

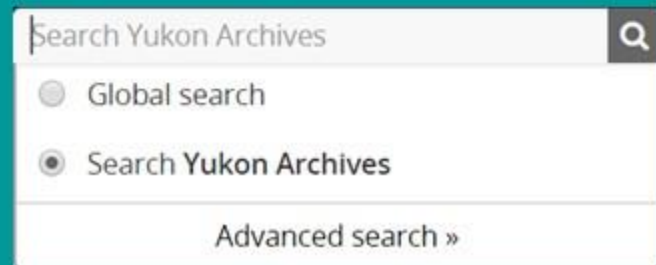
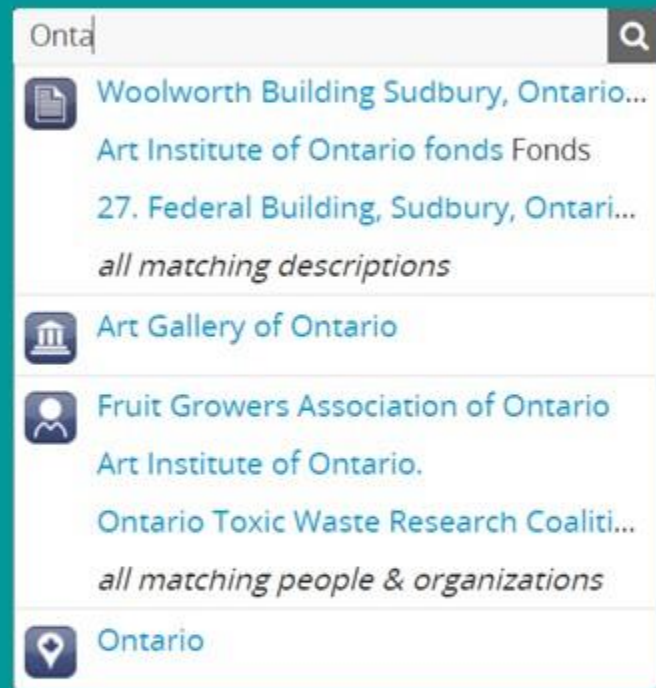
Searching in AtoM

Exploring Advanced search tips
and techniques in Access to Memory

Global search box



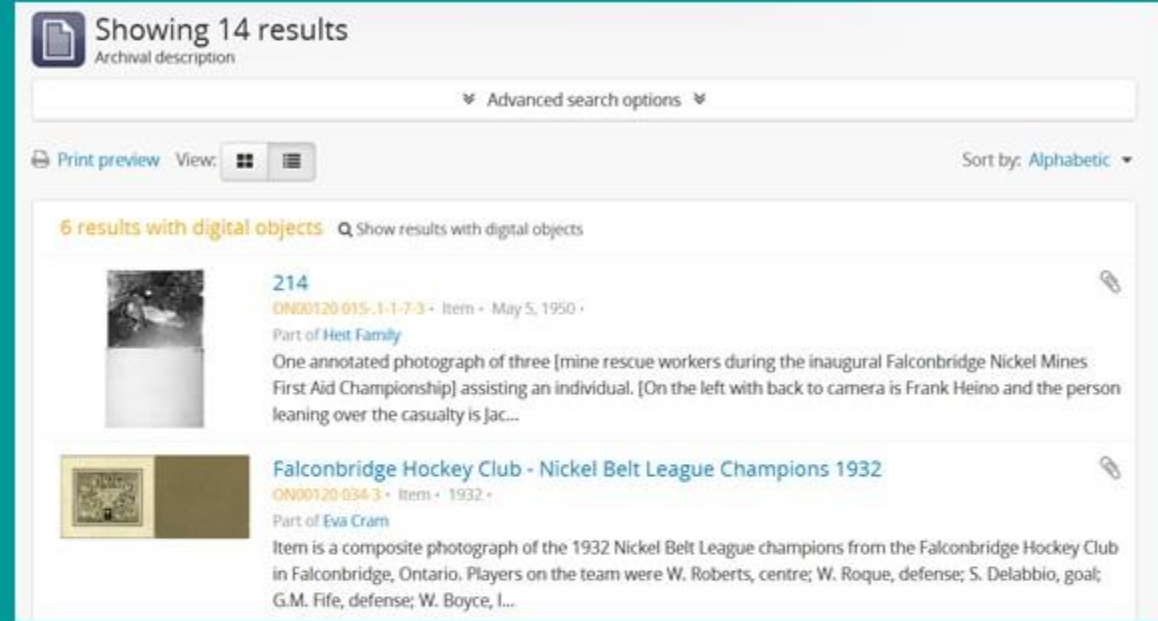
- Available throughout AtoM via the header bar
- Shows autocomplete results from:
 - Descriptions
 - Authority records
 - Archival institutions
 - Places
 - Subjects
- If you enter a search and hit return, it defaults to archival description results!
- Supports BOOLEAN expressions (must be in caps)
 - AND
 - OR
 - AND NOT
- Supports wildcards and other special search characters
- When multi-repository support is enabled, allows search to be scoped to descriptions from last repository visited



aSearch overview

Field weighting

- To improve the relevancy of search results, AtoM includes some basic weighting added to certain fields
- When a search term matches the data in one of these weighted fields, it is boosted and returned higher in the list of matching results.



Archival descriptions

- **10x weight:** Title
- **6x weight:** Creator
- **5x weight:** Identifier, Subject access point, Scope and content
- **3x weight:** Name access point, Place access point

Accessions

- **10x weight:** Accession number, Donor name, Title, Scope and content
- **5x weight:** Location information, Processing notes, Immediate source of acquisition, Archival/custodial history

