

Space-based detection of wetlands' surface water level change using interferometry

Remote Sensing of Environment

112, 681-696

DOI: [10.1016/j.rse.2007.06.008](https://doi.org/10.1016/j.rse.2007.06.008)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Evaluation of TerraSAR-X Observations for Wetland InSAR Application. , 2008, , .		4
2	Small Temporal Baseline Subset (STBAS): A New InSAR Technique for Multi-Temporal Monitoring Wetland's Water Level Changes. , 2008, , .		3
3	A logit model for predicting wetland location using ASTER and GIS. International Journal of Remote Sensing, 2009, 30, 2215-2236.	1.3	8
4	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain. Earth Surface Processes and Landforms, 2009, 34, 1562-1574.	1.2	69
5	Remote sensing change detection tools for natural resource managers: Understanding concepts and tradeoffs in the design of landscape monitoring projects. Remote Sensing of Environment, 2009, 113, 1382-1396.	4.6	291
6	Hydrologic Dynamics of the Ground-Water-Dependent Sian Ka'an Wetlands, Mexico, Derived from InSAR and SAR Data. Wetlands, 2010, 30, 1-13.	0.7	49
7	Evaluation of TerraSAR-X Observations for Wetland InSAR Application. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 864-873.	2.7	84
8	Multi-temporal monitoring of wetland water levels in the Florida Everglades using interferometric synthetic aperture radar (InSAR). Remote Sensing of Environment, 2010, 114, 2436-2447.	4.6	123
10	Land subsidence induced by groundwater pumping, monitored by D-InSAR and field data in the Toluca Valley, Mexico. Canadian Journal of Remote Sensing, 2010, 36, 9-23.	1.1	31
11	On the importance of path for phase unwrapping in synthetic aperture radar interferometry. Applied Optics, 2011, 50, 3205.	2.1	29
12	Evaluation of the quad-polarimetric Radarsat-2 observations for the wetland InSAR application. Canadian Journal of Remote Sensing, 2011, 37, 484-492.	1.1	19
13	Relating TRMM Precipitation Radar backscatter to water stage in wetlands. Journal of Hydrology, 2011, 401, 240-249.	2.3	49
14	Dedicated SAR interferometric analysis to detect subtle deformation in evaporite areas around Zaragoza, NE Spain. International Journal of Remote Sensing, 2011, 32, 1861-1884.	1.3	11
15	An approach to regional wetland digital elevation model development using a differential global positioning system and a custom-built helicopter-based surveying system. International Journal of Remote Sensing, 2012, 33, 450-465.	1.3	9
16	Water level change time series extraction of Yellow River Delta based on small baseline subset approach. , 2012, , .		1
17	Flood occurrence mapping of the middle Mahakam lowland area using satellite radar. Hydrology and Earth System Sciences, 2012, 16, 1805-1816.	1.9	23
18	A new insight on the water level dynamics of the Danube Delta using a high spatial density of SAR measurements. Journal of Hydrology, 2013, 482, 79-91.	2.3	13
19	Mapping flooding regimes in Camargue wetlands using seasonal multispectral data. Remote Sensing of Environment, 2013, 138, 165-171.	4.6	48

