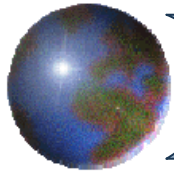




Geospatial Technologies in Wildland Fire Management

GIS Data Discovery Workshop
July 15, 2008

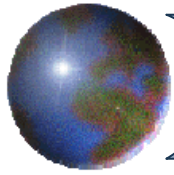




Objectives



- Wildland Fire and Fire Prevention Website
- Fire Management Information Systems (FMIS) Internet Mapping Tool and Reports
- Wildfire Map Products
- Standard Operating Procedures on Incidents
- National Interagency Fire Center (NIFC) FTP site
- Wildfire Perimeter data
- Firestats geodatabase

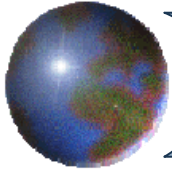


Wildland Fire and Fire Prevention Website

<http://www.fl-dof.com/wildfire/index.html>



- Forestry Fire Management Information System (FMIS) Mapping Tool
- Map: Keetch-Byram Drought Index
- Active Wildfires Over 100 Acres in Google Map (Only during active wildfire season).
- Wildfire Year to Date Progression KMZ (Only during active wildfire season).
- Burn Ban Maps (Only during active wildfire season).

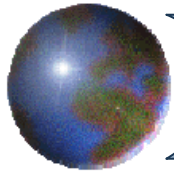


Fire Management Information Systems (FMIS)

http://flame.fl-dof.com/wildfire/tools_fmis.html



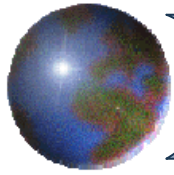
- All existing/active wildfires in Florida except wildfires on federal land
- Where all open burn authorizations are or are planned to be on any particular day
- All other incidents that the Division of Forestry has responsibility for resolving
- Data is real time. The map will update as incidents occur, so it is very likely that the map at 08:00 AM will be very different from the map at 10:00 AM.



Wildfire Map Products

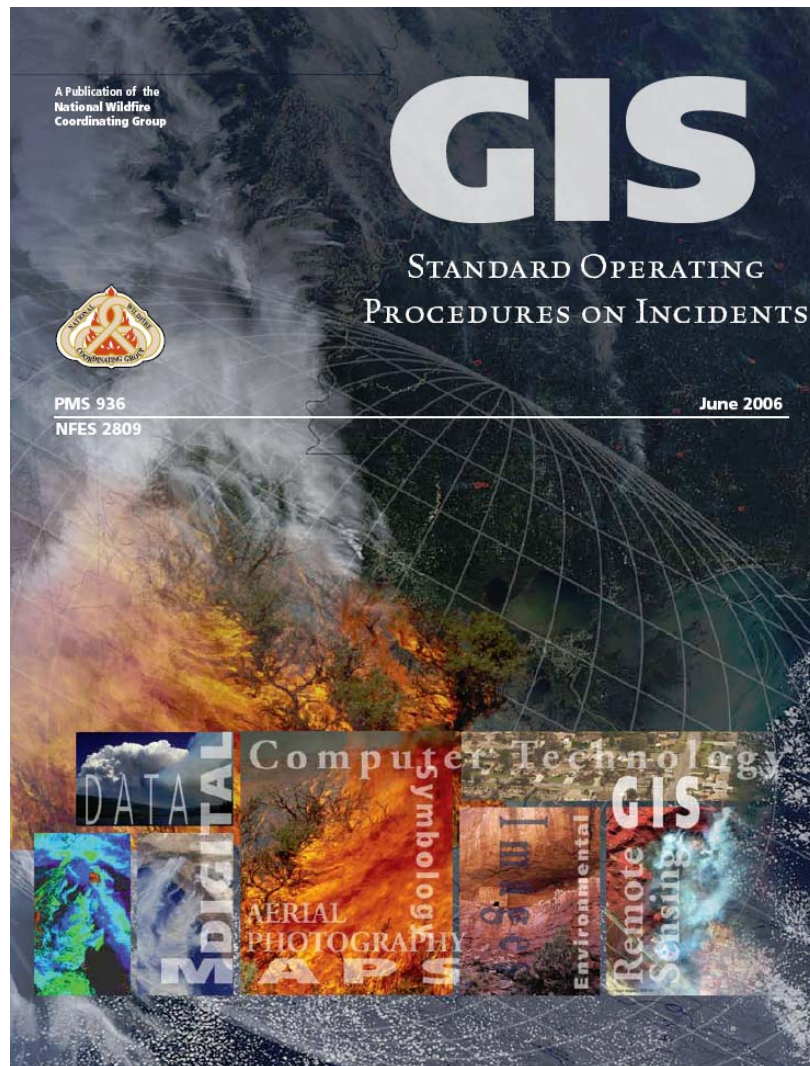


- Wildfire KMLs with weather/rainfall/imagery overlays
- Wildfire Year to Date Progression KMZ
- Burn Ban maps
- BLM Lightning and NOAA rainfall maps