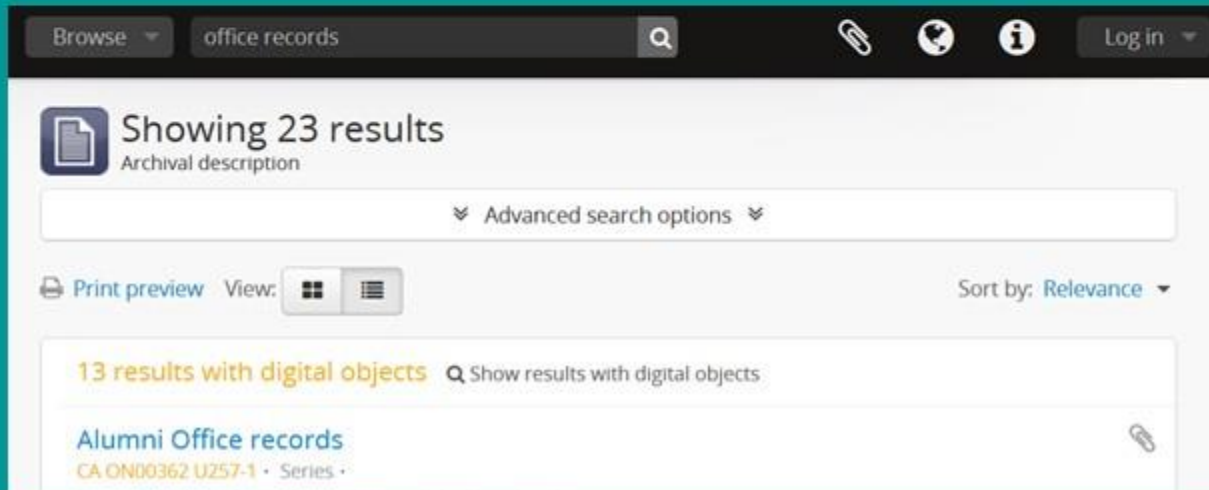
Search overview

Default operator: AND

- When multiple terms are entered in a search, AtoM will use AND as the default operator
- This means that a search for **vancouver city hall** will be interpreted as:
 - Return records with Vancouver AND city AND hall appearing in any field

SEARCHING EXACT PHRASES

- To search for a phrase in the exact order you enter the query, use quotations
- A search for **vancouver city hall** will return any records that have vancouver AND city AND hall appearing anywhere
- A search for **"vancouver city hall"** will return only records that have those terms together in that exact order



Browse office records

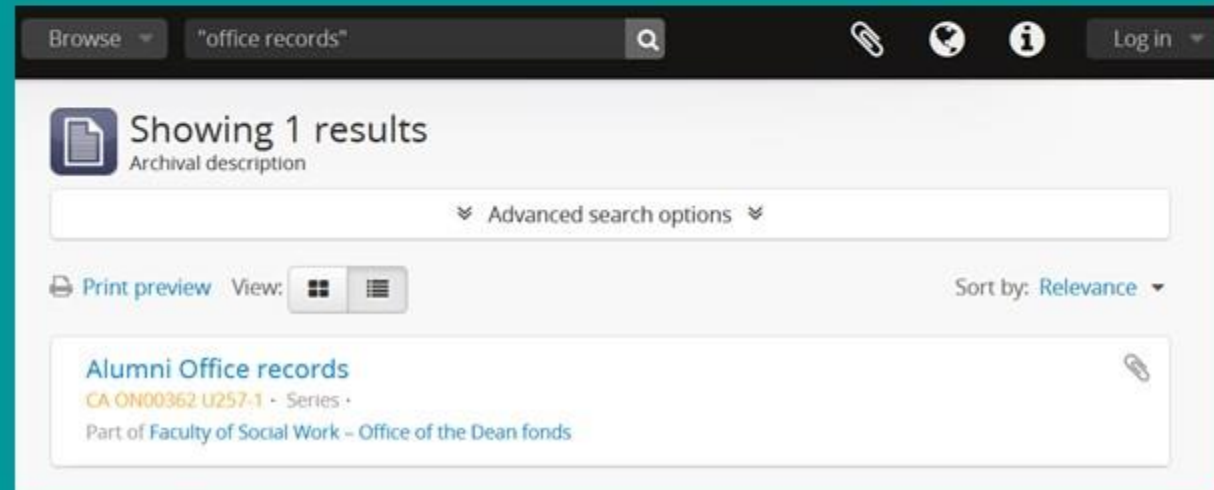
Showing 23 results
Archival description

Advanced search options

Print preview View: Sort by: Relevance

13 results with digital objects Show results with digital objects

Alumni Office records
CA ON00362 U257-1 • Series



Browse "office records"

Showing 1 results
Archival description

Advanced search options

Print preview View: Sort by: Relevance

Alumni Office records
CA ON00362 U257-1 • Series
Part of Faculty of Social Work – Office of the Dean fonds

Search overview

RESERVED CHARACTERS

- AtoM uses Elasticsearch (ES) as its search index. In ES, certain characters are normally reserved to be used as operators in advanced searching.
- If you need to use any of the characters which function as operators in your query itself (and not as operators), then you should escape them with a leading backslash. For instance, to search for $(1+1)=2$, you would need to write your query as `\(1\+1\) =2`.
- The reserved characters are:
 - `+ - = && || > < ! () { } [] ^ " ~`
`* ? : \ /`
- Failing to escape these special characters correctly could lead to a syntax error which prevents your query from running.

STOPWORDS

- Stopwords are very commonly occurring words in a particular language, that are often removed from search indexes during processing to produce better results and performance
- English stopwords list in AtoM:
 - `a, an, and, are, as, at, be, but, by, for, if, in, into, is, it, no, not, of, on, or, such, that, the, their, then, there, these, they, this, to, was, will, with`

The Advanced Search Panel

atom

Demo

Browse ▾

Search



Log in

Narrow your results by:

LANGUAGE ▴

Unique records	123
English	123
French	3

ARCHIVAL INSTITUTION ▴

All	
Art Gallery of Ontario	45
Wilfrid Laurier University Archives	40
City of Greater Sudbury Archives	18
Women's College Hospital Archives	10
Burlington Historical Society	6
Yukon Archives	3
University of British Columbia Archiv...	1

CREATOR ▴

All	
King, A. Richard, 1919-2005	1
Briere, Elaine	1
Yukon Dog Musers Association	1
Moulton, Aaron	1
Munro, Will	1
Wainwright, Andy	1
Milne, David	1
Brownstone, S. (Shieky)	1
Vale, Florence	1
Gallery 44 Centre for Contemporary ...	1

NAME ▾

PLACE ▾

SUBJECT ▾

GENRE ▾

LEVEL OF DESCRIPTION ▾



Showing 123 results

Archival description

Only top-level descriptions ✕

Advanced search options ▾

Find results with:

Search

in

Any field ▾



Add new criteria ▾

Limit results to:

Repository ▾

Top-level description ▾

Filter results by:

Level of description ▾

Digital object available ▾

Finding aid ▾

Copyright status ▾

General material designation ▾

☒ Top-level descriptions

☐ All descriptions

Filter by date range:

