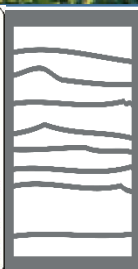
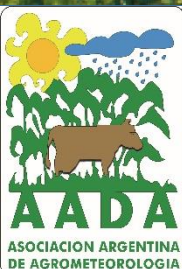


XVII- REUNIÓN ARGENTINA DE AGROMETEOROLOGIA RADA 2018

VILLA DE MERLO-SAN LUIS
19 - 21 SEPTIEMBRE



Universidad
Nacional de los
Comechingones



LA AGROMETEOROLOGIA COMO HERRAMIENTA PARA EL DESARROLLO AGRÍCOLA SUSTENTABLE

PAPEL DE LA COMISIÓN DE METEOROLOGIA AGRÍCOLA Y DE LOS ORGANISMOS IMPLICADOS

AGROMETEOROLOGY AS A TOOL FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT

ROLE OF THE COMMISSION FOR AGRICULTURE METEOROLOGY AND OF THE ORGANIZATIONS INVOLVED

ORIVALDO BRUNINI

Ph.D.- Agrometeorologia

Vice-Presidente – CAgM

Vice-Presidente - GlobalFAMS



TOPICS TO BE ADDRESSED

- A SMALL REVIEW OF WMO-REGIONAL ASSOCIATIONS**
- PROGRAMS AND TECHNICAL PROJECTS**
- TECHNICAL COMMISSIONS**
- COMMISSION FOR AGRICULTURE METEOROLOGY-CAGM- FOCUS AREAS**
- REPRESENTATIVE FROM AR's**
- AGROMETEOROLOGY MONITORING TO SUPPORT FOOD SECURITY**
- WEATHER STATION NETWORK-USES CROP -CLIMATE-MONITORING**
- Examples from AR III**

TEMAS A ABORDAR

EXAMEN DE LA OMM- ASOCIACIONES REGIONALES--COMISIONES TÉCNICAS

- COMISIÓN DE METEOROLOGÍA AGRÍCOLA-CAGM**
- ÁREAS DE ENFOQUE--REPRESENTATIVO DE AR's**
- MONITOREO AGROMETEOROLÓGICO**
- SEGURIDAD ALIMENTARIA**
- ESTACIÓN METEOROLÓGICA RED-USES**
- EXEMPLOS DE LA AR III**



***WMO- 189 countries
Divided into 6 regions***

RA-I- Africa

RAI-I- Asia

RA-III-South America

RA-IV_ North and Central America

RA-V- Oceania-Pacific

RA-VI-Europe

President of WMO

David Grimes

**David Grimes was re-elected President of the WMO by the World
Meteorological Congress in 2015 for a four-year**

Acting First Vice-President of the WMO-

Andrea Celeste Paulo

Second Vice-President of the WMO



Technical Commissions:

- Commission for Aeronautical Meteorology - CAeM
- Commission for Agricultural Meteorology - CAgM
- Commission for Atmospheric Sciences - CAS
- Commission for Basic Systems - CBS
- Commission for Climatology - CCI
- Commission for Hydrology - CHy
- Commission for Instruments and Methods of Observation - CIMO
- Joint WMO-IOC Commission for Oceanography and Marine Meteorology - JCOMM



Commission for Agricultural Meteorology

As one of the eight technical commissions of WMO, the Commission for Agricultural Meteorology (CAgM) provides guidance in the field of agricultural meteorology by studying and reviewing the available science and technology.

**All aspects and work plan are decided at the Commision Session
Held every 4 years**

CAgM Sessions

- **CAgM-17 - South Korea 2018**
 - [CAgM-16 - Turkey 2014](#)
 - [CAgM-15 - Brazil 2010](#)
 - [CAgM-14 - India 2006](#)
 - [CAgM-13 - Slovenia 2002](#)
 - [CAgM-12 - Ghana 1999](#)



**COMPOSITION OF MEMBERS DEPENDS ON PREVIOUS APPROVAL BY THE
DIRECTOR OF THE NATIONAL METEOROLOGICAL SERVICE-
ARII - only 5 countries - out of a total of 12 countries**

Argentina

Brazil

Chile

Ecuador

PERÚ



Each meeting of the Commission is preceded by a technical conference –where experts of different regions can present update of relevant aspects

**Technical Conference on Future Challenges and Opportunities in Agricultural Meteorology – Applications and Services
Incheon- South Korea
17-18-
Abril -2018**



Organization

MAXX DILEY

DIRECTOR

CLIMATE PREDICTION AND DAPTATION BRANCH

World Meteorological Organization

ROBERT STEFANSKI

Chief, Agricultural Meteorology Division

CAGM

Head, Technical Support Unit of

Integrated Drought Management Programme (IDMP)

World Meteorological Organization

JOSE CAMACHO Ph. D

Scientific Officer

Agricultural Meteorology Division-CLW/CLPA

CAGM President
Roger Stone (Australia)

CAGM Vice President
Orivaldo Brunini (Brazil)

Focus Area 1: Weather and Climate Services for Agriculture
Chairperson: Yvette Everingham (Australia)
Co-chairperson: Kyurang Kim (Republic of Korea)

Focus Area 2: Research and Technology Development in Agrometeorology
Chairperson: Harlan Shannon (USA)
Co-chairperson: Lorena Ferreira (Argentina)

Focus Area 3: Agrometeorological Risk Management
Chairperson: Guangsheng Zhou (China)
Co-chairperson: Meriem Alaouri (Morocco)

Focus Area 4: Communications, Education and Capacity Development
Chairperson: Adamou Sitta (Niger)
Co-chairperson: Elena Mateescu (Romania)

Advisor to the CAGM President on an ex-officio basis
Federica Rossi (Italy)

Focus Area 1- Weather and Climate Services for Agriculture

[ET 1.1](#) | [ET 1.2](#) | [ET 1.3](#) - [TT Fisheries](#)

Focus Area 2: Research and Technology Development in Agrometeorology

[ET 2.1](#) | [ET 2.2](#) | [ET 2.3](#)

Focus Area 3 - Agrometeorological Risk Management

[ET 3.1](#) | [ET 3.2](#) | [ET 3.3](#)

Focus Area 4 - Communications, Education and Capacity Development

[ET 4.1](#) | [ET 4.2](#) | [ET 4.3](#)

Focus Area 1- Weather and Climate Services for Agriculture

[ET 1.1](#) | [ET 1.2](#) | [ET 1.3](#)

[TT Fisheries](#)

Focus Area 1 will emphasize the improvement and development of agrometeorological products, services and communication to users including early warning systems. It will develop the following deliverables based on a review of existing material as a contribution to the implementation of the GFCS Climate Services Information System and the User Interface Platform



ET 1.1 - Expert Team on Agrometeorological Tools and Applications

Leader-James Adamu IJAMPY-Nigeria

ET 1.2 - Expert Team on Feedback Mechanisms and Outreach of Agromet Information

Leader- Hatten Baccour-Tunisia

ET 1.3 - Expert Team on Crop, Animal, and Pest/Disease Early Warning Systems

Leader- Tom DAVISON-

Focus Area 2: Research and Technology Development in Agrometeorology

[ET 2.1](#) | [ET 2.2](#) | [ET 2.3](#)

Focus Area 2 will emphasize research and technology development to provide high quality agrometeorological products, resources and services. It will develop the following deliverables as a contribution to the implementation of the GFCS Observation and Monitoring and Research, Modelling and Prediction Components, the WMO Integrated Global Observing System and the Integrated Global Greenhouse Gas Information System (IG3IS). It will also focus on operational data issues in agricultural meteorology and improving the World Agrometeorological Information Service (WAMIS).



ET 2.1 - Expert Team on Soil Moisture Monitoring and Applications

Leader John Qu- USA

ET 2.2 - Expert Team on Flux Measurements for Agriculture with focus on GHG emissions

Leader Elizabeth Pattey-Canada

ET 2.3 - Task Team on Climate and Agricultural Modelling for Sustainable Agriculture

Leader Ward Smith- Canada



Focus Area 3 - Agrometeorological Risk Management

[ET 3.1](#) | [ET 3.2](#) | [ET 3.3](#)

Focus Area 3 will emphasize the impacts of natural hazards and extreme weather and climate events on agriculture. It will develop the following deliverables as a contribution to the implementation of the GFCS Climate Services Information System as well as to the WMO Global Multi-Hazard Alert System (GMAS) and the WMO Global Hydrological Status and Outlook System. It will also focus on the reviewing impact assessments of climate variability and change on agriculture and how to further develop application related to Climate Smart Agriculture.



