

Korean Fog/Low Cloud Event, 7-8th September 2017

Examining various Himawari-8 and COMS products

21st September 2017

Presented by

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Should you use these resources please acknowledge the Australian Bureau of Meteorology Training Centre and the Korea Meteorological Administration. In addition, you need to retain acknowledgement in the PowerPoint slides of the Japan Meteorological Agency, the Bureau of Meteorology and any other sources of information.

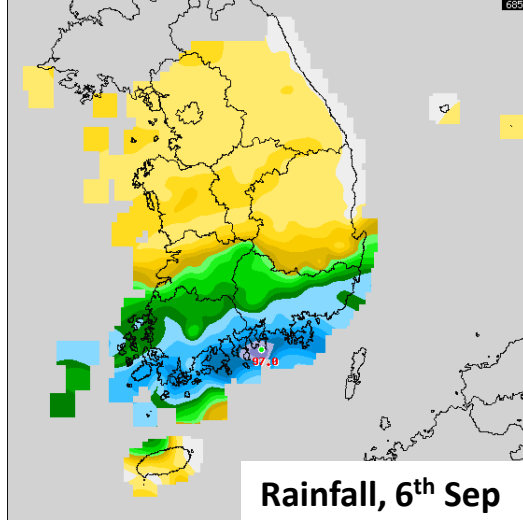
images courtesy JMA/BOM

Himawari-8 IR, MLSP and precipitation, 6th and 7th September

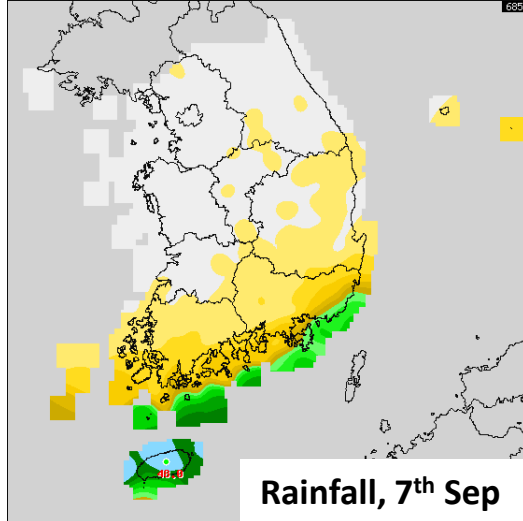
precipitation data courtesy KMA

mm

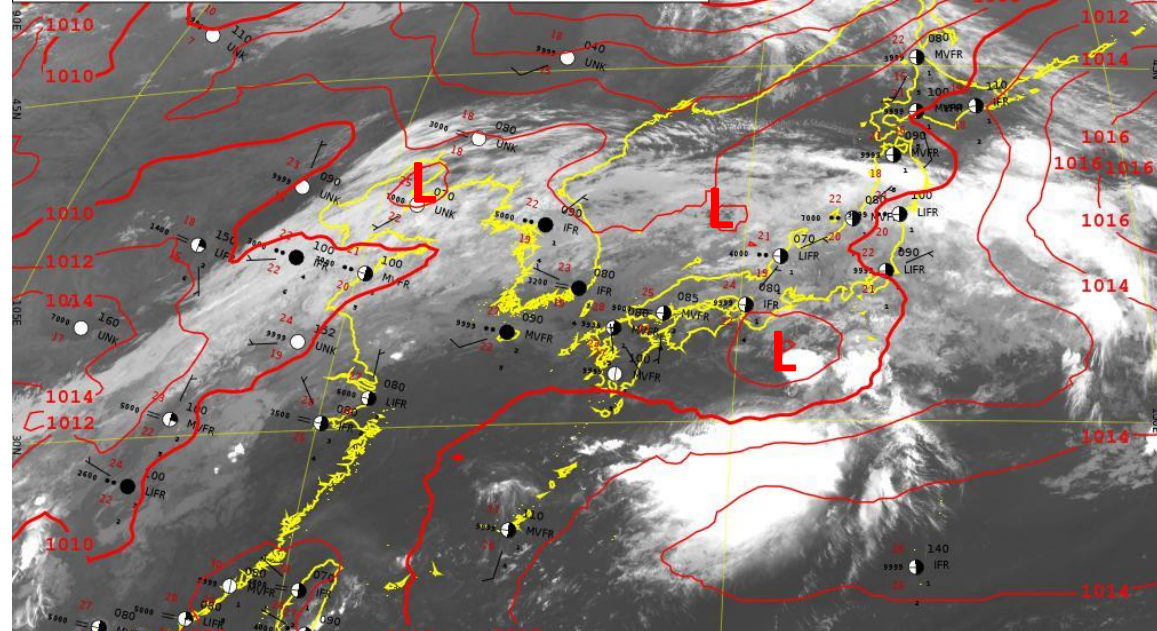
RAIN(day) 2017.09.06.



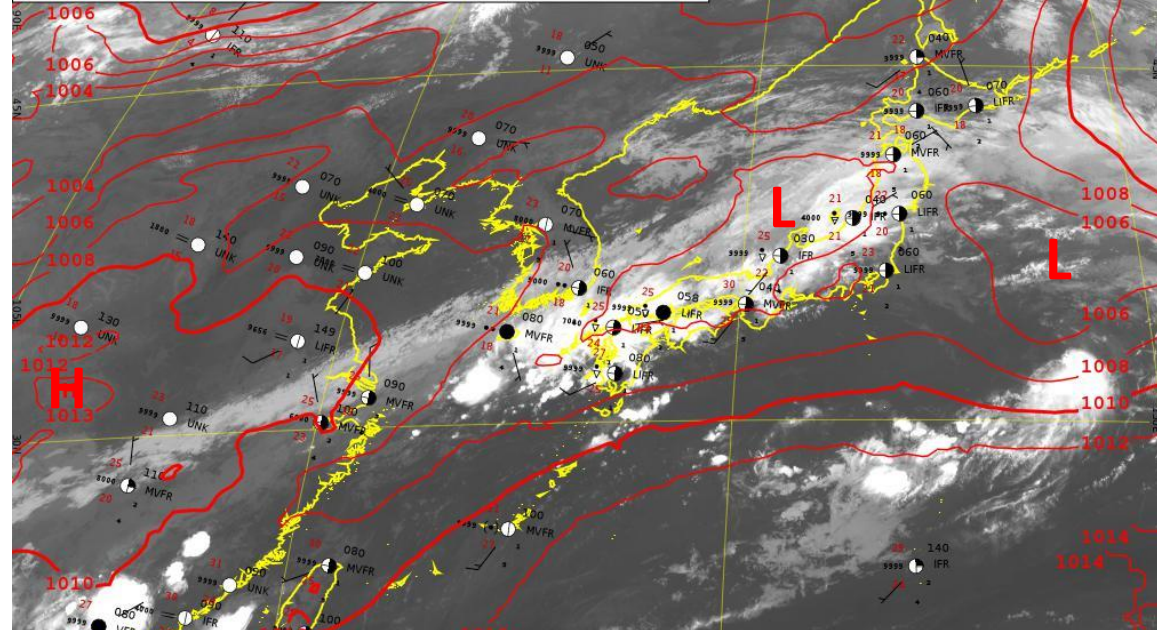
RAIN(day) 2017.09.07.



