WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

Current status of operations of SARCOF

Mduduzi Sunshine Gamedze
SADC CSC

WMO OMM
World Meteorological Organization
Organisation météorologique mondiale

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Outline

- *Background*
- *SARCOF Process*
- *Capacity development*
- *Users involvement*
- *SWOT analysis*
- *Way forwards*

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SADC CSC TECHNICAL ARCHITECTURE

Equipment and Products

SERVERS

DESCRIPTION

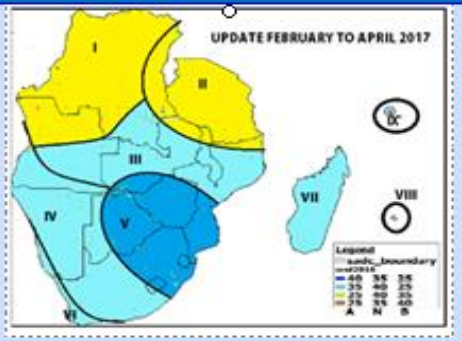
Telecommunication: links the Centre with global Centre's.
2.**High performance computer:** climate scenario analysis.
3. **High performance computer:** data service processing.

DATABASE

DESCRIPTION

NEW PRODUCTS

SOUTHERN AFRICAN REGIONAL CLIMATE OUTLOOK FORUM



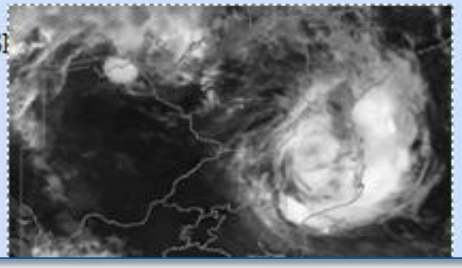
LEGEND: YELLOW: IS FOR TREND TO NORMAL TO BELOW-NORMAL
CYAN: IS FOR TREND TONORMAL TO ABOVE-NORMAL

