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IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
Special Issue on
"Recent Advances in Microwave Remote Sensing of Chinese Ocean Satellites"

China has been making great effort to improve ocean remote sensing monitoring for several decades, including 1) launching ocean color monitoring satellites (Haiyang (HY)-1 series), ocean dynamic environment monitoring satellites (HY-2 and Chinese-French Oceanography SATellite (CFOSAT) series) and Synthetic Aperture Radar (SAR) satellites; 2) building up an integrated ground segment, several calibration/validation fields, and various data application systems; 3) advancing pioneering studies of future in-orbit payloads and missions.

Microwave payloads play essential roles in ocean satellites of China. The HY2 series of satellites carry active and passive microwave remote sensors like microwave altimeters, microwave scatterometers, and microwave radiometers to monitor sea surface wind, wave height, sea surface height, sea surface temperature, etc. The CFOSAT with a microwave wind scatterometer and a microwave Surface Waves Investigation and Monitoring (SWIM) instrument on-board aims at monitoring the global sea wave spectrum, the sea surface wind, and a better understanding of the catastrophic sea conditions such as huge waves, tropical storms, and storm surges. The Gaofen-3 and the upcoming launch of HY-3 C-band SARs, with 12 different imaging-modes, provides more detailed and more frequent observations of sea surface winds and waves, oceanic internal waves, mesoscale/sub-mesoscale oceanic processes, and marine target detection, among others. New payloads and algorithms to monitor the sea surface salinity, the sea surface current, etc., and to improve the accuracy and applications of the space-borne data, are being advanced.

This special issue aims to present recent advances in microwave remote sensing of Chinese ocean satellites in data processing, retrieval algorithm development, sensor calibration and validation, data application in ocean research and operation, and future missions.

The broad topics include (but are not limited to):
- In-orbit, on-ground data processing techniques, etc.
- Data calibration and validation, in-situ experiments, etc.
- Retrieval approaches including state-of-the-art Artificial Intelligence (AI) algorithms, etc.
- Payload designs, end-to-end simulations, future missions, etc.
- Oceanic and coastal applications, etc.

Schedule
January 1, 2021:   Submission system opening
June 30, 2021:   Submission system closing

Format
All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on http://mc.manuscriptcentral.com/jstars, using the Manuscript Central interface and select the "**Chinese Ocean Satellites**" special issue manuscript type. Prospective authors should consult the site https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768 for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html to download a template for transactions. Please note that as of Jan. 1, 2020, IEEE J-STARS has become a fully open-access journal charging a flat publication fee $1,250 per paper.

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