

Basic data for date and time constructed in the HuTime Project

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HuTime Calendar Conversion Web API

About: 令和6年3月9日
<http://datetime.hutime.org/calendar/1001.1/date/2460378.5>

Alias
<http://datetime.hutime.org/calendar/1001.1/date/令和6年3月9日>

CURIE Examples
@prefix hcal: <<http://datetime.hutime.org/calendar/>>
hcal:1001.1/date/2460378.5
hcal:1001.1/date/令和6年3月9日
@prefix hcaldate: <<http://datetime.hutime.org/calendar/1001.1/date/>>
hcaldate:2460378.5
hcaldate:令和6年3月9日

Property Group	Property	Value
General	rdf:type	hutime:CalendarDate
	rdfs:label	令和6年3月9日
Period	hutime:begin	2024-03-09
	hutime:end	2024-03-09
JdPeriod	hutime:jdBegin	2460378.5
	hutime:jdEnd	2460379.5
	hutime:hasPossibleJdBeginning	2460378.5
	hutime:hasReliableJdBeginning	2460378.5

[time.hutime.org/calendar/1001.1/date/2460378.5](http://datetime.hutime.org/calendar/1001.1/date/2460378.5)

HuTime Calendar LOD

Calendar Conversion Service of the HuTime Project

Time Information System **HuTime** 日本語

Software Basic Data Documents Links About

Home > Time Basic Data > Calendar > Calendar Conversion Service

Calendar Conversion Form

Japanese Calendar Calendar Julian/Gregorian Calendar (reformed in 1582) Calendars

書式指定の前に型を選択 Auto Format and Type Formats

Enter date expressions

Convert

Date (begin)

Enter date expressions (e.g. 令和5年4月1日) into the left panel, and click the convert button.
Enter the next date expressions in a new line (up to 100 lines). → [Examples](#)

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(1) Enter date string(s) (2) Press the convert button (3) Converted results are output

<https://www.hutime.org/basicdata/calendar/form.html>

HuTime calendar



Web API (Application Programming Interface)

Makes date string interpretation and calendar conversion functions available to external programs.

- The web application for calendar conversion also calls this Web API.
- It is widely used for data generation, search, etc., and is one of the infrastructures for digital humanities in Japan (7 million accesses per year).

An example of request to the Web API

"慶應三年十月十四日" of a Japanese calendar date is converted to the Gregorian calendar date.

```
http://ap.hutime.org/cal/?method=conv  
&ical=1001.1&ival=慶應三年十月十四日&ocal=102.1
```