MONITORING & FORECASTING

DESCRIPTION

TRAINING

DESCRIPTION



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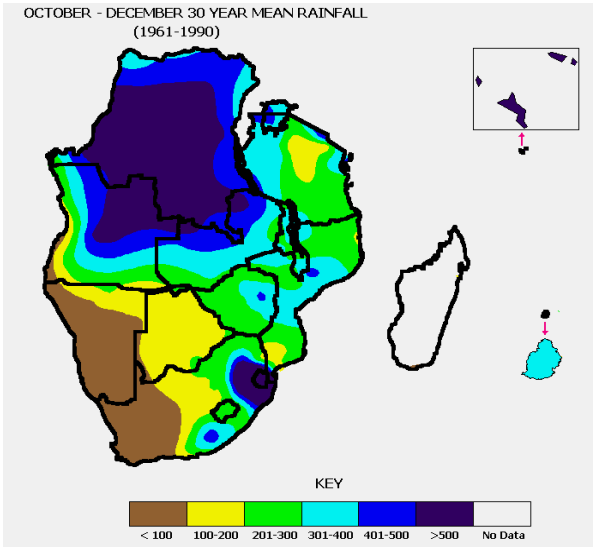
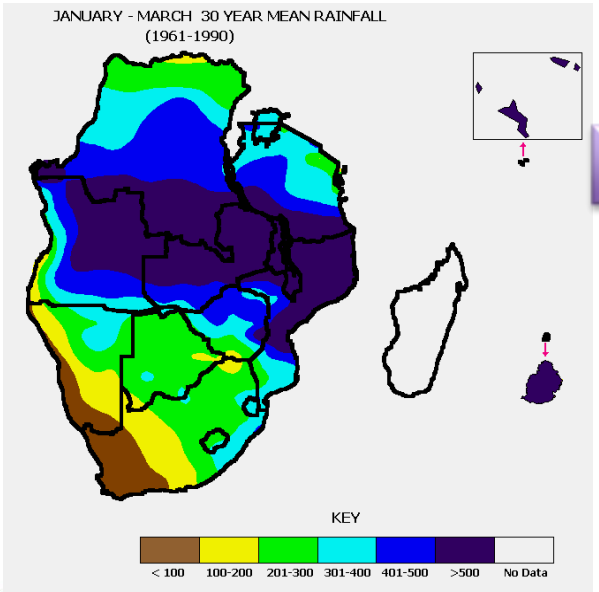
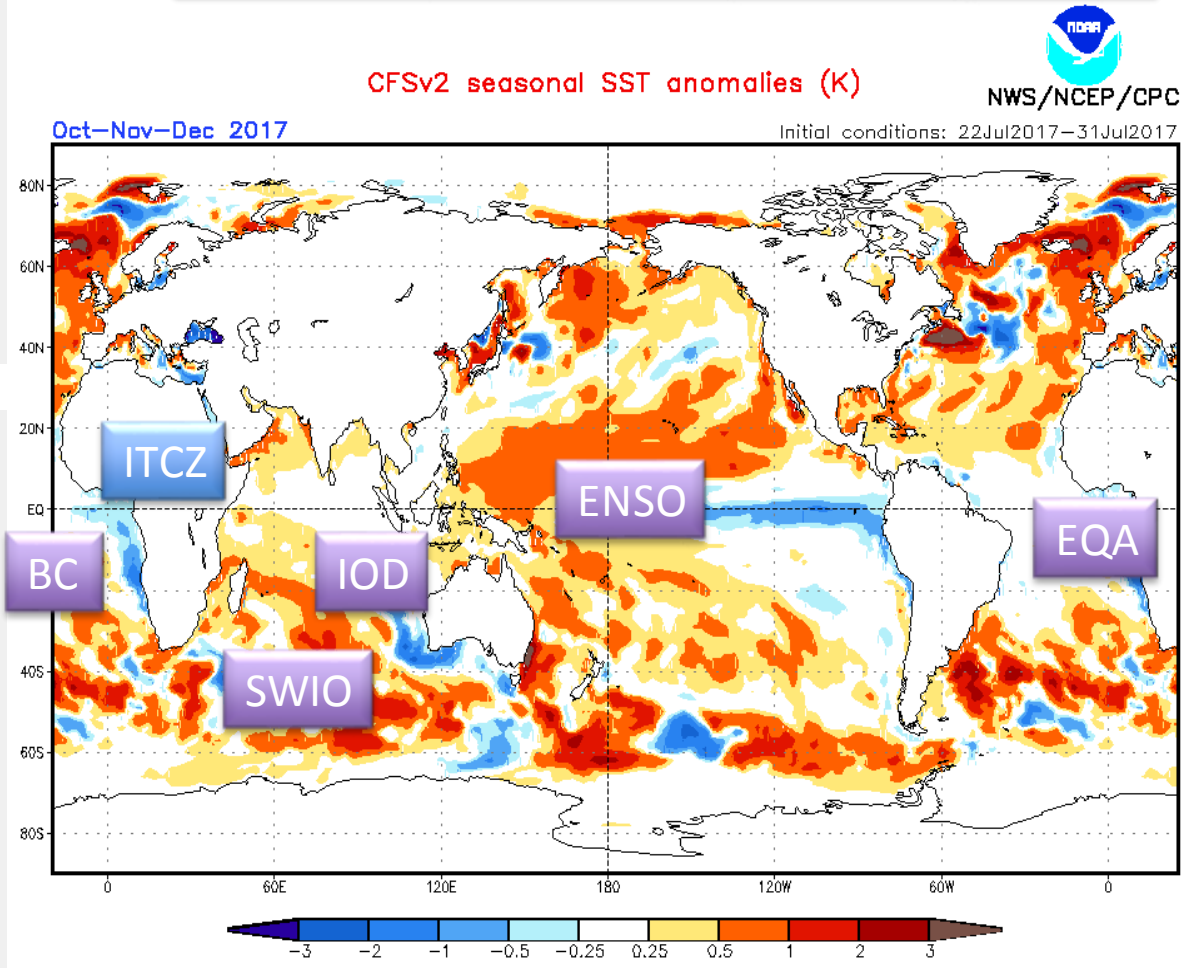
Target Season: October to March (+1)

