



Emergency
Management



Global Drought Observatory

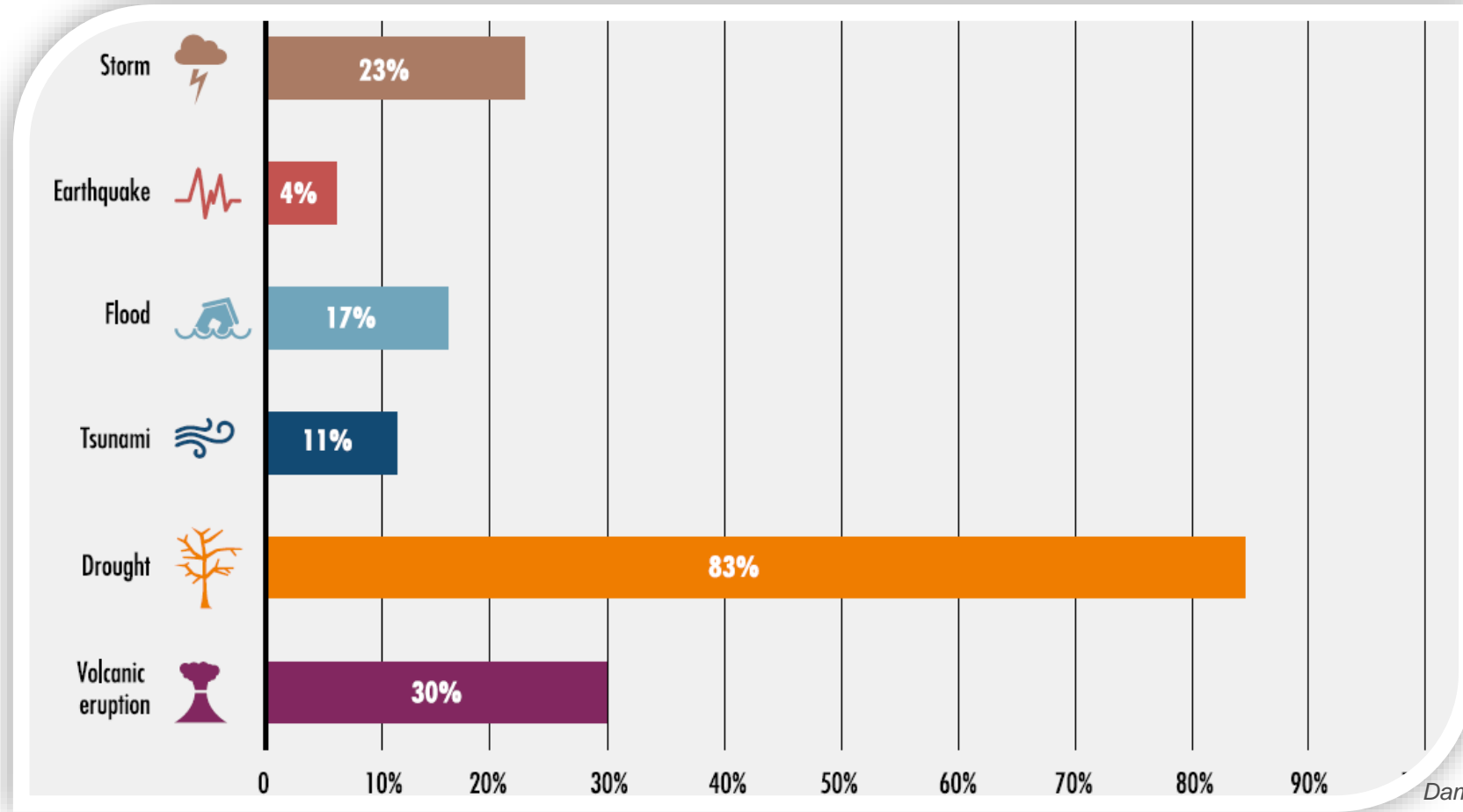
where and when is the next drought striking?

Alfred de Jager & Drought Team JRC

European Commission, Joint Research Centre



Impact of extreme events



Damage and loss in agriculture 2006-16.
Source: FAO, SOFI 2018.



GAR report on Drought

CURRENT CONTEXT

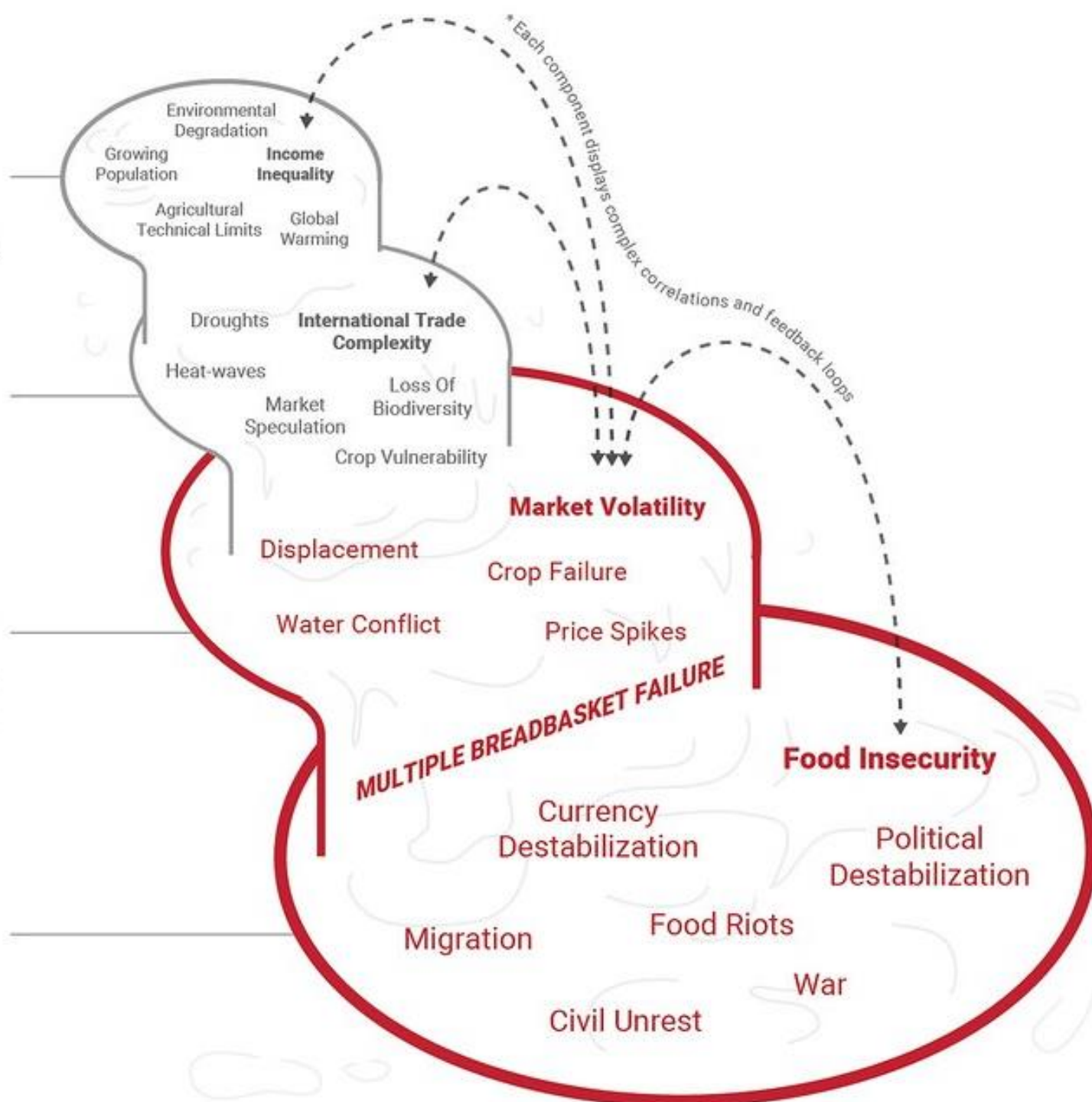
Capacity to absorb negative events is being reduced slowly (e.g. population growth pushing the limits of agricultural technology)