ET 3.1 - Expert Team on Drought

Leader- Andreja Susnik -Slovenia

ET 3.3 - Expert Team on Impacts of Extreme Events / Natural Hazards on Agriculture (except drought)

Leader- Udo Busch -Germany

ET 3.2 - Expert Team on AgroClimatic Data and Sub- seasonal to Seasonal Forecasts for Agriculture

Leader- Flavio Justino -Brazil



Focus Area 4 - Communications, Education and Capacity Development

[ET 4.1](#) | [ET 4.2](#) | [ET 4.3](#)

Focus Area 4 will promote the training, education, and outreach related to agricultural meteorological topics to the transfer of knowledge and methodologies to the agricultural community and to enhance capacity building. This focus area will also improve the capacity of users to understand available agricultural meteorological and climate products and services for better uptake and appropriate use. It will also review any improvements in the Guide to Agricultural Meteorological Practices and will identify any agrometeorological knowledge and capacity development tools.



ET 4.1 - Expert Team on Capacity Building

Leader - Valentina Grigoryan- Armenia

ET 4.2 - Expert Team on Communication and User Interface for Agriculture

Leader -Jong Sook Park- Republic of Korea-SK

ET 4.3 - Task Team on Information Communication Technology Applications

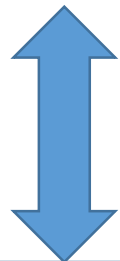
Leader- Andrea Nunes- Chile



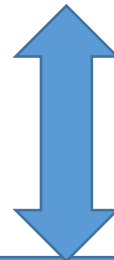
**TASKS-MAIN SUBJECT FOR OVERALL
TO SPREAD INFORMATION
SERVICES- PRODUCTS
WAMIS- 2º phase**



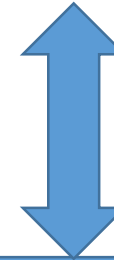
Research and technology-services- capacity building



INFORMATION



**WHEATER DATA
SERVICES**



SUPPORT TRAINING



World AgroMeteorological Information Service



- [Home](#)
- [Objectives](#)
- [Background](#)
- [Brochure](#)
- [Contact](#)
- [Regions](#)
 - [Africa](#)
 - [Asia](#)
 - [South America](#)
 - [N & Central America](#)
 - [S.W. Pacific](#)
 - [Europe](#)
- [Locust Weather](#)
- [Tools & Resources](#)
- [Drought Products](#)
- [WAMIS Modules](#)
 - [GMU Soil Moisture](#)
 - [Crop/Wx Profiles](#)
- [Related Web Sites](#)
 - [WMO AgMet](#)
 - [World Weather](#)
 - [Severe Weather](#)
 - [INSAM](#)
- [Other Links](#)
- [Mirror Servers](#)

Products Available For:

- | | | |
|-------------------------------------|-----------------------------|---|
| ACMAD | Fiji | Philippines |
| Albania | Gambia | Portugal |
| Antigua and Barbuda | Germany | Republic of Korea (3) |
| Argentina | Ghana | SADC |
| Australia (2) | Greece | Serbia |
| Bangladesh | Hungary | Slovakia |
| Belgium | India | Slovenia |
| Belize | Indonesia | South Africa (3) |
| Bolivia | Iran | South Pacific |
| Brazil (2) | Italy | Spain |
| Burkina Faso | Jamaica | St Vincent and the Grenadines |
| Bulgaria | Kenya | Swaziland |
| Canada | Lesotho | Tanzania |
| Caribbean | Malawi | Turkey |
| Chile (2) | Malaysia | Uruguay |
| China (2) | Mali | Venezuela |
| Colombia | Mexico | USA (2) |
| Côte d'Ivoire | Moldova | Zambia |
| Croatia | Myanmar | |
| Cuba | Nepal | |
| Dominican Republic | New Zealand | |
| DMCSEE | Nicaragua | |
| Ecuador | Niger | |
| El Salvador | Nigeria | |
| Ethiopia | Pakistan | |
| EU-MARS | Peru | |

ACTIONS-MAINLY IN AFRICA AND PART OF ASIA

ROVING SEMINARS

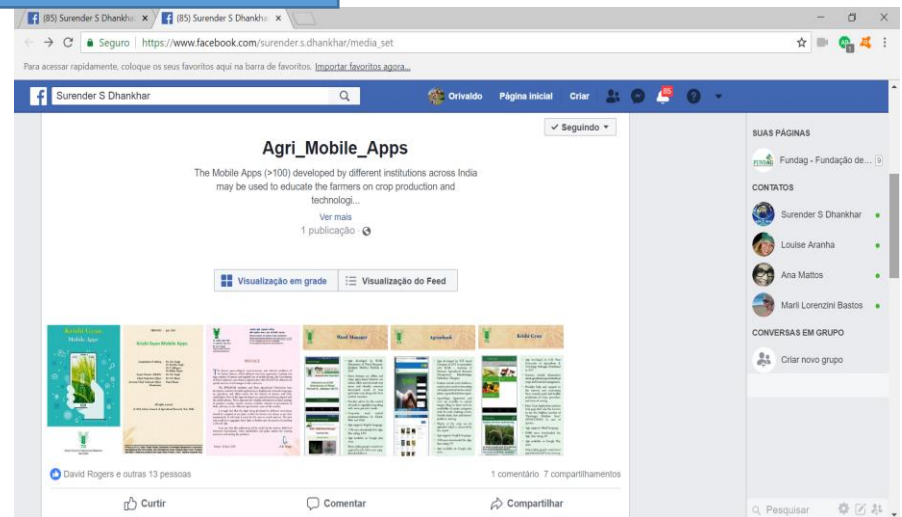
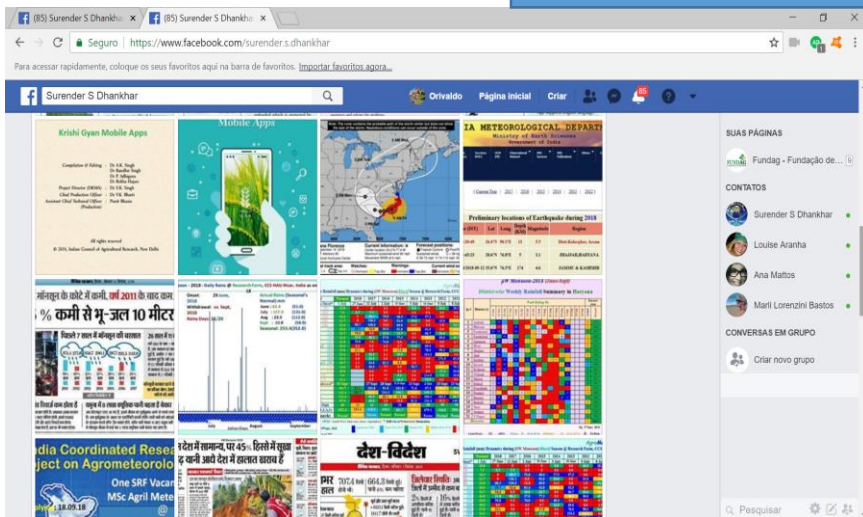
USE OF RAIN GAGE

CELL PHONE-

FOOD SECURITY-MOÇAMBIQUE

WEATHER STATION NETWORK- ANGOLA

EXAMPLE OF SMART PHONE- INDIA



CREWS-CLIMATE RISKS AND EARLY WARNING SYSTEMS

Comité de Pilotaje de los proyectos CREWS de la OMM en los países de África Occidental..

Papel (J.Camacho) en los proyectos CREWS en Burkina Faso, Níger, Mali es de coordinar los equipos de Meteorología Agrícola que son una parte importante de la implementación de dichos proyectos



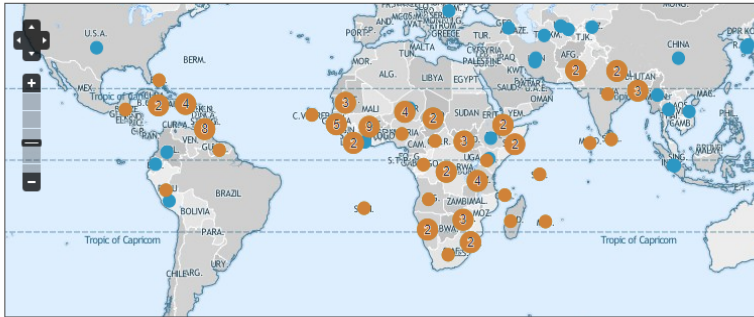
Global Framework for Climate Services-GFCS

GFCS provides a worldwide mechanism for coordinated actions to enhance the quality, quantity and application of climate services.

404 Not Found on WMO.INT | World Meteorological Organization | GFCS | Global Framework for Climate Services

https://www.wmo.int/gfcs/

GFCS in action



Disclaimer: The depiction and use of boundaries, geographic names and related data shown on maps and included in lists, tables, documents, and databases on this website are not warranted to be error free nor do they necessarily imply official endorsement or acceptance by the WMO.

