WMO OMM
World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

Secrétariat
7 bis, avenue de la Paix – Case postale 2300
CH 1211 Genève 2 – Suisse
Tél.: +41 (0) 22 730 81 11
Fax: +41 (0) 22 730 81 81
wmo@wmo.int – public.wmo.int

Ref.: 12977/2020-L0 GS

Nuestra ref.: 12680/2020/CSG/WMO-Reform

26 de junio de 2020

Anexo: 1 (disponible en inglés solamente)

Estimados colegas:

Me gustaría informarles de los notables progresos alcanzados en el histórico proceso de reforma y en la ejecución de las actividades principales de la Organización Meteorológica Mundial (OMM) en un contexto marcado por los retos que impone la actual pandemia de la COVID-19. Las importantes decisiones adoptadas en el Decimoctavo Congreso Meteorológico Mundial del pasado mes de junio sobre el Plan Estratégico y Presupuesto de la Organización para el período financiero han orientado la labor de la Secretaría, y durante el último año, y en particular durante estos últimos meses, el personal de la OMM ha logrado diversos objetivos relevantes.

Hace algunas semanas, junto con el Presidente de la OMM, el doctor Gerhard Adrian, tuve la oportunidad de hablar con todos los miembros del Consejo Ejecutivo por videoconferencia en el marco de dos reuniones de carácter especializado, cuya presentación se adjunta a la presente carta. Las nuevas comisiones técnicas —la Comisión de Aplicaciones y Servicios Meteorológicos, Climáticos, Hidrológicos y Medioambientales Conexos (SERCOM) y la Comisión de Observaciones, Infraestructura y Sistemas de Información (INFCOM)— así como los nuevos órganos integrantes —el Comité Consultivo en materia de Políticas, el Grupo Consultivo Científico y la Junta de Investigación sobre el Tiempo, el Clima, el Agua y el Medioambiente— ya están operativos. Todos esos órganos se han podido reunir satisfactoriamente por videoconferencia en las últimas semanas y funcionan de manera eficiente. En consonancia con las nuevas resoluciones aprobadas por el Congreso, estamos fortaleciendo la participación de los sectores público y privado, y en ese sentido cabe destacar las interacciones mantenidas con nuevos proveedores de servicios y la elaboración de un código de conducta por el que se regirán tales interacciones.

En la OMM, seguimos de cerca la situación del sistema mundial de observación, una de las capacidades en materia de servicios de los Servicios Meteorológicos e Hidrológicos Nacionales (SMHN) que se ha visto amenazada por la pandemia. Algunos SMHN han experimentado dificultades para mantener sus observaciones y servicios. Así pues, he enviado cartas a los ministros encargados de los SMHN para hacer hincapié en la importancia de sus servicios para la seguridad nacional. También he estado en contacto con los operadores de satélites a fin de velar por el mantenimiento de sus servicios. Estoy preparado para hablar de esas cuestiones con sus gobiernos en caso de que así se me pida.

En los últimos meses, la crisis de la COVID-19 ha transformado el modo en que nos reunimos y adoptamos decisiones, pero también ha supuesto la adopción de algunas innovaciones y ha hecho que nos centremos en cuestiones fundamentales. Todavía quedan aspectos por preparar para la 72ª reunión del Consejo Ejecutivo que tendrá lugar a finales de septiembre por videoconferencia. Si bien algunos países retoman la actividad lentamente, cabe señalar que, globalmente, en otros la afectación es todavía muy importante. Ello repercutirá en la posibilidad de celebrar reuniones físicas durante cierto tiempo.

A los Representantes Permanentes (o Directores de los Servicios Meteorológicos o Hidrometeorológicos) de los Miembros de la OMM

copias: Asesores hidrológicos de los Representantes Permanentes

Durante el Decimoctavo Congreso Meteorológico Mundial me pidieron que considerara la posibilidad de reformar la administración de la OMM, tratara de aplicar mejoras y ganar en eficiencia y, en consonancia con las resoluciones aprobadas, fortaleciera las actividades regionales y velara por la prestación de un apoyo técnico y profesional más relevante por parte de la Secretaría. A lo largo de los últimos meses, he adoptado medidas importantes y decisivas en ese sentido. En primer lugar, he armonizado las estructuras de los departamentos para que satisfagan las necesidades de las nuevas comisiones técnicas y otros órganos integrantes, y he abierto procesos para la selección de directores. Esas vacantes se han cubierto y los nuevos departamentos ya están plenamente operativos.

Se ha creado una plataforma centralizada de servicios para satisfacer las necesidades de los departamentos y de nuestros Miembros. He adoptado medidas encaminadas a reducir los costos asociados al Cuadro de Servicios Generales y se reasignarán recursos para contratar a nuevo personal del Cuadro Orgánico. Algunos funcionarios del Cuadro de Servicios Generales han decidido abandonar la OMM, y otros que postularon a alguno de los puestos de la plataforma de servicios no han logrado su objetivo. Sin embargo, tal y como se había pedido, se ha respaldado a esos funcionarios en la construcción de su futura carrera profesional. A principios de 2020, reforzamos significativamente los servicios de apoyo jurídico destinados al personal gracias a la firma de un acuerdo integral con el Tribunal Contencioso-Administrativo de las Naciones Unidas y el Tribunal de Apelaciones de las Naciones Unidas, en virtud del cual el personal puede recurrir al Ombudsman y solicitar asistencia jurídica. Se han creado nuevos departamentos y se han nombrado coordinadores transectoriales en los ámbitos de los océanos y del agua y la criosfera.

La reasignación de los recursos liberados a raíz de las medidas de racionalización de nuestra administración permitirá fortalecer nuestros conocimientos técnicos y respaldar nuestras actividades en el plano regional. Desde enero de 2020, seis nuevos directores integran el equipo directivo superior, que junto con la Dirección Ejecutiva, forma la Junta de Directores, en cuyas reuniones semanales se fija la orientación estratégica que sigue la Secretaría. Esos directores han firmado acuerdos de rendición de cuentas que se revisarán semestralmente a fin de velar por la transparencia y el buen desempeño. Asimismo, cabe destacar que el resultado logrado por la OMM en el informe de los auditores externos de 2019 ha sido sumamente positivo, dado que se emitió una opinión sin salvedades y se han cumplido prácticamente todas las recomendaciones.

La OMM tiene previsto celebrar una gran conferencia en materia de datos a finales de noviembre con objeto de mejorar el sistema mundial de observación y actualizar nuestras políticas de datos y las resoluciones pertinentes de la Organización. En los próximos meses, prepararemos la reunión extraordinaria del Congreso Meteorológico Mundial de 2021, en la que se abordarán temas como la reforma de la OMM, el agua y decisiones relacionadas con los datos. Actualmente estamos trabajando en la concertación de una coalición de alto nivel sobre el agua y el clima en la que participen organismos clave de las Naciones Unidas y grupos de países con miras a dar un nuevo impulso a las medidas relacionadas con el Objetivo de Desarrollo Sostenible (ODS) 6: agua limpia y saneamiento. También hemos fortalecido nuestras actividades en materia de asociaciones para el desarrollo mediante la firma de la Alianza para el Desarrollo Hidrometeorológico con diversos asociados importantes, tanto de las Naciones Unidas como asociados para la financiación, entre los que cabe destacar el Banco Mundial, el Fondo Verde para el Clima y bancos para el desarrollo. También estamos trabajando en la instauración de un instrumento de financiación sostenible que permita detectar deficiencias en los sistemas hidrometeorológicos y de observación de los países en desarrollo y brindar apoyo para subsanarlas, para lo que se recurrirá al Servicio de Financiamiento de Observaciones Sistemáticas y a la Iniciativa de Apoyo a los Países.

Nuestros informes climáticos son publicaciones de referencia cuya relevancia internacional no deja de crecer. Sus datos son una fuente de asesoramiento directo para el Secretario General de las Naciones Unidas en el marco del Grupo Básico sobre el Clima y de las reuniones de la Conferencia sobre el Cambio Climático de las Naciones Unidas, lo que multiplica su notoriedad en todo el mundo a través de los medios internacionales.

Finalmente, me gustaría hacer hincapié en que la crisis financiera posterior a la COVID-19 ha socavado los recursos de todos los países en un contexto de reorganización de las prioridades. Ello podría repercutir en el ritmo de recepción de las contribuciones prorrateadas. La llegada de ese flujo de fondos es sumamente importante para que la Secretaría pueda cumplir con su mandato de forma eficaz y eficiente y servir a los Miembros del mejor modo posible, por lo que les insto a que velen por el mantenimiento de esos compromisos por parte de sus gobiernos.

Aguardo con gran interés la continuación de nuestra importante trayectoria y la materialización de los esfuerzos consagrados a este histórico proceso de reforma para hacer realidad la OMM del siglo XXI, y aprovecho la ocasión para agradecerles su confianza y apoyo continuados.

Le saluda atentamente.

Prof. Petteri Taalas
Secretario General

Status of WMO

Prof. Petteri Taalas
Secretary-General
WMO

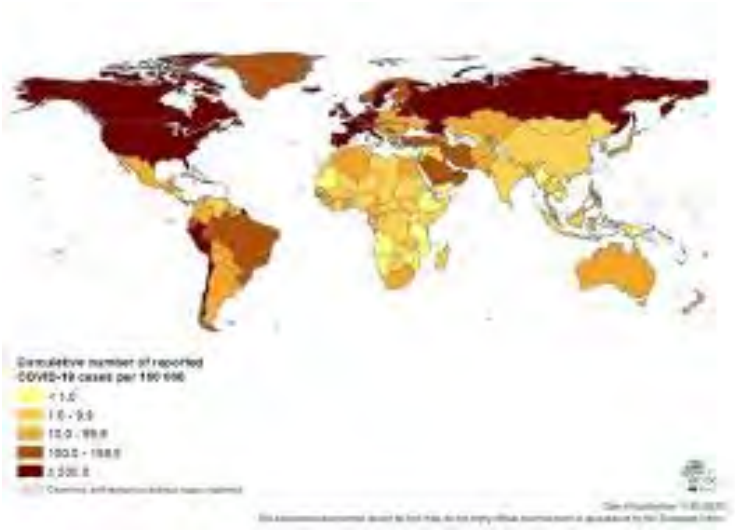
- Impact of Covid-19: global & WMO perspective
- Progress of constituent body & secretariat reforms
- Secretariat highlights
- Status of climate
- 2020 meeting plan

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

Covid-19/World

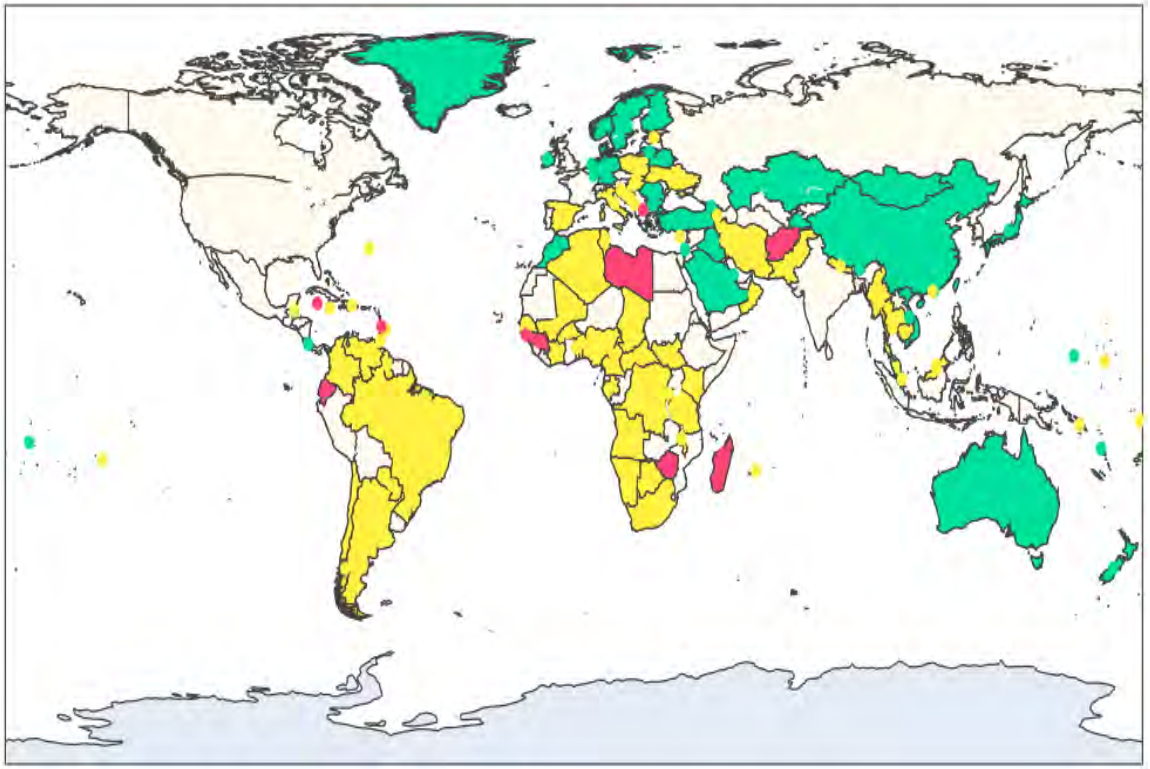


- As recession of the 30's, but now truly global;
- Global economy fragile, future unknown;
- In 2020 -3 % of global GDP, 2021 + 5 % (IMF);
- Optimistic scenario: 2-3 y recession, vaccine in one year, no major new Covid-19 waves, recovery of strong economies helps the weaker ones;
- Pessimistic scenario: 5-7 y recession, no vaccine soon, new Covid-19 waves, severe problems in developing world & weak economies: major increase of extreme poverty & hunger;
- Wide impacts already: economy, trade, consumption, air, sea & road transportation, tourism, emissions, employment, food security, industry, education etc;
- Large global powers not aligned: UN multilateral system challenged;
- Public recovery investments partly to climate friendly businesses.

