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Mike Peel
Jodrell Bank Centre for Astrophysics
Wikimedia UK

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NGC 7027
(149976) 2005 UO6
SETI
Europa (moon)
Crab Nebula

Crab Nebula

From Wikipedia, the free encyclopedia

Coordinates: $5^h\ 34^m\ 31.97^s$, +22° 00′ 52.1″

The **Crab Nebula** (catalogue designations M1, NGC 1952, Taurus A) is a supernova remnant and pulsar wind nebula in the constellation of Taurus. The nebula was observed by John Bevis in 1731; it corresponds to a bright supernova recorded by Chinese and Arab astronomers in 1054. At X-ray and gamma-ray energies above 30 KeV, the Crab is generally the strongest persistent source in the sky, with measured flux extending to above 10^{12} eV. Located at a distance of about 6,500 light-years (2 kpc) from Earth, the nebula has a diameter of 11 ly (3.4 pc) and expands at a rate of about 1,500 kilometers per second.

At the center of the nebula lies the Crab Pulsar, a neutron star (or spinning ball of neutrons), 28–30 km across,[5] which emits pulses of radiation from gamma rays to radio waves with a spin rate of 30.2 times per second. The nebula was the first astronomical object identified with a historical supernova explosion.

The nebula acts as a source of radiation for studying celestial bodies that occult it. In the 1950s and 1960s, the Sun's corona was mapped from observations of the Crab's radio waves passing through it, and in 2003, the thickness of the atmosphere of Saturn's moon Titan was measured as it blocked out X-rays from the nebula.

The cloudy remnants of SN 1054 are now known as the Crab Nebula. The nebula is also referred to as Messier 1 or M1, being the first Messier Object catalogued in 1758.

Contents [hide]

Crab Nebula

M1, the Crab Nebula. Courtesy of NASA/ESA

Observation data: J2000.0 epoch	
Type	Supernova Remnant
Right ascension	$05^h\ 34^m\ 31.97^s$[1]
Declination	+22° 00′ 52.1″[1]
Distance	6.5 ± 1.6 kly (2.0 ± 0.5 kpc)[2]
Apparent magnitude (V)	+8.4
Apparent dimensions (V)	420″ × 290″[3][a]
Constellation	Taurus
Physical characteristics	
Radius	5.5 ly (1.7 pc)[4]
Absolute magnitude (V)	−3.1 ± 0.5[b]
Notable features	Optical pulsar
Other designations	Messier 1,[1] NGC 1952,[1] Sharpless 244

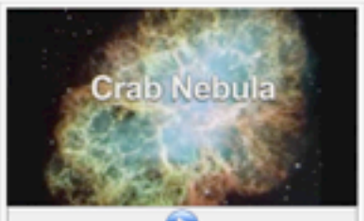
See also: Diffuse nebula, Lists of nebulae

Origins

[edit]

Main article: SN 1054

The creation of the Crab Nebula corresponds to the bright SN 1054 supernova that was recorded by Chinese astronomers and Arab astronomers in 1054 AD. The Crab Nebula itself was first observed in 1731 by John Bevis. The nebula was independently rediscovered in 1758 by Charles Messier as he was observing a bright comet. Messier catalogued it as the first entry in his catalogue of comet-like objects. The Earl of Rosse observed the nebula at Birr Castle in the 1840s, and referred to the object as the Crab Nebula because a drawing he made of it looked like a crab.[6]



The Crab Nebula video by NASA

In the early 20th century, the analysis of early photographs of the nebula taken several years apart revealed that it was expanding. Tracing the expansion back revealed that the nebula must have become visible on Earth about 900 years ago. Historical records revealed that a new star bright enough to be seen in the daytime had been recorded in the same part of the sky by Chinese and Arab astronomers in 1054.[7][8] Given its great distance, the daytime "guest star" observed by the Chinese and Arabs could only have been a supernova—a massive, exploding star, having exhausted its supply of energy from nuclear fusion and collapsed in on itself.

Recent analysis of historical records have found that the supernova that created the Crab Nebula probably appeared in April or early May, rising to its maximum brightness of between apparent magnitude −7 and −4.5 (brighter than everything in the night sky except the Moon) by July. The supernova was visible to the naked eye for about two years after its first observation.[9] Thanks to the recorded observations of Far Eastern and Middle Eastern astronomers of 1054, Crab Nebula became the first astronomical object recognized as being connected to a supernova explosion.[8]

Physical conditions

[edit]

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From Wikipedia, the free encyclopedia

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Origins [edit]

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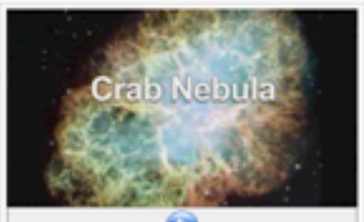

The Crab Nebula video by NASA

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Physical conditions [edit]

Language links

سديم_السرطان
Krabí_mlhovina
Nébuleuse du Crabe
سحابی_خرچنگ
Mgławica Kraba
Yengeç Bulutsusu
Месиje I

See also - related articles

References

See also

[edit]

- List of nebulae
- Crab Nebula in fiction
- New General Catalogue

Star portal

Notes

[edit]

a. ^ Size as measured on a very deep plate taken by Sidney van den Bergh in late 1969.[3][35]
b. ^ Apparent Magnitude of 8.4 - distance modulus of 11.5 ± 0.5 = −3.1 ± 0.5
c. ^ distance × tan(diameter_angle = 420″) = 4.1 ± 1.0 pc diameter = 13 ± 3 ly diameter

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[edit]

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External links

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- Data on the Crab Nebula, on a supernova remnants catalogue managed at University of Cambridge
- The Crab Nebula at ESA/Hubble
- Messier 1, SEDS Messier pages
- Images of the Crab from the Chandra X-ray Observatory
- Chandra page about the nebula

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- Slooh Video Podcast on M1 [dead link]
- M1 The Crab Pulsar in Crab Nebula / Video
- The Crab Nebula on WikiSky: DSS2, SDSS, GALEX, IRAS, Hydrogen α, X-Ray, Astrophoto, Sky Map, Articles and images

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Messier objects [hide]

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Book:Messier objects · Category:Messier objects · Portal:Astronomy

Sharpless catalog [hide]