● Regional Projects ● National Projects ● Contributed Projects [More](#)

Latest news

- July 25, 2018 | Examining Climate Information Services from Production to Uptake: Our Learning from Adaptation Futures 2018
- July 18, 2018 | Jobs / Calls for applicants
- June 21, 2018 | Life-saving 3-D Printed Automatic Weather Station comes to Senegal

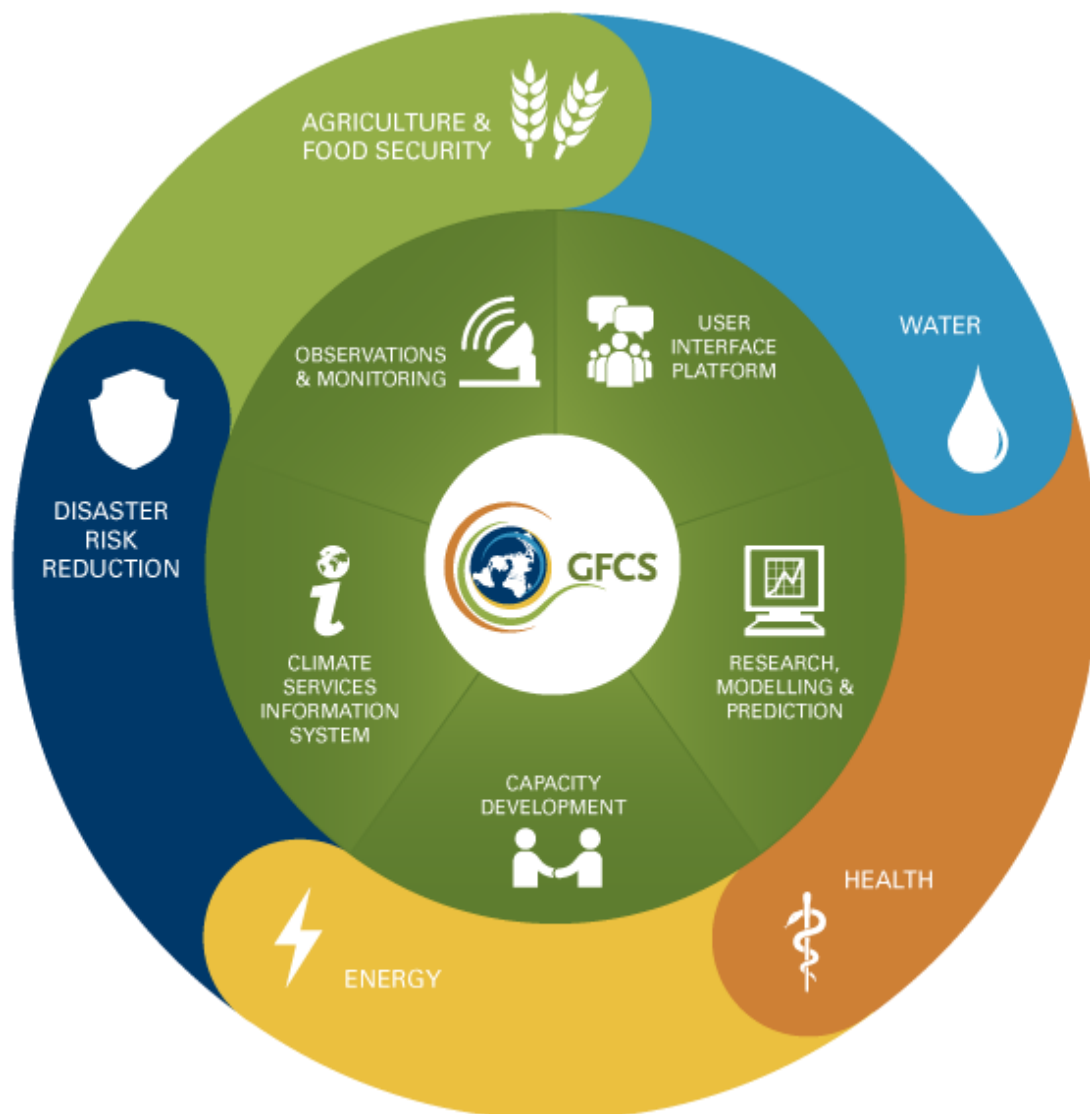
Upcoming events

- September 17, 2018 to September 19, 2018
- Senegal, Dakar
Sustainable Climate Information Services (CIS) Regional Workshop: Expanding CIS delivery through innovative financial and business arrangements
- October 22, 2018 to October 23, 2018
- Italy, Rome

@WMO media

Tweets by

Helping
countries
provide
climate
services
(<http://gfcs.wmo.int/projects-list>)



2-Assist
countries to
establish
National
Frameworks for
Climate
Services that
serve as
coordination
mechanisms
involving
various actors
to identify
priorities on
which the
country should
work to
develop and
implement
climate
services.

SEGURIDAD HIDRICA Y ALIMENTARIA



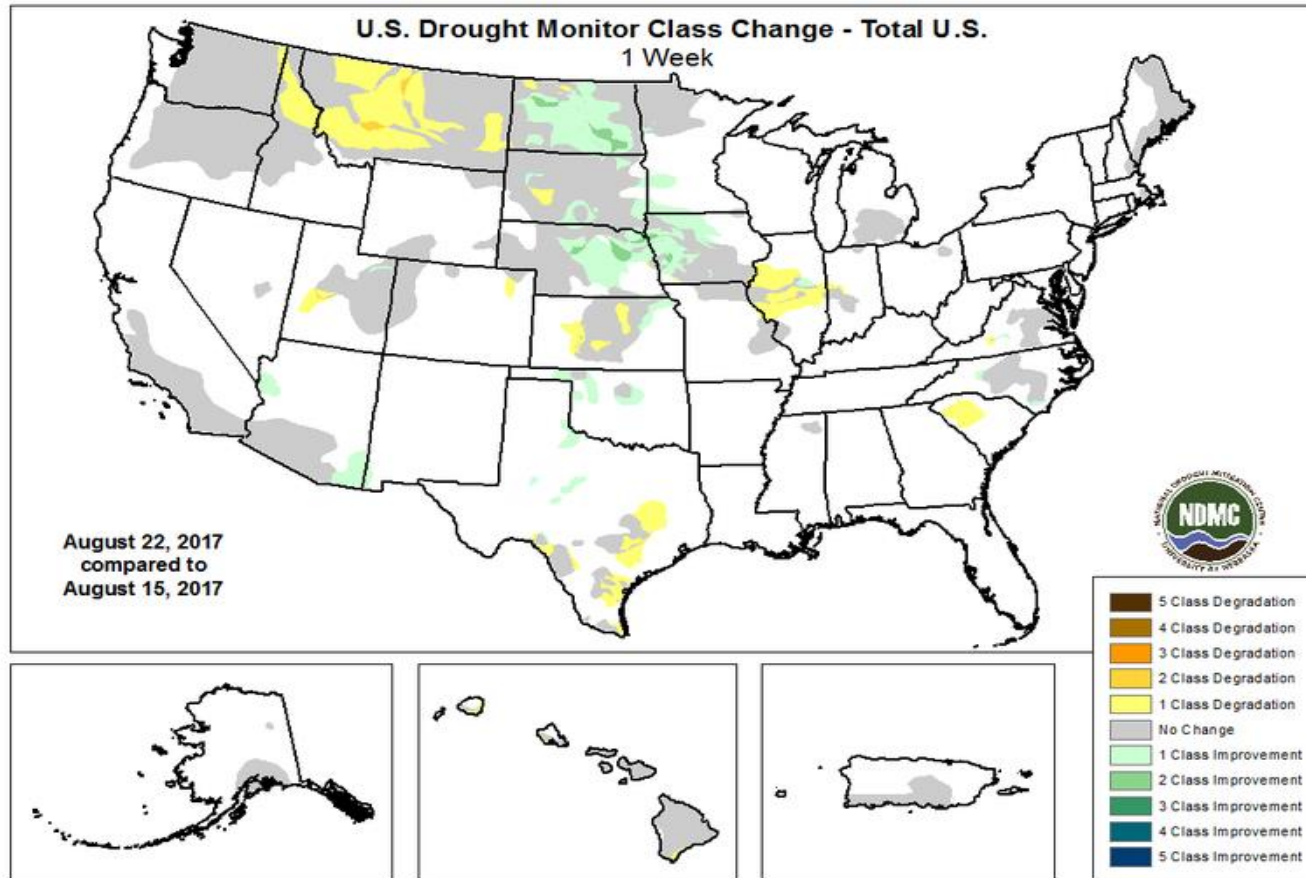
National Drought Mitigation Center (NDMC)

NATIONAL
INTEGRATED
DROUGHT
INFORMATION
SYSTEM



Drought.gov

U.S. Drought Portal



<http://droughtmonitor.unl.edu>

ASPECTS RELATED TO RA-III

AR III WG on CLIMATE GT s/CLIMA de la AR III 0

President: * Miss Bárbara TAPIA (Chile) –Also vice president of the
Comission for Climatology

Vice president: * Ms. María de los Milagros SKANSI (Argentina)



Sub-group on Agrometeorology
Sub-grupo de Agrometeorología:

