SED Web Project

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Presentation to SED Senior Staff Meeting
1/25/11

National Aeronautics and Space Administration
Goddard Space Flight Center

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Flight Projects | Sciences and Exploration

for Everyone   About Us

Sciences and Exploration Directorate Code 600

SED Home (600) | SED Offices | Earth Sciences (610) | Astrophysics (660) | Heliophysics (670) | Solar System (690)

People & Organizations
Missions/Projects
Publications
Highlights
Calendar
FAQ
Internal
Awards
Comment Form

Quick Links

› Earth Observatory Twitter
› Geeked on Goddard blog
› Hubble Telescope Twitter
› IceBridge Twitter
› Inside Goddard
› JWST Twitter
› LRO Twitter
› NASA Blueshift Twitter
› NASA Goddard Twitter
› NASA Goddard Facebook
› SDO Twitter
› Spacebook

The Task

- Web Council tasked to Assess, and fix, the SED Web Presence
- Started with Line Organizations (Projects next)
- Web Council designed modern, integrated site requiring minimal maintenance. Easy future re-design via CSS.
  – Scalable, extensible
  – Dynamic (DB-driven)
- Three Audience Groups
  – About Us (SED Mgmt & employees are the primary audience)
  – For Everyone (General Public and Educators)
  – For Researchers (Professional Scientists and Engineers)
- Started with "About Us"

Current Operational Status

- Integrated site at science.gsfc.nasa.gov
  - Key Required Elements in place
    - Searchable Staff List w/Bio Pages*
    - Definitive List of Missions & Projects, by Organization
    - Publications DB*
    - Organization Highlights
    - Calendar*
  - Organization-Specific Links & Quick Links allow for customization

  * - denotes demonstration
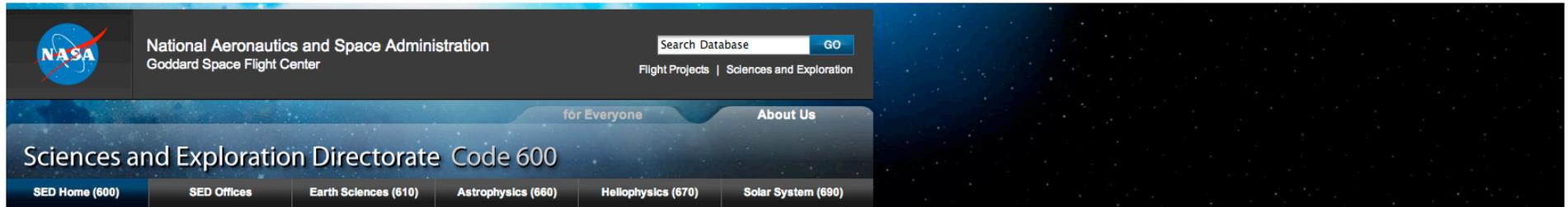
Coming Soon

- Enhanced Line Org Functionality
  - Automated Publications Ingest
  - CV *WYSIWYG* Editor,* with Identity Mgmt
  - Staff List searchable by Role (e.g. scientists, fire warden)
  - Awards, Internal Sections
  - Accomplishment Tracking
- For Everyone facelift* & automation (4/30)
- For Researchers (4/30)

Next Steps

- Extend Page Templates into integrated Project "Site Templates"
  - Add Core Information Architecture for each Project Type (e.g., Field Experiment, Small Instrument,* etc.)
- Provide Project Site Improvement Support
  - Science Writer for Content Updates
  - DB structures, tables, pulls and even code, to support projects developing automated back-ends

SED non-Organizational Web Sites

- Three part strategy for reviewing SED websites
  - Web Council – currently addressing the Web Site Lifecycle; will make recommendations for SED, Division roles & responsibilities
  - IT Council – recommend criteria for website hosting
  - SED Development Group – Look and Feel: Page Templates available, more being developed. Consulting support for web pages.
- Divisions – responsible for disposition of websites
  - Decommission, update in place, update and move to VME, OK as is
- CISTO will track progress

Web Security

- Recent News: Successful SQL injection attack on Fermi site via php script
  - Server (including other sites) taken off-line and static page displayed
  - Sites run through "Fortify" security analysis
  - Non-php scripts were validated and most sites and core capabilities brought back online in 4 days
  - Work continues checking remaining scripts including all php scripts; Fortify will be re-run

- Lessons Learned:
  - Remove old scripts
  - Minimize setting the 'executable' bit on pages
  - Better education/training required; gsfc-sed-web-developers listserv being used to share "best practices" and code

Backup Charts

SED Web Development Resources: Staff

- Web Council Chair/SED Web Development Project Manager: 1.0 FTE
- SED Web Editor-in-Chief: 1.0 WYE
- Web Designer ~0.9 on CSS & Design
- Maintenance Developer: 1 WYE I&T, development
- Primus Team: 3WYE, 9/10 – 5/11
  - 4 Cold Fusion Developers FT for 8 months
  - 0.5 Manager for 8 months

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SED Web Development Resources

- Using the VME – 11 VMs
- Developer area, 2 VMs: web server & DB
- Testing area, 2 VMs: web server & DB
- Live Site, 4 VMs: 3 web servers (load balanced), 1 DB server
- SED "Web 2.0" sites, 3 VMs: 2 load-balanced web servers & 1 DB server
  - Blogs, Podcasts, Wikis, etc.