Major forcings on the regional climate







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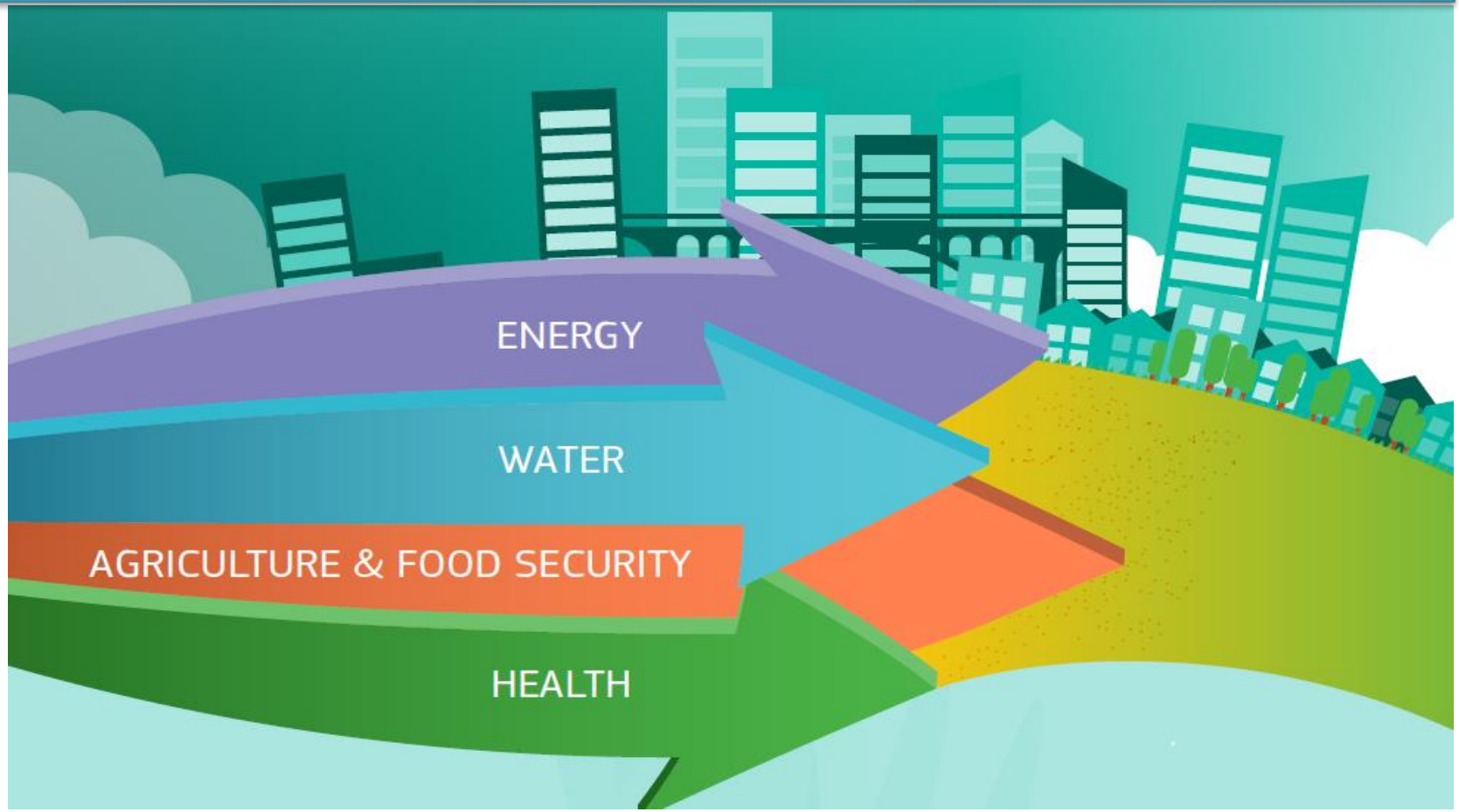
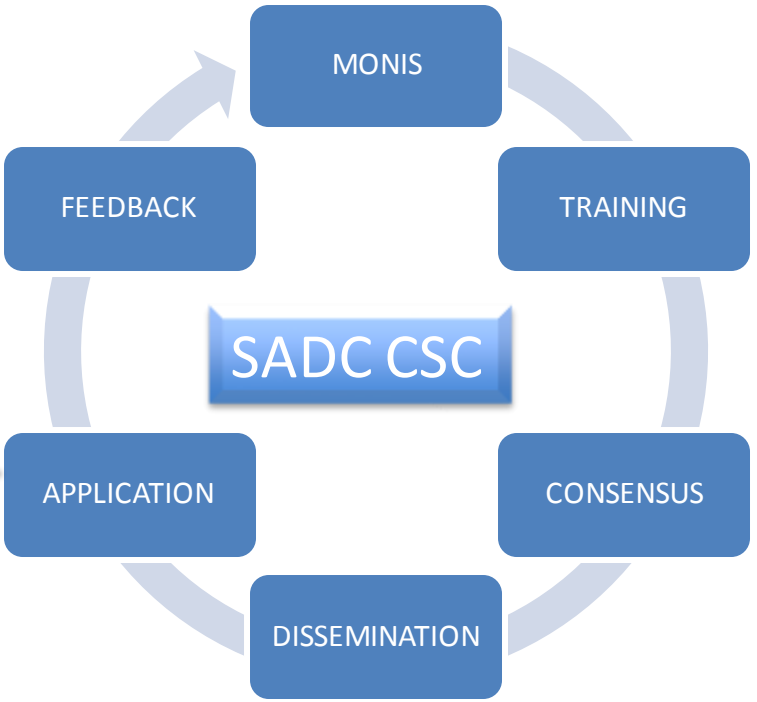
Potential applications of seasonal outlooks