#	ARTICLE	IF	CITATIONS
20	Observing and understanding the Earth system variations from space geodesy. Journal of Geodynamics, 2013, 72, 1-10.	0.7	90
21	Revealing storage-area relationship of open water in ungauged subalpine wetland " Napahai in Northwest Yunnan, China. Journal of Mountain Science, 2013, 10, 553-563.	0.8	4
22	Measurement of the water level in reservoirs from TerraSAR-X SAR interferometry and amplitude images. Remote Sensing Letters, 2013, 4, 446-454.	0.6	6
23	Interferometric Coherence Analysis of the Everglades Wetlands, South Florida. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 5210-5224.	2.7	45
24	A Land Cover Variation Model of Water Level for the Floodplain of Tonle Sap, Cambodia, Derived From ALOS PALSAR and MODIS Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 2238-2253.	2.3	12
25	Geodetic imaging with airborne LiDAR: the Earth's surface revealed. Reports on Progress in Physics, 2013, 76, 086801.	8.1	139
26	Detection of flooded vegetation and measurements of water level changes using Radarsat-2. , 2013, , .		4
27	The Effects of Data Selection and Thematic Detail on the Accuracy of High Spatial Resolution Wetland Classifications. Photogrammetric Engineering and Remote Sensing, 2013, 79, 613-623.	0.3	33
28	Remote-Sensing Monitoring of Tide Propagation Through Coastal Wetlands. Oceanography, 2013, 26, 64-69.	0.5	13
29	Synthetic Aperture Radar (SAR) Interferometry for Assessing Wenchuan Earthquake (2008) Deforestation in the Sichuan Giant Panda Site. Remote Sensing, 2014, 6, 6283-6299.	1.8	10
30	Detecting Emergence, Growth, and Senescence of Wetland Vegetation with Polarimetric Synthetic Aperture Radar (SAR) Data. Water (Switzerland), 2014, 6, 694-722.	1.2	35
31	SAR for surface water monitoring and public health. , 2014, , .		1
32	RADARSAT-2 D-InSAR for ground displacement in permafrost terrain, validation from Iqaluit Airport, Baffin Island, Canada. Remote Sensing of Environment, 2014, 141, 40-51.	4.6	83
33	Double-Bounce Component in Cross-Polarimetric SAR From a New Scattering Target Decomposition. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 3039-3051.	2.7	73
34	Multitemporal Multitrack Monitoring of Wetland Water Levels in the Florida Everglades Using ALOS PALSAR Data With Interferometric Processing. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1355-1359.	1.4	31
35	Remotely sensing the ecological influences of ditches in Zoige Peatland, eastern Tibetan Plateau. International Journal of Remote Sensing, 2014, 35, 5186-5197.	1.3	27
36	Monitoring Everglades freshwater marsh water level using L-band synthetic aperture radar backscatter. Remote Sensing of Environment, 2014, 150, 66-81.	4.6	53
38	Combining Multispectral Imagery with in situ Topographic Data Reveals Complex Water Level Variation in China's Largest Freshwater Lake. Remote Sensing, 2015, 7, 13466-13484.	1.8	18

#	ARTICLE	IF	CITATIONS
39	Toward Estimating Wetland Water Level Changes Based on Hydrological Sensitivity Analysis of PALSAR Backscattering Coefficients over Different Vegetation Fields. <i>Remote Sensing</i> , 2015, 7, 3153-3183.	1.8	32
40	A Collection of SAR Methodologies for Monitoring Wetlands. <i>Remote Sensing</i> , 2015, 7, 7615-7645.	1.8	163
41	Evaluation of Polarimetric SAR Decomposition for Classifying Wetland Vegetation Types. <i>Remote Sensing</i> , 2015, 7, 8563-8585.	1.8	42
42	Efficient Wetland Surface Water Detection and Monitoring via Landsat: Comparison with in situ Data from the Everglades Depth Estimation Network. <i>Remote Sensing</i> , 2015, 7, 12503-12538.	1.8	94
43	Using Remote Sensing to Map and Monitor Water Resources in Arid and Semiarid Regions. <i>Handbook of Environmental Chemistry</i> , 2015, , 33-60.	0.2	18
44	Evaluation of MODIS Spectral Indices for Monitoring Hydrological Dynamics of a Small, Seasonally-Flooded Wetland in Southern Spain. <i>Wetlands</i> , 2015, 35, 851-864.	0.7	45
46	Mapping wetland water depths over the central Congo Basin using PALSAR ScanSAR, Envisat altimetry, and MODIS VCF data. <i>Remote Sensing of Environment</i> , 2015, 159, 70-79.	4.6	53
47	Long term detection of water depth changes of coastal wetlands in the Yellow River Delta based on distributed scatterer interferometry. <i>Remote Sensing of Environment</i> , 2015, 164, 238-253.	4.6	30
48	A method for monitoring hydrological conditions beneath herbaceous wetlands using multi-temporal ALOS PALSAR coherence data. <i>Remote Sensing Letters</i> , 2015, 6, 618-627.	0.6	15
49	Evaluation of RADARSAT-2 Acquisition Modes for Wetland Monitoring Applications. <i>Canadian Journal of Remote Sensing</i> , 2015, 41, 431-439.	1.1	22
50	Monitoring of the Lac Bam Wetland Extent Using Dual-Polarized X-Band SAR Data. <i>Remote Sensing</i> , 2016, 8, 302.	1.8	41
51	InSAR-Based Mapping of Tidal Inundation Extent and Amplitude in Louisiana Coastal Wetlands. <i>Remote Sensing</i> , 2016, 8, 393.	1.8	33
52	Application of Single-Polarimetric RADARSAT-2 Images with WorldView 2 Images in Estimating Water Stages in the Everglades. , 2016, , .		0
53	Retrieval of Water Depth of Coastal Wetlands in the Yellow River Delta From ALOS PALSAR Backscattering Coefficients and Interferometry. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2016, 13, 1517-1521.	1.4	9
54	The backscattering characteristics of wetland vegetation and water-level changes detection using multi-mode SAR: A case study. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016, 45, 1-13.	1.4	39
55	Characterizing hydrologic changes of the Great Dismal Swamp using SAR/InSAR. <i>Remote Sensing of Environment</i> , 2017, 198, 187-202.	4.6	37
56	Random forest wetland classification using ALOS-2 L-band, RADARSAT-2 C-band, and TerraSAR-X imagery. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2017, 130, 13-31.	4.9	225
57	Absolute water storages in the Congo River floodplains from integration of InSAR and satellite radar altimetry. <i>Remote Sensing of Environment</i> , 2017, 201, 57-72.	4.6	42

