

Developments in Drought Monitoring

- From Low to High resolution on any device -

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EMS Drought Observatory Trends

- Recent developments

- Exchanging data with more systems and partners.
- Exchanging in new formats (JSON, WFS).
- Making richer client interfaces, such as the event system
- Forecast of SPI added
- Expansion to the Maghreb, Turkey and Ukraine

- Foreseen

- **Sentinel 2 data analysis of High Resolution data.**
- **HPPTS and checks on security**
- **SPI updates every ten days**
- **Smart Phone & Tablet enabling**
- **Empowering and system implementation in Africa**
- **Community for Impact Database actualization**



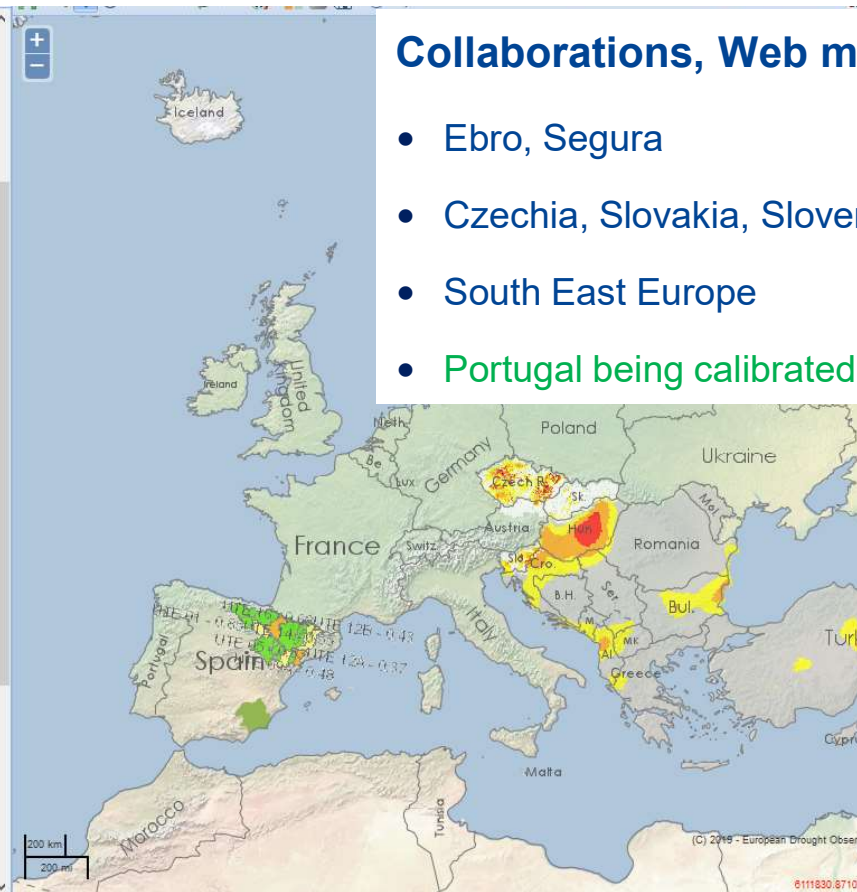
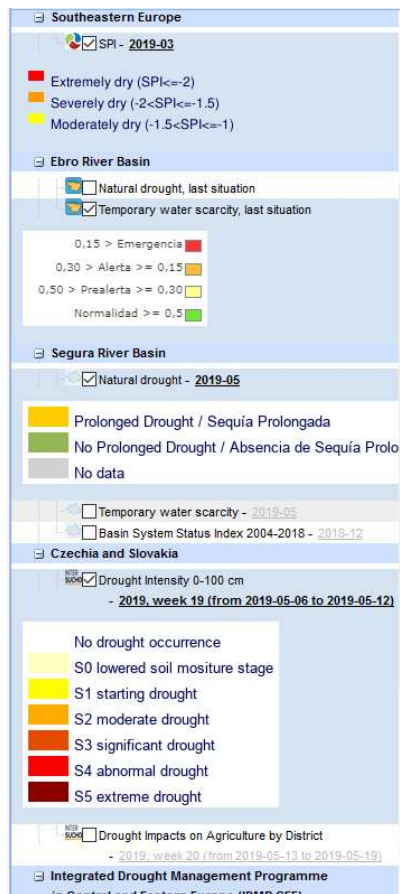
Map of disaster alerts in the past 4 days. European Union, 2019. Map produced by EC-JRC. The boundaries and the names shown on this map do not imply official endorsement or acceptance by the European Union. The listed events in the list below are the past events before last 4 days.





