

Contents

1 Radar Altimetry: Past, Present and Future	1
J. Benveniste	
2 From Research to Operations: The USDA Global Reservoir and Lake Monitor	19
C. Birkett, C. Reynolds, B. Beckley, and B. Doorn	
3 User Requirements in the Coastal Ocean for Satellite Altimetry	51
C. Dufau, C. Martin-Puig, and L. Moreno	
4 Retracking Altimeter Waveforms Near the Coasts.....	61
C. Gommenginger, P. Thibaut, L. Fenoglio-Marc, G. Quartly, X. Deng, J. Gómez-Enri, P. Challenor, and Y. Gao	
5 Range and Geophysical Corrections in Coastal Regions: And Implications for Mean Sea Surface Determination.....	103
O.B. Andersen and R. Scharroo	
6 Tropospheric Corrections for Coastal Altimetry.....	147
E. Obligis, C. Desportes, L. Eymard, J. Fernandes, C. Lázaro, and A. Nunes	
7 Surge Models as Providers of Improved “Inverse Barometer Corrections” for Coastal Altimetry Users.....	177
P.L. Woodworth and K.J. Horsburgh	
8 Tide Predictions in Shelf and Coastal Waters: Status and Prospects.....	191
R.D. Ray, G.D. Egbert, and S.Y. Erofeeva	
9 Post-processing Altimeter Data Towards Coastal Applications and Integration into Coastal Models.....	217
L. Roblou, J. Lamouroux, J. Bouffard, F. Lyard, M. Le Henaff, A. Lombard, P. Marsaleix, P. De Mey, and F. Birol	
10 Coastal Challenges for Altimeter Data Dissemination and Services	247
H.M. Snaith and R. Scharroo	

11 In situ Absolute Calibration and Validation: A Link from Coastal to Open-Ocean Altimetry	259
P. Bonnefond, B.J. Haines, and C. Watson	
12 Introduction and Assessment of Improved Coastal Altimetry Strategies: Case Study over the Northwestern Mediterranean Sea	297
J. Bouffard, L. Roblou, F. Birol, A. Pascual, L. Fenoglio-Marc, M. Cancet, R. Morrow, and Y. Ménard	
13 Satellite Altimetry Applications in the Caspian Sea	331
A.V. Kouraev, J.-F. Crétaux, S.A. Lebedev, A.G. Kostianoy, A.I. Ginzburg, N.A. Sheremet, R. Mamedov, E.A. Zakharova, L. Roblou, F. Lyard, S. Calmant, and M. Bergé-Nguyen	
14 Satellite Altimetry Applications in the Black Sea.....	367
A.I. Ginzburg, A.G. Kostianoy, N.A. Sheremet, and S.A. Lebedev	
15 Satellite Altimetry Applications in the Barents and White Seas.....	389
S.A. Lebedev, A.G. Kostianoy, A.I. Ginzburg, D.P. Medvedev, N.A. Sheremet, and S.N. Shauro	
16 Satellite Altimetry Applications off the Coasts of North America.....	417
W.J. Emery, T. Strub, R. Leben, M. Foreman, J.C. McWilliams, G. Han, C. Ladd, and H. Ueno	
17 Evaluation of Retracking Algorithms over China and Adjacent Coastal Seas.....	453
L. Yang, M. Lin, Y. Zhang, L. Bao, and D. Pan	
18 Satellite Altimetry for Geodetic, Oceanographic, and Climate Studies in the Australian Region.....	473
X. Deng, D.A. Griffin, K. Ridgway, J.A. Church, W.E. Featherstone, N.J. White, and M. Cahill	
19 Lakes Studies from Satellite Altimetry.....	509
J.-F. Crétaux, S. Calmant, R. Abarca del Rio, A. Kouraev, M. Bergé-Nguyen, and P. Maisongrande	
20 The Future of Coastal Altimetry.....	535
R.K. Raney and L. Phalippou	
Index	561