Himawari-8 Band13, ACCESS-R MSLP, station METARS
Valid Wed, 06 Sep 2017 00:00 UTC



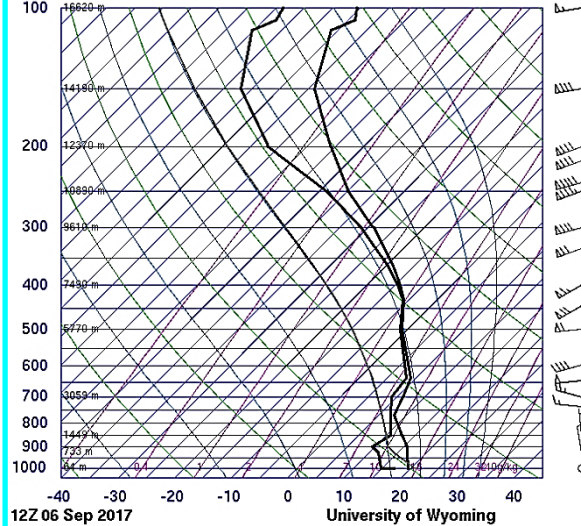
Himawari-8 Band13, ACCESS-R MSLP, station METARS
Valid Thu, 07 Sep 2017 00:00 UTC



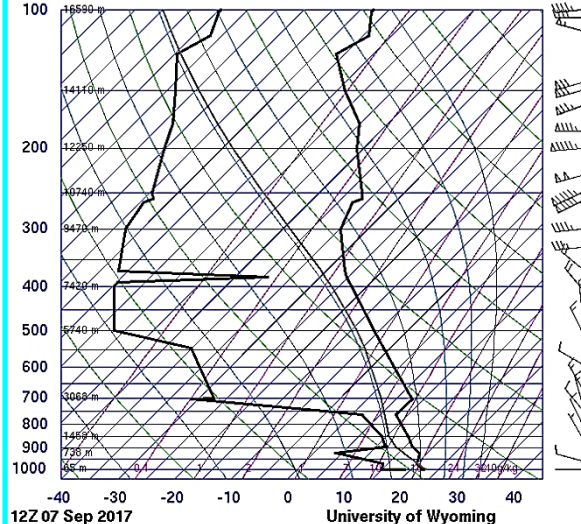
MLSP, T-Td and soundings, 6th and 7th September

sounding displayed by University of Wyoming

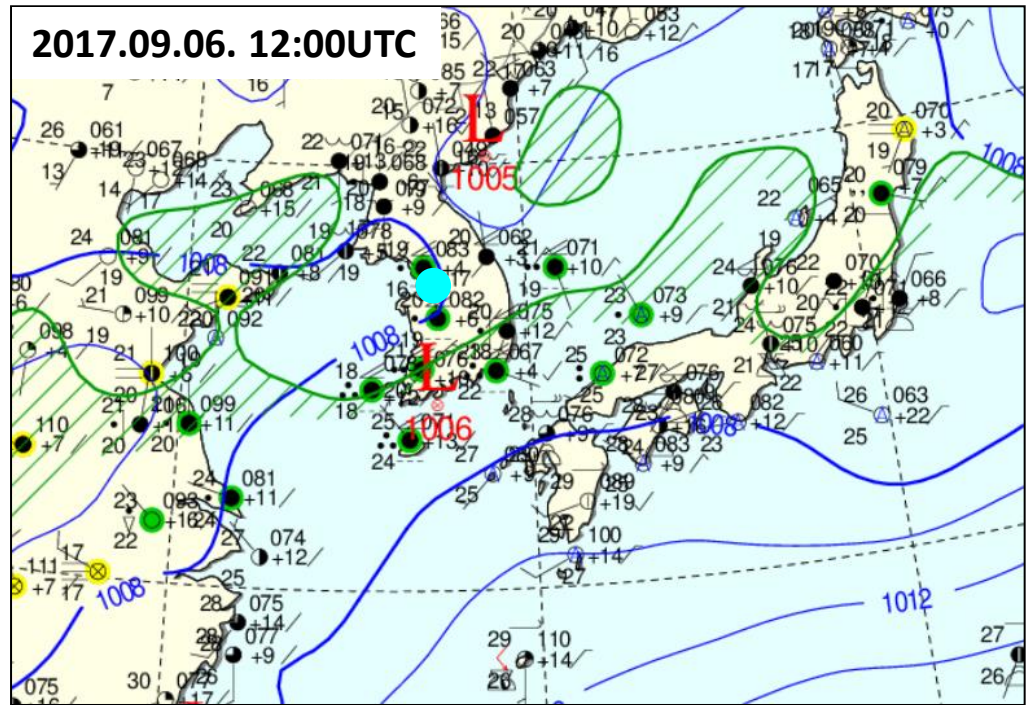
47122 RKSO Osan Ab



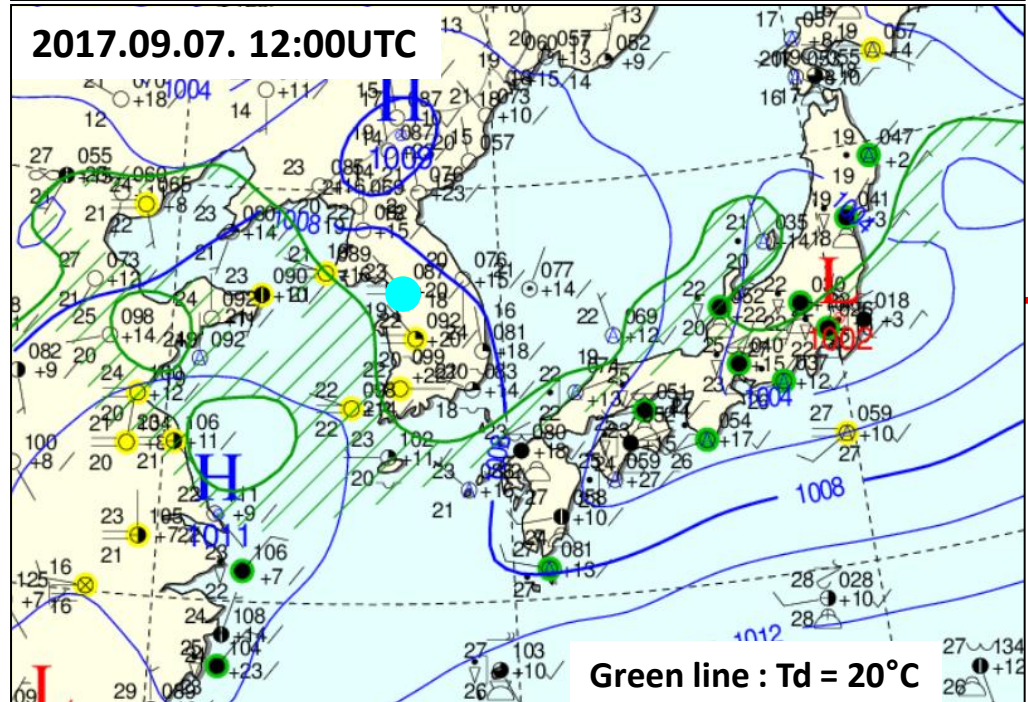
47122 RKSO Osan Ab



2017.09.06. 12:00UTC



2017.09.07. 12:00UTC

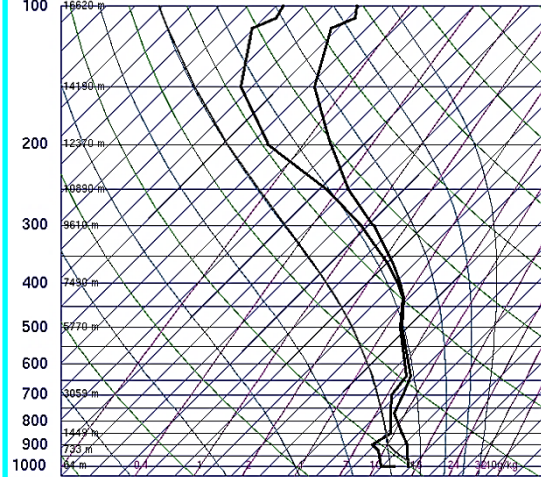


MLSP, surface T-Td

925hPa Height, T and soundings, 12UTC 7 Sept

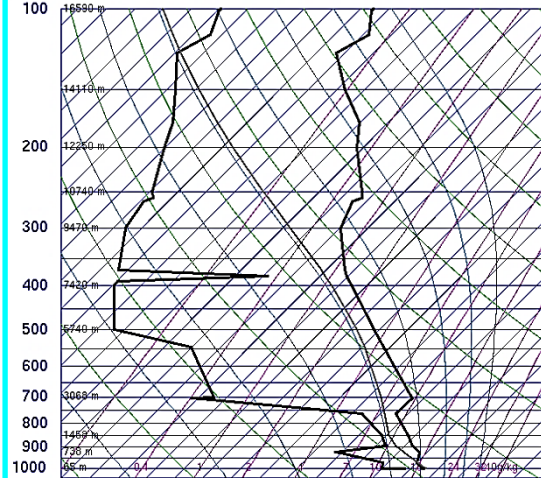
sounding displayed by University of Wyoming

