

DAFTAR PUSTAKA

- Abualtayef, M., Foul, A. A., Ghabayen, S., Rabou, A. F. A., Seif, A. K., & Matar, O. (2013). Mitigation Measures for Gaza Coastal Erosion. *Journal of Coastal Development*, 16(2), 135–146.
- Adalya, N. M., & Mutaqin, B. W. (2022). Modeling of hydro-oceanographic parameters and its possible impact on coral reef cover in Derawan Island waters, East Kalimantan, Indonesia. *Modeling Earth Systems and Environment*, 8(3), 4191–4203. <https://doi.org/10.1007/s40808-022-01355-0>
- Addo, K. A., Larbi, L., Amisigo, B., & Ofori-Danson, P. K. (2011). Impacts of Coastal Inundation Due to Climate Change in a CLUSTER of Urban Coastal Communities in Ghana, West Africa. *Remote Sensing*, 3(9), 2029–2050. <https://doi.org/10.3390/rs3092029>
- Alwi, M. (2021). *Analisis Spasial Kerawanan Tsunami di Desa Parangtritis, Yogyakarta*. Universitas Gadjah Mada.
- Alwi, M., & Mutaqin, B. W. (2022). Geospatial mapping of tsunami susceptibility in Parangtritis coastal area of Yogyakarta, Indonesia. *Arabian Journal of Geosciences*, 15(15). <https://doi.org/10.1007/s12517-022-10608-2>
- Amin, B. (2017). Historical Landscape of an Island Town: Ternate, North Maluku. *Paramita: Historical Studies Journal*, 27(2), 127–140. <https://doi.org/10.15294/paramita.v27i2.11157>
- Anggraini, D. D., & Marfai, M. A. (2017). Analisis Jasa Ekosistem Mangrove dalam Mengurangi Erosi Pantai di Sebagian Pesisir Kecamatan Rembang Kabupaten Rembang. *Urnal Bumi Indonesia*, 6(3).
- Appelquist, L. R., & Balstrøm, T. (2014). Application of the Coastal Hazard Wheel methodology for coastal multi-hazard assessment and management in the state of Djibouti. *Climate Risk Management*, 3, 79–95. <https://doi.org/10.1016/j.crm.2014.06.002>
- Appelquist, L. R., & Balstrøm, T. (2015). Application of a new methodology for coastal multi-hazard-assessment & management on the state of Karnataka,

- India. *Journal of Environmental Management*, 152, 1–10.
<https://doi.org/10.1016/j.jenvman.2014.12.017>
- Appelquist, L. R., Balstrøm, T., & Halsnaes, K. (2016a). *Managing climate change hazards in coastal areas - The Coastal Hazard Wheel decision-support system: Catalogue of hazard management options*. United Nations Environment Programme.
- Appelquist, L. R., Balstrøm, T., & Halsnaes, K. (2016b). *Managing climate change hazards in coastal areas - The Coastal Hazard Wheel decision-support system: Main manual* (3rd ed.). United Nations Environment Programme.
- Appelquist, L. R., & Halsnaes, K. (2015). The Coastal Hazard Wheel system for coastal multi-hazard assessment & management in a changing climate. *Journal of Coastal Conservation*, 19(2), 157–179.
<https://doi.org/10.1007/s11852-015-0379-7>
- Aral, M., & Chang, B. (2017). Spatial Variation of Sea Level Rise at Atlantic and Mediterranean Coastline of Europe. *Water*, 9(7), 522.
<https://doi.org/10.3390/w9070522>
- Asari, N., Suratman, M. N., Mohd Ayob, N. A., & Abdul Hamid, N. H. (2021). Mangrove as a Natural Barrier to Environmental Risks and Coastal Protection. In *Mangroves: Ecology, Biodiversity and Management* (pp. 305–322). Springer Singapore. https://doi.org/10.1007/978-981-16-2494-0_13
- Aslam, B., J, M., ZI, M., A, G., & IA, Q. (2017). GIS Mapping of Tsunami Susceptibility: Case Study of the Karachi City in Sindh, Pakistan. *Journal of Geography & Natural Disasters*, 07(01), 1–6. <https://doi.org/10.4172/2167-0587.1000187>
- Badan Geologi. (2013, January 1). *Peta Geologi Interpretasi Citra Inderaan Jauh Lembar Karimunjawa, Jawa Tengah*.
<https://geologi.esdm.go.id/geomap/pages/preview/peta-geologi-interpretasi-citra-inderaan-jauh-lembar-karimunjawa-jawa-tengah>
- Badan Informasi Geospasial. (2020). *Peraturan Badan Informasi Geospasial Republik Indonesia Nomor 1 Tahun 2020 tentang Standar Pengumpulan Data Geospasial Dasar untuk Pembuatan Peta Dasar Skala Besar*.

<https://peraturan.bpk.go.id/Home/Details/217042/peraturan-big-no-1-tahun-2020>

Badan Informasi Geospasial. (2021). *Peraturan Badan Informasi Geospasial Republik Indonesia Nomor 18 Tahun 2021 tentang Tata Cara Penyelenggaraan Informasi Geospasial*.

<https://peraturan.bpk.go.id/Home/Details/217091/peraturan-big-no-18-tahun-2021>

Badan Informasi Geospasial (BIG). (2022). *iPASOET Sea Level Monitoring Data*.
<http://ina-sealevelmonitoring.big.go.id/ipasut/data/map>

Badan Nasional Penanggulangan Bencana. (2015). *Peraturan Kepala Badan Nasional Penanggulangan Bencana No. 07 Tahun 2015*.