Sh2-1 · Sh2-2 · Sh2-3 · Sh2-4 · Sh2-5 · Sh2-6 · Sh2-7 · Sh2-8 · Sh2-9 · Sh2-10 · Sh2-11 · Sh2-12 · Sh2-13 · Sh2-14 · Sh2-15 · Sh2-16 · Sh2-17 · Sh2-18 · Sh2-19 · Sh2-20 · Sh2-21 · Sh2-22 · Sh2-23 · Sh2-24 · Sh2-25 · Sh2-26 · Sh2-27 · Sh2-28 · Sh2-29 · Sh2-30 · Sh2-31 · Sh2-32 · Sh2-33 · Sh2-34 · Sh2-35 · Sh2-36 · Sh2-37 · Sh2-38 · Sh2-39 · Sh2-40 · Sh2-41 · Sh2-42 · Sh2-43 · Sh2-44 · Sh2-45 · Sh2-46 · Sh2-47 · Sh2-48 · Sh2-49 · Sh2-50 · Sh2-51 · Sh2-52 · Sh2-53 · Sh2-54 · Sh2-55 · Sh2-56 · Sh2-57 · Sh2-58 · Sh2-59 · Sh2-60 · Sh2-61 · Sh2-62 · Sh2-63 · Sh2-64 · Sh2-65 · Sh2-66 · Sh2-67 · Sh2-68 · Sh2-69 · Sh2-70 · Sh2-71 · Sh2-72 · Sh2-73 · Sh2-74 · Sh2-75 · Sh2-76 · Sh2-77 · Sh2-78 · Sh2-79 · Sh2-80 · Sh2-81 · Sh2-82 · Sh2-83 · Sh2-84 · Sh2-85 · Sh2-86 · Sh2-87 · Sh2-88 · Sh2-89 · Sh2-90 · Sh2-91 · Sh2-92 · Sh2-93 · Sh2-94 · Sh2-95 · Sh2-96 · Sh2-97 · Sh2-98 · Sh2-99 · Sh2-100 · Sh2-101 · Sh2-102 · Sh2-103 · Sh2-104 · Sh2-105 · Sh2-106 · Sh2-107 · Sh2-108 · Sh2-109 · Sh2-110 · Sh2-111 · Sh2-112 · Sh2-113 · Sh2-114 · Sh2-115 · Sh2-116 · Sh2-117 · Sh2-118 · Sh2-119 · Sh2-120 · Sh2-121 · Sh2-122 · Sh2-123 · Sh2-124 · Sh2-125 · Sh2-126 · Sh2-127 · Sh2-128 · Sh2-129 · Sh2-130 · Sh2-131 · Sh2-132 · Sh2-133 · Sh2-134 · Sh2-135 · Sh2-136 · Sh2-137 · Sh2-138 · Sh2-139 · Sh2-140 · Sh2-141 · Sh2-142 · Sh2-143 · Sh2-144 · Sh2-145 · Sh2-146 · Sh2-147 · Sh2-148 · Sh2-149 · Sh2-150 · Sh2-151 · Sh2-152 · Sh2-153 · Sh2-154 · Sh2-155 · Sh2-156 · Sh2-157 · Sh2-158 · Sh2-159 · Sh2-160 · Sh2-161 · Sh2-162 · Sh2-163 · Sh2-164 · Sh2-165 · Sh2-166 · Sh2-167 · Sh2-168 · Sh2-169 · Sh2-170 · Sh2-171 · Sh2-172 · Sh2-173 · Sh2-174 · Sh2-175 · Sh2-176 · Sh2-177 · Sh2-178 · Sh2-179 · Sh2-180 · Sh2-181 · Sh2-182 · Sh2-183 · Sh2-184 · Sh2-185 · Sh2-186 · Sh2-187 · Sh2-188 · Sh2-189 · Sh2-190 · Sh2-191 · Sh2-192 · Sh2-193 · Sh2-194 · Sh2-195 · Sh2-196 · Sh2-197 · Sh2-198 · Sh2-199 · Sh2-201 · Sh2-202 · Sh2-203 · Sh2-204 · Sh2-205 · Sh2-206 · Sh2-207 · Sh2-208 · Sh2-209 · Sh2-210 · Sh2-211 · Sh2-212 · Sh2-213 · Sh2-214 · Sh2-215 · Sh2-216 · Sh2-217 · Sh2-218 · Sh2-219 · Sh2-220 · Sh2-221 · Sh2-222 · Sh2-223 · Sh2-224 · Sh2-225 · Sh2-226 · Sh2-227 · Sh2-228 · Sh2-229 · Sh2-230 · Sh2-231 · Sh2-232 · Sh2-233 · Sh2-234 · Sh2-235 · Sh2-236 · Sh2-237 · Sh2-238 · Sh2-239 · Sh2-240 · Sh2-241 · Sh2-242 · Sh2-243 · **Sh2-244** · Sh2-245 · Sh2-246 · Sh2-247 · Sh2-248 · Sh2-249 · Sh2-250 · Sh2-251 · Sh2-252 · Sh2-253 · Sh2-254 · Sh2-255 · Sh2-256 · Sh2-257 · Sh2-258 · Sh2-259 · Sh2-260 · Sh2-261 · Sh2-262 · Sh2-263 · Sh2-264 · Sh2-265 · Sh2-266 · Sh2-267 · Sh2-268 · Sh2-269 · Sh2-270 · Sh2-271 · Sh2-272 · Sh2-273 · Sh2-274 · Sh2-275 · Sh2-276 · Sh2-277 · Sh2-278 · Sh2-279 · Sh2-280 · Sh2-281 · Sh2-282 · Sh2-283 · Sh2-284 · Sh2-285 · Sh2-286 · Sh2-287 · Sh2-288 · Sh2-289 · Sh2-290 · Sh2-291 · Sh2-292 · Sh2-293 · Sh2-294 · Sh2-295 · Sh2-296 · Sh2-297 · Sh2-298 · Sh2-299 · Sh2-301 · Sh2-302 · Sh2-303 · Sh2-304 · Sh2-305 · Sh2-306 · Sh2-307 · Sh2-308 · Sh2-309 · Sh2-310 · Sh2-311 · Sh2-312 · Sh2-313

See also: Stewart Sharpless · RCW catalog · Gum catalog · Nebula

Categories (+): Messier objects (–) (±) | NGC objects (–) (±) | Supernova remnants (–) (±) | Taurus constellation (–) (±) | Sharpless objects (–) (±) | (+)

Hidden categories: All pages needing factual verification | Wikipedia articles needing factual verification from February 2011 | Featured articles | All articles with dead external links | Articles with dead external links from August 2010 | Articles with inconsistent citation formats (–) (±)

WIKIMEDIA COMMONS

Main Page
Welcome
Community portal
Village pump

Participate
Upload file
Recent changes
Latest files
Random file
Help
Contact us
outreach
Donate

Toolbox
What links here
Related changes
Special pages
Printable version
Permanent link
Nominate category for discussion
Category RSS feed

In Wikipedia
Български
Česky
Corsu
Dansk
Deutsch
English
Español
Esperanto
Euskara
Français
한국어
Hrvatski
Ido
Italiano
Lietuvių
Magyar
Nederlands
日本語
Norsk (bokmål)
Novial
Polski
Português
Русский
Slovenčina
Slovenščina
Српски / Srpski
Suomi
Svenska
Українська
中文

Category:Crab Nebula

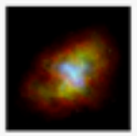
Pages in category "Crab Nebula"

This category contains only the following page.

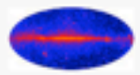
- Messier 1

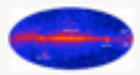
Media in category "Crab Nebula"

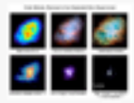
The following 38 files are in this category, out of 38 total.


0052 xray opt radio.jpg
117,047 bytes


19Fortuna-LB1-crab-m...
86,977 bytes

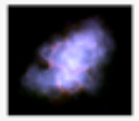

267634main allsky un...
4,404,284 bytes


267641main allsky la...
4,416,283 bytes

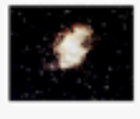

800crab.png
237,801 bytes


Chandra-crab.jpg
321,787 bytes


Changes in the Crab ...
58,873 bytes


Crab 3.6 5.8 8.0 mic...
81,115 bytes


Crab Lucky video2.gif
347,147 bytes


Crab Nebula 1959.jpg
205,988 bytes


Crab Nebula in Tauru...
5,273,511 bytes


Crab Nebula NGC 1952...
1,177,105 bytes

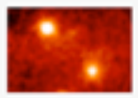

Crab Nebula pulsar x...
1,116,752 bytes


Crab nebula pulsar.jpg
12,896 bytes


Crab Nebula.jpg
6,478,711 bytes


CrabNebula VATT.jpg
172,867 bytes


Filaments in the Cra...
89,624 bytes


Gamma crab.gif
60,390 bytes


M1 - The Crab Nebula...
1,492,661 bytes


M1 ccd.jpg
42,561 bytes


M1 charta.png
274,390 bytes


M1 I lo Olsztyn.jpg
192,741 bytes


M1 RRGB.jpg
95,633 bytes


M1 Zoom.jpg
280,888 bytes


M1rosse.jpg
24,198 bytes


Messier 001 2MASS.jpg
297,646 bytes


Messier object 001.jpg
5,950 bytes


Messier1.jpg
7,495 bytes


Nebula stub.PNG
16,983 bytes


Nebulosa Granchio te...
16,069 bytes

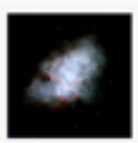

Nebulosagranchiomap.png
107,475 bytes


Peering into the Hea...
1,101,453 bytes


Sig05-003.jpg
1,080,460 bytes


Sig05-004.jpg
1,013,823 bytes


Sig06-028.jpg
1,259,183 bytes


Spitzer Crab Nebula.jpg
1,295,214 bytes


The Crab Nebula - A ...
7,992,605 bytes


The Crab Nebula NASA...
15,502,612 bytes

Categories (+"): Messier objects (–) (s) (,) (↑) | NGC objects by name (–) (s) (,) (↑) | Supernova remnants (–) (s) (,) (↑) | Taurus (constellation) (–) (s) (,) (↑) | (+)

This page was last modified on 16 December 2010, at 16:19.

Getting content

API:Main page

Main page
Browse categories
Community portal
Recent changes
Tech blog
Current issues
Support
User help
Technical manual
FAQ
Support desk
Download
Development
Communication
Toolbox

MediaWiki has three interfaces:

- the **MediaWiki API**, which provides convenient access to wiki features, data and meta-data. Read this article for an overview of the API.
- the **Special:Export** page, which provides bulk export of wiki content as XML. Read the Export help article on meta.mediawiki.org for more information.
- the **standard web-based interface** (which you are likely using right now). Read Manual:Parameters to index.php for information on using the web-based interface.

This page is part of the MediaWiki API documentation.

Language: **English** • Deutsch • Español • Français • 日本語 • Русский • Українська • 粵語 • 中文 • 中文(简)

See the menu bar on the right for the API sub-topics.