Start

YYYY-MM-DD

End

YYYY-MM-DD

☒ Overlapping

☐ Exact



Search

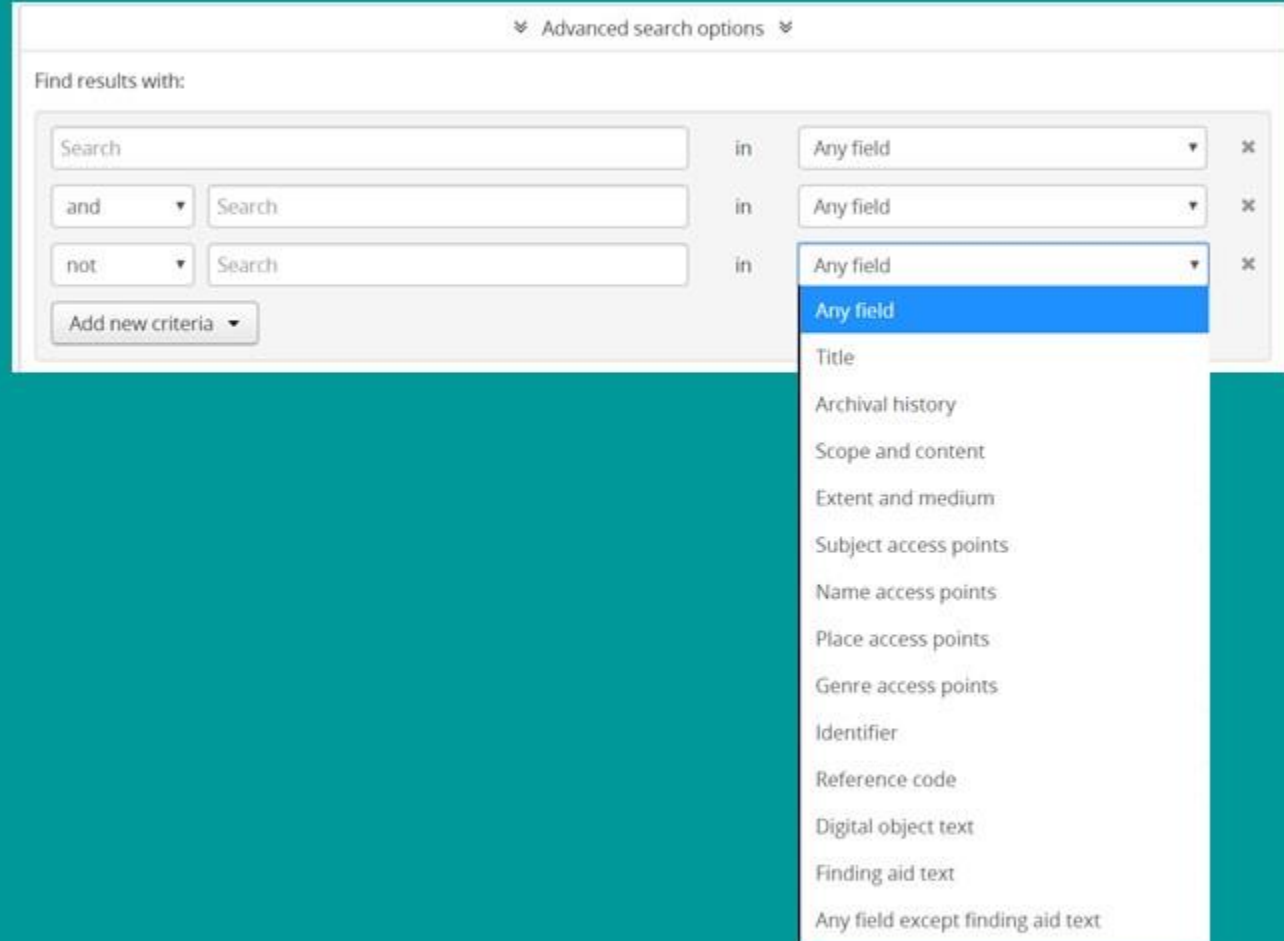
Reset

Print preview View:

Sort by: **Alphabetic** ▾

Query builder

- Provides a graphical interface for building BOOLEAN queries
- Supports wildcards and other special search characters
- Search parameters can be limited to specific fields:
 - Any field
 - Title
 - Archival history
 - Scope and content
 - Extent and medium / Physical description
 - Subject / Place / Genre / Name access points
 - Identifier / Reference code
 - Digital object transcript text
 - Finding aid text or any field except finding aid text
 - Creator (coming in 2.5)



The screenshot displays the 'Advanced search options' section of the 'a' Query builder. It features a 'Find results with:' section containing three search criteria rows. Each row has a search input field, a logical operator dropdown (currently set to 'and', 'and', and 'not'), and a field selection dropdown (currently set to 'Any field'). An 'Add new criteria' button is located below the first row. To the right, a list of available search fields is shown, with 'Any field' selected and highlighted in blue. The list includes: Title, Archival history, Scope and content, Extent and medium, Subject access points, Name access points, Place access points, Genre access points, Identifier, Reference code, Digital object text, Finding aid text, and Any field except finding aid text.

Advanced search options

Find results with:

Search	in	Any field	x
Search	and	Any field	x
Search	and	Any field	x
Search	not	Any field	x

Add new criteria

- Any field
- Title
- Archival history
- Scope and content
- Extent and medium
- Subject access points
- Name access points
- Place access points
- Genre access points
- Identifier
- Reference code
- Digital object text
- Finding aid text
- Any field except finding aid text

Limit results

Limit results to:

Repository

Top-level description

By repository

- Drop-down menu
- Will not display if “multiple repositories” setting is disabled
- Will return only matching results linked to the selected repository

By top-level desc.

- Autocomplete field
- Begin typing to see matching results
- Will return only matching results within the selected archival unit

To prevent conflicting results, you can only use one of these two limiting options at a time

a Filters

Filter results by:

Level of description	Digital object available	Finding aid
<input type="text"/>	<input type="text"/>	<input type="text"/>
Copyright status	General material designation	
<input type="text"/>	<input type="text"/>	

☐ Top-level descriptions ☒ All descriptions

Level of description

- Limit results to a particular LOD
- Populated via the Levels of description taxonomy
- When new terms are added to the taxonomy, they become available here

Digital object available

- Limit results to those with (or without) digital objects
- Can be used in conjunction with the Media types facet filter for specific types of digital object (audio, video, text, etc.)

Finding aid

- Limit results to those with or without finding aid
- Can limit to those with a particular type of finding aid (generated from description or manually uploaded)

Filters

Filter results by:

Level of description	Digital object available	Finding aid
<input type="text"/>	<input type="text"/>	<input type="text"/>
Copyright status	General material designation	
<input type="text"/>	<input type="text"/>	
<input type="radio"/> Top-level descriptions <input checked="" type="radio"/> All descriptions		

Copyright status

- Limit results to those with a particular copyright status
- Depends on presence of PREMIS rights statements
- Can be hidden!

GMD

- Limit results to those with a particular General material designation (aka material type)
- Depends on use of Canadian RAD description template
- Can be hidden!

