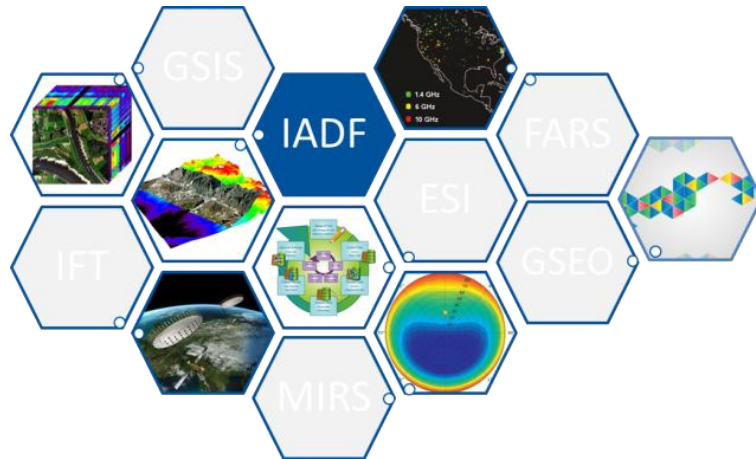


# Image Analysis and Data Fusion Technical Committee Meeting



Claudio Persello (University of Twente)

IADF chair

Gemine Vivone (National Research Council)

Saurabh Prasad (University of Huston)

IADF co-chairs

Dalton Lunga (Oak Ridge National Laboratory)

Gülşen Taşkın (Istanbul Technical University)

Xian Sun (Chinese Academy of Sciences)

WG leads

## Mission of IADF TC



- Serve as a global and multi-disciplinary network for geospatial **image analysis and data fusion** (e.g., machine learning, deep learning, image and signal processing, and big data, multi-sensor, multi-scale, and multi-temporal data integration)
- Connect people and resources, educate students and professionals, and promote theoretical advances and best practices in geospatial **image analysis and data fusion**.



IADF Meeting IGARSS 2023



DFC 2019 winners & organizers

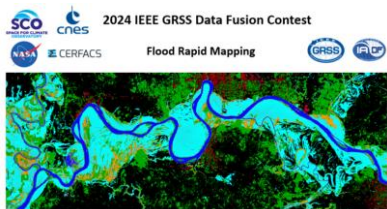


Group photo @ EarthVision 2019

## IADF TC Activities



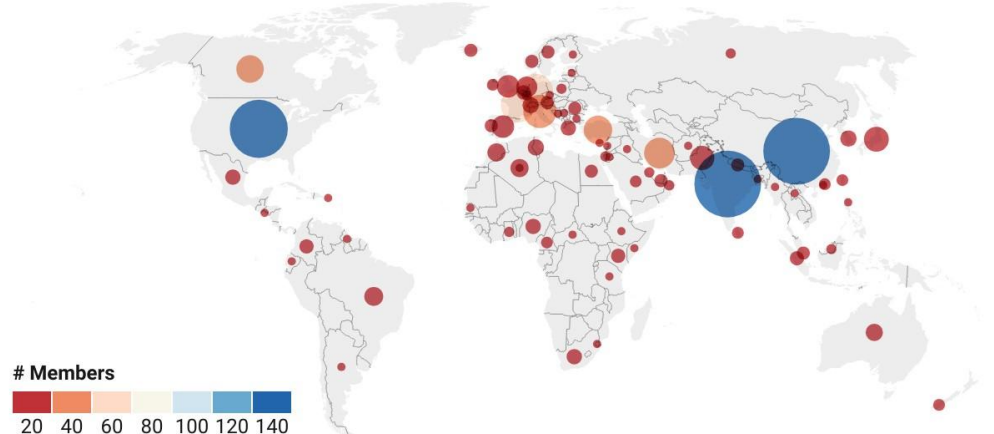
- Organize and host the annual **Data Fusion Contest** since 2006
- **TC Newsletter**
- Organize the **IADF School**: Computer Vision for Earth Observation since 2022
- Promote and organize workshops and special journal issues on IADF-related topics
  - **EarthVision** in conjunction with CVPR (2015, 2017 – 2025)
  - **GRSL Special Streams and JSTARS SI**
- Operate the GRSS Earth Observation Database (**EOD**) Website
- Organize and chair various IGARSS events:
  - Several Community Contributed Sessions



# IADF TC Members

- **1,047** members from more than 70 countries in IADF TC
- **4,237** members in Linkedin group: <https://www.linkedin.com/groups/3678437/>
- X(Twitter): **962** followers for IADF (since June 2020)

