

IOOS® QUANTITATIVE QUESTIONS

***BEGIN SURVEY CONTENT HERE

**The Ocean Enterprise:
A Survey of US Business Activity in Ocean Measurement, Observation, and Forecasting**

Thank you for participating in this important survey. Your input is entirely voluntary and you may skip any questions you do not feel comfortable answering. Final survey data will only be published at the aggregate level, and no information will be attributable to any individual or organization.

Public reporting burden for this collection of information is estimated to average 25 minute per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Carl Gouldman, NOAA Integrated Ocean Observing System (IOOS), 1100 Wayne Avenue, Suite 1225, Silver Spring, MD 20910.

Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subjected to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

This survey seeks to engage with businesses providing the infrastructure needed to undertake measurements and observations in the coastal, ocean, and Great Lakes environments. Additionally, it includes enterprises that make use of such measurements, observations, and any derived forecasts in the production of data products for commercial sale.

The purpose of the survey is to determine the economic and employment impact of this important industry cluster within the United States. It will help to support understanding the value of US exports generated by this cluster and the identification of potential growth and/or new international markets which the Department of Commerce (DOC) should consider within its strategic goals for trade and investment.

The survey is being conducted under the auspices of the NOAA Integrated Ocean Observing System (IOOS) Program Office as part of its mission to work with industry in promoting the benefits of ocean observation, measurement, and forecasting. IOOS is a network of people and technology that work together to compile and distribute data on coastal, ocean and Great Lakes waters.

1. Please select the answer choice(s) below that best describes your business: (select all that apply)
 - We provide infrastructure for ocean measurement, observation, or forecasting purposes (e.g., platforms, instruments, sensors, data communications, IT infrastructure, instruments for navigation and positioning, etc.)
 - We use ocean measurements, observations or forecasts to create or enhance a value added data product offered for commercial sale (e.g. to provide a survey product, power a weather or surf forecast service, evaluate ocean hazards, support fish locating, etc.)
 - We don't provide ocean measurement, observation, or forecasting infrastructure or use ocean measurements, observations or forecasts <SURVEY WILL GO TO THANK YOU/EXIT SCRIPT>

2. How long has your business provided ocean measurement, observation or forecast infrastructure or related value added services?
 - Less than 1 year
 - 1 through 3 years
 - through 5 years
 - More than 5 years
 - Unknown

3. Currently, how many employees in your business are located in the U.S.?
 - 1-4
 - 5-9
 - 10-24
 - 25-49
 - 50-99
 - 100-249
 - 250-499
 - 500-999
 - 1000 or more

4. Currently, how many employees in your business are at your current location?
 - We only have one location
 - 1-4
 - 5-9
 - 10-24
 - 25-49
 - 50-99
 - 100-249
 - 250-499
 - 500-999
 - 1000 or more

5. In the next 12 months do you anticipate your company:
 - Growing

- Staying the same
 - Decreasing
 - Not sure
6. Is your company a subsidiary, and if YES, what is the name of the holding company and in which country is it registered?
- Not a subsidiary
- Yes, we are a subsidiary of _____, and based in (Country) _____.
7. How many discrete locations does your company or your parent company have? (multiple buildings on a single campus counts as one location)
- 1
 - 2
 - 3
 - 4
 - 5
 - 6-9
 - 10 or more
8. How many of these locations are outside the U.S.?
- All
 - None
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6-9
 - 10 or more
9. What were your company's gross revenues for the past year?
- a) Subsidiary revenues (if subsidiary) _____
 - b) Overall company revenues _____
10. What share of your revenue is due to Maritime activities or business?
- 0% or None
 - 1% to 24%
 - 25% to 49%
 - 50% to 74%
 - 75% to 100%
 - Don't Know
11. What share of your maritime revenues is due to business or activities associated with providing ocean observation, measurement or forecasting infrastructure or provision of

value added data products based in whole or in part on ocean observation, measurement or forecast data?

- 0% or None
- 1% to 24%
- 25% to 49%
- 50% to 74%
- 75% to 100%
- Don't Know

12. What percentage of your ocean observation, measurement or forecasting related revenues from Question 10 is from sales outside the U.S.?

- 0% or None
- 1% to 24%
- 25% to 49%
- 50% to 74%
- 75% to 100%
- Don't Know

13. In the next 12 months, do you anticipate your ocean observation, measurement and forecasting related business revenue:

- Growing
- Staying the same
- Decreasing
- Not sure

14. From which of these market areas does your company, or your parent company (if it is U.S. registered) receive significant ocean observation, ocean measurement or ocean forecasting business related revenue (greater than 5%) (Select all that apply):

- Australia/New Zealand
- Other Asia-Pacific
- Japan
- China
- Taiwan
- South Korea
- Africa
- Middle East
- East Europe/Russia
- Continental Europe
- UK/Ireland
- USA
- Canada
- Mexico/Central America
- Non-U.S. Caribbean
- South America
- Other: _____