The goal of this API (Application Programming Interface) is to provide direct, high-level access to the data contained in the MediaWiki databases. Client programs can use the API to login, get data, and post changes. The API supports thin web-based JavaScript clients, such as Navigation popups or LiveRC, end-user applications (such as vandal fighter), and can be accessed by another web site (tool server's utilities).

Output from the API is available in a wide range of formats, including JSON, WDDX, XML, YAML and PHP's native serialization format.

Each API module uses a set of parameters. To prevent name collision, each submodule of action=query has a two letter abbreviation, and each parameter name begins with those two letters.

- Short help and parameter guide can be obtained from the api itself
- Mailing List for notifications and questions: API mailing list
  - Low-traffic mailing list for announcements only (all posts to this list are posted to mediawiki-api as well): mediawiki-api-announce
- View and report API bugs: BugZilla (*When reporting new bugs, don't forget to set Component=API*)

Useful Links [edit]

- API Live
- API source code in SVN
- Database layout
- The current DB schema in SVN
- Creating a Bot howto

Archive [edit]

- API:Wikimania 2006 API discussion

MediaWiki API

Search API pages

Quick overview:

- Quick start guide
- FAQ
- Formats
- Error reporting
- Restricting usage
- Authentication
  - Login
  - Logout
- Queries
  - Meta information
  - Properties
  - Lists
- Search suggestions
- Expanding templates and rendering
- Purging pages' caches
- Parameter information
- Changing wiki content
  - Create and edit pages
  - Move pages
  - Rollback
  - Delete pages
  - Restore deleted revisions
  - (Un)protect pages
  - (Un)block users
  - (Un)watch pages
  - Send e-mail
  - Patrol changes
  - Import pages
  - Change user group membership
  - Upload files
- Watchlist feed
- Extensions
- Using the API in MediaWiki and extensions
- Miscellaneous
- Implementation
- Client code

Category: MediaWiki Development

http://www.mediawiki.org/wiki/API:Main_page

categories / cl [edit]

Gets a list of all categories used on the provided pages. This module can be used as a generator.

MediaWiki version: 1.11

Parameters [edit]

- clprop: Which properties to get (*cannot be used with a generator*)
  - sortkey: The sort key
  - timestamp: The date and time the page was added to the category, or the date and time its sortkey was changed last
- clshow: Which kinds of categories to list. Conflicting options (such as hidden and !hidden) cannot be used together.
  - hidden: Only list hidden categories
  - !hidden: Don't list hidden categories
- cllimit: Maximum number of results to return
- clcontinue: When more results are available, use this to continue
- clcategories: Only list these categories. Useful to check whether a certain page is in a certain category
  - This parameter takes full titles, so the Category: prefix must be used

Example [edit]

Get a list of categories en:Albert Einstein belongs to

api.php ? action=query & titles=Albert%20Einstein & prop=categories

```
<api>
  <query>
    <pages>
      <page pageid="736" ns="0" title="Albert Einstein">
        <categories>
          <cl ns="14" title="Category:1879 births" />
          <cl ns="14" title="Category:1955 deaths" />
          <cl ns="14" title="Category:Albert Einstein" />
          ...
        </categories>
      </page>
    </pages>
  </query>
</api>
```

Possible warnings [edit]

- 'title' is not a category
  - The title mentioned is not in the Category: namespace

Possible errors [edit]

- code: clshow
  - info: Incorrect parameter - mutually exclusive values may not be supplied

imageinfo / ii [edit]

Gets image information for any titles in the image namespace

MediaWiki version: 1.11

http://www.mediawiki.org/wiki/API:Properties#categories_.2F_cl

DBpedia Blog | Get Involved | Get Help

DBpedia is a community effort to extract structured information from Wikipedia and to make this information available on the Web. DBpedia allows you to ask sophisticated queries against Wikipedia, and to link other data sets on the Web to Wikipedia data. We hope this will make it easier for the amazing amount of information in Wikipedia to be used in new and interesting ways, and that it might inspire new mechanisms for navigating, linking and improving the encyclopaedia itself.

News

DBpedia Spotlight - Text Annotation Toolkit released
We are happy to announce a first release of DBpedia Spotlight - Shedding Light on the Web of Documents. The amount of data in the Linked Open Data cloud is steadily increasing. Interlinking text documents with this data enables the Web of Data to be used as background knowledge within document-oriented applications such as search and [...]

DBpedia 3.6 AMI Available
In line with prior releases of DBpedia, there is a new 3.6 edition of the DBpedia AMI available from Amazon EC2. What is a DBpedia AMI? A preconfigured Virtuoso Cluster Edition database that includes a preloaded DBpedia dataset. The entire deliverable is packaged as an Amazon Machine Instance (AMI), which is a cloud hosted virtual machine. Why is [...]

DBpedia 3.6 released
Hi all, we are happy to announce the release of DBpedia 3.6. The new release is based on Wikipedia dumps dating from October/November 2010. The new DBpedia dataset describes more than 3.5 million things, of which 1.67 million are classified in a consistent ontology, including 364,000 persons, 462,000 places, 99,000 music albums, 54,000 films, 16,500 video games, [...]

The DBpedia Knowledge Base

Knowledge bases are playing an increasingly important role in enhancing the intelligence of Web and enterprise search and in supporting information integration. Today, most knowledge bases cover only specific domains, are created by relatively small groups of knowledge engineers, and are very cost intensive to keep up-to-date as domains change. At the same time, Wikipedia has grown into one of the central knowledge sources of mankind, maintained by thousands of contributors. The DBpedia project leverages this gigantic source of knowledge by extracting structured information from Wikipedia and by making this information accessible on the Web under the terms of the Creative Commons Attribution-ShareAlike 3.0 License and the GNU Free Documentation License.

The DBpedia knowledge base currently describes more than 3.5 million things, out of which 1.67 million are classified in a consistent Ontology, including 364,000 persons, 462,000 places, 99,000 music albums, 54,000 films, 17,000 video games, 148,000 organisations, 169,000 species and 5,200 diseases. The DBpedia data set features labels and abstracts for these 3.5 million things in up to 97 different languages; 1,850,000 links to images and 5,900,000 links to external web pages; 6,500,000 external links into other RDF datasets, 633,000 Wikipedia categories, and 2,900,000 YAGO categories. The DBpedia knowledge base altogether consists of over 672 million pieces of information (RDF triples) out of which 286 million were extracted from the English edition of Wikipedia and 386 million were extracted from other language editions.

The DBpedia knowledge base has several advantages over existing knowledge bases: it covers many domains; it represents real community agreement; it automatically evolves as Wikipedia changes, and it is truly multilingual. The DBpedia knowledge base allows you to ask quite surprising queries against Wikipedia, for instance "Give me all cities in New Jersey with more than 10,000 inhabitants" or "Give me all Italian musicians from the 18th century". Altogether, the use cases of the DBpedia knowledge base are widespread and range from enterprise knowledge management, over Web search to revolutionizing Wikipedia search.

Nucleus for the Web of Data

Within the W3C Linking Open Data (LOD) community effort, an increasing number of data providers have started to publish and interlink data on the Web according to Tim Berners-Lee's Linked Data principles. The resulting Web of Data currently consists of several billion RDF triples and covers domains such as geographic information, people, companies, online communities, films, music, books and scientific publications. In addition to publishing and interlinking datasets, there is also ongoing work on Linked Data browsers, Linked Data crawlers, Web of Data search engines and other applications that consume Linked Data from the Web.

The DBpedia knowledge base is served as Linked Data on the Web. As DBpedia defines Linked Data URIs for millions of concepts, various data providers have started to set RDF links from their data sets to DBpedia, making DBpedia one of the central interlinking-hubs of the emerging Web of Data.

Wiki Contents

This Wiki provides information about the DBpedia community project:

- Datasets gives an overview about the DBpedia knowledge base.
- Ontology gives an overview about the DBpedia ontology.
- Online Access describes how the data set can be accessed via a SPARQL endpoint and as Linked Data.
- Downloads provides the DBpedia data sets for download.
- Interlinking describes how the DBpedia data set is interlinked with various other datasets on the Web.
- Use Cases lists different use cases for the DBpedia data set.
- Extraction Framework describes the DBpedia information extraction framework.
- Data Provision Architecture paints a picture of the software and protocols used to serve DBpedia on the Web.
- Community explains how the DBpedia community collaborates and how people can contribute to the DBpedia effort.
- DBpedia Mapping Wiki containing the mappings used by the DBpedia extraction.
- Credits lists the people and institutions that have contributed to DBpedia so far.
- Next steps describes ideas and future plans for the DBpedia project.