Argentina: Ms. Lorena FERREIRA

Brasil: * Dr. Orivaldo BRUNINI

Colombia: Ing. Martha CADENA

Chile: Mr Juan QUINTANA

Ecuador: * Ms. Gilma Bertilda CARVAJAL MERA (Cabeza del Sub-grupo)

Paraguay: * Mr. Edgar MAYEREGGER

Perú: Mr Wilfredo YZARRA

Mr Juan GUERRERO

Ms Beatriz SALES

Uruguay: * Ing. Juan Pablo CHIARA

Venezuela: * Mr. Rafael HERNANDEZ



PLAN DE TRABAJO SUBGRUPO AGROMETEOROLOGIA

- a) Colaboración entre la CAgM y ARIII. Evaluar mejoras para una encuesta ampliada sobre la provisión de servicios agrometeorológicos.*
- a) Sequias. Desarrollar índices de sequia agrícola y desarrollar métodos de verificación de impactos: Coordinación: Peru. Temas relevante transversales: Sequia, humedad del suelo, intercambio de datos,*
- b) Sequia agrícola. Pocos trabajos. Trabajos en Peru sobre verificación de índices. Humedad de suelo. Impactos y relevancia de los índices.*
- c) Argentina: Necesidad de caracterizar la sequia agrícola.*



a) Proyecto piloto apoyo a Res 43 EC-69. Propuesta de proyecto piloto de monitorización de humedad del suelo y comparación con datos de satélite. Coordinación: Argentina.

a) Capacitación.

1 – Diagnostico de las necesidades de la capacitación de la región..

2 -Taller para aprender a utilizar los datos de humedad del suelo y definir el proyecto en base a los cultivos papa, soja y maíz. Equipo coordinado por Lorena Ferreira.

3 – Taller monitorización de sequias agrícolas. Índices para apoyar a los productos sector agrícola en los CRCs. Peru.



EXAMPLES OF AGROMET SERVICES IN AR III



INMET



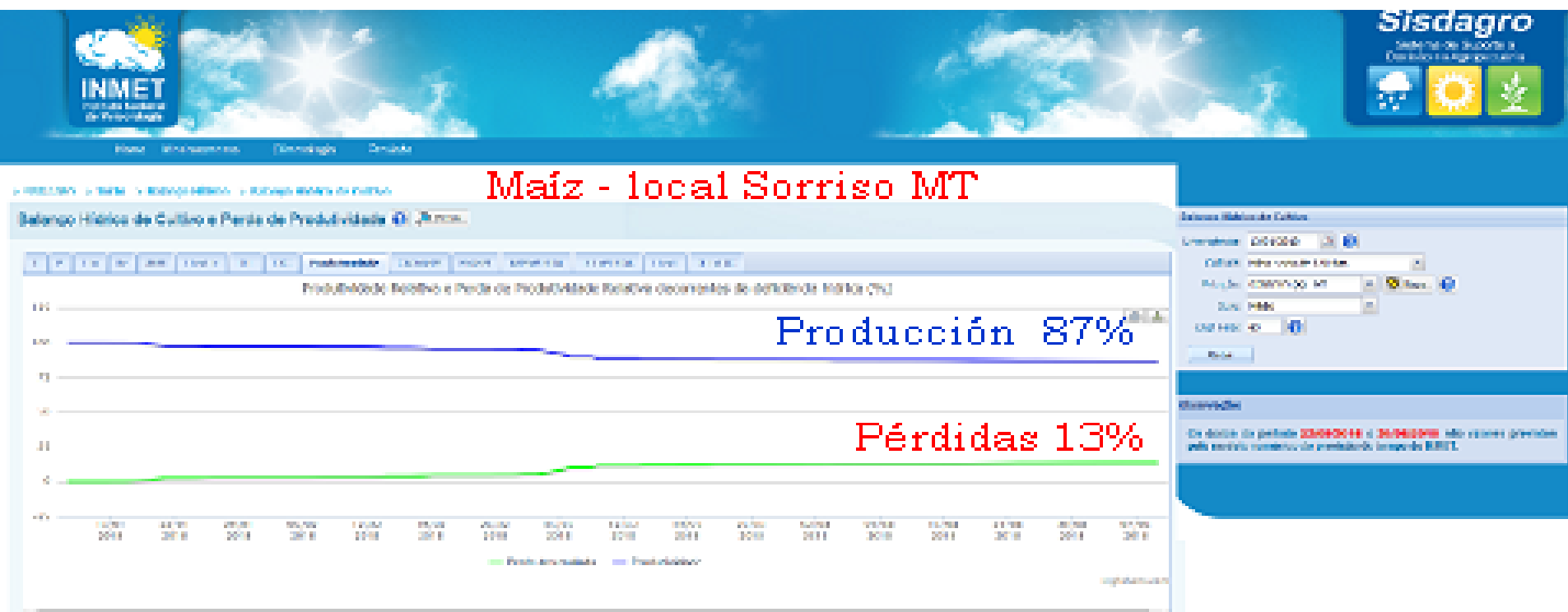
INSTITUTO NACIONAL
DE METEOROLOGIA

Ministério da Agricultura,
Pecuária e Abastecimento



SISDAGRO

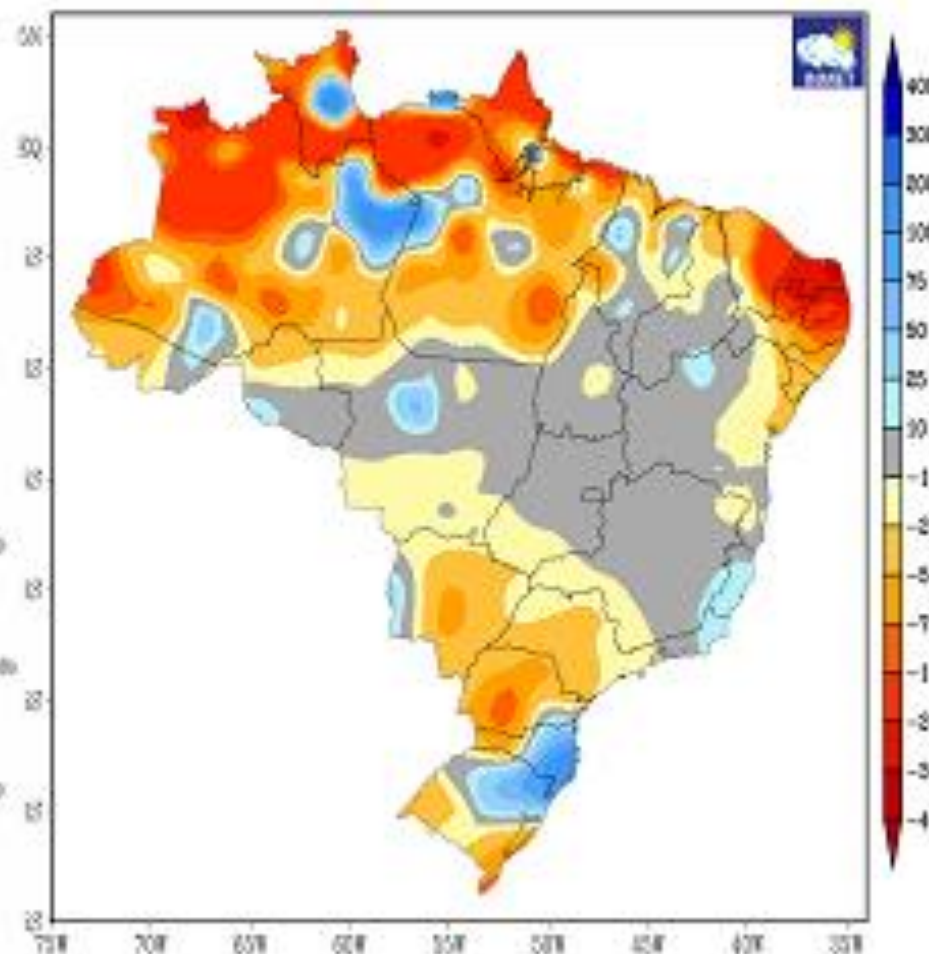
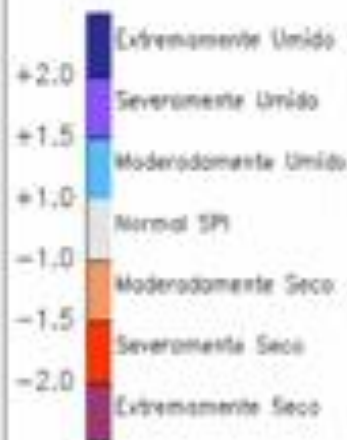
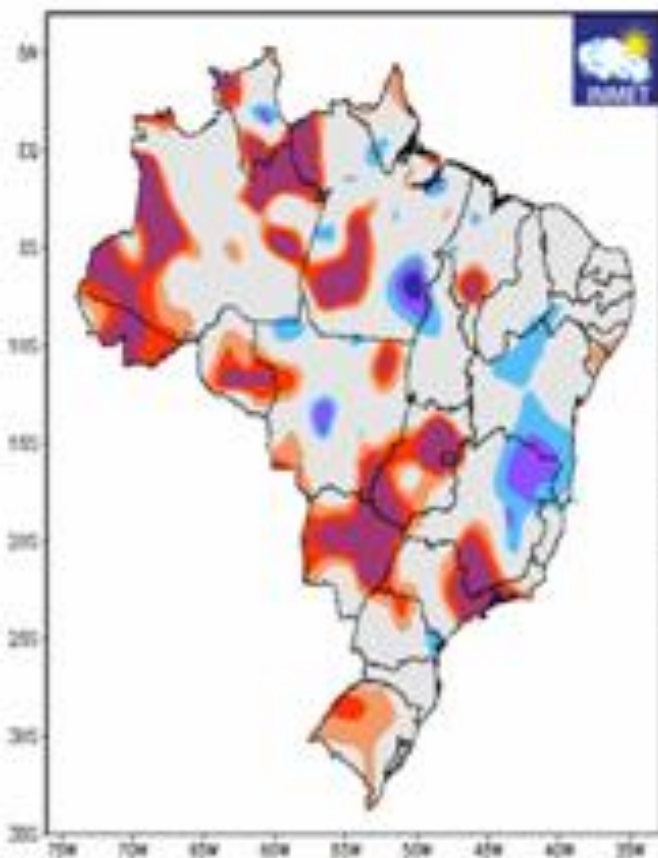
Sistema de Suporte à Decisão na Agropecuária



