



NOAA/NESDIS Process to Transition Satellite Products from Research to Operations

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MECHANISM

NOAA's Satellite and Information Service (NESDIS) process to transition satellite products from research to operations is a function of the Satellite Products and Services Review Board (SPSRB). The transition to operations of new satellite products requires approval through the SPSRB process.

TRANSITION FROM RESEARCH TO OPERATIONS

There are three distinct ways satellite products can be examined by the SPSRB to transition from research into operations:

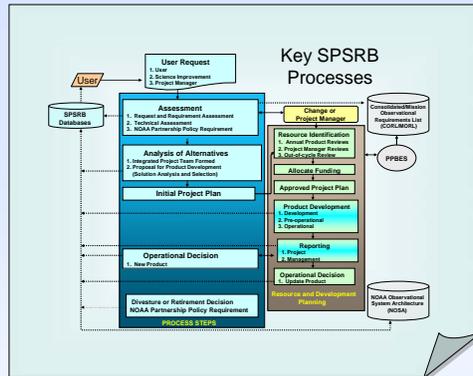
(1) **User Request**: users can identify a need for a new or improved observations or products; (2) **Mature Science Development**: scientific agencies can identify a maturing scientific development or algorithm thought to provide significant user benefit; and (3) **NOAA Program or NESDIS Project Manager Development**: NOAA/NESDIS program or project managers can receive requirements to develop new or improved products. These acquisitions managers formulate plans to acquire the new capabilities for users.

(1) USER REQUEST

These requests will include the requirements, specifications and other information needed to describe the requested product or service. They are submitted on the SPSRB web site: <http://projects.osd.noaa.gov/spsrb/userRequest/index.htm> by only (gov and mil) domains. Others can submit a user request but have to submit their requests through a NESDIS sponsor. The SPSRB Manager receives a notification of each request and the assessment process is initiated.

(2) ASSESSMENT

There are three key assessments performed on the user requests: (1) **request**-ensure the request contains sufficient information to process, (2) **requirement**- consistent with the NOAA Mission Goal Program observational requirements data bases, and (3) **technical**-determine technical feasibility to satisfy the user request and provide NESDIS management the best way to process the user request.



(3) ANALYSIS OF ALTERNATIVES

There are four actions required in this part of the process: (1) Determine if the product is really needed and satisfies a NOAA Mission Goal Program; (2) Form an **integrated products team (IPT)**-assembled to guide product development; (3) **identify** viable technical solutions; (4) **select** a technical solution- Yes or No on product development.

(4) PROJECT DEVELOPMENT

The SPSRB technical solution is to form an **IPT** and generate a plan for product development. As part of this plan, the **resources** needed for development, maintenance and archive are included. The projects are **tracked** via the secure SPSRB Web Product database.

PRE - OPERATIONAL

This stage allows the IPT to begin routine processing for the purpose of complete testing and validation of the product. It allows for limited testing of the product by selected users. The user feedback helps refine the product and ensure formats are documented properly.

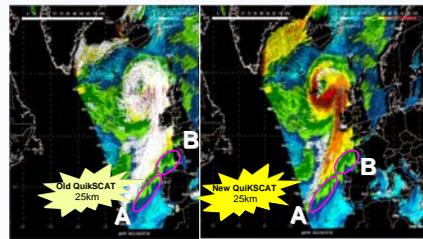
(5) OPERATIONAL

This stage allows the Management to work jointly with the IPT to transition the product into operations. Users are invited to participate. Two elements need to be met (1) project meets **users' needs** and (2) product can be **supported** operationally. Then the SPSRB will declare the product operational. The products database is updated and the product is required to become operational within 45 days or less.

(6) DIVESTITURE OR RETIREMENT

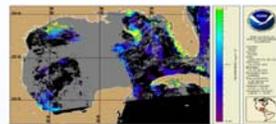
Products are identified that **no longer satisfy user** requirements or the responsibility for the production can be **transferred** to another organization.

Ocean Surface Wind Vectors: Reduced Rain Flagged Vectors Produced with New QuikSCAT Processing

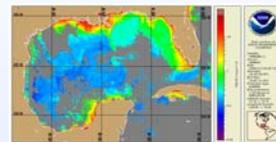


COMPARISON OF NEW vs. OLD PROCESS: WHITE : RAIN FLAGS
A and B are regions of the same area in both images showing the difference in quantity of rain flags. Decrease in rain flags indicate higher accuracy of prediction for wind vectors. No rain flags indicate a good measurement

Examples of Ocean Color Products



MODIS-Chlorophyll Anomaly Product



SeaWiFS-Chlorophyll Concentration Product

SIX KEY STEPS

- (1) User Request
- (2) Assessment
- (3) Analysis of Alternatives
- (4) Project Development
- (5) Operational Decision
- (6) Product Divestiture or Retirement.