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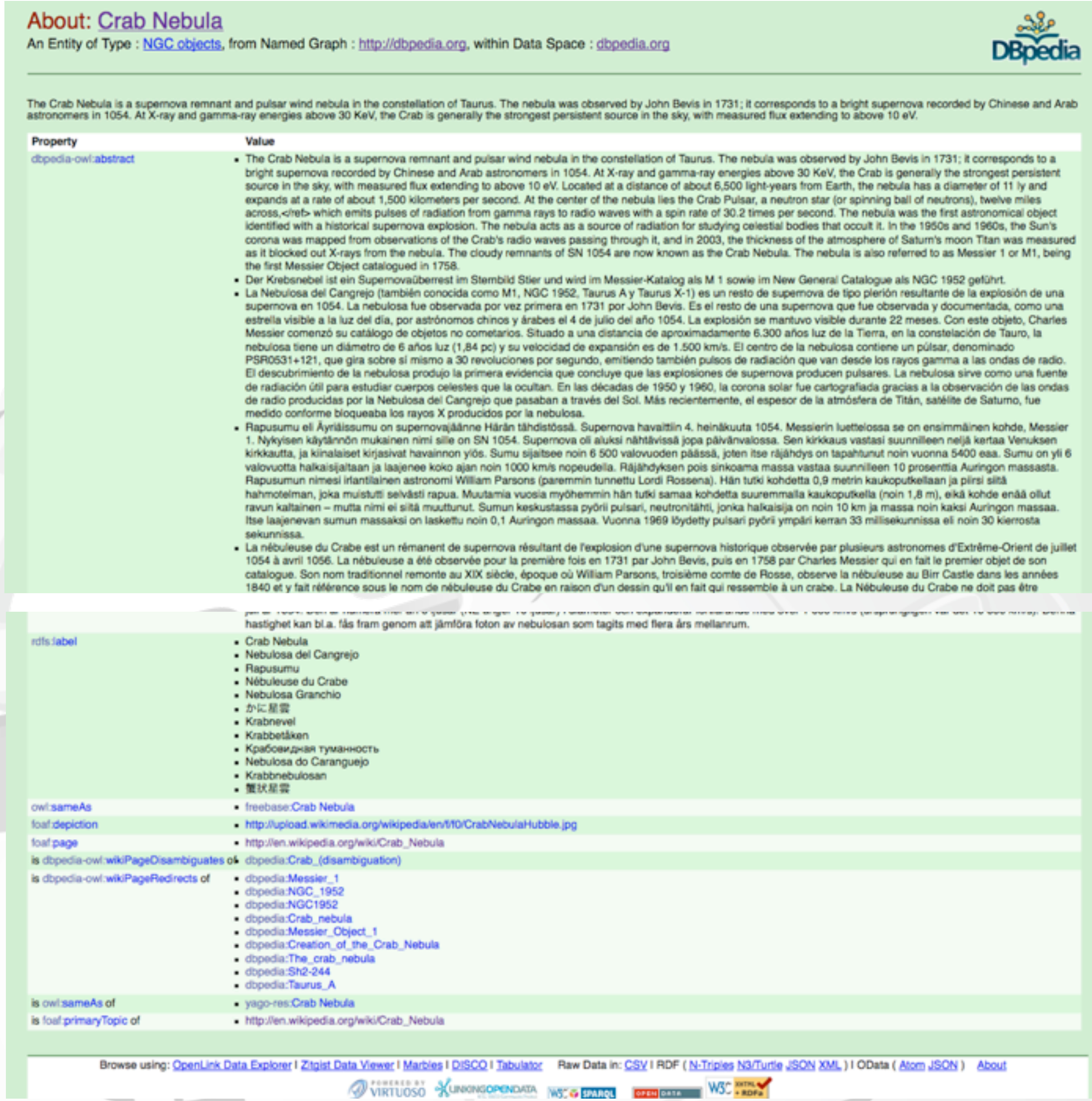
For a recent overview paper about DBpedia, please refer to:

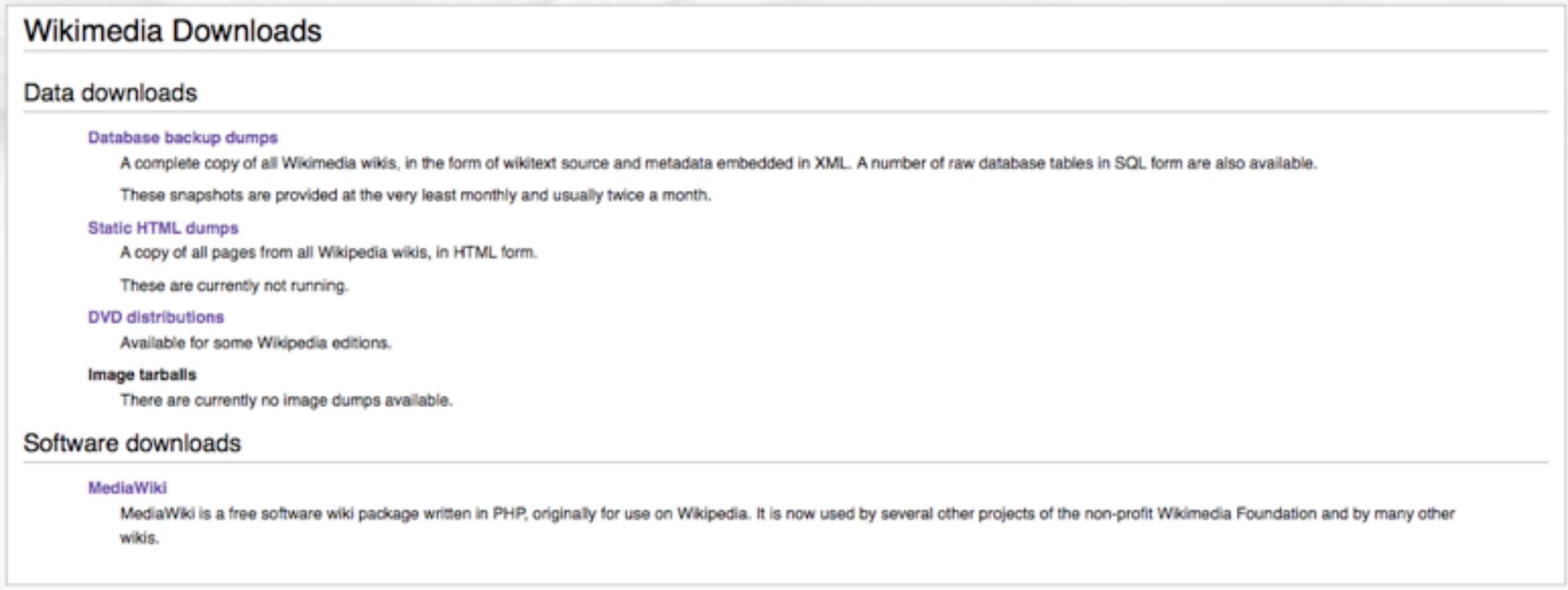
- Christian Bizer, Jens Lehmann, Georgi Kobilarov, Sören Auer, Christian Becker, Richard Cyganiak, Sebastian Hellmann: DBpedia – A Crystallization Point for the Web of Data. Journal of Web Semantics: Science, Services and Agents on the World Wide Web, Issue 7, Pages 154–165, 2009.
- Further papers about DBpedia are found at Publications