<http://sisdagro.inmet.gov.br/sisdagro/app/monitoramento/bhc>

ANOMALIA DE PRECIPITAÇÃO
VALIDO PARA JUNHO DE 2018

ÍNDICE DE PRECIPITAÇÃO PADRONIZADA
Abril de 2018 Acumulador: 3 meses



RAINFALL AND DROUGHT

CENTRO REGIONAL DEL CLIMA SUR DE AMÉRICA DE SUR

SPI - 06 MARÇO DE 2018

ÍNDICE DE
PRECIPITAÇÃO
PADRONIZADA

06 MESES

Referencias:

-  Sequia extrema
-  Sequia severa
-  Sequia moderada
-  Normal
-  Moderadamente húmedo
-  Severamente húmedo
-  Extremadamente húmedo
-  Sin datos en este período





Ministerio de
**AGRICULTURA
Y GANADERÍA**



Balance Hídrico Agrícola & Mapas de Riesgos Agroclimáticos

Ing. Agr. Edgar Mayeregger
Unidad de Gestión de Riesgos - MAG

San Lorenzo, 23 de agosto, 2018



PARAGUAY



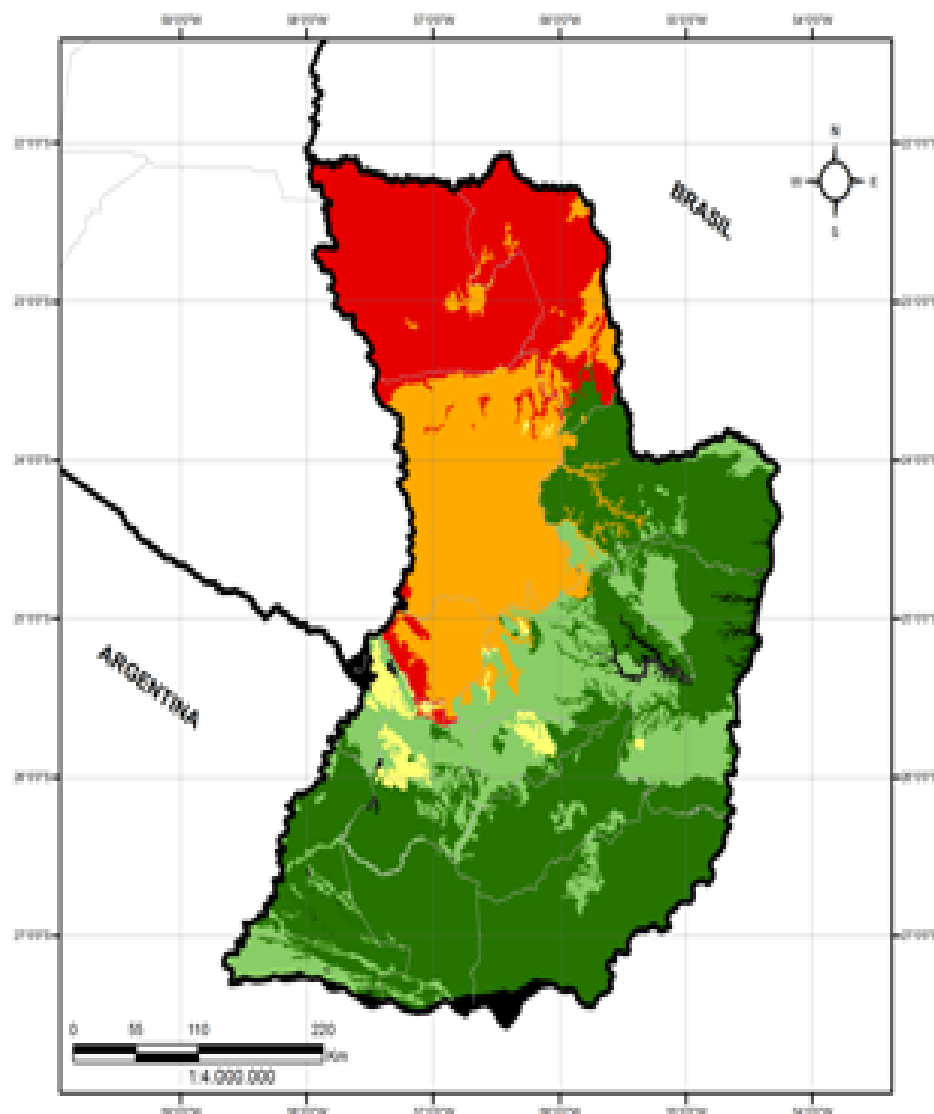
Mapas de Riesgos Agroclimáticos & Balance Hídrico Agrícola (BHAg)

*Fueron obtenidos mediante el uso de herramientas de modelación y simulación y contemplando características de **suelos**, de **cultivos** y las condiciones **meteorológicas** diarias por unidad de suelos para toda la Región Oriental.*

De ahora en mas podremos:

- *Monitorear diariamente las condiciones meteorológicas e hidrológicas, generando series históricas de humedad y temperatura en el suelo. Con **mapas en tiempo real de humedad en el suelo para cultivos específicos**.*
- *Observar estadísticas y evaluaciones de probabilidad de déficits y excesos hídricos, así como heladas y sequías por cultivo. Con **mapas estadísticos de riesgos por excesos y déficit hídrico, heladas en periodos críticos de los cultivos y estrés térmico en ganadería**.*

REPÚBLICA DEL PARAGUAY - REGIÓN ORIENTAL
RIESGO DE SEQUÍA PARA EL CULTIVO MAÍZ
AGRICULTURA FAMILIAR



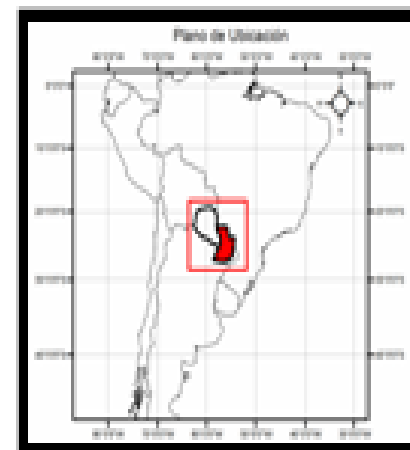
MINISTERIO DE
AGRICULTURA
Y GANADERÍA



TETÁ REKUÁI
GOBIERNO NACIONAL
Juntos Avanzamos hacia el futuro
Comprometidos al Tercer Milenio