47122 RKSO Osan Ab



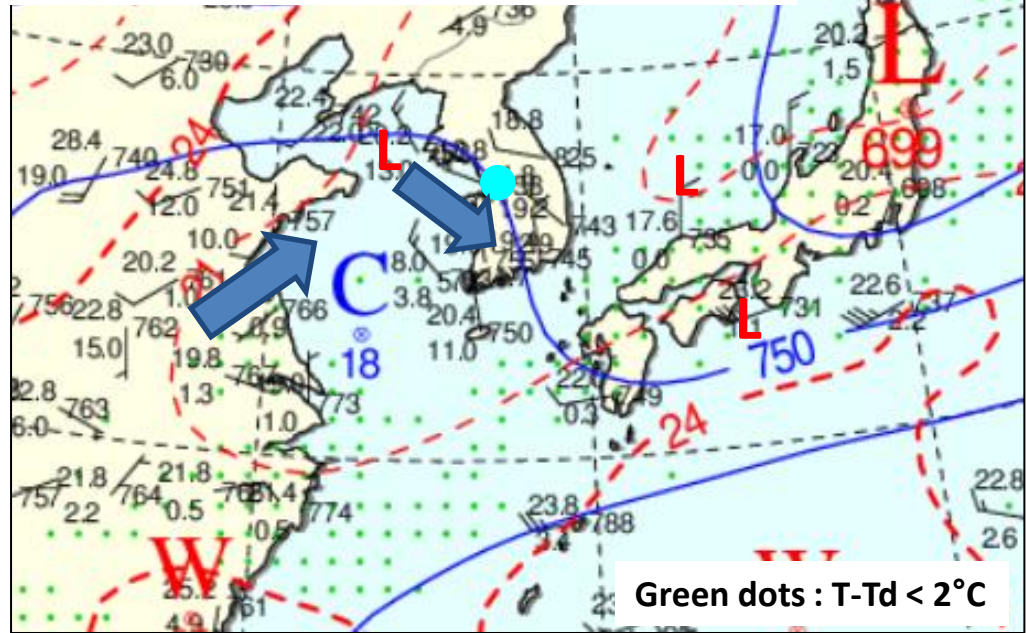
12Z 06 Sep 2017 University of Wyoming

47122 RKSO Osan Ab



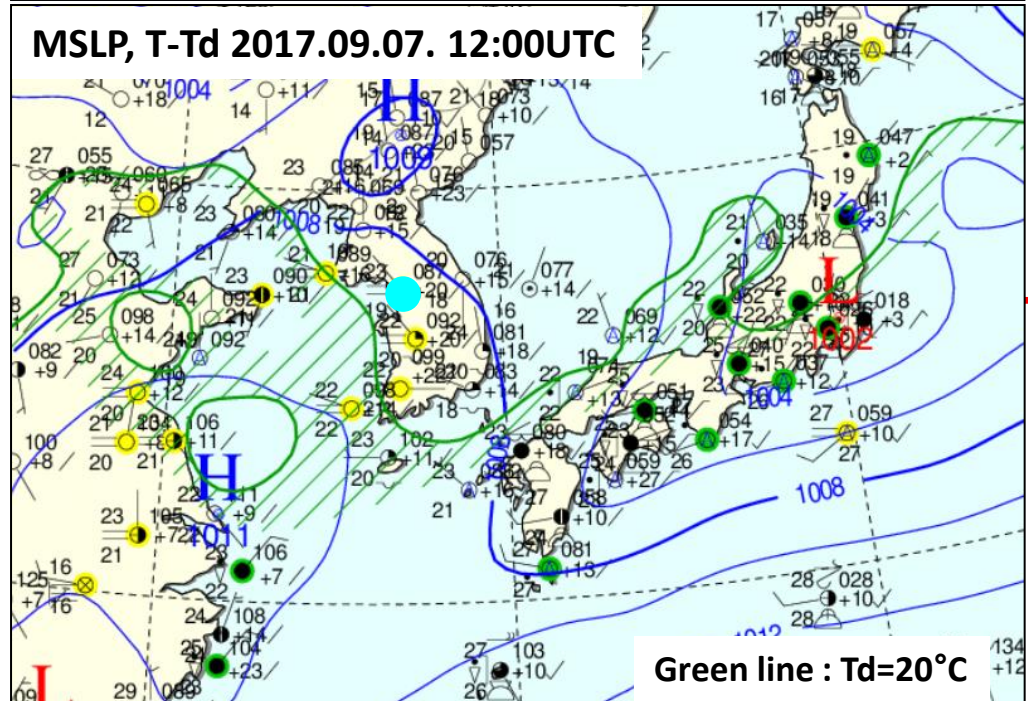
12Z 07 Sep 2017 University of Wyoming

925hPa Height & T 2017.09.07. 12:00UTC



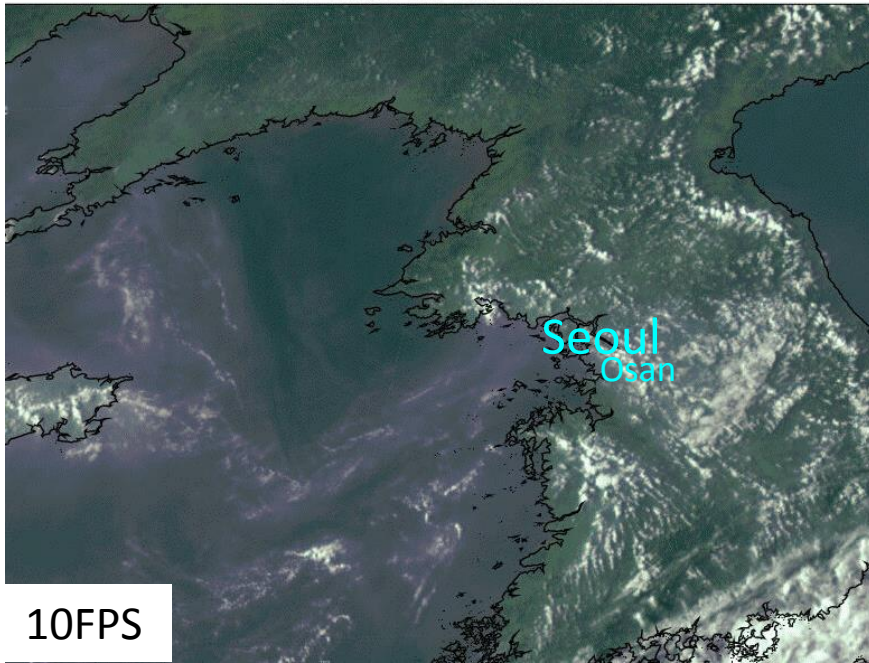
Green dots : T-Td < 2°C

MSLP, T-Td 2017.09.07. 12:00UTC



Green line : Td=20°C

Daytime True Colour / Night Microphysics RGB
Valid Thu, 07 Sep 2017 07:00 UTC



animations courtesy JMA/BOM

Animation 1: Evening of the 7th September (07 to 13UTC): various Himawari-8 products

What animation speed do you prefer?