II. SARCOF PROCESS

Potential applications of seasonal outlooks

- AGRIFOOD SEC
- WATER & ENER RES
- DRR
- HEALTH → MALOF



CAPACITY DEVELOPMENT WORKSHOP

CONSENSUS MEETING

UPDATE & MIDTERM REVIEW

Aug - Sept | Sept | Dec

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Consensus methodology

- → Statistical models used by NMHS seek for potential relationship between ocean variability ENSO, Atlantic, Indian and rainfalls. Look for any changes in the relationships between variables.
- → Prospect other sources of forecast from advanced centres;
- → Incorporate knowledge and experience on certain pattern observed in the past.
- → Explore statistical downscaling performances at sub-regional and national level by using existing GCMS hind-cast data and local dataset.
- → More weight is given to NMHS forecast which used local dataset in case of discrepancy of various outputs.
- → Drive the consensus by "best estimate" of the forecast from various forecast sources : dynamical (GCMs), Statistical, Analog, others.
- → Address probability forecast with consensus by giving weight to regional statistical outputs

Verification/evaluation of seasonal outlook

When the observed data coincided with Highest probability in the tercile category, then a hit occurred => (Hit)

When the observed data coincided with the second middle highest probability, a half score was recorded => (Half Hit)

When the observed value coincided with above 2 categories missed, a false alarm was noted => false alarm (2 errors)

