

## SELECTED SCIENCE RESOURCES from the U.S. government

### Online Portal –

- Science.gov
  - <http://www.science.gov>
  - “The gateway to authoritative selected science information provided by U.S. government agencies. Can search within broad categories (astronomy & space ; applied science & technologies, etc.).
  - Selected material from **45 databases** (including NASA Technical Reports Server, NTIS, PubMed) from 14 federal agencies – **more than 200 million** pages of scientific information
  - From the Dept. of Energy (DOE) – Office of Scientific & Technical Information (OSTI)
  - Link (lower right): “Special collections” to “Federal R&D Summaries” (see entry under “Research” for full information)
- WorldWideScience.org
  - <http://worldwidescience.org/>
  - Allows users to quickly search -- at no cost -- over 400 million pages of important science information, across every inhabited continent, with just one single query.
  - Developed and maintained by DOE’s OSTI
- USA.gov
  - <http://www.usa.gov/>
    - Updated daily
    - Images searchable at results page (for NASA, NOAA, etc.)

### Bibliographies

- Government Databases in Science & Technology (from St. Mary’s University)
  - <http://library.stmarytx.edu/acadlib/doc/electronic/dbst.htm>
- Science and Technology Government Information Sources (from ACRL’s STS section – Government Information Committee)
  - [http://wikis.ala.org/acrl/index.php/Government\\_Information\\_Sources\\_for\\_Science\\_and\\_Technology](http://wikis.ala.org/acrl/index.php/Government_Information_Sources_for_Science_and_Technology)

### Biology & Biotechnology

- Bioethics Resources on the Web (from the NIH)
  - <http://bioethics.od.nih.gov/>
- Biometrics.gov
  - <http://www.biometrics.gov/>
- National Center for Biotechnology Information (NCBI)
  - <http://www.ncbi.nlm.nih.gov/>

## Climate/Weather

- Global Warming (presentation to the EPA, December 2008, by MIT Professor of Atmospheric Sciences, Dr. Richard Lindzen)
  - [http://yosemite.epa.gov/ee/epa/wpi.nsf/09133da7fb9a95db85256698006641d1/0e4e53113f856d848525751b0070e6d3/\\$FILE/Lindzen-12-9-08.pdf](http://yosemite.epa.gov/ee/epa/wpi.nsf/09133da7fb9a95db85256698006641d1/0e4e53113f856d848525751b0070e6d3/$FILE/Lindzen-12-9-08.pdf)
- Drought...(from NOAA) -
  - <http://www.drought.gov> - [“U.S. Drought Portal” – more specifically, the National Integrated Drought Information System]
  - <http://www.drought.noaa.gov/> [Drought Information Center - archive]
- National Hurricane Center (part of NOAA)
  - <http://www.nhc.noaa.gov/>
    - For current info.
  - <http://www.nhc.noaa.gov/pastall.shtml>
    - Past tracks of hurricanes

## Climate Data (Historical)

- NCDC: Most Popular Products – Free Data
  - <http://www.ncdc.noaa.gov/oa/mpp/freedata.html>
  - From NOAA’s National Climatic Data Center (NCDC)
  - Online access is **FREE** for these domains:  
**.gov .edu .mil .k12 .us**
  - Select “Most Requested”
    - *Local Climatological Data*  
(1923- present for Georgia)  
For most recent (loaded daily), select “quality controlled”  
Hourly summary as well as daily observations  
For historical, select “edited monthly”
    - *Hourly Precipitation Data*  
1951-Nov. 2010
    - *Annual Climatological Summary*  
1931 – present  
Gives monthly data, year-by-year for each station
    - *Storm Data*  
1950- 2011 (approx. 6 month delay)
  - Note that U.S. federal depository libraries have an ID/password access for additional information.
- Climatic Extremes and Weather Events
  - From NOAA’s NCDC
  - <http://ncdc.noaa.gov/oa/climate/severeweather/extremes.html>

