

REFERENCES

- Akbar, F.S., Vira, B.A., Doni, L.R., Putra, H.E., Efriyanti, A., 2020, Aplikasi Metode Weighted Overlay untuk Pemetaan Zona Keterpaparan Permukiman Akibat Tsunami (Studi Kasus: Kota Bengkulu dan Kabupaten Bengkulu Tengah), *Jurnal Geosains Dan Remote Sensing*, Vol. 1, Page. 43–51, DOI: 10.23960/jgrs.2020.v1i1.17.
- Amalia, F., Zairion, Z., Atmadipoera, A.S., 2023, Perubahan Garis Pantai Selama 20 Tahun (2001-2021) dan Prediksi dan Adaptasi Masyarakat Pesisir Tahun 2041, *Jurnal Sains Dan Teknologi*, Vol. 12, Page. 102–110, DOI: 10.23887/jstundiksha.v14i1.64813.
- Amani, M., Ghorbanian, A., Ahmadi, S.A., Kakooei, M., Moghimi, A., Mirmazloumi, S.M., Moghaddam, S.H.A., Mahdavi, S., Ghahremanloo, M., Parsian, S., 2020, Google Earth Engine Cloud Computing Platform for Remote sensing Big Data Applications: A Comprehensive Review, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, Vol. 13, Page. 5326–5350, DOI: 10.1109/JSTARS.2020.3021052.
- Badan Informasi Geospasial, 2019, *Jelajah Pantai Indonesia*, Badan Informasi Geospasial, Cibinong.
- Bappeda Kota Padang, 2019, *Rencana Pembangunan Jangka Panjang Daerah (Rpjpd) Kota Padang Panjang 2005-2025*, Bappeda Kota Padang, Padang.
- Commission, I.O., 2006, Manual on Sea Level Measurement and Interpretation. Volume IV-An Update to 2006.
- Dall’Osso, F., Gonella, M., Gabbianelli, G., Withycombe, G., Dominey-Howes, D., 2009, A Revised (PTVA) Model for Assessing The Vulnerability of Buildings to Tsunami Damage, *Natural Hazards and Earth System Sciences*, Vol. 9, Page. 1557–1565, DOI: 10.5194/nhess-9-1557-2009.
- Fadilah, 2021, *Analisis Faktor Hidro-Oseanografi Terhadap Kerusakan Pantai Kecamatan Pondok Kelapa Kabupaten Bengkulu Tengah Dan Penentuan Konsep Penanganannya*, CV. Jakad Media Publishing, Sirabaya.
- Fariz, T.R., Permana, P.I., Daeni, F., Putra, A.C.P., 2021, Pemetaan Ekosistem Mangrove di Kabupaten Kubu Raya Menggunakan Machine Learning Pada Google Earth Engine, *Jurnal Geografi: Media Informasi Pengembangan dan Profesi Kegeografian*, Vol. 18, Page. 83–89.
- Gao, B.-C., 1996, NDWI—A normalized difference water index for remote sensing of vegetation liquid water from space, *Remote sensing of environment*, Vol. 58,

Page. 257–266, DOI: 10.1016/S0034-4257(96)00067-3.

Gemilang, W.A., Husrin, S., Wishu, U.J., Kusumah, G., 2017, Kerentanan Pesisir Terhadap Bencana Tanah Longsor di Bungus, Sumatera Barat dan Sekitarnya Menggunakan Metode Storie, *Jurnal Geosaintek*, Vol. 3, Page. 37–44, DOI: 10.12962/j25023659.v3i1.2954.

Gorelick, N., Hancher, M., Dixon, M., Ilyushchenko, S., Thau, D., Moore, R., 2017, Google Earth Engine: Planetary-Scale Geospatial Analysis for Everyone, *Remote sensing of Environment*, Vol. 202, Page. 18–27, DOI: 10.1016/j.rse.2017.06.031.

Gulácsi, A., Kovács, F., 2015, Drought Monitoring With Spectral Indices Calculated from MODIS Satellite Images in Hungary, *Journal of Environmental Geography*, Vol. 8, Page. 11–20, DOI: 10.1515/jengeo-2015-0008.

Harahap, I.J., 2024, *Geoekologi Menuju Permukiman Kepesisiran yang Berkelanjutan*, Penerbit Adab, Indramayu.

Hiraishi, T., 2003, Greenbelt Tsunami Prevention in South-Pacific Region, *Report of the Port and Airport Research Institute*, Vol. 42, Page. 1–23.