WMO OMM

Effects of Covid-19 pandemic on NMHSs

Situation as of May, 15th, 2020



Reported impacts include:

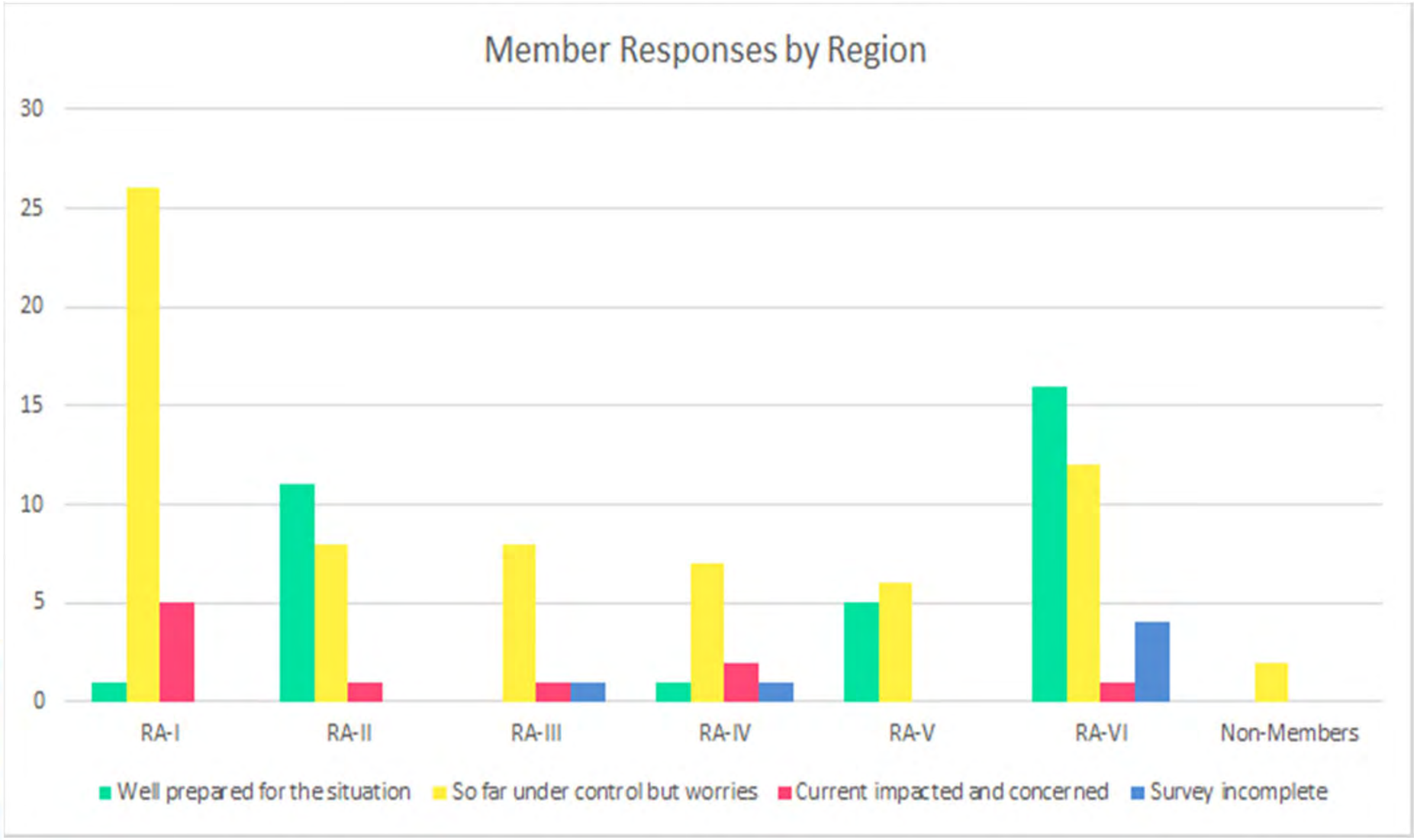
- Staff working conditions, health and well being;
- Observation network operations;
- Challenges with ICT, data processing;
- Forecasting and service delivery;
- Financial resources;
- Teleworking arrangements implemented by 92 services.

136 responses were received from 117 Members and 2 non Members.

83 services reaffirmed their commitment to support neighbouring countries.

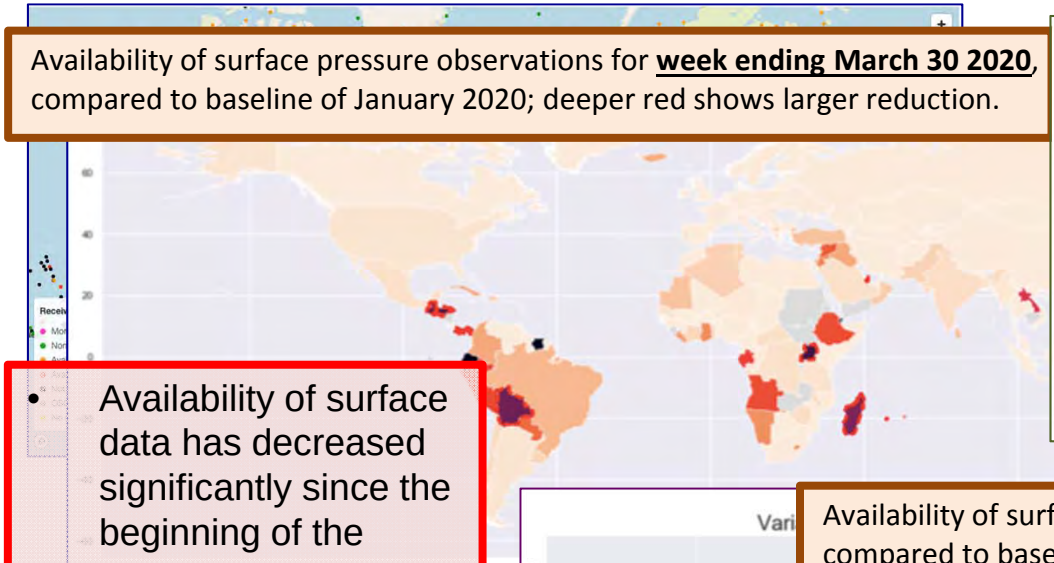
WMO OMM

Impact of COVID-19 by WMO Regions

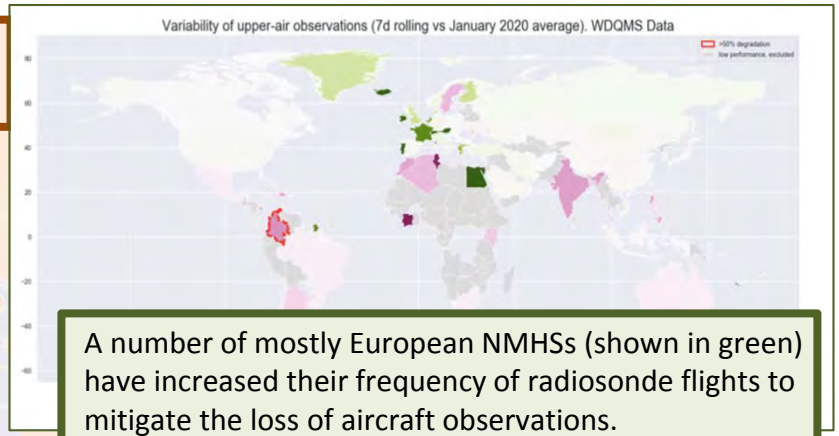


WMO OMM

Significant reductions in the availability of surface observations, especially in developing countries



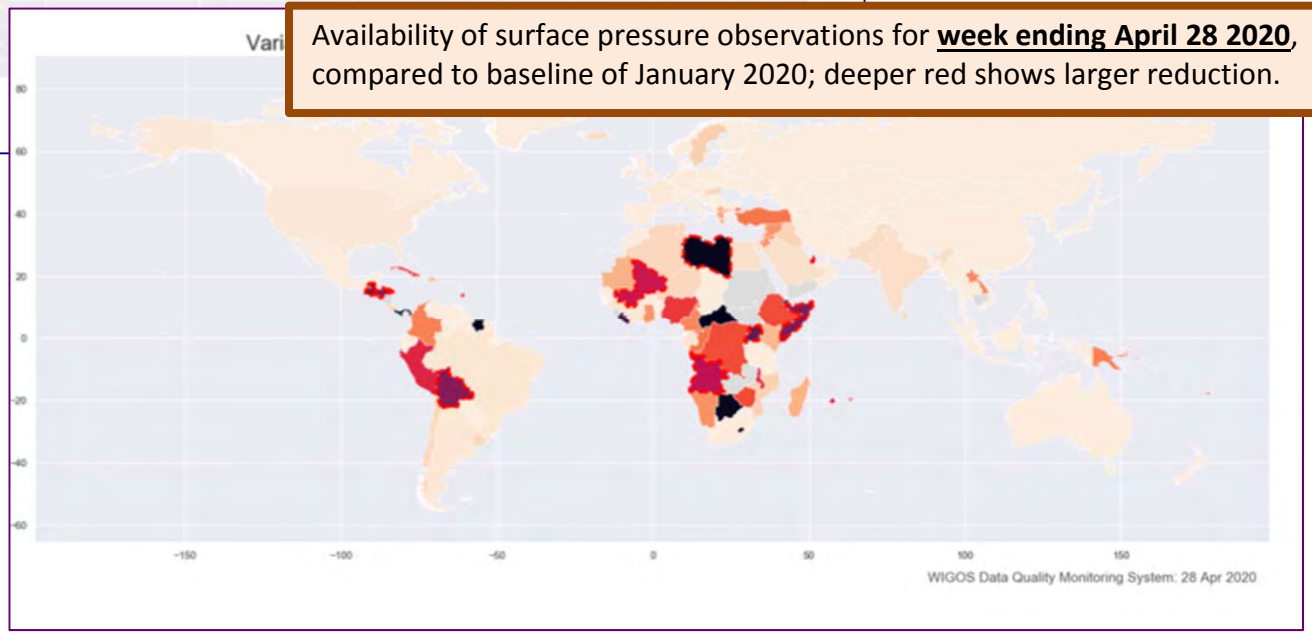
Availability of surface pressure observations for **week ending March 30 2020**, compared to baseline of January 2020; deeper red shows larger reduction.



A number of mostly European NMHSs (shown in green) have increased their frequency of radiosonde flights to mitigate the loss of aircraft observations.

- Availability of surface data has decreased significantly since the beginning of the COVID-19 crisis; steady decline continues, especially over Africa.
- Main suspected cause is reliance on manned observing stations subject to lockdowns.

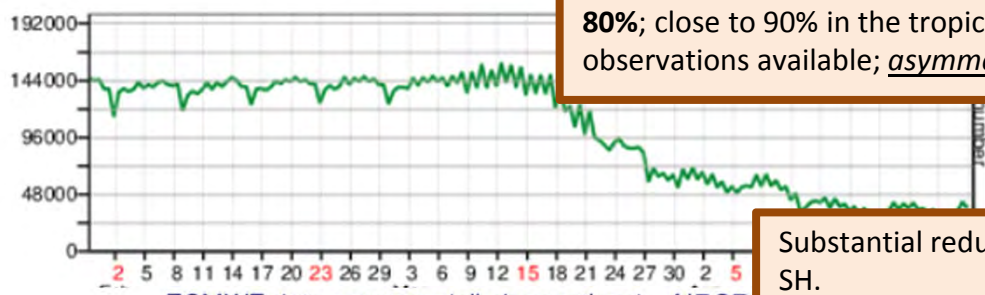
Availability of surface pressure observations for **week ending April 28 2020**, compared to baseline of January 2020; deeper red shows larger reduction.



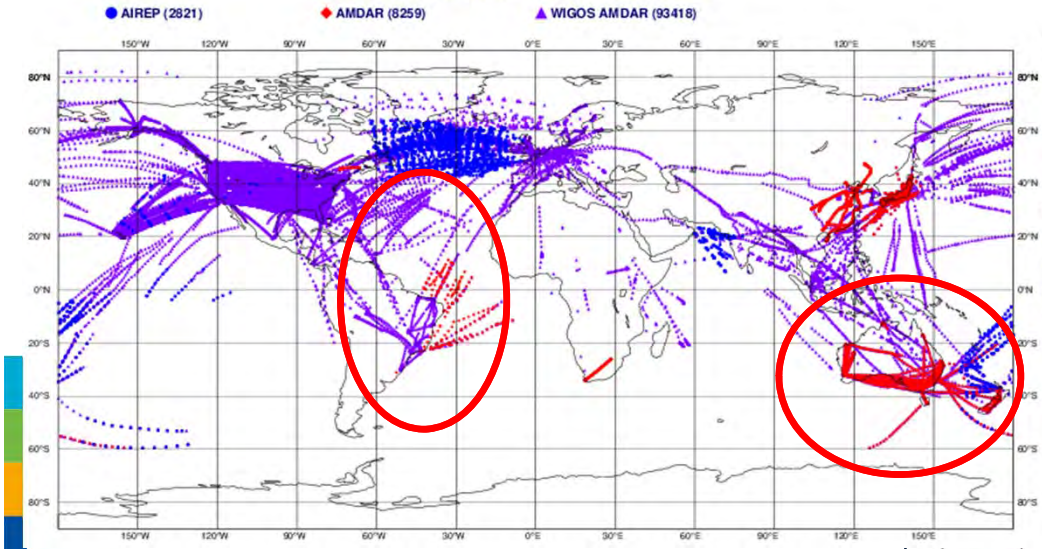
WMO OMM

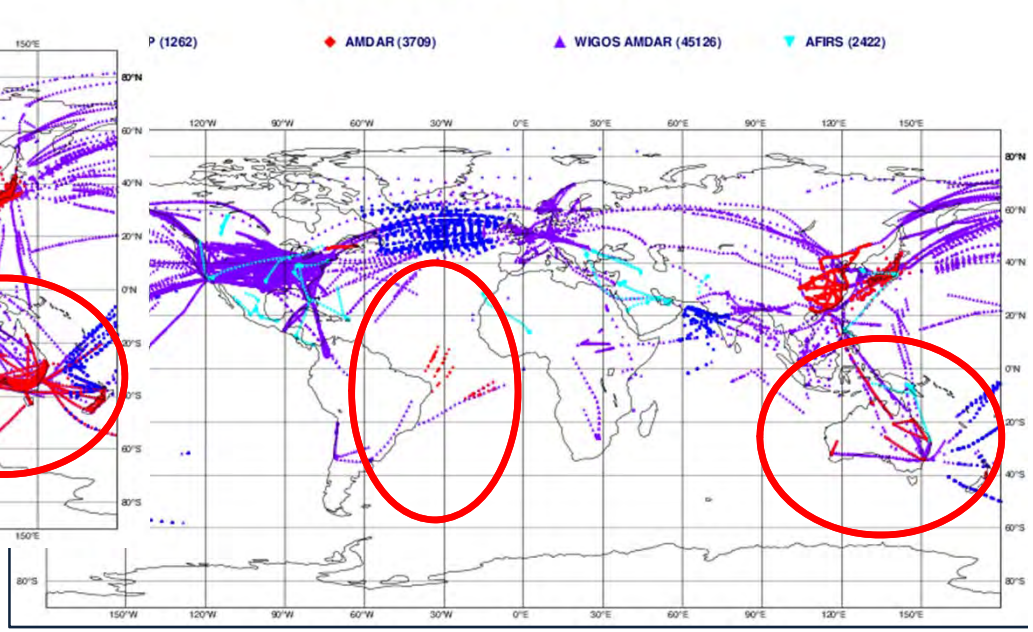
Aircraft observations; drastic decline, especially in the Southern Hemisphere and in the tropics

Overall **reduction in aircraft observations since early February of around 80%**; close to 90% in the tropics and in the SH, where we already have fewer observations available; *asymmetric impact of COVID-19.*



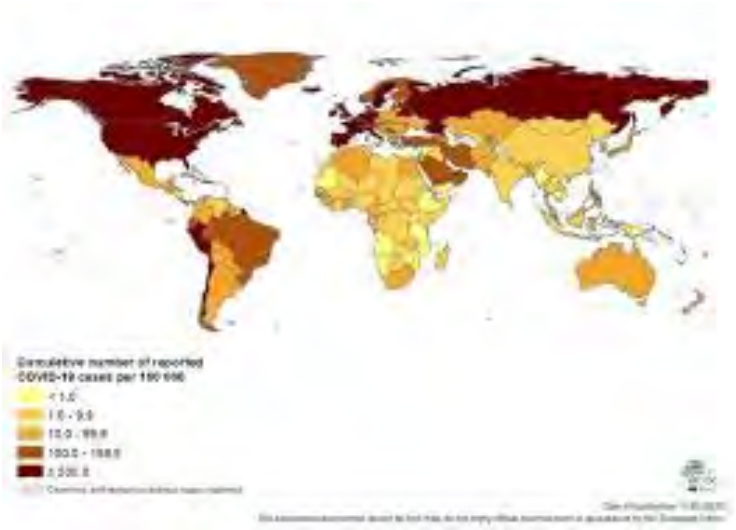
Substantial reductions continue over the last month especially in areas in the SH.