Last Modification: 2011-01-11 14:56:07 by Max Jakob

http://dbpedia.org/About

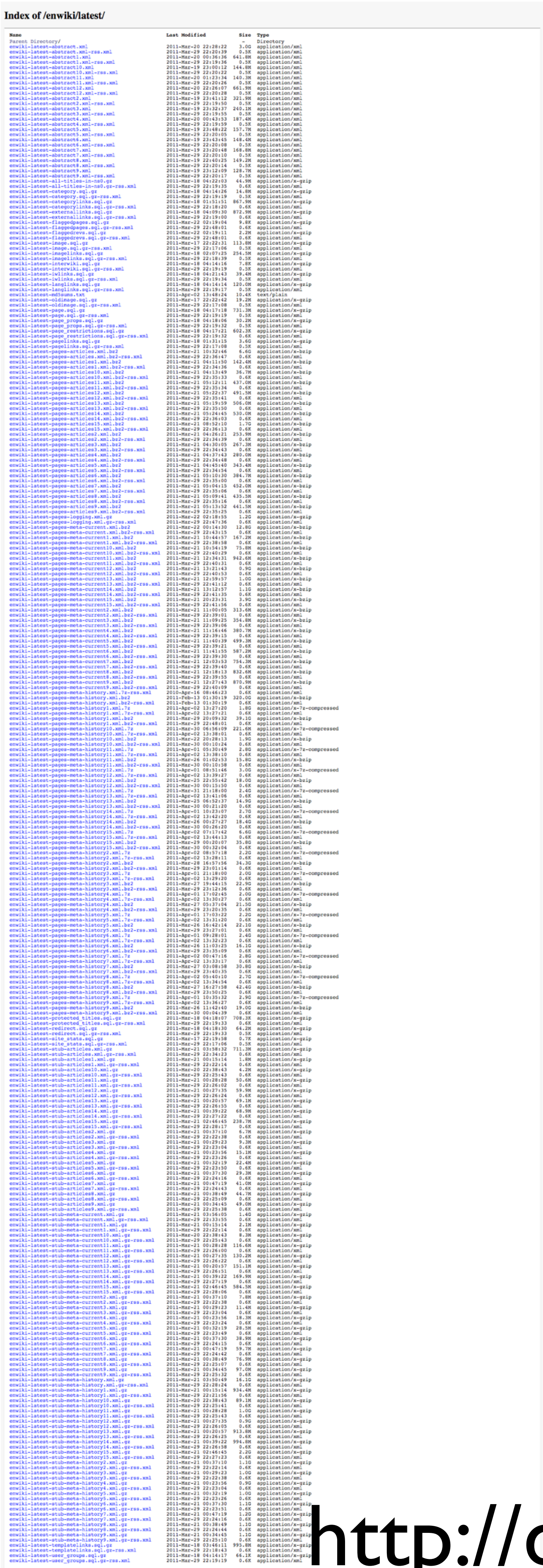


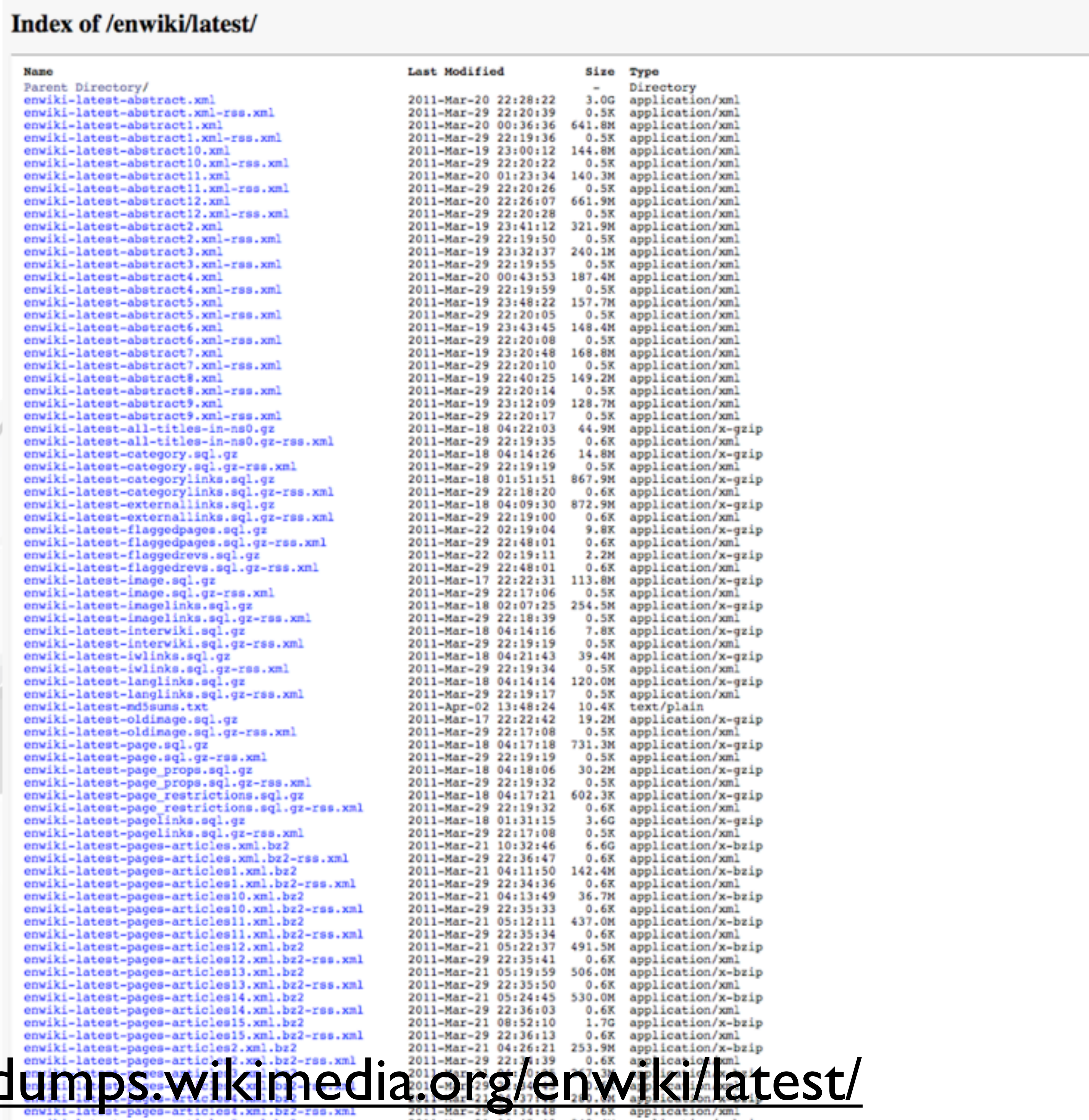
http://dbpedia.org/page/Crab_Nebula



http://dumps.wikimedia.org/

http://en.wikipedia.org/wiki/Wikipedia:Database_download





Index of /enwiki/latest/

Name	Last Modified	Size	Type
Parent Directory/		-	Directory
enwiki-latest-abstract.xml	2011-Mar-20 22:28:22	3.0G	application/xml
enwiki-latest-abstract.xml-rss.xml	2011-Mar-29 22:20:39	0.5K	application/xml
enwiki-latest-abstract1.xml	2011-Mar-20 00:36:36	641.8M	application/xml
enwiki-latest-abstract1.xml-rss.xml	2011-Mar-29 22:19:36	0.5K	application/xml
enwiki-latest-abstract10.xml	2011-Mar-19 23:00:12	144.8M	application/xml
enwiki-latest-abstract10.xml-rss.xml	2011-Mar-29 22:20:22	0.5K	application/xml
enwiki-latest-abstract11.xml	2011-Mar-20 01:23:34	140.3M	application/xml
enwiki-latest-abstract11.xml-rss.xml	2011-Mar-29 22:20:26	0.5K	application/xml
enwiki-latest-abstract12.xml	2011-Mar-20 22:26:07	661.9M	application/xml
enwiki-latest-abstract12.xml-rss.xml	2011-Mar-29 22:20:28	0.5K	application/xml
enwiki-latest-abstract2.xml	2011-Mar-19 23:41:12	321.9M	application/xml
enwiki-latest-abstract2.xml-rss.xml	2011-Mar-29 22:19:50	0.5K	application/xml
enwiki-latest-abstract3.xml	2011-Mar-19 23:32:37	240.1M	application/xml
enwiki-latest-abstract3.xml-rss.xml	2011-Mar-29 22:19:55	0.5K	application/xml
enwiki-latest-abstract4.xml	2011-Mar-20 00:43:53	187.4M	application/xml
enwiki-latest-abstract4.xml-rss.xml	2011-Mar-29 22:19:59	0.5K	application/xml
enwiki-latest-abstract5.xml	2011-Mar-19 23:48:22	157.7M	application/xml
enwiki-latest-abstract5.xml-rss.xml	2011-Mar-29 22:20:05	0.5K	application/xml
enwiki-latest-abstract6.xml	2011-Mar-19 23:43:45	148.4M	application/xml
enwiki-latest-abstract6.xml-rss.xml	2011-Mar-29 22:20:08	0.5K	application/xml
enwiki-latest-abstract7.xml	2011-Mar-19 23:20:48	168.8M	application/xml
enwiki-latest-abstract7.xml-rss.xml	2011-Mar-29 22:20:10	0.5K	application/xml
enwiki-latest-abstract8.xml	2011-Mar-19 22:40:25	149.2M	application/xml
enwiki-latest-abstract8.xml-rss.xml	2011-Mar-29 22:20:14	0.5K	application/xml
enwiki-latest-abstract9.xml	2011-Mar-19 23:12:09	128.7M	application/xml
enwiki-latest-abstract9.xml-rss.xml	2011-Mar-29 22:20:17	0.5K	application/xml
enwiki-latest-all-titles-in-ns0.gz	2011-Mar-18 04:22:03	44.9M	application/x-gzip
enwiki-latest-all-titles-in-ns0.gz-rss.xml	2011-Mar-29 22:19:35	0.6K	application/xml
enwiki-latest-category.sql.gz	2011-Mar-18 04:14:26	14.8M	application/x-gzip
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enwiki-latest-flaggedrevs.sql.gz	2011-Mar-22 02:19:11	2.2M	application/x-gzip
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enwiki-latest-pages-articles12.xml.bz2-rss.xml	2011-Mar-29 22:35:41	0.6K	application/xml
enwiki-latest-pages-articles13.xml.bz2	2011-Mar-21 05:19:59	506.0M	application/x-bzip
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enwiki-latest-pages-articles14.xml.bz2	2011-Mar-21 05:24:45	530.0M	application/x-bzip
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enwiki-latest-pages-articles15.xml.bz2-rss.xml	2011-Mar-29 22:36:13	0.6K	application/xml
enwiki-latest-pages-articles2.xml.bz2	2011-Mar-21 04:26:21	253.9M	application/x-bzip
enwiki-latest-pages-articles2.xml.bz2-rss.xml	2011-Mar-29 22:34:39	0.6K	application/xml
enwiki-latest-pages-articles4.xml.bz2-rss.xml	2011-Mar-29 22:34:48	0.6K	application/xml