#	ARTICLE	IF	CITATIONS
58	Satellite and Aircraft Remote Sensing. , 0, , 316-344.		0
59	Congo Floodplain Hydraulics using PALSAR InSAR and Envisat Altimetry Data. Springer Remote Sensing/photogrammetry, 2017, , 65-81.	0.4	9
60	X-band interferometric sar observations for wetland water level monitoring in newfoundland and labrador. , 2017, , .		1
61	Seasonal Change in Wetland Coherence as an Aid to Wetland Monitoring. Remote Sensing, 2017, 9, 158.	1.8	52
62	Moving to the RADARSAT Constellation Mission: Comparing Synthesized Compact Polarimetry and Dual Polarimetry Data with Fully Polarimetric RADARSAT-2 Data for Image Classification of Peatlands. Remote Sensing, 2017, 9, 573.	1.8	41
63	A New Hierarchical Object-Based Classification Algorithm for Wetland Mapping in Newfoundland, Canada. , 2018, , .		5
64	Wetland Classification Using Deep Convolutional Neural Network. , 2018, , .		7
65	Wetland Water Level Monitoring Using Interferometric Synthetic Aperture Radar (InSAR): A Review. Canadian Journal of Remote Sensing, 2018, 44, 247-262.	1.1	43
66	Remote Sensing of Lakesâ€™ Water Environment. , 2018, , 249-277.		5
67	Wetlands and Malaria in the Amazon: Guidelines for the Use of Synthetic Aperture Radar Remote-Sensing. International Journal of Environmental Research and Public Health, 2018, 15, 468.	1.2	19
68	Deep Convolutional Neural Network for Complex Wetland Classification Using Optical Remote Sensing Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 3030-3039.	2.3	157
69	Multi-temporal, multi-frequency, and multi-polarization coherence and SAR backscatter analysis of wetlands. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 142, 78-93.	4.9	79
71	Chasm at East African Suswa Rift: Possible Explanations. Journal of the Indian Society of Remote Sensing, 2019, 47, 1773-1780.	1.2	4
72	Evaluation of C-Band SAR for Identification of Flooded Vegetation in Emergency Response Products. Canadian Journal of Remote Sensing, 2019, 45, 73-87.	1.1	19
73	A small-scale map analysis of the engineering-geological zone and landscape element dependencies for the land-use planning purposes in the Czech Republic. Environmental Earth Sciences, 2019, 78, 1.	1.3	2
74	SAR Backscatter and InSAR Coherence for Monitoring Wetland Extent, Flood Pulse and Vegetation: A Study of the Amazon Lowland. Remote Sensing, 2019, 11, 720.	1.8	39
75	A Collection of Novel Algorithms for Wetland Classification with SAR and Optical Data. , 0, , .		6
76	Mapping Forested Floodplain Topography Using InSAR and Radar Altimetry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 5189-5198.	2.3	7