WMO OMM

Covid-19/WMO



- Government economies threatened;
- Aviation income losses;
- Impacts on commercial services;
- Future of private sector?
- Impact on observing systems, soundings, satellite programs;
- Recovery investments as an opportunity? E.g. climate mitigation & adaptation;
- Videomeetings: possibility for more frequent meetings, savings of working time & costs, less jet lags… (WMO no more World Meeting Organization);
- Impacts on WMO strategy? EC, SAP?

WMO OMM

Historical WMO Reforms 2016-

1. Constituent body reform

2. Secretariat alignment & reform

WMO OMM

Official, No. 127.

REPORT

OF THE

INTERNATIONAL METEOROLOGICAL CONFERENCE.

PARIS, 1896.

Published by Authority of the Meteorological Council.

LONDON:
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
BY EYRE AND SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

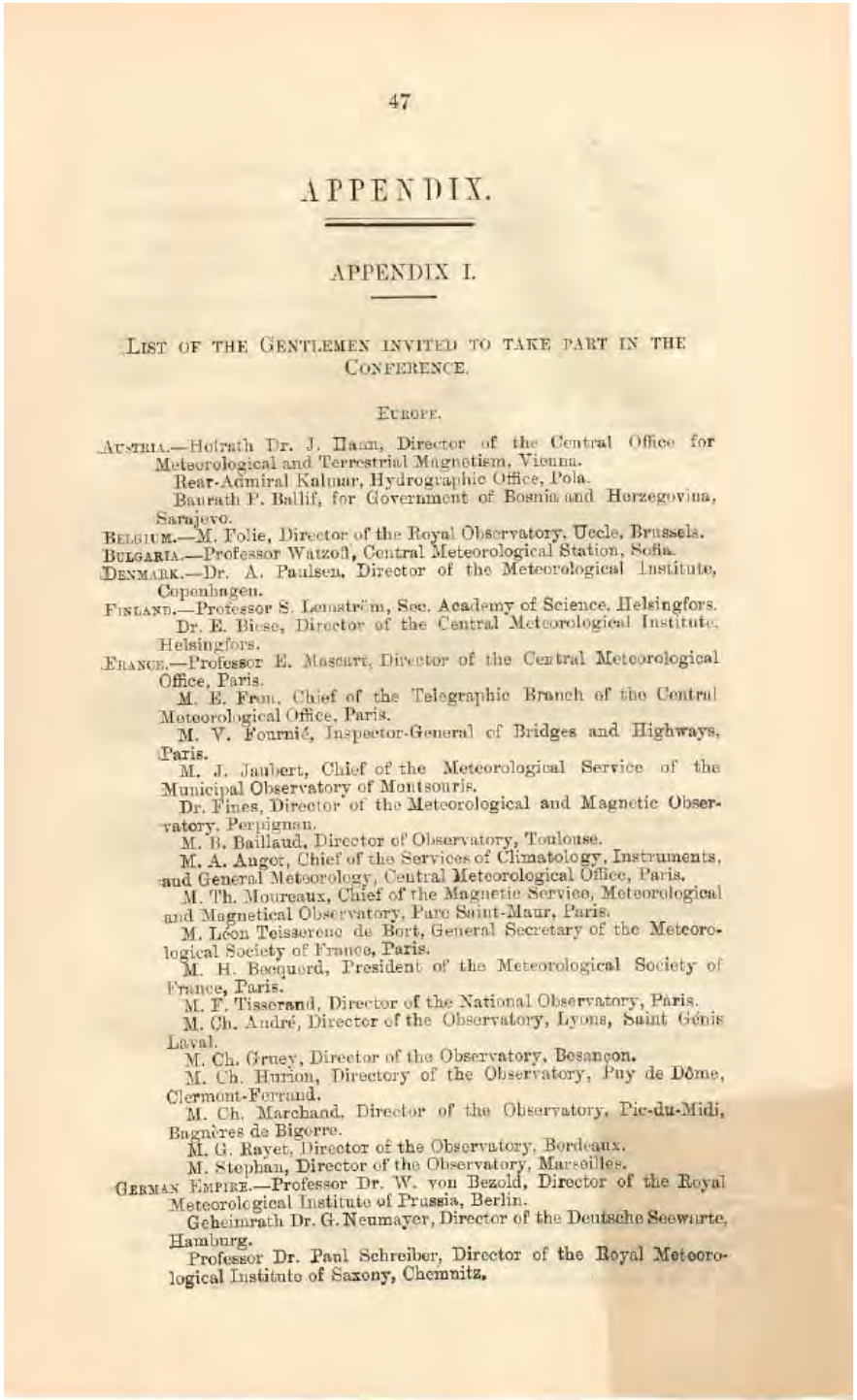
And to be purchased, either directly or through any Bookseller, from
EYRE AND SPOTTISWOODE, East Harding Street, Fleet Street, E.C.; or
JOHN MENZIES & Co., 12, Hanover Street, Edinburgh, and
90, West Nile Street, Glasgow; or
HODGES, FIGGIS, & Co., Limited, 104, Grafton Street, Dublin.

1897.

Price One Shilling.

CONTENTS.

REPORTS OF THE MEETINGS.



47

APPENDIX.

APPENDIX I.

List of the Gentlemen invited to take part in the Conference.

Europe.

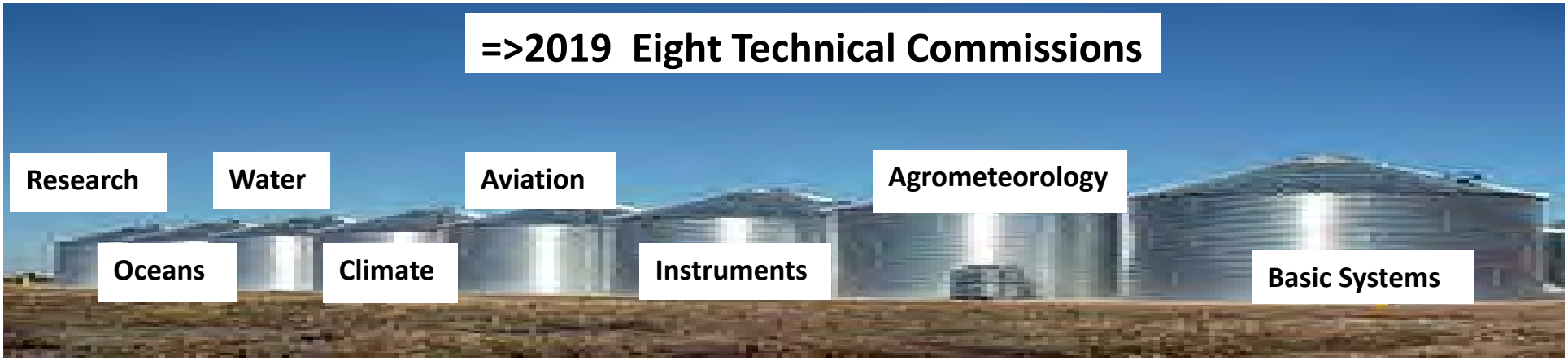
Austria.—Hofrath Dr. J. Hann, Director of the Central Office for Meteorological and Terrestrial Magnetism, Vienna.
Rear-Admiral Kalmar, Hydrographic Office, Pola.
Baurath P. Ballif, for Government of Bosnia and Herzegovina, Sarajevo.
Belgium.—M. Folie, Director of the Royal Observatory, Uccle, Brussels.
Bulgaria.—Professor Watzoff, Central Meteorological Station, Sofia.
Denmark.—Dr. A. Paulsen, Director of the Meteorological Institute, Copenhagen.
Finland.—Professor S. Lemström, Sec. Academy of Science, Helsingfors.
Dr. E. Biese, Director of the Central Meteorological Institute, Helsingfors.
France.—Professor E. Mascart, Director of the Central Meteorological Office, Paris.
M. E. From, Chief of the Telegraphic Branch of the Central Meteorological Office, Paris.
M. V. Fournié, Inspector-General of Bridges and Highways, Paris.
M. J. Jaubert, Chief of the Meteorological Service of the Municipal Observatory of Montsouris.
Dr. Fines, Director of the Meteorological and Magnetic Observatory, Perpignan.
M. B. Baillaud, Director of Observatory, Toulouse.
M. A. Angot, Chief of the Services of Climatology, Instruments, and General Meteorology, Central Meteorological Office, Paris.
M. Th. Moureaux, Chief of the Magnetic Service, Meteorological and Magnetical Observatory, Parc Saint-Maur, Paris.
M. Léon Teisserenc de Bort, General Secretary of the Meteorological Society of France, Paris.
M. H. Becquerel, President of the Meteorological Society of France, Paris.
M. F. Tisserand, Director of the National Observatory, Paris.
M. Ch. André, Director of the Observatory, Lyons, Saint Génis Laval.
M. Ch. Gruey, Director of the Observatory, Besançon.
M. Ch. Hurion, Directory of the Observatory, Puy de Dôme, Clermont-Ferrand.
M. Ch. Marchand, Director of the Observatory, Pic-du-Midi, Bagnères de Bigorre.
M. G. Rayet, Director of the Observatory, Bordeaux.
M. Stephan, Director of the Observatory, Marseilles.
German Empire.—Professor Dr. W. von Bezold, Director of the Royal Meteorological Institute of Prussia, Berlin.
Geheimrath Dr. G. Neumayer, Director of the Deutsche Seewarte, Hamburg.
Professor Dr. Paul Schreiber, Director of the Royal Meteorological Institute of Saxony, Chemnitz.

87 Invited, 43 Attended

RA I	4	0
RA II	7	0
RA III	3	0
RA IV	10	4
RA V	7	2
RA VI	56	37

WMO OMM

From silos to holistic approach

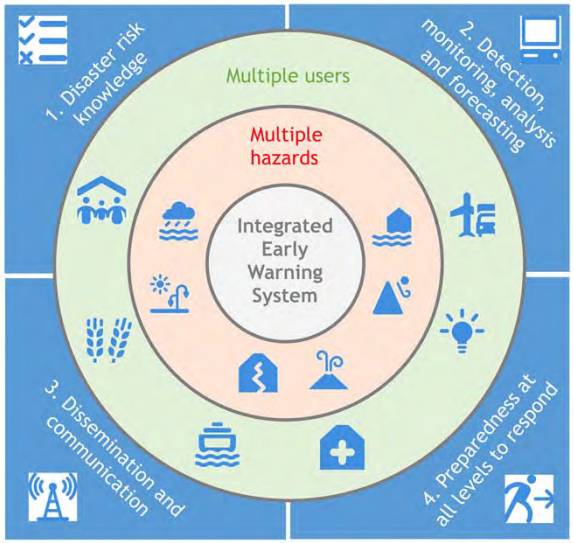


Integration of weather, climate, water & ocean

Infrastructure Commission

Joint meetings

Services Commission



WMO

Infrastructure reform

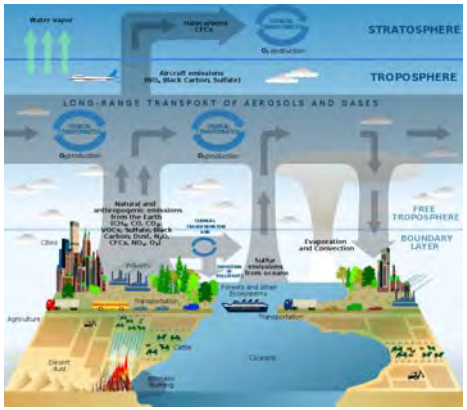
- Infrastructure Commission formed
  - End-to-end value chain from measurement to products.
  - Cross-cutting domains – weather, climate, oceans, hydrology, cryosphere.

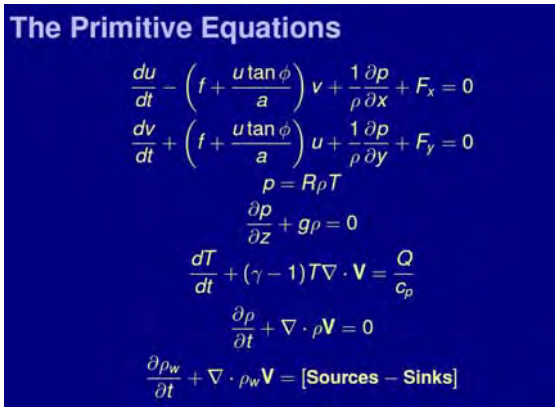
  - Management Group membership agreed and first meeting already took place.
  - Full membership of subsidiary structures to be agreed by end May.
- Infrastructure Department created 1 January to support the Commission
  - Consolidation of functions along the value chain and strong expertise across domains.

Engagement of science community

1. Scientific Advisory Panel

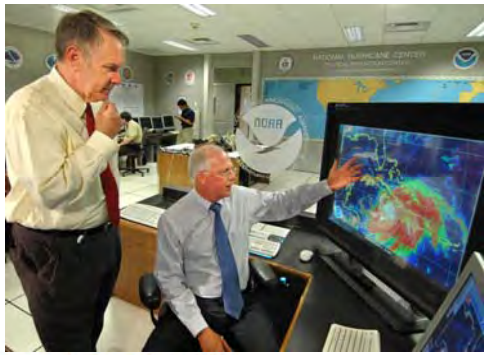
- Major strategic think-tank, world leading experts.
- How world is changing & how WMO should take changes into account in its strategic planning?