Top-level descriptions

- Limit results to just top-level descriptions
- On by default when arriving on descriptions browse page
- Off by default when entering query into global search box

Go to [Admin > Settings > Default page elements](#) to hide these filters if not in use

Date range searching

Filter by date range:

Start



YYYY-MM-DD

End

YYYY-MM-DD

☒ Overlapping ☐ Exact



 Jun 2018 

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- Uses the internal description Start and End dates for matching
- Will **NOT** search against the Display date (what the public sees on the description view page)
- Expects dates to be in YYYY-MM-DD format (ISO 8601)
 - Will add -01-01 to YYYY start dates and -12-31 to YYYY end date parameters
 - Will not accept YYYY-MM date parameters
- Can enter text directly into field, or use the graphical date-picker widget

Date range searching

Two date range search options:

- Exact
- Overlapping

Exact mean the start and end dates of descriptions returned must fall entirely within the date range entered

Overlapping means that any description whose start or end dates touch or overlap the target date range will be returned

Filter by date range:

Start

YYYY-MM-DD

End

YYYY-MM-DD

☒ Overlapping ☐ Exact



Use these options to specify how the date range returns results. "Exact" means that the start and end dates of descriptions returned must fall entirely within the date range entered. "Overlapping" means that any description whose start or end dates touch or overlap the target date range will be returned.

Date(s)

Type	Date	Start	End	
Creation	[ca. 1980] - 199-?	1980-01-01	1999-12-31	x
Add new				

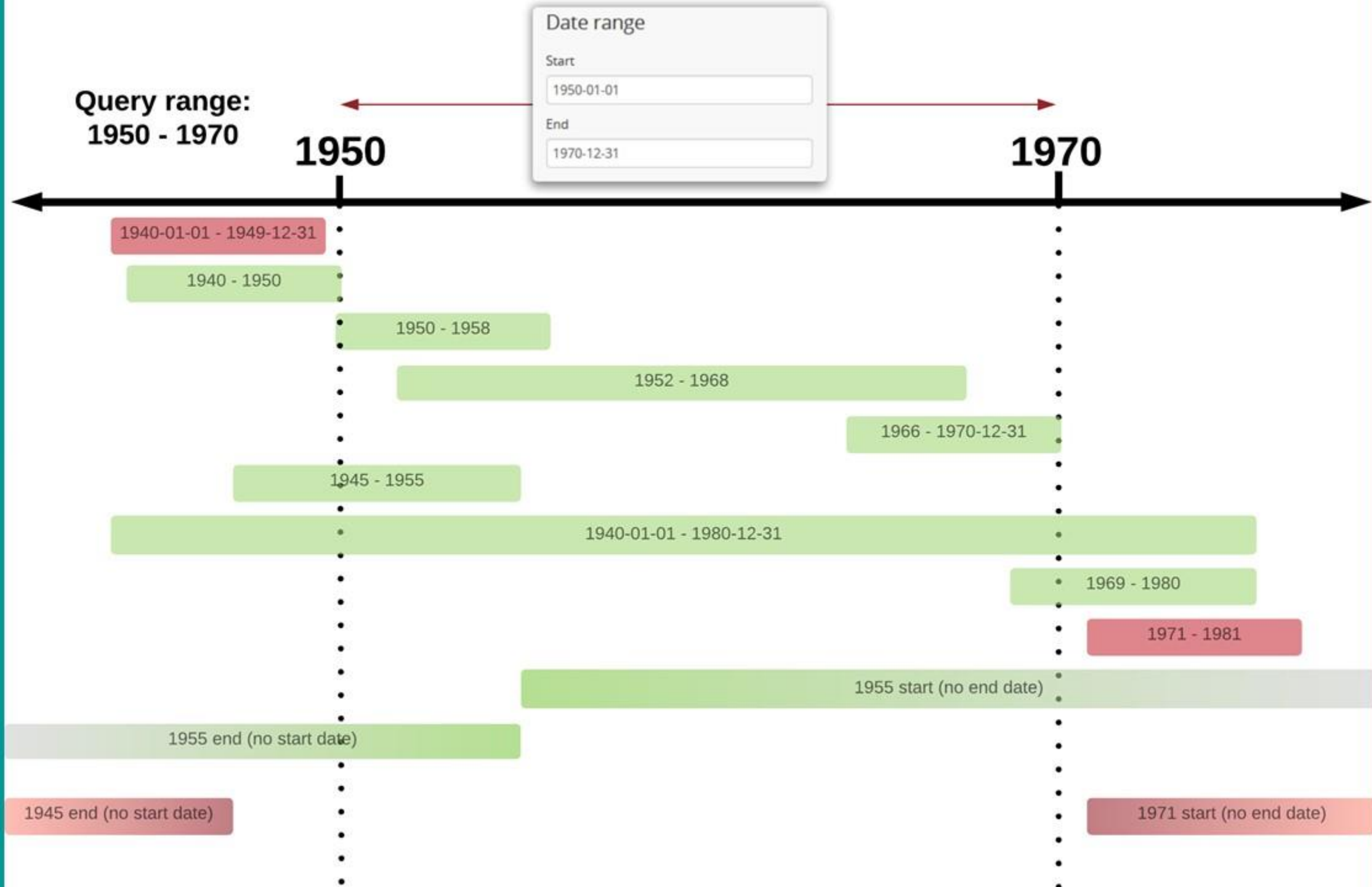
Display date (what the public user sees)

