Space Weather Courses & Trainings by the Solar-Terrestrial Centre of Excellence

Petra Vanlommel, Elke D'Huys, Ronald Van der Linden

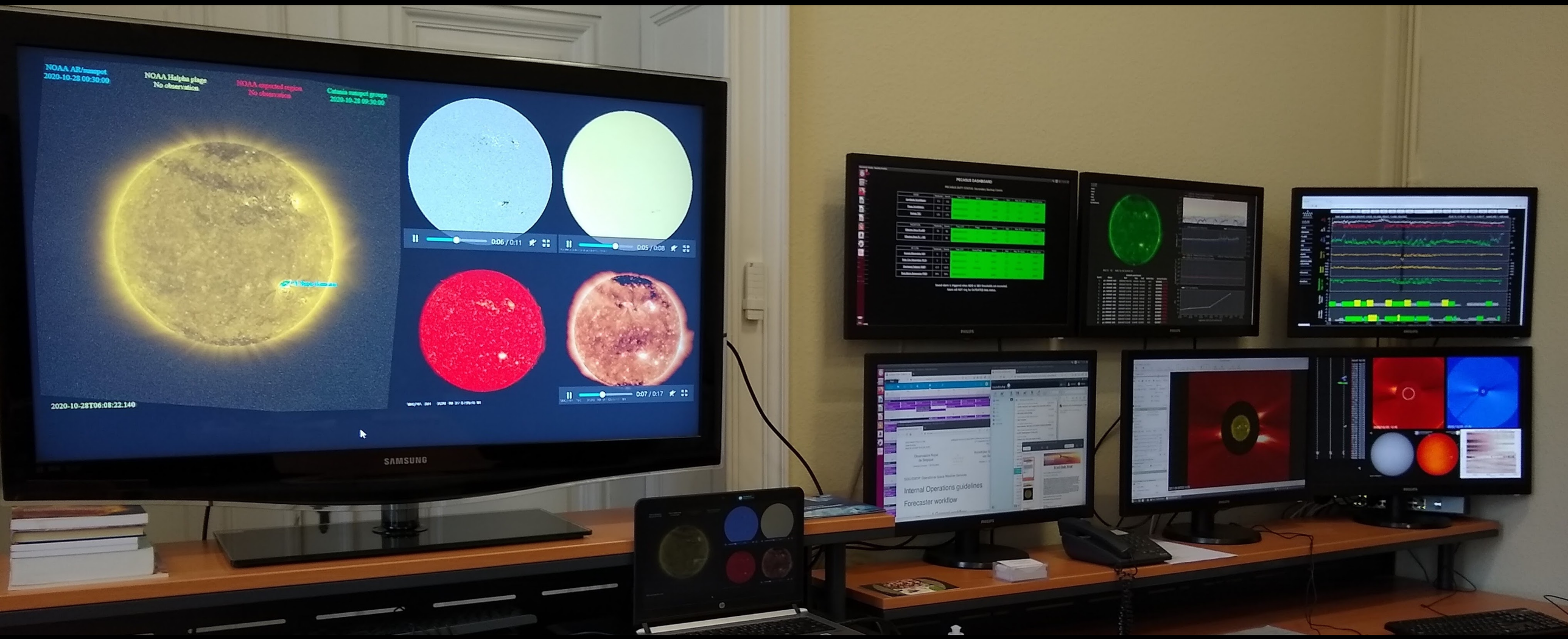


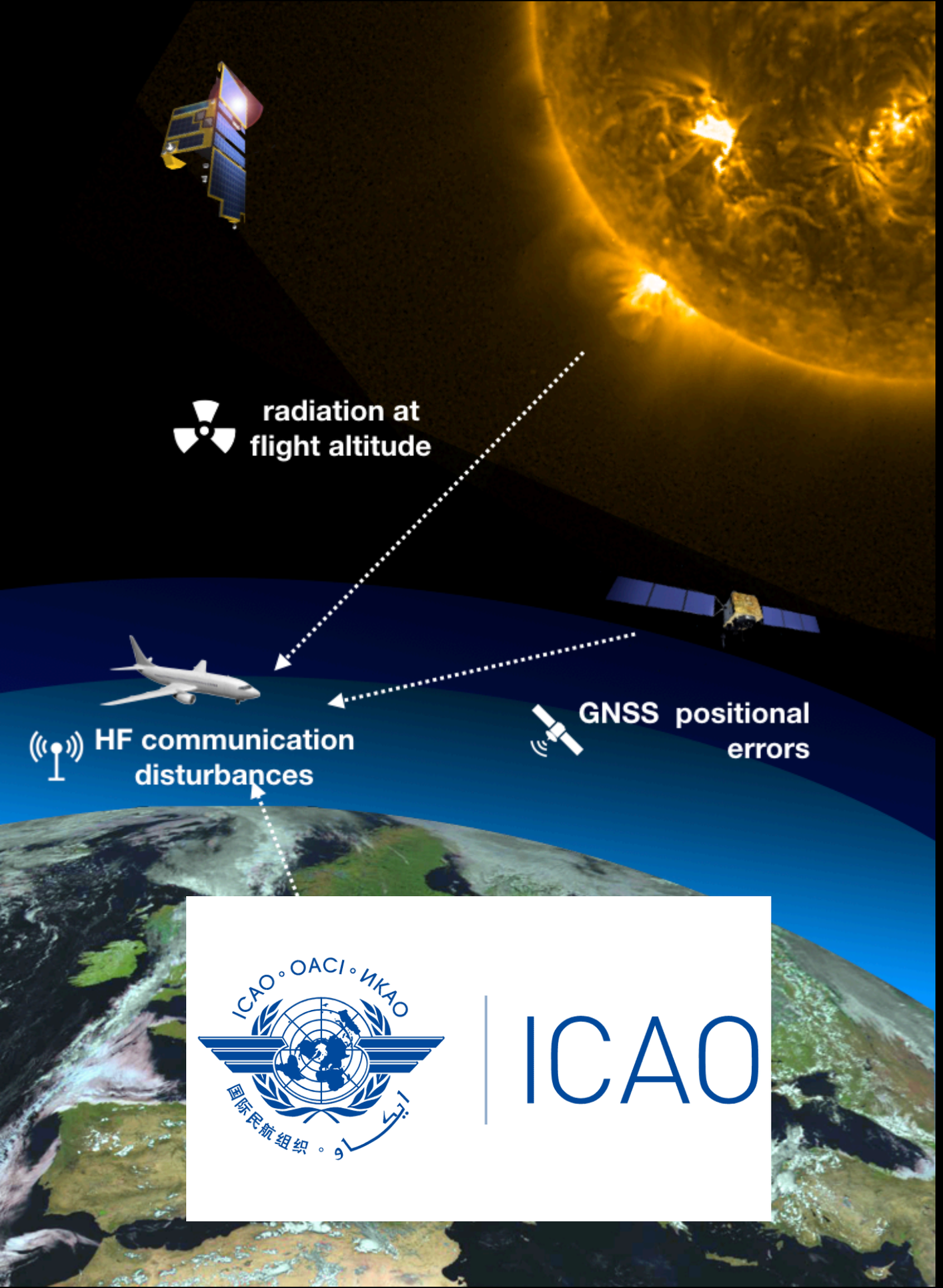
Space Storms

SWx Service Centre

Space Weather bulletins and warnings

SERVICES





SERVICES

PECASUS

Partnership for Excellence in
Civil Aviation SWx User Services

ICAO

:Issued: 2024 Sep 08 1256 UTC
:Product: documentation at http://www.sidc.be/products/meu
#---#
DAILY BULLETIN ON SOLAR AND GEOMAGNETIC ACTIVITY from the SIDC
(RWC Belgium)
#---#
SIDC URSIGRAM 40908
SIDC SOLAR BULLETIN 08 Sep 2024, 1255UT
SIDC FORECAST
SOLAR FLARES : C-class flares expected, (probability >=50%)
GEOMAGNETISM : Quiet (A<20 and K<4)
SOLAR PROTONS : Quiet
PREDICTIONS FOR 08 Sep 2024 10CM FLUX: 222 / AP: 010
PREDICTIONS FOR 09 Sep 2024 10CM FLUX: 222 / AP: 010
PREDICTIONS FOR 10 Sep 2024 10CM FLUX: 222 / AP: 007

Solar Active Regions and flaring: Solar flaring activity was at low levels over the past 24 hours beside de number of complex regions visible on the solar disc, with several C-class flares. The strongest was an C7.2 flare from NOAA active region (AR) 3808. The most magnetically complex active regions currently on the disk are NOAA AR 3806 AR 3811, AR 3813 and AR 3815 (beta-gamma). Solar flaring activity is expected to remain at low to moderate levels over the next 24 hours, with the possibility of an M-class flare and a chance for isolated X-class flares.

