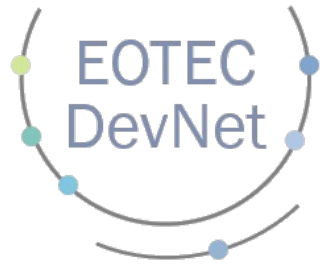




Image credit: European Union, Copernicus
Sentinel-2 imagery 2024



Advancing Drought Monitoring

EOTEC DevNet Drought Working Group Progress & Tools Tracker Update

Earth Observation Training, Education and Capacity Development Network

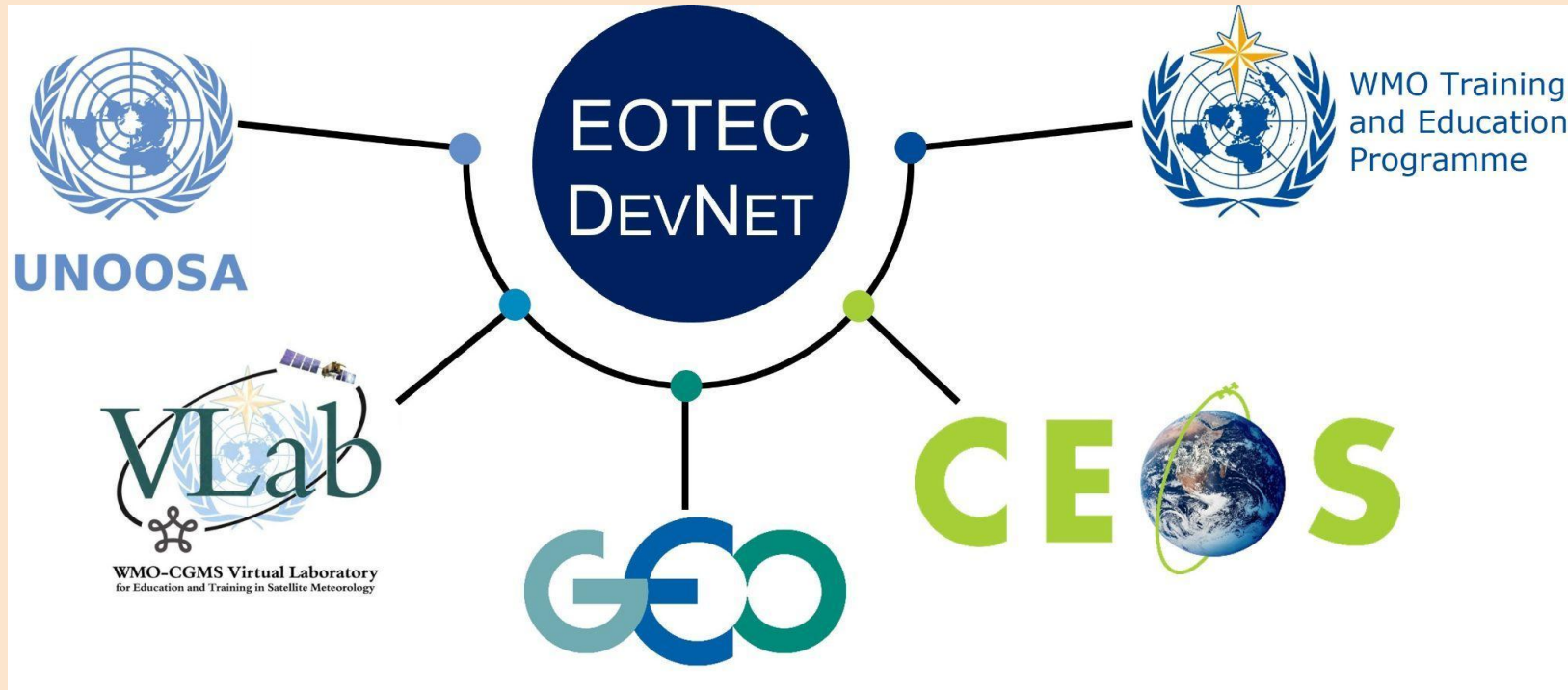
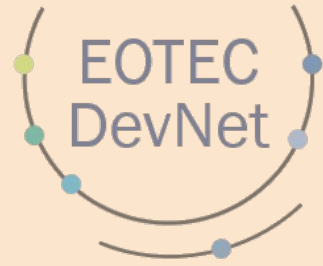
INTEGRATED DROUGHT MANAGEMENT PROGRAMME (IDMP)
ANNUAL MEETING 2026