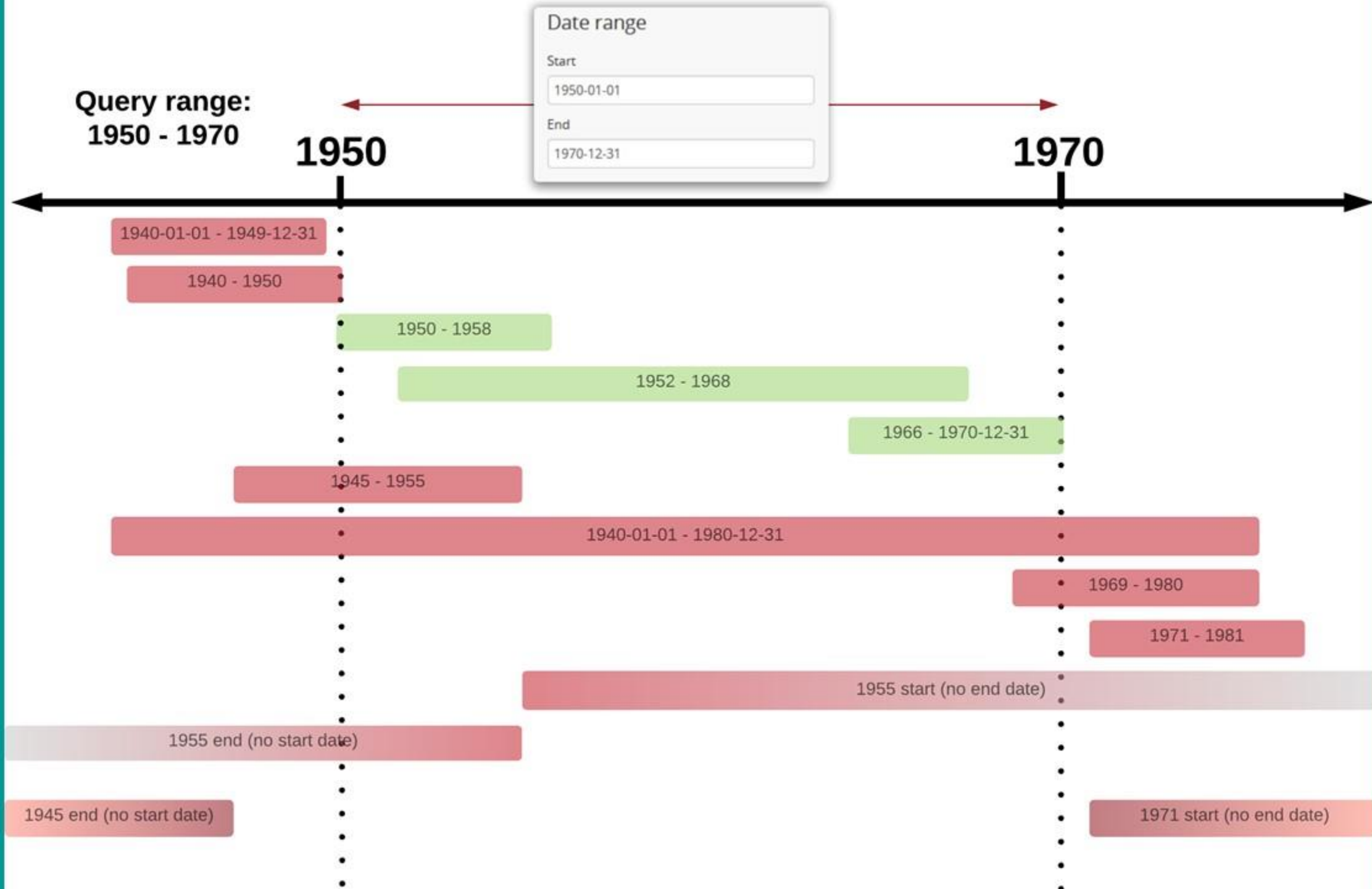
Can use typography to represent approximation or uncertainty

