. en.wikipedia.org/wiki/Ponthion

Institution

- **Identifier**
- Name and alternate-name
- Type of institution
- Location → **location-id**
- Church province → **institution-id**
- Wikipedia identifier → [external databases](#), en.wikipedia.org/wiki/Lorsch_Abbey

Base tables

Name

- Identifier
- Name (e. g. HROTH-BERHT)
- Sex or gens/stirps/lemmata
- Origin (Germanic, Celtic, Slavic, Roman, Greek, Hebrew)
- Lemma 1 → lemma-id (e. g. HROTH)
- Lemma 2 → lemma-id (e. g. BERHT)
- Reference to Förstemann, E., Bonn 1900. *Altdeutsches Namenbuch. Erster Band. Personennamen* → books.google.com/books?id=JrhmineU_P0C&pg=PAxx

Person

- Identifier
- Name (label)
- Title (highest obtained office)
- Name → name-id
- Father → person-id
- Mother → person-id
- Spouse → person-id
- Family → family-id
- Wikipedia-identifier → [external databases](https://en.wikipedia.org/wiki/Pepin_the_short), en.wikipedia.org/wiki/Pepin_the_short

Evidence tables

Location/inst.-evidence

- Identifier
- Event → event-id
- Location → location-id
- Institution → institution-id
- Role in event (institutions only)
- Function of location: place of event, property, mentioned, institution
- Ownership: fiscal, private, church property
- Type of location: *civitas, urbs, palatium, villa, vicus, locus, episcopatum, monasterium, ecclesia, castrum, etc.*
- Pagus → pagus-id
- Quote → quote-id

Person/name-evidence

- Identifier
- Event → event-id
- Name → name-id
- Person → person-id
- Role in event: donator, witness, consent, *scripsi, sub N. comite, in pago x in comitatu N. comitis, anno x regnante N. Rege, in office,*
- Office title: *imperator, rex, regina, dux, comes, centenarius, episcopus, abba, monachus, clericus, sanctimonialis etc.*
- Honorary title: *vir venerabilis, inluster vir, deo sacrata, sanctus*
- Quote → quote-id

Example of a quote

*Igitur venerabilis vir Adebertus
abbas Epternacensis monasterii,
quod est constructum in pago
Bedense super fluvio Sura in
honore sancte trinitatis et sancti
Petri, quod venerabilis episcopus
Willibrordus suo opere edificavit et
ubi ipse corpore requiescit vel
Adebertus abbas una cum monachis
conversare videtur, clementiam
regni nostri petiit*

D Kar. 1 70, (771-10-09 – 772-10-08),
Charlemagne to monastery Echternach,
royal confirmation of privilege.

Referencing:

person → Adebertus, abbot

name → ATH-BERHT

office → abbot of Echternach

role → petition

title → *vir venerabilis*

pagus → Bidgau

location → Echternach

institution → monastery St.-Peter in
Echternach

church-patron → Trinity → Peter.

This quote is shared between several
evidence tables

Content of the database

56,553 quotes from primary sources
45,458 evidence of cities and/or institutions in source documents
11,495 evidence of *pagus* (shire, county)
1,691 evidence of church patrons
39,095 evidence of personal names or historical persons
1,605 evidence of kinship relations

These evidences are distributed among

11,819 locations
1,462 institutions
4,298 personal names
2,375 persons
14,098 events

Geographical content of database

11,819 named locations (point)

