



National Aeronautics and Space Administration
Goddard Space Flight Center

Search Database

[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 \(690\)](#)

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[Internal](#)

[Awards](#)

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[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](#)
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- [SDO Twitter](#)
- [Spacebook](#)

SED Web Project

Phil Webster

Presentation to SED Senior Staff Meeting

1/25/11

NASA National Aeronautics and Space Administration
Goddard Space Flight Center

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The Task

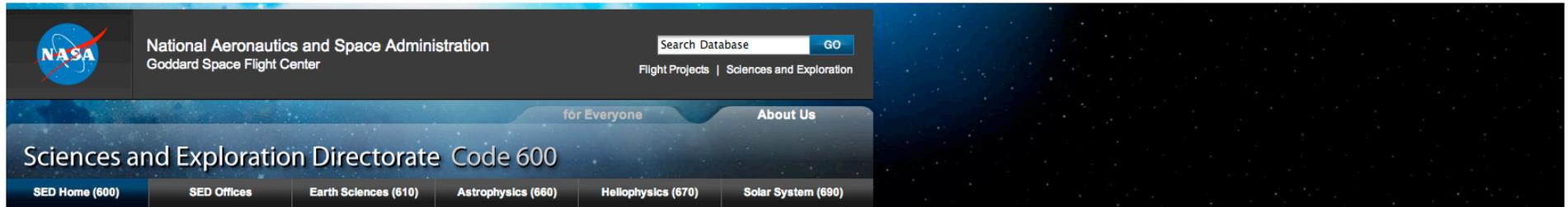
- Web Council tasked to Assess, and fix, the SED Web Presence
- Started with Line Organizations (Projects next)
- Web Council designed modern, integrated site requiring minimal maintenance. Easy future re-design via CSS.
 - Scalable, extensible
 - Dynamic (DB-driven)
- Three Audience Groups
 - About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

The screenshot shows the top navigation bar of the NASA Goddard Space Flight Center website. It includes the NASA logo, the text "National Aeronautics and Space Administration" and "Goddard Space Flight Center", a search bar with "Search Database" and "GO" buttons, and links for "Flight Projects" and "Sciences and Exploration". Below this is a secondary navigation bar with "for Everyone" and "About Us" tabs. The main navigation bar features "Sciences and Exploration Directorate Code 600" and a menu with items: "SED Home (600)", "SED Offices", "Earth Sciences (610)", "Astrophysics (660)", "Heliophysics (670)", and "Solar System (690)". A left sidebar contains a vertical menu with categories: "People & Organizations", "Missions/Projects", "Publications", "Highlights", "Calendar", "FAQ", "Internal", "Awards", and "Comment Form". Below the sidebar is a "Quick Links" section with a list of 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", and "Spacebook".

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)

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The image shows the top portion of the NASA Goddard Space Flight Center website. At the top left is the NASA logo. To its right, the text reads "National Aeronautics and Space Administration" and "Goddard Space Flight Center". A search bar labeled "Search Database" with a "GO" button is positioned to the right. Below the search bar are links for "Flight Projects" and "Sciences and Exploration". A navigation bar contains "for Everyone" and "About Us". The main header area displays "Sciences and Exploration Directorate Code 600". Below this is a horizontal menu with links: "SED Home (600)", "SED Offices", "Earth Sciences (610)", "Astrophysics (660)", "Heliophysics (670)", and "Solar System (690)". On the left side, there is a vertical navigation menu with categories: "People & Organizations", "Missions/Projects", "Publications", "Highlights", "Calendar", "FAQ", "Internal", "Awards", and "Comment Form". Under the "Quick Links" section, there is a list of external 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", and "Spacebook".

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

The screenshot shows the NASA Goddard Space Flight Center website. The top navigation bar includes the NASA logo, the text "National Aeronautics and Space Administration Goddard Space Flight Center", a "Search Database" search bar with a "GO" button, and links for "Flight Projects" and "Sciences and Exploration". Below this is a secondary navigation bar with "for Everyone" and "About Us" links. The main navigation bar features "Sciences and Exploration Directorate Code 600" and a menu with items: "SED Home (600)", "SED Offices", "Earth Sciences (610)", "Astrophysics (660)", "Heliophysics (670)", and "Solar System (690)". A left sidebar contains a vertical menu with categories: "People & Organizations", "Missions/Projects", "Publications", "Highlights", "Calendar", "FAQ", "Internal", "Awards", and "Comment Form". Below this is a "Quick Links" section with a list of 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, and Spacebook.

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

The image shows a screenshot of the NASA Goddard Space Flight Center website. The header includes the NASA logo, the text "National Aeronautics and Space Administration" and "Goddard Space Flight Center", a search bar with "Search Database" and a "GO" button, and navigation links for "Flight Projects" and "Sciences and Exploration". Below the header is a navigation bar with "for Everyone" and "About Us" tabs, and a main navigation bar with "SED Home (600)", "SED Offices", "Earth Sciences (610)", "Astrophysics (660)", "Heliophysics (670)", and "Solar System (690)". A sidebar on the left contains a menu with categories: "People & Organizations", "Missions/Projects", "Publications", "Highlights", "Calendar", "FAQ", "Internal", "Awards", and "Comment Form". Under "Quick Links", there are several links to social media and internal pages, such as "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", and "Spacebook".

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



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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

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.