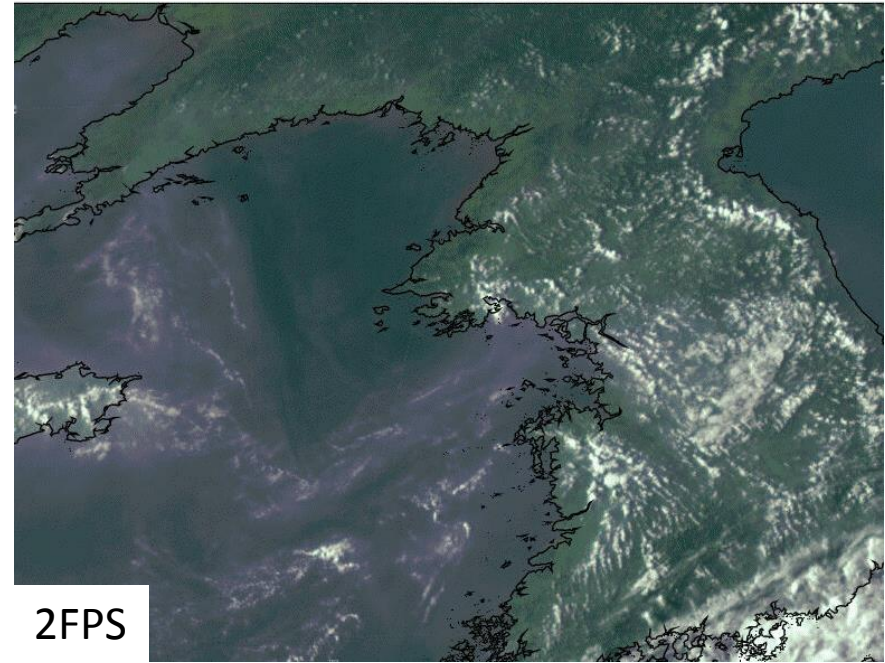
A: 10 frames per second (FPS)

B: 2 FPS

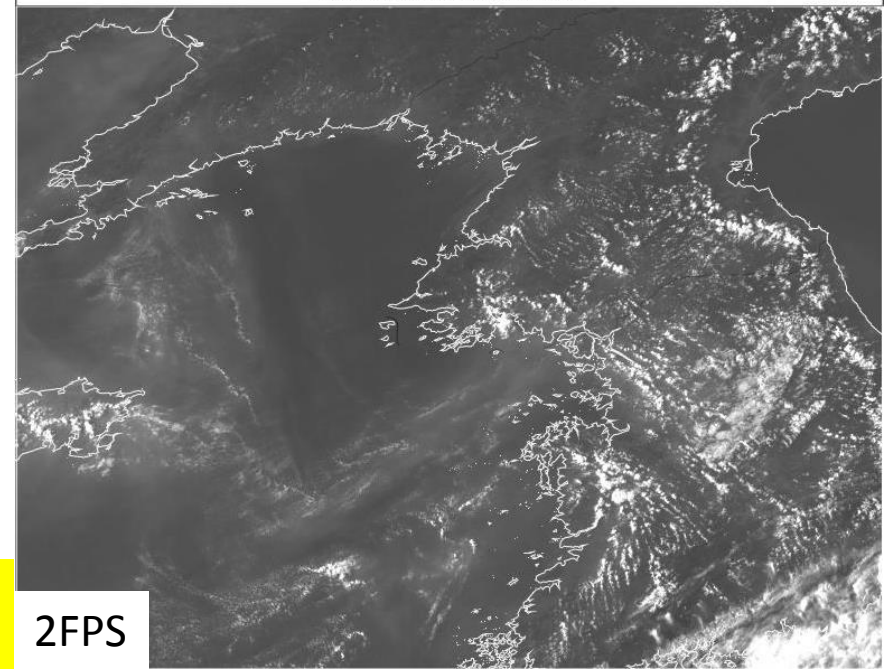
What product do you prefer?

**Please start the Power Point Slide Show to activate the
animation**

Daytime True Colour / Night Microphysics RGB
Valid Thu, 07 Sep 2017 07:00 UTC



Himawari-8 VIS/SWIR
Valid Thu, 07 Sep 2017 07:00 UTC

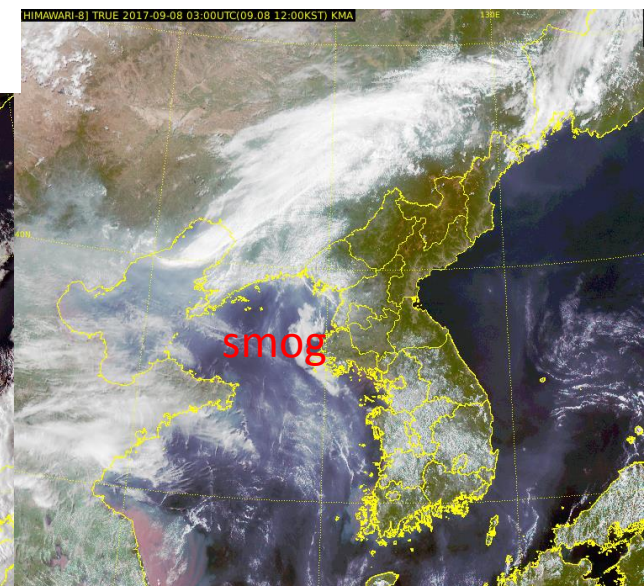
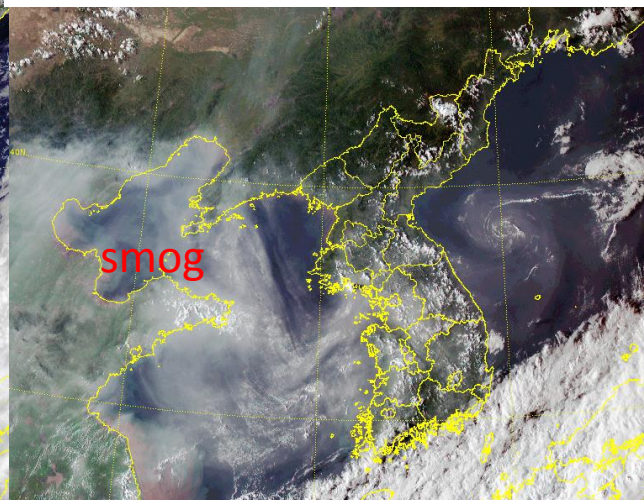
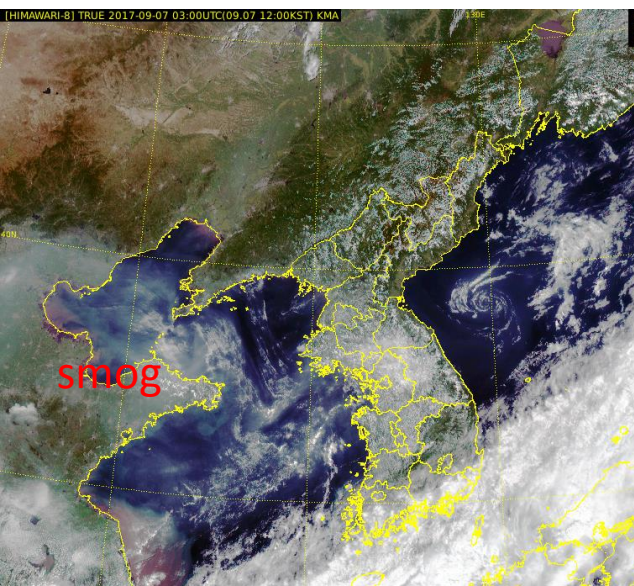