Coronal mass ejections: A halo coronal mass ejection (CME) was detected in LASCO/C2 coronagraph images at 00:36 UTC on September 8. This CME is associated with the filament eruption located at 15 degrees North and 23 degrees West. The projected speed is estimated to be about 600 km/s in the northwest direction. This eruption is believed to be Earth-directed and is currently under analysis. A preliminary estimate suggests an arrival time of September 10.

Solar wind: The solar wind parameters reflect a slow wind speed regime. The total interplanetary magnetic field (IMF) ranged between 5 nT and 9 nT. The southward IMF component (Bz) fluctuated between -6.5 nT and +9 nT. The solar wind speed remained around 315-430 km/s. Solar wind conditions are expected to become more enhanced in the next 24 hours due to the September 3 coronal mass ejection, combined with the high-speed stream from the small negative polarity coronal hole that crossed the central meridian on September 3.

Geomagnetism: Geomagnetic conditions were quiet both globally and locally, with some periods of unsettled conditions (NOAA Kp and K-Dourbes indices of 1-3). Quiet to unsettled conditions are expected in the next 24 hours, with possible active periods in response to the anticipated enhancement of solar wind conditions.

Proton flux levels: The greater than 10 MeV GOES proton flux has now returned to background levels. It is expected to remain at background levels over the next 24 hours. However, there is a small chance of exceeding the threshold if high-energy flares or eruptions occur.

Electron fluxes at GEO: The greater than 2 MeV electron flux, as measured by the GOES-16 satellite, remained below the threshold over the past 24 hours and is expected to remain so in the coming 24 hours. The 24-hour electron fluence is currently at normal levels and is expected to stay that way over the next 24 hours.

TODAY'S ESTIMATED ISN : 174, BASED ON 10 STATIONS.

SOLAR INDICES FOR 07 Sep 2024
WOLF NUMBER CATANIA   : ///
10CM SOLAR FLUX   : 222
AK CHAMBON LA FORET   : 011
AK WINGST   : 008
ESTIMATED AP   : 007
ESTIMATED ISN   : 164, BASED ON 17 STATIONS.

NOTICEABLE EVENTS SUMMARY
DAY BEGIN MAX END LOC   XRAY OP 10CM Catania/NOAA RADIO_BURST_TYPES
NONE
END


SWEC
Space Weather Education Center
©Simon Schmitt - www.

SUN-SPACE-
EARTH for
INDUSTRY

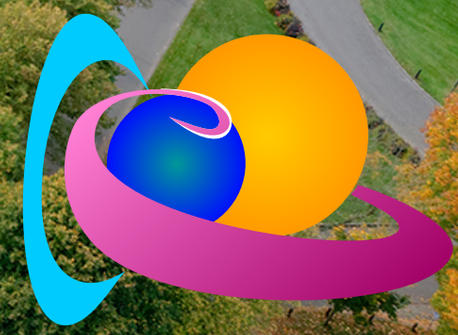
SUN-SPACE-
EARTH for
CITIZENS

SUN-SPACE-
EARTH for
SCIENTISTS

SUN-SPACE-
EARTH for
GOVERNMENT

SWEC

Space Weather Education Center



©Simon Schmitt - www.

SWx INTRODUCTORY COURSE



Koninklijke Luchtmacht

Koninklijk Nederlands
Meteorologisch Instituut
Ministerie van Infrastructuur en Waters