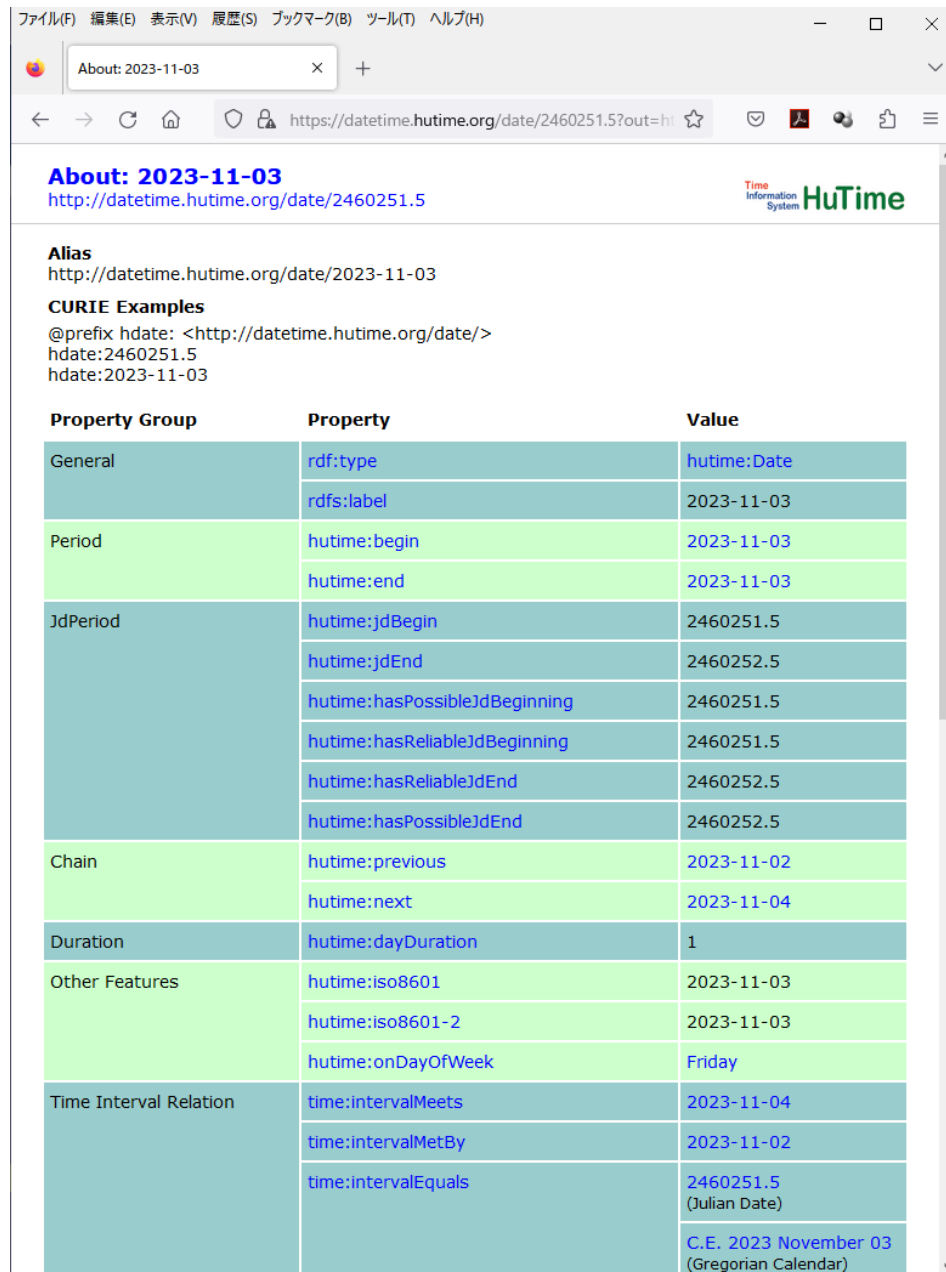
(The return) C.E. 1867 October 28

Detailed manual available

http://ap.hutime.org/cal/index_en.html



The existing system of the Calendar LOD



ファイル(F) 編集(E) 表示(V) 履歴(S) ブックマーク(B) ツール(T) ヘルプ(H)

About: 2023-11-03

https://datetime.hutime.org/date/2460251.5?out=hi

About: 2023-11-03
<http://datetime.hutime.org/date/2460251.5>

Time Information System **HuTime**

Alias
<http://datetime.hutime.org/date/2023-11-03>

CURIE Examples
@prefix hdate: <<http://datetime.hutime.org/date/>>
hdate:2460251.5
hdate:2023-11-03

Property Group	Property	Value
General	rdf:type	hutum:Date
	rdfs:label	2023-11-03
Period	hutum:begin	2023-11-03
	hutum:end	2023-11-03
JdPeriod	hutum:jdBegin	2460251.5
	hutum:jdEnd	2460252.5
	hutum:hasPossibleJdBeginning	2460251.5
	hutum:hasReliableJdBeginning	2460251.5
	hutum:hasReliableJdEnd	2460252.5
	hutum:hasPossibleJdEnd	2460252.5
Chain	hutum:previous	2023-11-02
	hutum:next	2023-11-04
Duration	hutum:dayDuration	1
Other Features	hutum:iso8601	2023-11-03
	hutum:iso8601-2	2023-11-03
	hutum:onDayOfWeek	Friday
Time Interval Relation	time:intervalMeets	2023-11-04
	time:intervalMetBy	2023-11-02
	time:intervalEquals	2460251.5 (Julian Date) C.E. 2023 November 03 (Gregorian Calendar)

Calendar LOD on HuTime web site

<http://datetime.hutime.org/>

- Information about calendar date, on when you access, are shown at first.
- This page linked to calendar date resources of other calendars.



Sample of RDF Data about a calendar date (a date of Japanese Calendar)

@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.

@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.

@prefix xsd: <http://www.w3.org/2001/XMLSchema#>.