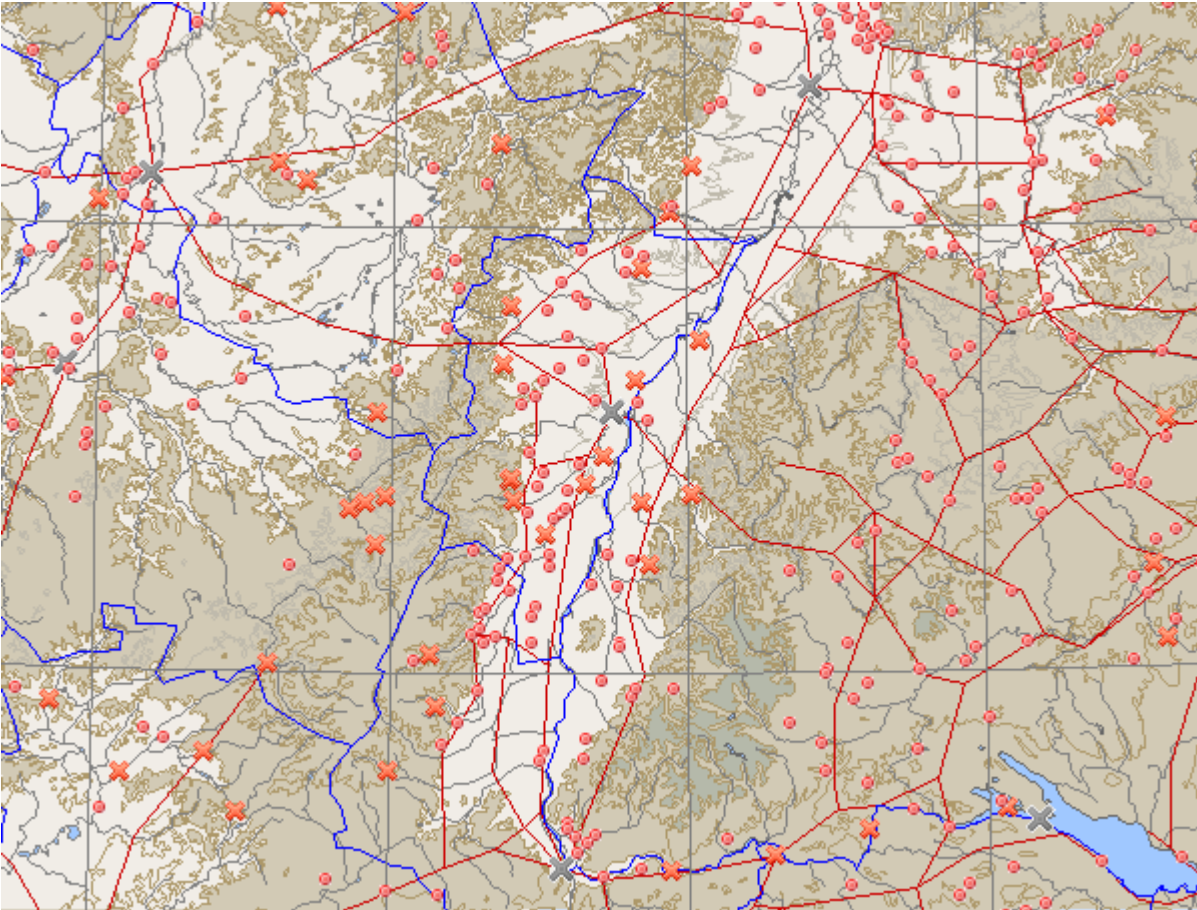
Medieval territories: *pagus*, *civitas*, kingdoms and division of kingdoms, duchies, marches, territories assigned to *missi*, Roman provinces and church provinces (polygon, time-period, → **institution-id**)

Roman roads (curve)

Modern territories: country, province, county (polygon).

Coastlines, rivers (curve), lakes (polygon), elevations (curve and polygon)

Other geospatial layers



- Rivers, lakes, coastlines, elevations
- Country, first and second order administrative borders
- Medieval territories: *pagus*, *civitas* and *regna*
- Roman roads
- Interactive layer: Evidence of churches around Strasbourg, France, for a specified time-period

Events referenced by meta-data

- Meta-data to describe historical events in time, space and by agency, fully referenced and inter-linked with evidence in primary source-documents (online)
- Evidence of locations, institutions, persons, names, territories, offices etc. found in events
- Different properties of locations, institutions, territories, persons etc. are also compiled

Inter-operation, outgoing requests

- Direct linking to editions of sources and literature by identifier (Google Books, Internet Archive, [Gallica](#), [Persée](#))
- Direct linking to source documents by identifier and page/scan/document number ([dMGH](#), [Regesta Imperii](#) and [Clauss-Slaby](#) databases)
- Direct linking to additional information on *entities*, like sources, locations, institutions, persons, territories, and states:
 - Library of Congress, LCCN, books, periodicals, (e. g. lcn.loc.gov/01022739)
 - Wikipedia articles (e.g. en.wikipedia.org/wiki/Charlemagne)
 - Prosopographic articles about Frankish officials,
 - Geodata from Geonames (www.geonames.org) for locations about altitude, population, coordinates, wikipedia articles
- Embedding external sources and source-documents from Google Books, and Internet archive.
- Embedding XML-documents (Atom, RSS, RDF, TEI)
- Embedding external maps ([Google Maps](#) and other providers)

