



Rafael Ramos, Regional Manager – Senior Oceanographer at Woods Hole Group

Dr. Rafael Ramos has more than 35 years of experience working in many aspects of ocean engineering, oceanography, and atmospheric sciences for government entities, research institutions, and the offshore energy industry (Oil & Gas, Wind, and other renewables). He earned a Master's Degree in Ocean Engineering from Texas A&M University and a Doctorate Degree in Applied Marine Physics at the University of Miami. He also completed a post-Doctorate appointment at the *Center for Southeastern Tropical Advance Remote Sensing* of the University of Miami. He has been involved in multiple aspects of design (and requalification) of offshore Oil & Gas and wind farm infrastructure and has participated in several studies related to the generation and implementation of associated operational, design, and structural assessment criteria, including the generation of recommended practices. Dr. Ramos has also been involved in several field experiments focused on further understanding atmospheric, oceanographic, and air-sea interaction phenomena, ranging from internal waves to momentum and heat transfer on the ocean surface. He is author or coauthor of more than 30 peer-reviewed technical articles and several conference proceedings papers dealing with modeling and interpretation of data collected by shore-based (HF radar), vessel-based (X-Band radar), and satellite-based (altimeter, scatterometer, SAR) remote sensing systems as well as moored (buoy) and non-moored instrumentation.

Dr. Ramos has participated in and led several meteorological and oceanographic (metocean) studies in the Gulf of Mexico including the real-time monitoring of the Macondo oil spill with satellite imagery (US DHLS Science and Technology Impact Award). He also works actively in the characterization of the Loop Current and Loop Current Eddies that shed from it (using measurements collected from dedicated vessels and other data sources), the assessment of accuracy of existing simplified and regional circulation models, and the deployment (and associated data analysis and interpretation) of metocean instrumentation in moorings and other offshore measuring platforms. He participates in and has been an integral part of several studies concerning the characterization of the Loop Current System for Joint Industry Projects and public entities (e.g., CASE EJIP, NASEM UGOS). Dr. Ramos is member of several technical organizations such as the American Society of Civil Engineers (COPRI Chapter), AGU, MTS, SNAME, SUT, and participates actively in scientific review committees in the US and abroad. He is also

engaged in GCOOS activities and contributes to various discussions of interests for the regional association.