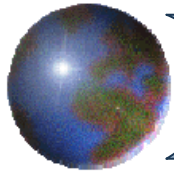


National Wildfire Coordinating Group GIS Standard Operating Procedures

<http://gis.nwcg.gov/>



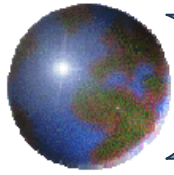
- Two Year Project to examine the various GIS operating procedures currently being used at incident base camps in support of incident management.
- Based on analysis of those findings, deliver guidelines of geospatial standard operating procedures (SOPs) to NWCG.
- These SOPs became the national standard within the wildland fire community in 2006 and endorsed by 5 federal land management agencies, and the states through the National Association of State Foresters.
- SOPs Covered:
 - ❑ GIS Roles and Responsibilities
 - ❑ Map Products
 - ❑ File and Folder Naming Conventions
 - ❑ Team Transition
 - ❑ Map Symbology
 - ❑ Map Data
 - ❑ Documentation and Metadata



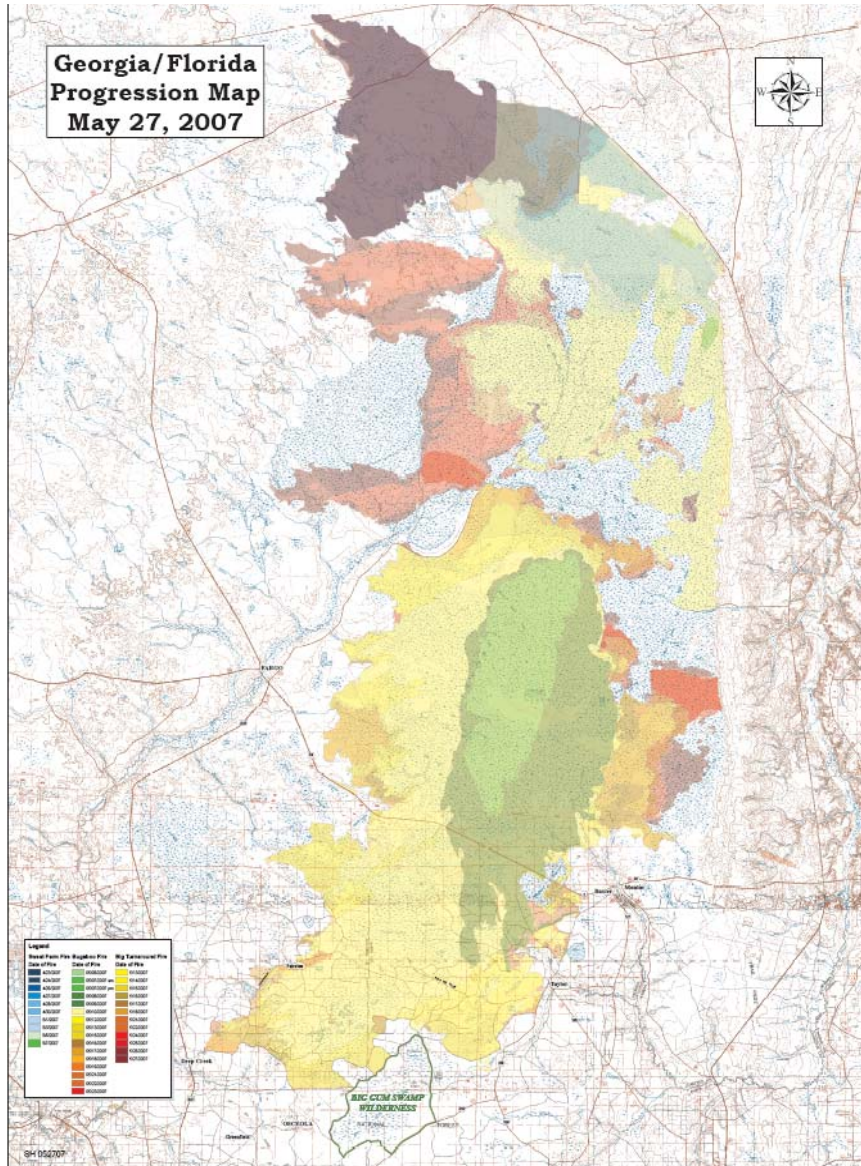
National Interagency Fire Center (NIFC) FTP site



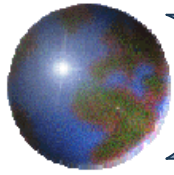
- “One Stop Shopping” for incident personnel to download data when it is available and to upload incident relevant data
- Share incident information with interagency websites such as: Active Fires (<http://www.activefires.net>) and GEOMAC (<http://www.geomac.gov>).
- FTP site is hosted at the USDA National Information and Technology Center (NITC) in Kansas City, Missouri.
- All information that is posted to <ftp.nifc.gov> must be:
 - ❖ 1. Public data - Information that is non-sensitive, unclassified, not copyrighted, and viewable by everyone.
 - ❖ 2. Official content - Only official information directly related to wildland fire may be posted.



