

REFERENCES

1. S Senthil Kumar., 'Semi Automatic detection of ships using Microwave Remote Sensing' published in National Seminar on Geospatial Technologies for Resources Evaluation & Environment (GEOTREE-2015) under the aegis of UGC-SAP-DRS by Department of Geography, School of Earth and Atmospheric Sciences, Madurai Kamaraj University held during 13-14 August 2015. ISBN 978-93-84193-36-2 Section I page 49-58 of proceedings.
2. S Senthil Kumar, KS Misra and RK Tripathi., 'Image Analysis of Microwave SAR for semi-automatic detection of Ships' published in Conference proceedings of International Conference on Management of Infrastructure (ICMI-2016), conducted by University of Petroleum & Energy Studies, Dehradun from 04-06 February 2016. ISBN 978-194343889-1 Section Transportation Theme Maritime Page T107-119.
3. S Senthil Kumar and HK Anasuya Devi., 'Intelligent Image Interpreter: A semi-automatic detection of ships by image analysis of space-borne SAR image using Support Vector Machines (SVM)' is accepted and presented is to be published in proceedings of International Conference on Intelligent Communication, Control and Devices (ICICCD-2016) conducted by University of Petroleum & Energy Studies. Proceedings is published with Springer in Advances in Intelligent Systems and Computing Series of Springer (Scopus indexed) (ISBN 978-981-10-1707-0, E-book: ISBN 978-981-10-1708-7, ISSN 2194-5357, ISSN 2194-5365 (electronic), DOI 10.1007/978-981-10-1708-7).
4. M. L. Truong-Loi, A. Freeman, P. C. Dubois-Fernandez and E. Pottier, "Estimation of Soil Moisture and Faraday Rotation From Bare Surfaces Using Compact Polarimetry," in *IEEE Transactions on Geoscience and Remote Sensing*, vol. 47, no. 11, pp. 3608-3615, Nov. 2009. doi: 10.1109/TGRS.2009.2031428.
5. Vapnik, V. N., The Nature of Statistical Learning Theory, Springer Verlag, New York, 1995., Vapnik, V. N., Statistical Learning Theory, Wiley, New York, 1998. Cortes, C., V. N. Vapnik, "Support Vector Networks," *Machine Learning* 20, 273, 1995.
6. Gustavo Camps-Valls, Lorenzo Bruzzone., Kernel methods for Remote Sensing Data Analysis, Wiley, UK, 2009, ISBN-978-0-470-72211-4.
7. Crisp, D.J. (2004), „The state-of-the-art in ship detection in synthetic aperture radar imagery“, DSTO Information Sciences Laboratory, DSTO-RR-0272.

8. M. Liao and C. Wang "Using SAR images to detect ships from sea clutter", IEEE Geosci. Remote Sens. Lett., vol. 5, no. 2, pp.194 -198 2008.
9. Meyer, F., Automatic Ship Detection in Spaceborne SAR Imagery, ISPRS Hannover Workshop 2009, High-Resolution Earth Imaging for Geospatial Information.
10. Tonje Nanette Hannevik and Andreas N. Skauen, Ship detection using high resolution satellite imagery and space-based AIS, Norwegian Defence Research Establishment (FFI), 15 December 2011, FFI-rapport 2011/01693.
11. Angiulli, G., Barile, V., and Cacciola, M., "SAR Imagery Classification using Multi-Class Support Vector Machines", Progress in Electromagnetics Research Symposium, Hangzhou, 2005, August 22-26, pp.218-222.
12. www.bigoceandata.com, www.sea-web.com, www.marinetraffic.com, www.vtexplorer.com.

BIBLIOGRAPHY

- Ainsworth, T., Kelly, J., Lee, J.-S., 2009. Classification comparision between dual-pol compact polarimetric and quad-pol SAR imagery. ISPRS Journal of Photogrammetry and Remote Sensing 64 (5), 464-471
- Angelliaume, S., Dubois-Fernandez, P., Souyris, J.-C., 2007. Compact polinsar for vegetation characterization. In: Proc. IEEE International Geoscience and Remote sensing symposium. IEEE, pp. 1136-1138
- Atteia, G.E., Collins, M.J., 2013. ISPRS Journal of Photogrammetry and Remote Sensing 80 (2013) 1-9.
- Carther, L., Campbell, D., Campbell, B., 2011. Gelogic studies of planetary surfaces using radar polarimetric imaging. Proceedings of the IEEE 95 (5), 770-782.
- Charbonneau, F., Brisco, B., Raney, R., McNairn, H., Liu, C., Vachon, P., Shang, J., DeAbreu, R., Champagne, C., Merzouki, A., Geldsetzer, T., 2010. Compact polarimetry overview and applications assessment. Canadian Journal of Remote Sensing 36 (S2).
- Cloude, S., 2009. Dual versus quadpol: a new test statistic for radar polarimetry. In: Proc. Of the Fourth International Workshop on Science and Application of SAR Ploarimetry and Polarimetric Interferometry – POLInSAR 2009. ESA SP-668.
- Collins, M., Denbina, M., Atteia, G., 2010. On the reconstruction of quad-pol SAR data from compact polarimetry data for ocean target detection. IEEE trans. On Geoscience and Remote Sensing 51 (1), 591-600.
- Denbina, M., Collins, M.J., 2012. Iceberg detection using pseudo quad-pol reconstruction of compact polarimetric SAR. Atmosphere Ocean 50 (4), 437-446.
- Lardeux, C., Frison, P.-L., Tison, C., Souyris, J.-C., Stoll, B., Fruneau, B., Rudant, J.-P., 2011. Classification of tropical vegetation using multifrequency partial SAR polarimetry. IEEE Geoscience and Remote Sensing Letters 8 (1), 133–137.
- Li, H., Perrie, W., He, Y., Lehner, S., and Brusch, S., "Target Detection on the Ocean With the Relative Phase of Compact Polarimetry SAR," in *IEEE Transactions on Geoscience and Remote Sensing*, vol. 51, no. 6, pp. 3299-3305, June 2013.