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More data exchange in EDO



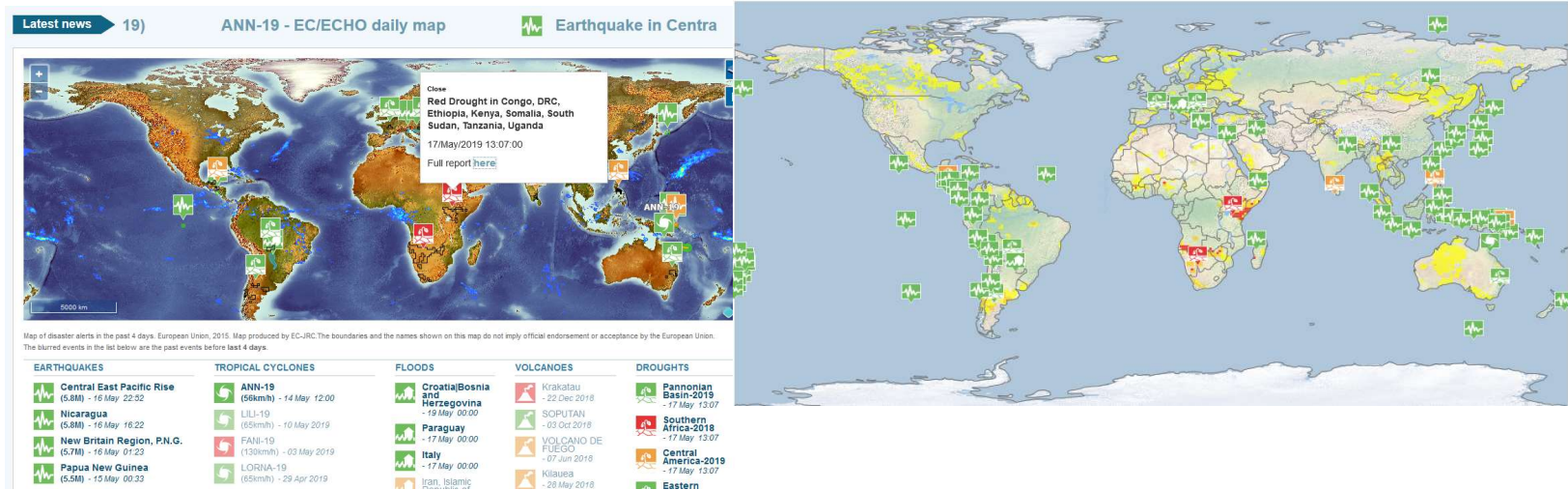
Collaborations, Web map inclusion

- Ebro, Segura
- Czechia, Slovakia, Slovenia
- South East Europe
- Portugal being calibrated