Inter-operation, incoming requests

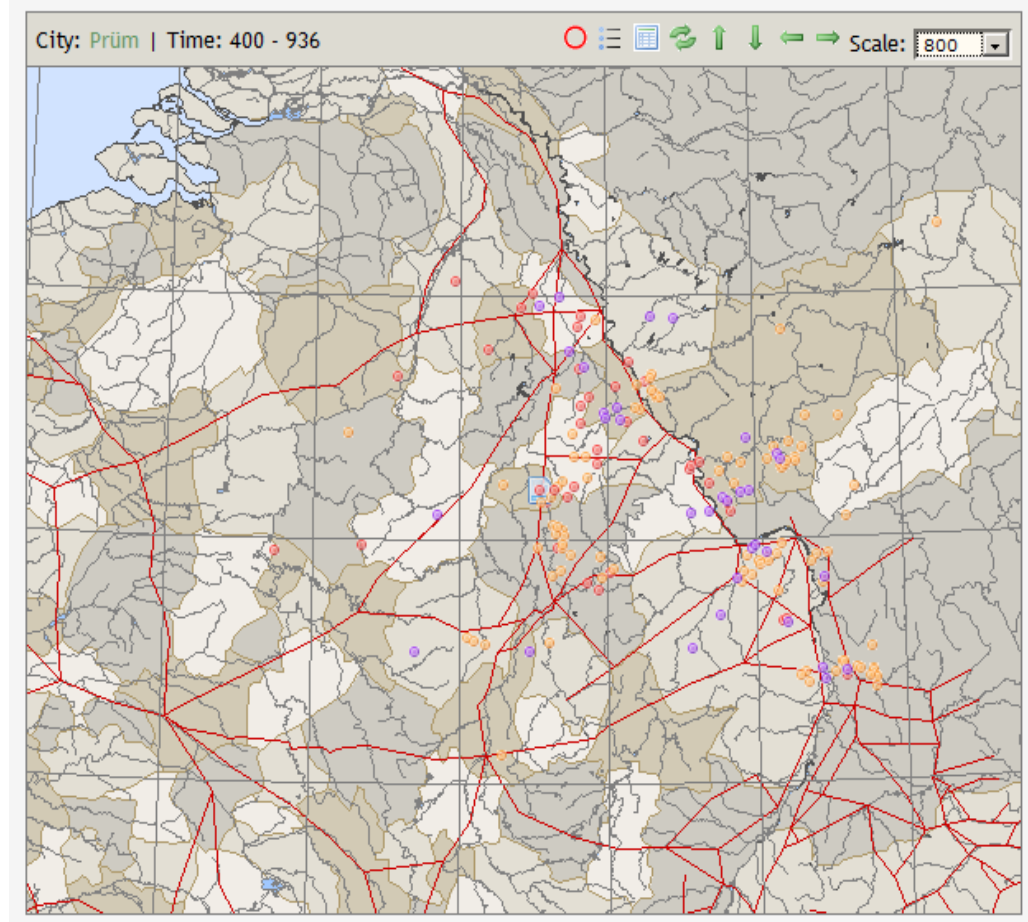
Incoming requests by categories and identifiers, producing maps:

- URL resolving: <http://francia.ahlfeldt.se>
 - /monastery/Saint-Denis
 - /bishopric/Paris
 - /location/Quierzy
 - /person/Carolus+814
 - /name/HROTHBERHT
 - /document/D_Kar._1_016
 - /mint /fiscal /source /literature
- XML-services:
- Exporting online sources by city, institution, *pagus* and person as XML-document
- Exporting online source-evidence by city, institution, *pagus* as XML-document



Property of monastery Prüm

Search city begin Status: Ready



Legends

[Change Map options](#) | [Introduction](#)
 Scale: 800 meter per pixel
 Projection: [Universal Transverse Mercator](#)
 Time-period: 400 – 936
 City of reference: Prüm

Territories and borders
 Borders:
 Territory: Pagus
[List pagus currently on map](#)

Institution
 Prüm

- Private donations (donation, sale, exchange etc.)
- Royal donations
- Church property (property list, polyptyque, *precaria*)

