

Initiative on sub-seasonal to seasonal (S2S) forecast in the agricultural sector

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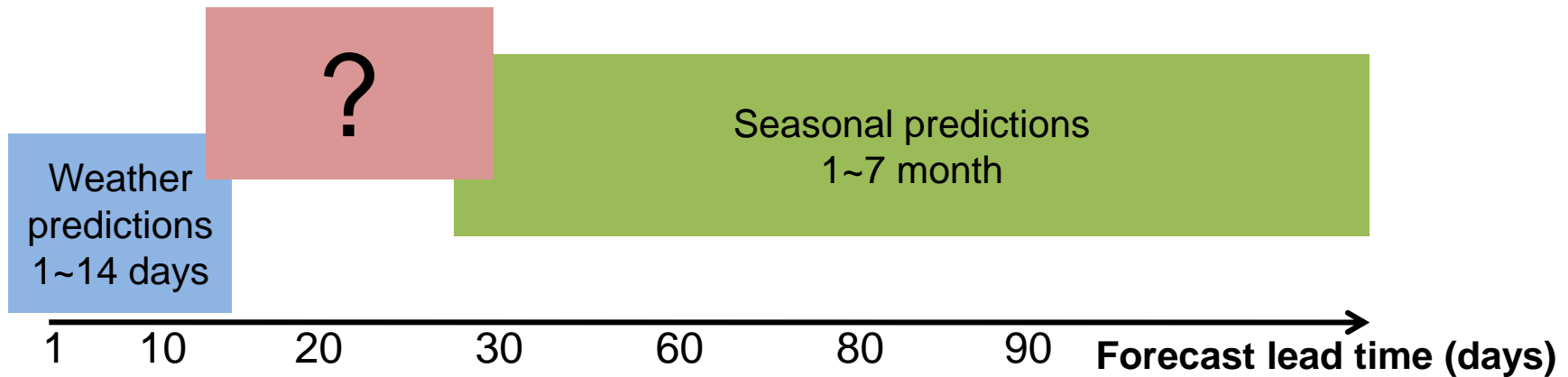
Context

- In Central Africa agriculture is essentially rain-fed, and employs more than half of the population
- Agricultural production is tightly linked to weather and rainfall fluctuations.
- Observed changes are obvious in temperature and precipitation in Central African countries (Aguilar *et al.*, 2009).



Need of accurate climate information for sustainable development of agriculture over the region

Available climate information

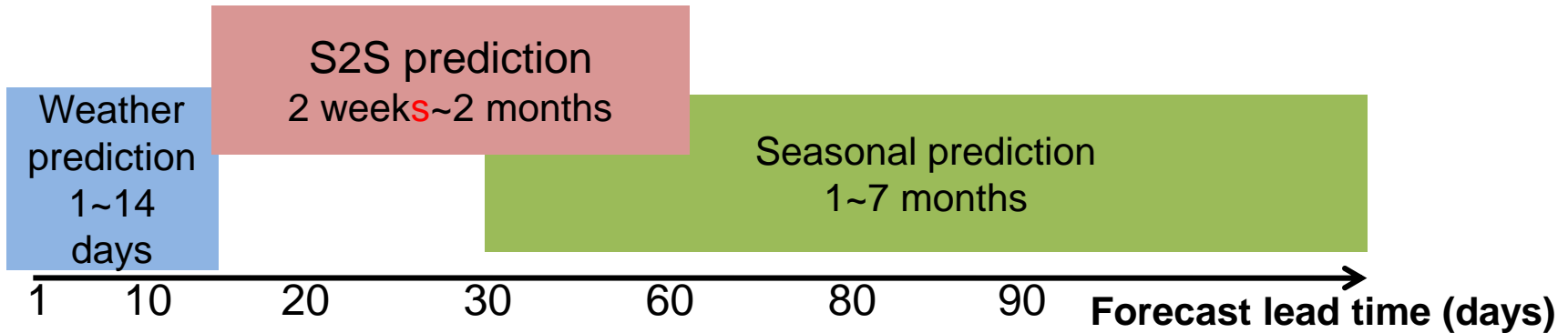


Weather predictions: provide **details** weather information, but **time** scale **too short** for agricultural **planning**