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Data exchange in GDO

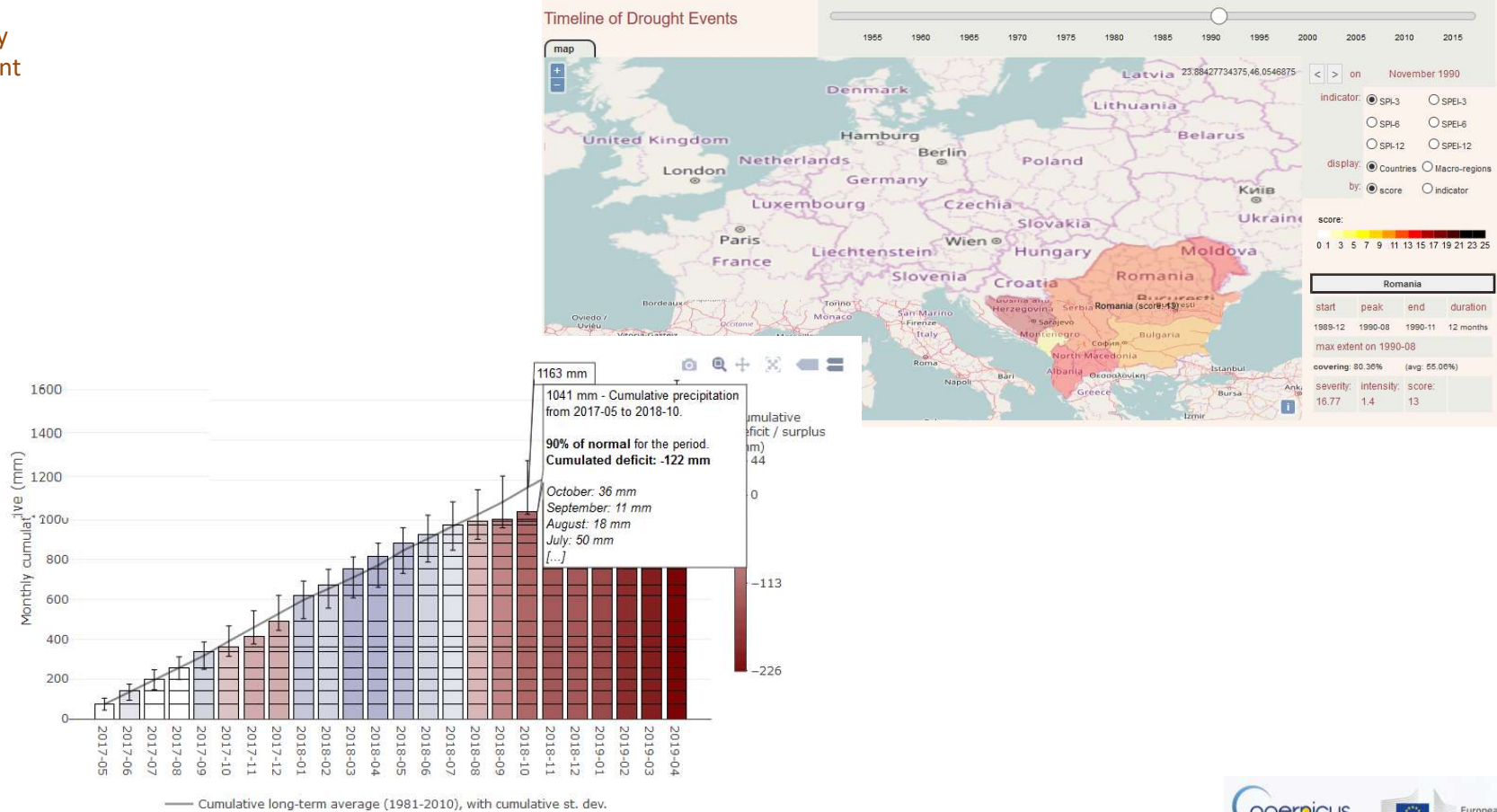


<https://www.gdacs.org>



