**Experimenting a subseasonal prediction bulletin as part of the CREWS-Burkina Faso project**

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**Key deliverables**

- Assesment of observation network processes and needs
- Data base improvements
- Short term forecast capabilities
- Sub-seasonal to seasonal forecast
- Analysis, nowcasting and climate watch tools
- Risk information and forecast products for flood Early Warning
- Risk information and forecast products for agriculture and food security
- Institutional strengthening
- Monitoring and Evaluation

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**Burkina Faso: Strengthening National Capacities for Early Warning System Service Delivery**

**Status**: Ongoing

**National Projects**

- **The World Bank - GFDRR - WMO**
- Areas of Implementation: Burkina Faso
  
  **Funding**: $370,000

In Burkina Faso, CREWS aims to improve hydrometeorological services for early warning for flood-related risks and risk information for agriculture, food security and anticipation of severe weather impacts. It will serve as a pilot project for the construction of a monthly to seasonal operational system.

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**Meteo-France is involved in**

**Component 1: Basic systems. 1d: Subseasonal to seasonal forecast**

- Definition of the production for subseasonal to seasonal forecast
- Development of the chains of production
- Score computation and evaluation of hindcast mode
- Implementation and dissemination of all products
- Training and experimentation
- Final reporting and recommendations

**Strategy:**

- Take advantage of what has been learned from AMMA project
- Extend the concepts developed for operational purpose at the synoptic scale to the larger scale: monthly up to the seasonal forecast

→ the strategy is more regional than local.

It can be used for different countries in the Sahelian band.

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**Key points**

- CREWS-Burkina Faso has started this year with weekly briefing and a workshop held in Ouagadougou
- Meteo France and the ANAM collaborate for the improvement / development of monthly and seasonal forecast over Burkina Faso with products that will benefit the entire Sahelian region

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**Training workshop – June 2018 – Ouagadougou**

First training workshop meeting of the project ⇒ confront the needs with current knowledge

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**Need for robust climatology**

Stronger spatial variability in rain gauge network data than in satellite-based estimates

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**Develop an operational methodology (1)**

- Try to follow a multi-ensemble approach for confidence assessment

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**Develop an operational methodology (2)**

- Monitoring the MJO, Equatorial waves, regional modes of variability (QBZD, Sahelian) using RMM indices and wave filtering methods

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**Develop an operational methodology (3)**

- Precipitable water is key to track interseasonal variability

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**Build a human expertise**

**A synthetic table summarizes the ingredients, numerical prediction and human expertise of weekly precipitation anomaly**

Launch a procedure of immediate subjective verification

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**Traditional rain gauge data**

ANAM spatialized data

CPC ARC2 data

ANAM rain gauge data

ANAM spatialized data

D.E. Poan thesis, 2013:

**Documentation and physical interpretation of the African monsoon intra-seasonal variability for improved weather forecasts**

Precipitable water is key to track interseasonal variability

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