Weather Impact

ECMWF forecasts for African small-scale farmers

6th June 2018

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CRAY
ECMWF
EUROPEAN CENTRE FOR MEDIUM RANGE WEATHER FORECASTS
CRAY
CRAY
CRAY
CRAY
CRAY
CRAY
CRAY
60°N
50°N
40°N
30°N
20°N
10°N
90°W
60°W

Weather Impact

Weather Impact: experts in translating meteorological and climate data into user-friendly services

Weather Impact

SMS agri-weather forecast
Sesame farmers Ethiopia

Weather Impact

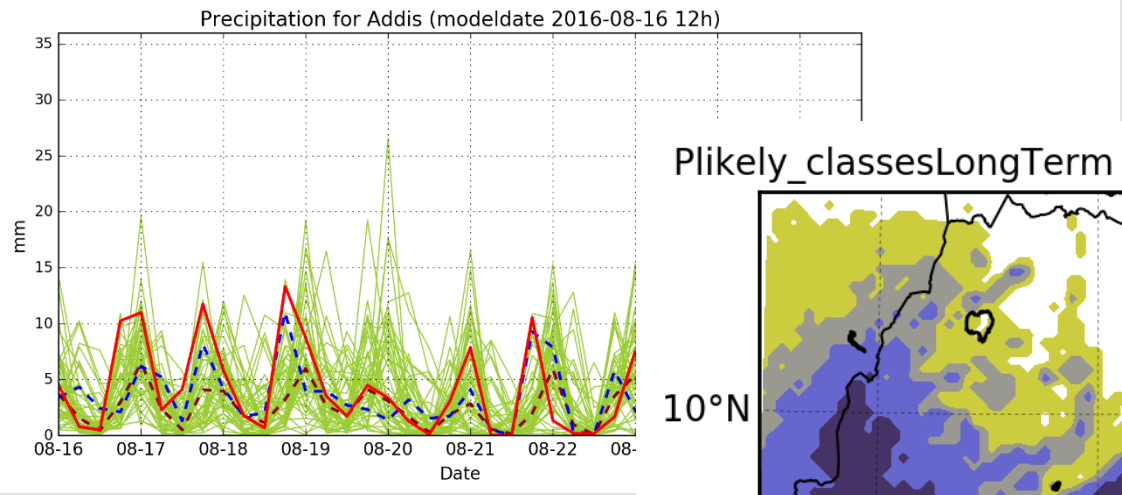
Smartphone application
Maize and wheat farmers South Africa