DOF Wildfire Perimeter Data Standards

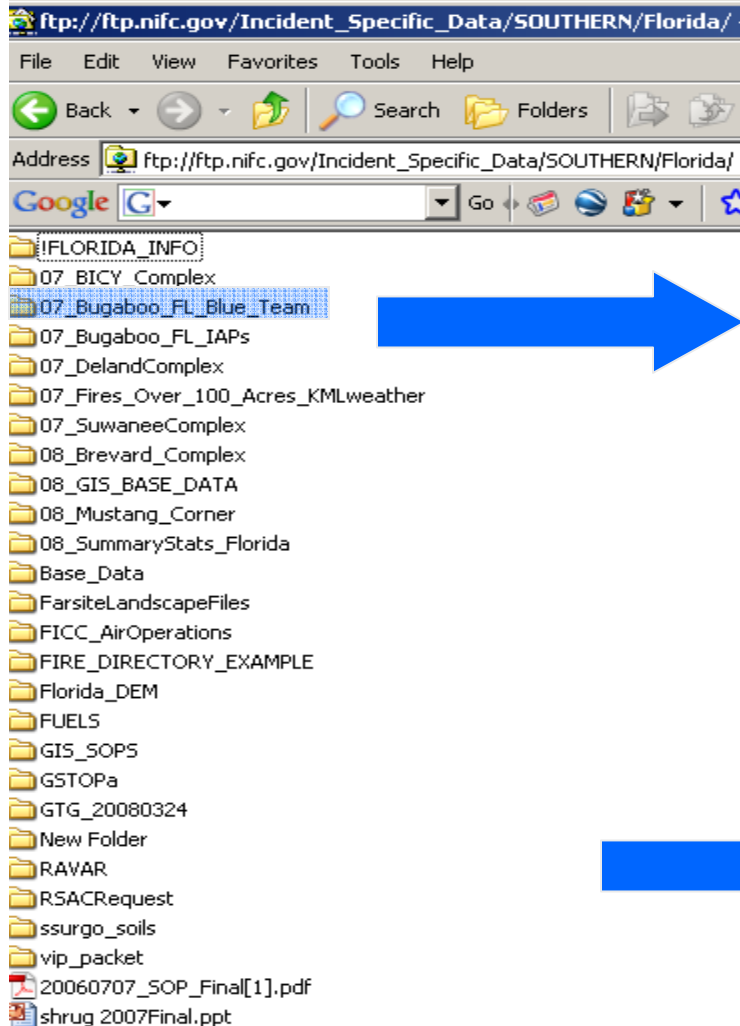


- 1. File Naming Convention for Daily Fire Progression
<date>__<incident number>_<fire name>
Example: 20060309_12-534_CanopyFire
- 2. File Naming Convention for Final Fire perimeter
<yyyymmdd>_<fire name>_final
Example: 20060309_CanopyFire_Final
- 3. Fire Perimeters need to be attributed with the following information:
Fire Name
Fire Incident Number
Date Collected
Time Collected
Method of Collection
Person Collecting
Acres
- Note: The collection of spatial perimeters of wildland fires less than 250 acres is up to the discretion of the field units.

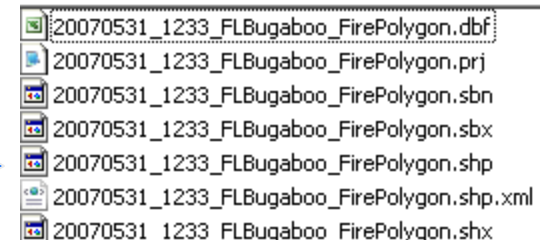


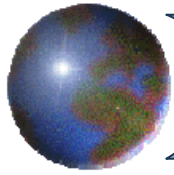
Wildfire Perimeter data on NIFC FTP site

ftp://ftp.nifc.gov/Incident_Specific_Data/SOUTHERN/Florida/



- Please note that wildfire perimeter data is somewhat sensitive data in regard to public perception.
- DOF generally does not provide imagery with perimeter overlays to the public, nor do we provide perimeter data to insurance companies.
- Keep in mind that perimeter data has varying levels of accuracy.