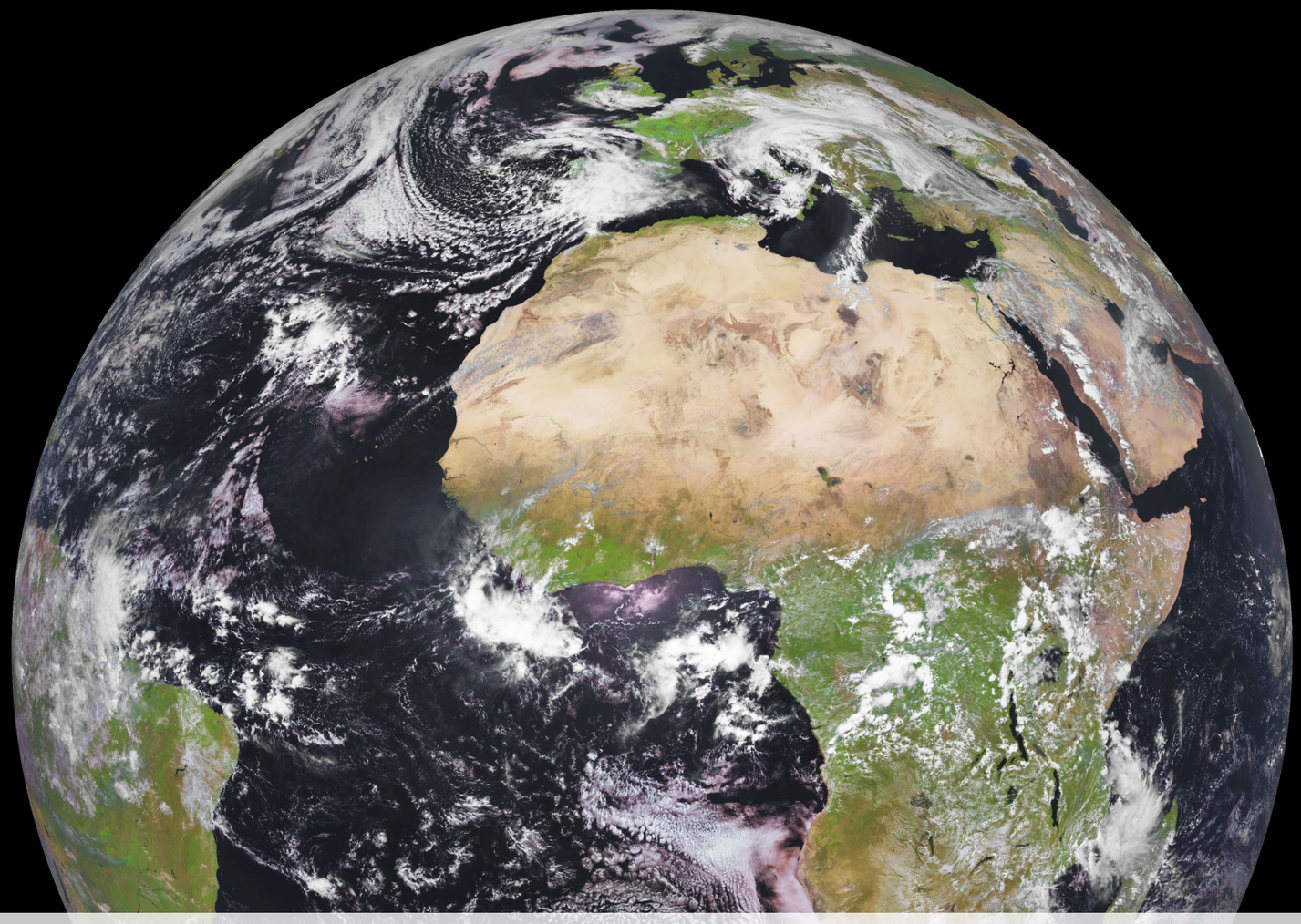
NATO
OTAN

Federal Agency for
Cartography and Geodesy

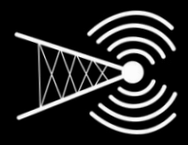
EUROCONTROL

SUPPORTING
EUROPEAN
AVIATION









Space Weather Introduction Course
Space Weather impacts on ionospheric wave propagation, focus on GNSS and HF com
Space Weather Impacts on Aviation
Role of the ionosphere and space weather in military communications
…
Space Weather Impacts on LEO satellite systems


WHO ELSE SHOULD WE TARGET?
TOM FISH BURNE
WebonMobi

TAILORED


© Limebridge
CUSTOMER SERVICE
GOOGLE IT
KUDELKA.
WHILE THE NEW SELF-HELP STRATEGY SAVED MONEY, IT LACKED THE PERSONAL TOUCH.



"She is the most enthusiastic teacher
I've ever had."

Diamond Certificate



The Solar-Terrestrial Centre of Excellence declares that …. participated in the Space Weather Introductory Course and successfully completed the test with an outstanding score of x/50.

Ronald Van der Linden
STCE General Manager

Tailored - Flexible - Change Help



"What did you take away from the meeting?"

Reach out to us



Reach out to us

yana.maneva@oma.be



jennifer.ohara@oma.be



elke.dhuys@oma.be



petra.vanlommel@oma.be