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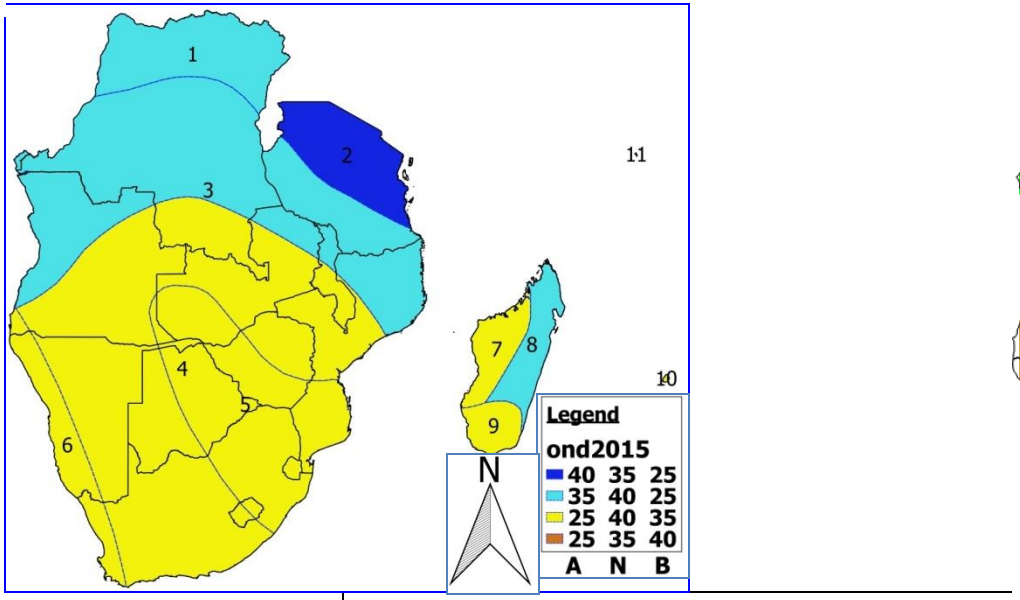
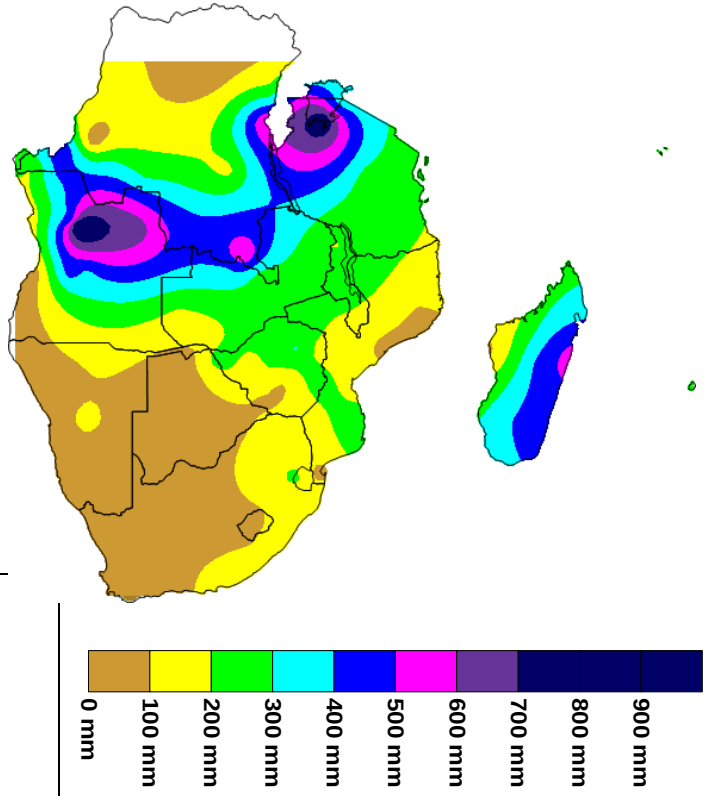
SADC OND 2015 VERIFICATION RESULTS