Donation
 You can support the Regnum Francorum Online project and make a donation via PayPal. Any and all donations are sincerely appreciated.
 Many thanks, Johan

[Donate](#)

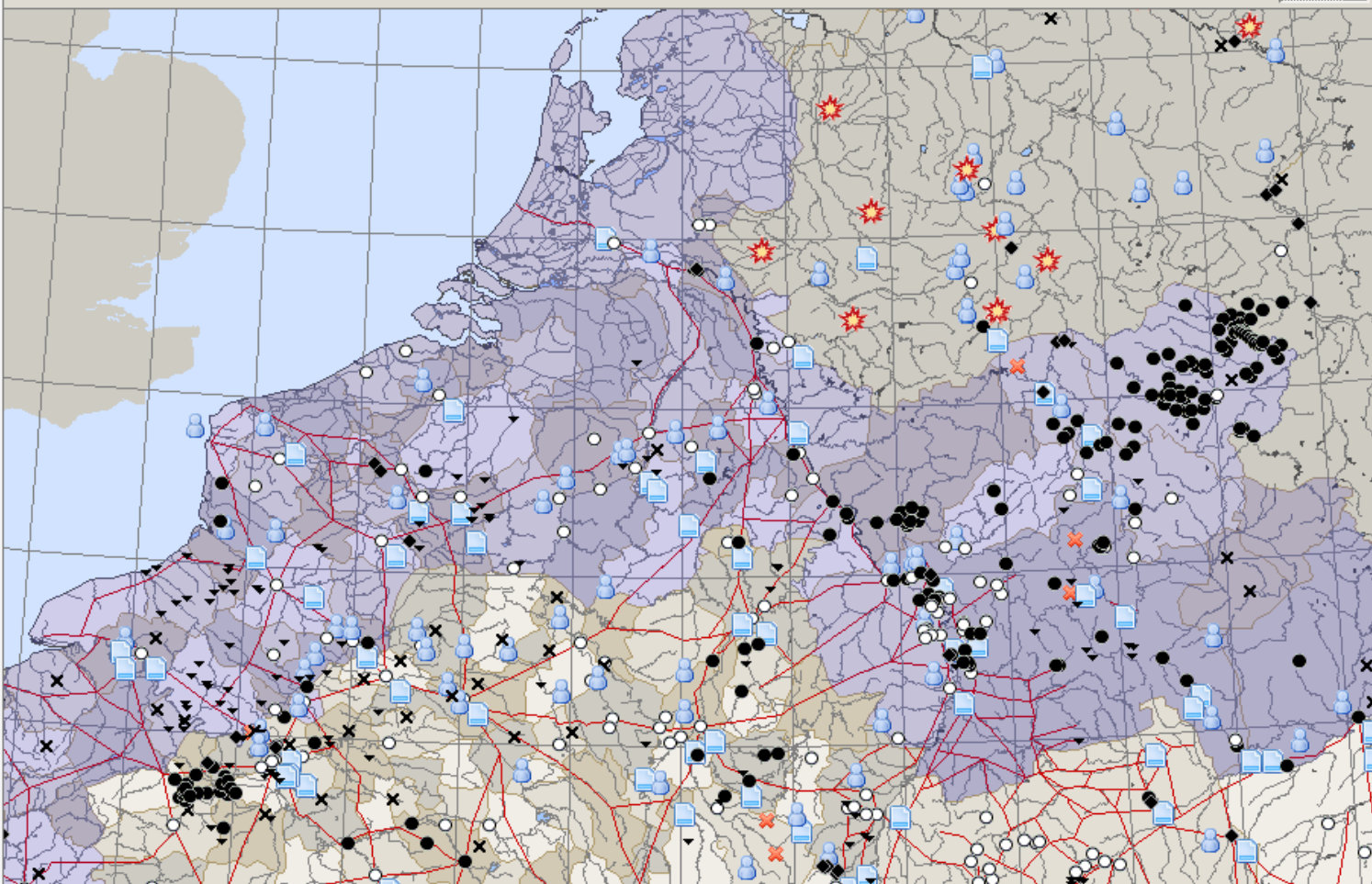


Itinerary of Charlemagne 768-814

Search HI Status: Ready

City: [Aachen](#) | Time: 400 - 936

Scale: 1000



Legends

[Change Map options](#) | [Introduction](#)

