













- [15] A. K. Singh *et al.*, “Estimation of quantitative measures of total water storage variation from GRACE and GLDAS-NOAH satellites using geospatial technology,” *Quat. Int.*, vol. 444, pp. 191–200, 2017, doi: 10.1016/j.quaint.2017.04.014.
- [16] Z. Han *et al.*, “Effects of vegetation restoration on groundwater drought in the Loess Plateau, China,” *J. Hydrol.*, vol. 591, no. August, p. 125566, 2020, doi: 10.1016/j.jhydrol.2020.125566.
- [17] K. Zhao and X. Li, “Estimating terrestrial water storage changes in the Tarim River Basin using GRACE data,” *Geophys. J. Int.*, vol. 211, no. 3, pp. 1449–1460, 2017, doi: 10.1093/GJI/GGX378.
- [18] D. Reale, F. Serafino, and V. Pascazio, “An accurate strategy for 3-D ground-based SAR imaging,” *IEEE Geosci. Remote Sens. Lett.*, vol. 6, no. 4, pp. 681–685, 2009, doi: 10.1109/LGRS.2009.2023537.
- [19] B. F. Thomas, J. S. Famiglietti, F. W. Landerer, D. N. Wiese, N. P. Molotch, and D. F. Argus, “GRACE Groundwater Drought Index: Evaluation of California Central Valley groundwater drought,” *Remote Sens. Environ.*, vol. 198, pp. 384–392, 2017, doi: 10.1016/j.rse.2017.06.026.
- [20] Z. Hu *et al.*, “Groundwater depletion estimated from GRACE: A challenge of sustainable development in an arid region of Central Asia,” *Remote Sens.*, vol. 11, no. 16, 2019, doi: 10.3390/rs11161908.
- [21] Y. Zhong, M. Zhong, W. Feng, Z. Zhang, Y. Shen, and D. Wu, “Groundwater depletion in the West Liaohe River Basin, China and its implications revealed by GRACE and in situ measurements,” *Remote Sens.*, vol. 10, no. 4, pp. 1–16, 2018, doi: 10.3390/rs10040493.
- [22] M. Shamsuddoha and R. G. Taylor, “Groundwater storage dynamics in the world’s large aquifer systems from GRACE: Uncertainty and role of extreme precipitation,” *Earth Syst. Dyn.*, vol. 11, no. 3, pp. 755–774, 2020, doi: 10.5194/esd-11-755-2020.
- [23] A. Mohamed and J. Gonçalvès, “Hydro-geophysical monitoring of the North Western Sahara Aquifer System’s groundwater resources using gravity data,” *J. African Earth Sci.*, vol. 178, no. March, 2021, doi: 10.1016/j.jafrearsci.2021.104188.
- [24] D. Long *et al.*, “Have GRACE satellites overestimated groundwater depletion in the Northwest India Aquifer?,” *Sci. Rep.*, vol. 6, no. December 2015, pp. 1–11, 2016, doi: 10.1038/srep24398.
- [25] D. Stampoulis *et al.*, “Model-data fusion of hydrologic simulations and GRACE terrestrial water storage observations to estimate changes in water table depth,” *Adv. Water Resour.*, vol. 128, no. November 2018, pp. 13–27, 2019, doi: 10.1016/j.advwatres.2019.04.004.
- [26] K. S. Kumar, P. Anandraj, K. Sreelatha, D. S. Bisht, and V. Sridhar, “Monthly and seasonal drought characterization using grace-based groundwater drought index and its link to teleconnections across south Indian river basins,” *Climate*, vol. 9, no. 4, 2021, doi: 10.3390/cli9040056.
- [27] Y. Pang, B. Wu, Y. Cao, and X. Jia, “Spatiotemporal changes in terrestrial water storage in the Beijing-Tianjin Sandstorm Source Region from GRACE satellites,” *Int. Soil Water Conserv. Res.*, vol. 8, no. 3, pp. 295–307, 2020, doi: 10.1016/j.iswcr.2020.06.004.
- [28] A. Karunakalage *et al.*, “The appraisal of groundwater storage dwindling effect, by applying high resolution downscaling GRACE data in and around Mehsana district, Gujarat, India,” *Groundw. Sustain. Dev.*, vol. 13, no. October 2020, p. 100559, 2021, doi: 10.1016/j.gsd.2021.100559.
- [29] R. Huang, J. Huang, C. Zhang, W. Zhuo, and D. Zhu, “Drought monitoring over the northeast China using GRACE satellite data from 2002 to 2016,” *2018 7th Int. Conf. Agro-Geoinformatics, Agro-Geoinformatics 2018*, pp. 1–5, 2018, doi: 10.1109/Agro-Geoinformatics.2018.8476013.
- [30] Kementerian Kelautan dan Perikanan (KKP), “UU No.6/1996: Indonesia waters. Ministry for Maritime and Fisheries Affairs (KKP),” KKP, 1996.
- [31] L. Hu and J. J. Jiao, “An innovative method to estimate regional-scale hydraulic diffusivity using GRACE data,” *Hydrol. Sci. J.*, vol. 61, no. 15, pp. 2694–2703, 2016, doi: 10.1080/02626667.2016.1171324.
- [32] F. W. Landerer and S. C. Swenson, “Accuracy of scaled GRACE terrestrial water storage estimates,” *Water Resour. Res.*, vol. 48, no. 4, pp. 1–11, 2012, doi: 10.1029/2011WR011453.
- [33] S. Deng, S. Liu, and X. Mo, “Assessment of three common methods for estimating terrestrial water storage change with three reanalysis datasets,” *J. Clim.*, vol. 33, no. 2, pp. 511–525, 2020, doi: 10.1175/JCLI-D-18-0637.1.
- [34] D. K. Panda and J. Wahr, “Spatiotemporal evolution of water storage changes in India from the updated GRACE-derived gravity records,” *Water Resour. Res.*, vol. 52, no. 1, pp. 135–149, 2016, doi: 10.1002/2015WR017797.
- [35] Y. B. Katpatal, C. Rishma, and C. K. Singh, “Sensitivity of the Gravity Recovery and Climate Experiment (GRACE) to the complexity of aquifer systems for monitoring of groundwater,” *Hydrogeol. J.*, vol. 26, no. 3, pp. 933–943, 2018, doi: 10.1007/s10040-017-1686-x.
- [36] N. Nie, W. Zhang, H. Chen, and H. Guo, “A Global Hydrological Drought Index Dataset Based on Gravity Recovery and Climate Experiment (GRACE) Data,” *Water Resour. Manag.*, vol. 32, no. 4, pp. 1275–1290, 2018, doi: 10.1007/s11269-017-1869-1.
- [37] F. Frappart and G. Ramillien, “Monitoring groundwater storage changes using the Gravity Recovery and Climate Experiment (GRACE) satellite mission: A review,” *Remote Sens.*, vol. 10, no. 6, 2018, doi: 10.3390/rs10060829.
- [38] X. Liu, X. Feng, P. Ciais, B. Fu, B. Hu, and Z. Sun, “GRACE satellite-based drought index indicating increased impact of drought over major basins in China during 2002–2017,” *Agric. For. Meteorol.*, vol. 291, no. February, p. 108057, 2020, doi: 10.1016/j.agrformet.2020.108057.
- [39] A. Getirana *et al.*, “GRACE improves seasonal groundwater forecast initialization over the United States,” *J. Hydrometeorol.*, vol. 21, no. 1, pp. 59–71, 2020, doi: 10.1175/JHM-D-19-0096.1.