Holthuijsen, L.H., 2010, *Waves in Oceanic and Coastal Waters*, Cambridge university press, United States of America.

Hutabarat, S., Evans, S.M., 2006, Pengantar Oseanografi, *Penerbit Universitas Indonesia. Jakarta. Page*, Vol. 54.

Joesidawati, M.I., 2017, Studi Perubahan Iklim dan Kerusakan Sumberdaya Pesisir di Kabupaten Tuban, , *Disertation*, Faculty of Marine Technology, Institut Teknologi Sepuluh Nopember, Indonesia.

Jonah, F.E., Boateng, I., Osman, A., Shimba, M.J., Mensah, E.A., Adu-Boahen, K., Chuku, E.O., Effah, E., 2016, Shoreline Change Analysis using End Point Rate and Net Shoreline Movement Statistics: An Application to Elmina, Cape Coast and Moree Section of Ghana's Coast, *Regional studies in marine science*, Vol. 7, Page. 19–31, DOI: 10.1016/j.rsma.2016.05.003.

Koshimura, S., Oie, T., Yanagisawa, H., Imamura, F., 2009, Developing Fragility Functions for Tsunami Damage Estimation using Numerical Model and Post-Tsunami Data from Banda Aceh, Indonesia, *Coastal Engineering Journal*, Vol. 51, Page. 243–273, DOI: 10.1142/S0578563409002004.

Leli Honesti, Alvin, Fajrin, 2023, Pemetaan Zona Bahaya Tsunami Di Kabupaten Pesisir Selatan Provinsi Sumatera Barat, *Journal of Sciентech Research and Development*, Vol. 5, Page. 356–366, DOI: 10.56670/jsrd.v5i2.202.

Mangor, K., Drønen, N.K., Kærsgaard, K.H., Kristensen, S.E., 2017, *Shoreline*

Management Guidelines, DHI Water and Environment, DHI, Copenhagen.

McFeeters, S.K., 1996, The Use of the Normalized Difference Water Index (NDWI) in The Delineation of Open Water Features, *International journal of remote sensing*, Vol. 17, Page. 1425–1432, DOI: 10.1080/01431169608948714.

Nassar, K., Mahmod, W.E., Fath, H., Masria, A., Nadaoka, K., Negm, A., 2019, Shoreline Change Detection using DSAS Technique: Case of North Sinai Coast, Egypt, *Marine Georesources & Geotechnology*, Vol. 37, Page. 81–95, DOI: 10.1007/s11852-018-0613-1.

Ningsih, N.S., 2002, Diktat Kuliah Oseanografi, *ITB. Bandung*.

Opa, E.T., 2011, Perubahan Garis Pantai Desa Bentenan Kecamatan Pusomaen, Minahasa Tenggara, *Jurnal perikanan dan kelautan tropis*, Vol. 7, Page. 109–114, DOI: 10.35800/jpkt.7.3.2011.187.

Papathoma, M., Dominey-Howes, D., Zong, Y., Smith, D., 2003, Assessing Tsunami Vulnerability, an Example from Herakleio, Crete, *Natural Hazards and Earth System Sciences*, Vol. 3, Page. 377–389, DOI: 10.5194/nhess-3-377-2003.

Pararas-Carayannis, G., 2003, Near and Far-Field Effects of Tsunamis Generated by The Paroxysmal Eruptions, Explosions, Caldera Collapses and Massive Slope Failures of The Krakatau Volcano in Indonesia on August 26–27, 1883, *Science of Tsunami Hazards*, Vol. 21, Page. 191–201.

Pratama, A., Sudrajat, J., 2020, Analisis Penggunaan Algoritma NDVI pada Platform Google Earth Engine sebagai Data Dukung Evaluasi Keberhasilan Pelaksanaan Reklamasi Lahan Bekas Tambang, *Prosiding Temu Profesi Tahunan PERHAPI*, Page. 155–162.

Rahman, Y.A., 2022, Pemanfaatan Citra Satelit Google Earth untuk Pemetaan Garis Pantai di Kota Padang, *Jurnal Geomatika dan Ilmu Alam*, Vol. 1.

Ramdhan, M., 2021, Dampak dan Adaptasi Kerentanan Pesisir di Pantai Kota Padang, Provinsi Sumatera Barat, *Indonesian Journal of Earth Sciences*, Vol. 1, Page. 1–9, DOI: 10.52562/injoes.2025.1307.

Ramdhan, M., Husrin, S., Sudirman, N., Tanto, T.A., 2012, Pemetaan Indeks Kerentanan Pesisir Terhadap Perubahan Iklim di Sumatera Barat dan Sekitarnya, *J. Segara*, Vol. 8, Page. 107–115, DOI: 10.15578/segara.v19i1.14336.