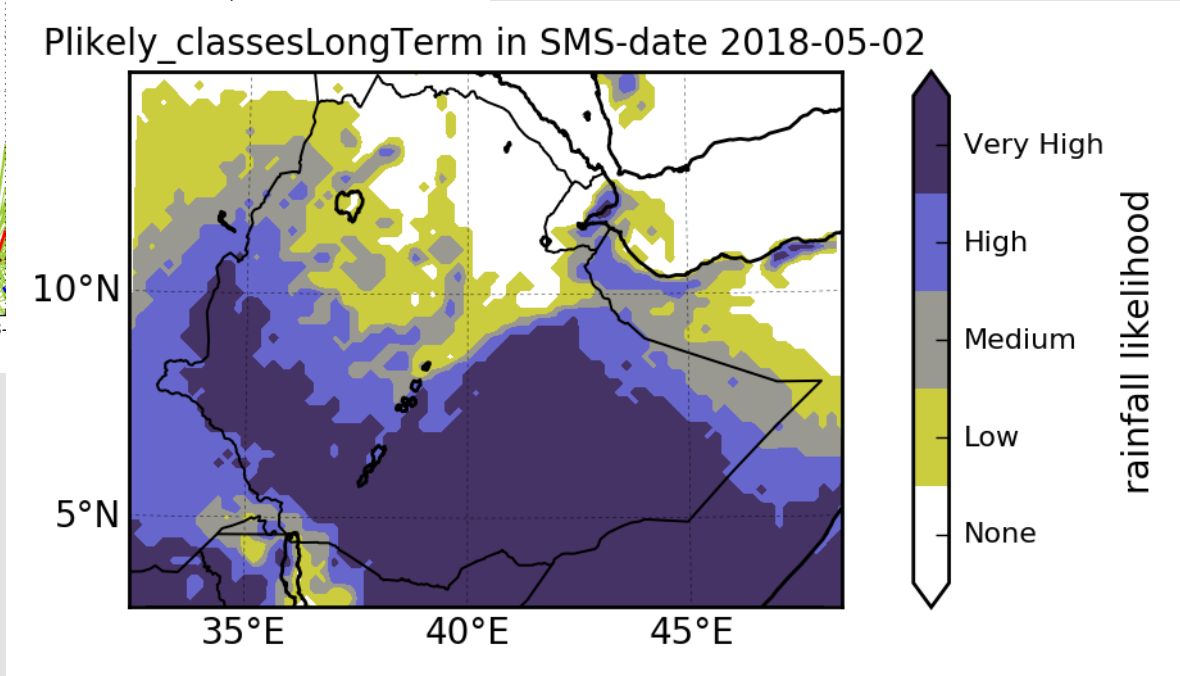
Weather Impact

5 critical success factors for mobile weather services in Africa

1. Location specific and reliable forecasts

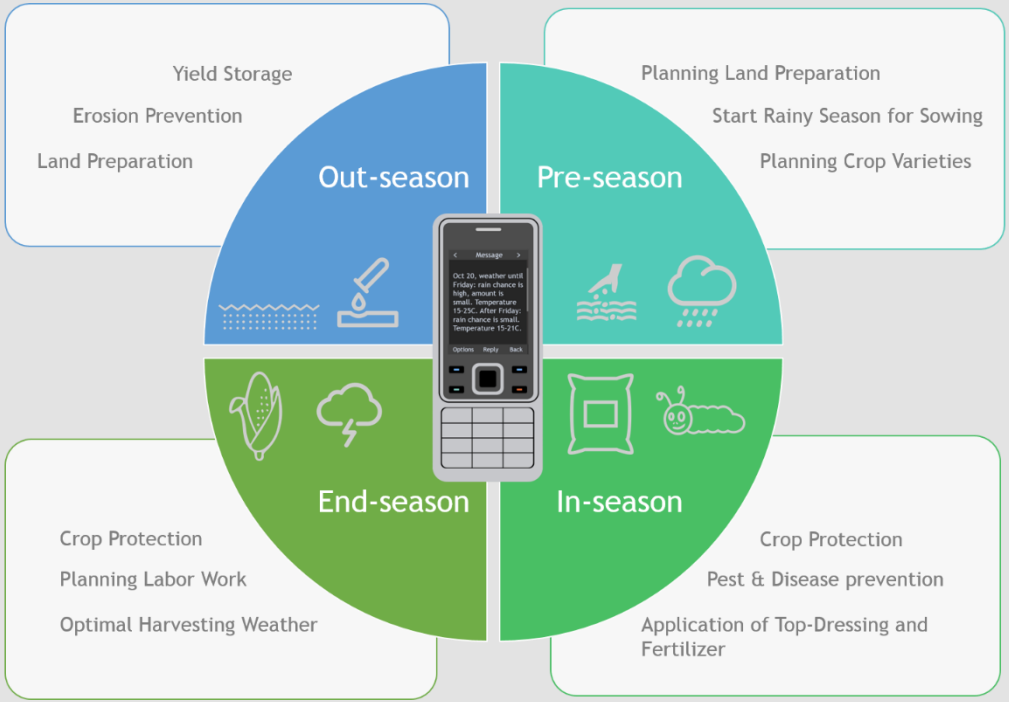
From “Uncertainty” to “Likelihood”





2. Information/technology tailored to user needs

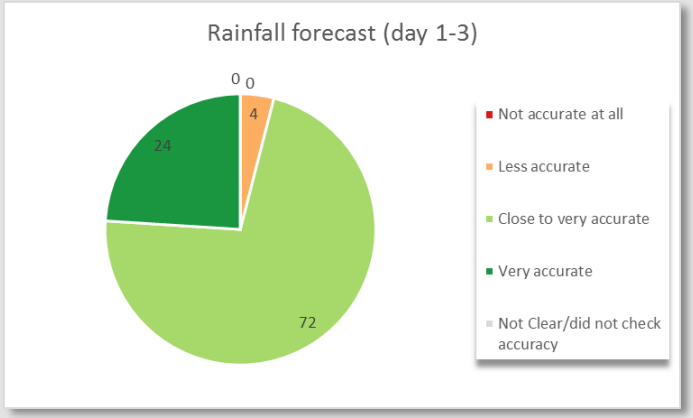
Local language and appropriate technology