## **Earth Sciences**

- Earthquake Information Center
  - <http://earthquake.usgs.gov/>
- Tsunami (from NOAA)
  - <http://www.tsunami.noaa.gov/>

## **Endangered Species**

- Endangered Species Program (from the U.S. Fish & Wildlife Service)
  - <http://www.fws.gov/endangered/>
- Special Concern Animal Species in Georgia (from the Dept. of Natural Resources)
  - <http://georgiawildlife.dnr.state.ga.us/content/specialconcernanimals.asp>

## **Energy**

- U.S. Department of Energy (DOE)
  - Fuel Economy (compare cars, new & used): <http://www.fueleconomy.gov/>
- Energy Information Administration (EIA)
  - <http://www.eia.gov/>  
EIA is the statistical and analytical agency within the Dept. of Energy.  
For country information, see: <http://www.eia.gov/countries/>  
For state energy profiles, see: <http://www.eia.gov/state/>
- Energy Statistics Database (from the UN)
  - <http://data.un.org/Explorer.aspx?d=EDATA>  
1990-2008 (free; data from 1950 onward available as a fee database)  
Country-specific – production, trade, and consumption
- International Energy Agency (IEA)
  - <http://www.iea.org/stats/index.asp>  
IEA statistics, country-specific.  
For excellent worldwide overview, select: Key World Energy Statistics (left frame): [http://www.iea.org/textbase/nppdf/free/2010/key\\_stats\\_2010.pdf](http://www.iea.org/textbase/nppdf/free/2010/key_stats_2010.pdf)
- DOE R&D Project Summaries
  - <http://www.scienceaccelerator.gov/>  
Select “advanced search” for this specific database within Science Accelerator

## **Environment**

- Environmental Protection Agency (EPA)
  - <http://www.epa.gov/>
    - By topic : select “Learn the Issues” ; “Science and Technology”
  - <http://www.epa.gov/myenvironment/>
- ToxMap
  - <http://toxmap.nlm.nih.gov/>

From the National Library of Medicine (on the campus of the National Institutes of Health - NIH)  
“Superfund” sites and Toxics Release Inventory (TRI) sites and info. TRI is a database on disposal or other releases of over 600 toxic chemicals for thousands of U.S. facilities. State-by-state fact sheets too.
- Envirofacts
  - <http://www.epa.gov/enviro/>
  - From left frame – “Quick Start” – select geographic level (down to zip code)
- AIRNow
  - <http://www.airnow.gov>
  - From upper-right, select: “Current Ozone & Particle Maps” ; or, “Compare Your City’s Air Quality”. Reports available for emissions, hazardous air pollutants, etc.
- Gulf Oil Spill
  - <http://libguides.gatech.edu/content.php?pid=88170&sid=1178095>
  - Selected sources and links from the Government Information Research Guide (Georgia Tech)
    - Links to the independent commission’s reports
- Earth Day Research Guide
  - <http://libguides.gatech.edu/earthday>
  - Selected sources and links compiled by 3 Georgia Tech librarians.

## **Food Safety**

- FoodSafety.gov
  - <http://www.foodsafety.gov/>

Recalls; sign up for alerts
- CDC – Division of Foodborne, Waterborne, and Environmental Diseases
  - <http://www.cdc.gov/ncezid/dfwed/>

Select “multi-state foodborne outbreaks”

## **Health/Medicine**

- National Library of Medicine
  - PubMed -- abstracts of journal articles
    - <http://www.ncbi.nlm.nih.gov/pubmed/>
  - Medline Plus -- For patients and their families and friends; information about diseases, conditions, and wellness issues.
    - <http://www.nlm.nih.gov/medlineplus/>

## **Minerals**

- Minerals Yearbook
  - <http://minerals.usgs.gov/minerals/pubs/myb.html>
  - Worldwide production and industry information on metals, minerals and commodities (90 total) for more than 175 countries.
  - Vol. II is state-by-state; Vol. III has international reports
  - <http://minerals.usgs.gov/minerals/pubs/usbmmyb.html> (for 1932-1993)