Rasyif, T.M., Kato, S., Syamsidik, Okabe, T., 2019, Numerical Simulation of Morphological Changes due to The 2004 Tsunami Wave Around Banda Aceh, Indonesia, *Geosciences*, Vol. 9, Page. 125, DOI: 10.3390/geosciences9030125.

Ruiz-Beltran, A.P., Astorga-Moar, A., Salles, P., Appendini, C.M., 2019, Short-term Shoreline Trend Detection Patterns Using SPOT-5 Image Fusion in the

- Northwest of Yucatan, Mexico, *Estuaries and Coasts*, Vol. 42, Page. 1761–1773, DOI: 10.1007/s12237-019-00573-7.
- Sasmito, B., Amarrohman, F.J., 2016, Pemantauan Perubahan Garis Pantai Menggunakan Aplikasi Digital Shoreline Anaysis System (DSAS) Studi Kasus: Pesisir Kabupaten Demak, *Jurnal Geodesi Undip*, Vol. 5, Page. 78–89.
- Sharifi, M.A., Retsios, V., 2004, Site Selection for Waste Disposal Through Spatial Multiple Criteria Decision Analysis, *Journal of telecommunications and information technology*, Page. 28–38.
- Sorensen, R.M., 1997, *Two-Dimensional Wave Equations and Wave Characteristics*, Edisi Third, Basic Coastal Engineering, Department of Civil and Environmental Engineering Lehigh University, Bethlehem, Pennsylvania, New York.
- Stewart, R.H., 2008, *Introduction to Physical Oceanography*, Robert H. Stewart, Texas.
- Supriyanto, A., 2003, Analisis Abrasi Pantai Dan Alternatif Penanggulangannya di Perairan Pesisir Perbatasan Kabupaten Kendal—Kota Semarang, , Program Pasca Sarjana Universitas Diponegoro.
- Susandi, A., 2004, The Impact of International Greenhouse Gas Emissions Reduction on Indonesia, , University of Hamburg Hamburg.
- Thieler, E.R., Himmelstoss, E.A., Zichichi, J.L., Ergul, A., 2008, Digital Shoreline Analysis System (DSAS) version 4.0—An ArcGIS Extension for Calculating Shoreline Change; USGS Open-File Report, *US Geological Survey: Reston, VA, USA*, Vol. 1278, DOI: 10.3133/70039552.
- Torres, R., Snoeij, P., Geudtner, D., Bibby, D., Davidson, M., Attema, E., Potin, P., Rommen, B., Floury, N., Brown, M., 2012, GMES Sentinel-1 mission, *Remote sensing of environment*, Vol. 120, Page. 9–24, DOI: 10.1016/j.rse.2011.05.028.
- Tri Dev Acharya, Intae Yang, 2015, Exploring Landsat 8, *International Journal of IT, Engineering and Applied Sciences Research*, Vol. 4, Page. 4–10.
- Triatmodjo, B., 2006, *Perencanaan Bangunan Pantai*, Beta Offset.
- Triscowati, D.W., Wijayanto, A.W., 2019, Peluang dan Tantangan Dalam Pemanfaatan Teknologi Penginderaan Jauh dan Machine Learning untuk Prediksi Data Tanaman Pangan yang Lebih Akurat, *Seminar Nasional Official Statistics*, Pp. 177–187.
- Utomo, D.S., 2022, *Kamus Geosains*.
- Wirasatria, A., Hartoko, A., Suripin, S., 2006, Kajian Kenaikanmuka Laut Sebagai

Landasan Penanggulangan Rob Di Pesisir Kota Semarang Study of sea level rise as a base for rob problem solving in coastal region of Semarang City, *Jurnal Pasir Laut*, Vol. 1, Page. 31–42, DOI: 10.14710/jpl.2025.69127.

Yulfa, A., Chandra, D., Ramadhan, R., Andreas, A., 2022, Geovisualization for Information Extraction of Shoreline Changes in Padang City 2000–2020, *Geodesy and Cartography*, Vol. 48, Page. 78–84, DOI: 10.3846/gac.2022.14212.

Zeinali, S., Talebbeydokhti, N., Dehghani, M., 2020, Spatiotemporal Shoreline Change in Boushehr Province Coasts, Iran, *Journal of oceanology and limnology*, Vol. 38, Page. 707–721, DOI: 10.1007/s00343-019-8373-9.