Badan Pusat Statistik Kabupaten Jepara. (2018). *Kecamatan Karimunjawa Dalam Angka 2018*. Badan Pusat Statistik Kabupaten Jepara.
<https://jeparakab.bps.go.id/publication/2018/09/26/b0ca4b5d4f09ddb2701c9c72/kecamatan-karimunjawa-dalam-angka-2018.html>

Badan Pusat Statistik Kabupaten Jepara. (2019). *Kecamatan Karimunjawa Dalam Angka 2019*. Badan Pusat Statistik Kabupaten Jepara.
<https://jeparakab.bps.go.id/publication/2019/09/26/b14474a33878f321d58279a0/kecamatan-karimunjawa-dalam-angka-2019.html>

Badan Pusat Statistik Kabupaten Jepara. (2020). *Kecamatan Karimunjawa Dalam Angka 2020*. Badan Pusat Statistik Kabupaten Jepara.
<https://jeparakab.bps.go.id/publication/2020/09/28/1a3db6b434d33bffb0a11996/kecamatan-karimunjawa-dalam-angka-2020.html>

Badan Pusat Statistik Kabupaten Jepara. (2021). *Kecamatan Karimunjawa Dalam Angka 2021*. Badan Pusat Statistik Kabupaten Jepara.
<https://jeparakab.bps.go.id/publication/2021/09/24/e26d076dd538d89a98c5dee4/kecamatan-karimunjawa-dalam-angka-2021.html>

Badan Pusat Statistik Kabupaten Jepara. (2022). *Kecamatan Karimunjawa Dalam Angka 2022*. Badan Pusat Statistik Kabupaten Jepara.
<https://jeparakab.bps.go.id/publication/2022/09/26/4126452c47640418ced80304/kecamatan-karimunjawa-dalam-angka-2022.html>

- Balai Taman Nasional Karimunjawa. (2020). *Statistik Balai Taman Nasional Karimunjawa Tahun 2020*. Balai Taman Nasional Karimunjawa.
- Balai Taman Nasional Karimunjawa. (2021). *Statistik Balai Taman Nasional Karimunjawa Tahun 2021*.
- Batubara, B., Kooy, M., & Zwarteveen, M. (2023). Politicising land subsidence in Jakarta: How land subsidence is the outcome of uneven sociospatial and socationatural processes of capitalist urbanization. *Geoforum*, 139, 103689. <https://doi.org/10.1016/j.geoforum.2023.103689>
- Bird, E. (2007). *Coastal Geomorphology An Introduction Second Edition* (2nd ed.).
- Brathwaite, A., Clua, E., Roach, R., & Pascal, N. (2022). Coral reef restoration for coastal protection: Crafting technical and financial solutions. *Journal of Environmental Management*, 310. <https://doi.org/10.1016/j.jenvman.2022.114718>
- Cahyadi, A., Marfai, A., Andryan, T., Wulandari, T., & Hidayat, W. (2013, August 31). Menyelamatkan Masa Depan Pulau-Pulau Kecil Indonesia: Sebuah Pembelajaran dari Pulau Pramuka, Kepulauan Seribu. *Sarasehan Nasional Tanggal 31 Agustus 2013, Fakultas Geografi UGM Yogyakarta*.
- Chittora, A., Joshi, V. B., & Kumar, M. P. (2017). Assessment of Beach Nourishment Through Analysis of Beach Profiles. *International Journal of Civil Engineering and Technology (IJCET)*, 8(6), 153–159. <http://iaeme.com/Home/journal/IJCET153editor@iaeme.com>
<http://iaeme.com>
- Cisse, C. O. T., Brempong, E. K., Taveneau, A., Almar, R., Sy, B. A., & Angnuureng, D. B. (2022). Extreme coastal water levels with potential flooding risk at the low-lying Saint Louis historic city, Senegal (West Africa). *Frontiers in Marine Science*, 9. <https://doi.org/10.3389/fmars.2022.993644>
- Copernicus Marine Service. (2023). *Access data*. <https://marine.copernicus.eu/access-data>
- Cozannet, G. Le, Nicholls, R. J., Durand, G., Slangen, A. B. A., Lincke, D., & Chapuis, A. (2023). Adaptation to multi-meter sea-level rise should start now.

Environmental Research Letters, 18(9), 091001. <https://doi.org/10.1088/1748-9326/acef3f>

Dahl, K. A., Fitzpatrick, M. F., & Spanger-Siegfried, E. (2017). Sea level rise drives increased tidal flooding frequency at tide gauges along the U.S. East and Gulf Coasts: Projections for 2030 and 2045. *PLOS ONE*, 12(2), e0170949. <https://doi.org/10.1371/journal.pone.0170949>

Day, J. W., & Rybczyk, J. M. (2019). Global Change Impacts on the Future of Coastal Systems: Perverse Interactions Among Climate Change, Ecosystem Degradation, Energy Scarcity, and Population. In *Coasts and Estuaries: The Future* (pp. 621–639). Elsevier. <https://doi.org/10.1016/B978-0-12-814003-1.00036-8>

di Friedberg, M. S., Malatesta, S., & Dell’Agnese, E. (2020). Hazard, Resilience and Development: The Case of Two Maldivian Islands. *Bollettino Della Società Geografica Italiana*, 3(2), 11–24. <https://doi.org/10.36253/bsgi-1087>

Durand, G., van den Broeke, M. R., Le Cozannet, G., Edwards, T. L., Holland, P. R., Jourdain, N. C., Marzeion, B., Mottram, R., Nicholls, R. J., Pattyn, F., Paul, F., Slangen, A. B. A., Winkelmann, R., Burgard, C., van Calcar, C. J., Barré, J. B., Bataille, A., & Chapuis, A. (2022). Sea-Level Rise: From Global Perspectives to Local Services. *Frontiers in Marine Science*, 8. <https://doi.org/10.3389/fmars.2021.709595>

Edmonds, D. A., Caldwell, R. L., Brondizio, E. S., & Siani, S. M. O. (2020). Coastal flooding will disproportionately impact people on river deltas. *Nature Communications*, 11(1). <https://doi.org/10.1038/s41467-020-18531-4>

Effendy, M. (2009). Pengelolaan Wilayah Pesisir Secara Terpadu: Solusi Pemanfaatan Ruang, Pemanfaatan Sumberdaya, dan Pemanfaatan Kapasitas Asimilasi Wilayah Pesisir Yang Optimal dan Berkelanjutan. *Jurnal Kelautan*, 2(1), 81–86.