BUILDING STRESSORS

SUDDEN AND GRADUAL TIPPING POINTS

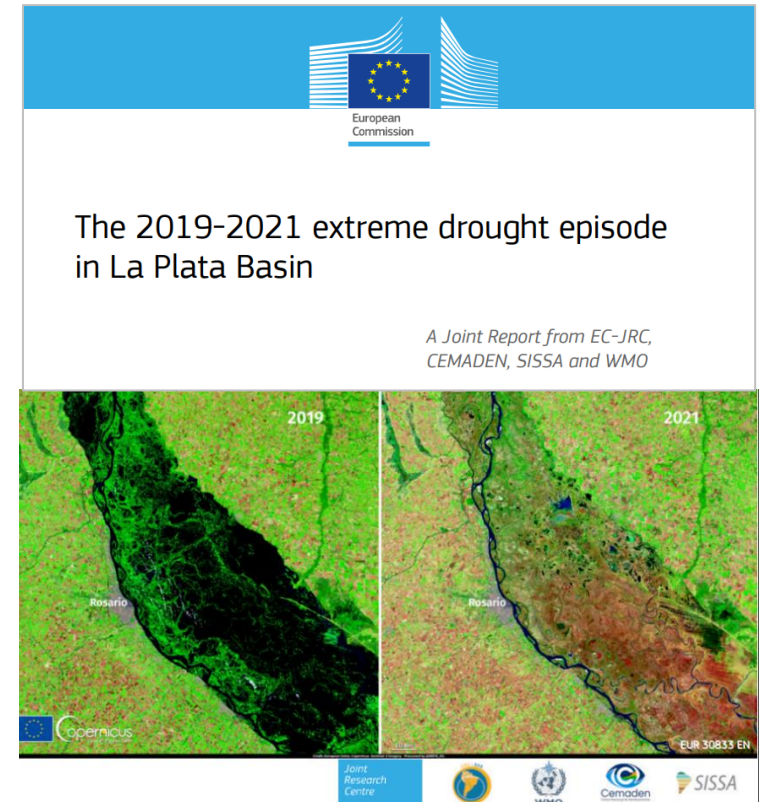
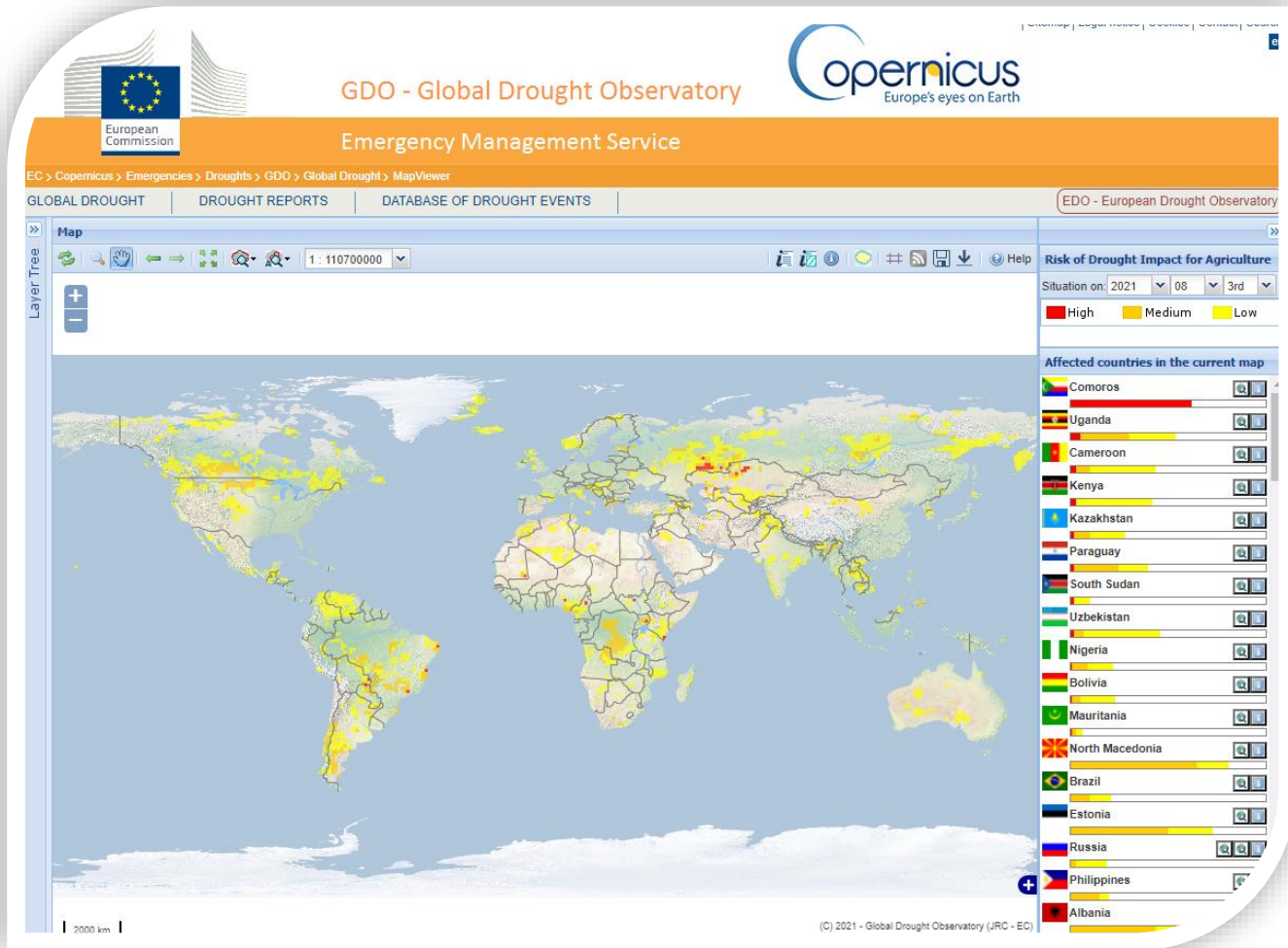
An event of great magnitude or multiple failures at the same time could suddenly exceed all remaining capacity