#	ARTICLE	IF	CITATIONS
77	Wetland Monitoring and Mapping Using Synthetic Aperture Radar. , 0, , .		7
78	InSAR monitoring of marsh wetlands flow dynamics in Great Lakes. , 2019, , .		0
79	Using Sentinel-1A DInSAR interferometry and Landsat 8 data for monitoring water level changes in two lakes in Crete, Greece. Geocarto International, 2019, 34, 703-721.	1.7	6
80	Integration of multi-sensor analysis and decision tree for evaluation of dual and quad-Pol SAR in L- and C-bands applied for marsh delineation. Environment, Development and Sustainability, 2020, 22, 5603-5620.	2.7	4
81	Hydrological monitoring of high-latitude shallow water bodies from high-resolution space-borne D-InSAR. Remote Sensing of Environment, 2020, 236, 111444.	4.6	19
82	Regional-scale hydrological monitoring of wetlands with Sentinel-1 InSAR observations: Case study of the South Florida Everglades. Remote Sensing of Environment, 2020, 251, 112051.	4.6	21
83	Wetland Monitoring Using SAR Data: A Meta-Analysis and Comprehensive Review. Remote Sensing, 2020, 12, 2190.	1.8	60
84	Spaceborne L-Band Synthetic Aperture Radar Data for Geoscientific Analyses in Coastal Land Applications: A Review. Remote Sensing, 2020, 12, 2228.	1.8	33
85	Monitoring Water Level Change and Seasonal Vegetation Change in the Coastal Wetlands of Louisiana Using L-Band Time-Series. Remote Sensing, 2020, 12, 2351.	1.8	15
86	Investigating the Potential Use of RADARSAT-2 and UAS imagery for Monitoring the Restoration of Peatlands. Remote Sensing, 2020, 12, 2383.	1.8	11
87	Using Growing-Season Time Series Coherence for Improved Peatland Mapping: Comparing the Contributions of Sentinel-1 and RADARSAT-2 Coherence in Full and Partial Time Series. Remote Sensing, 2020, 12, 2465.	1.8	10
88	Coupling high-resolution field monitoring and MODIS for reconstructing wetland historical hydroperiod at a high temporal frequency. Remote Sensing of Environment, 2020, 247, 111807.	4.6	17
89	Characterizing marsh wetlands in the Great Lakes Basin with C-band InSAR observations. Remote Sensing of Environment, 2020, 242, 111750.	4.6	20
90	Smart Property Insurance using IoT. , 2020, , .		0
91	Exploring Polarimetric Phase of Microwave Backscatter from <i>Typha</i> Wetlands. Canadian Journal of Remote Sensing, 2020, 46, 49-66.	1.1	5
92	Interferometric SAR for Wetland Hydrology: An Overview of Methods, Challenges, and Trends. IEEE Geoscience and Remote Sensing Magazine, 2020, 8, 120-135.	4.9	11
93	Evaluation of SAR C-band interferometric coherence time-series for coastal wetland hydropattern mapping. Journal of South American Earth Sciences, 2021, 106, 102976.	0.6	6
94	Extraction of Absolute Water Level Using TanDEM-X Bistatic Observations With a Large Perpendicular Baseline. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	1