Fafurida, F., Oktavilia, S., Prajanti, D. S. W., & Maretta, Y. A. (2020). Sustainable Strategy: Karimunjawa National Park Marine Ecotourism, Jepara, Indonesia. *International Journal of Scientific & Technology Research*, 9(3), 3234–3239. www.ijstr.org

- Faral, A., Lavigne, F., Mutaqin, B. W., Mokadem, F., Achmad, R., Ningrum, R. W., Lahitte, P., Hadmoko, D. S., & Mei, E. T. W. (2022). A 22,000-year tephrostratigraphy record of unidentified volcanic eruptions from Ternate and Tidore islands (North Maluku, Indonesia). *Journal of Volcanology and Geothermal Research*, 423. <https://doi.org/10.1016/j.jvolgeores.2022.107474>
- Fatmawati, K., Apriandi, A., Amrizal, S. N., & Rezeki, Z. A. (2021). Antioxidant Activity Saripati Beruwas Laut Fruit (*Scaevola taccada*). *E3S Web of Conferences*, 324, 01012. <https://doi.org/10.1051/e3sconf/202132401012>
- Febrianti, M. I., Purwanti, F., & Hartoko, A. (2018). ANALISIS KETERPAPARAN EKOSISTEM TERUMBU KARANG AKIBAT AKTIVITAS PARIWISATA DI PULAU MENJANGAN TAMAN NASIONAL BALI BARAT. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, 10(1), 15–24. <https://doi.org/10.29244/jitkt.v10i1.19236>
- Forbes, D. L., James, T. S., Sutherland, M., & Nichols, S. E. (2013). Physical basis of coastal adaptation on tropical small islands. *Sustainability Science*, 8(3), 327–344. <https://doi.org/10.1007/s11625-013-0218-4>
- Förster, J., Mcleod, E., Bruton-Adams, M. M., & Wittmer, H. (2019). Climate Change Impacts on Small Island States: Ecosystem Services Risks and Opportunities. In *Atlas of Ecosystem Services* (pp. 353–359). Springer International Publishing. https://doi.org/10.1007/978-3-319-96229-0_54
- Fuchs, G., & Schumann, H. (2004). Visualizing Abstract Data on Maps. *Proceedings. Eighth International Conference on Information Visualisation, 2004. IV 2004*, 139–144. <https://doi.org/10.1109/IV.2004.1320136>
- Garcia, G. P. B., & Grohmann, C. H. (2019). DEM-based geomorphological mapping and landforms characterization of a tropical karst environment in southeastern Brazil. *Journal of South American Earth Sciences*, 93, 14–22. <https://doi.org/10.1016/j.jsames.2019.04.013>
- Giardino, A., Nederhoff, K., & Vousedoukas, M. (2018). Coastal hazard risk assessment for small islands: assessing the impact of climate change and disaster reduction measures on Ebeye (Marshall Islands). *Regional*

- Environmental Change*, 18(8), 2237–2248. <https://doi.org/10.1007/s10113-018-1353-3>
- Gumpili, S. P., & Das, A. V. (2022). Sample size and its evolution in research. *IHOPE Journal of Ophthalmology*, 1, 9–13. https://doi.org/10.25259/ihopejo_3_2021
- Handayani, S., Adrianto, L., Nurjaya, I. W., Bengen, D. G., & Wardiatno, Y. (2021). Strategies for optimizing mangrove ecosystem management in the rehabilitation area of Sayung coastal zone, Demak Regency, Central Java. *Jurnal Pengelolaan Sumberdaya Alam Dan Lingkungan (Journal of Natural Resources and Environmental Management)*, 11(3), 387–396. <https://doi.org/10.29244/jpsl.11.3.387-396>
- Handayani, W., Mutaqin, B. W., Marfai, M. A., Tyas, D. W., Alwi, M., Rosaji, F. S. C., Hilmansyah, A. A., Musthofa, A., & Fahmi, M. S. I. (2022). Coastal Hazard Modeling in Indonesia Small Island: Case Study of Ternate Island. *IOP Conference Series: Earth and Environmental Science*, 1039(1), 1–12. <https://doi.org/10.1088/1755-1315/1039/1/012025>
- Haniru, L. O. (2017). Tinjauan Hukum Penetapan Zonasi Terhadap Masyarakat Nelayan Berdasarkan Pasal 23 Undang-Undang Nomor 5 Tahun 1990 Tentang Konservasi Sumberdaya Alam Hayati dan Ekosistem. *Jurnal Hukum Volkgeist*, 2(1), 71–81.
- Harrison, B. J., Daron, J. D., Palmer, M. D., & Weeks, J. H. (2021). Future sea-level rise projections for tide gauge locations in South Asia. *Environmental Research Communications*, 3(11), 115003. <https://doi.org/10.1088/2515-7620/ac2e6e>
- Hartanto, P., & Hadi, S. I. (2007). Evaluasi Kualitas dan Ketersediaan Air Pulau Karimunjawa. *Kamujan Kepulauan Karimunjawa, Kabupaten Jepara. Jurnal Teknologi Academia ISTA*, 12(1), 118–129.
- Haryanto, Y. D., Riama, N. F., Purnama, D. R., & Sigalingging, A. D. (2021). The Effect of the Difference in Intensity and Track of Tropical Cyclone on Significant Wave Height and Wave Direction in the Southeast Indian Ocean. *Hindawi*. <https://doi.org/10.1155/2021/5492048>

- Herbenita, V., Rildova, Yuanita, N., Kurniawan, A., Kahdar, K., & Gunawan, W. (2022). Comparative of material properties between natural fibers and geo-bag synthetic fibers as sustainable material of temporary structure in natural coastal protection systems. *IOP Conference Series: Earth and Environmental Science*, 1065(1). <https://doi.org/10.1088/1755-1315/1065/1/012055>
- Howari, F. M., & Ghrefat, H. (2020). Geographic Information System. In *Pollution Assessment for Sustainable Practices in Applied Sciences and Engineering* (pp. 165–198). Elsevier. <https://doi.org/10.1016/B978-0-12-809582-9.00004-9>
- Indarto, & Prasetyo, D. R. (2014). Pembuatan Digital Elevation Model Resolusi 10m dari Peta RBI dan Survei GPS dengan Algoritma ANUDEM. *Jurnal Keteknik Pertanian*, 2(1), 55–63.
- Indriasari, V. Y., Risandi, J., & Akhwadhy, R. (2017). Analisa stabilitas struktur revetmen di Pantai Kedungu, Tabanan Bali. *JURNAL SUMBER DAYA AIR*, 13(1), 11–22. <https://doi.org/10.32679/jsda.v13i1.315>
- Iswari, M. Y., & Anggraini, K. (2018). DEMNAS: Model Digital Ketinggian Nasional untuk Aplikasi Kepesisiran. *OSEANA*, 43(4). <https://doi.org/10.14203/oseana.2018.vol.43no.4.2>
- Jiang, C., Wu, Z., Chen, J., Deng, B., & Long, Y. (2015). Sorting and sedimentology character of sandy beach under wave action. *Procedia Engineering*, 116(1), 771–777. <https://doi.org/10.1016/j.proeng.2015.08.363>
- Kais, S. M., & Islam, M. S. (2023). Climate Change, Ecological Modernization, and Disaster Management: The Coastal Embankment Project in Southwestern Bangladesh. *International Journal of Environmental Research and Public Health*, 20(12), 6086. <https://doi.org/10.3390/ijerph20126086>
- Kaya, R. G. K., & de Lima, F. (2018). Wisata Bahari pada Zona Pemanfaatan Taman Nasional Manusela: Potensi dan Faktor Pengaruh Pengembangan. *Jurnal Papalele*, 2(2), 66–74.
- Ketjulan, R., Boer, M., Imran, Z., & Siregar, V. P. (2019). Daya Dukung Lahan untuk Pemukiman Penduduk dan Implikasinya Terhadap Kualitas Perairan di Pulau-Pulau Kecil (Kasus Pulau-Pulau Kecil Selat Tiworo Kabupaten Muna