SYSTEMIC FAILURE



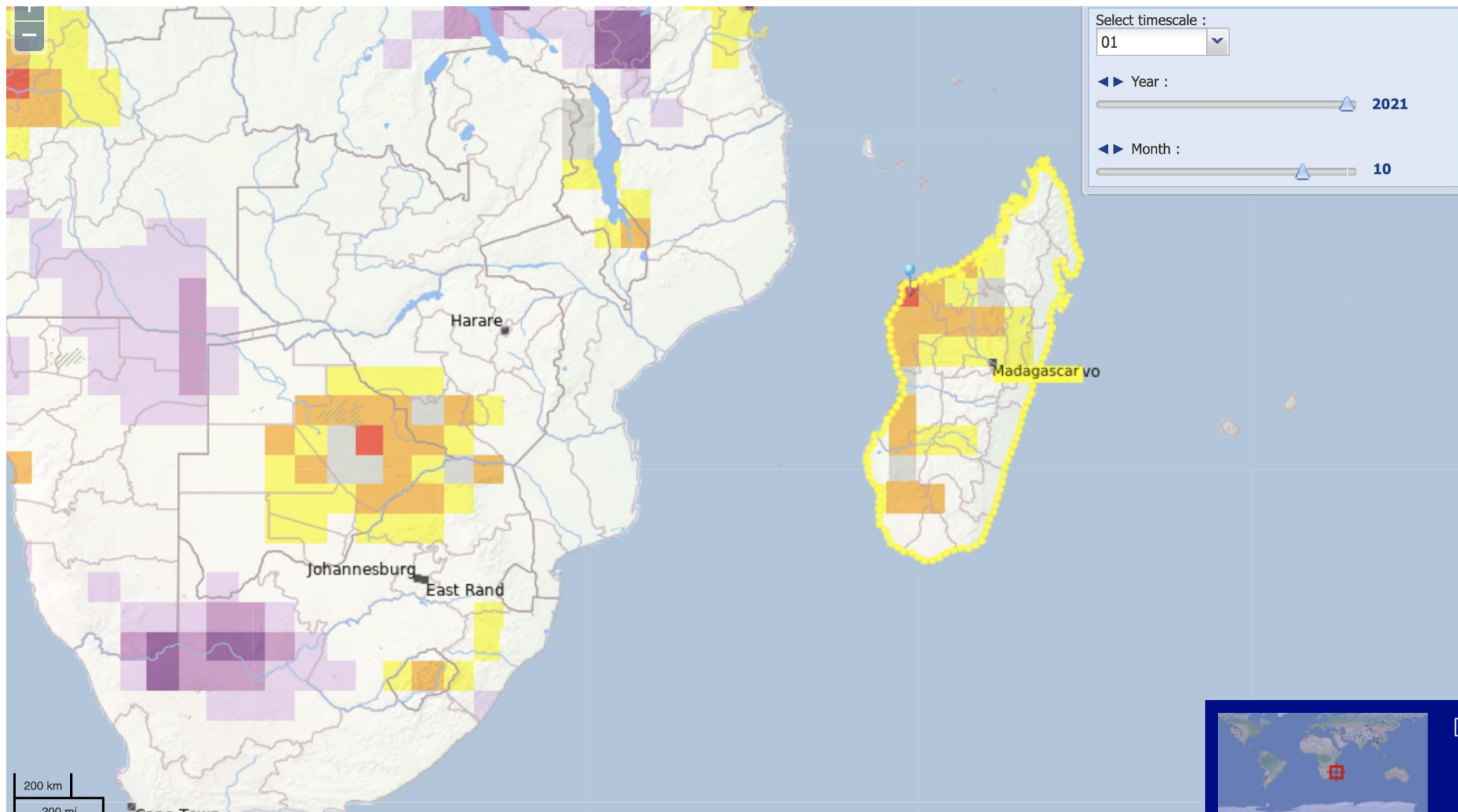


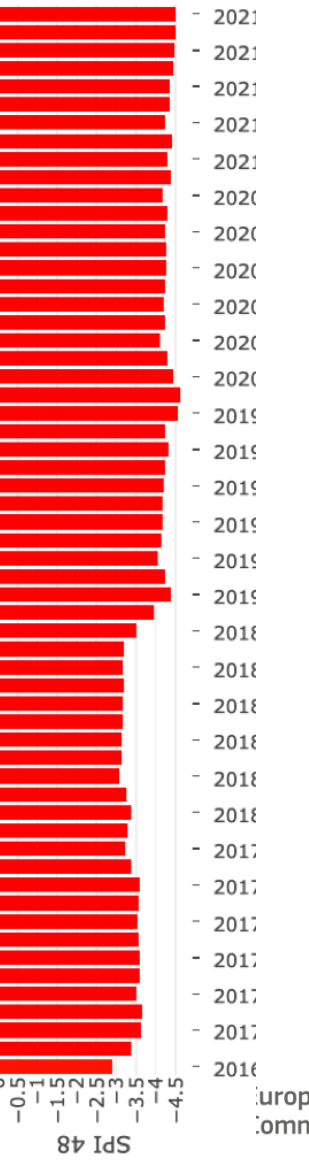
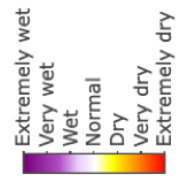
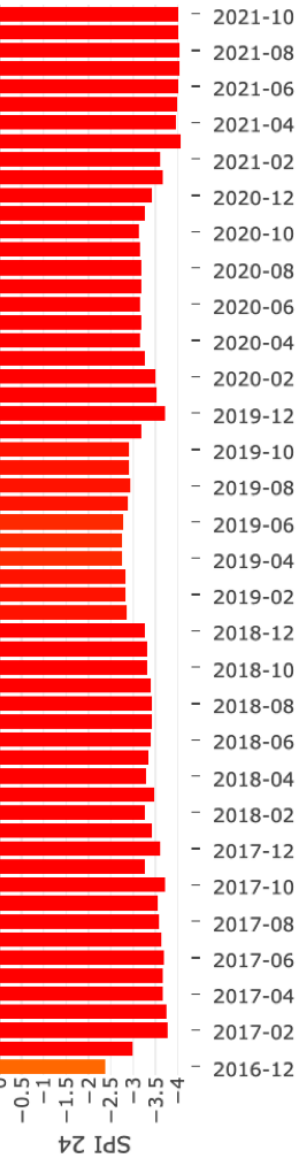
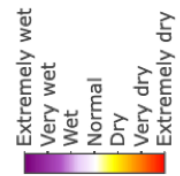
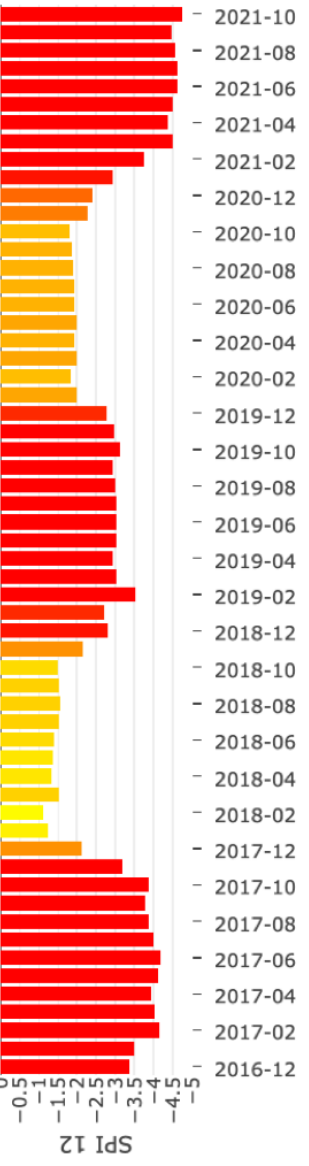
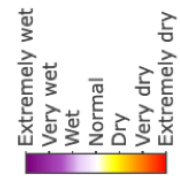
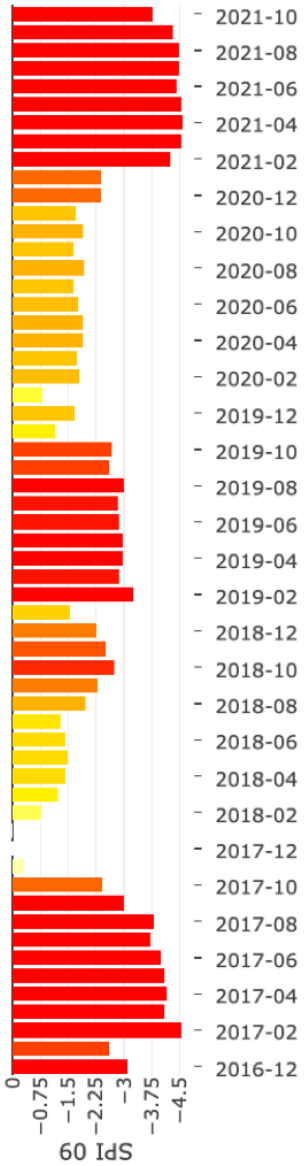