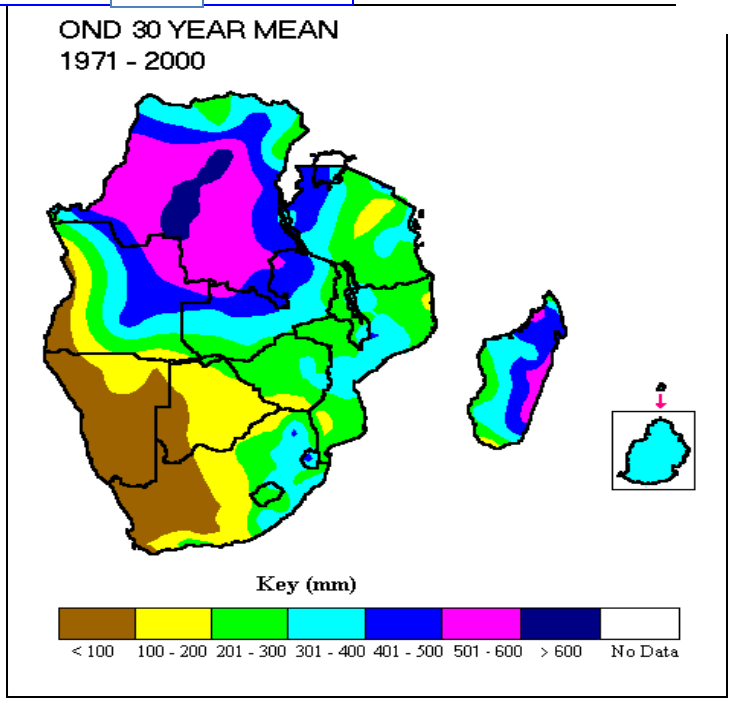
OND 2015 FORECAST



OND 2015 OBS



OND long-term average



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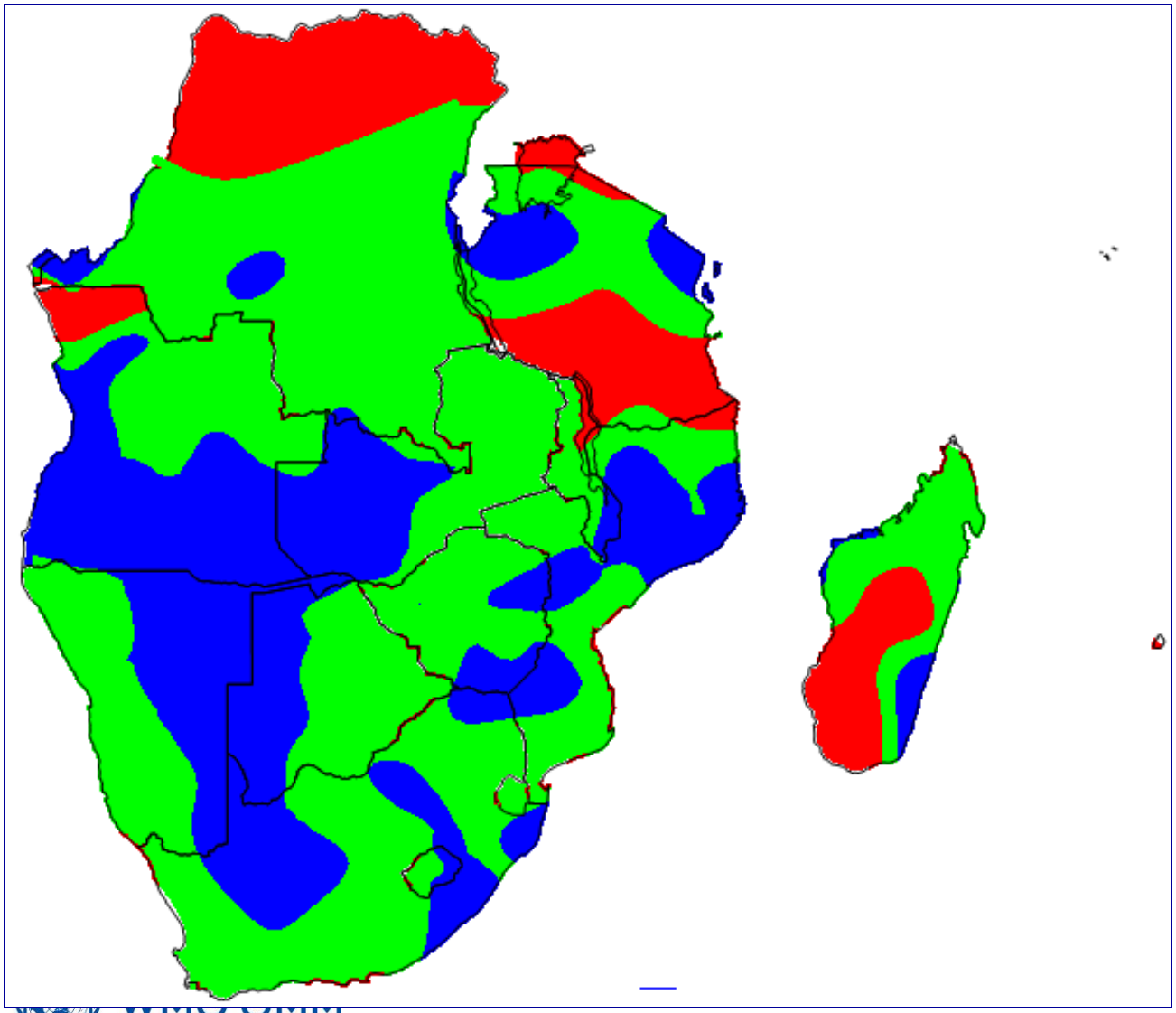
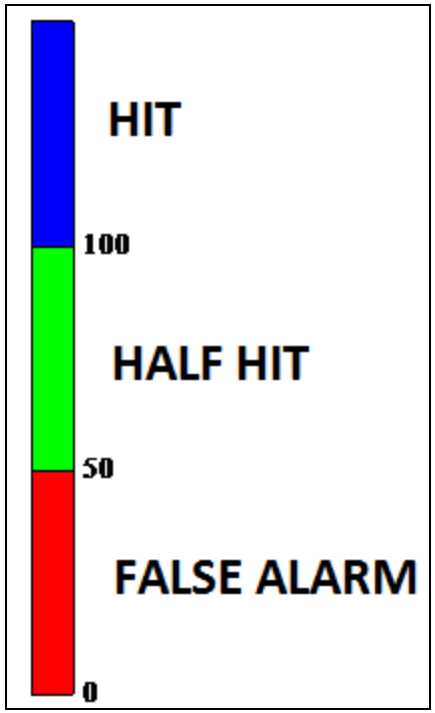
OND 2015 VERIFICATION