- Barat). *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, 11(3), 569–582.
<https://doi.org/10.29244/jitkt.v11i3.25731>
- Khoirunnisa, H., Wibowo, M., Hendriyono, W., & Wardani, K. S. (2021). The hydrodynamics condition of water operating area for flight test site selection of N219 Amphibious aircraft. *IOP Conference Series: Earth and Environmental Science*, 930(1). <https://doi.org/10.1088/1755-1315/930/1/012056>
- Koroy, K., Yulianda, F., & Butet, N. A. (2017). Pengembangan Ekowisata Bahari Berbasis Sumberdaya Pulau-Pulau Kecil di Pulau Sayafi dan Liwo, Kabupaten Halmahera Tengah. *Jurnal Teknologi Perikanan Dan Kelautan*, 8(1), 1–17.
<https://doi.org/10.24319/jtpk.8.1-17>
- Kurniawan, R., & Khotimah, M. K. (2015). Ocean Wave Characteristics in Indonesian Waters for Sea Transportation Safety and Planning. *IPTEK*, 26(1).
- Lazuardi, Z., Abubakar, & Sugianto. (2022). Analisis Perubahan Garis Pantai Menggunakan Digital Shoreline Analysis System (DSAS) di Pesisir Timur Kota Sabang. *Jurnal Ilmiah Mahasiswa Pertanian*, 7(1).
www.jim.unsyiah.ac.id/JFP
- Lee, Y.-H., Kim, Y.-C., & Lee, H. (2022). Framework for selection of temporary disaster waste management sites for post-flood recovery in Seoul, South Korea. *International Journal of Disaster Risk Reduction*, 71, 102832.
<https://doi.org/10.1016/j.ijdr.2022.102832>
- Li, L., Qiang, Y., Zheng, Z., & Zhang, J.-Y. (2019). Research on the Relationship between the Spatial Resolution and the Map Scale in the Satellite Remote Sensing Cartographies. *International Conference on Modeling, Analysis, Simulation Technologies and Applications (MASTA 2019)*, 194–199.
- Li, S., Mao, X., He, Z., Xu, S., Guo, Z., & Shi, S. (2023). Chromosomal-Scale Genome Assemblies of Two Coastal Plant Species, *Scaevola taccada* and *S. hainanensis*—Insight into Adaptation Outside of the Common Range. *International Journal of Molecular Sciences*, 24(8), 7355.
<https://doi.org/10.3390/ijms24087355>

- López-Dóriga, U., & Jiménez, J. A. (2020). Impact of relative sea-level rise on low-lying coastal areas of catalonia, nw mediterranean, spain. *Water (Switzerland)*, 12(11). <https://doi.org/10.3390/w12113252>
- López-Olmedilla, L., Almeida, L. P., de Figueiredo, S. A., Fontán-Bouzas, Á., Silva, P. A., & Alcántara-Carrió, J. (2022). Effect of alongshore sediment supply gradients on projected shoreline position under sea-level rise (northwestern Portuguese coast). *Estuarine, Coastal and Shelf Science*, 271. <https://doi.org/10.1016/j.ecss.2022.107876>
- Lukman, K. M., Uchiyama, Y., Quevedo, J. M. D., & Kohsaka, R. (2022). Tourism impacts on small island ecosystems: public perceptions from Karimunjawa Island, Indonesia. *Journal of Coastal Conservation*, 26(3). <https://doi.org/10.1007/s11852-022-00852-9>
- Magnan, A. K., Oppenheimer, M., Garschagen, M., Buchanan, M. K., Duvat, V. K. E., Forbes, D. L., Ford, J. D., Lambert, E., Petzold, J., Renaud, F. G., Sebesvari, Z., van de Wal, R. S. W., Hinkel, J., & Pörtner, H. O. (2022). Sea level rise risks and societal adaptation benefits in low-lying coastal areas. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-14303-w>
- Mahmud, A., Satria, A., & Kinseng, R. A. (2015). Zonasi Konservasi untuk Siapa? Pengaturan Perairan Laut Taman Nasional Bali Barat. . . *Kinseng, Zonasi Konservasi Untuk Siapa?*, 18(3), 237–251.
- Marfai, M. A. (2011). Impact of coastal inundation on ecology and agricultural land use case study in central Java, Indonesia. *Quaestiones Geographicae*, 30(3), 19–32. <https://doi.org/10.2478/v10117-011-0024-y>
- Marfai, M. A. (2012). Preliminary assessment of coastal erosion and local community adaptation in sayung coastal area, central java - Indonesia. *Quaestiones Geographicae*, 31(3), 47–55. <https://doi.org/10.2478/v10117-012-0028-2>
- Marfai, M. A. (2014). Impact of sea level rise to coastal ecology: A case study on the northern part of java island, indonesia. *Quaestiones Geographicae*, 33(1), 107–114. <https://doi.org/10.2478/quageo-2014-0008>