## IADF TC Members by Country



Created with Datawrapper

# IADF TC Chairs - July 2023-2025



Claudio Persello  
U. of Twente, The Netherlands  
Chair



Gemine Vivone  
National Research Council, Italy



Saurabh Prasad  
University of Houston, USA

Co-chairs

(Old rules) Chair is elected every two years; Chair appoints Co-chairs

- All IEEE GRSS and IADF TC members are eligible for election
- All IEEE GRSS and IADF TC members can vote in the election

# New IADF Leadership



Claudio Persello  
University of Twente,  
Chair



Ujjwal Verma  
Manipal Institute of Technology  
Co-Chair



Gülşen Taşkın  
Istanbul Technical University  
Co-Chair



Dalton Lunga  
Oak Ridge National Laboratory  
Chair-Elect

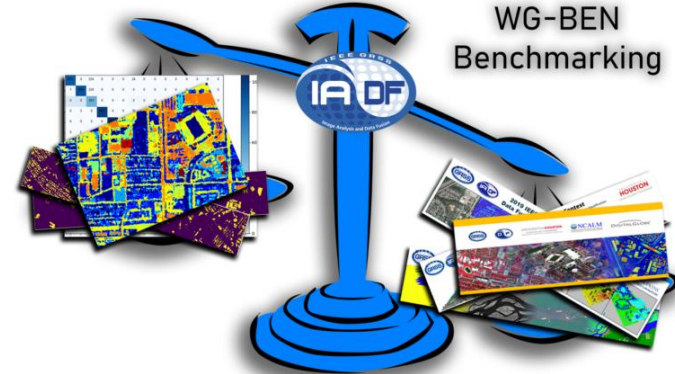
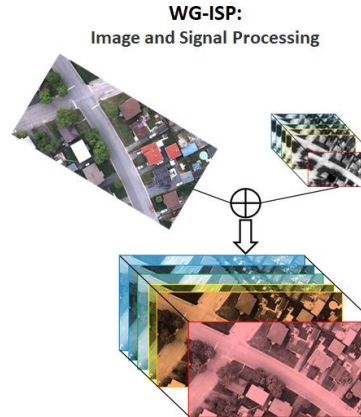
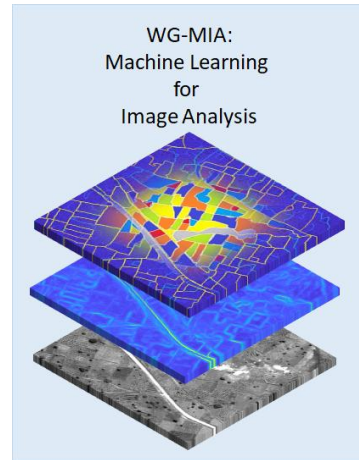


Ronny Hänsch  
German Aerospace Center  
Past-Chair



# IADF Working Groups

- In 2020, IADF TC has formed three WGs to address specific subtopics of IADF TC.
- WGs organizes topic-related events, such as workshops, contests, tutorials, and invited sessions.



# IEEE GRSS Data Fusion Contest

## Past Contests

2011	VHR multiangular data fusion
2012	VHR multisensor optical / SAR / LiDAR data fusion
2013	VHR multisensor hyperspectral / LiDAR DSM data fusion
2014	VHR multisensor thermal hyperspectral / color data fusion
2015	LiDAR and Extremely HR color data
2016	VHR from Space: video and multitemporal imagery
2017	Open data for global multimodal land use classification
2018	Advanced multi-sensor optical remote sensing for urban land use and land cover classification
2019	Large-scale semantic 3D reconstruction
2020	Global land cover mapping with weak supervision
2021	Geospatial AI for social good
2022	Semi-Supervised Learning
2023	Large-Scale Fine-Grained Building Classification for Semantic Urban Reconstruction
2024	Flood Rapid Mapping

- Annual initiative of the IEEE GRSS IADF TC (formerly Data Fusion TC)
- Fosters progress on fusion and analysis of multisource remote sensing data
  - New sensors (e.g., thermal hyperspectral, multispectral LiDAR)
  - New challenges (e.g., semantic 3D reconstruction, weak supervision)
- Has been active since 2006