Riesgo
de sequía

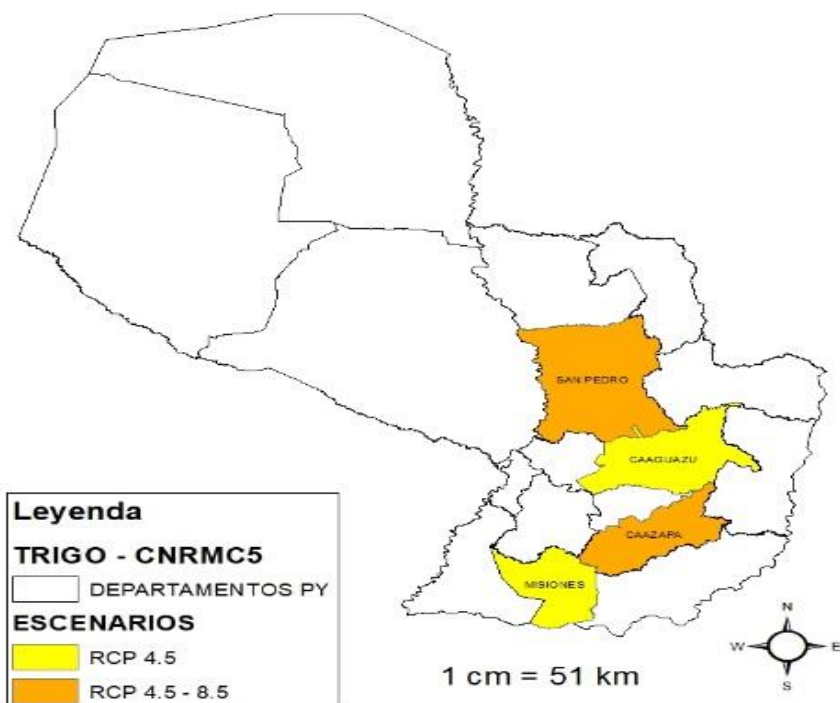


Sevilla de Coordinación:
OCS
Dra. W. G. G. G.
Fuente: Elaboración propia

Alta	Medio-Alto	Medio	Medio-Bajo
Alta	Alto - Medio	Medio	Medio - Bajo
Alta	Medio - Alto	Medio	Medio - Bajo
Alta	Medio - Alto	Medio	Medio - Bajo
Alta	Medio - Alto	Medio	Medio - Bajo

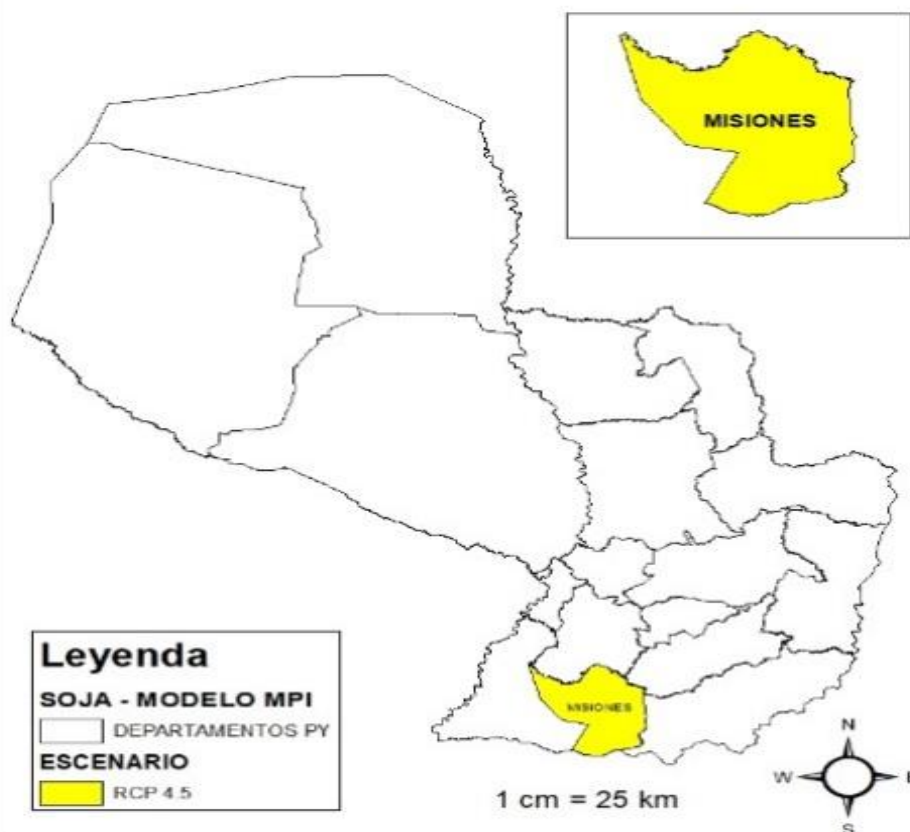


Análisis y Mapeo del Cambio Climático para la Agricultura y Seguridad Alimentaria (AMICAF)



CAMBIOS CLIMATICOS E CULTIVOS

Análisis y Mapeo del Cambio Climático para la Agricultura y Seguridad Alimentaria (AMICAF)



Regularly agrometeorology bulletins

CONDIÇÕES DE SECA AGRÍCOLA NO ESTADO DE SÃO PAULO
Número 004/2018 Período de Análise 01/08/2018 a 31/08/2018

CARACTERÍSTICAS GERAIS:

O estado apresentou duas características distintas. O início do mês foi bem seco, seguido por um período de alta precipitação, isto é representado nas figuras **figuras 1 e 2** representando as condições de umidade do solo e desenvolvimento da cultura (CWDF)..

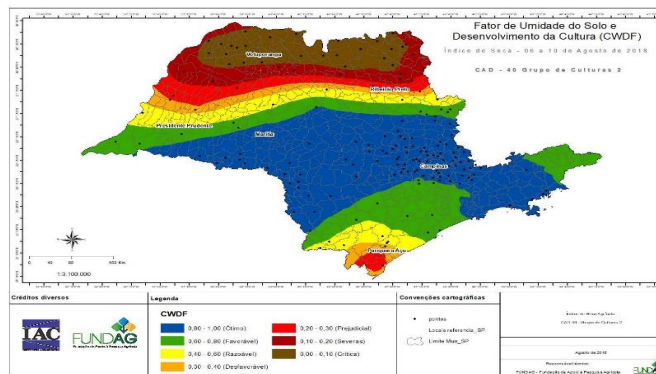


Figura 1- Fator de umidade do solo (CWDF) e desenvolvimento da cultura (10-8).

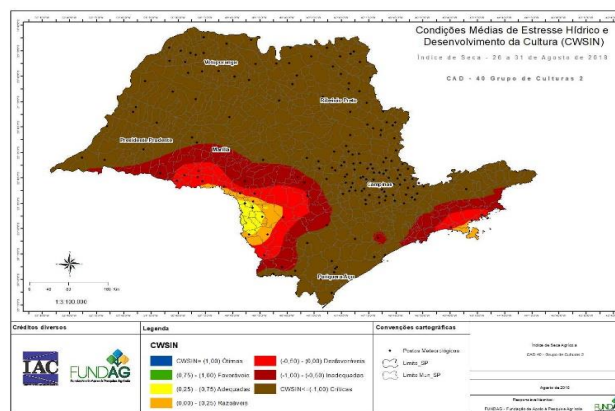


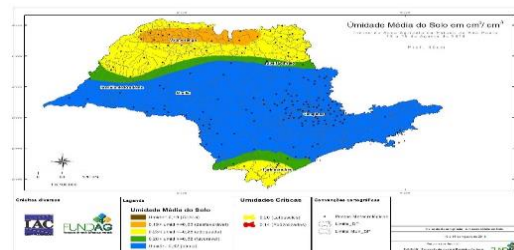
Figura - Condições médias de estresse hídrico para as culturas (CWSIN-31-8)

Orivaldo Brunini - Pesquisador Aposentado-IAC; PqC-VI-Vice-Presidente-GlobalFAMS e -Vice-Presidente – CagM/OMM-Diretor Presidente –Fundag.

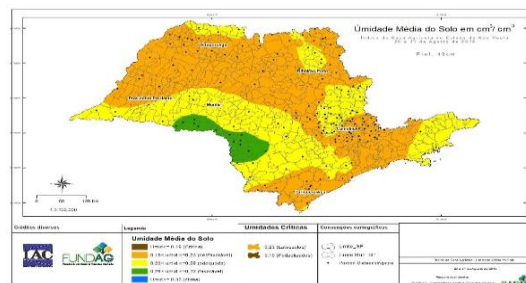
BOLETIM DE UMIDADE DO SOLO

Número 004/2018 Período de Análise 01/08/2018 a 31/08/2018

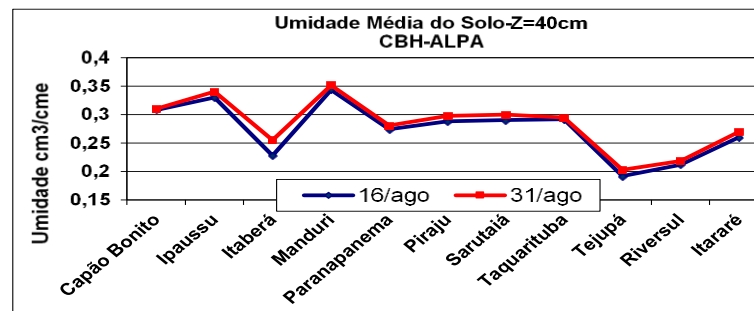
CARACTERÍSTICAS GERAIS: Com a passagem de frente fria as chuvas registradas no Estado foram suficientes para recuperar a umidade do solo no início do mês conforme figura 1. Isto refletiu em condições favoráveis no período às culturas conforme a figura 2 apresenta. Esta relaciona o desenvolvimento vegetal em função da água disponível no solo e umidade do solo considerando-se sistema radicular de profundidade máxima efetiva de 40cm.