Dr. Martyna Stelmaszczuk-Górska
EOTEC DevNet Secretariat
5 March 2026



EOTEC DevNet:

Promoting collaboration among EO capacity providers



AIMS

- Improve collaboration among EO-capacity building providers
- Foster exchange of capacity building resources
- Reduce duplication

THEMATIC FOCUS

- Disaster risk reduction
- Climate adaptation and mitigation ²



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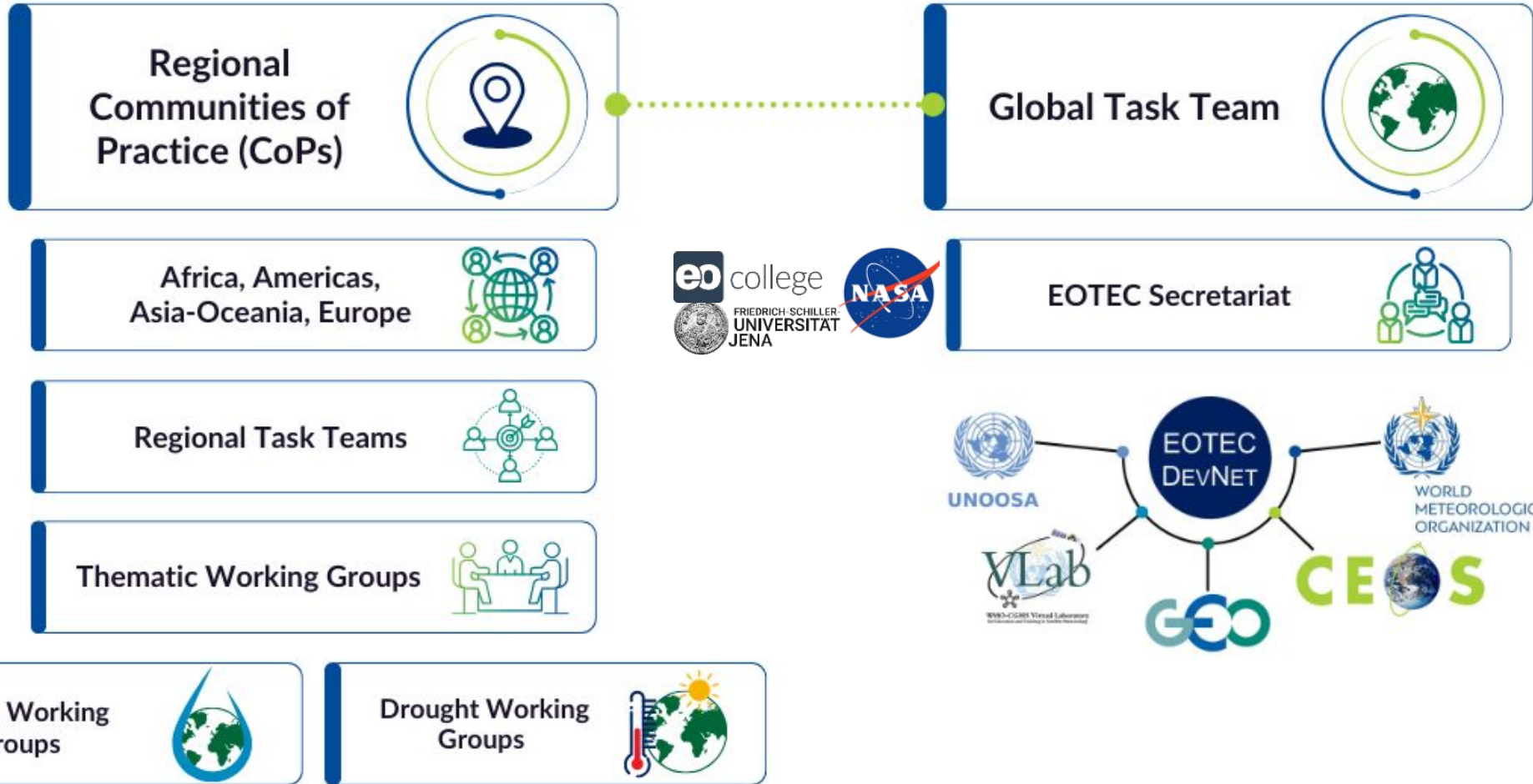
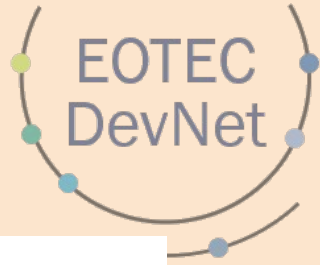
[@EOTEC DevNet](https://www.linkedin.com/company/eotec-devnet)



