

ASPIRE JAS 2019

From GPC forecasts initialised April

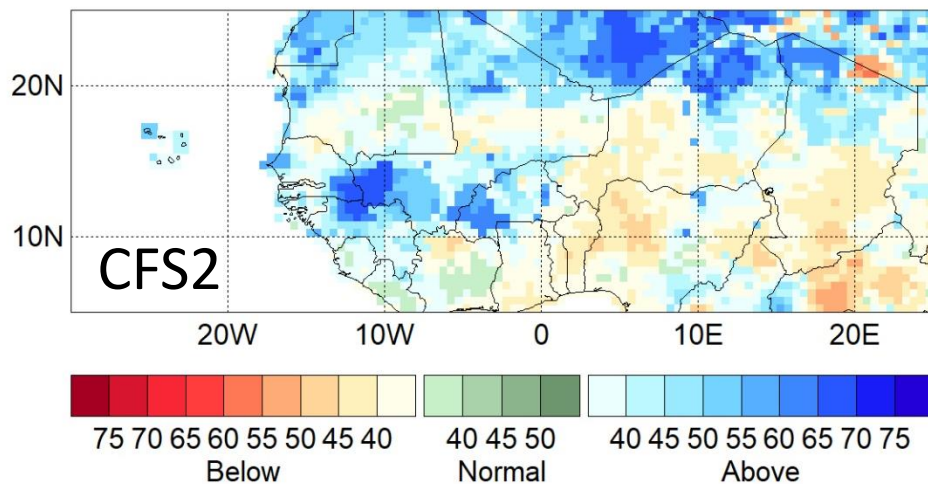
By: Issa Lele

ASPIRE Embedded Consultant

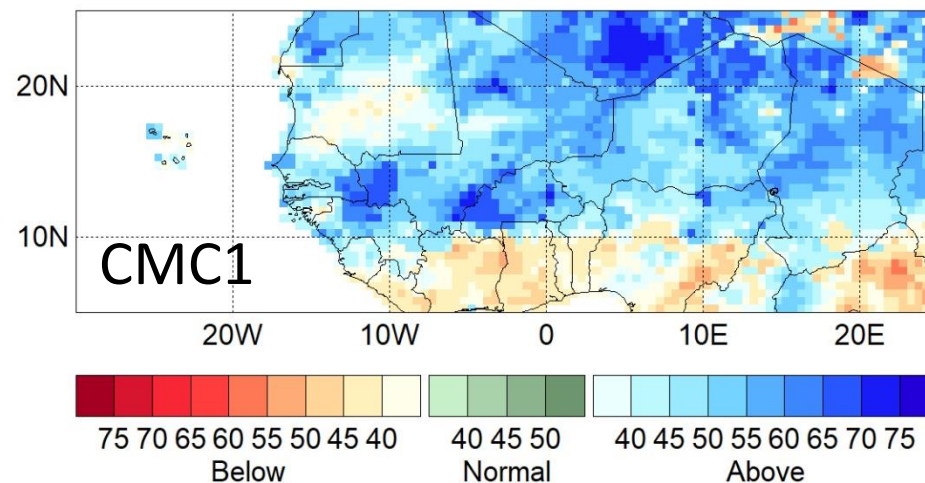
Forecasts are generated using predicted precipitation over 0E-360N; 30S to 30N
in a CPT-CCA calibration to the West Africa region

Forecasts for JAS 2019 – initialised April (NMME)