Seasonal predictions: indication of seasonal average conditions of weather parameters (normal, wet, dry)
Good time scale, but **information not detailed enough** for local agriculture Planning (e.g. onset of *growing season*, *dry episodes*)

Need to address **both time scale** and **detailed** information

Initiative on S2S prediction



S2S predictions contribute to fill the gap between weather and seasonal time scales

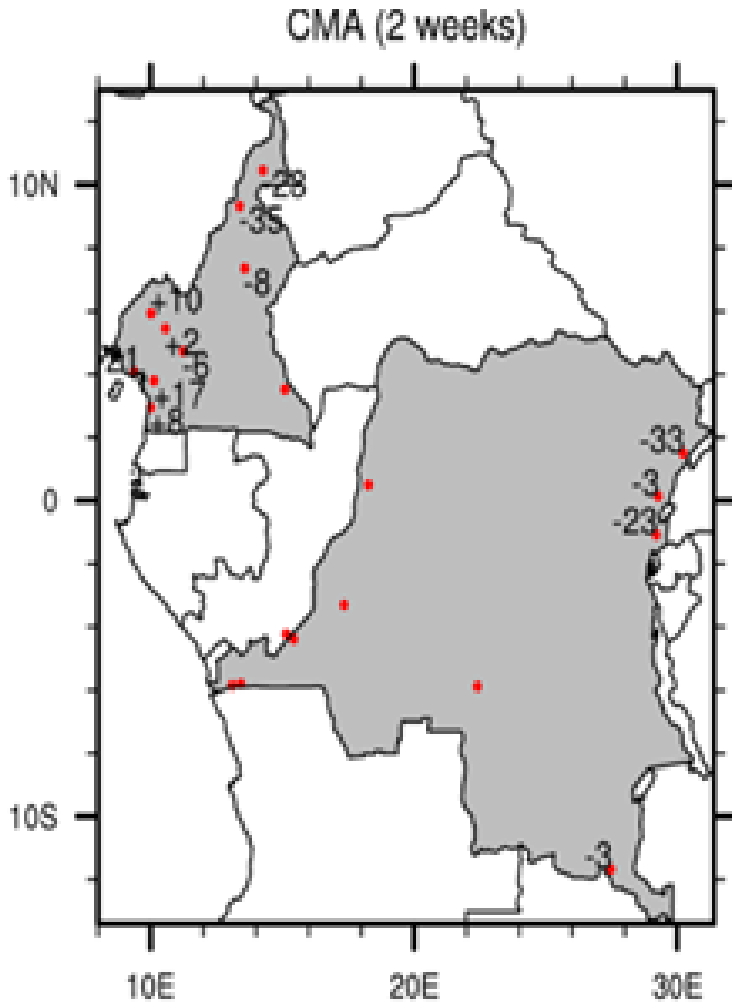
- Initiative within the framework of CR4D
- Countries :Cameroon and Dem. Rep. of Congo (DRC)
- Aim: assess the skill of available S2S predictions to capture seasonal characteristic useful for agriculture over Central Africa (*e.g. onset of growing season, occurrence of dry spells during the growing season*)

Activities

- Present the current state of climate service for agriculture over CA
- Highlight climate information needed by farmers
- Define meaningful climate index related to information need by farmers
- Assess the skill of climate model predictions at S2S timescales over Central Africa

Event/shock identified by farmers	Climate information related to event/shock	Climate information needed by farmers
prolonged episode of drought	Length of dry spells during the rainy season	-onset of growing season -dry spells distribution during the growing season -dry spells duration

Activities



Comparison of onset of rainfall between model and observations at 2 weeks lead time

Conclusions

S2S predictions is still a **research** project

- Need of capacity building on S2S predictions
- Research and operational : Strengthen link between Met services and Universities

Main Recommendations

- Sustainability : strengthen the link between S2S prediction project and regional initiatives on S2S over Africa
- Develop network between initiatives on S2S over different regions : allowing regions to learn from others (know-how transfer).