Scale: 1000 meter per pixel
 Projection: [Universal Transverse Mercator](#)
 Time-period: 400 – 936

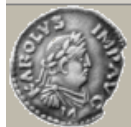
City of reference: [Aachen](#)

Territories and borders

Borders:
 Territory: Pagus
[List pagus](#) currently on map

Itinerary of Charlemagne 768-814
 Showing part of the kingdom in 768

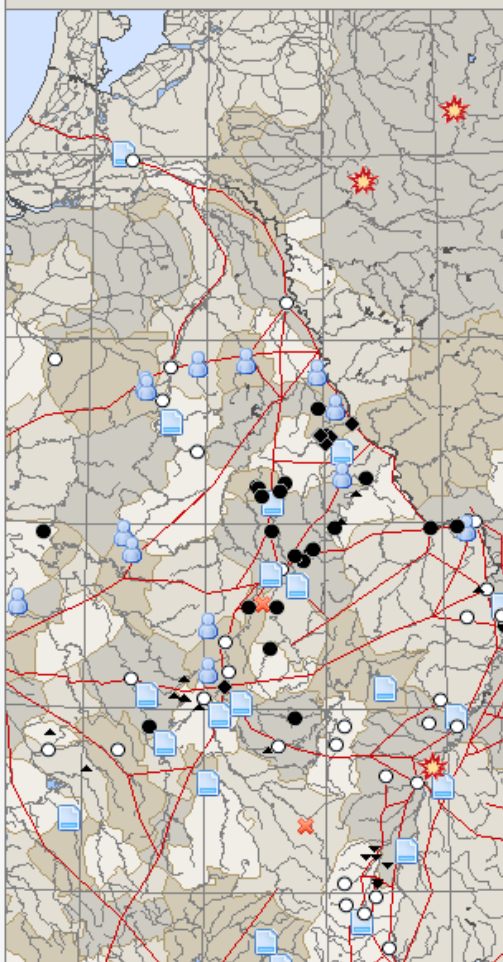
- Battle, siege. Note: has offset to the northeast from the actual location of the city.
- Raid or attack. Note: same offset.
- Visit, celebration, assembly, place of event.
Note: offset to the northwest.
- Year in the reign
- Mint
- Royal monastery
- mentioned as fiscal property, castrum, etc.
- Gifts of fiscal land or rights, or land given as *beneficium*, the fisc as neighbour
- Consent to gifts (of fiscal land)
- Confirmation of property (of fiscal land)
- territory/city assigned to *missi dominici*, or territory/institution mentioned in division of kingdom.
- Gifts or privileges to institutions. Note: offset to the southeast.



Itinerary of Pepin the Short 741-768

Search Status: Ready

City: Prüm | Time: 400 - 936



Royal donation 762-08-13

D_Kar._1 016
 Institution Prüm

Pippin schenkt dem Kloster Prüm genannte Besitzungen, bestätigt die früher gemachten Schenkungen, stellt es unter seinen und seiner Erben Schutz und verleiht freie Abtswahl.

Trisgodros 762 August 13

Pippinus rex Francorum vir inluster. [...]

Igitur dum notum est omnibus tam propinquis quam exteris nationibus nos et coniuge nostra Bertradane in amore sancti Salvatoris nec non et sanctę dei genetricis Mariae atque beatorum principum apostolorum Petri et Pauli vel sancti Iohannis baptistę seu et martirum sancti Stephani, Diunisii et Mauricii atque confessorum sancti Martini, Vedasti atque Germani monasterium in re proprietatis nostre aedificare, quod est positum infra terminos Bidense atque Ardinne, ubi rivulus qui dicitur Dethenobach ingreditur in Prumian, in ipsius vero monasterii ecclesia [...]