- Marfai, M. A., Khakim, N., Fatchurohman, H., & Salma, A. D. (2021). Planning tsunami vertical evacuation routes using high-resolution UAV digital elevation model: case study in Drini Coastal Area, Java, Indonesia. *Arabian Journal of Geosciences*, 14(2028), 1–13. <https://doi.org/10.1007/s12517-021-08357-9/Published>
- Medwedeff, W. G., Clark, M. K., Zekkos, D., West, A. J., & Chamlagain, D. (2022). Near-Surface Geomechanical Properties and Weathering Characteristics Across a Tectonic and Climatic Gradient in the Central Nepal Himalaya. *Journal of Geophysical Research: Earth Surface*, 127(2). <https://doi.org/10.1029/2021JF006240>
- Meli, P., Benayas, J. M. R., Balvanera, P., & Ramos, M. M. (2014). Restoration enhances wetland biodiversity and ecosystem service supply, but results are context-dependent: A meta-analysis. *PLoS ONE*, 9(4). <https://doi.org/10.1371/journal.pone.0093507>
- Merz, E., Saberski, E., Gilarranz, L. J., Isles, P. D. F., Sugihara, G., Berger, C., & Pomati, F. (2023). Disruption of ecological networks in lakes by climate change and nutrient fluctuations. *Nature Climate Change*, 13(4), 389–396. <https://doi.org/10.1038/s41558-023-01615-6>
- Micallef, S., Micallef, A., & Galdies, C. (2018). Application of the Coastal Hazard Wheel to assess erosion on the Maltese coast. *Ocean and Coastal Management*, 156, 209–222. <https://doi.org/10.1016/j.ocecoaman.2017.06.005>
- Miller, T. (2020). The Effect of Sea Level Rise on Islands and Atolls. *Encyclopedia of the World's Biomes*, 1, 76–82. <https://doi.org/10.1016/b978-0-12-409548-9.12038-x>
- Mohd, F. A., Abdul Maulud, K. N., Karim, O. A., Begum, R. A., Awang, N. A., Hamid, M. R. A., Rahim, N. A. A., & Razak, A. H. A. (2018). Assessment of coastal inundation of low lying areas due to sea level rise. *IOP Conference Series: Earth and Environmental Science*, 169(1). <https://doi.org/10.1088/1755-1315/169/1/012046>

- Moore, W. S., & Joye, S. B. (2021). Saltwater Intrusion and Submarine Groundwater Discharge: Acceleration of Biogeochemical Reactions in Changing Coastal Aquifers. *Frontiers in Earth Science*, 9. <https://doi.org/10.3389/feart.2021.600710>
- Mueller, C., Micallef, A., Spatola, D., & Wang, X. (2020). The Tsunami Inundation Hazard of the Maltese Islands (Central Mediterranean Sea): A Submarine Landslide and Earthquake Tsunami Scenario Study. *Pure and Applied Geophysics*, 177(3), 1617–1638. <https://doi.org/10.1007/s00024-019-02388-w>
- Muhammad, D. T. N., & Mardiatno, D. (2022). Kerentanan Pesisir Pulau Kecil (Studi Kasus: Pulau Karimunjawa dan Kemujan). *Journal of Fisheries and Marine Research*, 6(1), 91–103. <http://jfmr.ub.ac.id>
- Mutaqin, B. W., Amanatulloh, D. A., Waskita, T. B., Marfai, M. A., Isnain, M. N., Alwi, M., & Khomarudin, M. R. (2022). Analisis Geomorfologi dan Oseanografi untuk Identifikasi Tipologi Pulau Kecil: Studi Kasus di Kepulauan Maluku Utara dan Karimunjawa. *JPG (Jurnal Pendidikan Geografi)*, 9(1). <https://doi.org/10.20527/jpg.v9i1.12459>
- Mutaqin, B. W., Handayani, W., Rosaji, F. S. C., Wahyuningtyas, D., & Aris Marfai, M. (2021). Geomorphological Analysis for the Identification of Small Volcanic Islands in North Maluku, Indonesia. *Jurnal Geografi*, 13(2), 184–194. <http://jurnal.unimed.ac.id/2012/index.php/geo>
- Mutaqin, B. W., Lavigne, F., Sudrajat, Y., Handayani, L., Lahitte, P., Virmoux, C., Hiden, Hadmoko, D. S., Komorowski, J. C., Hananto, N. D., Wassmer, P., Hartono, & Boillot-Airaksinen, K. (2019). Landscape evolution on the eastern part of Lombok (Indonesia) related to the 1257 CE eruption of the Samalas Volcano. *Geomorphology*, 327, 338–350. <https://doi.org/10.1016/j.geomorph.2018.11.010>
- Mutaqin, B. W., Marfai, M. A., Handayani, W., Tyas, D. W., Alwi, M., Hilmansyah, A. A., Rosaji, F. S. C., Musthofa, A., Fahmi, M. S. I., & Isnain, M. N. (2022). *Metode Deteksi Potensi Bencana Pulau-Pulau Kecil* (R. Delima & U. Prastya, Eds.). PT. Kanisius.

- Mutaqin, B. W., Marfai, M. A., Khomarudin, M. R., Amanatulloh, D. A., Waskita, T. B., Isnain, M. I., & Alwi, M. (2022). *Buku pedoman teknis pengelolaan data geospasial untuk identifikasi dan pemetaan tipologi pulau-pulau kecil - studi kasus: Maluku Utara dan Karimunjawa*. PT. Kanisius.
- Nedd, R., Light, K., Owens, M., James, N., Johnson, E., & Anandhi, A. (2021). A synthesis of land use/land cover studies: Definitions, classification systems, meta-studies, challenges and knowledge gaps on a global landscape. In *Land* (Vol. 10, Issue 9). MDPI. <https://doi.org/10.3390/land10090994>
- Nugroho, F., Zamani, N. P., & Madduppa, H. (2018). THE EFFECT OF ORGANIC SEDIMENT CONTENT ON CORAL DIVERSITY IN KARIMUNJAWA ISLAND, INDONESIA. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, 10(1), 79–86. <https://doi.org/10.29244/jitkt.v10i1.21665>
- Orru, K., Hansson, S., Gabel, F., Tammpuu, P., Krüger, M., Savadori, L., Meyer, S. F., Torpan, S., Jukarainen, P., Schieffeler, A., Lovasz, G., & Rhinard, M. (2022). Approaches to ‘vulnerability’ in eight European disaster management systems. *Disasters*, 46(3), 742–767. <https://doi.org/10.1111/disa.12481>
- Otvos, E. G. (2000). Beach ridges-definitions and significance. *Geomorphology*, 32, 83–108.
- Pannozzo, N., Leonardi, N., Carnacina, I., & Smedley, R. K. (2023). Storm sediment contribution to salt marsh accretion and expansion. *Geomorphology*, 430. <https://doi.org/10.1016/j.geomorph.2023.108670>
- Pasaribu, R. P., Sewiko, R., & Arifin, A. (2022). Application of The Admiralty Method to Process Tidal Data in the Waters of The Nasik Strait - Bangka Belitung. *Jurnal Ilmiah PLATAX*, 10(1), 146. <https://doi.org/10.35800/jip.v10i1.39719>
- Paul, S., & Das, C. S. (2021). Delineating the coastal vulnerability using Coastal Hazard Wheel: A study of West Bengal coast, India. *Regional Studies in Marine Science*, 44, 101794. <https://doi.org/10.1016/j.rsma.2021.101794>
- Pemerintah Pusat. (1999). *Surat Keputusan Menteri Kehutanan Nomor 78/Kpts-II/1999*.