15. What are your main market sectors? (select all that apply)

- Academic research
 - Defense
 - Maritime Security
 - Ports/harbors
 - Coastal protection
 - Environmental monitoring
 - Renewable energy
 - Oil/gas
 - Maritime security
 - Fishing industry
 - Hydrographic Surveying
 - Construction Surveying
 - Water and water quality
 - Biotechnology
 - Engineering
 - Weather and ocean forecasting
 - Cargo shipping
 - Cruise ships/passenger ships
- Other: _____

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[NOTE TO OMB REVIEWER: At this point, in order to minimize respondent burden the system will skip to the appropriate questions depending upon their answer to Question #1. The conditional skip logic is as follows:

- If the respondent checked off Box 1 of Question 1 (provider of infrastructure for ocean measurement, observation, or forecasting purposes) the survey INCLUDES QUESTION 15 AND THEN SKIPS TO QUESTION 18.
- If the respondent checked off Box 2 of Question 1 (a user of ocean measurements, observations or forecasts to create or enhance a value added data product offered for commercial sale) the survey SKIPS FROM QUESTION 14 TO QUESTIONS 16.
- If they endorse both Box1 and Box 2 of Question 1, the survey skips no questions.

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16. What kind of ocean measurement, observation, or forecasting infrastructure (e.g., platforms, instruments, sensors, data communications, Information Technology infrastructure etc.) do you sell? (select all that apply)

- Hydrographic survey sensors/instruments/systems
- Shallow geophysical survey sensors/instruments/systems
- Geotechnical measurement/sampling, sensors/instruments/systems
- Physical oceanographic sensors/instruments/systems
- Chemical oceanographic sensors/instruments/systems
- Biological oceanographic sensors/instruments/systems

- Navigation and positioning sensors/instruments/systems
 - Platforms such as towed systems, remote or autonomous underwater vehicles
 - Data communications and Information Technology infrastructure
 - Other _____
17. If you utilize “*IN SITU*” ocean observations or measurements in your data products (ie data generated from observations or measurements conducted within or upon the ocean) what kind of data do you use? (select all that apply)
- Bathymetric data
 - Geophysical data
 - Geotechnical data
 - Physical oceanographic data
 - Chemical oceanographic data
 - Biological oceanographic data
 - Other _____
 - We do not utilize *IN SITU* data
18. If you utilize “REMOTELY SENSED” ocean observations in your product (e.g., satellites, airplane observations, high frequency radar), what kind of data do you use? (select all that apply)
- Aircraft observations
 - Satellite observations
 - Shore observations
 - Other _____
 - We do not utilize REMOTELY SENSED data

The following questions relate specifically to your interaction with the US Integrated Ocean Observing (IOOS).

19. Are you aware of the Integrated Ocean Observing System (IOOS)and, if so, do you contribute to IOOS infrastructure or utilize IOOS coordinated data? (Select all that apply)
- We are unaware of the IOOS <SURVEY WILL GO TO THANK YOU/EXIT SCRIPT>
 - We are aware of IOOS
 - We contribute to IOOS infrastructure
 - We make use of IOOS coordinated data
20. Which of the following do you consider issues or barriers to working with IOOS that impact your business? (select all that apply)
- Local regulations or restrictions
 - Limited access to data streams
 - Structure of IOOS data streams limits usability
 - Lack of documentation on IOOS data streams

- Difficulties or limitations with adapting new technology into the existing ocean observing system
- Limited knowledge about future investment and development plans for the IOOS system
- Data does not adequately cover the geographical needed
- Hard to find employees who can work with the IOOS data
- Hard to find employees who can work with the IOOS infrastructure
- Other: _____
- None of the above
- Don't know

21. In the future, we plan to: (select all that apply)

- Develop new products that utilize IOOS data
- Expand the capabilities of our current product that utilizes IOOS data
- Provide additional infrastructure for IOOS
- Provide additional services for IOOS
- Eliminate some products or services we provide
- None of the above

22. What areas do you think could be improved with regard to working with IOOS? (select all that apply)

- Better information and data stream standardization
- More openness to opportunities for new innovations
- Greater focus on the interests of small or new enterprises engaged in ocean observation, measurement, and forecasting or the use of ocean data
- Greater focus on the interests of large or established enterprises
- Other: (please describe) _____
- None of the above

23. Do you feel your current or future workforce could benefit from specific training related to working with IOOS data or providing IOOS infrastructure?

- Yes: please explain:
- No
- Don't know

24. Is there anything that would make it easier to provide services, products, or infrastructure to NOAA and the IOOS system?

- Yes: please explain:
- No
- Don't know

25. Is there anything that would make it easier to utilize the IOOS data and incorporate it into a product?

- Yes: please explain:
- No
- Don't know

OPTIONAL RECOMMENDATION QUESTION:

Can you recommend other recipients for this survey? These could be subsidiaries of your company, or other qualified companies?

If yes, please list below (name of company and contact if available):