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Examples of content reuse

lookUP

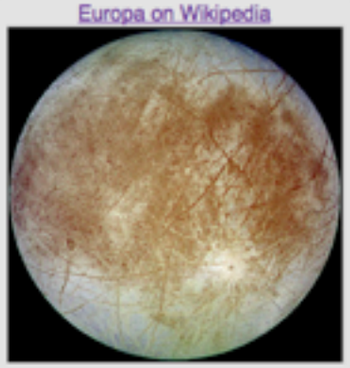
Astronomical object name: Europa Search

Europa (RA 00:58:36.7, Dec +05:05:15 FK5 J2000) Satellite

View maps of the area around Europa:

- Microwave via Chromoscope (Planck)
- Infrared via Wikisky (IRAS)
- Optical via Wikisky (DSS)
- Optical via Google Sky (DSS)
- UV via Wikisky (GALEX)
- X-ray via Wikisky (RASS)
- Gamma ray via Chromoscope (Fermi)
- Photo via Wikisky (AstroPhoto)

Europa on Wikipedia



Generate an ephemeris using JPL HORIZONS.

30×30′ finder chart from Your Sky.
10×10′ finder chart from the Minnesota Automated Plate Scanner Catalog (if available).

View in Microsoft's World Wide Telescope (requires Silverlight).

flickr images of Europa by astrotag (what's that?) or within Astrophotography.

Find recent papers on astro-ph or papers on the Astrophysics Data System (ADS).

Blog posts

- NASA Mission to Europa May Fall to Budget Cuts
  Next week, the US National Academy of Sciences will release their decadal review of priorities for planetary science in 2013-2022, and it will be interesting to see how highly prioritized a mission to Jupiter´s enticing moon **Europa** will be. But according to Space News, word from the NASA Advisory Council´s planetary science subcommittee is that ...
  Posted by Universe Today **29 days ago**
- Sistema satellitare Europeo EGNOS, da adesso certificato per compiti di Safety-of-Life
  (Immagine, credit ESA)NEWS SPAZIO :- Il sistema Europeo EGNOS (European Geostationary Navigation Overlay Service) è un´iniziativa dell´ Agenzia Spaziale Europea (ESA) in collaborazione con la Commissione Europea ed Eurocontrol, l´ente europeo per la sicurezza dell'aviazione civile. Si tratta della prima di due fasi che porteranno alla realizzazione di GALILEO, il primo sistema di localizzazione satellitare interamente Europeo. Sebbene quest'ultimo abbia avuto nel corso di qu.....
  Posted by News Spazio **29 days ago**
- Moon Used to Peek Inside Jupiter's "Missing" Belt
  Last May amateur astronomers alerted the world to the fact that the gas giant planet Jupiter had lost a belt. Normally the stormy world is encircled by two dark, rusty bands of clouds created by fast-moving jet streams. The features are easy to spot with a backyard telescope (and even easier with pro 'scopes, such as Hubble or Cassini). Jupiter in visible light, as seen by the Cassini space probe.—Picture courtesy NASABut seemingly out of the blue, one of the bands—called the south equ...
  Posted by Breaking Orbit **52 days ago**

Further information about Europa from SkyBot

Notes

- Europa is in our solar system and thus its celestial coordinates will vary noticeably over time. The given position is valid for *now*.