- Pemerintah Pusat. (2020a). *Peraturan Presiden Republik Indonesia Nomor 87 Tahun 2020 tentang Rencana Induk Penanggulangan Bencana Tahun 2020-2024*. <https://peraturan.bpk.go.id/Home/Details/146481/perpres-no-87-tahun-2020>
- Pemerintah Pusat. (2020b). *Undang-Undang Republik Indonesia Nomor 11 Tahun 2020 tentang Cipta Kerja*. <https://peraturan.bpk.go.id/Home/Details/149750/uu-no-11-tahun-2020>
- Pribadi, A. H., Suryani, & A'in, C. (2020). Dampak Kegiatan Pariwisata terhadap Status Tutupan Terumbu Karang dan Valuasi Ekonomi di Kepulauan Karimunjawa. *Journal of Maquares*, 9(1), 78–80. <https://ejournal3.undip.ac.id/index.php/maquares>
- Purbani, D., Salim, H. L., Kusuma, L. P. A. S. C., Tussadiah, A., & Subandriyo, J. (2019). Ancaman Gelombang Ekstrem dan Abrasi pada Penggunaan Lahan di Pesisir Kepulauan Karimunjawa (Studi Kasus: Pulau Kemujan, Pulau Karimunjawa, Pulau Menjangan Besar, dan Pulau Menjangan Kecil). *Jurnal Kelautan Nasional*, 14(1), 33–45. <https://doi.org/10.15578/jkn.v14i1.7207>
- Purwanto, Sugianto, D. N., Zainuri, M., Permatasari, G., Atmodjo, W., Rochaddi, B., Ismanto, A., Wetchayont, P., & Wirasatriya, A. (2021). Seasonal variability of waves within the Indonesian seas and its relation with the monsoon wind. *Ilmu Kelautan: Indonesian Journal of Marine Sciences*, 26(3), 189–196. <https://doi.org/10.14710/ik.ijms.26.3.189-196>
- Raju, R. D., & Arockiasamy, M. (2022). Coastal Protection Using Integration of Mangroves with Floating Barges: An Innovative Concept. *Journal of Marine Science and Engineering*, 10(5), 612. <https://doi.org/10.3390/jmse10050612>
- Ramli, M., Rochwulaningsih, Y., Sulistiyono, S. T., & Masruroh, N. (2015). Textbook for Small Multiethnics Islands In Indonesia. *PROSIDING ICTTE FKIP UNS 2015*, 1031–1042.
- Raswitaningrum, T. R., & Fitriyani, L. (2019). Analisis Tanggul Pelindung Pantai Reklamasi Terhadap Gelombang Laut. *Jurnal Konstruksia*, 10(2), 115–128.
- Rebeeh, Y. A. M. A., Pokharel, S., Abdella, G. M. M., & Hammuda, A. S. (2019). Disaster management in industrial areas: Perspectives, challenges and future

- research. *Journal of Industrial Engineering and Management*, 12(1), 133.
<https://doi.org/10.3926/jiem.2663>
- Regard, V., Prémaillon, M., Dewez, T., Carretier, S., Jeandel, C., Godderis, Y., Bonnet, S., Schott, J., Pedoja, K., & Martinod, J. (2022). Rock coast erosion: an overlooked source of sediments to the ocean. Europe as an example. *Earth and Planetary Science Letters*, 1–22.
<https://doi.org/10.1016/j.epsl.2021.117356>
- Romagnoli, C., Bosman, A., Casalbore, D., Anzidei, M., Doumaz, F., Bonaventura, F., Meli, M., & Verdirame, C. (2022). Coastal Erosion and Flooding Threaten Low-Lying Coastal Tracts at Lipari (Aeolian Islands, Italy). *Remote Sensing*, 14(13). <https://doi.org/10.3390/rs14132960>
- Saengsupavanich, C. (2022). Successful Coastal Protection by Step Concrete Revetments in Thailand. *IOP Conference Series: Earth and Environmental Science*, 1072(1), 012002. <https://doi.org/10.1088/1755-1315/1072/1/012002>
- Saengsupavanich, C., Ariffin, E. H., Yun, L. S., & Pereira, D. A. (2022). Environmental impact of submerged and emerged breakwaters. *Heliyon*, 8(12), e12626. <https://doi.org/10.1016/j.heliyon.2022.e12626>
- Sammartano, G., & Spanò, A. (2016). DEM generation based on UAV photogrammetry data in critical areas. *GISTAM 2016 - Proceedings of the 2nd International Conference on Geographical Information Systems Theory, Applications and Management*, 92–98.
<https://doi.org/10.5220/0005918400920098>
- Sandoval, V., Voss, M., Flörchinger, V., Lorenz, S., & Jafari, P. (2023). Integrated Disaster Risk Management (IDRM): Elements to Advance Its Study and Assessment. *International Journal of Disaster Risk Science*, 14(3), 343–356.
<https://doi.org/10.1007/s13753-023-00490-1>
- Saputra, I. D., Subardjo, P., & Handoyo, G. (2014). Peta Kerawanan Tsunami serta Rancangan Jalur Evakuasi di Pantai Desa Parangtritis Kecamatan Kretek Kabupaten Bantul Daerah Istimewa Yogyakarta. *Jurnal Oseanografi*, 3(4), 722–731. <http://ejournal-s1.undip.ac.id/index.php/jose.50275Telp/fax>