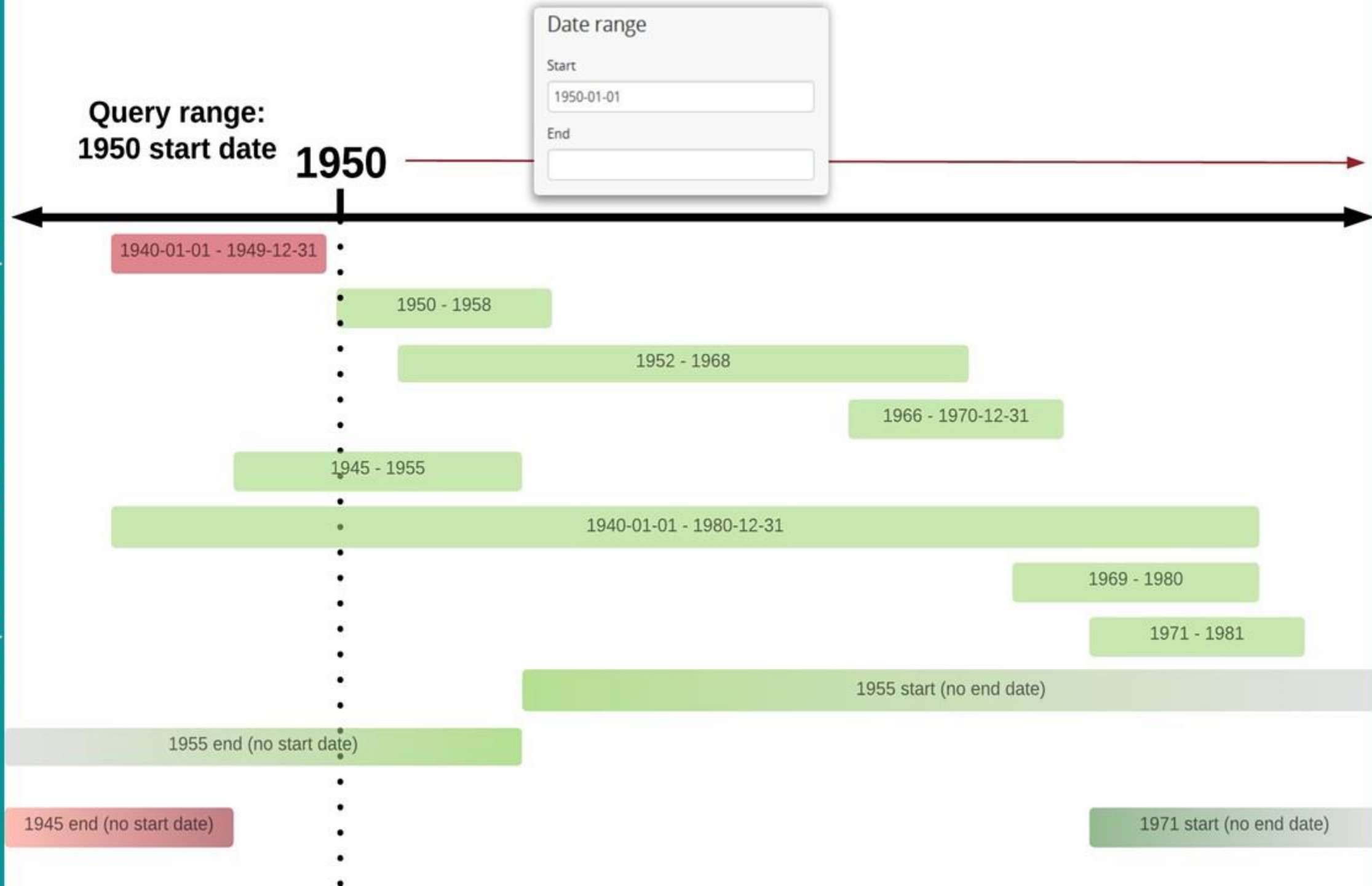
startDate

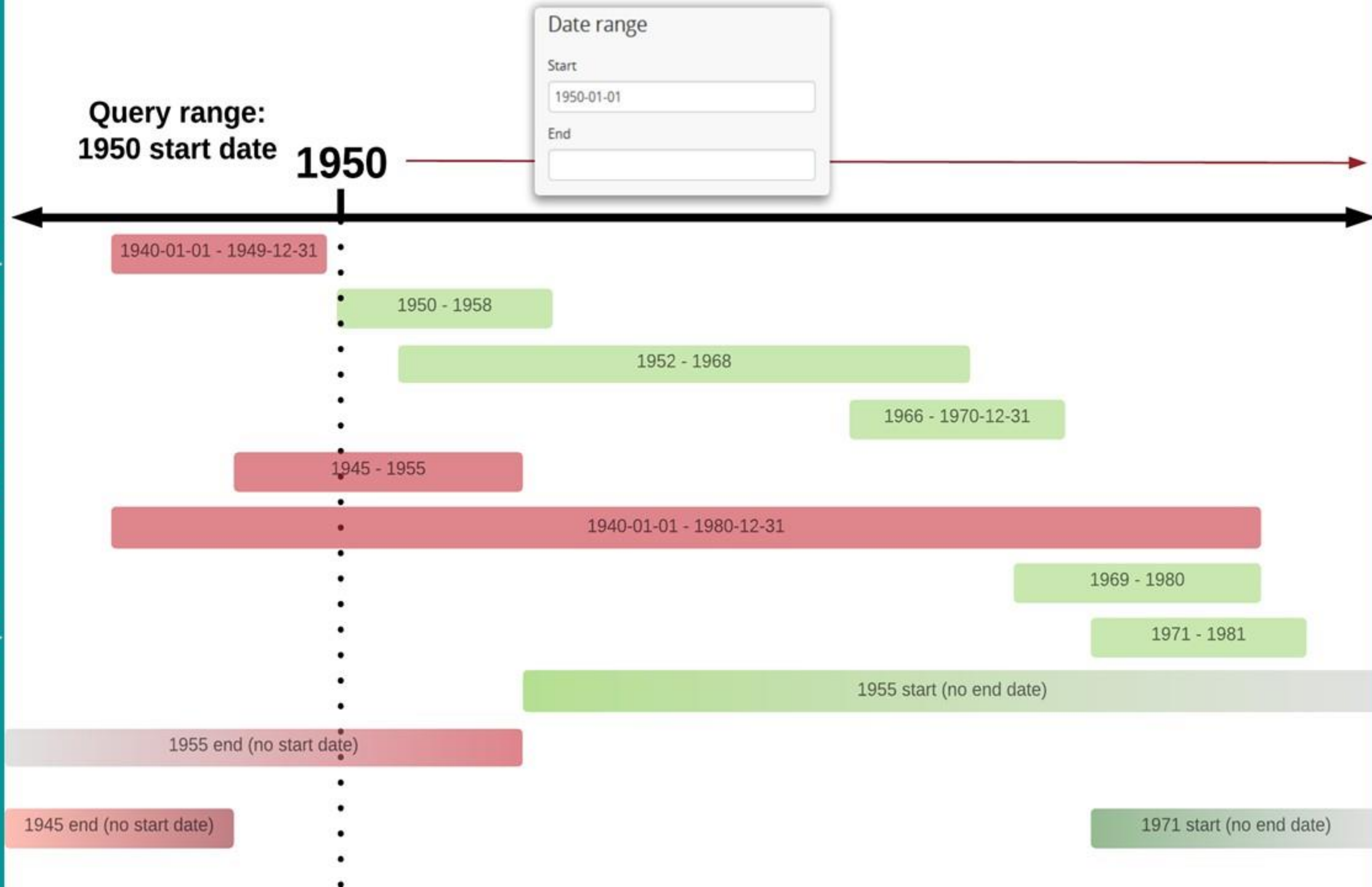
endDate

Internal ISO-8601 formatted date fields for searching
Use: YYYY, YYYY-MM, or YYYY-MM-DD format









Query range:
1970 end date

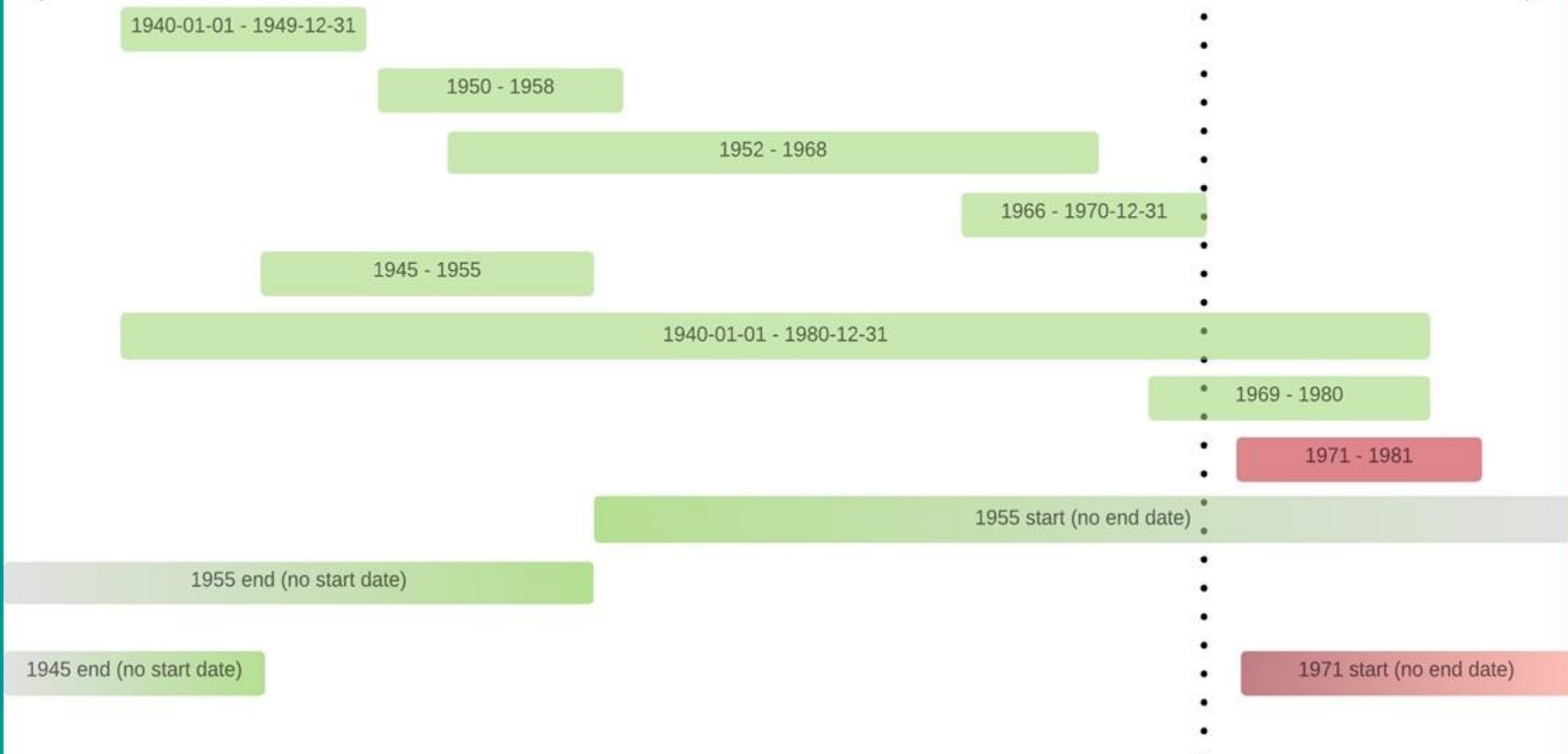
Date range

Start

End

1970

Overlapping



Query range:
1970 end date

Date range

Start

End

1970

1940-01-01 - 1949-12-31

1950 - 1958

1952 - 1968

1966 - 1970-12-31

1945 - 1955

1940-01-01 - 1980-12-31

1969 - 1980

1971 - 1981

1955 start (no end date)