[@EOTECDevNet](https://twitter.com/EOTECDevNet)

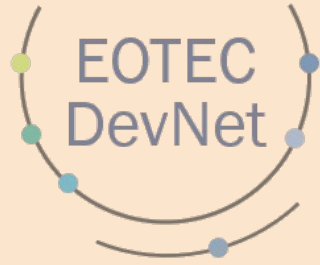
How the Network Operates

Regional Communities of Practice Drive Our Work



Creating drought working groups

Developing regional drought communities and partnerships to support capacity development



Dec
2022

2 EOTEC community meetings

CONSULTATION on capacity building on **DROUGHTS**

April
2023

Inaugural global meeting

PARTNERED with UNCCD, IDMP, others

Engaged experts on the **DROUGHT TOOLS TRACKER**

2024

Active partnership

2 **JOINT WEBINARS** and **SIDE EVENT** at WMO Drought Resilience +10 event, more work on tracker

April/
Oct
2025

Biannual EOTEC drought WG mtgs

EXPERTS come together by region based on priorities set by each task team



Zemedu Mulushewa Nigatu
Hawassa University, Ethiopia



Ethiopia Bisrat Zeleke
Florida International University,
USA



Susantha Jayasinghe
Asian Disaster Preparedness Center
(ADPC)



Jaime Gaona Garcia
National Research Council of Italy
(CNR-IRPI)

Key Messages from the Regions (2025)

Regional Engagement & Key Outcomes

8 regional meetings | 190+ participants

- Focus areas:
 - Overview of existing drought monitoring tools & initiatives
 - Regional insights: challenges, gaps, opportunities
 - Training and capacity-building needs
 - Advancing drought impact monitoring (incl. IDMP Guidelines)
 - Connecting global guidance with regional practice
- Key outcomes:
 - Need for policy-ready, actionable outputs
 - Emphasis on capacity building and repeat engagement
 - Stronger coordination among global and regional drought initiatives
 - Clear demand to move from hazard indicators → impact-linked thresholds
 - Strong support for integrating EO, in-situ & socio-economic data

Drought Tools Tracker Progress

Growth & Consolidation

- The Drought Tools Tracker is a structured matrix compiling EO-based drought tools, key initiatives, and training resources to support monitoring, management, and decision-making.
- Complementary to existing drought monitoring initiatives.
- Developed with support from an international volunteer expert group.

- Tracker content – previous vs current
 - Key initiatives: 20 → 31
 - Tools: 23 → 54
 - Training / capacity-building resources: 12 → 86
- Now entering validation & usability phase

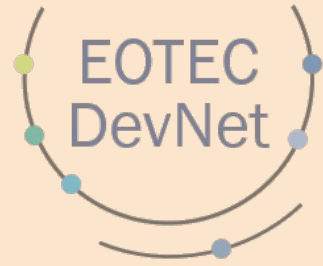


<https://eotecdev.net/tools/>

Learn more about the Drought Tools Tracker and **contribute**, visit EOTEC DevNet Tools website.