- Sartimbul, A., Ningtias, S. W., Dewi, C. S. U., Rahman, M. A., Yona, D., Sari, S. H. J., & Hidayati, N. (2021). Monitoring of sedimentation on geosynthetic bags installation area in banyuurip mangrove center, ujung pangkah, gresik, indonesia. *Ilmu Kelautan: Indonesian Journal of Marine Sciences*, 26(3), 173–181. <https://doi.org/10.14710/ik.ijms.26.3.173-181>
- Sawungrana, A. R., & Purwanto, T. H. (2017). Pemanfaatan Data Aster GDEM dan SRTM untuk Pemodelan Aliran Lahar Gunung Kelud Pasca Erupsi 2014. *Jurnal Bumi Indonesia*, 6(1).
- Setiady, D., & Sarmili, L. (2015). Proses Akresi dan Abrasi Berdasarkan Pemetaan Karakteristik Pantai dan Data Gelombang di teluk Pelabuhan Ratu dan Ciletuh, Kabupaten Sukabumi, Jawa Barat. *Jurnal Geologi Kelautan*, 13(1), 37–48.
- Setiawan, B. (2023). Ecotourism and Women Enterpreuner in Buffer Zone of Karimunjawa National Park. In *Proceedings of the 3rd Borobudur International Symposium on Humanities and Social Science 2021 (BIS-HSS 2021)* (pp. 336–342). Atlantis Press SARL. https://doi.org/10.2991/978-2-494069-49-7_56
- Shodiq, A. M., Sobatnu, F., & Inayah, N. (2022). Analisis Aspek Geometrik Genangan Banjir Menggunakan Data DEMNAS. *Jurnal INTEKNA*, 22(1), 51–59. <http://ejurnal.poliban.ac.id/index.php/intekna/issue/archive>
- Sidarto, Santosa, S., & Hermanto, B. (1993). *Peta geologi lembar Karimunjawa (lembar 1410-2, 3)*. Pusat Penelitian dan Pengembangan Geologi.
- Siddha, S., & Sahu, P. (2020). Status of seawater intrusion in coastal aquifer of Gujarat, India: a review. *SN Applied Sciences*, 2(10), 1726. <https://doi.org/10.1007/s42452-020-03510-7>
- Sinergise. (2023). *Sentinel Hub EO Browser*. <https://apps.sentinel-hub.com/eo-browser/>
- Su, Q., Li, Z., Li, G., Zhu, D., & Hu, P. (2021). Application of the coastal hazard wheel for coastal multi-hazard assessment and management in the Guang-Fong-Hongkong-Macao greater bay area. *Sustainability (Switzerland)*, 13(22). <https://doi.org/10.3390/su132212623>

- Suparjo, S., & Prianto, P. (2017). ANALISIS TINGKAT BAHAYA EROSI DI KOTA SAMARINDA. *ULIN: Jurnal Hutan Tropis*, 1(1).
<https://doi.org/10.32522/ujht.v1i1.790>
- Surinati, D., & Kusuma, D. A. (2018). Karakteristik dan Dampak Siklon Tropis yang Tumbuh di Sekitar Wilayah Indonesia. *Oseana*, 43(2), 1–12.
- Sutrisno, D., Rahadiati, A., Rudiastuti, A. W., Dewi, R. S., & Munawaroh. (2020). Urban Coastal Flood-Prone Mapping under the Combined Impact of Tidal Wave and Heavy Rainfall: A Proposal to the Existing National Standard. *ISPRS International Journal of Geo-Information*, 9(9), 525.
<https://doi.org/10.3390/ijgi9090525>
- Taftazani, R., Kazama, S., & Takizawa, S. (2022). Spatial Analysis of Groundwater Abstraction and Land Subsidence for Planning the Piped Water Supply in Jakarta, Indonesia. *Water*, 14(20), 3197. <https://doi.org/10.3390/w14203197>
- The National Committee of Soil and Terrain. (2009). *Australian Soil and Land Survey Field Handbook* (3rd ed.). CSIRO.
- Thiéblemont, R., Le Cozannet, G., Toimil, A., Meyssignac, B., & Losada, I. J. (2019). Likely and High-End Impacts of Regional Sea-Level Rise on the Shoreline Change of European Sandy Coasts Under a High Greenhouse Gas Emissions Scenario. *Water*, 11(12), 2607. <https://doi.org/10.3390/w11122607>
- Tian, P., Li, J., Cao, L., Pu, R., Gong, H., Liu, Y., Zhang, H., & Chen, H. (2021). Impacts of reclamation derived land use changes on ecosystem services in a typical gulf of eastern China: A case study of Hangzhou bay. *Ecological Indicators*, 132, 108259. <https://doi.org/10.1016/j.ecolind.2021.108259>
- Tosi, L., Da Lio, C., Bergamasco, A., Cosma, M., Cavallina, C., Fasson, A., Viezzoli, A., Zaggia, L., & Donnici, S. (2022). Sensitivity, Hazard, and Vulnerability of Farmlands to Saltwater Intrusion in Low-Lying Coastal Areas of Venice, Italy. *Water (Switzerland)*, 14(1).
<https://doi.org/10.3390/w14010064>
- Trajković, G. (2008). Measurement: Accuracy and Precision, Reliability and Validity. In *Encyclopedia of Public Health* (pp. 888–892). Springer Netherlands. https://doi.org/10.1007/978-1-4020-5614-7_2081