2. Research Board

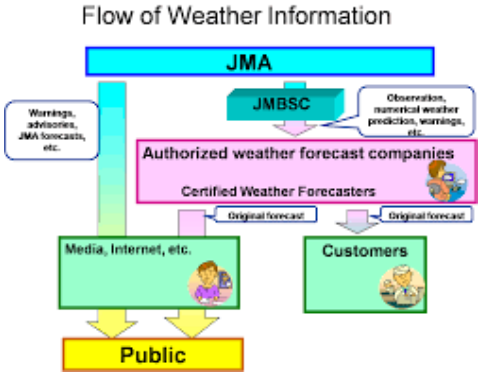
- Science to services.
- New innovative services & sharing of know-how.



Engagement of private sector

1. Observation & related IT infrastructures

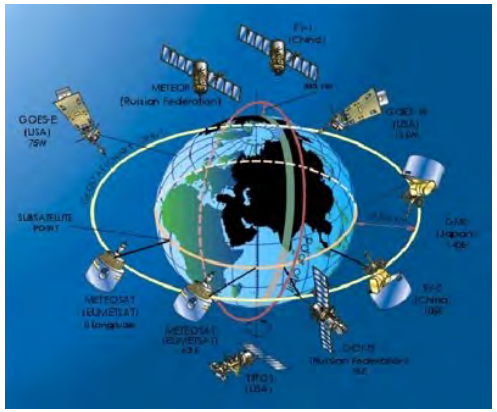
2. Service provision



Public-private partnership

- National co-operation
- Code of conduct
- Public sector sustainability

3. Future of observing systems & data policies



WMO OMM

AMS 100 activities (Keynote of WMO Strategy, meeting with PR of USA, IBM Weather Company and HMEI President, etc. Jan. 2020)

WMO OMM

Secretariat reform

- Alignment of the structures with the new constituent bodies

  - New departments established, and D posts announced for applicants in 2019, professional staff placed in the new departments;
  - Breaking of silos, holistic Earth System approach (weather-climate-water-oceans-cryosphere) in observations & services;
  - Support for multi-hazard early warning services (heat waves, drought, flooding, storms, tsunamis, earthquakes, forest fires etc.);
  - Enhanced coherence between Regional and Technical activities;
  - Engagement of private sector service & infrastructure providers in WMO;
  - Wider input of science community, support for national science-NMHSs co-operation & centres for excellence.

WMO OMM

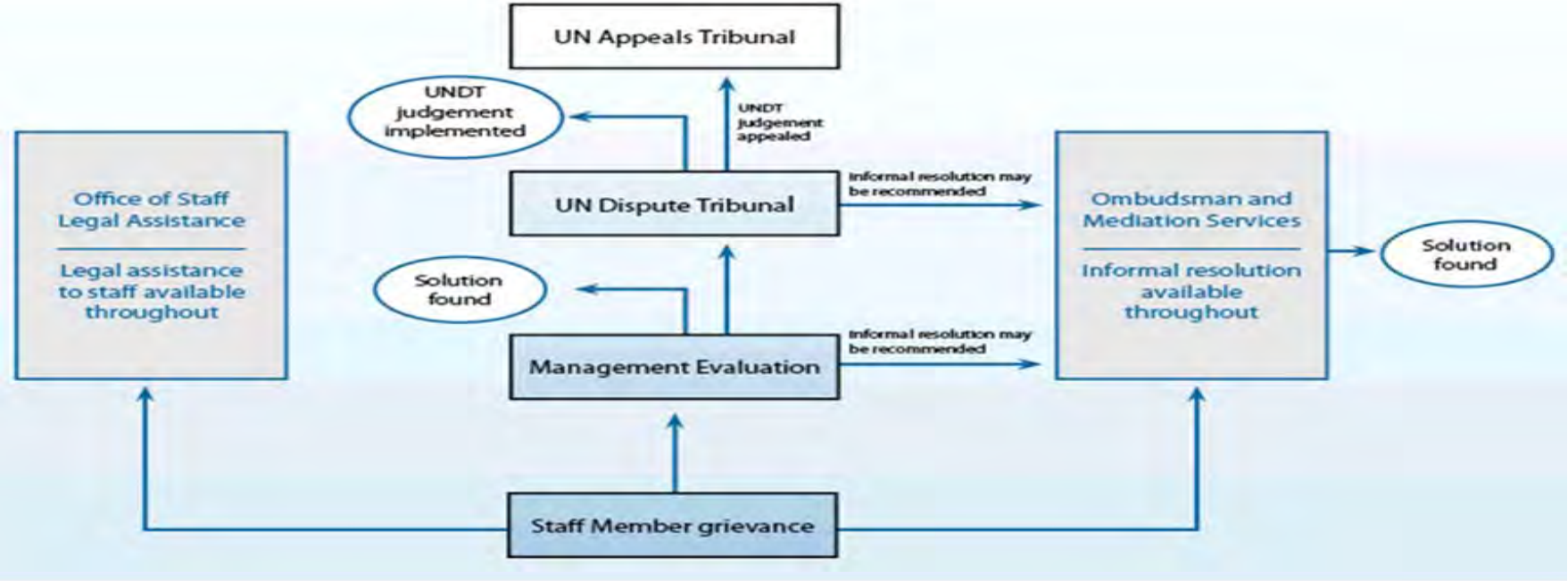
Secretariat reform

- Congress- 18 decision: savings in the Secretariat administrative work & additional resources for serving the Members

  - New large governance services department;
  - New P3 level administrative coordinators at each department;
  - Development of centralised & specialized administrative service platforms;
  - Utilization of modern means for streamlining of administrative work;
  - Review of all duties, 11 general staff terminations, 11 general staff opting out, reduction of ~6+ professional staff;
  - Reallocation of resources: strengthening of regional activities & technical expertise.

WMO OMM

WMO-United Nations Agreements



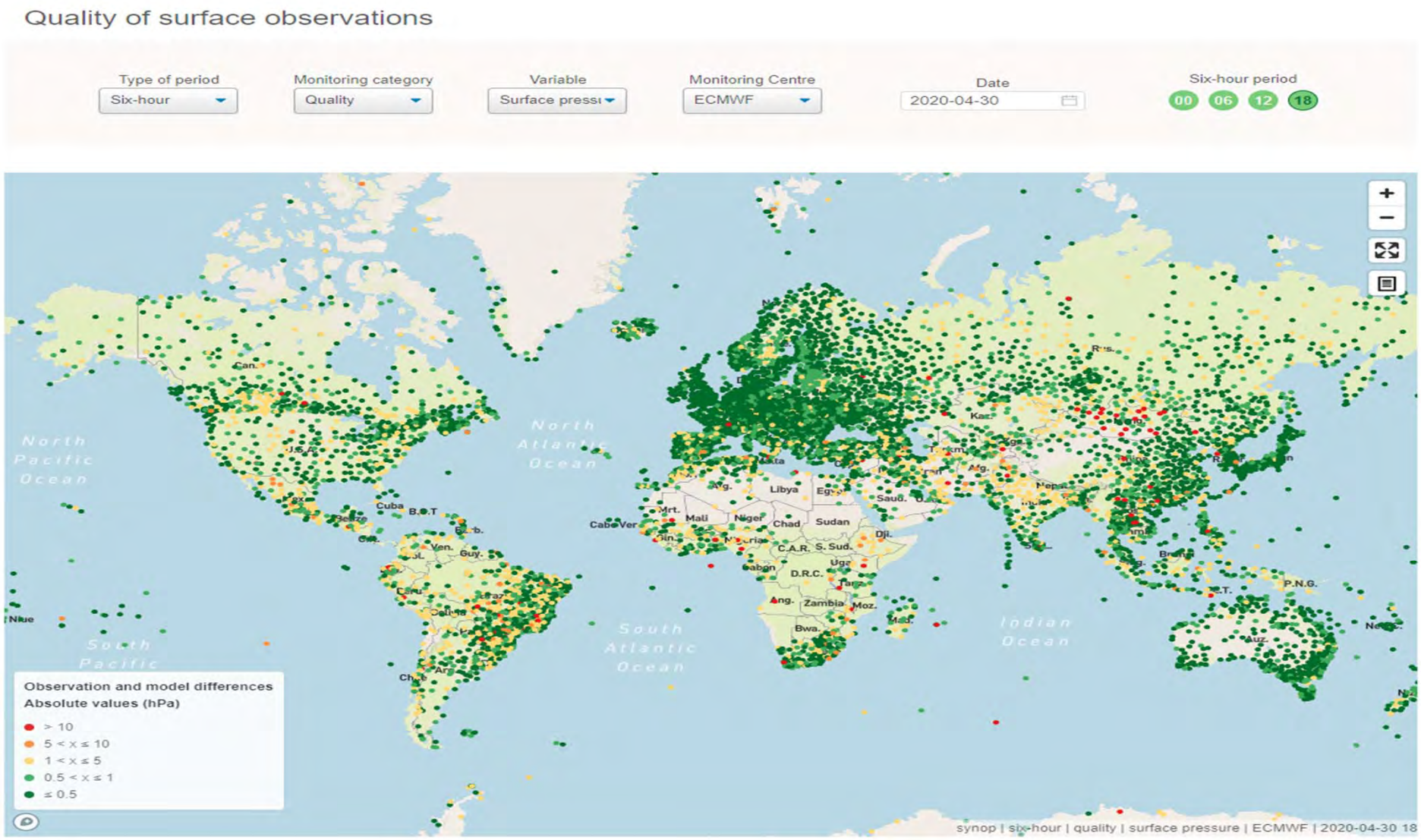
- Extension of the Jurisdiction of the UNDT and the UNAT to the WMO, signed on 20 January 2020;
- Provision of Services to the WMO by the Office of the United Nations Ombudsman and Mediation Services (UNOMS), signed on 27 January 2020;
- Provision of Services to the WMO by the United Nations Office of Staff Legal Assistance (OSLA), signed on 27 January 2020.

WMO OMM

Covid teleworking experiences

- The work at the Secretariat has proceeded surprisingly well. Videoconferences have proven to be a powerful way to work. Savings of working time & travel costs.
- Several WMO meetings as highly successful videoconferences
  - Savings of working time & travel costs;
  - Even interpretation possible;
  - Allows more frequent meetings;
  - Also physical meetings needed.
- Secretariat work, only ~20 staff physically present
  - Weekly successful Board of Directors;
  - Regular departmental meetings;
  - Staff & management teleworking experiences;
  - Future use of office space: partial teleworking & common offices.
- A survey among staff & directors => new practices

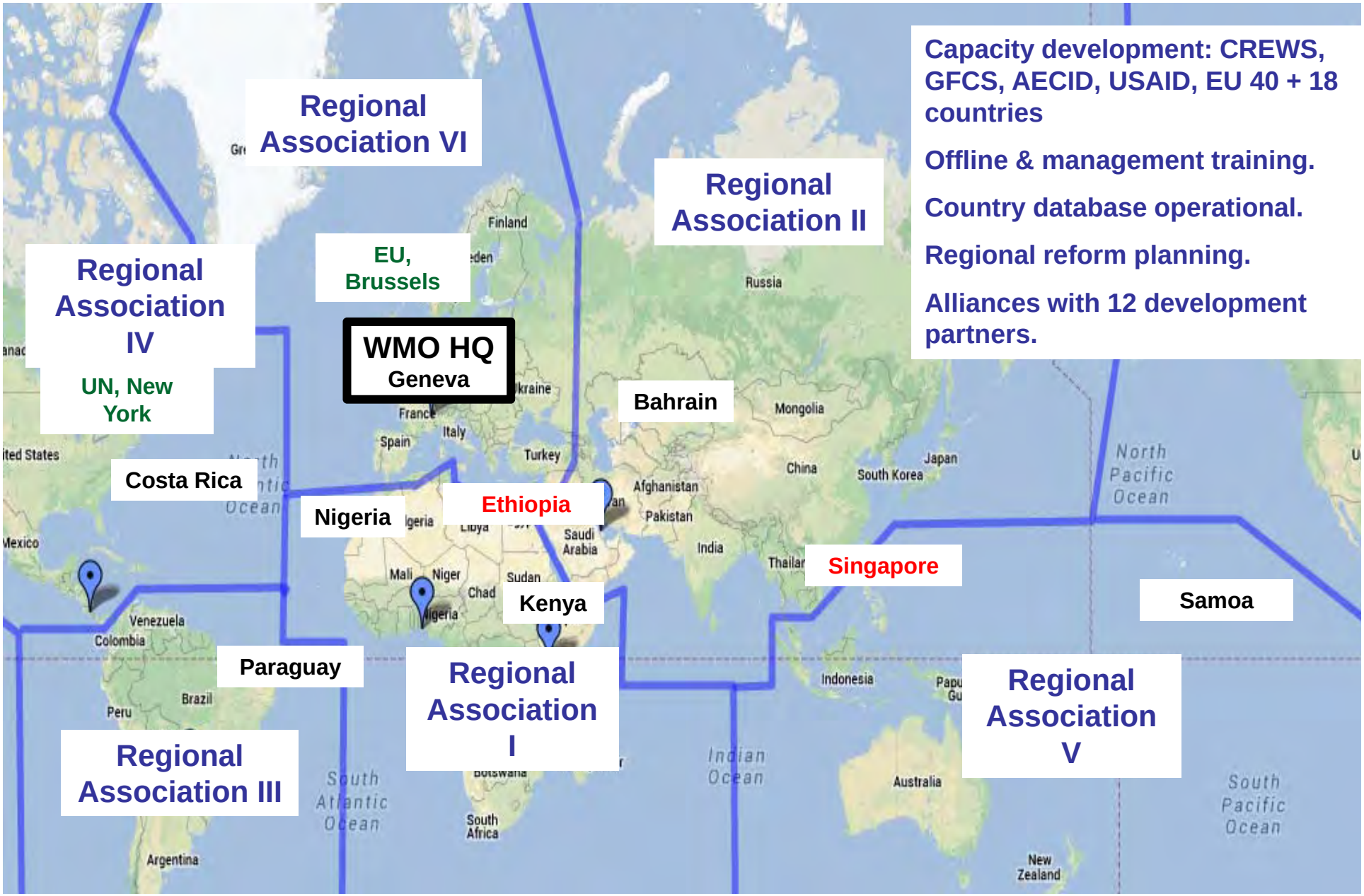
Data Quality Monitoring System, WDQMS



WMO OMM

WMO Regional Structure

Regional office **New 2018-19** **Liaison offices**



Regional State of the Climate Reports

- ✓ **Africa** planned to be finalized by the end of the month.
- ✓ Seeking opportunity to organize launch with the participation of the highest structures and key players in the continent (at the level of heads of African Union Commission, Economic Commission of Africa, African Development Bank, Regional Economic Communities and a few NHMSs (probably the President and Vice-President of RA I, WMO Vice-President or even EC Members).
- ✓ **South America** – in preparation.
- ✓ **Asia** under discussion with UNESCAP and other partners.