2017.09.07. 03:00UTC

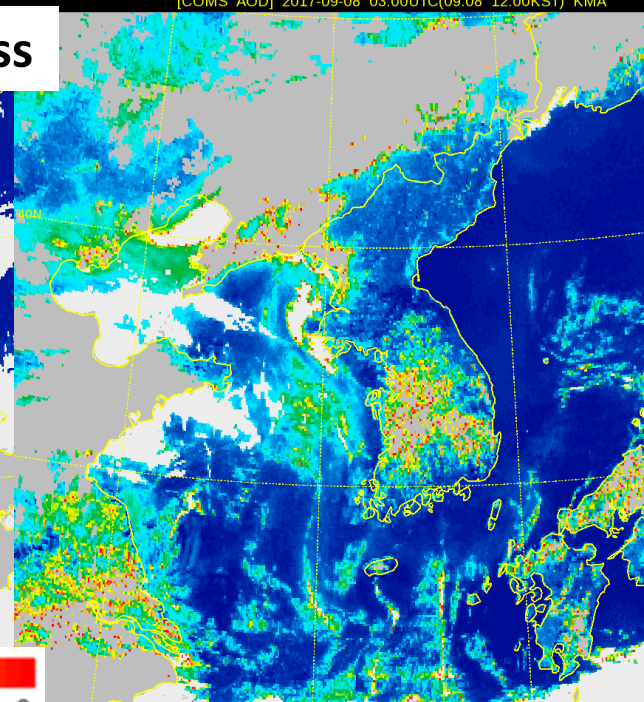
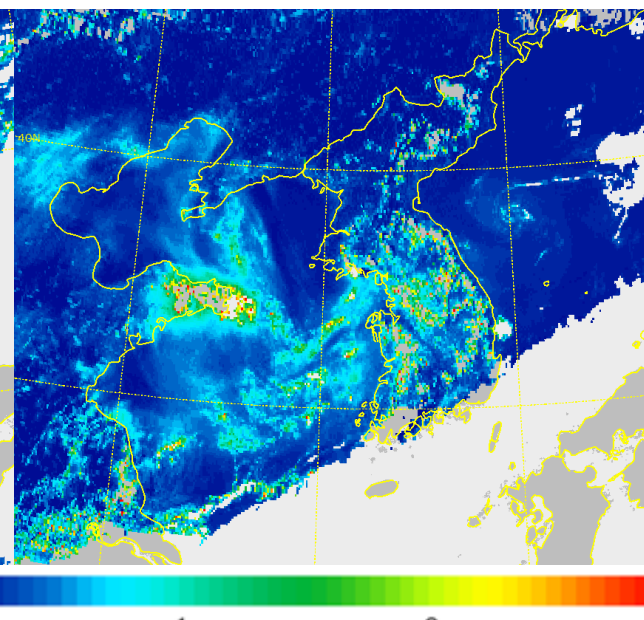
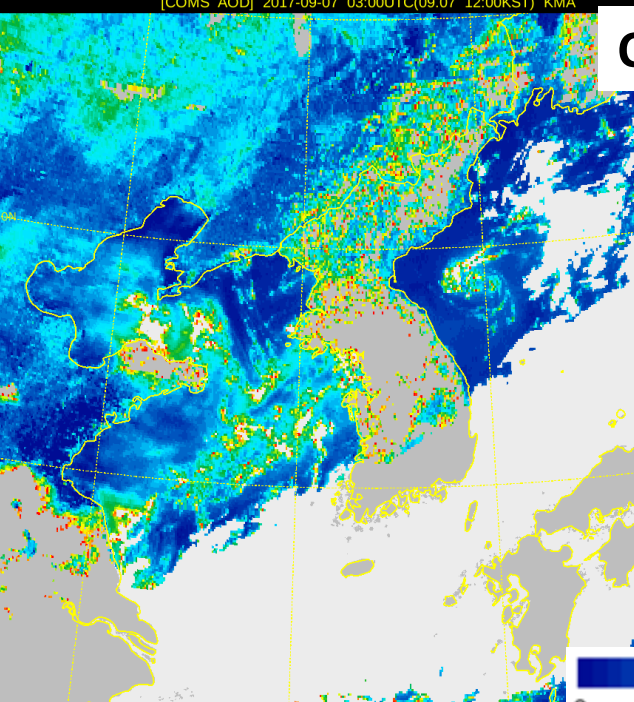
2017.09.07. 08:00UTC