## **Nuclear**

- International Nuclear Safety Center
  - <http://www.insc.anl.gov/> -- created in 1996; unable to access site in Sept.
  - Database from Argonne National Laboratory. Can select tabs: Maps ; Facilities.
  - Gives status of nuclear facilities (under construction, permanently shutdown, etc.) plus detailed data.
- U.S. Nuclear Regulatory Commission
  - <http://www.nrc.gov/>
  - For U.S. facilities, detailed information.
- State Nuclear Profiles
  - [http://www.eia.gov/cneaf/nuclear/state\\_profiles/nuc\\_state\\_sum.html](http://www.eia.gov/cneaf/nuclear/state_profiles/nuc_state_sum.html)
  - From the Energy Information Administration (EIA)
- International Atomic Energy Agency
  - <http://www.iaea.org/>

## **Patents**

- U.S. Patent and Trademark Office – Search page (select “Quick Search”)
  - <http://patft.uspto.gov/>
  - Georgia Tech Library is the only USPTO “resource center” for patents in Georgia (note: Clemson and Auburn are also in the program).  
    Patents and Trademarks: [http://libguides.gatech.edu/patent\\_guide](http://libguides.gatech.edu/patent_guide)  
    Patents and Trademarks: Detailed Guide <http://libguides.gatech.edu/patents>

## Research

- NTIS (National Technical Information Service) technical reports.  
All topics, 1964 to present
  - <http://www.ntis.gov/search/index.aspx>
- NASA's National Technical Reports Server (NTRS)
  - <http://ntrs.nasa.gov/search.jsp>
- DTIC Online (Dept. of Defense)
  - <http://www.dtic.mil/dtic/search/tr/tr.html>
- Transportation Research International Database (TRID). This new database combines:  
Transportation Research Information Services (TRIS) and OECD (ITRD)
  - <http://trid.trb.org/search.aspx>
- Department of Energy (DOE)
  - DOE Information Bridge. All full-text, Jan. 1995-  
<http://www.osti.gov/bridge/advancedsearch.jsp>
  - Energy Citations Abstracts. 1948 to present. Bibliographic records for DOE and predecessor agencies. Links to many full text technical reports.  
<http://www.osti.gov/energycitations/advancedsearch.jsp>
  - ETDE World Energy Base. 1995 to present. Worldwide energy information. Bibliographic record; links to selected full text technical reports.  
From Oak Ridge National Laboratory. Free to U.S. citizens (requires registration).  
<http://www.ornl.gov/info/library/etdeweb.htm>

## Space

- NASA
  - <http://www.nasa.gov>
  - NASA Technical Reports Server (NTRS)
    - <http://ntrs.nasa.gov/search.jsp>Recent “report” in NTRS : Wings in Orbit: Scientific and Engineering Legacies of the Space Shuttle, 1971-2010 [547 pgs] ; a treasure trove of info. Available at: <http://hdl.handle.net/2060/20110011792>
- Space Flight
  - NASA – the Space Shuttle Timeline, orbiter facts, crew directory, and more.
  - [http://www.nasa.gov/externalflash/the\\_shuttle/](http://www.nasa.gov/externalflash/the_shuttle/)
  - Apollo by the Numbers: a Statistical Reference [345 pgs.]  
[http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20010008244\\_2001006037.pdf](http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20010008244_2001006037.pdf)

## **Especially for K-12:**

- Kids.gov
  - <http://www.kids.gov/>
  - Grades K-5 and 6-8 (select “Science). Also “Educators” tab
- NASA’s Space Place
  - <http://spaceplace.nasa.gov/>
- For the Environmental Protection Agency (EPA)
  - <http://www.epa.gov/students/>  
Homework resources (by topic) ; teacher resources (includes lesson plans)
  - Teen Resources - Environmental Consciousness  
<http://www.usa.gov/Topics/Teens.shtml>

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