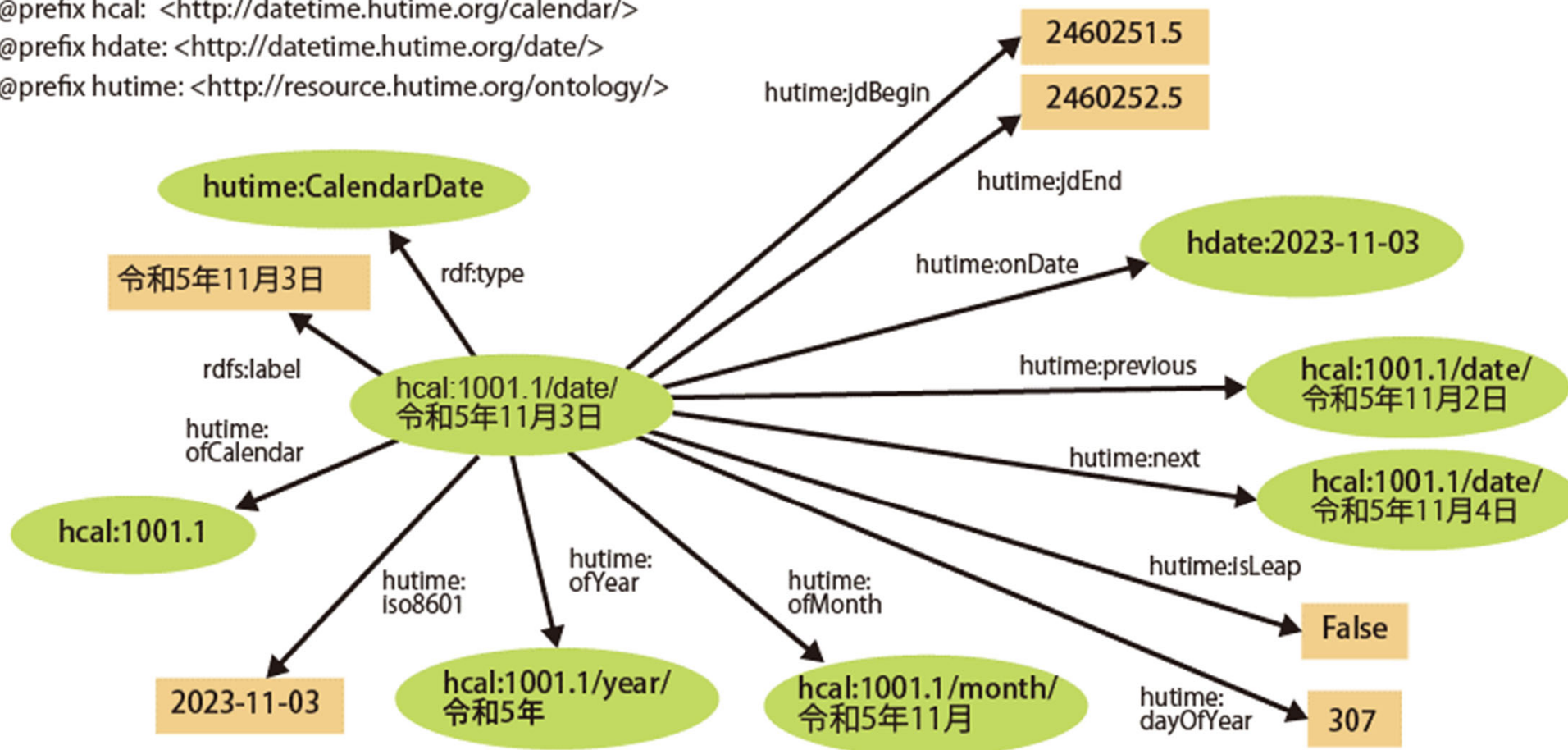
@prefix hutime: <http://resource.hutime.org/ontology/>.