2017.09.08 03:00UTC

Himawari-8 TRUE color RGB

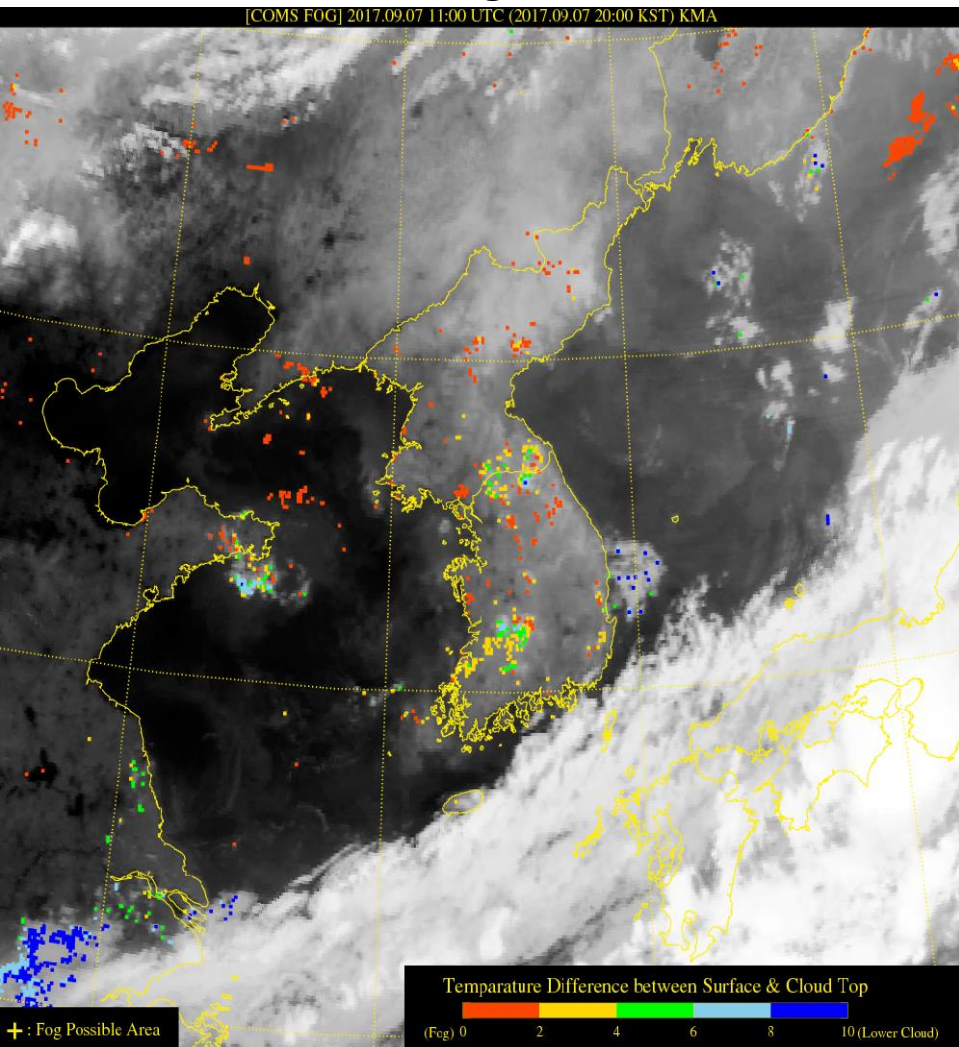


COMS aerosol optical thickness

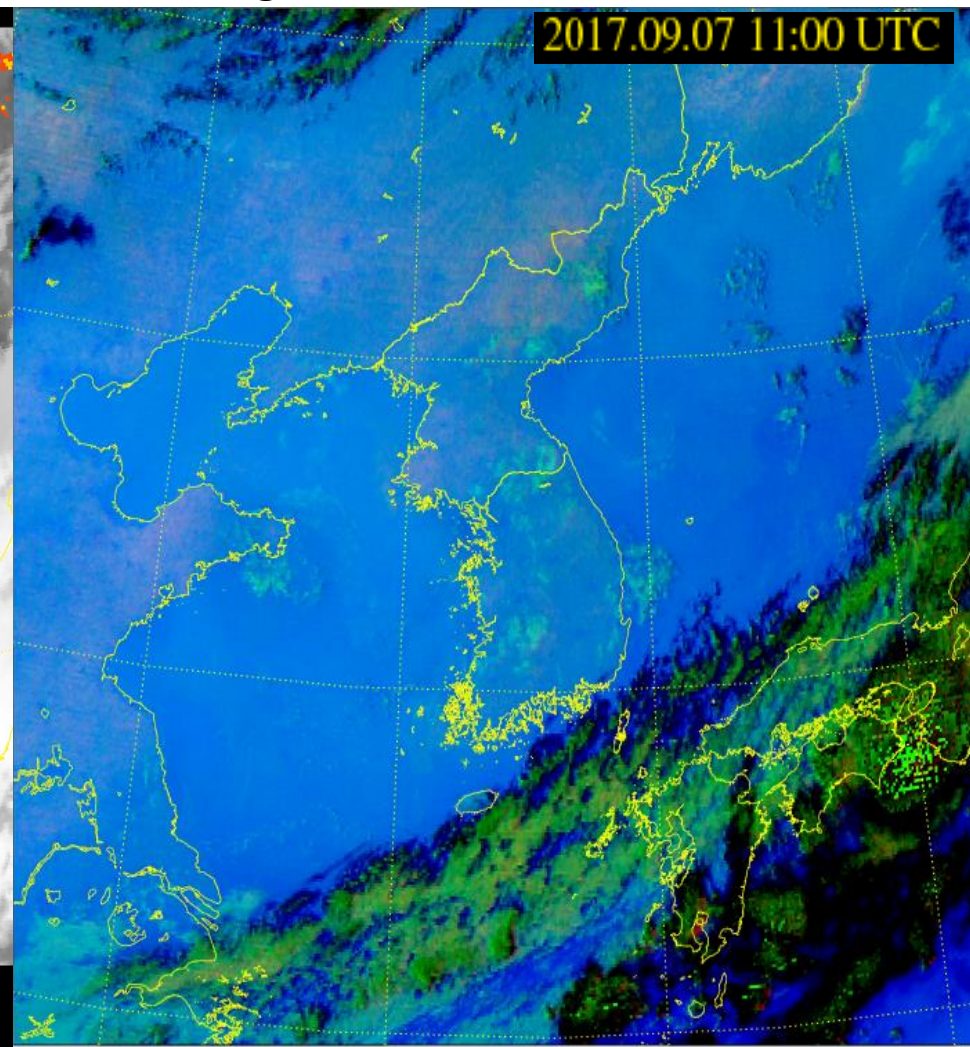


Animation 2: COMS FOG Products (4km, 15min, 5fps)

A. COMS fog detection



B. COMS fog RGB (day + night microphysics RGB)



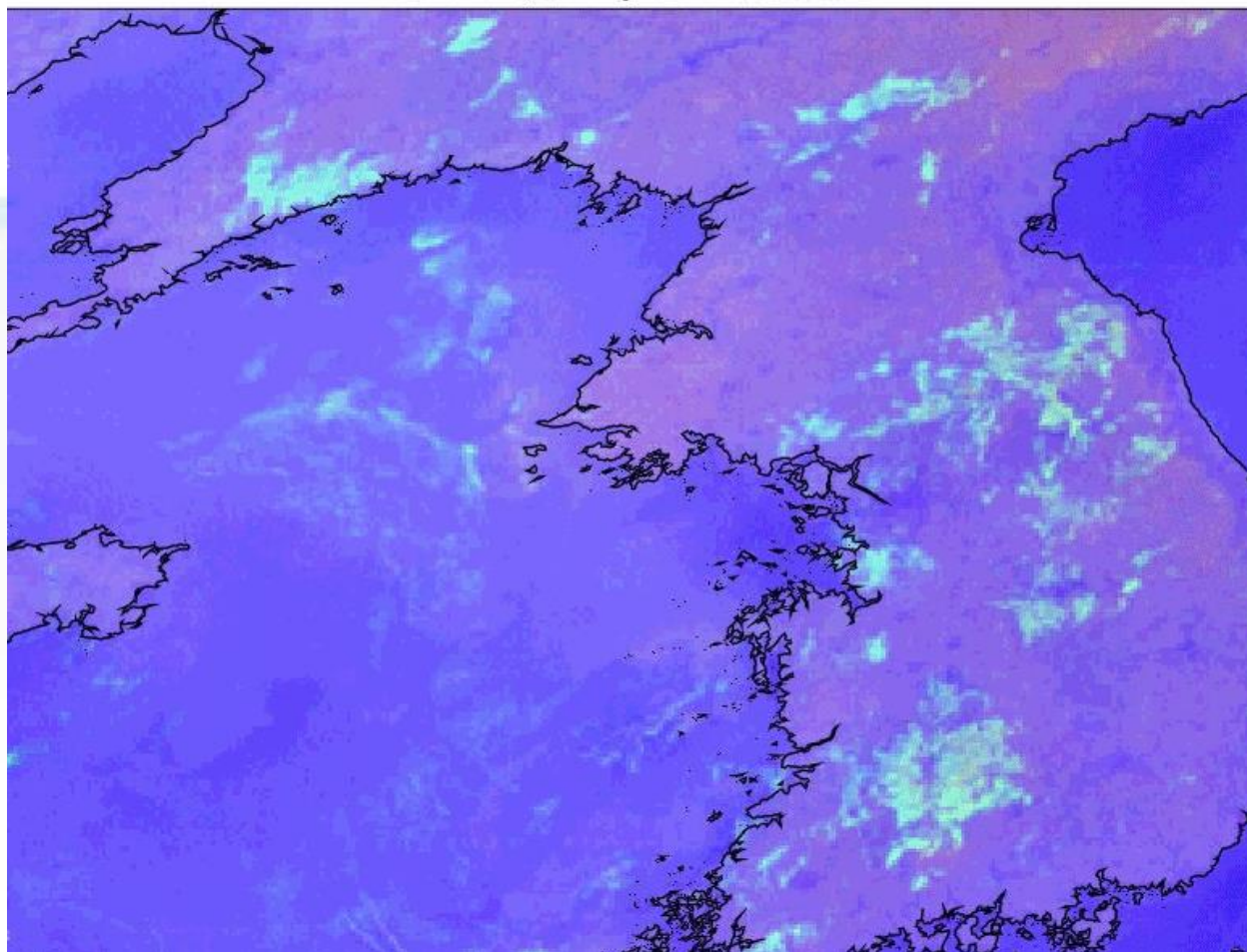
Animation(1100UTC ~ 2000UTC 7th Sept.)

Please start the Power Point Slide Show to activate the animation

Animation 3: Night-time monitoring of the development of the fog/low cloud using the Night Microphysics RGB product. 10FPS