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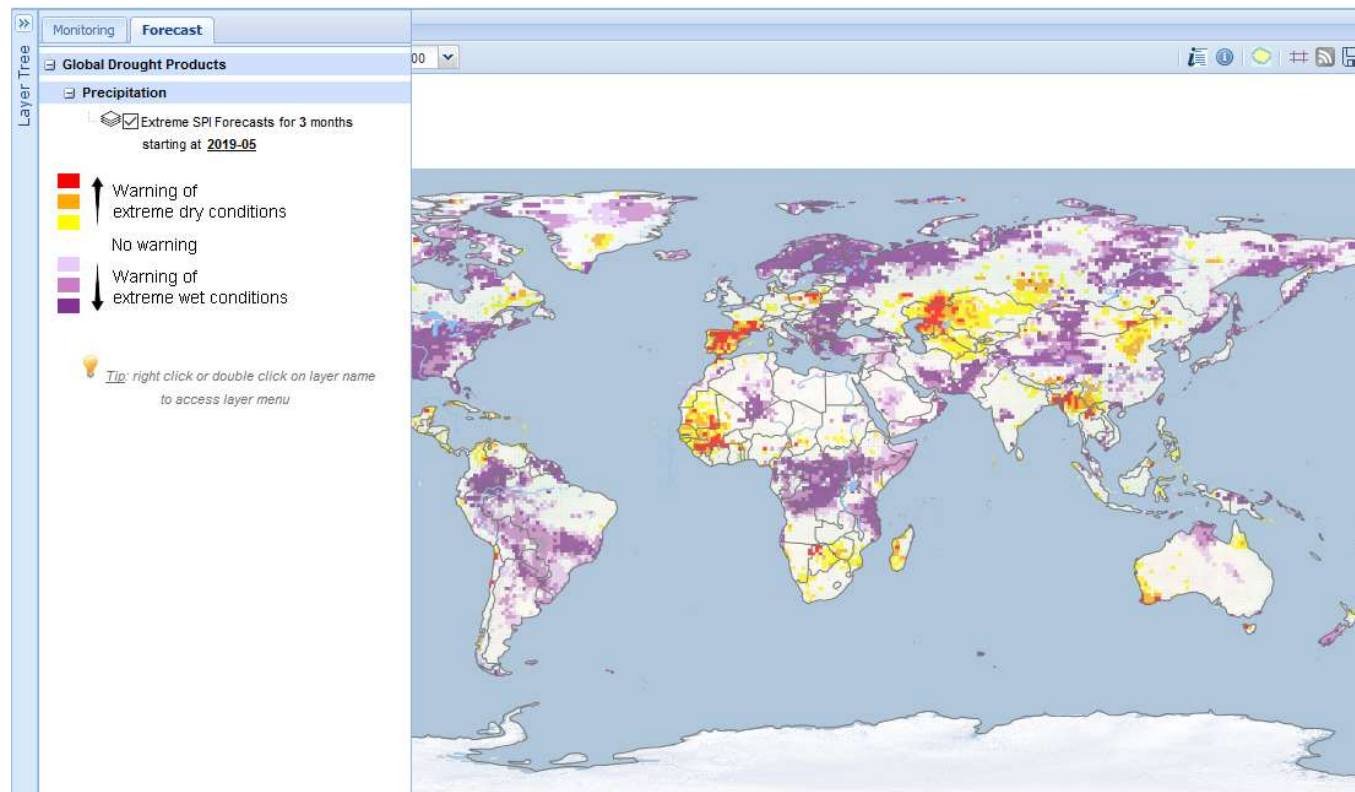
Interactive Graphics GDO Report / Events





