

World Meteorological Organization Working together in weather, climate and water

Use of Satellite Images in Communicating Extreme Weather Information on Television

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Using Satellite Images in TV Weather Presentation

- Why Satellite Images?
 - They provide very useful and detailed data;
 - Excellent for making good-looking weather graphics in terms of colour, depth & form – especially the RGBs;
 - They complement the sparse Meteorological data network.





- Master the science of interpretation of satellite pictures to detect extreme weather
- The viewer wants to know the potential impact of the weather and what to do about it. Therefore, Master the following:



Tropical Cyclones

 Tropical Cyclone intensity categories, associated wind speeds, Heavy rain, danger of flooding, their likely impact to particular areas;





Squall lines

 Squall lines, associated strong winds, dust storms, heavy rainfall (flooding) and potential to destroy structures;





- 1= Very high, cold ice clouds with small ice particles (developing stage, intense precipitation)
- 2= very high, cold ice clouds with large ice particles (decaying stage)
- 3= Thin Cirrus
- 4= Altocumulus with thin borders
- 5= Sand storm

MSG-1 14 July 2003 10:00 UTC RGB Composite R = IR12.0 - IR10.8 G = IR10.8 - IR3.9 B = WV7.3 - WV6.2



Deep Convection

 Deep convection: and the associated Hail, lightning, Downbursts, tornadoes, heavy showers, tornadic <u>waterspouts</u>







- Fog and danger to drivers:
 - Avoid travel if possible.
 - Drive very slowly with dipped headlights
 - Use fog lights
 - Don't trail tail lights of the car in front,





MSG-1 24 April 2003 02:00 UTC RGB Composite **R = IR12.0 - IR10.8 G = IR10.8 - IR3.9 B = IR10.8**

- 1= low-level fog or stratus
- 2= clear ground
- 3 = thin mid-level clouds
- 4 = thick high-level clouds

Recommended RGB for Monitoring of Night-time Fog



Dust Storms

– Dust storms:

- Increase risk of Meningitis infection (25,000 to 200,000 deaths per year in sub-Saharan Africa
- Reduces visibility to zero – hazard to drivers



Courtesy of EUMETSAT



• Create an interesting story around the weather event

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- Take time to study satellite pictures and add new, especially high-impact weather information to your presentation
- Pick out systems likely to cause (or may have caused) extreme weather and prepare a short, succinct and well focused message about them.



- Get key information regarding the area experiencing extreme weather and show its Geographical position accurately (use a Google earth "flight" if possible)
- Example



 If available, use disaster risk maps or data to guide you as you prepare your story





- Familiarize yourself with past impacts of extreme weather on the location so that you can:
 - o Compare current event to a particular one in the past
 - o Create a story around the phenomenon and enrich it with impact information;
 - o Address issues relevant the listener.
- Use video footage or photographs if available



- Tell the viewer about the prognosis of the event
- If a warning is in force, give an update





• Master the art of weather presentation

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Introduction to good weather presentation skills.

- A good presenter.
- Voice and speech.
- Body language.
- Overcoming nervousness
- Choice of graphics.
- Personal grooming and dressing.
- Action planning.





• Thank you