South Korea 11-20 UTC 7th September 2017

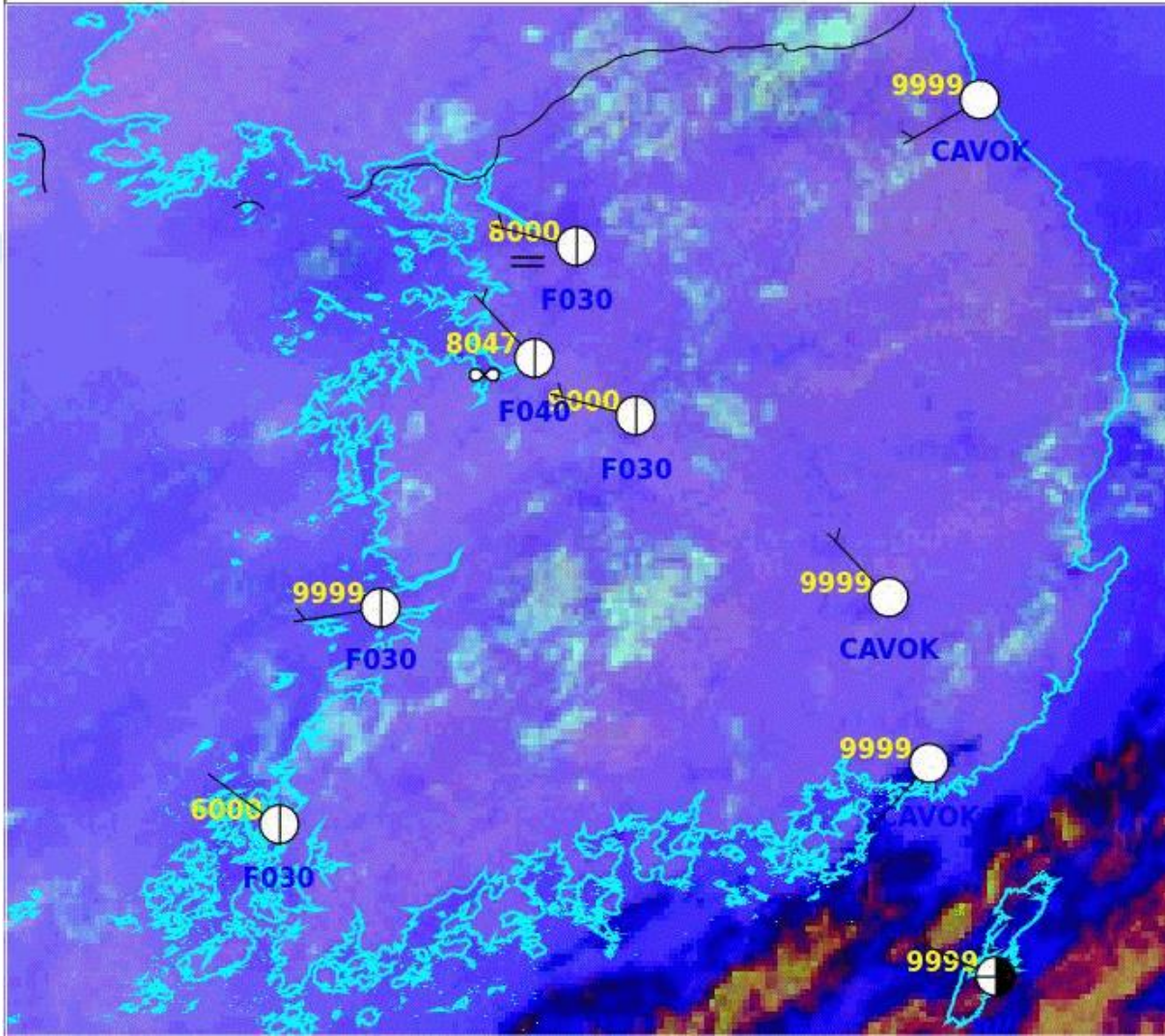
Daytime True Colour / Night Microphysics RGB
Valid Thu, 07 Sep 2017 13:00 UTC



Please start the Power Point Slide Show to activate the animation

Animation 4: Monitoring of the development of the fog/low cloud using the Night Microphysics RGB product, hourly data, with station observations. South Korea 11-20 UTC 7th September 2017