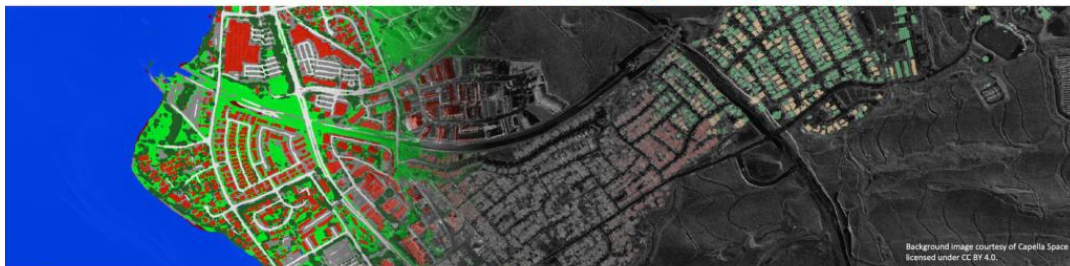
# 2025 IEEE GRSS Data Fusion Contest

- **All-Weather Land Cover and Building Damage Mapping**
  - The goal of this contest is to foster the development of innovative solutions for all-weather land-cover and building damage mapping using multimodal SAR and optical EO data at submeter resolution
- Two tracks:
  - Track-1: All-Weather Land Cover Mapping
  - Track-2: All-Weather Building Damage Mapping

Travel Grant Sponsored by



2025 IEEE GRSS Data Fusion Contest  
**All-Weather Land Cover and Building Damage Mapping**



# IADF School

## Fourth IEEE GRSS IADF School

From 16 Sep. 2025 to 19 Sep. 2025 in Benevento (Italy)

**Website:** <https://iadf-school.org/>

**Speakers:** Alessandro Sebastianelli, Behnood Rasti, Luis Gómez-Chova, Mihai Datcu, Nassim Ait Ali Braham, Silvia Liberata Ullo, Sylvain Lobry, César Luis Aybar Camacho, Lucrezia Tosato

**Lessons:** Self-Supervised Learning for Multi- and Hyperspectral Foundation Models, Towards Realistic and Trustworthy Super-Resolution for Multispectral Remote Sensing Images, Quantum Machine Learning for Earth Observation, Visual Question Answering on Remote Sensing Images, Physics aware and explainable AI for EO image understanding

# IADF School



**10 Travel Grants  
supported by IEEE**

**60 students from 30 countries**



# Workshops

- **WACV Workshop: CV4EO 2025**
  - Tucson, Arizona
  - February 28, 2025
  - Submissions received: 19
  - Accepted: 9
  
- **ICLR Workshop: Machine Learning for Remote Sensing**
  - April 27th 2025, Singapore
  - Submissions received: 50
  - Accepted: 26
  
- **CVPR Workshop: EarthVision 2025**
  - June 11/12th, Nashville, TN, USA
  - Submissions received: 76
  - decisions due March 31

## EarthVision @ CVPR

- A workshop on computer vision for remote sensing held in conjunction with CVPR
- Foster collaboration between the computer vision and earth observation communities
- EarthVision 2024 took place on June 11, 2025.
  - **76** submissions, **20** accepted papers
- 3 keynotes:
  - Kristof Van Tricht, VITO
  - Sherrie Wang, Massachusetts Institute of Technology
  - Patrick Beukema, Allen.ai
- **Look out and get ready for EarthVision 2026!**



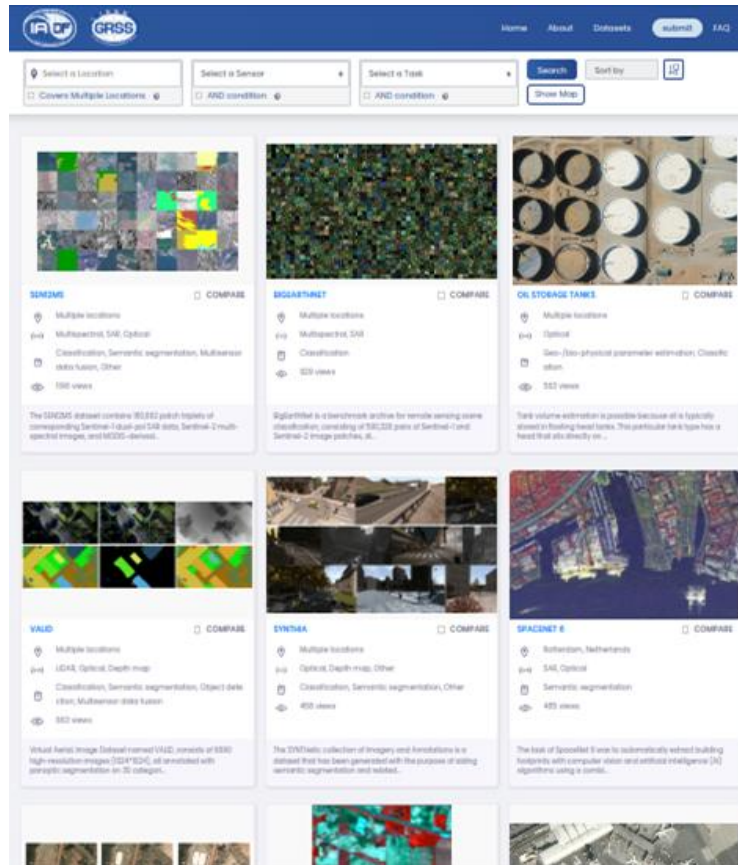
Twitter: @EarthVisionWS

# Earth Observation Database

- Community-driven catalogue of EO datasets
- Contains description and meta-information
- Actual data is hosted elsewhere
- More than 168 datasets available