Estimativa da umidade média do solo a uma profundidade de 40 cm. (16-8)



Estimativa da umidade média do solo a uma profundidade de 40 cm (31-8).



Variação temporal da umidade média do solo até à profundidade de 40cm.
(valores online-CBH_ALPA).

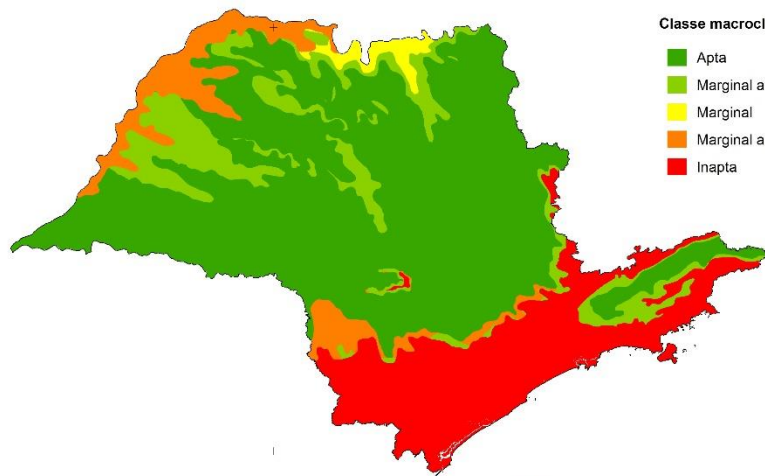
CAMBIO CLIMÁTICO E ADAPTAÇÃO DE CULTIVOS

CENÁRIOS DE ALTERAÇÕES CLIMÁTICAS NO ESTADO DE SÃO PAULO – BRASIL VERSÃO PRELIMINAR

Cenário atual
Microzonas Bioclimáticas - Cultura do café

Classe macroclimática

- Apta
- Marginal a apta
- Marginal
- Marginal a inapta
- Inapta



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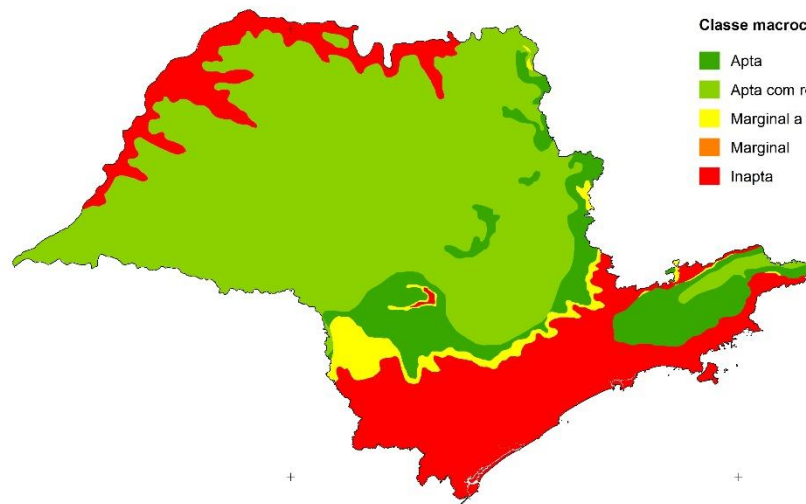
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CENÁRIOS DE ALTERAÇÕES CLIMÁTICAS NO ESTADO DE SÃO PAULO – BRASIL VERSÃO PRELIMINAR

Aumento de 2°C
Microzonas Bioclimáticas - Cultura do café

Classe macroclimática

- Apta
- Apta com restrições
- Marginal a apta
- Marginal
- Inapta



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Centro Regional del
Clima para el Sur de
América del Sur

Centro Regional do
Clima para o Sul da
América do Sul



Dada la importancia de la Sequía, la Administración Nacional Oceánica y Atmosférica de los Estados Unidos, la Organización Meteorológica Mundial y el Centro Regional del Clima para el sur de América del Sur se han asociado para identificar las acciones necesarias para la implementación de un Sistema de Información de Sequía para Sudamérica. Este documento describe los requisitos operacionales, las funciones y las actividades necesarias para la implementación del mencionado sistema.

“Hacia un Sistema de Información de Sequía para Sudamérica, un plan estratégico”.

[http://www.crc-](http://www.crc-sas.org/es/pdf/capacitacion/cursos/0810_08_2017_buenosaires/SADI_S_Strategic_Plan.pdf)

***[sas.org/es/pdf/capacitacion/cursos/0810_08_2017_buenosaires/SADI
S_Strategic_Plan.pdf](http://www.crc-sas.org/es/pdf/capacitacion/cursos/0810_08_2017_buenosaires/SADI_S_Strategic_Plan.pdf)***



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Towards a Drought Information System for South
America

A Strategic Plan

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Prepared in collaboration with
The United States' National Oceanic and Atmospheric Administration



Published: 15 February 2018

Serie Reportes Técnicos – Reporte Técnico CRC-SAS-2018-001
Technical Report Series – Technical Report CRC-SAS-2018-001

A continuación de esta iniciativa y financiado por el Banco Interamericano de Desarrollo (BID) en los años 2019-2020 se trabajará en el

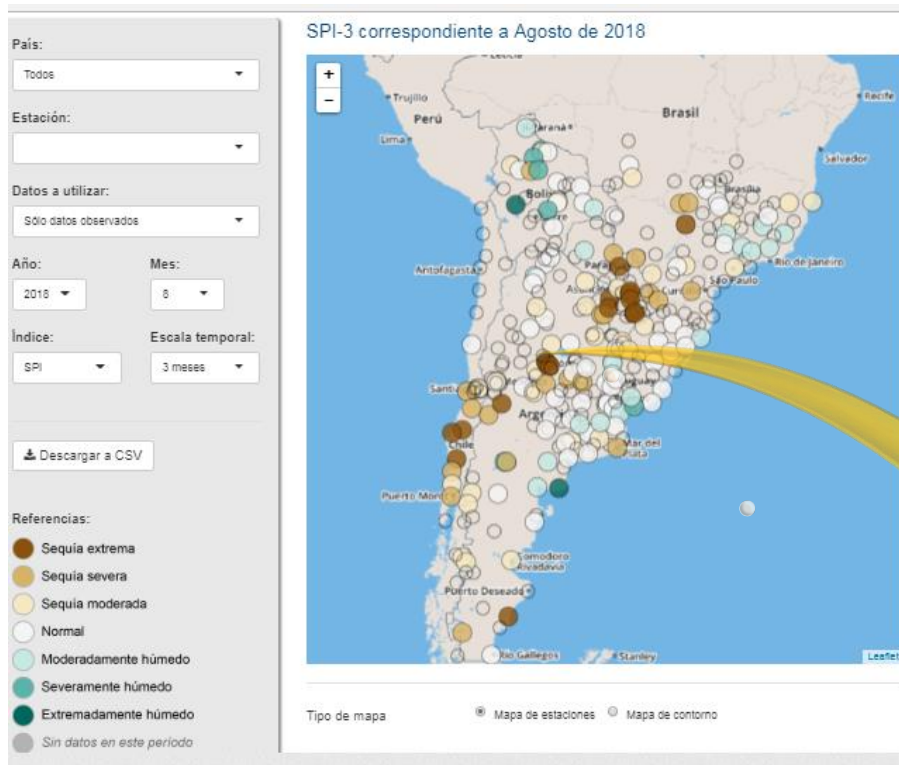
Diseño e implementación inicial de un Sistema de Información sobre Sequías (monitoreo, predicción, preparación y mitigación de impactos) para el sur de América del Sur-(SISA).

Participan:

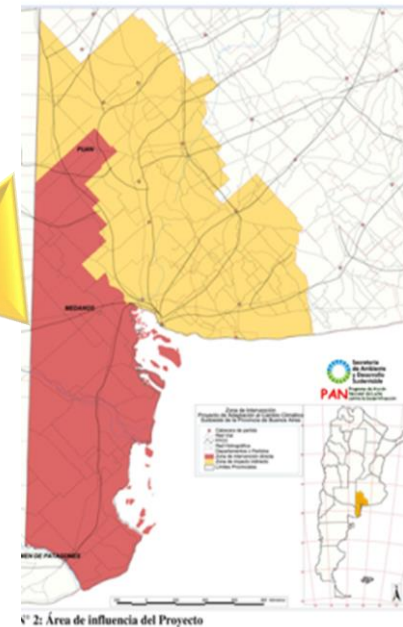
- (1) Instituciones gubernamentales y académicas de investigación en ciencias climáticas, agronómicas, hidrológicas y ambientales;**
- (2) Instituciones gubernamentales de gestión de recursos naturales y gestión de riesgos de desastres en sectores sensibles a la sequía ;**
- (3) Organizaciones privadas y no gubernamentales de sectores sensibles a la sequía (por ej., asociaciones o cooperativas de productores agrícolas de la región).**

Países participantes: Argentina, Bolivia, Brasil, Chile, Paraguay y Uruguay.