Liu, C., Meek, A., 2005. Likelihood Ration Test Polarimetric SAR Ship Detection Application. Defence Research and Development Canada, Technical Memorandum TM 2005-243.

Liu, C., Vachon, P.W., Geling, G.W., 2005. Improved ship detection with airborne polarimetric SAR data. Canadian Journal of Remote Sensing 31 (1), 122-131

Manab Chakraborty, Sushma Panigrahy, A. S. Rajawat, Raj Kumar, T. V. R. Murthy, Dipanwita Haldar, Abhisek Chakraborty, Tanumi Kumar, Sneha Rode, Hrishikesh Kumar, Manik Mahapatra and Sanchayita Kundu, 2013. Current science, vol. 104, no. 4, 25 february 2013, pp.490-501.

Nord, M., Ainsworth, T., Lee, J.-s., Stacy, N., 2009. Comparison of compact polarimetric synthetic aperture radar modes. IEEE Trans. On Geoscience and Remote Sensing 49 (1), 174-188.

Olsen, R.B., Wahl, T., 2003. The ship detection capability of ENVISAT's ASAR. In: Proc. Of the International Geoscience and Remote Sensing Symposium (IGARSS), PP. 3108-3110.

Raney, R., 2006. Dual-polarised SAR and Stokes parameters. IEEE Geoscience and Remote Sensing Letters 3 (3), 317-319.

Raney, R., 2007a. Comments on hybrid-polarity SAR architecture. In: Proc. IEEE International Geoscience and Remote Sensing Symposium (IGARSS). IEEE , pp. 2229-2231.

Raney, R., 2007b. Hybrid-polarity SAR architecture. IEE Transactions on Geoscience and Remote Sensing 45 (11), 3397-3403.

Raney, R., 2009. DESDynI adopts hybrid polarity SAR architecture. In: IEEE Radar Conferenc – Radar09, pp. 1-4.

Raney, R., Spudis, P., Bussey, B., Crusan, J., Jense, J., Marinelli, W., McKerracher, P., Neish, C., Palsetia, M., Schulze, R., Sequeira, H., Winters, H., 2010. The Lunar min-rf radars; hybrid polarimetric architecture and initial results. Procedding os the IEEE 99 (5), 808-823.

Shirvany, R., Chabert, M., Tourneret, J.-Y., 2012. Ship and oil-spill detection using the degree of polarization in linear and hybrid/copact dual-pol SAR. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing 5 (3), 885-892.

Souyris, J.-C., Imbo, P., rtoft, R.F., Mingot, S., Lee, J.-S., 2005. Compact polarimetry based on symmetry properties of geophysical media; the $\pi/4$ mode. IEEE Transactions on Geoscience and Remote Sensing 43 (), 634-646.

Stacy, N., Campbell, D., 1993. Stokes vector analysis of lunar radar backscatter. In: Proc. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), vol. 1. IEEE, pp. 30–32.

Touzi, R., 1999. On the use of polarimetric SAR data for ship detection. In: Proc. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), pp. 812–814.

Touzi, R., 2000. Calibrated polarimetric SAR data for ship detection. In: Proc. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), pp. 144–146.

Touzi, R., 2009. Compact-hybrid versus linear-dual and fully polarimetric SAR. In: Proceedings of the Fourth International Workshop on Science and Applications of SAR Polarimetry and Polarimetric Interferometry – POLInSAR 2009. ESA SP- 668.

Touzi, R., Charbonneau, F., Hawkins, R.K., Kevin Murnaghan, K., Kavoun, X., 2001. Ship-sea contrast optimisation when using polarimetric SAR. In: Proc. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), pp. 426–428.

Truong-Loi, M.-L., Freeman, A., Dubois-Fernandez, P., Pottier, E., 2009. Estimation of soil moisture and Faraday rotation from bare surfaces using compact polarimetry. IEEE Transactions on Geoscience and Remote Sensing 47 (11), 3608–3615.

Yeremy, M., Campbell, J., Mattar, K., Potter, T., 2001. Ocean surveillance with polarimetric SAR. Canadian Journal of Remote Sensing 27 (4), 328–344.

Yin, J., Yang, J., Zhang, X., 2011. On the ship detection performance with compact polarimetry. In: Proceedings of the IEEE Radar Conference (RADAR), pp. 675–680.

Yin, J., Yang, J., Zhou, Z.S., and Song, J.S., "The Extended Bragg Scattering Model-Based Method for Ship and Oil-Spill Observation Using Compact Polarimetric SAR," in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 8, no. 8, pp. 3760-3772, Aug. 2015.