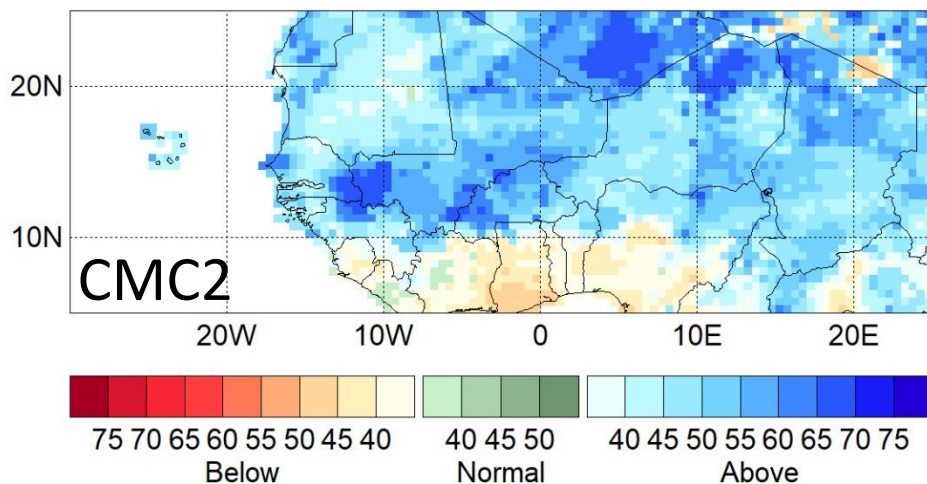
JAS 2019: cfs2aprJASppnCTchirps753p12



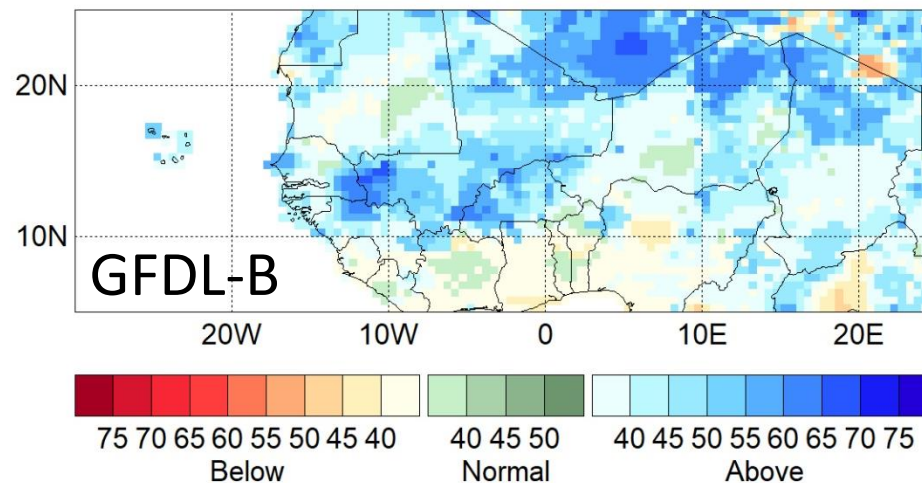
JAS 2019: cmc1aprJASppnCTchirps10103p21



JAS 2019 cmc2aprJASppnCTchirps1052p12

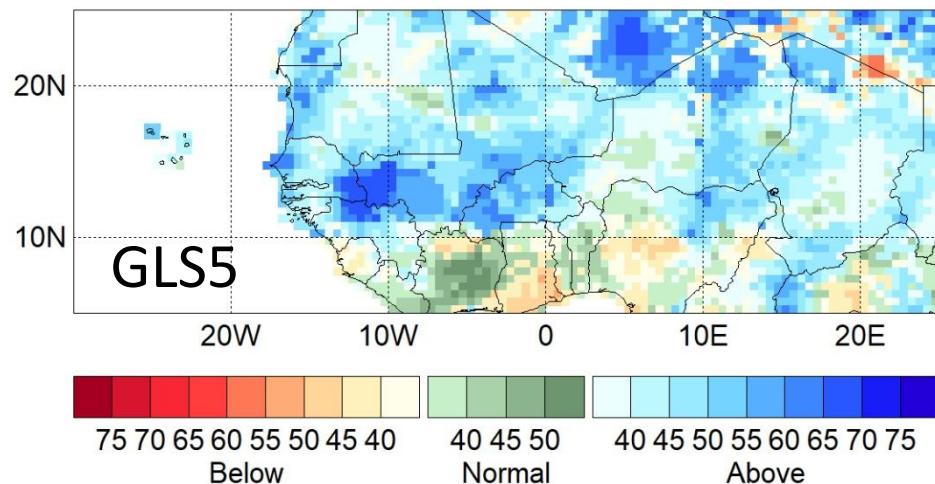


JAS 2019: gfdBaprJASppnCTchirps1053p29

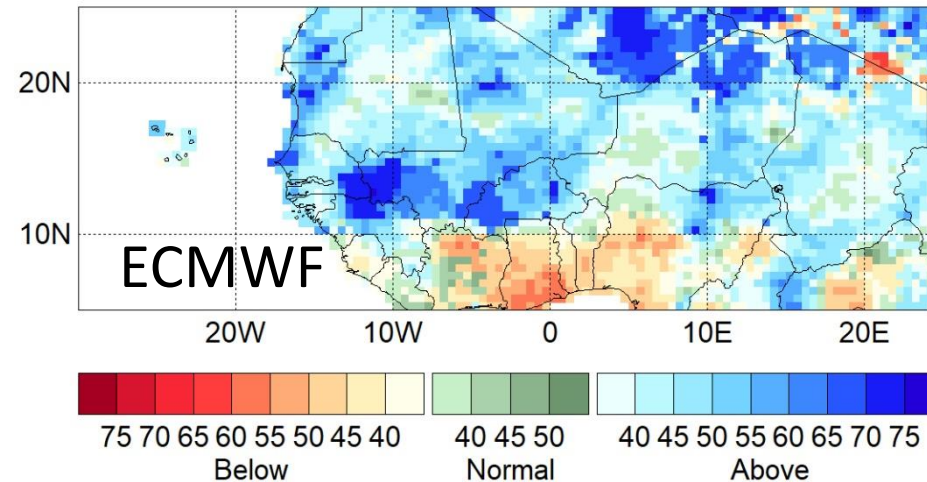


Forecasts for JAS 2019 – initialised April (C3S)

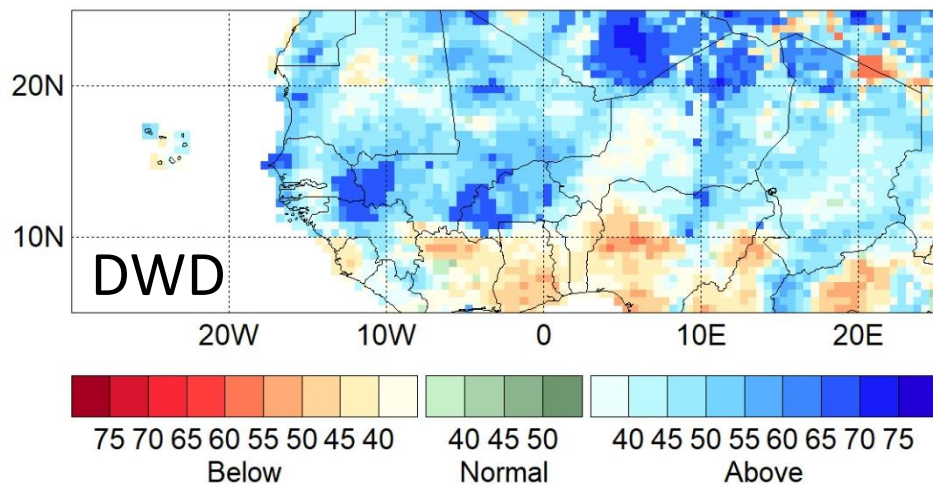
JAS 2019: gls5aprJASppnCTchirps222p18



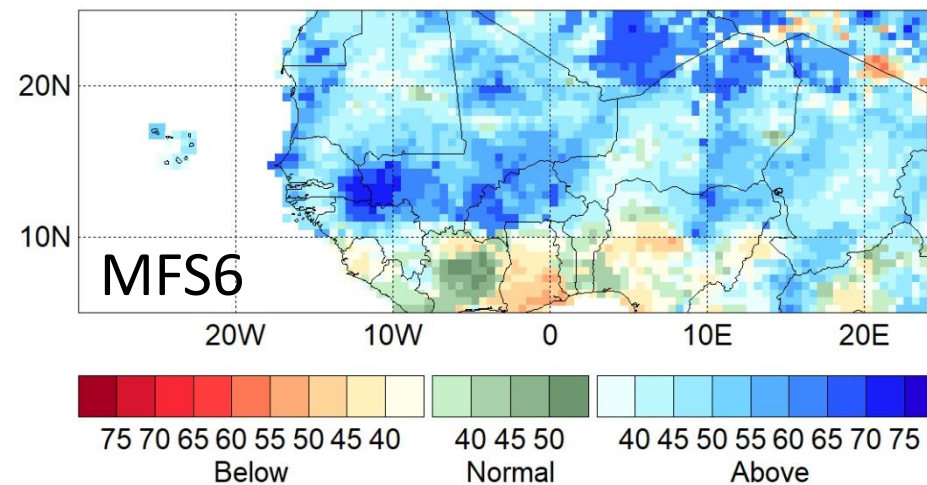
JAS 2019: ecmwaprJASppnCTchirps222p13



JAS 2019: dwd2aprJASppnCTchirps9101p10

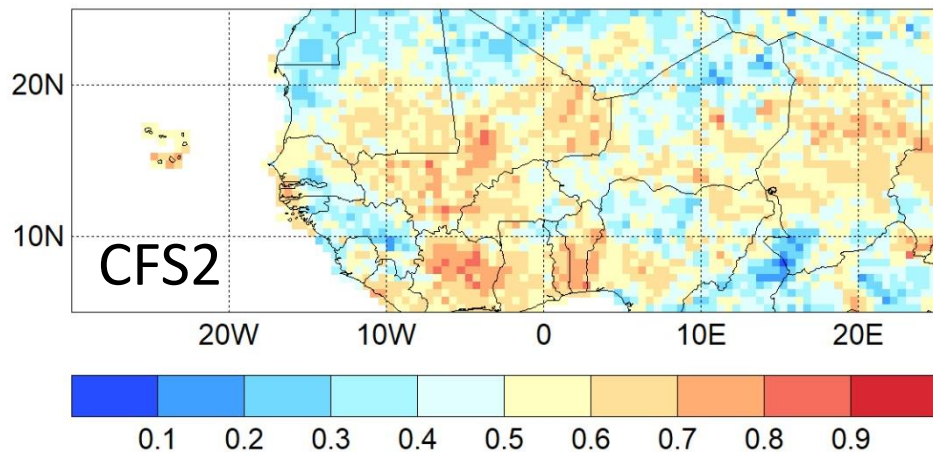


JAS 2019: mfs6aprJASppnCTchirps222p24

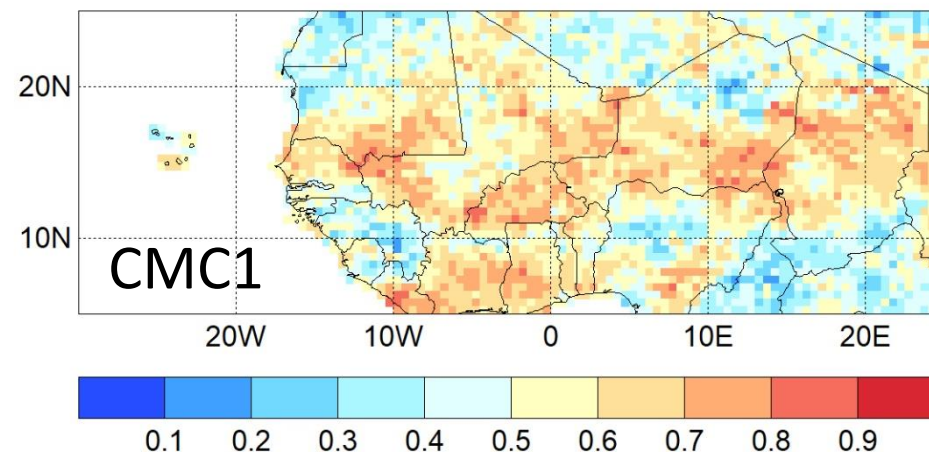


JAS skill for above normal – initialised April (NMME)

