## Supplemental Questions for DOC/NOAA Customer Survey Clearance (OMB Control Number 0648-0342)

1. Explain who will be conducting this survey. What program office will be conducting the survey? What services does this program provide? Who are the customers? How are these services provided to the customer?

The National Environmental Satellite, Data, and Information Service (NESDIS) Tropical team works on projects/tasks to help improve the products we provide to our global customers. These projects also benefit the satellite analyst at the Satellite Analysis Branch by making the analysis less difficult. Michael Turk, the Tropical Team Lead and Jamie Kibler, the User Service Lead for the Satellite Analysis Branch (SAB), a division of NESDIS, will be conducting and monitoring the Tropical survey with the assistance of the World Meteorological Organization (WMO), the official United Nations' authoritative voice on weather. The WMO will be disseminating the survey by mail to customers for the SAB Tropical Team. The survey pertains to the programs products including tropical bulletins, and Microwave classifications and others, such as:

- **e-TRaP**, an automated product that estimates 24 hours rainfall potential (also breaks it up into 6 hour rainfall potential) for a land falling tropical system using multiple forecast from various agencies and forecast times. e-TRaP also uses satellite imagery (microwave imagery). Thus it is a blend of forecast times and current satellite imagery.
- **Automated Dvorak Technique** (ADT), an automated objective technique used in measuring the strength of a tropical system.
- **T-Data**, using the subjective Dvorak technique to classify a tropical system to find position and intensity.
- Multiplatform Tropical Cyclone Surface Winds, an automated product that combines
  information from several data sources to create a mid-level wind analysis which is then
  adjusted to the surface. Eight products are displayed from this product.
- **48 Hour Global Tropical Formation Probability**, an automated product that provides an estimate of the probability of tropical cyclone formation within the next 24 to 48 hours in 1 by 1 degree latitude/longitude areas from 45S to 45N and 0 to 360E.

The SAB Tropical program provides satellite data and analysis: 1) for the detection of tropical systems; 2) for the classification of tropical systems from development to typhoon/cyclone strength; 3) for the creation of tropical bulletins and other satellite products to assist our customers with their daily operations.

2. Explain how this survey was developed. With whom did you consult during the development of this survey on content? statistics? What suggestions did you get about improving the survey?

This survey was assembled based on our program area's needs, interests and issues in relation to areas for which we have the capability of improving and/or changing the amount of information. The entire Tropical Team was involved in the creation of the survey.

No information regarding statistical parameters was necessary.

In addition to the Tropical Team's collaboration, there was coordination with the SAB User Service Lead and the Tropical Product Area Lead (PAL). Suggestions focused mainly on rewording certain questions and adding/subtracting the total number of questions; all suggestions were addressed.

3. Explain how the survey will be conducted. How will the customers be sampled (if fewer than all customers will be surveyed). What percentage of customers asked to take the survey will respond? What actions are planned to increase the response rate? (Web-based surveys are not an acceptable method of sampling a broad population. Web-based surveys must be limited to services provided by Web.)

The survey will be disseminated by the WMO point of contact. Two options will be given to the customer for return purposes. They will be able to resubmit through electronic mail to Michael.Turk@noaa.gov or via fax. Based on prior experience in this product area and other product areas in the SAB, we estimate a 25% response rate. There was a previous survey and a communications test that involved customer interaction, and we are inferring the level of customer response from customer interest observed from those. We expect at least this response level, as it is in the best interests of the customers to respond to the survey, and it will take an average of only 15 minutes to complete and submit each survey.

4. Describe how the results of this survey will be analyzed and used. If the customer population is sampled, what statistical techniques will be used to generalize the results to the entire customer population? Is this survey intended to measure a GPRA performance measure? (If so, please include an excerpt from the appropriate document.).

The results will be analyzed and used to determine if the Tropical Program will continue to disseminate particular tropical products to our global customers, make changes to these products, or add products. The survey questions are not quantitative in nature and therefore do not require any descriptive statistical measures. However, some descriptive statistics will be used to assist in the most objective presentation of how the customer feels about our products. A report will be generated and presented to the Tropical Team showing the results of the survey. This survey is not intended to measure a GPRA performance measure.

## B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

This will be a census survey of all known customers.

Type of Organization	Number	Expected responses
WMO Regional Specialized Meteorological Centers (RSMC)	8	2
Forecast Centers	20	5
Totals	28	7

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

Two options will be given to the customer for return purposes. They will be able to resubmit through electronic mail to Michael.Turk@noaa.gov or via fax. Based on prior experience in this product area and other product areas in the SAB, we estimate a 25 % response rate. Regardless of response rate, however, we strongly believe that each response is valuable. The responses will provide the SAB Tropical Team details of how many of our Tropical products are used in daily operations, analyses and help us to make decisions on how we will continue to disseminate these products/ change these products/add products for global customers.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

We cannot confirm the total number of our customers and thus there is no guarantee that the responses will be representative of all those receiving our products. The SAB disseminates

Tropical products to many global customers requesting them, but many of SAB customers receive them through the internet and do not contact us directly to request them. For past surveys and a communication test distributed through the WMO, we have had a response rate of 25% from those customers known to us. The Tropical survey will have no official deadline, but the SAB Tropical Team will begin to evaluate the results of the survey after 3 months of response time. There will be no follow-up with non-responders and no test for non-response: we do not have the option of requesting that the WMO include such activities as part of its dissemination procedures. The WMO receives numerous survey and questionnaires from WMO representatives. They state that they do not have the time or manpower to redisseminate the survey/questionnaire. They would do so if able.

We have chosen to use WMO to disseminate the survey, in spite of lack of follow-up, as they are the best venue for the survey. We truly don't know all of our global customers. We send out our products using WMO headers and any group in that region that finds out about our tropical products can subscribe to these products based on those headers. The survey will go to all parties using these and other WMO headers. Thus, using WMO to disseminate the survey will be the most effective in providing us with information about at least some of our customers previously unknown to us.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

There is no pre-testing planned for this survey other than review by the Tropical and SAB teams .

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

**Michael Turk** is the Tropical Team Lead. He created the survey, disseminated it to team members and the User Service Lead for comments and suggestions, and provided to management for final approval. Mr. Turk will take the survey results with applied recommendations and show them to management. He will act on the results and suggestions of management.

**Jamie Kibler** is the User Service Lead and Volcanic Ash Team Lead. He provided comments on the survey before being approved by management. He led the PRA submission process and worked out survey dissemination details with the WMO. He will look review the survey results and make recommendations to the Tropical Team Lead, Michael Tu.

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