Drought Tools Tracker Current Phase

Validation & Usability

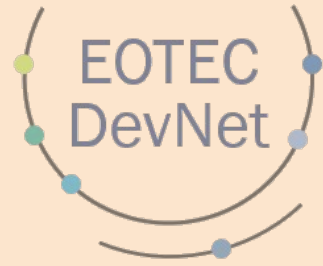


- ➔ Validation with tool providers (status, use cases, maintenance)
- ➔ Adding usability indicators
- ➔ Distinguishing operational decision-support tools from research tools
- ➔ Preparing web-based searchable version
- ➔ Volunteer expert group supporting review and quality assurance

EOTEC DevNet Drought Data and Tools Matrix														
Tool Name	Provider Organization	POC	Email	Input by (Name, Affiliation)	URL or Other Source	Drought Management Stage	Drought Type	Modeled or remotely sensed data?	Combined or Single Indicator?	If single indicator: Parameter?	If Parameter = Other, please specify	If Parameter = hydro: flow, precision?	If Parameter = Depth of Measurement?	If Parameter = Snow, Ice, Transpiration?
The Standardized Precipitation Index (SPI)	WMO	Dr. Lutz, UN-SPIDER	lutz@un.org	UN-SPIDER	https://www.un.org/.../...	Monitoring	Metesociological	Yes	Single indicator	SPI	Other	Other	Other	Other
South Asia Drought Monitoring System (SADMS)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Regional Drought Monitoring and Outlook System (RDMOS)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Africa Flood and Drought Monitor (WASA Secure Africa Initiative)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
ClimateSERV	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
North America Drought Indicators and Indicators Assessment	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Drought Toolbox by UNCCD International Drought Resilience Alliance	UNCCD	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.unccd.int/.../...	Preparation / Planning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Global and regional (Europe, Central and South America, Africa) Drought Observatory	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Last Africa Drought Watch - ICAC	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Drought Monitoring System (DMS)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
City Drought Risk Management Toolkit	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Drought Central	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
African Flood and Drought Monitor	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Africa Drought Advisory	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Risk and Resilience Portal (Asia Pacific)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
National Integrated Drought Information System	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
European drought Information System (EUDIS)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
European drought Information System (EUDIS)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Global Information and Early Warning System on Food and Agriculture (GIEWS)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
NASA Harvest - Crop Monitor Tools	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Global Drought Outlook - OECD	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
IPCC Global Drought Monitor	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
German Drought Monitor	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Global Drought Impact Report Database (GDIR)	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Drought monitoring bulletins of DMACEE	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Alpine Drought Observatory	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other
Drought monitoring system for Poland - ADMS	WMO	Genel Karamath, WMO	genel.karamath@wmo.int	Genel Karamath, WMO	https://www.wmo.int/.../...	Monitoring and Early Warning	All	Remotely sensed and modelled	Combined indicator	Other	Other	Other	Other	Other

Drought Tools Matrix

Next Steps & Collaboration



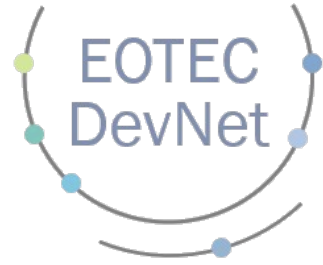
- Open to integration / hosting discussion
- Avoid duplication and align with existing drought initiatives
- Happy to share database
- Working on publication



Building on the success of the EOTEC Flood Tools Tracker, this matrix will evolve into a user-friendly, searchable web tool.



Join the EOTEC DevNet Regional Drought Working Group Meet-ups



Africa: 22 April | 13:00–14:15 UTC

Americas: 22 April | 16:00–17:15 UTC

Asia-Oceania: 23 April | 04:00–05:15 UTC

Europe: 23 April | 13:00–14:15 UTC



<https://eotecdev.net/meeting-signup-form/>

Thank you!

Image credit: European Union, Copernicus
Sentinel-2 imagery 2024



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Advancing EO for informed decision-making

Our contribution to IDMP

- *Technical support for EO-based water resource management*
- *Assistance in indicating related training and education resources*
- *Assistance in EO needs assessment analysis*

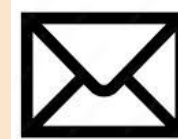
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secretariat@eotecdev.net