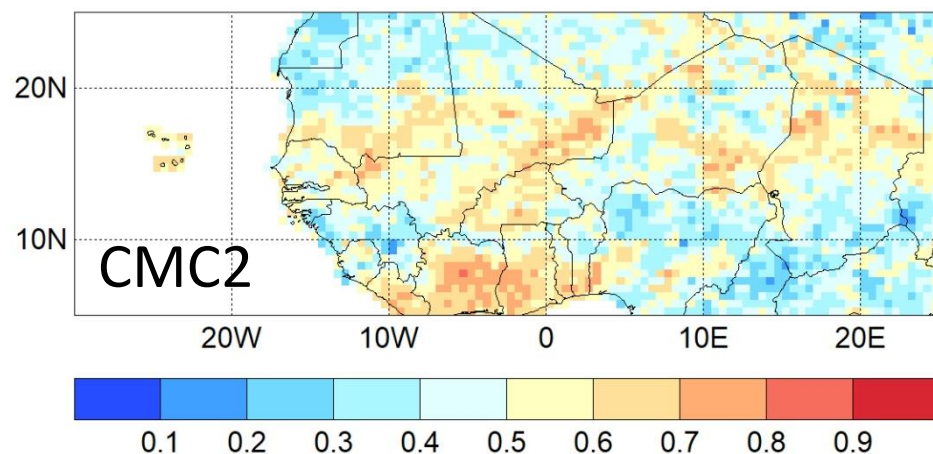
ROC A: cfs2aprJASppnCTchirps753p12



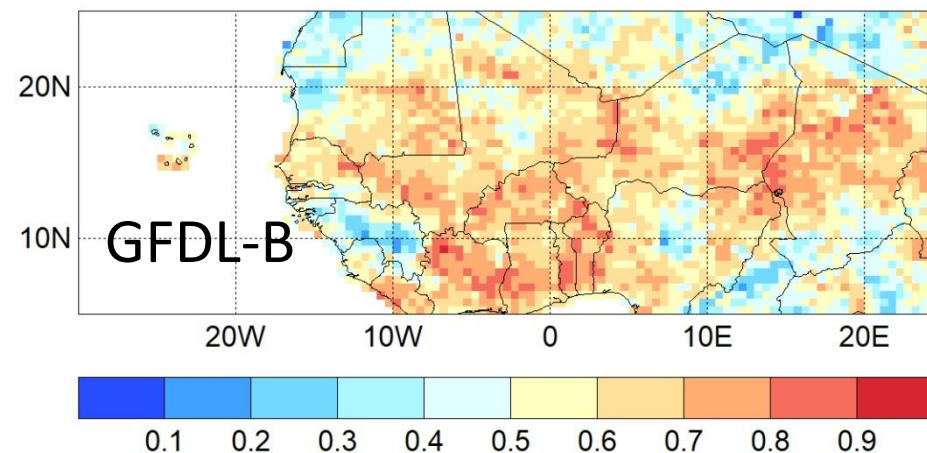
ROC A: cmc1aprJASppnCTchirps10103



ROC A: cmc2aprJASppnCTchirps1052p12

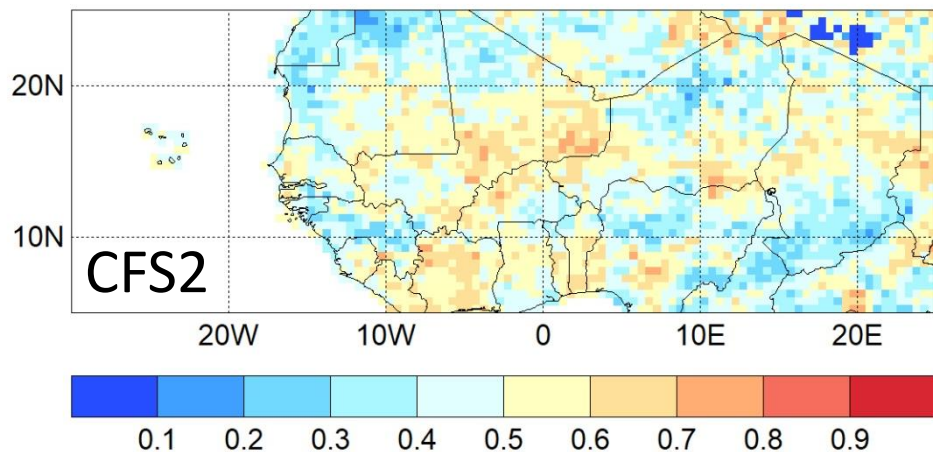


ROC A: gfdBaprJASppnCTchirps1053p29

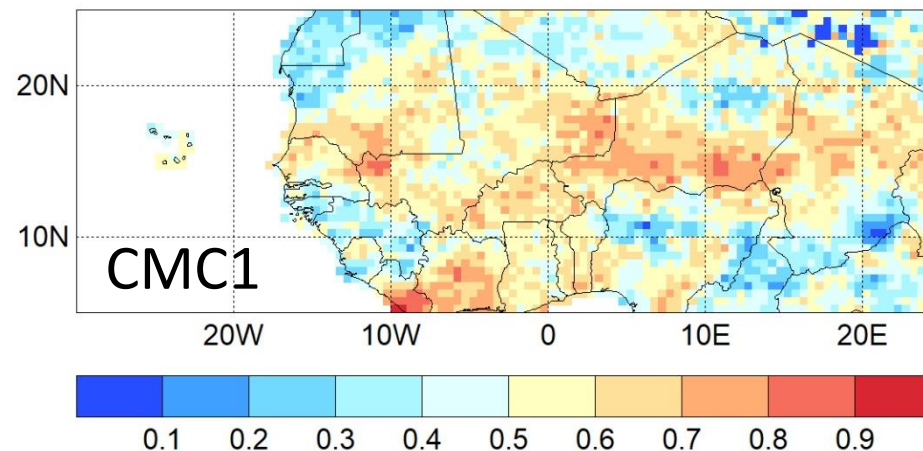


JAS skill for below normal – initialised April (NMME)