Education and Training

- ✓ Training schedules are disrupted, and a number of group training activities have been cancelled, which is affecting potential fellows in the order of 60, so far in Africa, Asia and West Pacific.
- ✓ Looking with Regional Training Centers and collaborating partners on delivery distance learning. Looking into how to assists some institutions to deal with the situation.
- ✓ Capacity Development Panel has been constituted and will meet virtually prior to EC.

Regional Association Business

- Joint session of the **Regional Association III** (South America) and the **Regional Association IV** (North America, Central America and the Caribbean) planned for Oct-Nov subject to COVID-19 situation in the regions.
- **RA I MG** virtual meeting 25-27 May to consider RA structures in consideration of INFCOM and SERCOM Structures.
- Virtual Discussion Series for **RA II** Management Group:
    - Series I (23 Apr): Review of TCs membership and JS-TC-1 documents - 5 PRs (UAE, Viet Nam, India, Iran and Japan), 2 DA (China and Rep. of Korea);
    - Series II (Jun-tentative): Working Group structure and new concept of RA sessions.
- Establishment of **Regional WIGOS Centres** in RAs **II** and **V:**
    - ✓RA II: Preparation of Progress Report on the Pilot Phase - China and Japan are transferring the pilot mode phase I to phase II, towards the operational phase;
    - ✓RA V: Preparation of proposals of candidate Members for a pilot phase (Australia, Fiji, Indonesia and Singapore).
- WMO joined the United Nations **Asia-Pacific Regional Coordination Mechanism** (UNAPRCM) as the 36th member of UN Agencies to enhance the inter-UN Agencies cooperation on Disaster Risk Reduction and Resilience in Asia-Pacific.
- Virtual **RA V PICOF-6** (21 April): 50 participants from NMHSs in the PICs and int./regional organizations and institutions.

WMO OMM

Strengthening of Regional Business

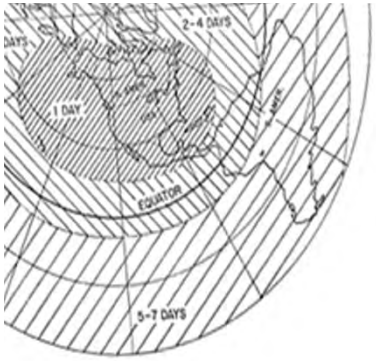
- Addition of P3 to RAM Office in Asunción and RAF Office in Abuja;
- CPDB Coordinator under recruitment to support Regional Offices engage Members to keep CPDB updated;
- P5 Technical Support Coordination under recruitment to support the Technical Integration Bridge between Regional Offices and the Technical Departments and work of RAs and TCs– in ELIOS for approval;
- Head of Office RAP Singapore advertised;
- New projects under development for CREWS and other mechanisms.

HydroMet ALLIANCE: Capacity **Gap Report** under development;

CSI: **Country Hydromet Diagnostics tool** on track;

SOFF WGs established and commencing to meet virtually.

WMO OMM



Systematic Observations Funding Facility

Overview of working groups' deliverables and timeline

WG#	DELIVERABLES	APR 6	13	20	27	MAY 4	11	18	25	JUN 1	8	15	22	29	JUL 6	13	20	27	AUG 3	10	17	24	31	SEP 7	14	21	28
1	GBON scientific value																										
	GBON socio-economic value																										
	GBON country value (case studies 5-6 Alliance members)																										
2	GBON global gap analysis																										
	GBON gap analysis country case studies (5-6 Alliance members)																										
3	Mapping Alliance members GBON funding																										
	Analysis of existing financing mechanisms																										
	SOFF design options																										
	Funding opportunities																										
4	Develop three insurance sector use cases																										
	Insurance sector stakeholder engagement																										
	Options for involvement of insurance sector in SOFF																										
5	Advocacy and communication plan																										
	Knowledge products																										
	Communication products																										
	Meetings of all working groups leads																										

WMO OMM

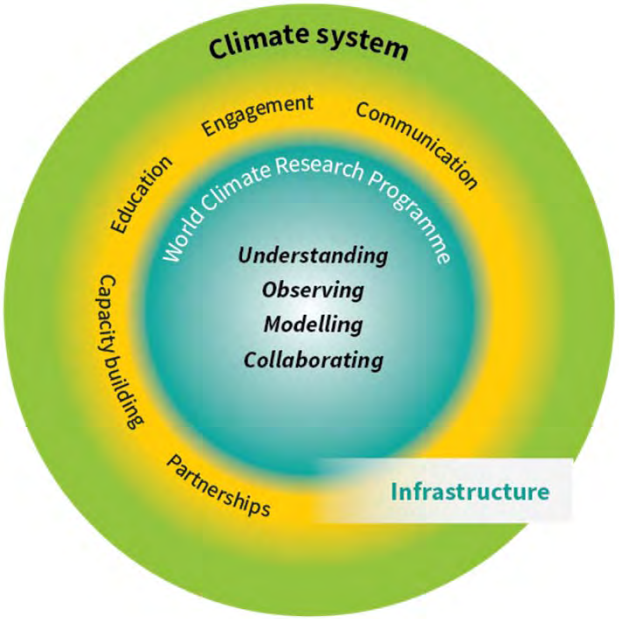
SOFF Workshop & Achievements

- **A two-days workshop on Systematic Observation Financial Facility (SOFF) was organized Feb. 25-26 2020 at DWD HQ (Offenbach);**
- **GBON and SOFF recognized as imperative, strong WMO Members ownership:** full participation of WMO President, PRA 1/3/6;
- **Full support of Alliance members:** SOFF creation one of the Alliance commitments; 11 members participated;
- **Commitments beyond Alliance**, in total 21 external partners joined;
- **Commitment to move fast to create the SOFF:** Agreement to establish multi-partner working groups to develop the SOFF, steady progress;
- **Clear demand for a scaled-up WMO role:** Development and climate finance partners fully committed in using SOFF, Alliance and Country Support Initiative (CSI).