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Forecasts

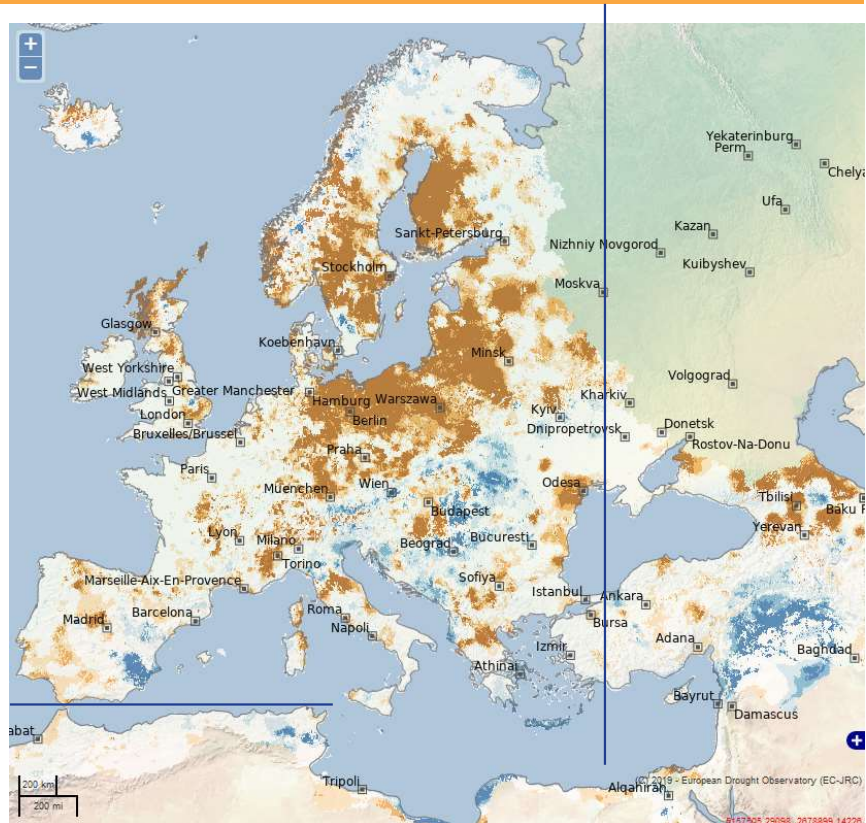




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Expansion to East and South

- LISFLOOD link
 - Soil moisture
 - Low flow
 - *Precipitation / SPI*
 - *10 day updating*





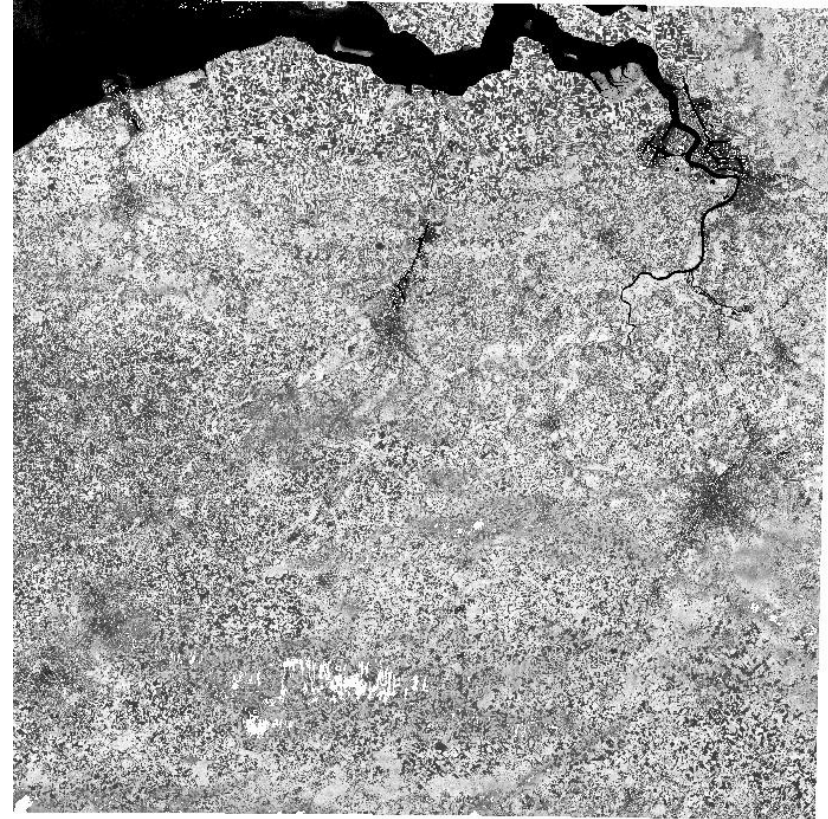
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Sentinel and Cloud Computing



- Sentinel 2 Data

- Higher resolution -> More clouds
- Mixing resolutions
- Cloud Shadow
- No time series yet
- Index affected area detailed mapping