Hit	31%
Half Hit	54%
False Alarm	5%

III. Capacity Development activities

- The annual training programme is mostly focused on the seasonal forecast system prior to the consensus building;
- The attachment programme used to respond to the capacity development needs in NMHSs.

IV. User Involvement

SARCOF used to collect users 'feedback, but the response to the needs is not sufficient due to lack of manpower to perform more in-depth analysis as requested by users.

V. SWOT analysis

Strengths	***Weaknesses***
SADC CSC Acquired High Tech equipment	Manpower deficit to run equipment
Council of Ministers meeting just approved CSC request for more permanent staff	SADC admin requirement turnaround time for implementation of decision.
Opportunities	***Threats***
SADC NMHS and user sectors very keen to develop sustainable SARCOF services	Data collection and sharing process
ICPs interested to support CSC (WB, AfDB, ACP-EU)	High frequency and duration of power cut on HPC operations

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Human Resources Development

Current resource	Needs
• On-job training of National Expert • Visiting scientist • Short-term experts on attachment • Internship and volunteership	• IT and system administration experts • Climate downscaling experts • Climate application specialist • Software development

VI. Way Forward

SADC CSC Strategy to improve Climate Services

Three main blocks:

WP1: understand

- Users needs and current use of climate services (LRF)
- Sector specific vulnerability response

WP2: improve

- Decision-relevant scales: downscaling products from others models
- Decision-relevant parameters: impact models for the 4 pillars of GFCS

WP3: engage and demonstrate

- Climate service prototypes
- Delivery and engagement

Tool and Services Development

E.g.