[eod-grss-ieee.com](http://eod-grss-ieee.com)



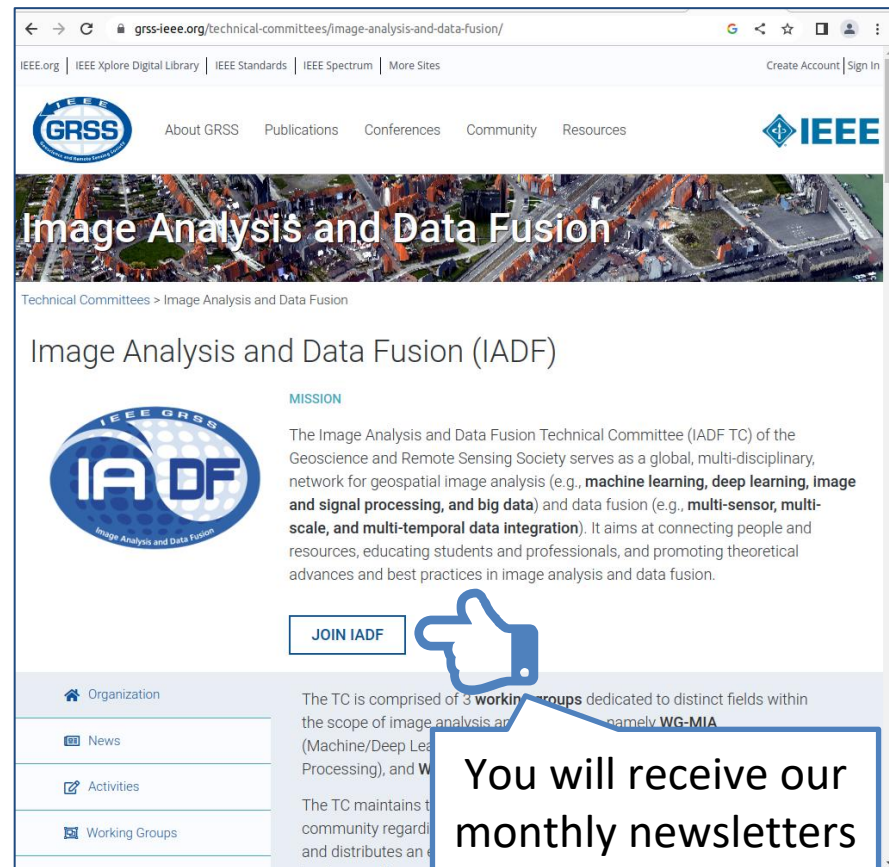


# Portfolio Development Funds

- GRSS CoMap: A Collaborative Platform for Machine Learning Datasets Curation
- Standard for assessing multispectral pansharpening algorithms
- GRSS Remote Sensing Visual Question Answering (RSVQA) Benchmark Dataset

## How to Join Us?

- **Website:** <https://www.grss-ieee.org/technical-committees/image-analysis-and-data-fusion/>
- **X (Twitter):** <https://twitter.com/grssiadf>
- **LinkedIn:** <https://www.linkedin.com/groups/3678437>
- **Chair email:** [iadf\\_chairs@grss-ieee.org](mailto:iadf_chairs@grss-ieee.org)

grss-ieee.org/technical-committees/image-analysis-and-data-fusion/

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### Image Analysis and Data Fusion

Technical Committees > Image Analysis and Data Fusion

#### Image Analysis and Data Fusion (IADF)

**MISSION**

The Image Analysis and Data Fusion Technical Committee (IADF TC) of the Geoscience and Remote Sensing Society serves as a global, multi-disciplinary, network for geospatial image analysis (e.g., **machine learning, deep learning, image and signal processing, and big data**) and data fusion (e.g., **multi-sensor, multi-scale, and multi-temporal data integration**). It aims at connecting people and resources, educating students and professionals, and promoting theoretical advances and best practices in image analysis and data fusion.

**JOIN IADF**

The TC is comprised of 3 **working groups** dedicated to distinct fields within the scope of image analysis and data fusion, namely **WG-MIA** (Machine/Deep Learning and Image Analysis), **WG-IP** (Image Processing), and **WG-DA** (Data Analysis). The TC maintains a community regarding these fields and distributes an annual newsletter.

**You will receive our monthly newsletters**