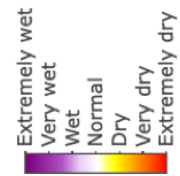
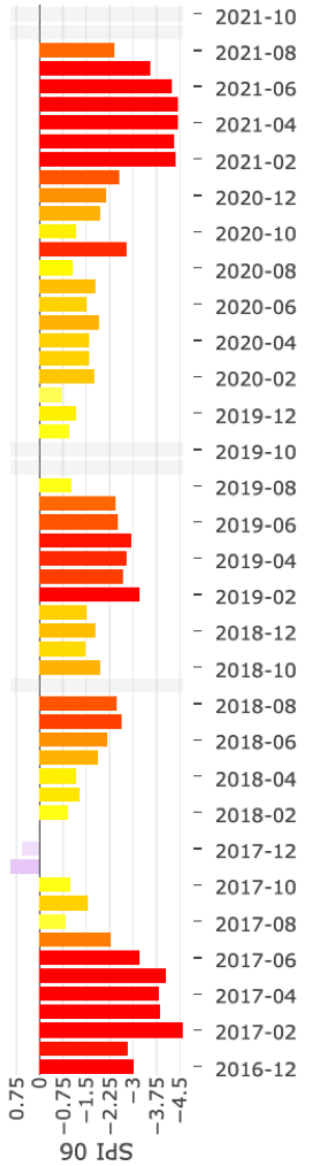
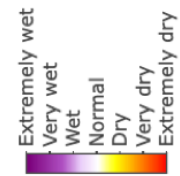
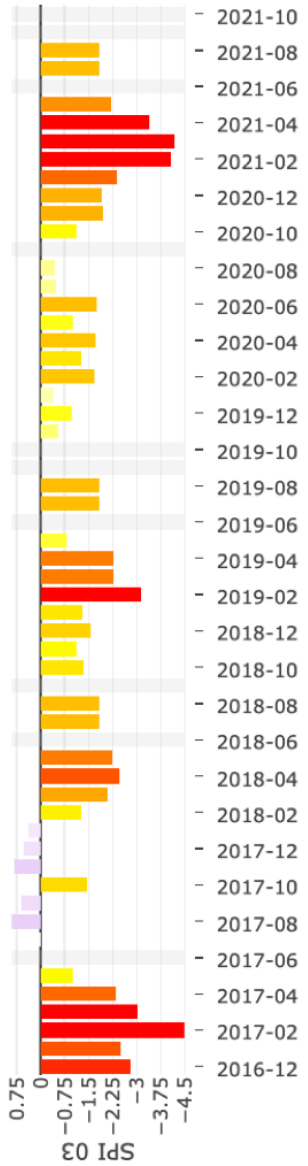
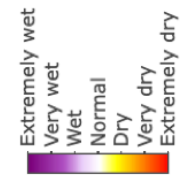
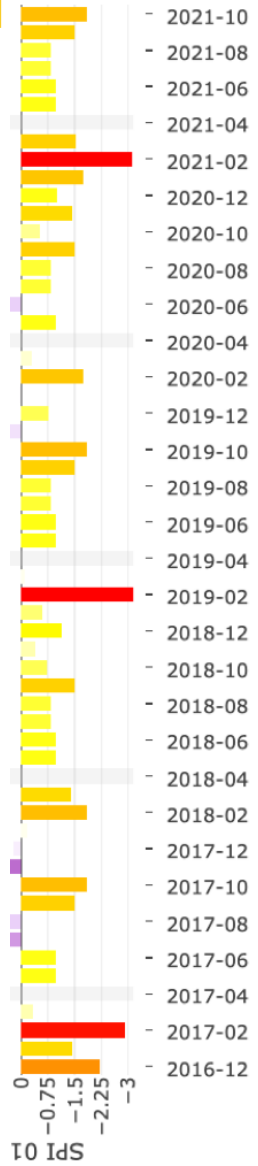
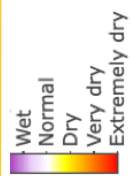
GDO, rich map and explanatory reports