1955 end (no start date)

1945 end (no start date)

1971 start (no end date)

Exact

Boolean operators

atom

Demo

Browse

ontario AND nickel AND NOT toront*



Log in

AND, OR, AND NOT

- Can be used in the global search box and the advanced search panel
- Can be combined with other filters and facets to further refine results

Find results with:

vancouver OR ontario	in	Any field	×
and "city hall"	in	Any field	×
not admin*	in	Any field	×
Add new criteria			

- Use **AND** to combine search terms to narrow your search:
 - e.g. search **vancouver AND "city hall"** to return only descriptions that contain both search terms
- Use **OR** to combine search terms to broaden your search:
 - e.g. search **vancouver OR "city hall"** to return descriptions that contain either search term
- Use **AND NOT** to exclude terms:
 - e.g. search **vancouver AND NOT "city hall"** to return descriptions that include vancouver but do not contain the phrase "city hall"

Boolean operators

Symbol	Use
+	Term after + <i>must</i> be in the result. Example: +tea cricket requires that results that must contain the term tea in them, and may have the term cricket.
-	Term after - must not be in the result. Example: -tea cricket requires that results that must not contain the term tea in them, and may have the term cricket.
?	Single character wildcard. Example: p?per will find paper and piper, but not pepper.
*	Multiple character wildcard. Example: galax* will find galaxy and galaxies, but not galactic.
~	Fuzzy search. Will return results with words similar to the term. Example: fjord~ will find fjord, fjords, ford, form, fonds, etc.
&&	Boolean operator. Can be used in place of AND. Will cause an error if combined with spelled-out operators. Example: Arthur && Ford AND Zaphod will fail; Arthur && Ford && Zaphod will succeed.
!	Boolean operator. Can be used in place of NOT. Will cause an error if combined with spelled-out operators.

Boolean operators

Symbol	Use
" "	Term enclosed in quotes must appear exactly as provided. Example: "towel" will find towel, but not towels. Used for phrase searching as well – a search for city hall will return any records that contain city AND hall anywhere, while a search for "city hall" will only return records where the terms appear together in the order of the query.
^	Boost relevance. Multiplies the relevance of the preceding term by the number following the symbol, affecting the sorting of the search results. Example: paranoid android^5 gives results containing the term "android" 5x the relevance as results containing only the word "paranoid", and will sort them closer to the start of the search results
\	Escapes the immediately following character, so that it is treated as text, rather than as a special character. For example, to search for "(1+1):2", use the following: \(1\+1\)\:2
()	Used to group search clauses. This can be useful if you want to control the precedence of boolean operators for a query, e.g. (coffee NOT tea)OR cream will return different results than coffee NOT(tea OR cream) . Without grouping, by default in Elasticsearch, NOT takes precedence over AND, which takes precedence over OR.


```

    "authorizedFormOfName" : {
      "type" : "string",
      "analyzer" : "english",
      "fields" : {
        "autocomplete" : {
          "type" : "string",
          "store" : true,
          "term_vector" : "with_positions_offsets",
          "index_analyzer" : "autocomplete",
          "search_analyzer" : "standard"
        }
      },
      "not_analyzed" : {
        "type" : "string",
        "index" : "not_analyzed"
      }
    },
    "include_in_all" : true
  },
  "buildings" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "city" : {
    "type" : "string",
    "analyzer" : "english",
    "fields" : {
      "not_analyzed" : {
        "type" : "string",
        "index" : "not_analyzed"
      }
    },
    "include_in_all" : true
  },
  "collectingPolicies" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "contactType" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "datesOfExistence" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "descriptionIdentifier" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "descriptionHistory" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "description" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "descriptionSources" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "disabledAccess" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "findingAids" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "functions" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  },
  "generalContext" : {
    "type" : "string",
    "analyzer" : "english",
    "include_in_all" : true
  }
}

```



elasticsearch

Expert searching with Elasticsearch



What is Elasticsearch?

Elasticsearch is an open-source, broadly-distributable, readily-scalable, enterprise-grade search engine. Accessible through an extensive and elaborate API, Elasticsearch can power extremely fast searches that support your data discovery applications.

– John Vanderzyden, Qbox blog - <https://qbox.io/blog/what-is-elasticsearch>



elasticsearch

- Search index
- Use to support browsing and searching in AtoM
- Version used in AtoM 2.4: 1.7
- Version used in AtoM 2.5: 5.5

Expert searching – using ES fields

- Fields are organized in the index hierarchically
 - Nested by entity type, culture, field type, etc.
 - **Example:** AtoM's alternative identifiers consist of 2 fields - a label and an identifier value. In the ES index, these are expressed as:
 - **`alternativeIdentifiers.identifier`**
 - **`alternativeIdentifiers.label`**
 - Field names are written in camelCase
 - Nesting is represented by a period between elements
- Example format for searching:
 - **`field.name:searchterm`**
 - **`field.name:"search term"`**

Examples

- Search for records with an alternative identifier value of "123":
 - **`alternativeIdentifiers.identifier:123`**
- Search for records with an alternative identifier label of "Legacy call number":
 - **`alternativeIdentifiers.label:"Legacy call number"`**

Expert searching – using ES fields

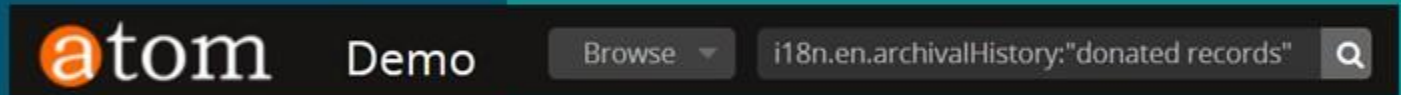
- Because AtoM is a multilingual application, some translatable fields are organized together under the common prefix of “i18n”
 - i18n is a common abbreviation in multilingual application development, short for internationalization.
- When searching these fields, the culture of your search must be entered as part of the field name, because nested within each i18n element of the index there will be a different term for each language.