Proyectos a Nivel Regional – SISA-



Proyectos a Nivel Local –SOBA-



http://www.crc-sas.org/es/monitoreo_sequias.php

Proyecto Aumentando la Resiliencia Climática y Mejorando el Manejo Sostenible de la Tierra en el Sudoeste de la Provincia de Buenos Aires (SOBA) Donación TF015401 AR



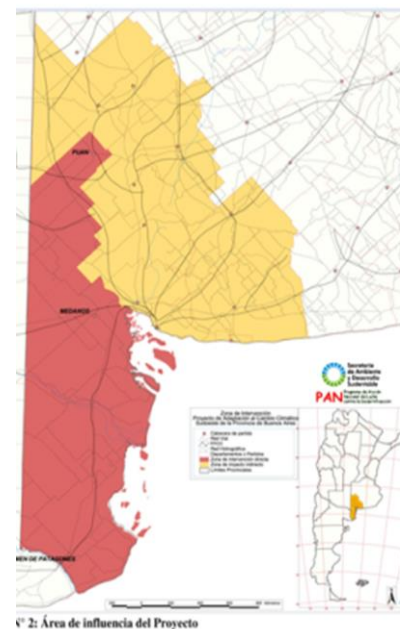
Fortalecimiento Institucional



Infraestructura ambiental



Buenas Prácticas



Gentileza: Joaquín Etoarena

El Proyecto en un vistazo: Aumentar la Resiliencia en sistemas productivos afectados por la erosión eólica y la sequía

- Convenciones involucradas: UNFCCC - UNCCD / Sector: Desarrollo Rural
- Donante: Adaptation Fund / MIE: Banco Mundial
- NIE: Ministerio de Ambiente y Desarrollo Sustentable – Argentina
- Inicio: 06/2015 / Duración: 4 años
- Área afectada (km²): Directa 35,000 (sup. Bélgica), indirecta: 65,000 (Lituania)
- Población afectada: Directa: 80,000 Indirecta: 550,000



Gentileza: Joaquín Etoarena

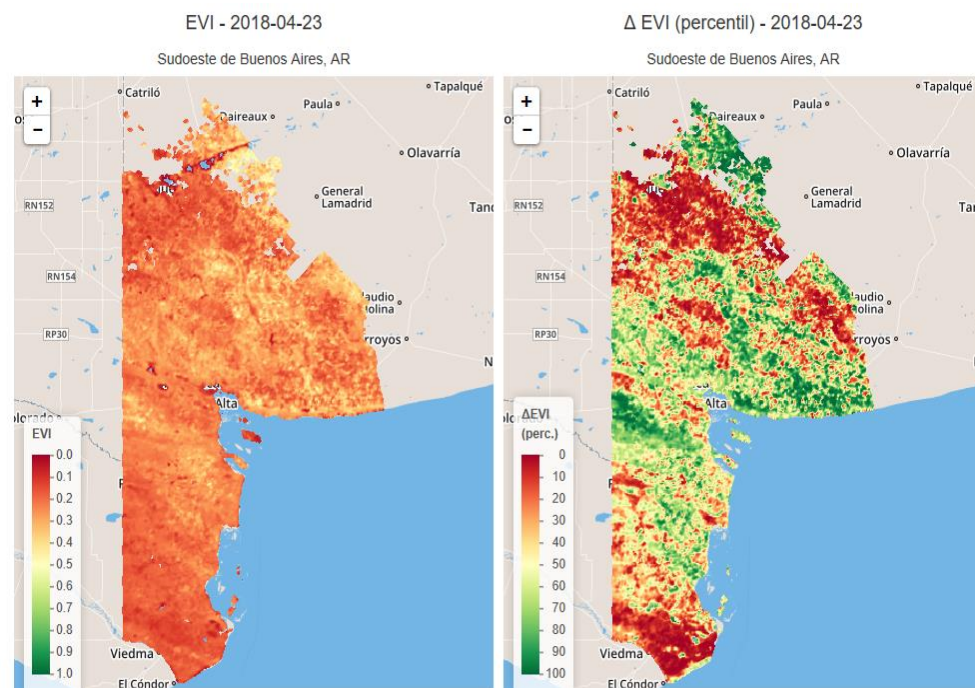
Como Proyecto Piloto se esta desarrollado un Sistema regional para el monitoreo, predicción y alerta temprana de sequías en el Sudoeste de la Provincia de Buenos Aires

en el marco del Proyecto Aumentando la Resiliencia Climática y Mejorando el Manejo Sostenible de la Tierra en el Sudoeste de la Provincia de Buenos Aires

El sistema contemplará tres componentes principales y dos componentes complementarios:

- 1. Monitoreo en tiempo real del comienzo y extensión geográfica de sequías mediante índices y datos climáticos y satelitales;**
- 2. Pronósticos de la posible evolución temporal de sequías; y**
- 3. Diseño colaborativo de planes y acciones para la emisión de alertas.**
- 4. Desarrollo de talleres de entrenamiento y difusión principalmente de actores locales del sudoeste de la provincia de Buenos Aires**

Como Proyecto Piloto se esta desarrollado un Sistema regional para el monitoreo, predicción y alerta temprana de sequías en el Sudoeste de la Provincia de Buenos Aires en el marco del Proyecto Aumentando la Resiliencia Climática y Mejorando el Manejo Sostenible de la Tierra en el Sudoeste de la Provincia de Buenos Aires



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Welcome to the GlobalFAMS site

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Bucharest, 7 October 2015

In Bucuresti, October 7, 2015 the Global Federation of Agrometeorological Societies was born.

GlobalFAMS is an Association formed by National / International Societies, bodies or groups that are scientifically based in the fields of agrometeorology and related sciences, and their application. The objective of **GlobalFAMS** is to further promote and advance all sectors of agricultural meteorology by improving international, inter-Society cooperation and partnership, exchange of knowledge and education in all the related scientific, technological, environmental, social issues.

Yr 1, N 1 of the GLOBAL GATEWAY TO AGRICULTURAL METEOROLOGY (70 Mbytes).

We are much more than grateful to our friend and

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- Korean Society of Agricultural and Forest Meteorology
- Indian Association of Agrometeorologists
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INSAM - The International Society for Agricultural Meteorology

Last modified August 26, 2016 09:39

*Dear friends,
the new homepage from the President
will come soon. Professor Stigter is
sorely missed by all of us and we are now
re-organizing our web pages.*

[Kees Stigter obituary](#)

Dear members of INSAM,
in the most recent issue of the magazine
"Farming Matters" in 2016 we (Yunita Winarto
and myself) were advertised as follows: "An
anthropologist, an agrometeorologist and
Universitas Indonesia students and other scientific and administrative support staff have teamed up with
rice farmers in Indramayu (Java) and on Lombok, to face changing local climatic patterns. The aim is to
generate reliable climate services on which farmers can base their crop management decisions. This is
done through co-production of knowledge that is rooted in scientific and local expertise and takes place in



IN EVIDENCE



The Farsi translation of the actual
home page is available.

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August 26, 2016

[Strong monsoon forecast lifts
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May 12, 2016

[Can we read the climate crystal
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April 26, 2016

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[Ahead of IMD, government predicts
normal monsoon rains](#)

April 15, 2016

WHAT CAN WE LEARN AND CONCLUDE

AGROMETEOROLOGY IS THE MAIN DRIVE FORCE TO SUPPORT FOOD SECURITY AND WATER SECURITY

REASONABLE WSN IS NECESSARY TO SUPPORT THE CHALLENGES

WEATHER DATA SHOULD BE EASILY AVAILABLE AND ACCESSABLE

WE IN SOUTH AMERICA HAVE VERY NICE AND GOOD EXAMPLES THE AGROMETEOROLOGY SERVICES AND PRODUCTS

A BETTER LIASION SHOULD HAVE BETWEEN CAgM AND AR III-WG

QUÉ PODEMOS APRENDER Y CONCLUIR

LA AGROMETEOROLOGÍA ES LA FUERZA DE IMPULSO PRINCIPAL PARA APOYAR LA SEGURIDAD ALIMENTARIA Y LA SEGURIDAD DEL AGUA

UNA REDE METEOROLOGICA RAZONABLE ES NECESARIA PARA APOYAR LOS DESAFÍOS

LOS DATOS DEL TIEMPO Y CLIMA DEBEN ESTAR DISPONIBLES Y ACCESIBLES

NOSOTROS EN AMÉRICA DEL SUR TENEMOS MUY BUENOS EJEMPLOS DE SERVICIOS Y PRODUCTOS DE AGROMETEOROLOGÍA

UNA MEJOR RELACIÓN DEBERÍA TENER ENTRE CAgM Y AR III-WG

GRACIAS
MUITO OBRIGADO
THANK YOU