

Application of Atmospheric Motion Vector in KMA

- Upper Level Flow
- Jet stream
- Typhoon Center analysis
- Strong winds

May 2017

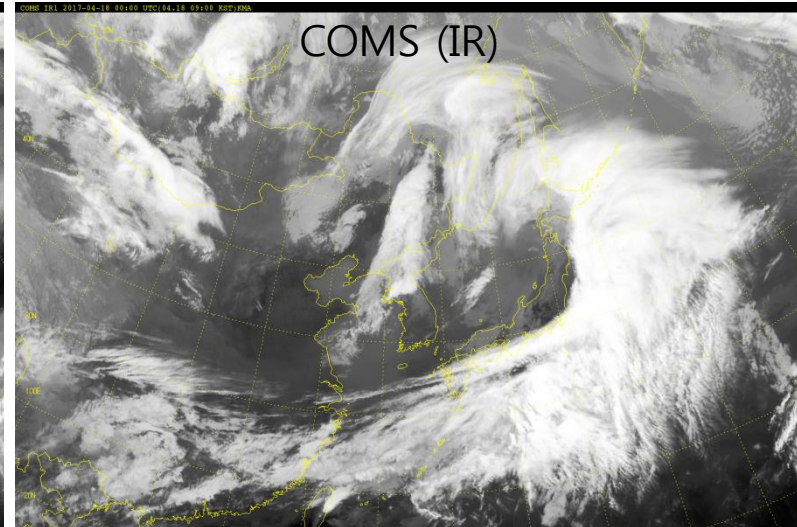
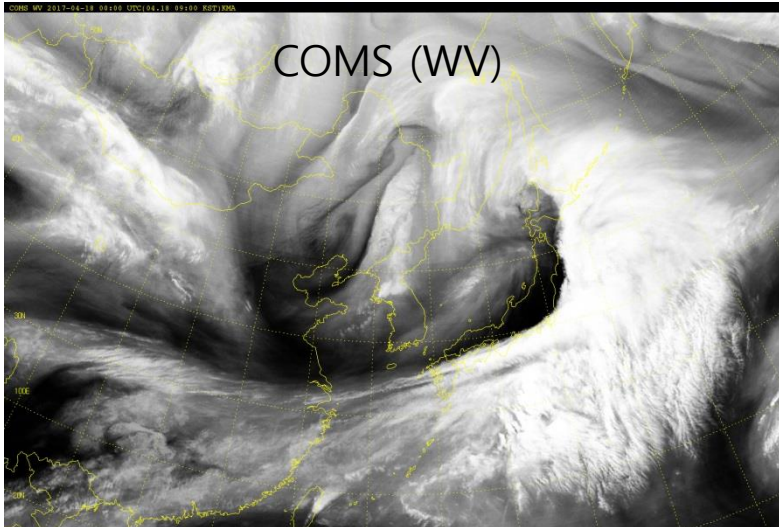
Dr. Hye Sook, Park

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Satellite Analysis Division, National Meteorological Satellite Center

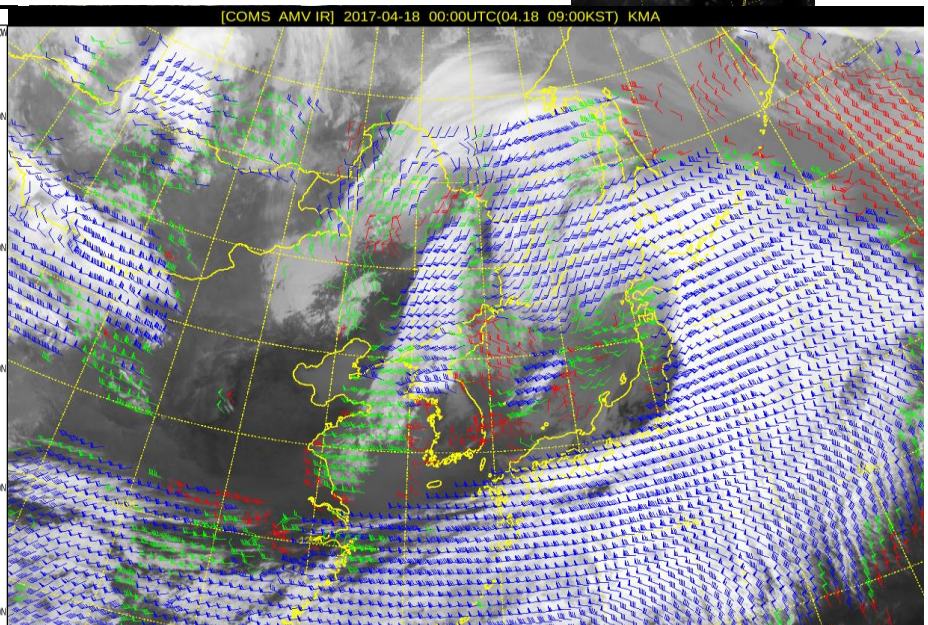
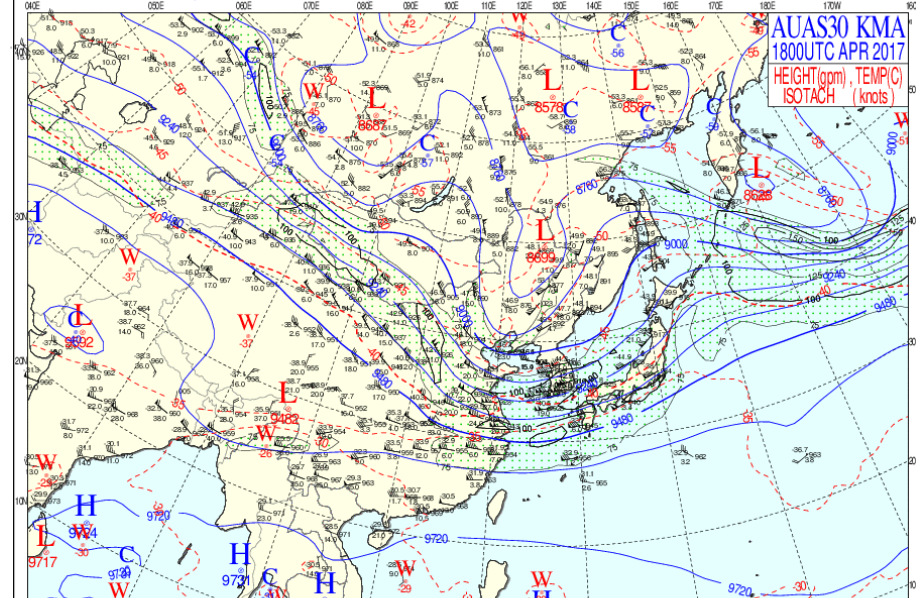
Upper Atmosphere Analysis