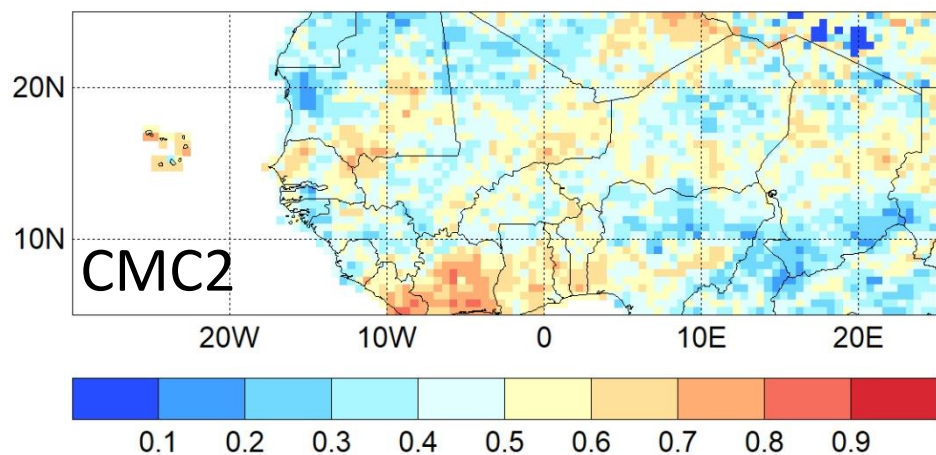
ROC B: cfs2aprJASppnCTchirps753p12



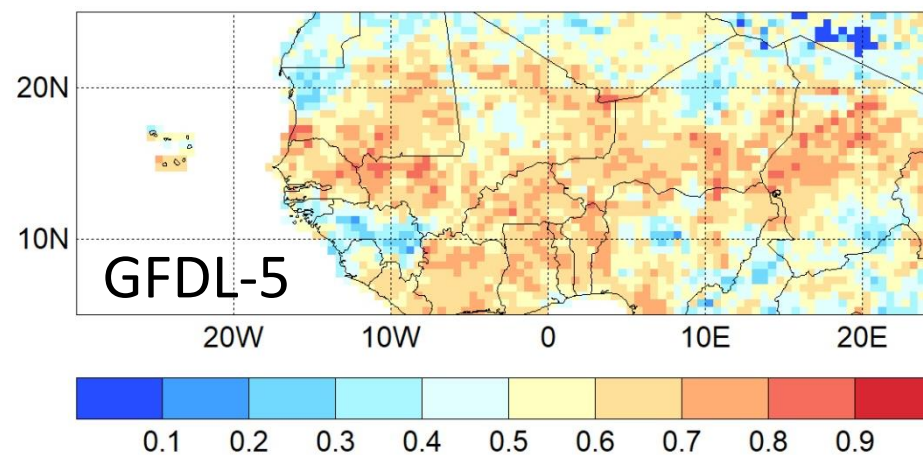
ROC B: cmc1aprJASppnCTchirps10103p21



ROC B: cmc2aprJASppnCTchirps1052p12

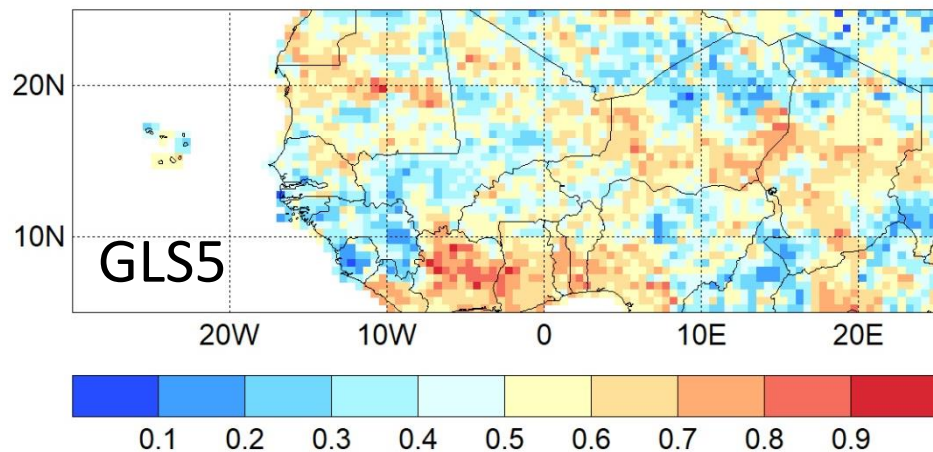


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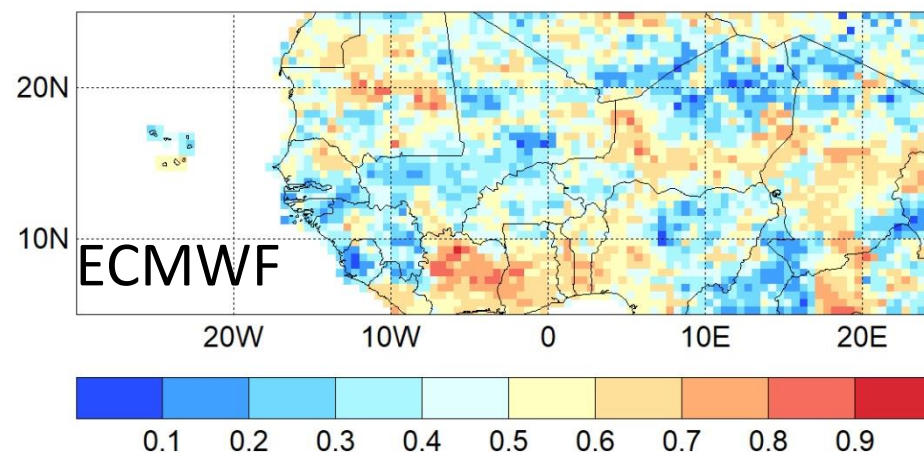


JAS skill for above normal – initialised April (C3S)