Idcirco inspirante nobis superna gratia donamus pariter ego et coniux mea Bertrada ad ipsum sacratissimum locum, quem in honore sancti Salvatoris vel sancte Mariae construximus, res proprietatis nostrae in pago Charos villa quae dicitur Rumerucoyme, tam illa portione, quem de genitore meo Karolo mihi advenit, quam et illa portione ipsius Bertradane, quam

Itinerary of Pippin III 768: Prüm

Prüm

Prüm, Stadt, Eifelkreis Bitburg-Prüm, früher: Reg.-Bez. Trier, Rheinland-Pfalz

Center city | Show city Detailed map

All evidence of Prüm

Itinerary of Pippin III 768

Evidence of Prüm in itinerary of Pippin III 768
 Navigation: 1-7

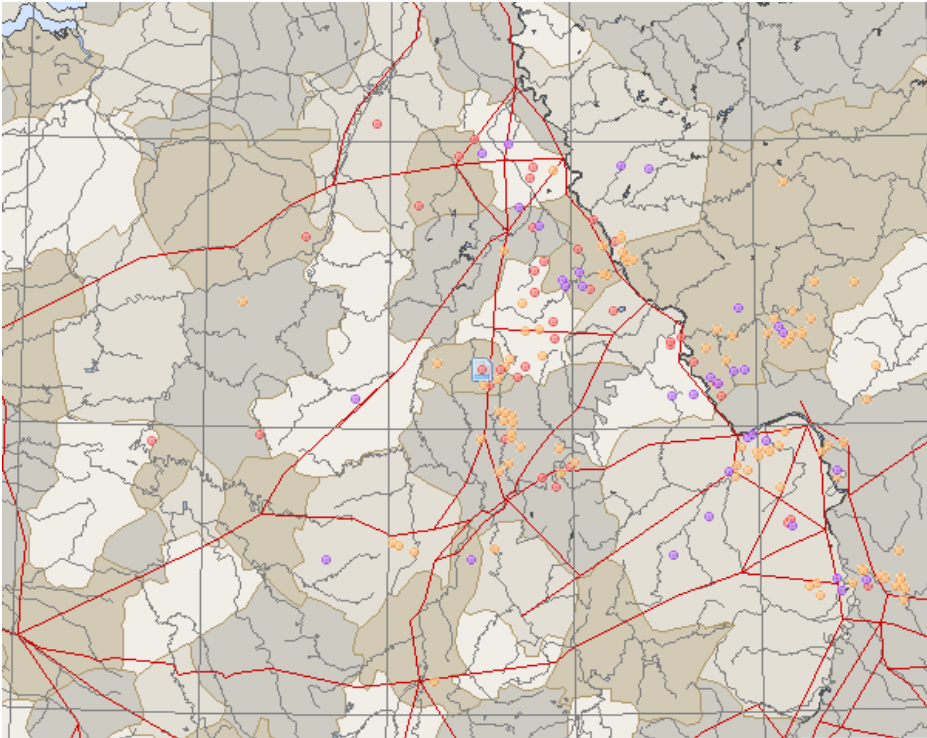
- Royal donation (D_Kar._1 003) 752-05-27
 Source document at dMGH institution, monasterium Prüm monasterium quod dicitur Prumia superna nobis inspirante gratia a novo construximus opere in honore videlicet sancti Salvatoris vel sancto Marie
- Royal donation (D_Kar._1 015) 762-07-10
 Source document at dMGH institution, monasterium Prüm sancto Salvatore Prumię monasterii, quod ędificare rogavimus ob remedium animę nostrę et coniugis nostrę Bertradane
- Royal donation (D_Kar._1 016) 762-08-13

Geo-spatial and temporal analysis

Interactive maps of historical entities can be produced for a specified period in time and space, based on, and with reference to, evidence of historical events found in sources

- Crown (fiscal/royal) estates
- Minting
- Property development of church institutions
- Itinerary and activity of rulers (kings, dukes)
- Activity of royal officials (counts, *missi dominici*)
- Celebrations and assemblies
- Distribution of churches and church patrons
- Evidence of territories

Property development of monastery Prüm 720-936



- Private property (gifts, testament, exchange, court descisions)
- Fiscal property (royal donations and privileges)
- Church property (polyptyques, *precaria*)
- Background layers (rivers, lakes, *pagus*-territories, roman roads, realm of rulers)

Future development

- Common *identifiers* of medieval source-documents, locations, institutions, territories and persons shared with other databases to make them inter-operable
- XML standardization of historical texts (TEI/CEI)
- Standardization of meta-data for events and sources (RDF/XML ontologies, semantic web)
- Digitization of additional background maps of Roman and medieval territories, Roman and medieval roads, Church provinces
- Collect additional references to online medieval primary sources and literature
- Continue to reference historical events by meta-data
- Continue to proof-read historical documents and publish them online