Nowcasting SAF Exercises

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6-9 June 2017
Roshydromet Training Event
Exercise

- Exercise examples based on data from the IODC (Indian Ocean) MSG-1 satellite
- Date: 29.05.2017
- Hour: close to 12Z
- Products available in ftp://nwcsaf.org/Roshydromet_2017
- Zoom in by pressing <CTRL> and +
- Zoom out by pressing <CTRL> and -
Exercise 1: CRR + RDT

- Look at the precipitation intensity estimations at 12Z close to Moscow
  figIndian/CRR/crr_intensity_S_NWC_CRR_MSG1_India-VISIR_20170529T120000Z.png

- Look also at the RDT product at 12Z close to Moscow
  figIndian/RDT/RDT-CW_S_NWC_RDT-CW_MSG1_India-VISIR_20170529T120000Z.png

- What kind of situation is it?
Exercise 2: RDT

- Look also at the RDT product at 12Z close to Moscow figIndian/RDT/RDT-CW_S_NWC_RDT-CW_MSG1_India-VISIR_20170529T120000Z.png
- Can you see convective cells close to Moscow?
- Are they severe? Anything special?
- How will they evolve?
- Where will they go?
Exercise 3: iSHAI

- Look at the **humidity at the boundary layer difference** with respect to ECMWF product at 12Z close to Moscow.

figIndian/iSHAI/ishai_diffbl_S_NWC_iSHAI_MSG1_India-VISIR_20170529T120000Z.png

- Is this product useful close to Moscow at 12Z?
- Why?

- Can you **spot** a region on the globe where ECMWF has **underestimated** the humidity at lower levels?
Exercise 4: HRW

- Look at the HRW winds close to Moscow at 12Z
  figIndian/HRW/S_NWC_HRW_MSG1_India-BS_20170529T120000Z.png

- How are the winds close to Moscow at 12Z?

- Can you say anything about the surface winds close to Moscow at 12Z?

- Why?

- Can you spot a region on the globe where low level winds are shown?
Exercise 5: Clouds

- Look at the **Cloud Top Height** product close to Moscow at 12Z
  figIndian/CTTH/ctth_aliti_S_NWC_CTTH_MSG1_India-VISIR_20170529T120000Z.png

- How high are the **cloud tops** close to Moscow at 12Z?

- Why?

- How **certain** are you about this height?
Exercise 6: Dust

• Look at the dust product product over the globe at 12Z
  figIndian/CMA/cma_dust_S_NWC_CMA_MSG1_India-VISIR_20170529T120000Z.png

• Do you see any regions where there might be dust?

• Would you say it is dust with 100% certainty?
Exercise 7: ASII-NG

• Look at the tropopause folding product over the globe at 12Z
  figIndian/ASII/asii_turb_trop_prob_S_NWC_ASII-NG_MSG1_India-VISIR_20170529T120000Z.png

• Do you think there can be turbulence at tropopause levels close to Moscow?
  Why?

• Can you spot a region on the globe where there might be turbulence at tropopause levels which is an airline flight path?
Summary

- NWC SAF Products are useful for **Nowcasting** and other applications
- Users can run the **software** on their computer and taylor it to their needs
- **Helpdesk** available to users with very quick response time
- More information at [nwc-saf.eumetsat.int](http://nwc-saf.eumetsat.int)