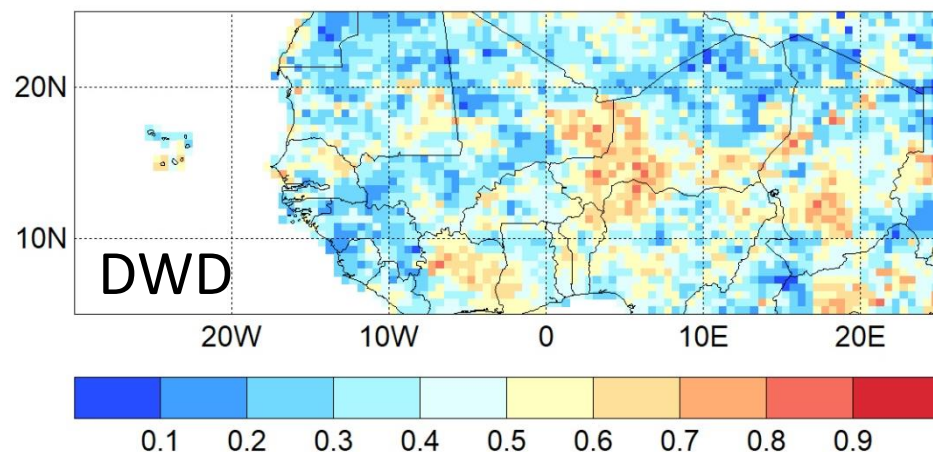
ROC A: gls5aprJASppnCTchirps222p18



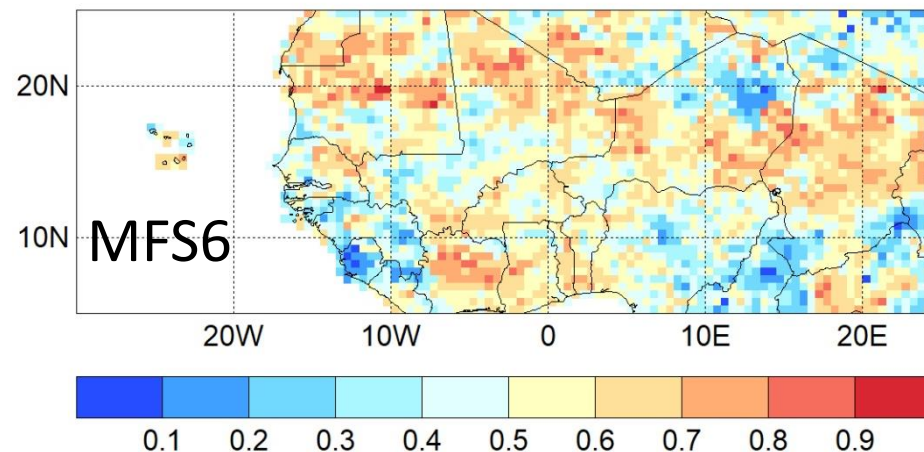
ROC A: ecmwaprJASppnCTchirps222p18



ROC A: dwd2aprJASppnCTchirps9101p10

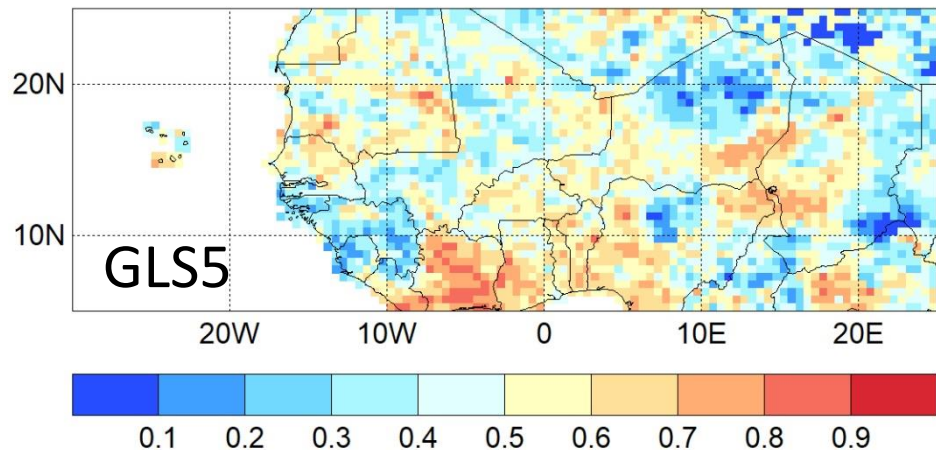


ROC A: mfs6aprJASppnCTchirps222p24

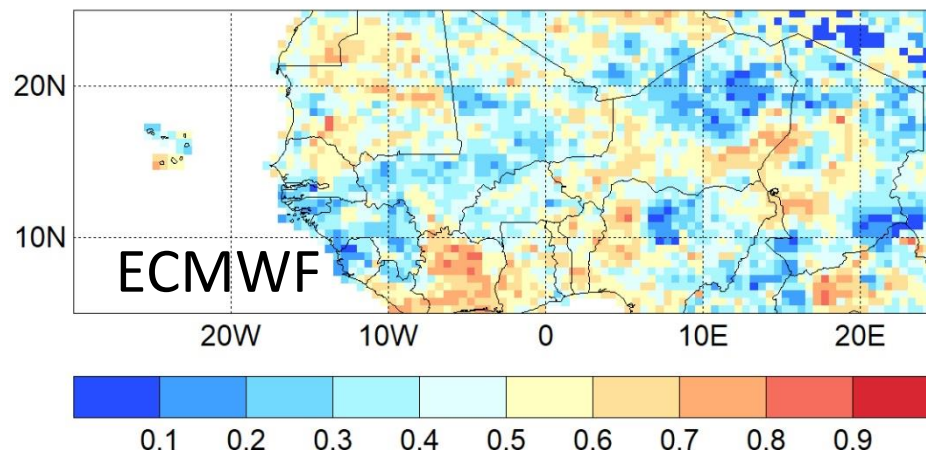


JAS skill for below normal – initialised April (C3S)