- Streamline seasonal forecast process (GeoCof, CPT,…)
- Users friendly Tools on downscaling
- Climate Services application tools

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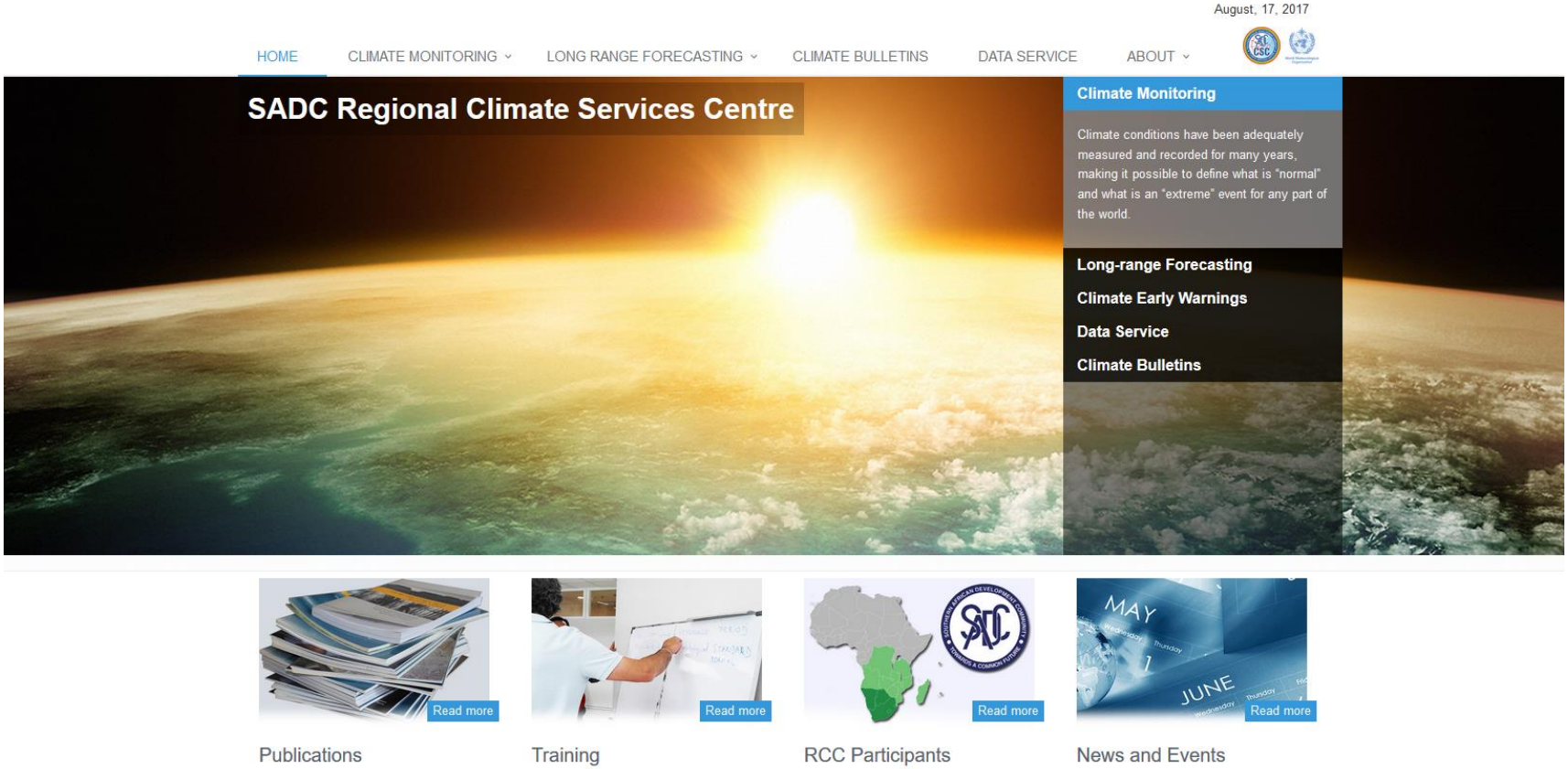
Access to LRF data from Website

SADC Regional Climatic Services Center (RCC) website

Within the LAN: http://192.168.203.4/en/

Public access: http://168.167.91.75/en/ (or http://rcc.mesasadc.org)



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Thank you
Merci

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