#	ARTICLE	IF	CITATIONS
95	Multi-Source EO for Dynamic Wetland Mapping and Monitoring in the Great Lakes Basin. Remote Sensing, 2021, 13, 599.	1.8	14
96	Lake water level variability determination from SAR backscatter of discrete objects, GNSS levelling and satellite altimetry. Survey Review, 2022, 54, 153-162.	0.7	2
97	Remote Sensing of Wetlands in the Prairie Pothole Region of North America. Remote Sensing, 2021, 13, 3878.	1.8	15
98	Monitoring of Water Level Change in a Dam from High-Resolution SAR Data. Remote Sensing, 2021, 13, 3641.	1.8	3
100	Robust boundary extraction of great lakes by blocking Active Contour Model using Chinese GF-3 SAR data: a case study of Danjiangkou reservoir, China. Journal of Engineering, 2019, 2019, 6876-6879.	0.6	4
101	Satellite Remote Sensing of Lakes and Wetlands. , 2016, , 57-72.		2
102	MAPPING THE EXTENT AND MAGNITUDE OF SEVER FLOODING INDUCED BY HURRICANE IRMA WITH MULTI-TEMPORAL SENTINEL-1 SAR AND INSAR OBSERVATIONS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-3, 2237-2244.	0.2	17
103	WETLAND CLASSIFICATION FOR BLACK DUCK HABITAT MANAGEMENT USING COMBINED POLARIMETRIC RADARSAT 2 AND SPOT IMAGERY. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-3, 2303-2306.	0.2	1
104	VALIDATION OF SPACEBORNE RADAR SURFACE WATER MAPPING WITH OPTICAL sUAS IMAGES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-1/W4, 363-368.	0.2	2
105	A method for monitoring hydrological conditions beneath herbaceous wetlands using multi-temporal ALOS PALSAR coherence data. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7/W4, 221-226.	0.2	2
107	Investigating the potential use of Sentinel-1 data for monitoring wetland water level changes in China's Momoge National Nature Reserve. PeerJ, 2020, 8, e8616.	0.9	15
108	Surface Water Storage in Rivers and Wetlands Derived from Satellite Observations: A Review of Current Advances and Future Opportunities for Hydrological Sciences. Remote Sensing, 2021, 13, 4162.	1.8	26
109	Estimation of Water Stage over Wetlands of South Florida Using TRMM Precipitation Radar Observations. , 2010, , .		0
112	- Determining Ecological Functions of Wetlands with Landscape Characterization. , 2013, , 182-253.		0
113	- Integrating Field-Based Data and Geospatial Data. , 2013, , 94-123.		0
114	Wetlands: Coastal, InSAR Mapping. , 2014, , 546-552.		0
116	Characterizing the Great Lakes Coastal Wetlands with InSAR Observations from X-, C-, and L-Band Sensors. Canadian Journal of Remote Sensing, 2020, 46, 765-783.	1.1	6
117	An era of Sentinels in flood management: Potential of Sentinel-1, -2, and -3 satellites for effective flood management. Open Geosciences, 2021, 13, 1616-1642.	0.6	9

#	ARTICLE	IF	CITATIONS
118	Retrieval of Simultaneous Water Level Changes in Small Lakes With InSAR. Geophysical Research Letters, 2022, 49, .	1.5	4
119	Space-Based Detection of Significant Water-Depth Increase Induced by Hurricane Irma in the Everglades Wetlands Using Sentinel-1 SAR Backscatter Observations. Remote Sensing, 2022, 14, 1415.	1.8	3
120	Spatiotemporal Change Detection of Coastal Wetlands Using Multi-Band SAR Coherence and Synergetic Classification. Remote Sensing, 2022, 14, 2610.	1.8	6
121	SAR Image Change Detection Based on Joint Dictionary Learning With Iterative Adaptive Threshold Optimization. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 5234-5249.	2.3	3
122	Observation of the Coastal Areas, Estuaries and Deltas from Space. Surveys in Geophysics, 2023, 44, 1309-1356.	2.1	12
123	Iranian wetland inventory map at a spatial resolution of 10m using Sentinel-1 and Sentinel-2 data on the Google Earth Engine cloud computing platform. Environmental Monitoring and Assessment, 2023, 195, .	1.3	6