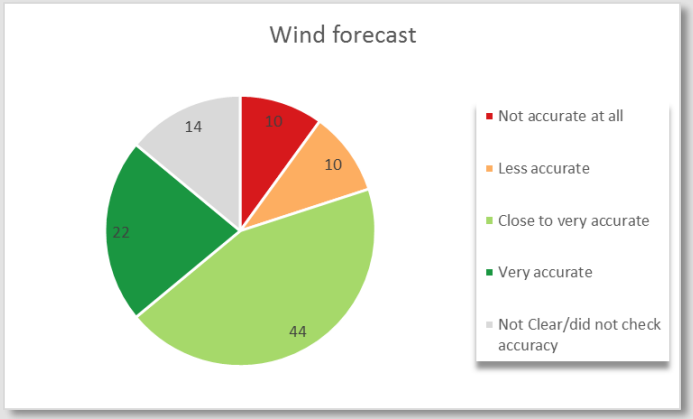


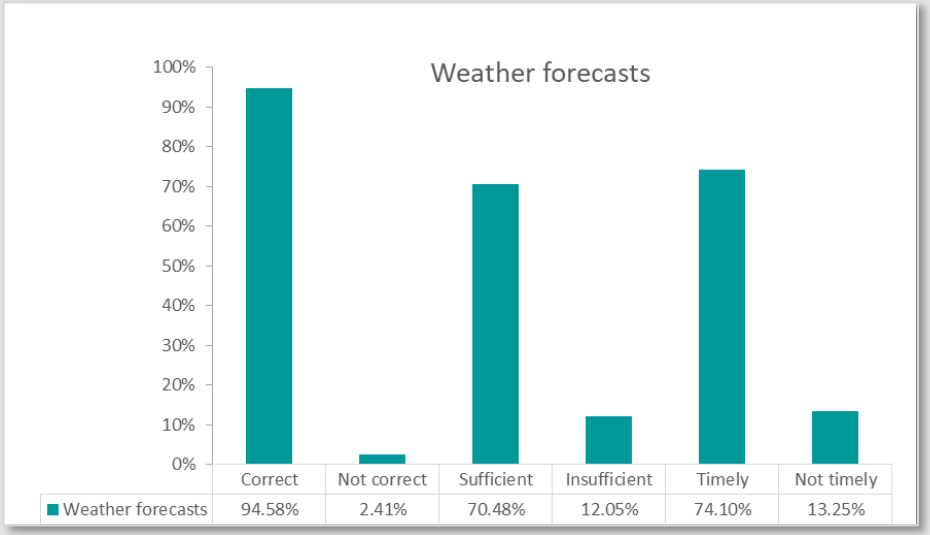
3. Service is embedded in existing local network

Extension networks as “ambassador” of the weather services

User evaluation in various projects



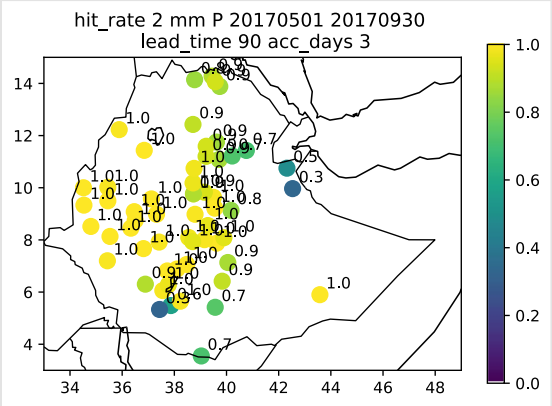


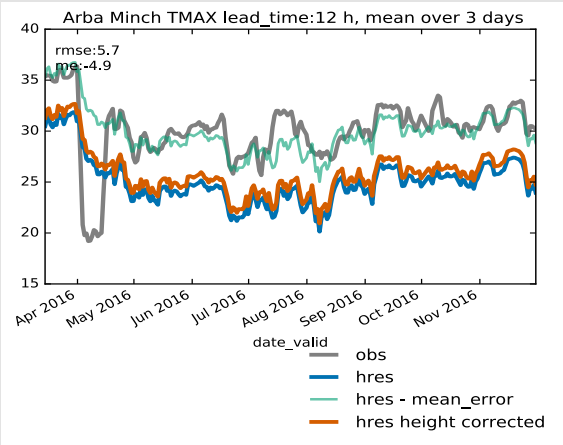


4. National weather services approve the service

Validation of ECMWF forecasts

- Rainfall likelihood good skill:
  - 80-90% accuracy
- Temperature fluctuations are well captured
- Predicting extreme rainfall events is possible, but not straightforward
- Rainfall amount can be improved, performance is very good compared to other models
- Difficulties next to big lakes





5. Involve the right partners for sustainability

- Financial institutes
  - MFI/insurers/banks
- Agro-input suppliers
- Governments

Weather Impact

Netherlands Space Office

Koninklijk Nederlands Meteorologisch Instituut
Ministerie van Infrastructuur en Milieu

ECMWF

Cropmon

G4AW

R4A Rain for Africa

Bridge between science and practice
We like to collaborate!
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