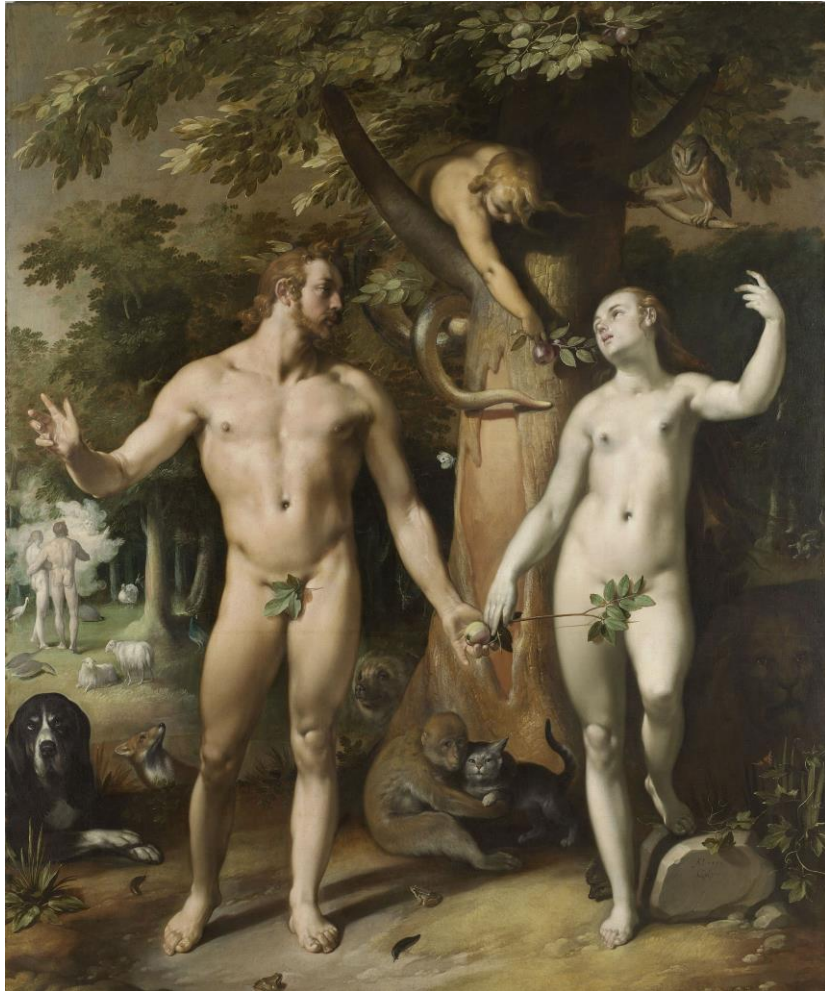
Lack of Precipitation