WMO OMM

Science and Innovation

WCRP



WWRP

20 FORECAST DEMONSTRATION PROJECTS

+100 M$ REGIONAL DEVELOPMENT & INNOVATION PROJECTS

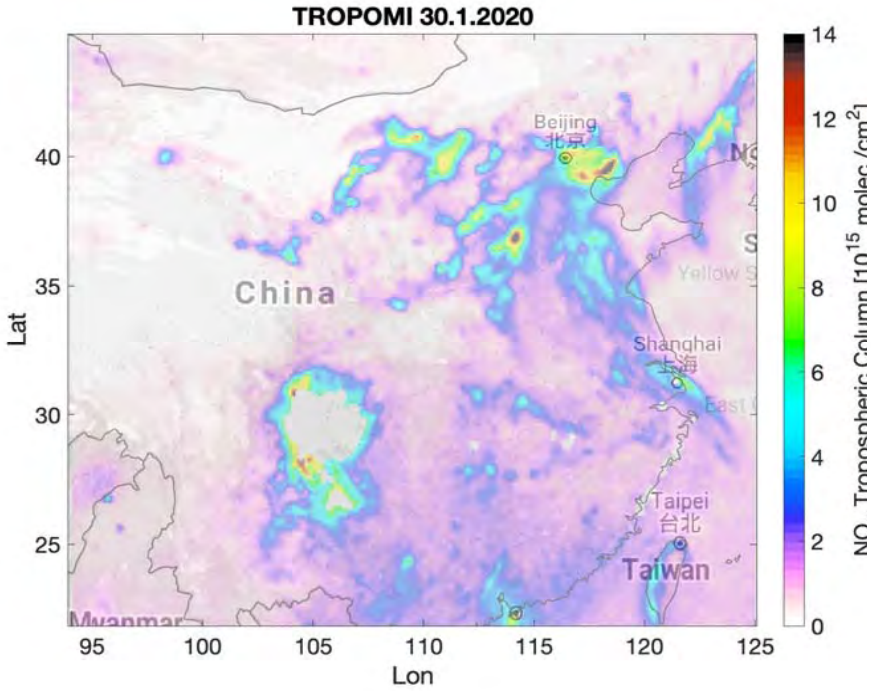
+50 REGIONAL SCIENCE AND TECH TRANINGS

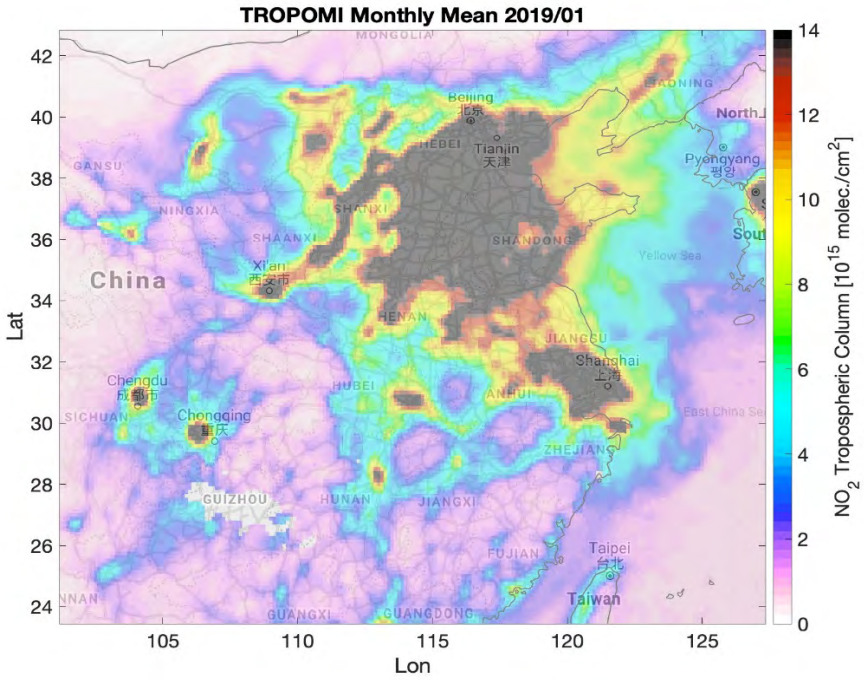
GAW

WMO OMM

Impact of corona outbreak on NO_2

China air quality in 30.1.2020 compared to January mean 2019

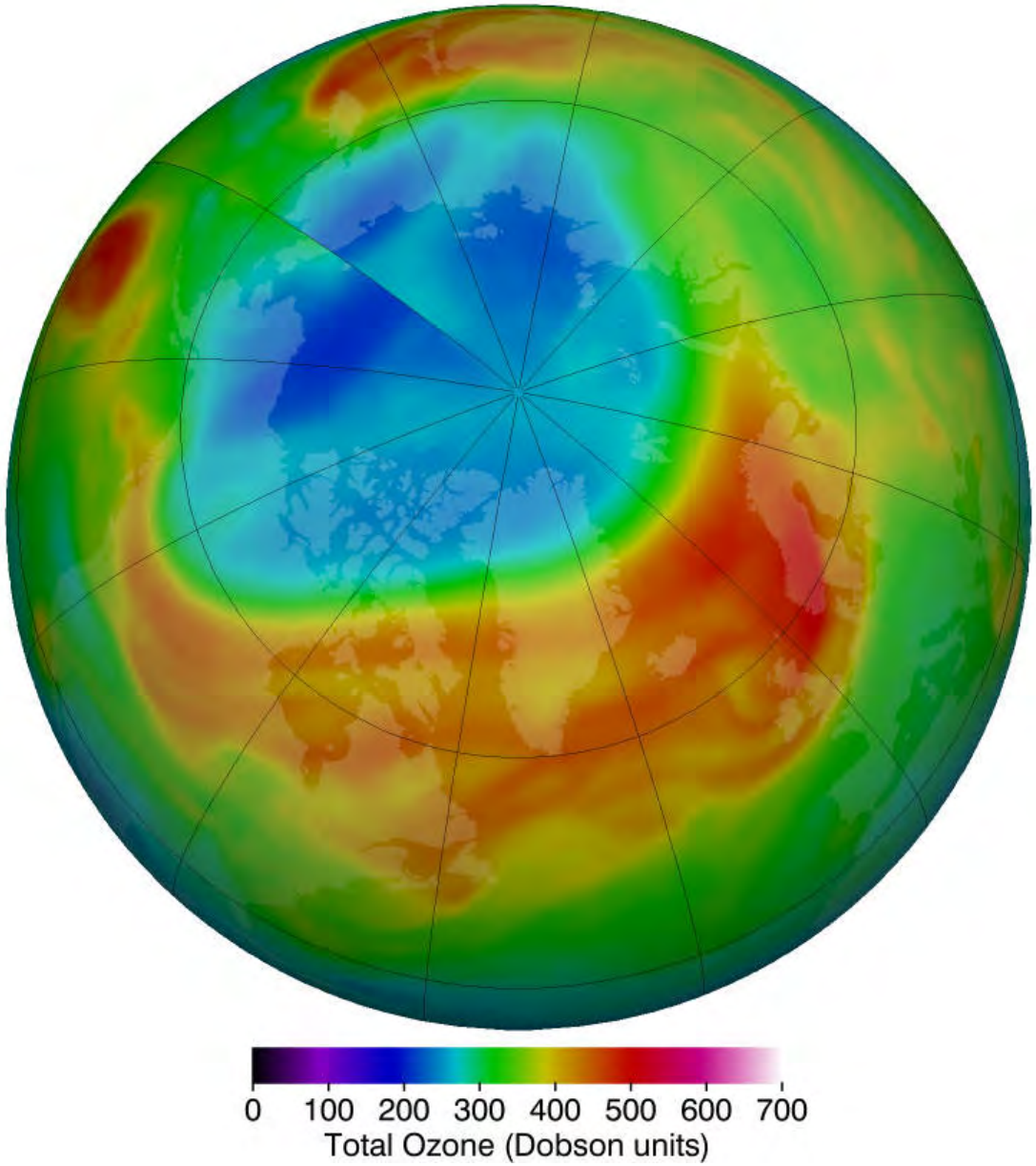




© A-M Sundström, FMI
Based on data from Sentinel 5P

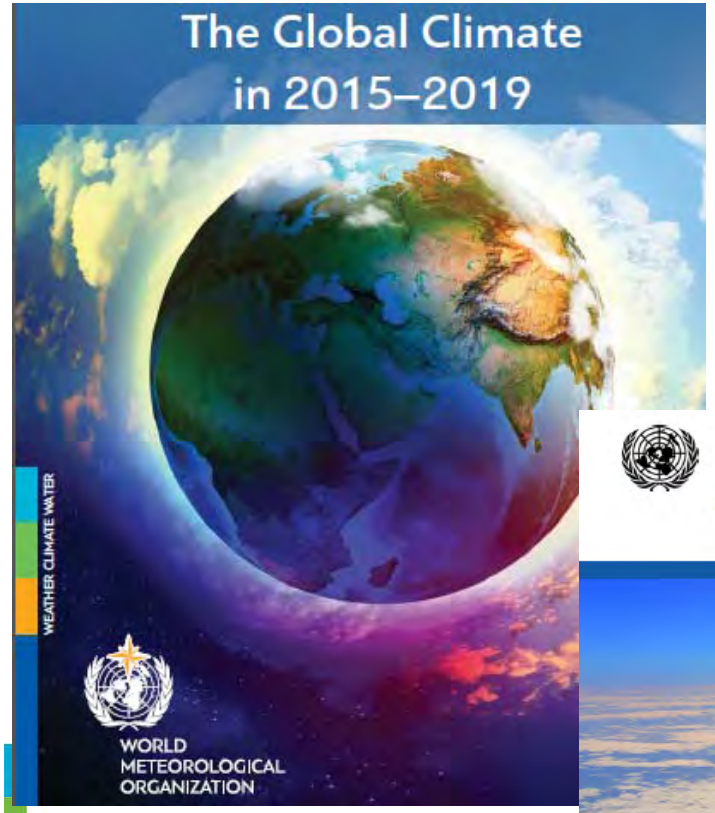
WMO OMM

Record Arctic ozone hole March 2020



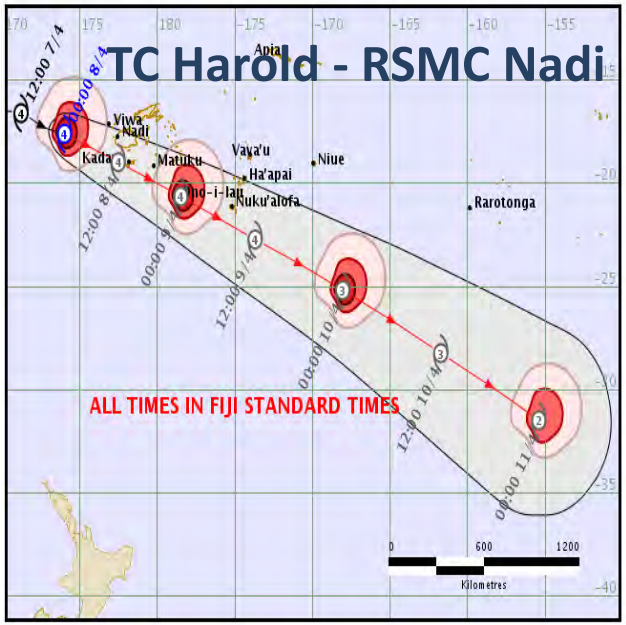
WMO OMM

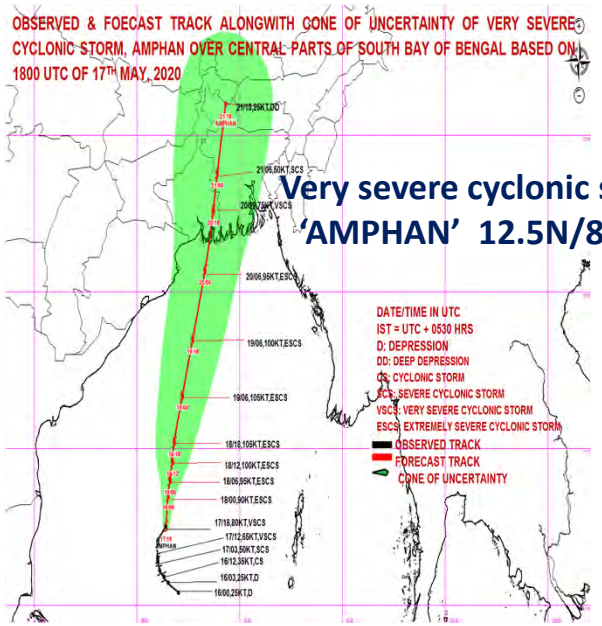
Climate reports



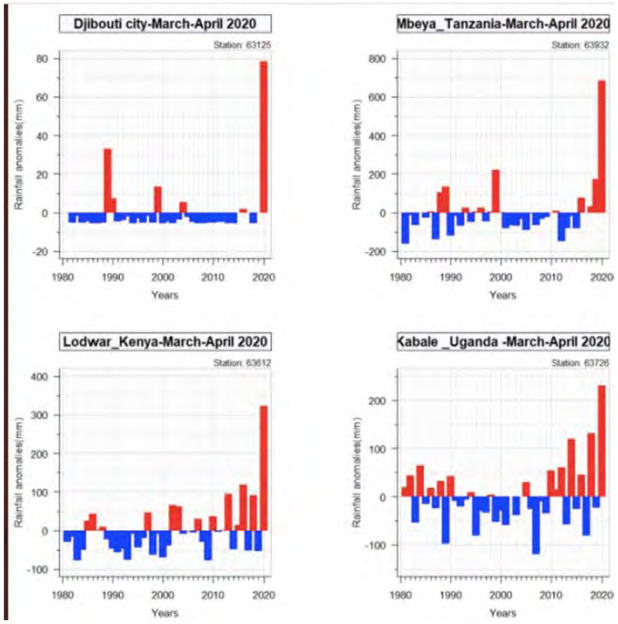
WMO OMM

Extreme events besides the COVID-19 era





Very severe cyclonic storm 'AMPHAN' 12.5N/86.4E

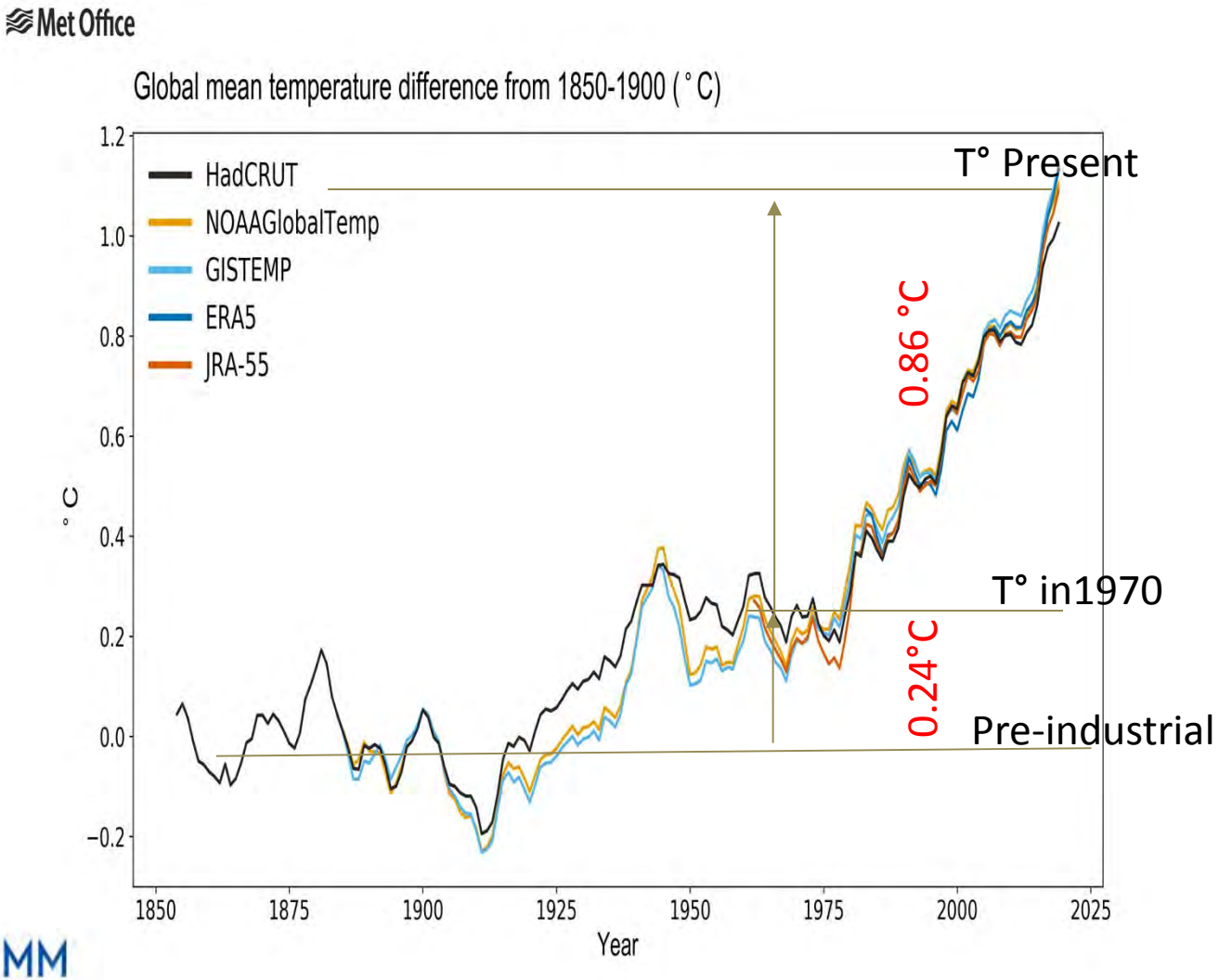


Flooding & locust crisis in E Africa

WMO OMM

2015-2019 warmest 5 year period +1.1°C above pre-industrial level

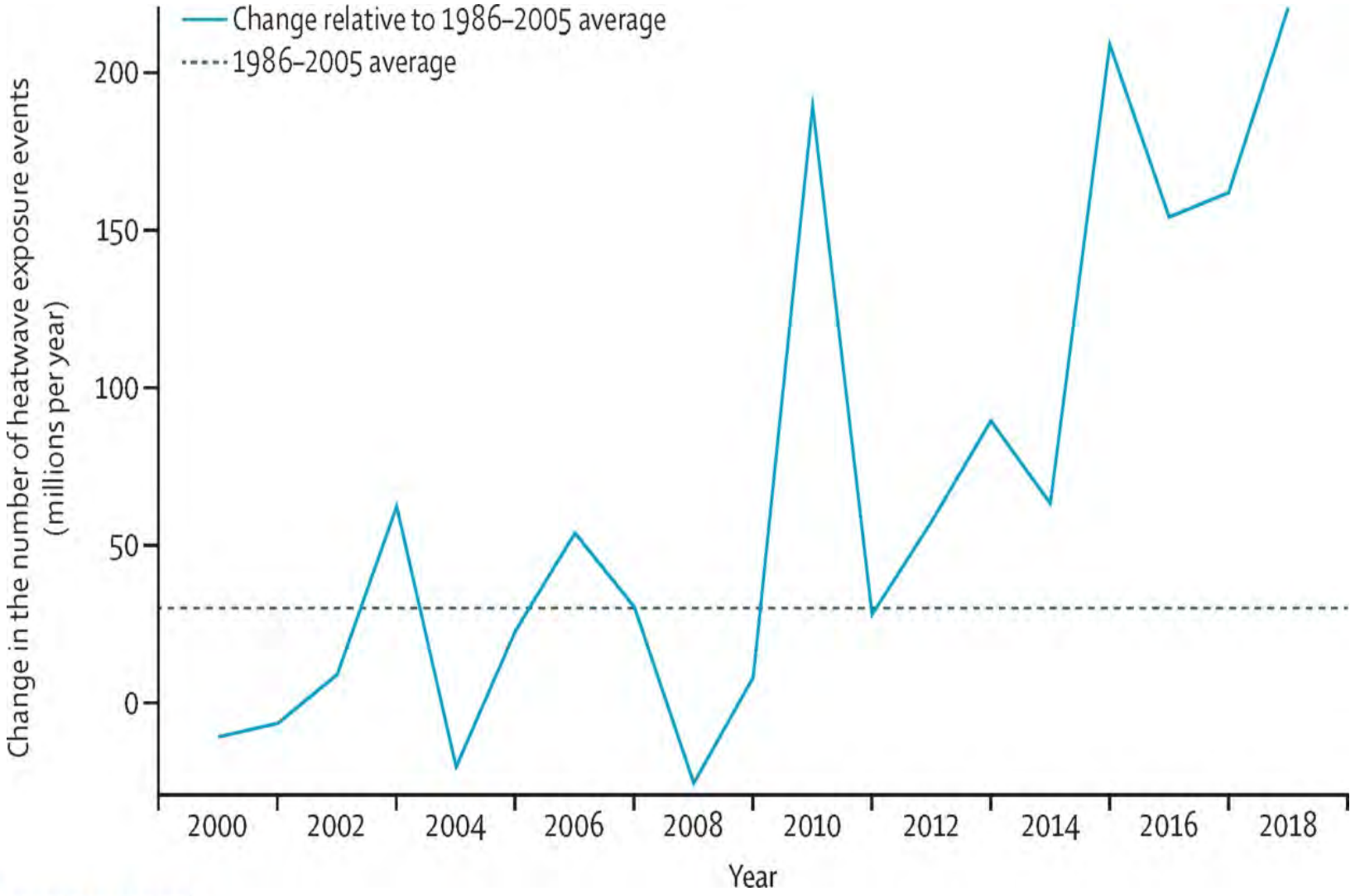
Each 5 year period is warmer than the previous one