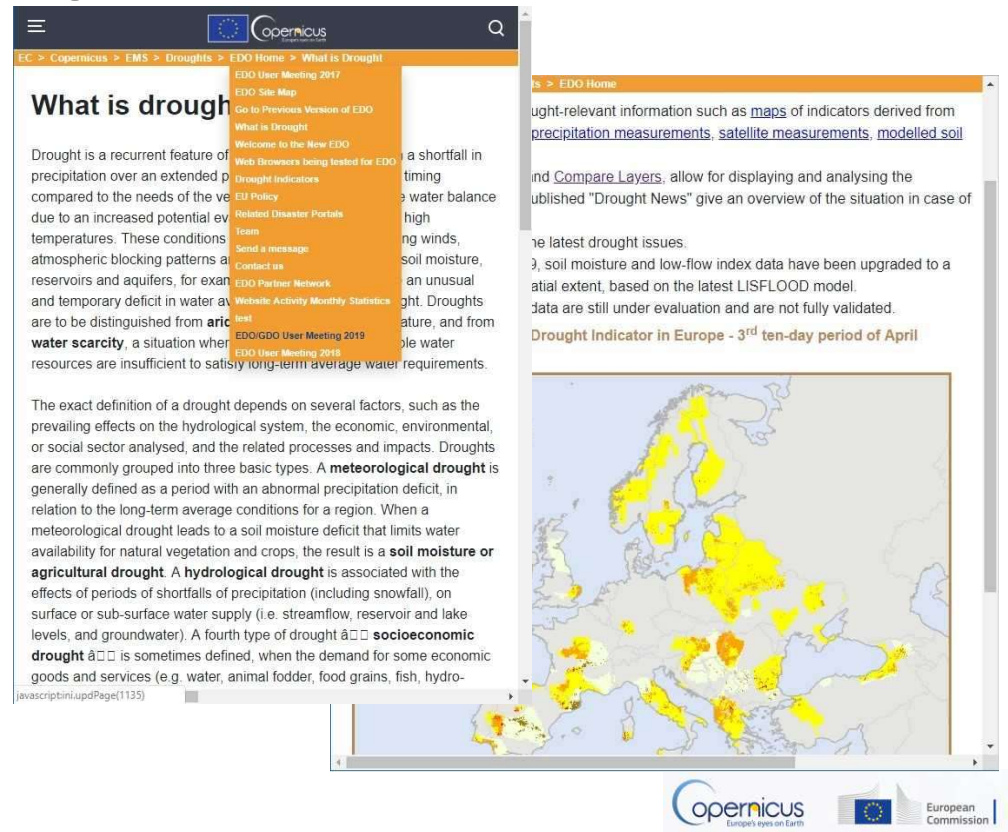


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Responsive Technologies

- Smart Phone / Tablet enabling

- Mapping functions
- Replacing menu options
- Creating Alert Pushes
- Reducing image sizes



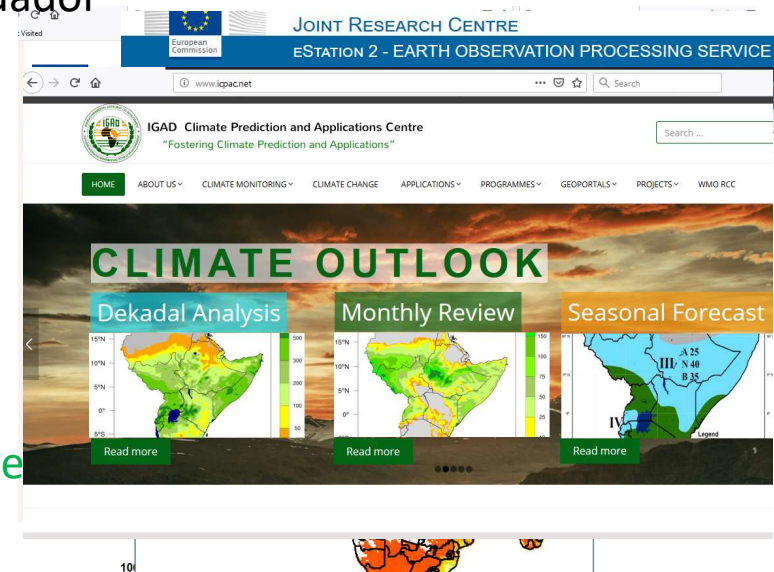


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Empowering African partner institutes

Building upon experience with CIIFEN in Ecuador
scado.ciifen.org

- Existing E-station base
 - SMS alert services
 - Moving Licensed platforms to Open Source
 - Exchanging data, quantifying impacts
 - Empowering software / maintenance
 - Direct contacts for Drought status reports
- www.icpac.net





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Thank you



<http://edo.jrc.ec.europa.eu>
<http://edo.jrc.ec.europa.eu/gdo>

Jürgen Vogt, Paulo Barbosa, Alfred de Jager

<https://youtu.be/Yq65rAb6l-U>

<https://youtu.be/Y08djGHi9w8>