- Trans7 Official. (2019). *Sayung, Hidup di Tanah Abrasi*.
<https://www.youtube.com/watch?v=O1xgfAk18UY&t=24s>
- Triana, K., & Wahyudi, A. J. (2020). Sea Level Rise in Indonesia: The Drivers and the Combined Impacts from Land Subsidence. *ASEAN Journal on Science and Technology for Development*, 37(3). <https://doi.org/10.29037/ajstd.627>
- U. S. Geological Survey. (1992). *Forum on Land Use & Land Cover*.
- Umar, M. A. (2018). Potensi Ekowisata Bahari pada Pulau-Pulau Kecil di Halmahera Selatan. *Jurnal Geografi*, 10(2), 117–128.
<https://doi.org/10.24114/jg.v10i2.10323>
- UNEP-WCMC, WorldFish Centre, WRI, & TNC. (2021). *Global distribution of warm-water coral reefs, compiled from multiple sources including the Millennium Coral Reef Mapping Project. Version 4.1. Includes contributions from IMaRS-USF and IRD (2005), IMaRS-USF (2005) and Spalding et al. (2001)*. <https://doi.org/https://doi.org/10.34892/t2wk-5t34>
- Uysal, M., Toprak, A. S., & Polat, N. (2015). DEM generation with UAV Photogrammetry and accuracy analysis in Sahitler hill. *Measurement: Journal of the International Measurement Confederation*, 73, 539–543.
<https://doi.org/10.1016/j.measurement.2015.06.010>
- Vousdoukas, M. I., Mentaschi, L., Voukouvalas, E., Verlaan, M., & Feyen, L. (2017). Extreme sea levels on the rise along Europe's coasts. *Earth's Future*, 5(3), 304–323. <https://doi.org/10.1002/2016EF000505>
- Walsh, S. J., Page, P. H., Brewington, L., Bradley, J. R., & Mena, C. F. (2017). A beach vulnerability framework for the galapagos islands: Fusion of worldview 2 imagery, 3-d laser scanner data, and unmanned aerial vehicles. In *Comprehensive Remote Sensing* (Vols. 1–9, pp. 159–176). Elsevier.
<https://doi.org/10.1016/B978-0-12-409548-9.10438-5>
- Wang, W., Fu, H., Lee, S. Y., Fan, H., & Wang, M. (2020). Can strict protection stop the decline of mangrove ecosystems in China? From rapid destruction to rampant degradation. *Forests*, 11(1). <https://doi.org/10.3390/f11010055>
- Watchdoc Documentary. (2021). *Tenggelam dalam Diam*.
<https://www.youtube.com/watch?v=v6hp3i2ydrI>

- Weston, N. B., Rodriguez, E., Donnelly, B., Solohin, E., Jezycki, K., Demberger, S., Sutter, L. A., Morris, J. T., Neubauer, S. C., & Craft, C. B. (2023). Recent Acceleration of Wetland Accretion and Carbon Accumulation Along the U.S. East Coast. *Earth's Future*, 11(3). <https://doi.org/10.1029/2022EF003037>
- Widodo, J., Herlambang, A., Sulaiman, A., Razi, P., Yohandri, Perissin, D., Kuze, H., & Sri Sumantyo, J. T. (2019). Land subsidence rate analysis of Jakarta Metropolitan Region based on D-InSAR processing of Sentinel data C-Band frequency. *Journal of Physics: Conference Series*, 1185, 012004. <https://doi.org/10.1088/1742-6596/1185/1/012004>
- Wijaya, A., Pramono, S. E., Melati, I. S., Zamzuri, N. H., Hanafiah, Mohd. H., & Ghazali, A. R. (2021). Toward the Community-based Sustainable Marine Tourism: Identifying the Impact of Tourism Development in Karimunjawa Island. *International Journal of Academic Research in Business and Social Sciences*, 11(5). <https://doi.org/10.6007/ijarbss/v11-i5/9924>
- Wilkinson, E., Lovell, E., Carby, B., Barclay, J., & Robertson, R. E. A. (2016). The dilemmas of risk-sensitive development on a small volcanic island. *Resources*, 5(2). <https://doi.org/10.3390/resources5020021>
- Wong, P. P., Losada, I. J., Gattuso, J.-P., Hinkel, J., Khattabi, A., McInnes, K. L., Saito, Y., & Sallenger, A. (2014). 5 Coastal Systems and Low-Lying Areas. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. (R. J. Nicholls & F. Santos, Eds.)*. Cambridge University Press.
- Woodroffe, C. D., & McLean, R. F. (1994). Reef Islands of the Cocos (Keeling) Islands. *Atoll Research Bulletin*, 403, 1–36. <https://doi.org/10.5479/si.00775630.403.1>
- Wu, S., Lu, Y., & Fang, H. (2022). Evolution process of land reclamation in Macao and its impact on economy and ecology. *Proceedings of the 2022 7th*

International Conference on Financial Innovation and Economic Development (ICFIED 2022), 3067–3076.

Wulandari, S. J., Febrianto, T., Suhana, M. P., Putra, R. D., & Apdillah, D. (2022).

Perbandingan Penerapan Hasil Metode Admiralty dan Least Square untuk Peramalan Pasang Surut di Selat Bintan, Kepulauan Riau. *Jurnal Kelautan: Indonesian Journal of Marine Science and Technology*, 15(3), 258–269. <https://doi.org/10.21107/jk.v15i3.11406>

Xie, D., Schwarz, C., Kleinhans, M. G., Zhou, Z., & van Maanen, B. (2022).

Implications of Coastal Conditions and Sea-Level Rise on Mangrove Vulnerability: A Bio-Morphodynamic Modeling Study. *Journal of Geophysical Research: Earth Surface*, 127(3). <https://doi.org/10.1029/2021JF006301>

Yincan et al, Y. (2017). Sea Level Change, Sea Water Intrusion, and Coastal Land

Subsidence. In *Marine Geo-Hazards in China* (pp. 587–656). Elsevier. <https://doi.org/10.1016/b978-0-12-812726-1.00014-0>

Yu, G., & Zhang, J. Y. (2011). Analysis of the impact on ecosystem and

environment of marine reclamation-A case study in Jiaozhou Bay. *Energy Procedia*, 5, 105–111. <https://doi.org/10.1016/j.egypro.2011.03.020>

Yuanita, N., Kurniawan, A., Nurmansyah, I. M., & Rizaldi, F. M. (2021). A

physical model simulation of combination of a geo-bag dike and mangrove vegetation as a natural coastal protection system for the Indonesian shoreline. *Applied Ocean Research*, 108, 102516. <https://doi.org/10.1016/j.apor.2020.102516>

Yulianda, F., Fahrudin, A., Hutabarat, A. A., Harteti, S., & Kusharjani, K. H.

(2010). *Pengeolaan Pesisir dan Laut secara Terpadu*. Pusdiklat Kehutanan dan SECEM-Korea International Cooperation Agency.

Zhao, Y., Liu, Q., Huang, R., Pan, H., & Xu, M. (2020). Recent evolution of coastal

tidal flats and the impacts of intensified human activities in the modern radial sand ridges, East China. *International Journal of Environmental Research and Public Health*, 17(9). <https://doi.org/10.3390/ijerph17093191>