Night-time Microphysics RGB
Valid Thu, 07 Sep 2017 11:00 UTC



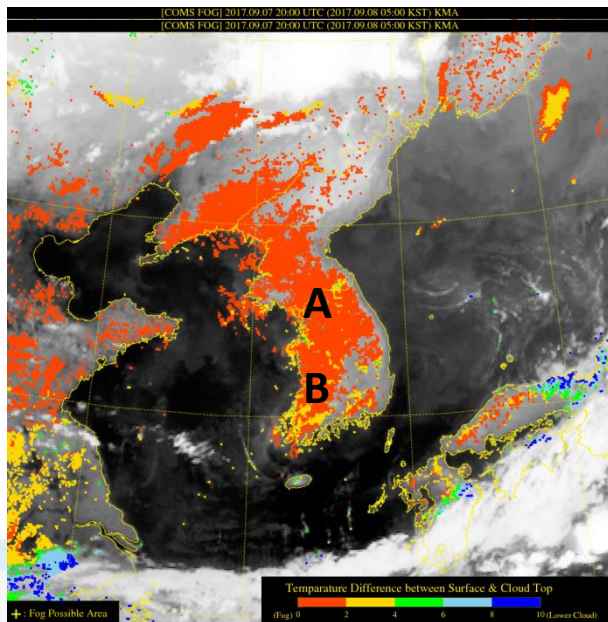
**Station visibility
(meters)**

**Lowest cloud
(type/cloud base in ft)**

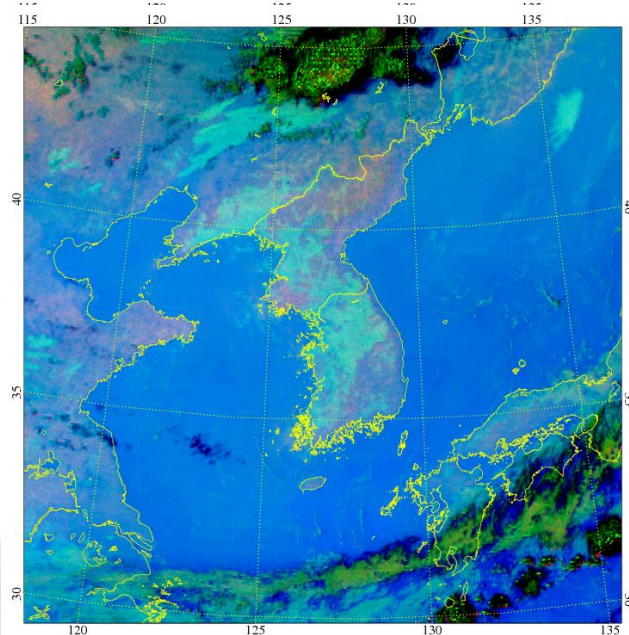


**Please start the Power Point Slide Show
to activate the animation**

COMS fog detection



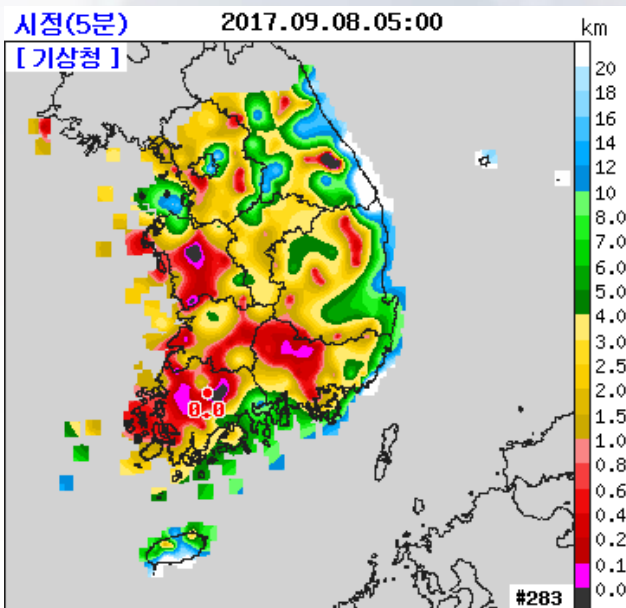
COMS fog RGB



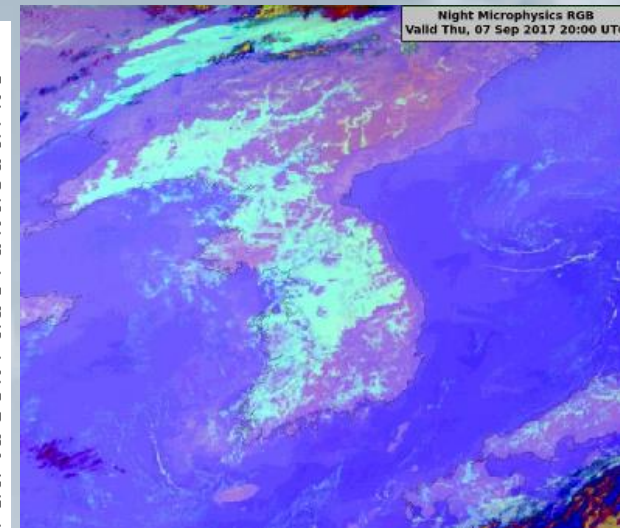
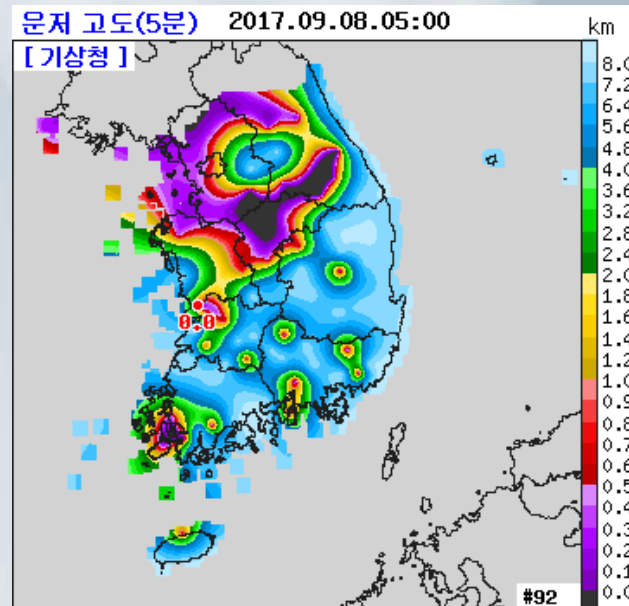
images courtesy Dr HyeSook Park KMA

COMS and Himawari-8 products and station observations, 20UTC 7th September 2017

Visibility



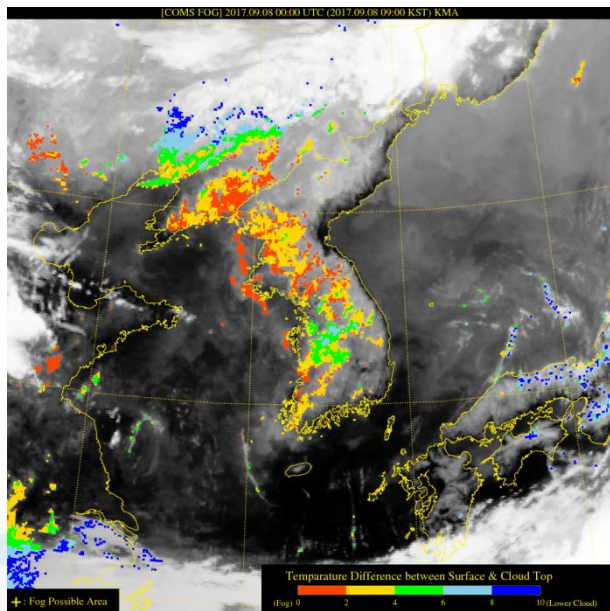
Cloud base height(km)



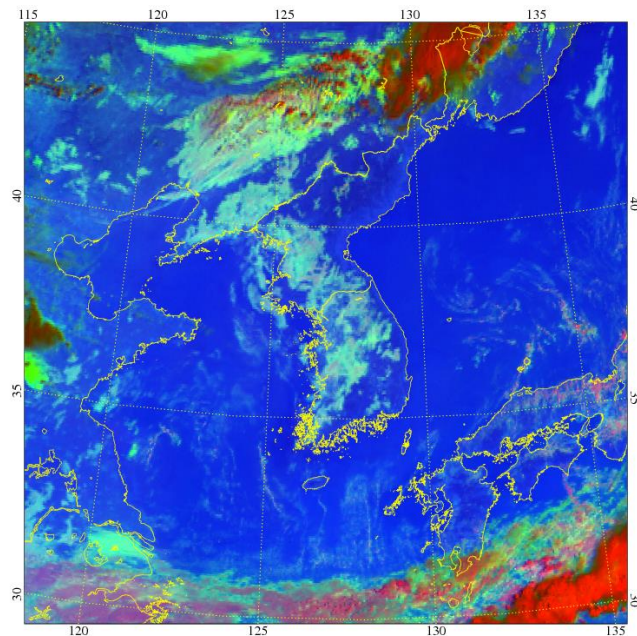
Himawari-8 Night Microphysics RGB product

2017.09.07. 20:00UTC

COMS fog detection



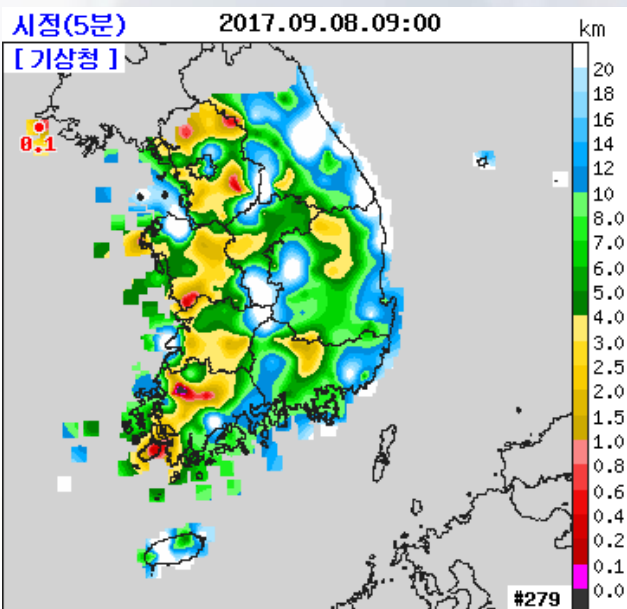
COMS fog RGB



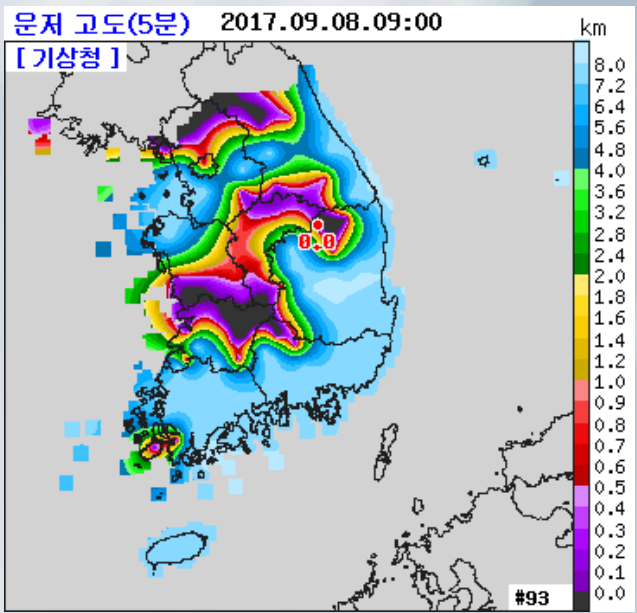
images courtesy Dr HyeSook Park KMA

COMS and Himawari-8 products and station observations, 00UTC 8th September 2017

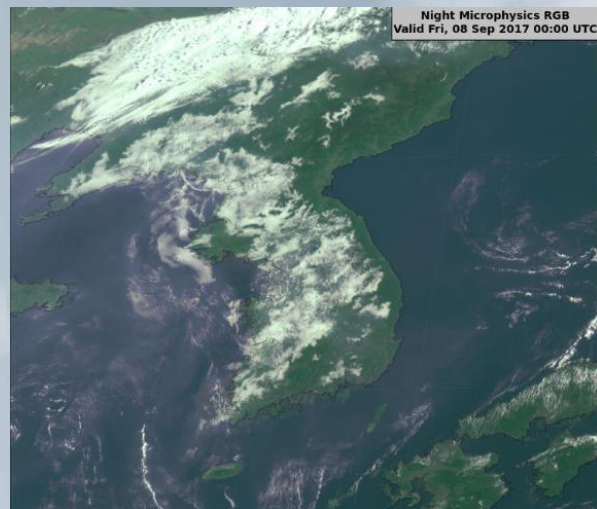
Visibility



Cloud base height(km)



2017.09.08. 00:00UTC



Himawari-8 True Colour RGB
product