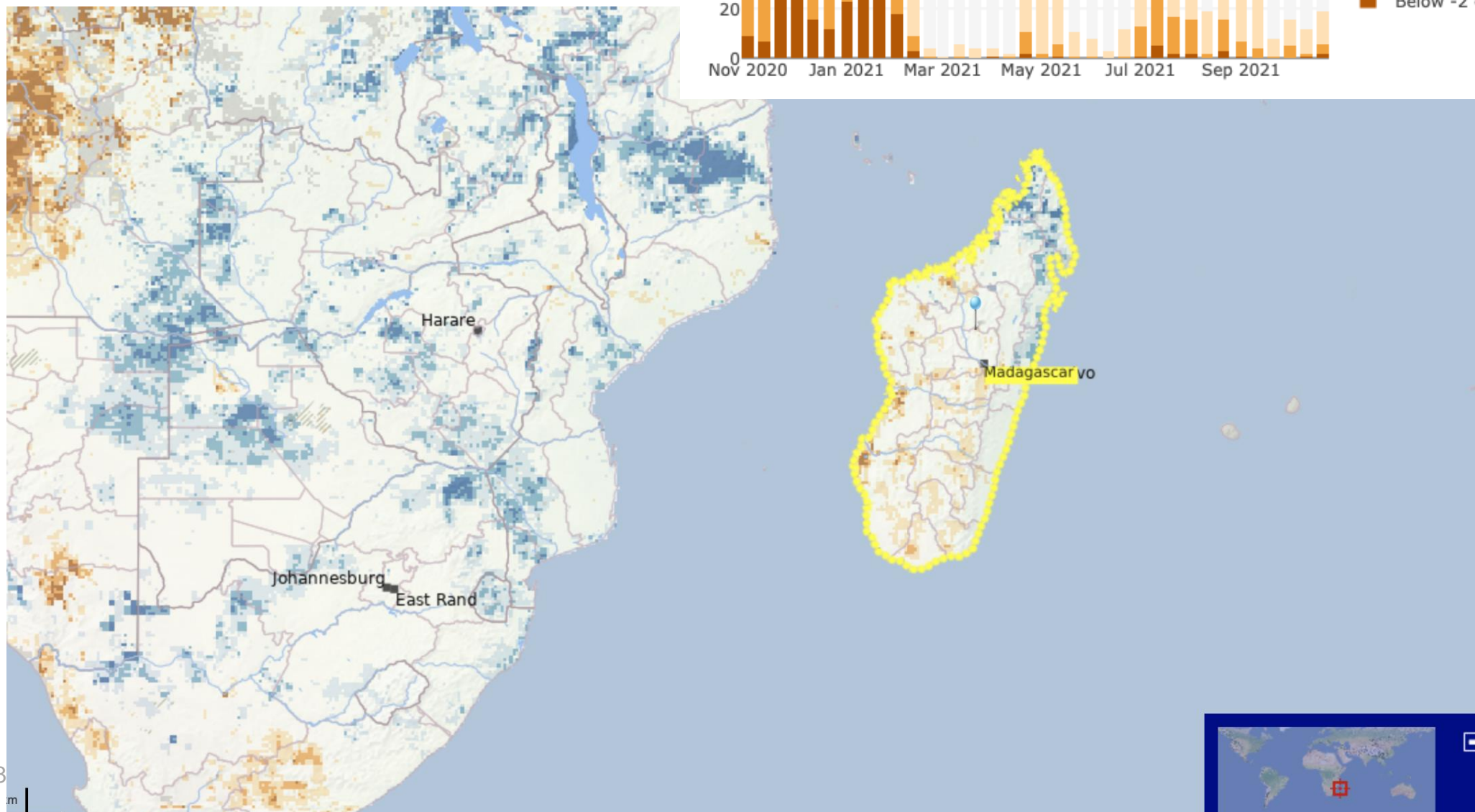
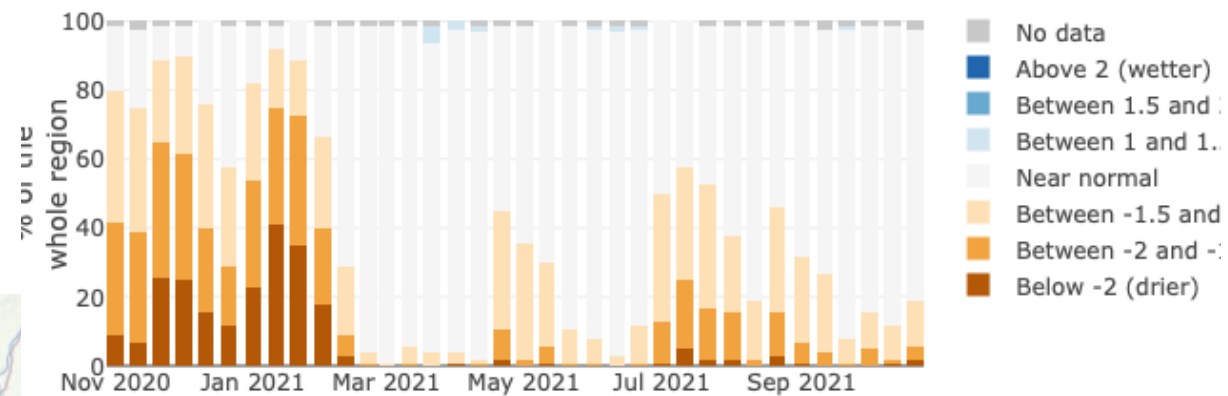