WMO OMM

Heat wave exposure events have increased

Nearly 200 million above 1986-2005 average



WMO OMM

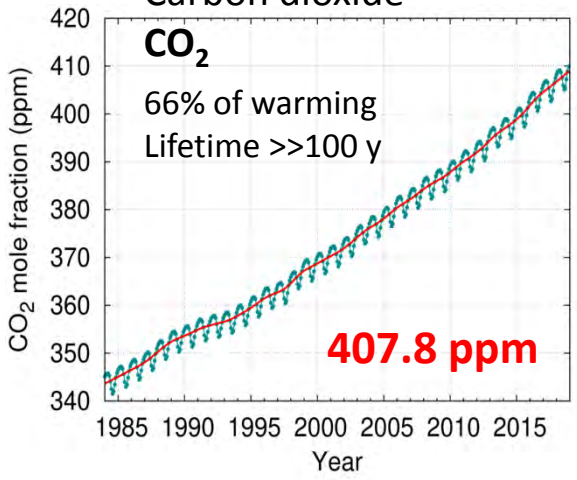
Greenhouse gases: new records

Carbon dioxide

CO_2

66% of warming

Lifetime >>100 y

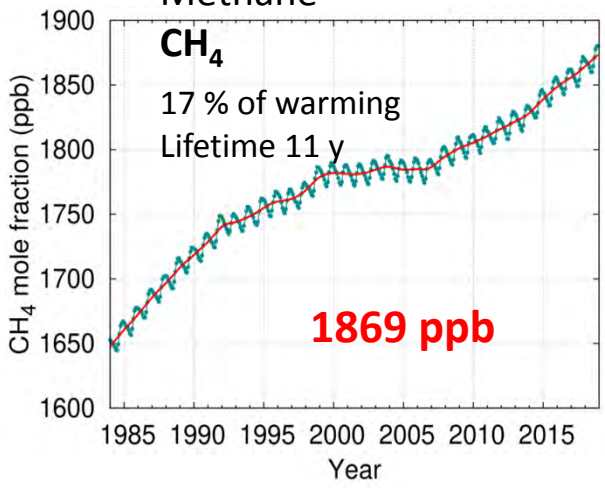


Methane

CH_4

17 % of warming

Lifetime 11 y

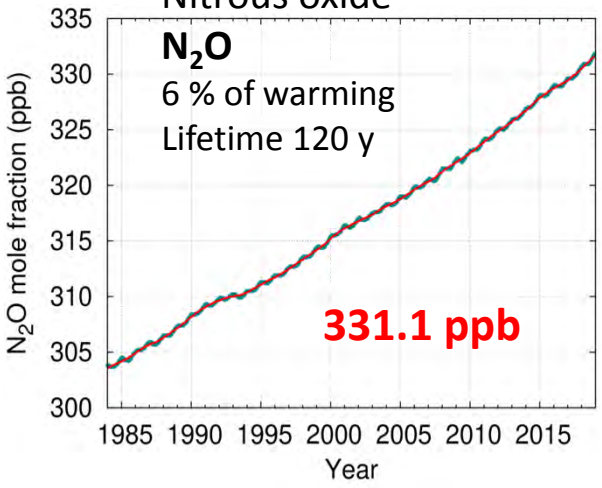


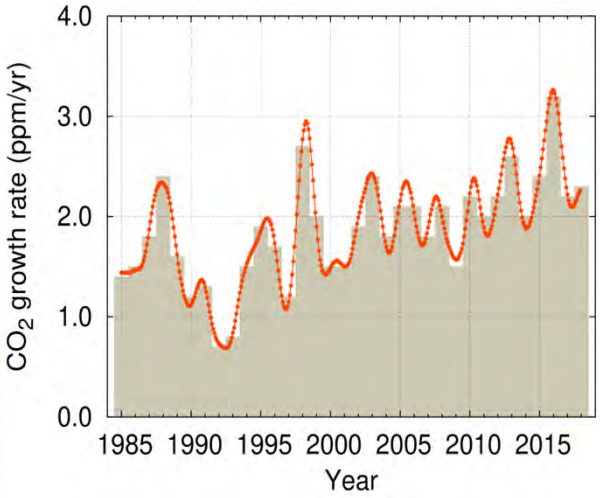
Nitrous oxide

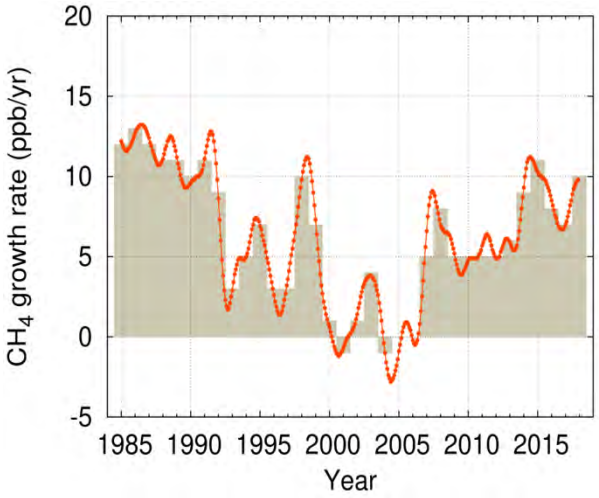
N_2O

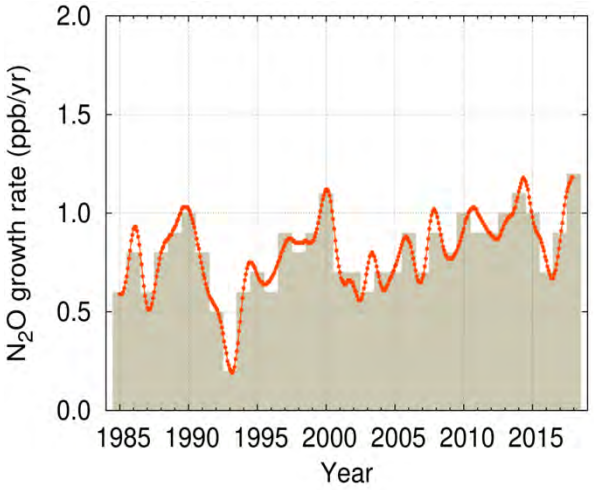
6 % of warming

Lifetime 120 y









WMO OMM

Real Time CO_2 Concentration Trends

Mauna Loa CO_2 concentrations continue to rise in 2020

March 2019 : 411.97 ppm
March 2020 : 414.50 ppm

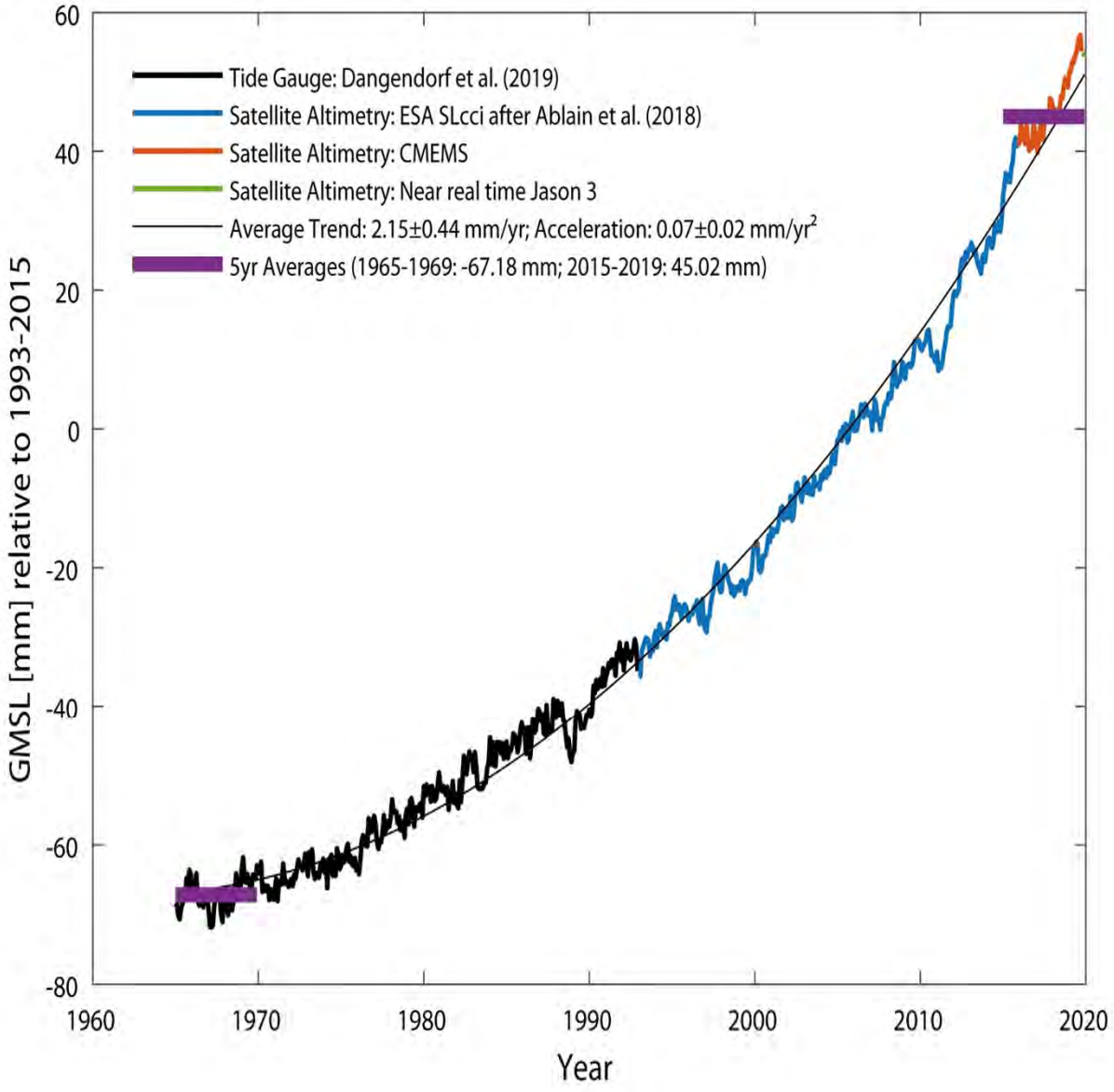
March 1970 : 326.87 ppm

WMO OMM

Sea level

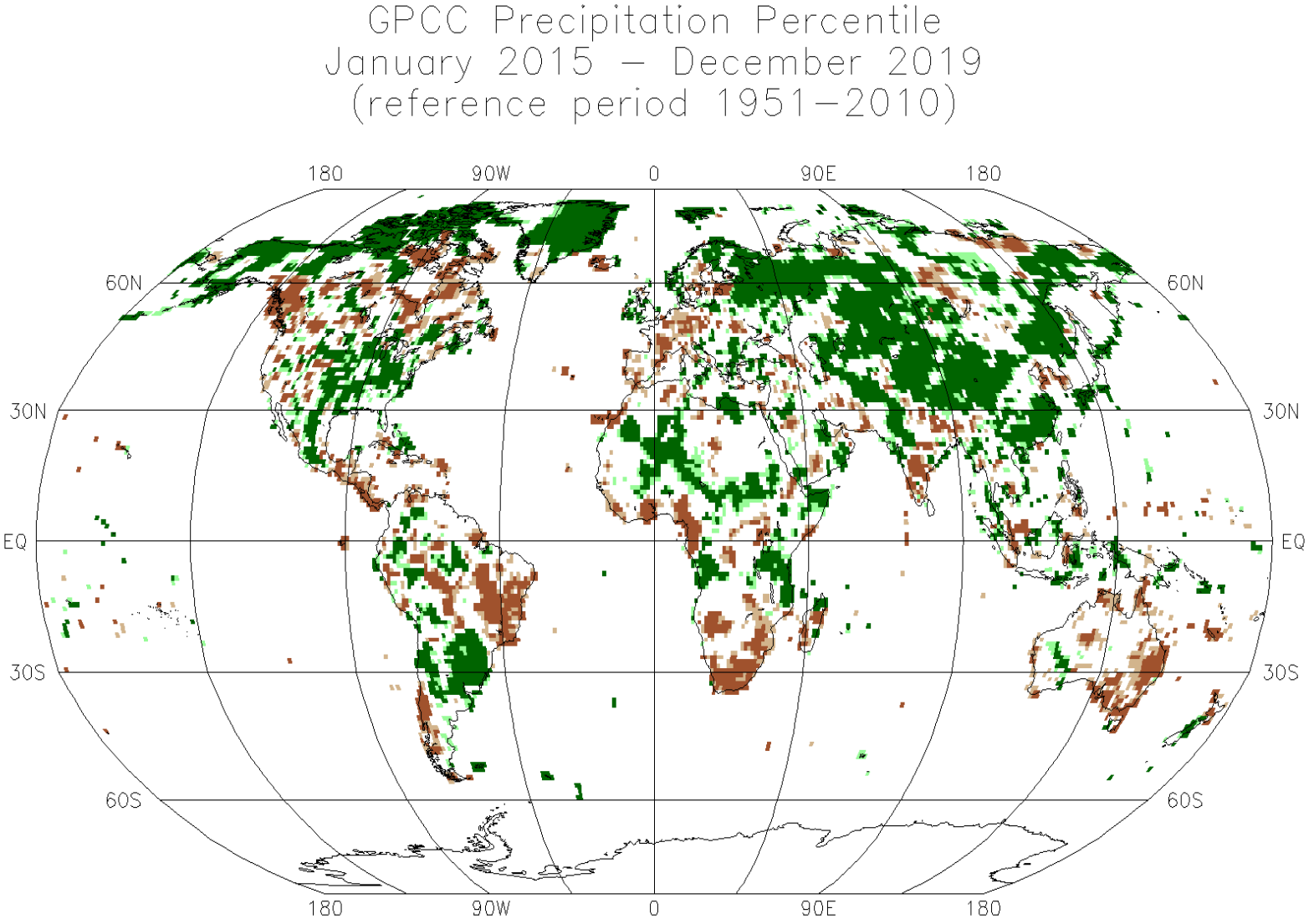
Parabolic shape depicts an acceleration of sea-level rise since 1970's.

Sea levels have risen by 112 mm since the 1970's.