@prefix dcterms: <http://purl.org/dc/terms/>.

```
<http://datetime.hutime.org/calendar/1001.1/date/2460251.5> dcterms:relation <http://dbpedia.org/resource/2023>,
    <http://dbpedia.org/resource/November_3>;
    hutime:begin <http://datetime.hutime.org/date/2460251.5>;
    hutime:calendarDuration <http://datetime.hutime.org/calendar/1001.1/duration/+0-0-1>;
    hutime:dayDuration "1.0"^^xsd:double;
    hutime:dayOfMonth 3 ;
    hutime:dayOfYear 307 ;
    hutime:end <http://datetime.hutime.org/date/2460251.5>;
    hutime:eraName "令和";
    hutime:hasPossibleJdBeginning "2460251.5"^^xsd:double;
    hutime:hasPossibleJdEnd "2460252.5"^^xsd:double;
    hutime:hasReliableJdBeginning "2460251.5"^^xsd:double;
    hutime:hasReliableJdEnd "2460252.5"^^xsd:double;
    hutime:isLeap false;
    hutime:iso8601 "2023-11-03"^^xsd:date;
    hutime:iso8601-2 "2023-11-03"^^xsd:date;
    hutime:jdBegin "2460251.5"^^xsd:double;
    hutime:jdEnd "2460252.5"^^xsd:double;
    hutime:monthName "11月";
    hutime:monthOfYear 11 ;
    hutime:next <http://datetime.hutime.org/calendar/1001.1/date/2460252.5>;
    hutime:ofCalendar <http://datetime.hutime.org/calendar/1001.1>;
    hutime:ofEra <http://datetime.hutime.org/calendar/1001.1/era/2458604.5>;
    hutime:ofMonth <http://datetime.hutime.org/calendar/1001.1/month/2460249.5>;
    hutime:ofYear <http://datetime.hutime.org/calendar/1001.1/year/2459945.5>;
    hutime:onDate <http://datetime.hutime.org/date/2460251.5>;
    hutime:onDayOfWeek <http://datetime.hutime.org/week/Friday>;
    hutime:onJulianDate <http://datetime.hutime.org/date/2460251.5>;
    hutime:previous <http://datetime.hutime.org/calendar/1001.1/date/2460250.5>;
    hutime:yearOfEra 5 ;
    a hutime:CalendarDate;
    rdfs:label "令和5年11月3日";
    <http://www.w3.org/2002/07/owl#intervalDuring> <http://datetime.hutime.org/calendar/1001.1/era/2458604.5>,
        <http://datetime.hutime.org/calendar/1001.1/month/2460249.5>,
        <http://datetime.hutime.org/calendar/1001.1/year/2459945.5>;
    <http://www.w3.org/2002/07/owl#intervalEquals> <http://datetime.hutime.org/date/2460251.5>;
    <http://www.w3.org/2002/07/owl#intervalMeets> <http://datetime.hutime.org/calendar/1001.1/date/2460252.5>;
    <http://www.w3.org/2002/07/owl#intervalMetBy> <http://datetime.hutime.org/calendar/1001.1/date/2460250.5>.
```

Sample of RDF Data about a calendar (a date of Japanese calendar)

@prefix hcal: <http://datetime.hutime.org/calendar/>
@prefix hdate: <http://datetime.hutime.org/date/>
@prefix hutime: <http://resource.hutime.org/ontology/>



The date resources can be used to describe RDF data

Examples

`<https://sites.google.com/view/pnc2024>` `dc:date`
`<https://datetime.hutime.org/calendar/101.1/date/2024-08-30>`

`<https://sites.google.com/view/pnc2024>` `dc:date`
`<https://datetime.hutime.org/calendar/1001.1/date/令和6年8月30日>`

Advantages to use date resource of the local calendars

- Local calendar dates are available directly in RDF data.
- Dates with special meanings can be represented in a local calendar.
(e.g. 「慶応2年1月1日」 is a day to celebrate New Year, but this meaning is unclear in the Gregorian calendar date representation (1866-02-15).)
- A local calendar date can be converted into the Gregorian calendar date through links between RDF data.

Calendar conversion Web API

<http://ap.hutime.org/cal/>

<http://www.hutime.org/basicdata/calendar/form.html>

- Interpreting date expression of Japanese calendar
- Converting date expression in Japanese calendar to Julian / Gregorian calendar

Calendar LOD

<http://datetime.hutime.org/>

- RDF resources of calendar periods (dates, months, years, and eras) of locale calendars are provided.
- Calendar periods of a local calendar are available to directly specify positions on a temporal axis instead of ISO 8601.