Firestats geodatabase

FIRE STATS

Wildfire Causes

Total Wildfire Acreage

Wildfire Size by District

Wildfires Over 100 Acres

Wildfire Size by County

Structure Involvement

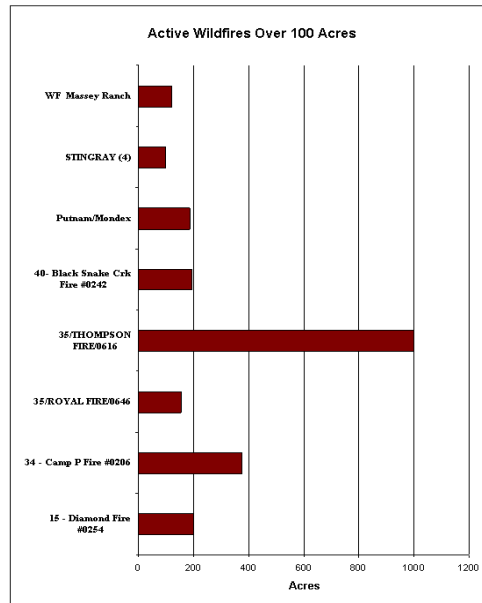
- Geodatabase which contains exported data from the Fire Management Information Systems (FMIS) Production Oracle database.
- For all active wildfires in 2008, FireStats provides reports and graphs on Wildfire Causes, Wildfire Size by County and District, Total Wildfire Acreage, Wildfires Over 100 Acres, as well as Structure Involvement.
- Spatial information on all active wildfires with latitude and longitude coordinates can be viewed in ArcGIS.

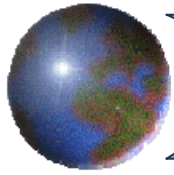
2008 Active Wildfires Over 100 Acres

ACRES	INCIDENT_NO	INCIDENT_NAME	COUNTY
1000	2008-11-0616	35/THOMPSON FIRE/061	Lake
377	2008-05-0206	34 - Camp P Fire #0206	Lafayette
200	2008-05-0254	15 - Diamond Fire #0254	Dixie
194	2008-05-0242	40- Black Snake Crk Fire #	Lafayette
186	2008-08-0480	Putnam/Mondex	Putnam
153.3	2008-11-0646	35/ROYAL FIRE/0646	Lake
120	2008-10-0459	WF Massey Ranch	Volusia
101	2008-12-0439	STINGRAY (4)	Orange

TOTAL COUNT OF ACTIVE WILDFIRES OVER 100 ACRES

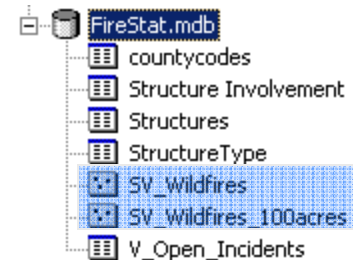
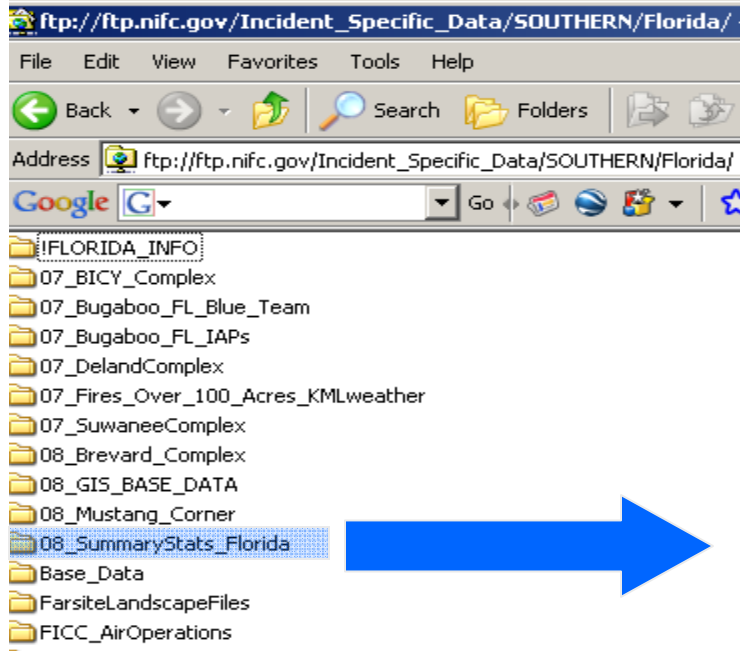
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Firestats geodatabase on NIFC FTP site

ftp://ftp.nifc.gov/Incident_Specific_Data/SOUTHERN/Florida/08_SummaryStats_Florida/



- Firestats is updated on the NIFC FTP site weekly
- During an active wildfire season, it is updated daily usually by 10am (depending on when the Executive Briefing is available).



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