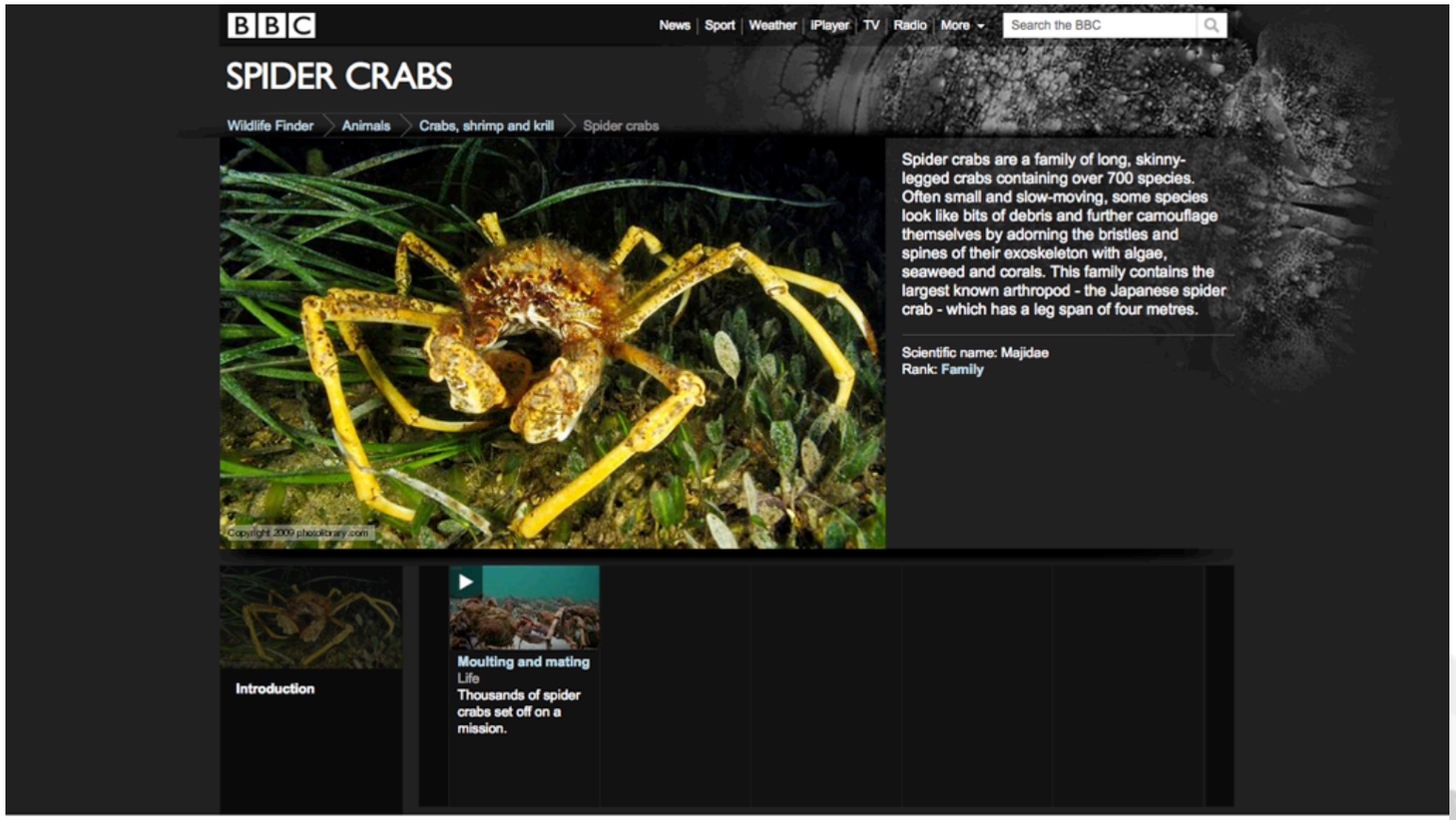
Alternate Output

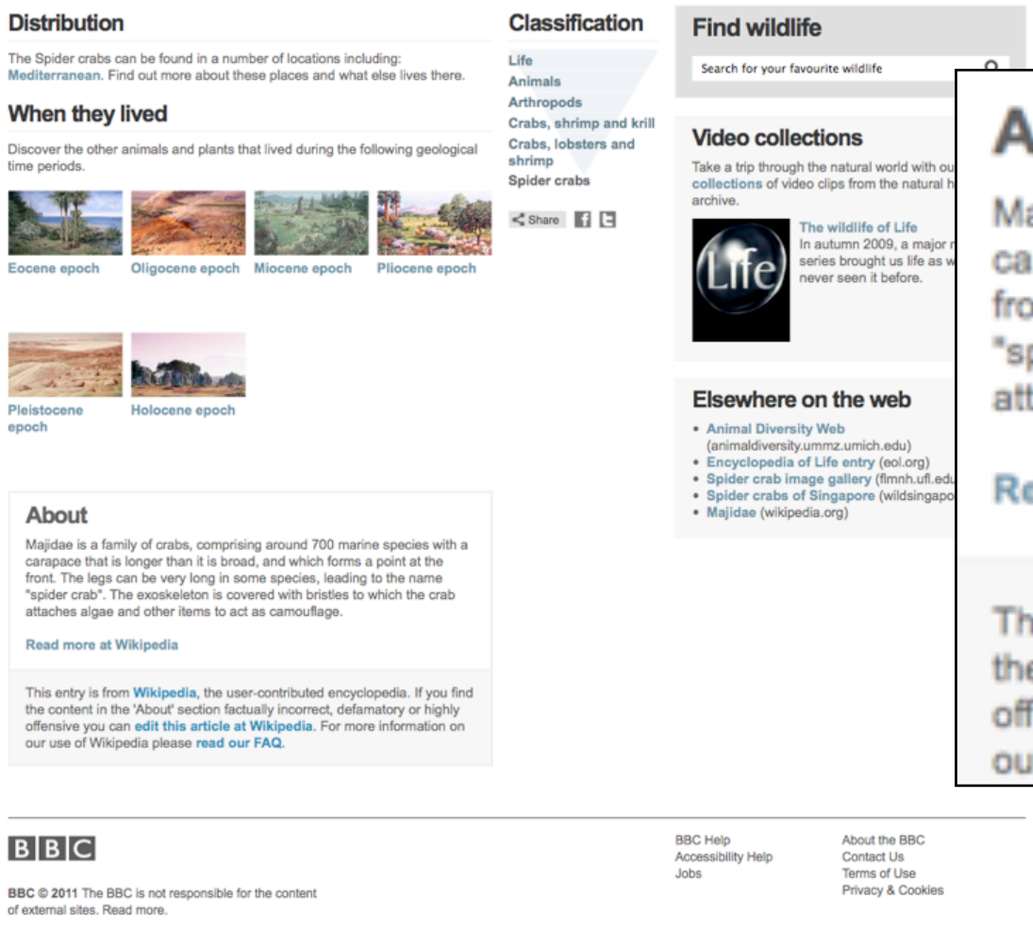
- **XML**: http://www.strudel.org.uk/lookUP/xml/?name=Europa
- **JSONp**: http://www.strudel.org.uk/lookUP/json/?name=Europa&callback=lk
- **AVM microformat**: http://www.strudel.org.uk/lookUP/avm/?name=Europa

Notes on output formats.

About | iPhone App | Mobile (basic) | Widget | Twitter | Last updated: 2011-01-20

http://www.strudel.org.uk/lookUP/?name=Europa





http://www.bbc.co.uk/nature/life/Majidae

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Brian Cox

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Brian Edward "B. E." Cox OBE (born 3 March 1968) is a British particle physicist, a Royal Society University Research Fellow and a professor at the University of Manchester. He is a member of the High Energy Physics group at the University of Manchester, and works on the ATLAS experiment at the Large Hadron Collider, CERN, near Geneva, Switzerland. He is also working on the R&D project of the FP420 experiment in an international collaboration to upgrade the ATLAS and the CMS experiment by installing additional, smaller detectors at a distance of 420 metres (1,380 ft) from the interaction points of the main experiments.

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... added Brian Cox to the group ... Beyond ...

I-Feel-Pretty added Brian Cox to I-Feel-Pretty's

http://www.last.fm/music/Brian%2520Cox

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Italiano
עברית
ქართული
Latviešu

Crab Nebula

From Wikipedia, the free encyclopedia

Coordinates: 05h 34m 31.97s, +22° 00′ 52.1″

The **Crab Nebula** (catalogue designations M1, NGC 1952, Taurus A) is a supernova remnant and pulsar wind nebula in the constellation of Taurus. The nebula was observed by John Bevis in 1731; it corresponds to a bright supernova recorded by Chinese and Arab astronomers in 1054. At X-ray and gamma-ray energies above 30 KeV, the Crab is generally the strongest persistent source in the sky, with measured flux extending to above 10^{12} eV. Located at a distance of about 6,500 light-years (2 kpc) from Earth, the nebula has a diameter of 11 ly (3.4 pc) and expands at a rate of about 1,500 kilometers per second.

At the center of the nebula lies the Crab Pulsar, a neutron star (or spinning ball of neutrons), 28–30 km across,[5] which emits pulses of radiation from gamma rays to radio waves with a spin rate of 30.2 times per second. The nebula was the first astronomical object identified with a historical supernova explosion.

The nebula acts as a source of radiation for studying celestial bodies that occult it. In the 1950s and 1960s, the Sun's corona was mapped from observations of the Crab's radio waves passing through it, and in 2003, the thickness of the atmosphere of Saturn's moon Titan was measured as it blocked out X-rays from the nebula.

The cloudy remnants of SN 1054 are now known as the Crab Nebula. The nebula is also referred to as Messier 1 or M1, being the first Messier Object catalogued in 1758.

Contents [hide]

Crab Nebula

M1, the Crab Nebula. Courtesy of NASA/ESA

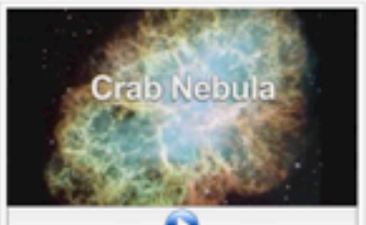
Observation data: J2000.0 epoch	
Type	Supernova Remnant
Right ascension	05h 34m 31.97s[1]
Declination	+22° 00′ 52.1″[1]
Distance	6.5 ± 1.6 kly (2.0 ± 0.5 kpc)[2]
Apparent magnitude (V)	+8.4
Apparent dimensions (V)	420″ × 290″[3][a]
Constellation	Taurus
Physical characteristics	
Radius	5.5 ly (1.7 pc)[4]
Absolute magnitude (V)	−3.1 ± 0.5[b]
Notable features	Optical pulsar
Other designations	Messier 1,[1] NGC 1952,[1] Sharpless 244

See also: Diffuse nebula, Lists of nebulae

Origins [edit]

Main article: SN 1054

The creation of the Crab Nebula corresponds to the bright SN 1054 supernova that was recorded by Chinese astronomers and Arab astronomers in 1054 AD. The Crab Nebula itself was first observed in 1731 by John Bevis. The nebula was independently rediscovered in 1758 by Charles Messier as he was observing a bright comet. Messier catalogued it as the first entry in his catalogue of comet-like objects. The Earl of Rosse observed the nebula at Birr Castle in the 1840s, and referred to the object as the Crab Nebula because a drawing he made of it looked like a crab.[6]



The Crab Nebula video by NASA

In the early 20th century, the analysis of early photographs of the nebula taken several years apart revealed that it was expanding. Tracing the expansion back revealed that the nebula must have become visible on Earth about 900 years ago. Historical records revealed that a new star bright enough to be seen in the daytime had been recorded in the same part of the sky by Chinese and Arab astronomers in 1054.[7][8] Given its great distance, the daytime "guest star" observed by the Chinese and Arabs could only have been a supernova—a massive, exploding star, having exhausted its supply of energy from nuclear fusion and collapsed in on itself.

