

# Breakout Session 4 over Applications

1. What are the best pathways forward for bridging gaps between scientists quantifying surface currents and scientists who use surface current products for applications?
2. What are the most pressing applications that require improved measurements of surface currents, and what kinds of improvements are needed (e.g., better accuracy, resolution, coverage, etc.) ?
3. What is the prevalence/importance of considering “behavior” rather than “passive transport” when investigating transport of particles, organisms, debris, etc.?
4. What level of accuracy/resolution in surface current observations and models is required for applications in the open ocean? Coastal ocean? Land-sea interface?
5. At what scale must we resolve surface currents to accurately model larval transport and connectivity, marine litter transport, coastal erosion, air-sea gas exchange? What are the pathways towards sufficiently high resolution current estimates?
6. Are specific observation systems needed for different applications (coastal erosion, plastic transport, larval connectivity, biogeochemical transports, etc.)