Human food





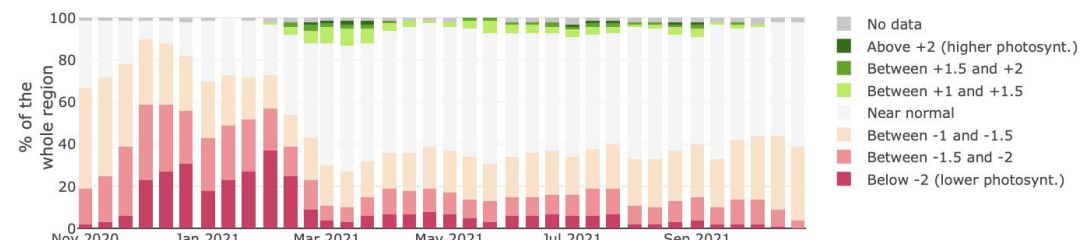
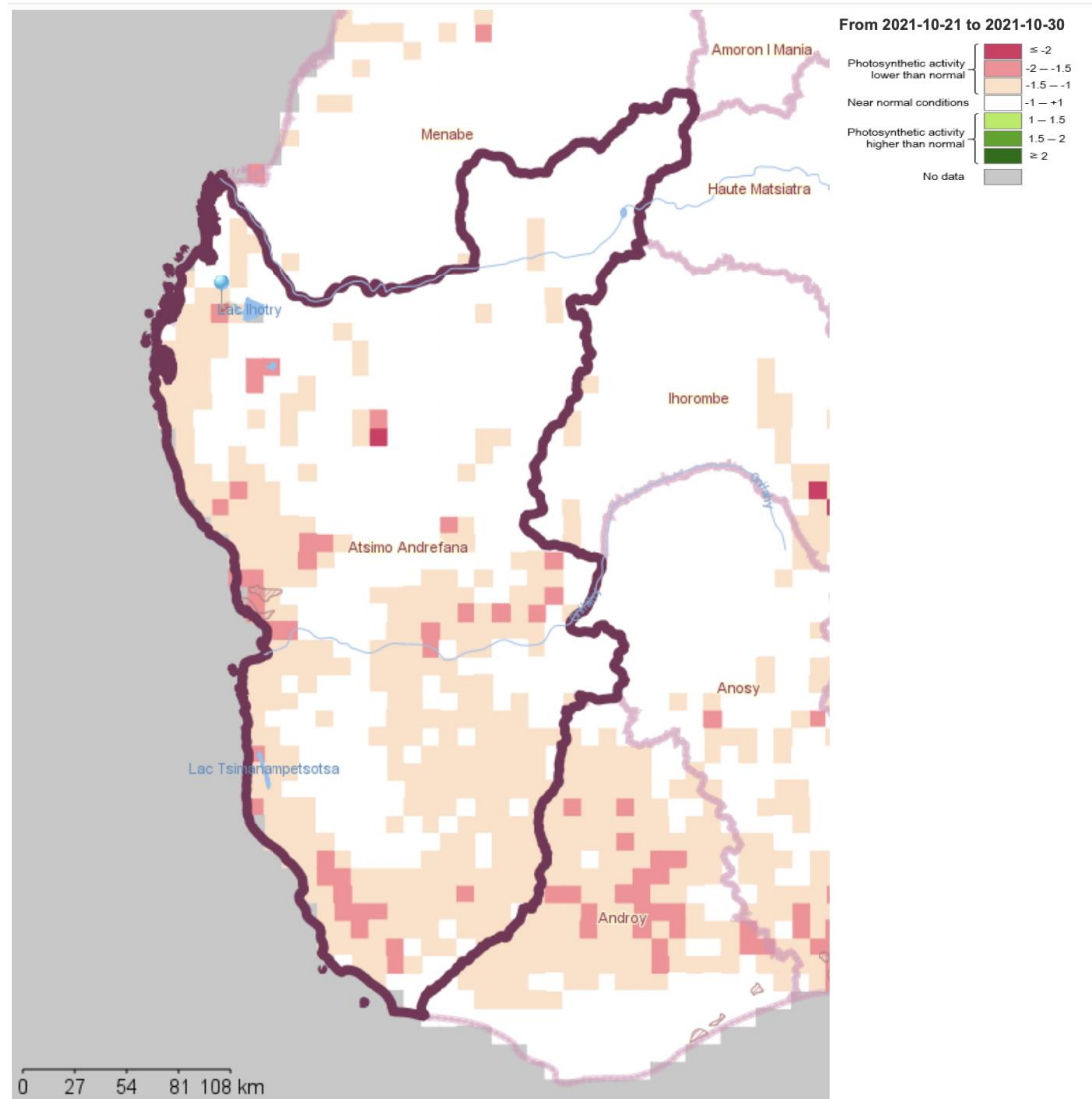
Soilmoisture





Impacts

fAPAR anomaly

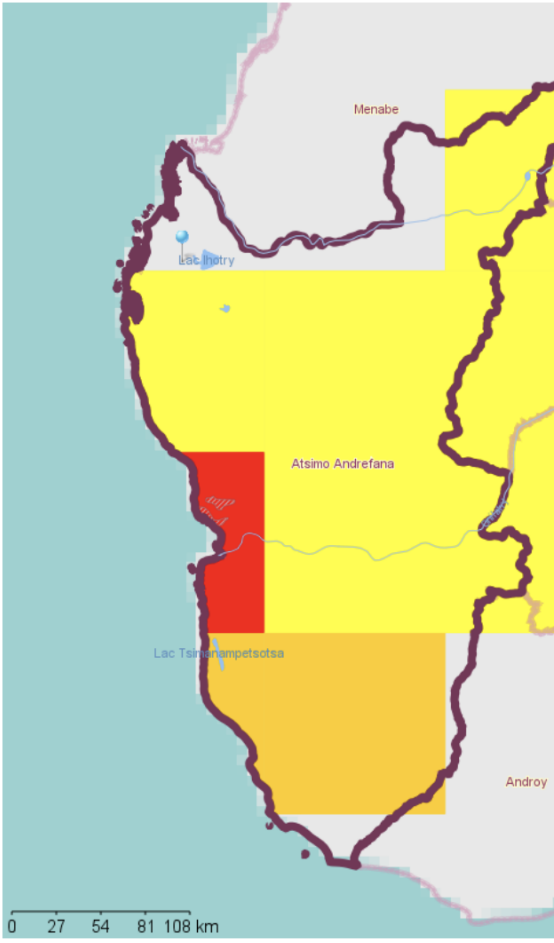




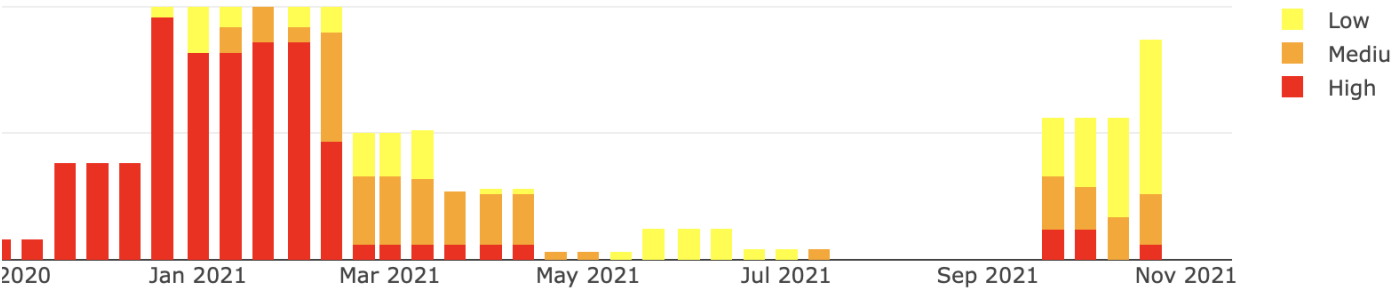
Atsimo Andrefana covers 11% of Madagascar