Recent analysis of historical records have found that the supernova that created the Crab Nebula probably appeared in April or early May, rising to its maximum brightness of between apparent magnitude −7 and −4.5 (brighter than everything in the night sky except the Moon) by July. The supernova was visible to the naked eye for about two years after its first observation.[9] Thanks to the recorded observations of Far Eastern and Middle Eastern astronomers of 1054, Crab Nebula became the first astronomical object recognized as being connected to a supernova explosion.[8]

Physical conditions [edit]

In visible light, the Crab Nebula consists of a broadly oval-shaped mass of filaments, about 6 arcminutes long and 4 arcminutes wide (by comparison, the full moon is 30 arcminutes across) surrounding a diffuse blue central region. In three dimensions, the nebula is thought to be

Editing Crab Nebula

From Wikipedia, the free encyclopedia

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Templates Named references Error check

```
 | constellation = [[Taurus (constellation)|Taurus]]
 | radius_ly = 5.5 ly (1.7 pc) <ref>
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  | last2 = Ostlie | first2 = Dale A.
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 | names = Messier 1,<ref name="simbad" /> NGC 1952,<ref name="simbad" /> [[Sharpless catalog|Sharpless]] 244
}}

The '''Crab Nebula''' (catalogue designations [[Messier object|M]]1, [[New General Catalogue|NGC]] 1952, Taurus A) is a
[[supernova remnant]] and [[pulsar wind nebula]] in the [[constellation]] of [[Taurus (constellation)|Taurus]]. The [[nebula]] was
observed by [[John Bevis]] in 1731; it corresponds to a bright [[supernova]] recorded by [[Chinese astronomy|Chinese]] and [[Islamic
astronomy|Arab]] astronomers [[SN 1054|in 1054]].
At [[X-ray]] and [[gamma-ray]] energies above 30 [[KeV]], the Crab is generally the [[strong (relative detectability)|strongest]]
persistent source in the sky, with measured flux extending to above 10<sup>12</sup> [[electron volt|eV]].
Located at a distance of about 6,500 [[light-year]]s (2 [[parsec|kpc]]) from [[Earth]], the [[nebula]] has a diameter of 11 [[light-
year|ly]] (3.4 [[parsec|pc]]) and expands at a rate of about 1,500 kilometers per [[second]].

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across,<ref>
{{cite web
 |title=Crab Nebula: The Spirit of Halloween Lives on as a Dead Star Creates Celestial Havoc
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}}</ref> which emits pulses of [[radiation]] from [[gamma ray]]s to [[radio wave]]s with a spin rate of 30.2 times per second. The
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atmosphere of [[Saturn]]'s moon [[Titan (moon)|Titan]] was measured as it blocked out [[X-ray]]s from the nebula.

The cloudy remnants of SN 1054 are now known as the Crab Nebula. The nebula is also referred to as Messier 1 or M1, being the first
Messier Object catalogued in 1758.

==Origins==
{{Main|SN 1054}}
The creation of the Crab Nebula corresponds to the bright [[SN 1054]] supernova that was recorded by [[Chinese astronomy|Chinese
```


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Wikipedia:Bots

From Wikipedia, the free encyclopedia

"WP:B" redirects here. You might be looking for Wikipedia:Bureaucrats, Wikipedia:Blocking policy or Wikipedia:Wikipedia is not a bureaucracy.
"WP:BOT" redirects here. You might be looking for Wikipedia:Bot policy.

Overview of bots · How to create a bot · Bot Approvals Group · Bot policy · Bot status page · BAG tools
Requests for work to be done by a bot · Bot owners' noticeboard · Requests for bot approval / Adminbots

Bots are automated or semi-automated tools that carry out repetitive and mundane tasks in order to maintain the 3,602,309 articles of the English Wikipedia. Bots are able to make edits very rapidly and can disrupt Wikipedia if they are incorrectly designed or operated. For these reasons a bot policy has been developed.

Shortcuts:
WP:B
WP:BOT

There are currently 1,322 bot tasks approved for use on the English Wikipedia; however, they are not all actively carrying out edits. Bots will leave messages on user talk pages if the action the bot has carried out is of interest to that editor. Some bots can be excluded from leaving these messages by using the {{bots}} tags. Exclusion-compliant bots are listed at Category:Wikipedia bots which are exclusion compliant. There are exactly 668 bots flagged with the "bot" flag right now. There is also a range of tools that allow for semi-automated editing of large numbers of articles.


Robots help Wikipedia!

Contents [hide]

History of Wikipedia bots [edit]

Main page: Wikipedia:History of Wikipedia bots

Bots have been used in the past to create large numbers of articles that were uploaded to Wikipedia within a short timeframe. Some technical problems were experienced and this led to the formulation of a bot policy.

Bot policy [edit]

Main page: Wikipedia:Bot policy

Wikipedia policy states the bots must be harmless and useful, have approval, use separate user accounts, and be operated responsibly.

Bot Approvals Group [edit]

Main page: Wikipedia:Bot Approvals Group

The Bot Approvals Group (BAG) supervises and approves all bot-related activity from a technical and quality-control perspective on behalf of the English Wikipedia community. Only bureaucrats are technically capable of *flagging* bots.

Running an automated bot on a separate account requires approval, which may be requested at Wikipedia:Bots/Requests for approval.

How to create a bot [edit]

Main page: Wikipedia:Creating a bot

In order to create a bot, some programming experience is needed, and knowledge of regular expressions is useful for many editing tasks.

The Perl, PHP, Python, Microsoft .NET, Java, Ruby and Chicken Scheme programming languages all have libraries available for creating bots. Pywikipedia (Python Wikipediabot Framework) is a collection of tools developed specifically for creating bots.

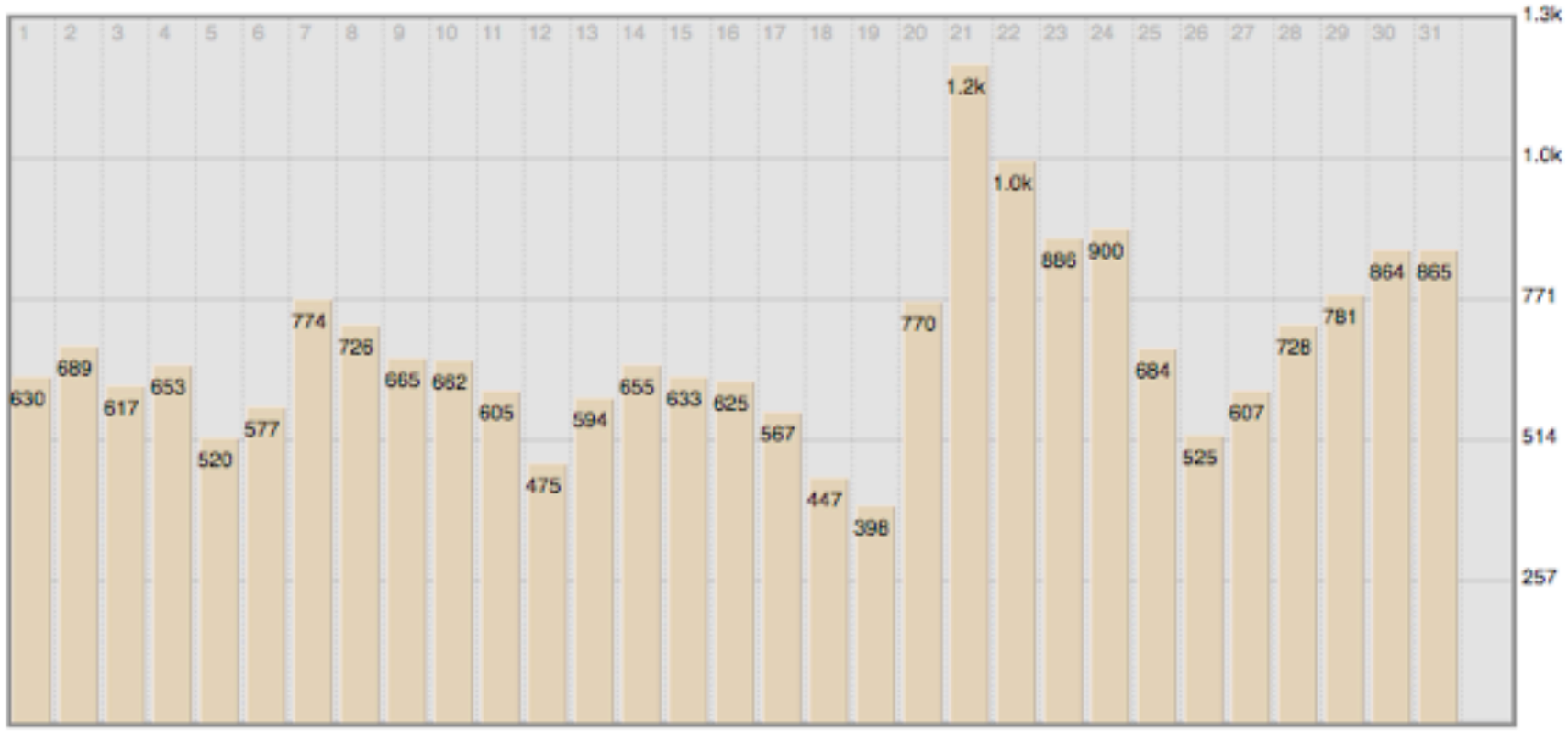
Examples [edit]

Some examples of bots are:

- User:SmackBot - corrects ISBN numbering, adds a date parameter to maintenance tags, adds missing reference sections and a variety of other tasks
- User:Cydebot - generally carries out tasks associated with deletion

Wikipedia article traffic statistics

Crab_Nebula has been viewed 21349 times in 201103.



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