Examples

- To search your **English** data for “linear feet” in the Extent and medium field, you would enter the search term as follows:
 - **i18n.en.extentAndMedium:“linear feet”**
- To search your **French** data for “albums de coupures” in the Scope and content field, you would enter the search term as follows:
 - **i18n.fr.scopeAndContent:“albums de coupures”**
- List of languages supported in AtoM, and their corresponding language codes:
 - **<http://bit.ly/AtoM-langs>**

AtoM ES fields: archival descriptions

- `alternativeIdentifiers.identifier`
- `alternativeIdentifiers.label`
- `createdAt`
- `digitalObject.filename`
- `digitalObject.mediaTypeId`
- `digitalObject.thumbnailPath`
- `findingAid.status`
- `findingAid.transcript`
- `hasDigitalObject`
- `i18n.%LANG%.accessConditions`
- `i18n.%LANG%.accruals`
- `i18n.%LANG%.acquisition`
- `i18n.%LANG%.alternateTitle`
- `i18n.%LANG%.appraisal`
- `i18n.%LANG%.archivalHistory`
- `i18n.%LANG%.arrangement`



Replace the placeholder **%LANG%** with the 2-letter culture code of the language in which you want to search

AtoM ES fields: archival descriptions

- `i18n.%LANG%.edition`
- `i18n.%LANG%.extentAndMedium`
- `i18n.%LANG%.findingAids`
- `i18n.%LANG%.institutionResponsibleIdentifier`
- `i18n.%LANG%.extentAndMedium`
- `i18n.%LANG%.findingAids`
- `i18n.%LANG%.institutionResponsibleIdentifier`
- `i18n.%LANG%.locationOfCopies`
- `i18n.%LANG%.locationOfOriginals`
- `i18n.%LANG%.physicalCharacteristics`
- `i18n.%LANG%.relatedUnitsOfDescription`
- `i18n.%LANG%.reproductionConditions`
- `i18n.%LANG%.revisionHistory`
- `i18n.%LANG%.rules`
- `i18n.%LANG%.scopeAndContent`
- `i18n.%LANG%.sources`

Browse ▼

`i18n.en.scopeAndContent:scrapbook*`



Returns all occurrences of **scrapbook*** (i.e. scrapbooks, scrapbooking, etc.) in scope and content in English descriptions

AtoM ES fields: archival descriptions

- `i18n.%LANG%.sources`
- `i18n.%LANG%.title`
- `identifier`
- `levelOfDescriptionId`
- `materialTypeId`
- `publicationStatusId`
- `referenceCode`
- `referenceCodeWithoutCountryAndRepo`
- `slug`
- `sourceCulture`
- `transcript`
- `updatedAt`
- `generalNotes.i18n.%LANG%.content`
- `alphaNumericNotes.i18n.%LANG%.content`
- `conservationNotes.i18n.%LANG%.content`
- `physicalDescriptionNotes.i18n.%LANG%.content`

The screenshot shows the AtoM ES web interface. At the top, a search bar contains the text 'identifier:19', which is highlighted with a red box. To the right of the search bar are icons for a paperclip, a globe, and an information icon, followed by a 'Log in' button. Below the search bar, the text 'Showing 2 results' is displayed, with 'Archival description' underneath. A search bar with 'Advanced search options' is visible. Below this, there are buttons for 'Print preview' and 'View:' with two icons (a grid and a list). To the right, it says 'Sort by: Relevance'. The results section shows '1 results with digital objects' and a link to 'Show results with digital objects'. The first result is 'History 331 : student essays, 1951-1952', with a red box around the number '19' in the identifier 'CA ON00362 RG-102.2 19'. Below this is the second result, '17 yrs old - To Ann & Archie from Vic Koski - May 25/43 S.S.M.', with a red box around the number '19' in the identifier 'ON00120 016-.1-1-2 19'. This result includes a small photograph of a man and a description: 'One annotated photograph of a head and shoulders shot of Veikko (Vic) Koski.'

AtoM ES fields: archival descriptions

- `continuationOfTitleNotes.i18n.%LANG%.content`

Linked entities

- `creators.i18n.%LANG%.authorizedFormOfName`
- `creators.otherNames.i18n.%LANG%.name`
- `creators.parallelNames.i18n.%LANG%.name`
- `creators.standardizedNames.i18n.%LANG%.name`
- `genres.i18n.%LANG%.name`
- `names.i18n.%LANG%.authorizedFormOfName`
- `names.otherNames.i18n.%LANG%.name`
- `names.parallelNames.i18n.%LANG%.name`
- `names.standardizedNames.i18n.%LANG%.name`
- `places.i18n.%LANG%.name`
- `repository.i18n.%LANG%.authorizedFormOfName`
- `subjects.i18n.%LANG%.name`

`subjects.i18n.en.name:"Arts and culture"` 

Return all English descriptions linked to a subject term "Arts and culture"

Searching for empty or populated fields

EMPTY / MISSING FIELDS

- Syntax:
 - `!_exists_:field.name`

Examples

Search for English descriptions with no scope and content:

- `!_exists_: i18n.en.scopeAndContent`

Search for French descriptions with no extent or medium statement:

- `!_exists_: i18n.fr.extentAndMedium`

POPULATED FIELDS

- Syntax:
 - `_exists_:field.name`

Examples

Search for English descriptions with a subject access point:

- `_exists_:subjects.i18n.en.name`

Search for Spanish descriptions with a statement on Sources in the Description control area:

- `_exists_:i18n.es.sources`

Publication status and modification dates

PUBLICATION STATUS

- Field name:
 - **publicationStatusId**

Use **159** for draft; **160** for published descriptions

Examples

Return all draft descriptions:

- **publicationStatusId:159**

Return all published descriptions:

- **publicationStatusId:160**

CREATION AND MODIFICATION

- Field names:
 - **createdAt**
 - **updatedAt**

Examples

Return all records last modified between Jan 1 2010 and Dec 31 2012:

- **updatedAt:[2010-01-01 TO 2012-12-31]**

Return all records created after January 1, 2012:

- **createdAt:[2012-01-01 TO *]**

See the docs for more tips

Search

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/advanced-search/>

Advanced search

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/advanced-search/>

Browse

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/browse/>

Documentation links for ES fields

Descriptions

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/advanced-search/#list-of-archival-description-es-fields>

Authority records

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/search-atom/#elasticsearch-authority-record-fields>

Accessions

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/search-atom/#elasticsearch-accession-record-fields>

Archival institutions

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/search-atom/#elasticsearch-archival-institution-record-fields>

Terms

- <https://www.accesstomemory.org/docs/latest/user-manual/access-content/search-atom/#elasticsearch-term-fields>

Questions?



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