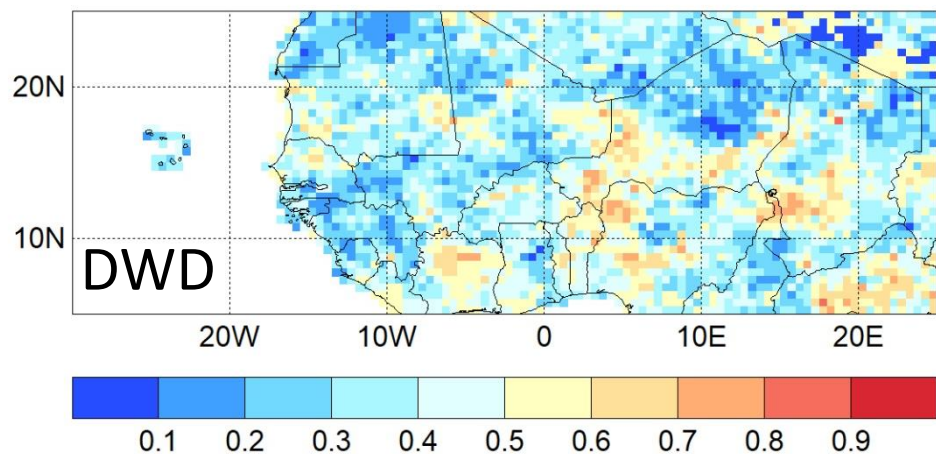
ROC B: gls5aprJASppnCTchirps222p18



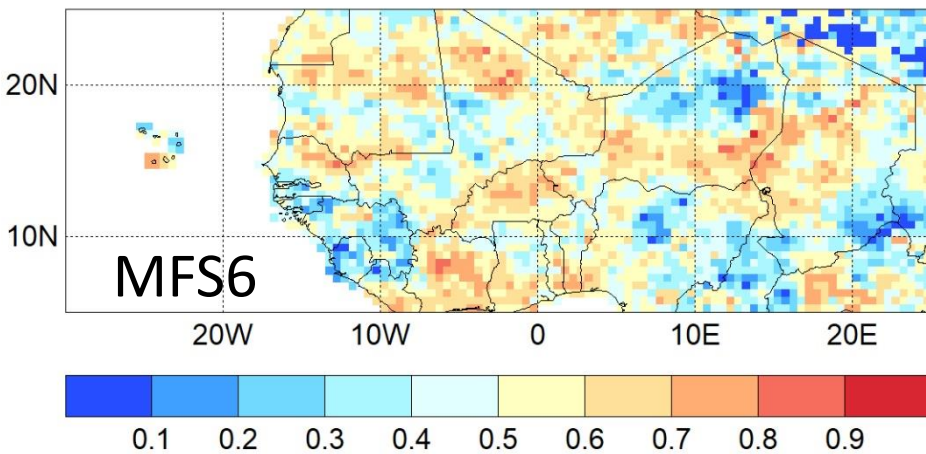
ROC B: ecmwaprJASppnCTchirps222p13



ROC B: dwd2aprJASppnCTchirps9101p10

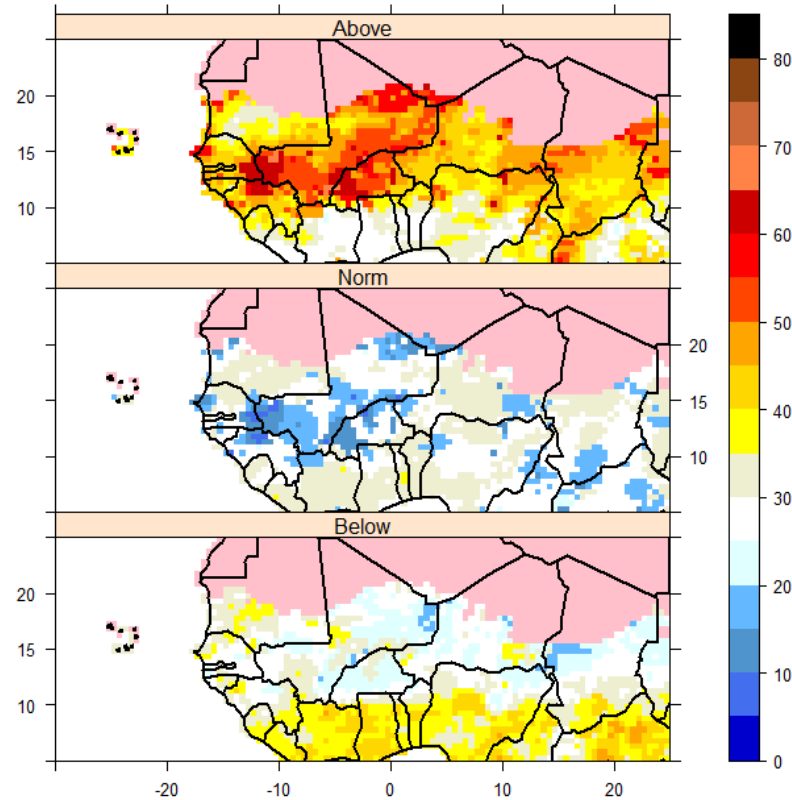


ROC B: mfs6aprJASppnCTchirps222p24

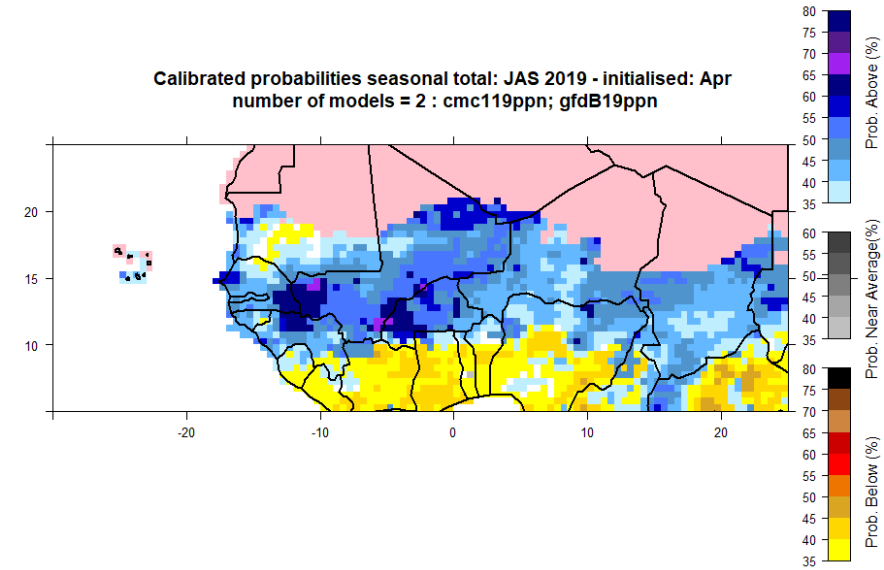


Multi-model of GFDL-B & CMC1 (most skilful of the 4 examined so far)

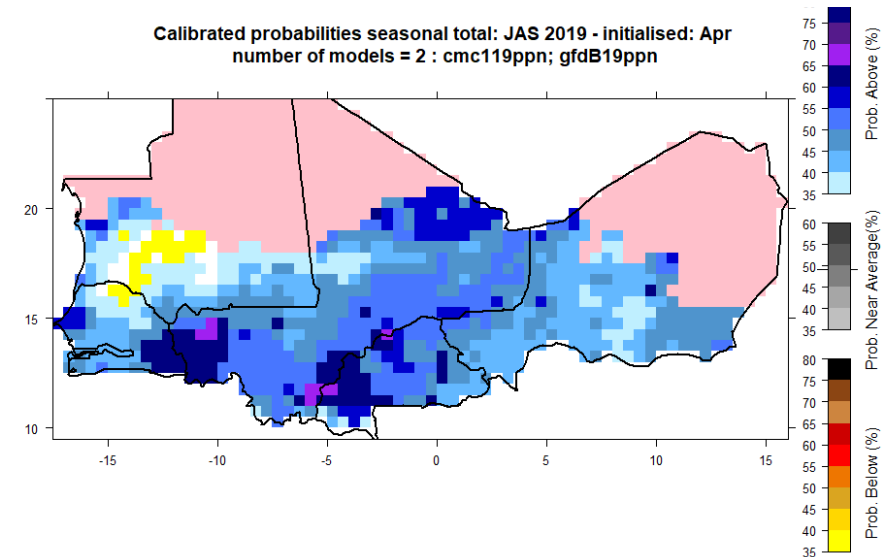
Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 2 : cmc119ppn; gfdB19ppn



Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 2 : cmc119ppn; gfdB19ppn

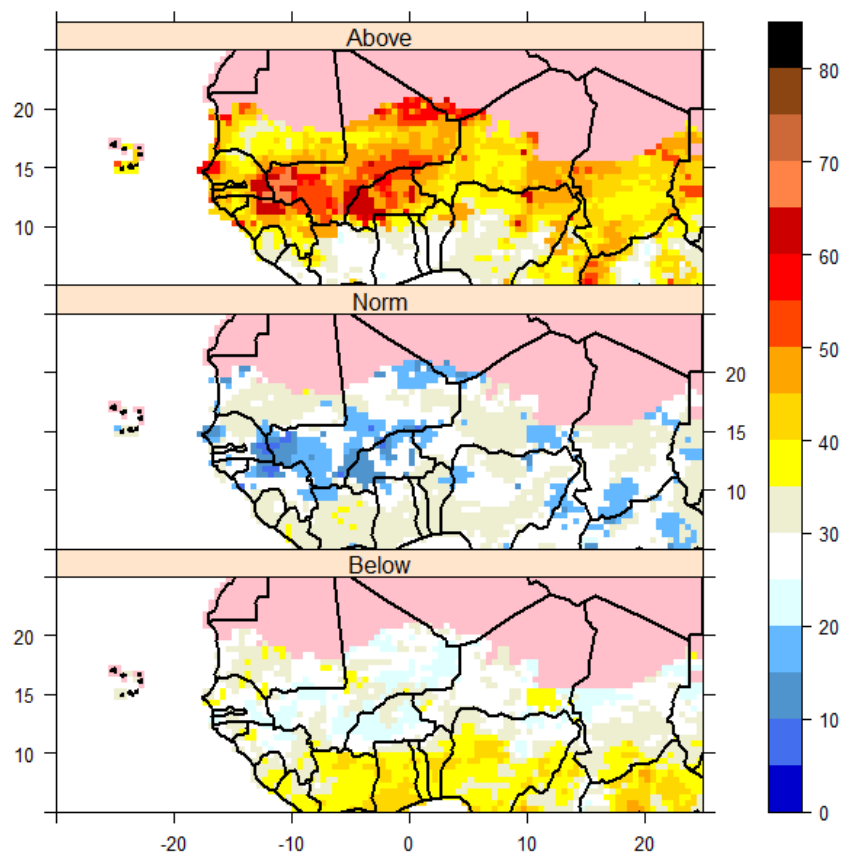


Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 2 : cmc119ppn; gfdB19ppn

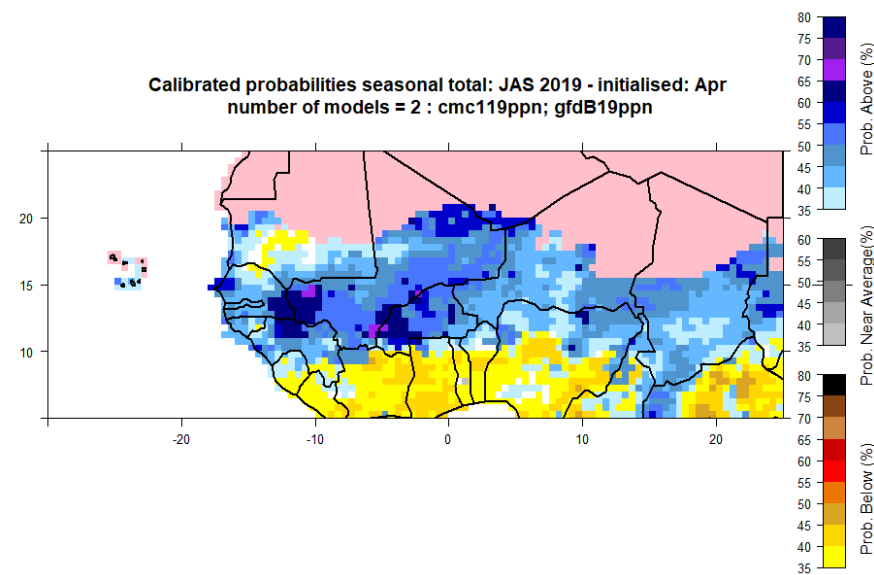


Multi-model of GFDL-B, CMC1, CMC2 and CFSv2

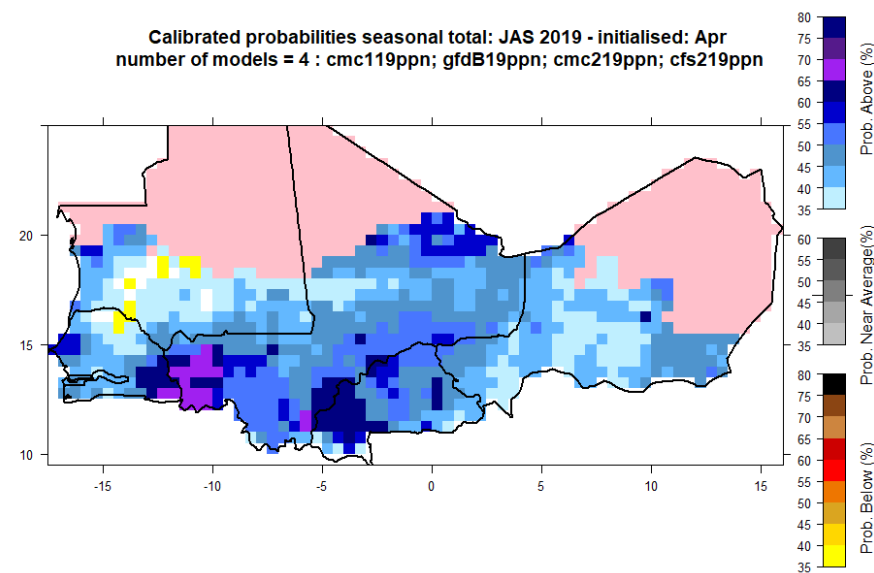
Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 4 : cmc119ppn; gfdB19ppn; cmc219ppn; cfs219ppn



Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 2 : cmc119ppn; gfdB19ppn

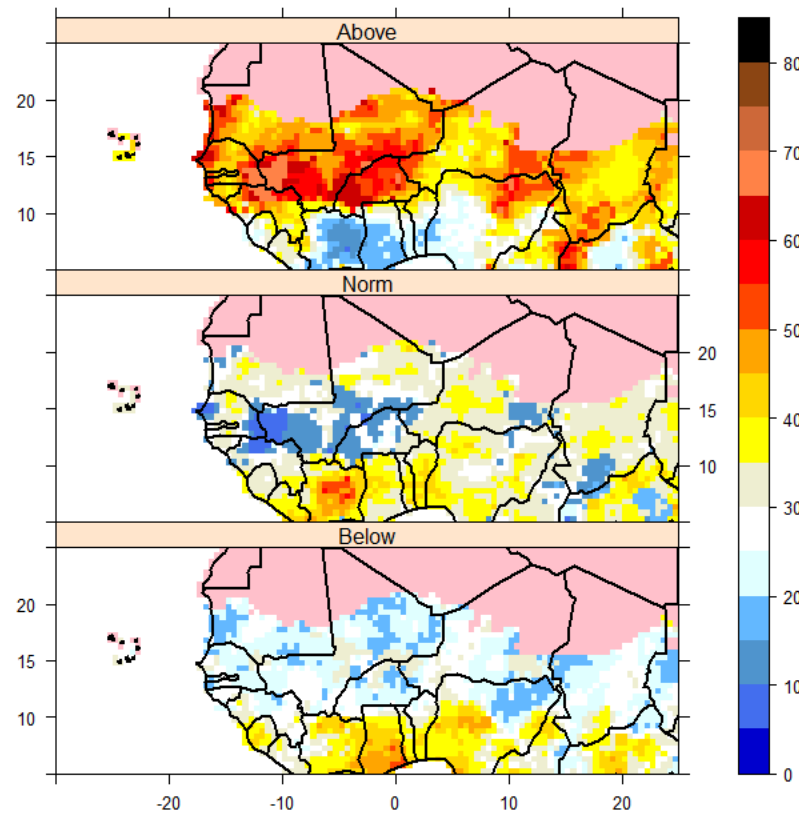


Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 4 : cmc119ppn; gfdB19ppn; cmc219ppn; cfs219ppn

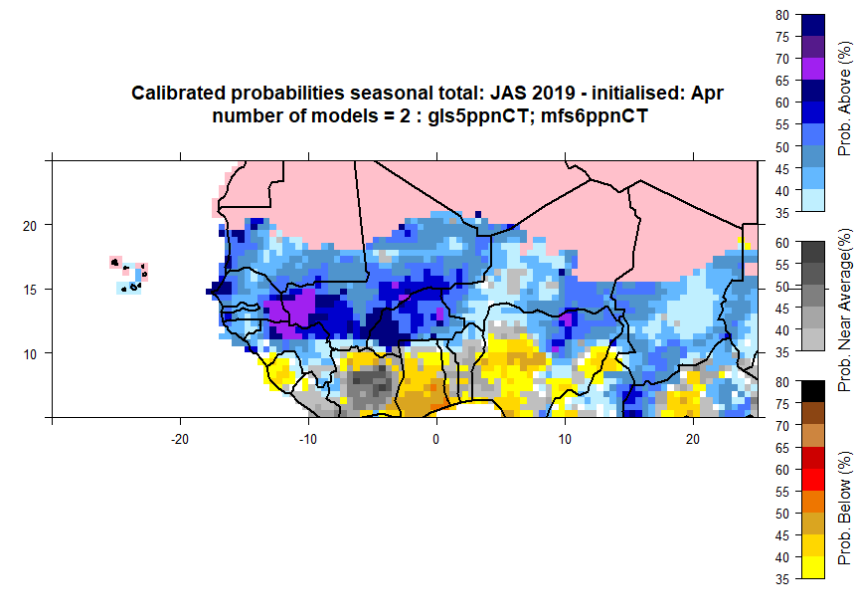


Multi-model of GLS5 and MFS6

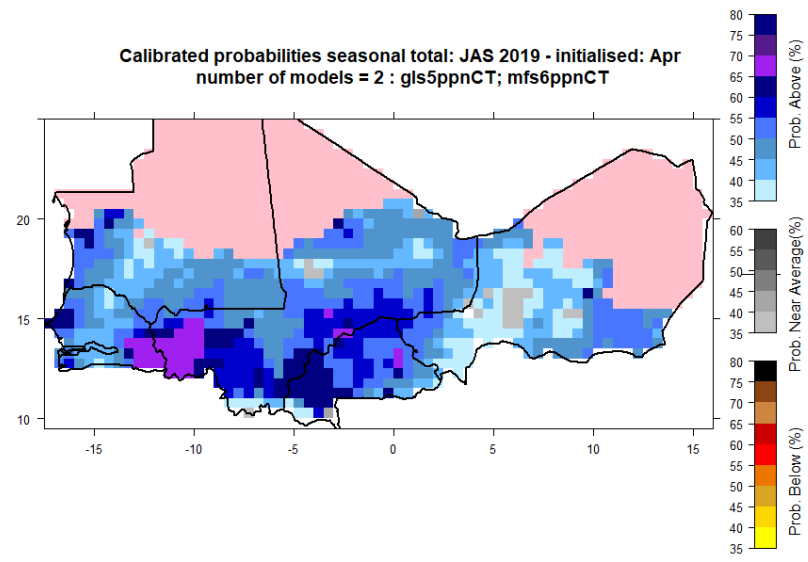
Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 2 : gls5ppnCT; mfs6ppnCT



Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 2 : gls5ppnCT; mfs6ppnCT

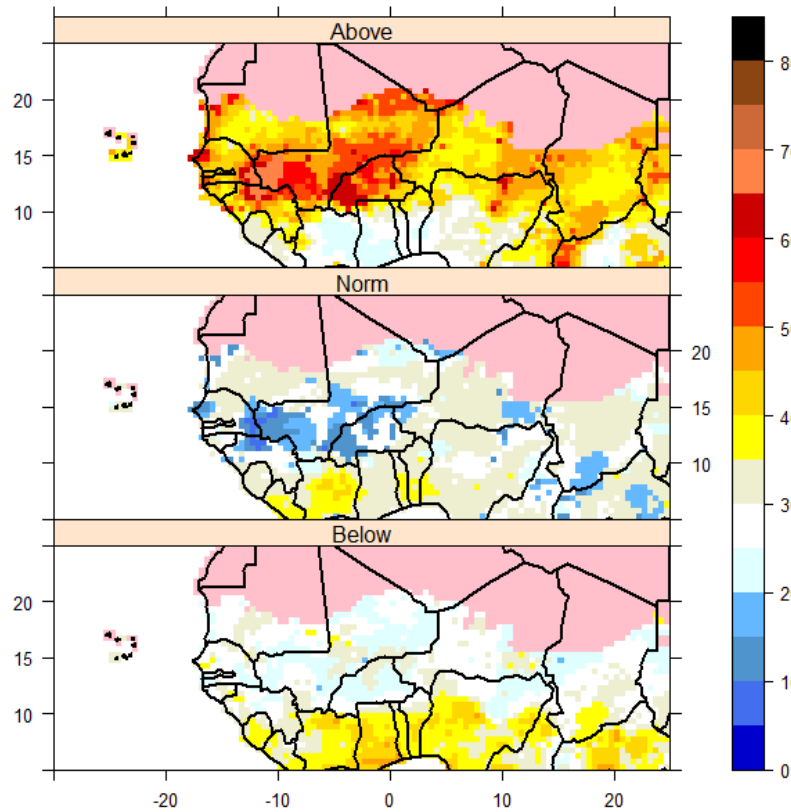


Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 2 : gls5ppnCT; mfs6ppnCT

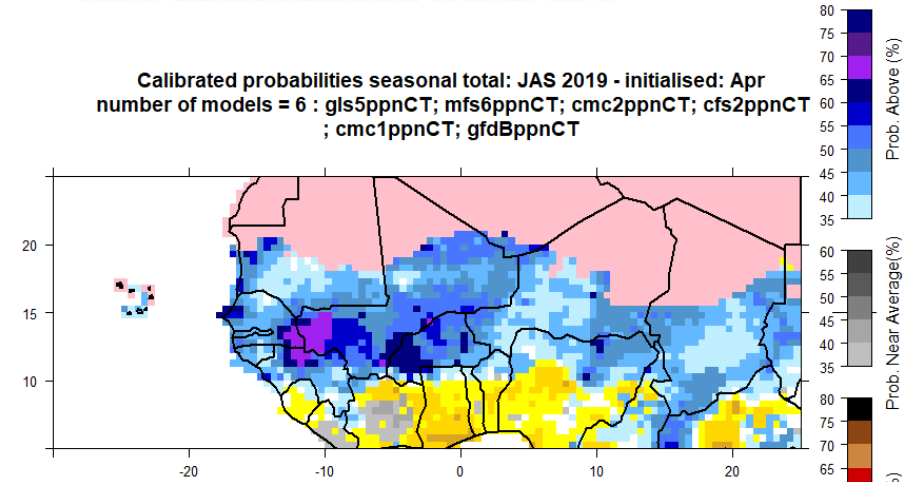


Multi-model of CFSv2, GFDL-B, CMC1, CMC2 GLS5 and MFS6

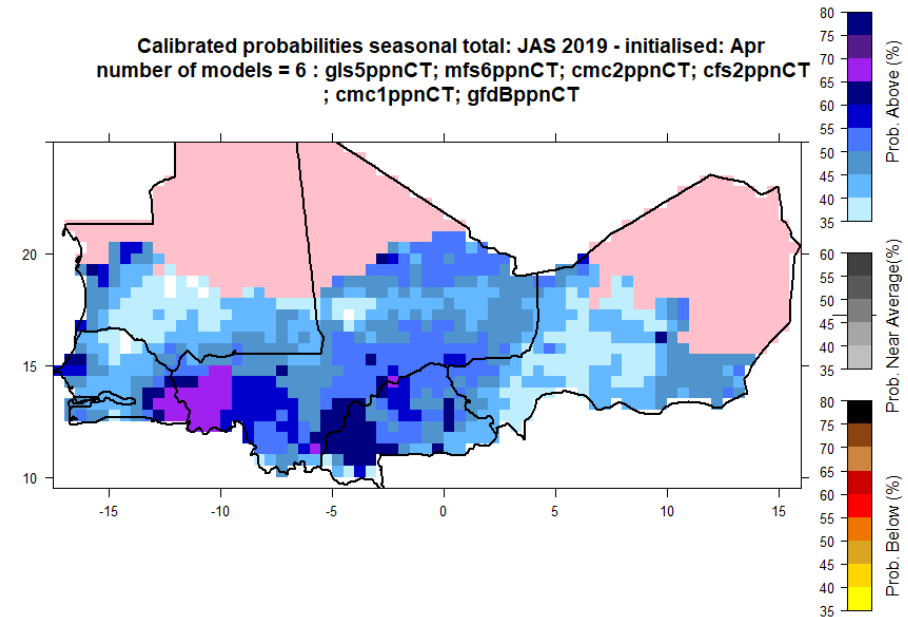
Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 6 : gls5ppnCT; mfs6ppnCT; cmc2ppnCT; cfs2ppnCT
; cmc1ppnCT; gfdBppnCT



Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 6 : gls5ppnCT; mfs6ppnCT; cmc2ppnCT; cfs2ppnCT
; cmc1ppnCT; gfdBppnCT



Calibrated probabilities seasonal total: JAS 2019 - initialised: Apr
number of models = 6 : gls5ppnCT; mfs6ppnCT; cmc2ppnCT; cfs2ppnCT
; cmc1ppnCT; gfdBppnCT



Summary

- Of models examined GFDL-B, CMC1, GLS5 & MFS6 are among most skilful
- Skill is best for the above normal category
- Probabilities favour above normal over most Sahel regions, below normal over Guinea Coast
- Generally good consistency across models