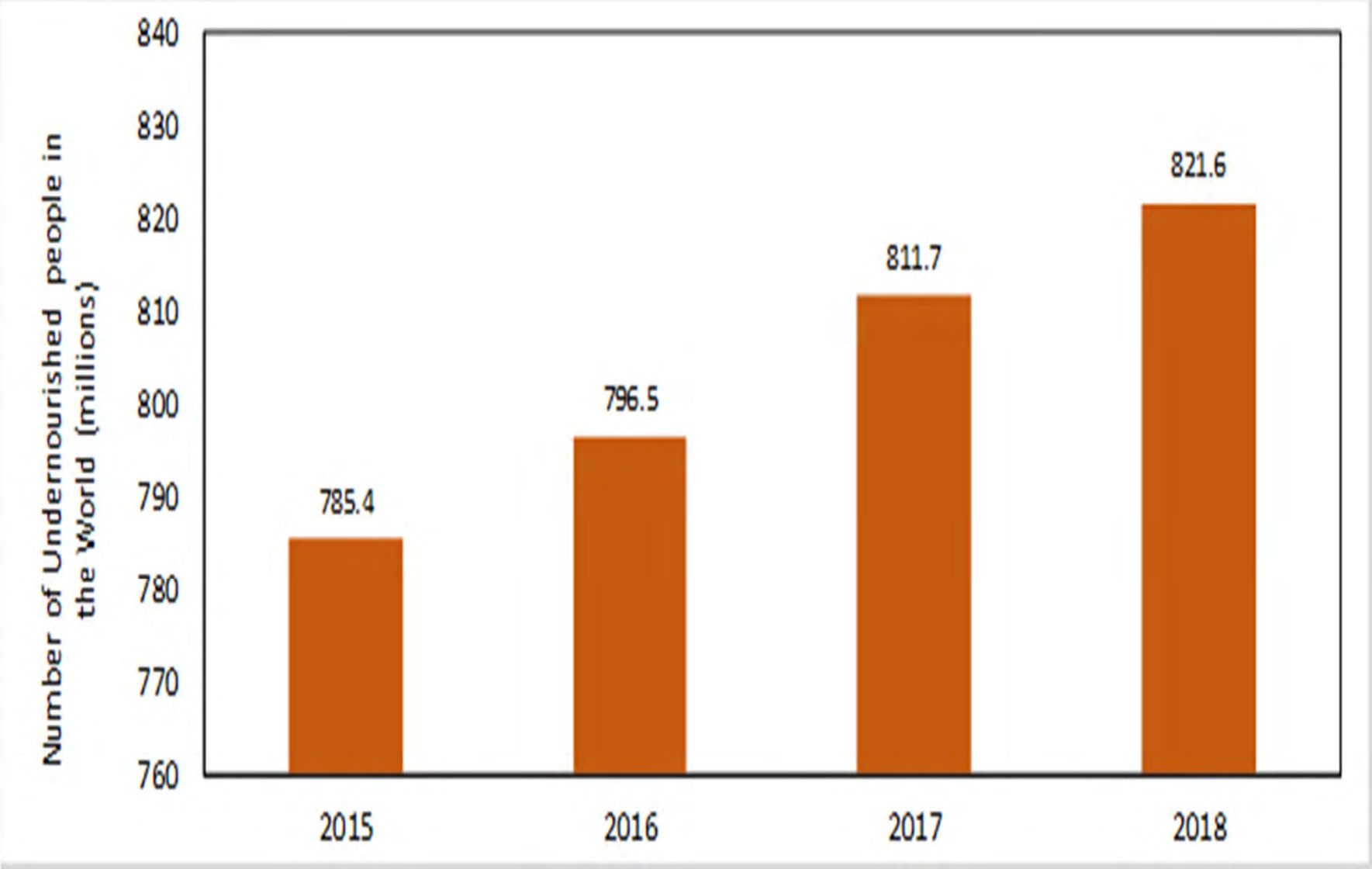
WMO OMM

Global precipitation extremes 2015-2019



WMO OMM

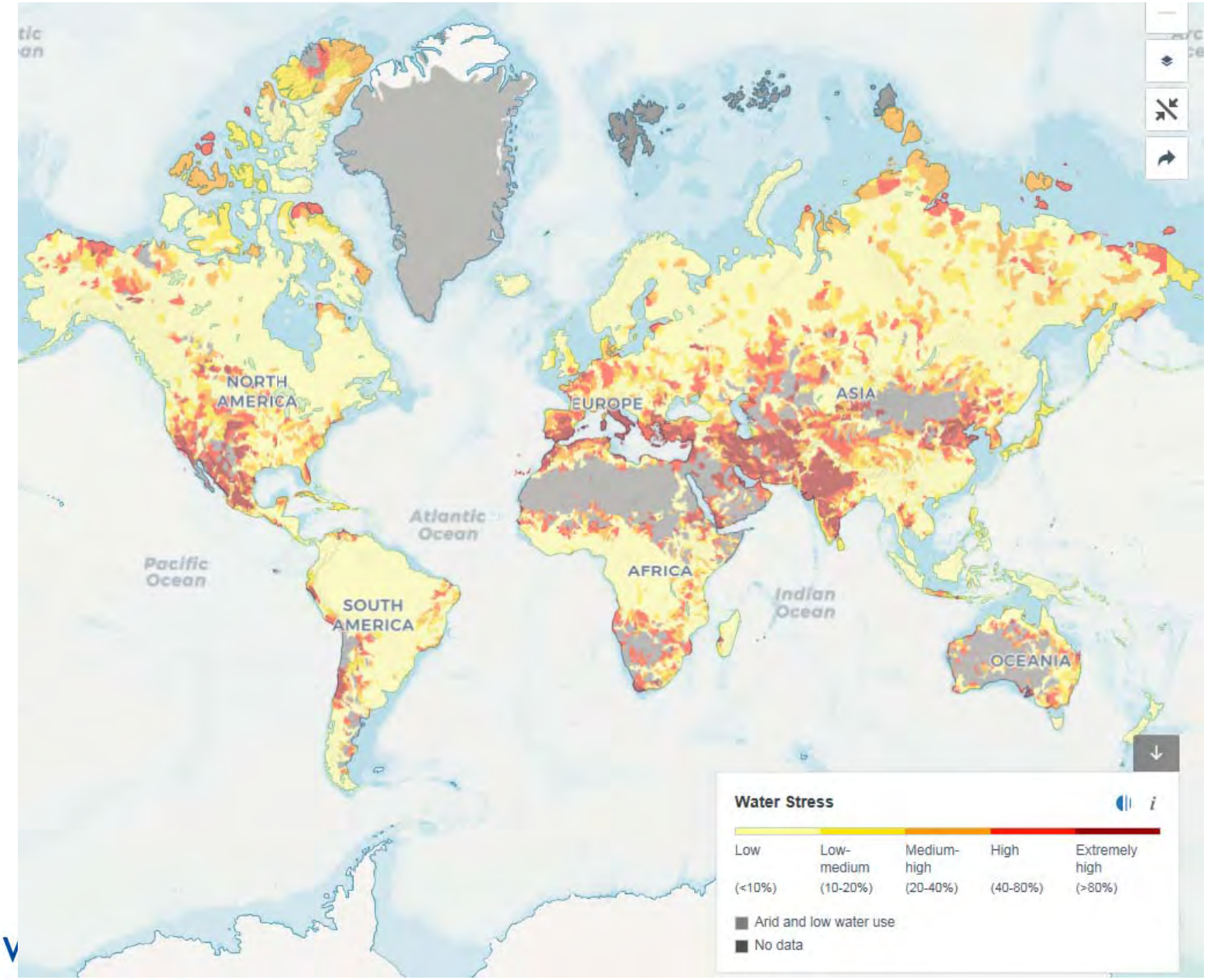
Rise in food insecurity & global hunger due to drought



WMO OMM

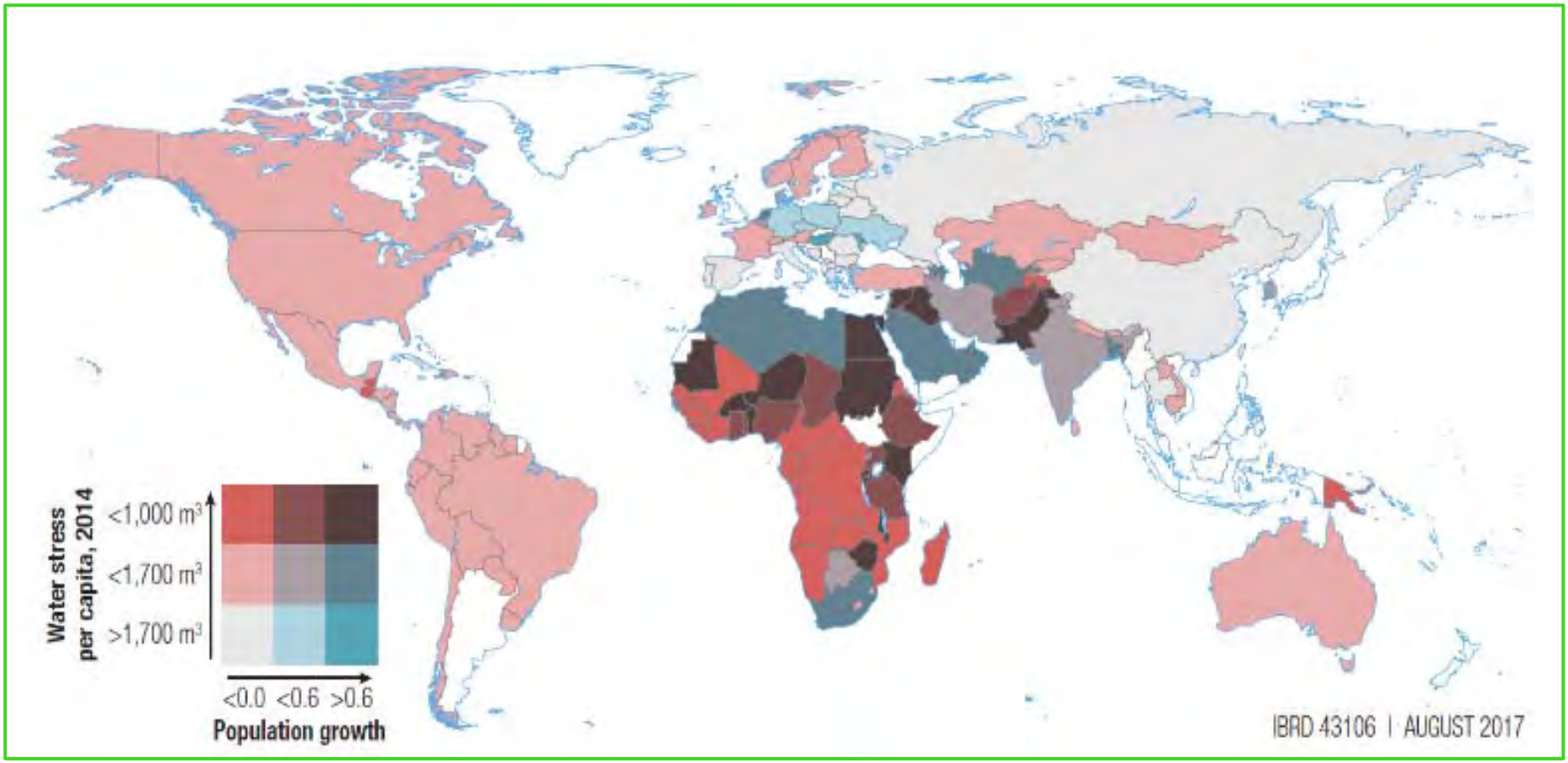
Number of undernourished people in the world, 2015-2018 (FAO, IFAD, UNICEF and WHO, 2019)

Water stress is a global challenge



Source WRI

Water availability & population growth 2050

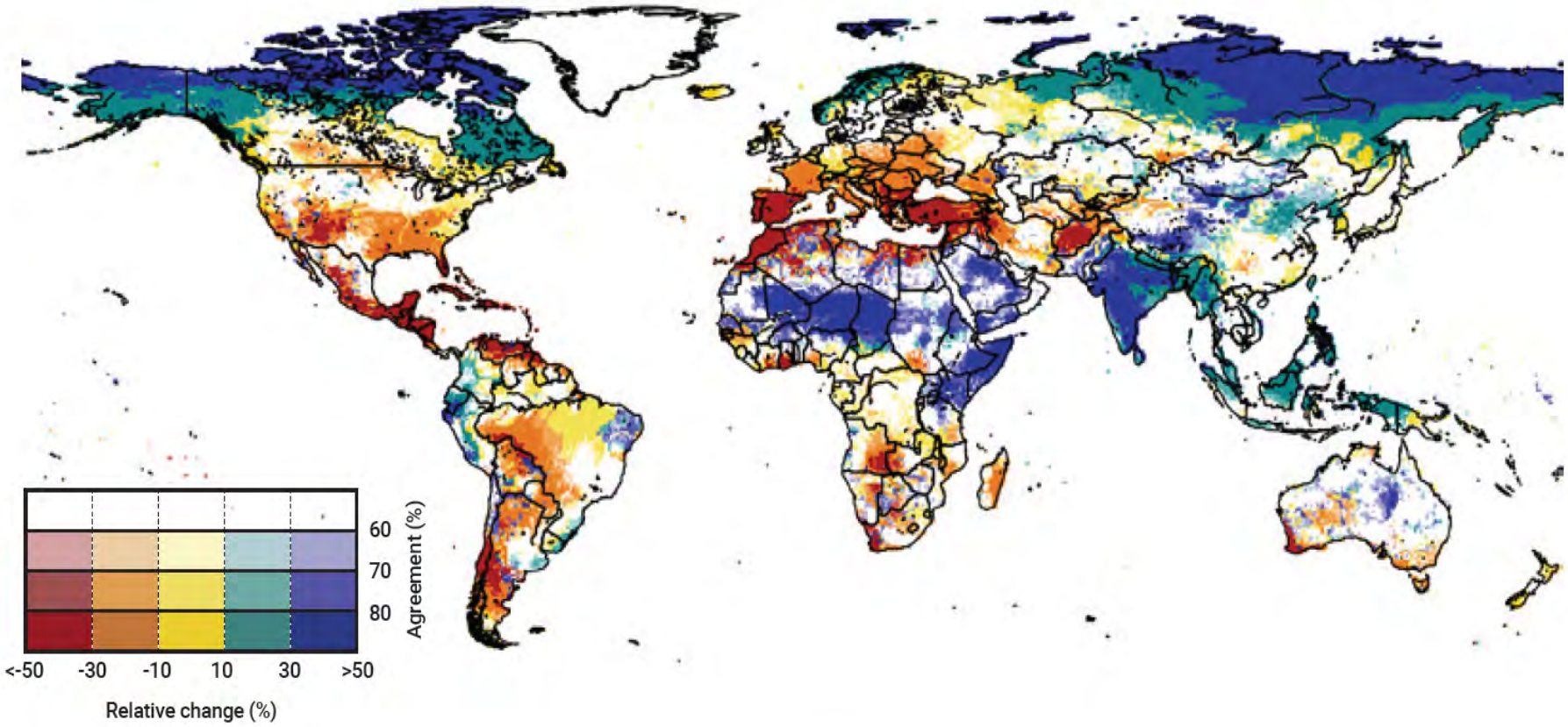


About **4 billion people**, representing nearly two-thirds of the world population, **experience severe water scarcity** during at least **one month of the year.**

WMO OMM

Water availability by 2100, 3-5 C warming

Figure 8 Climate change scenario trends in water availability



Note: This figure depicts the relative change in annual discharge at 2°C temperature increase compared with present day, under RCP8.5.

UN Water-Climate accelerator /SDG 6

- Boost the SDG 6/Water implementation;
- Enhance the hydrological observation & service capabilities of the UN Member countries for climate adaptation;
- Joint venture of at least WMO, FAO, WHO, WFP, UNEP, UNU, UNESCO, IFAD & UNICEF;
- Agreed by UN Water;
- Interest among development partners high, e.g. World Bank, GCF, Regional development banks & UNDP;
- Several supportive countries. German Mission plans to host a session this month, head of state level interest exists;
- Kick-off at WMO Congress 2021.

WMO OMM

WMO Meetings 2020

- Technical Coordination Committee 27-29 April;
- Information session for Geneva missions 4 May;
- Policy Advisory Committee 11-12 May;
- Information sessions for the Executive Council 18-19 May;
- Scientific Advisory Panel 4-5 June;
- Audit Committee July (TBD);
- Executive Council late September & open consultative platform for private sector;
- Infrastructure Commission & Services Commission in November;
- Data Conference in November. Data policies, enhanced amount of observations, Resolution 42?;
- Regional Associations October-December.

WMO OMM

شكرا لكم

Thank you

Gracias

Merci

Спасибо

谢谢

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

WMO OMM

World Meteorological Organization
Organisation météorologique mondiale