It's affected by drought for:

| | population | area [km ²] | % |
|-----------------------|------------|-------------------------|-------|
| Low, 1 | 685.233 | 40.695 | 61.30 |
| Medium, 2 | 217.978 | 12.945 | 19.50 |
| High, 3 | 65.952 | 3.917 | 5.90 |
| in affected areas: | 969.163 | 57.557 | 86.70 |
| whole reporting unit: | 1.117.836 | 66.387 | |



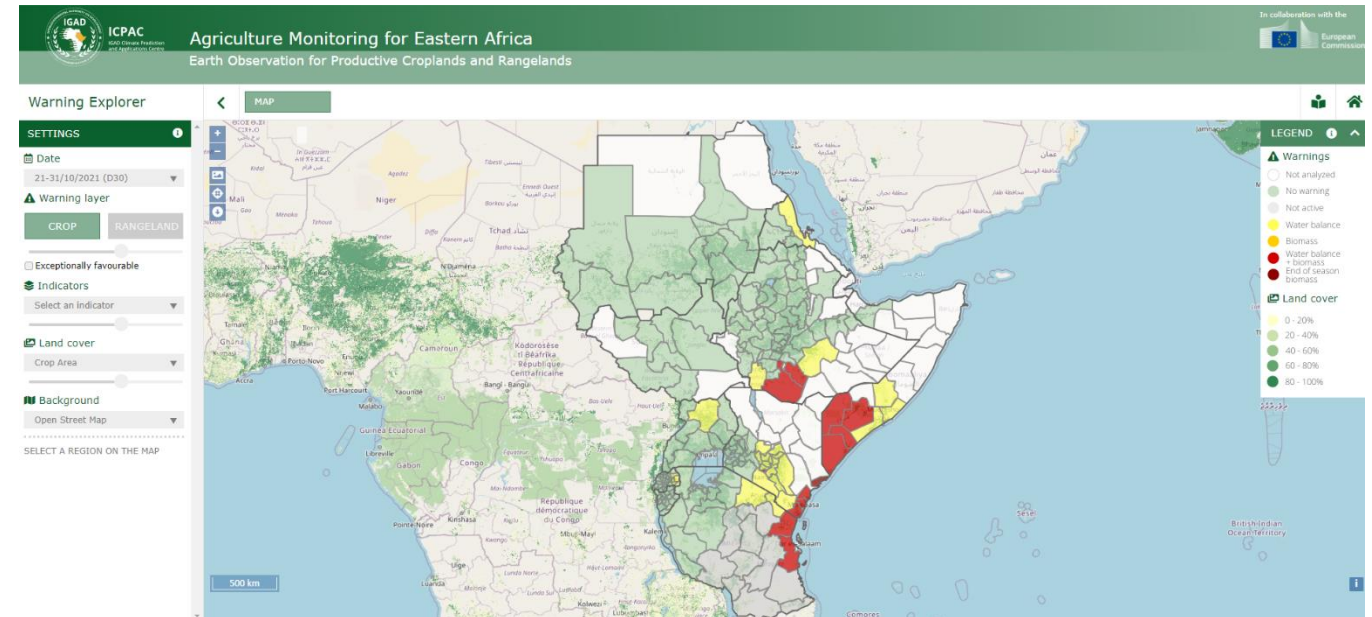
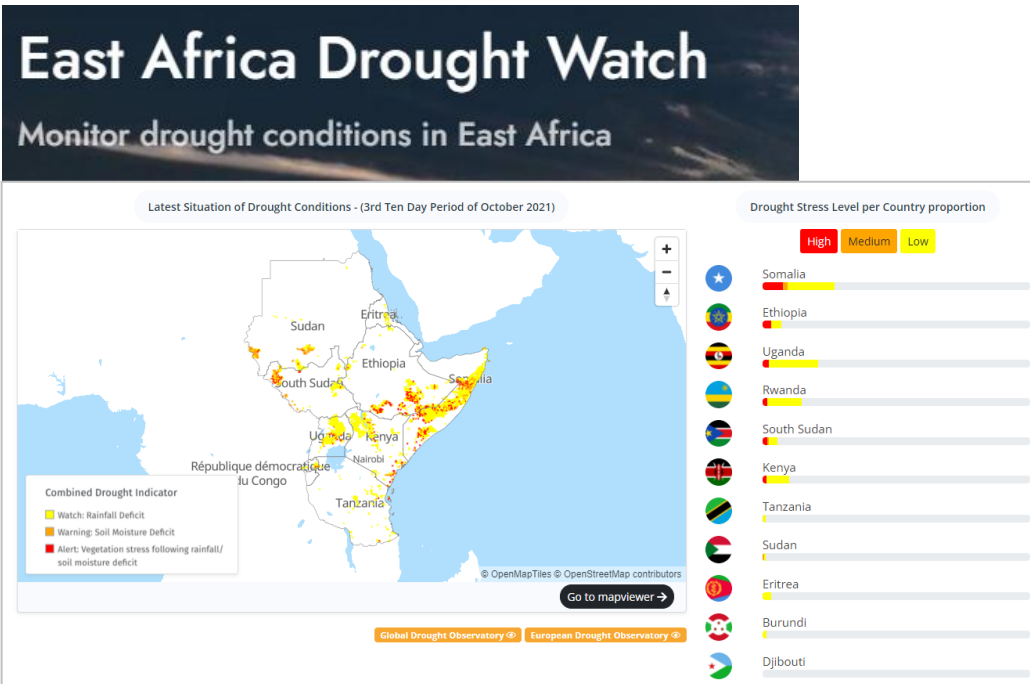
Combined Index





Capacity Building and Collaboration

Cooperating & Supporting to enhance the use and the integration of local data & knowledge



<http://droughtwatch.icpac.net>



Now we know where and when **droughts** appear, the next step is to ***avoid*** them, to **combat** them if they occur.



EU Science Hub: ec.europa.eu/jrc Drought Observatories: edo.jrc.ec.europa.eu



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EU Science Hub – Joint Research Centre



EU Science, Research and Innovation



Eu Science Hub