2017.04.18. 00UTC



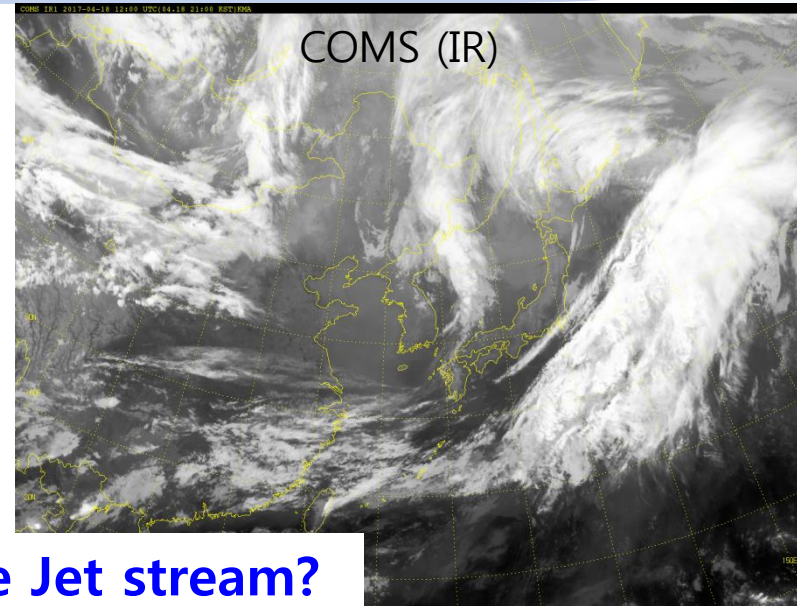
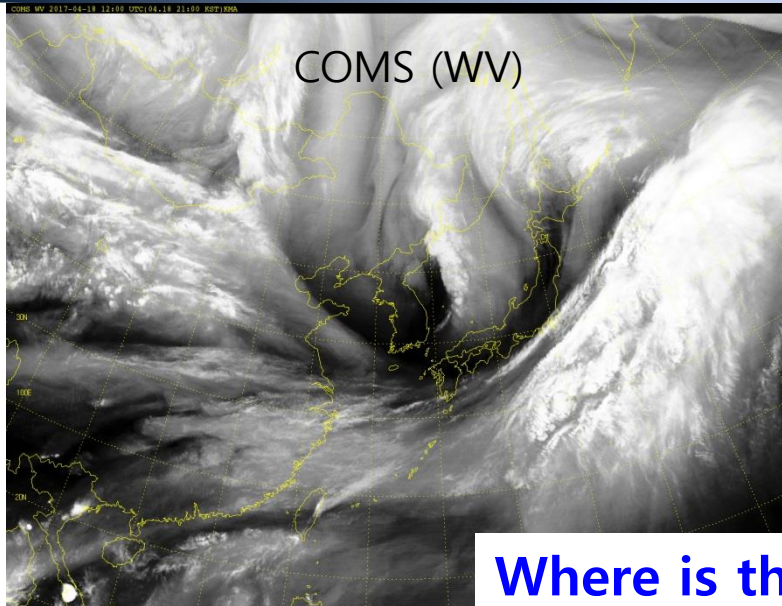
Where is the Upper low pressure system ?

00UTC 18 APR 2017 (09KST 18 APR 2017)

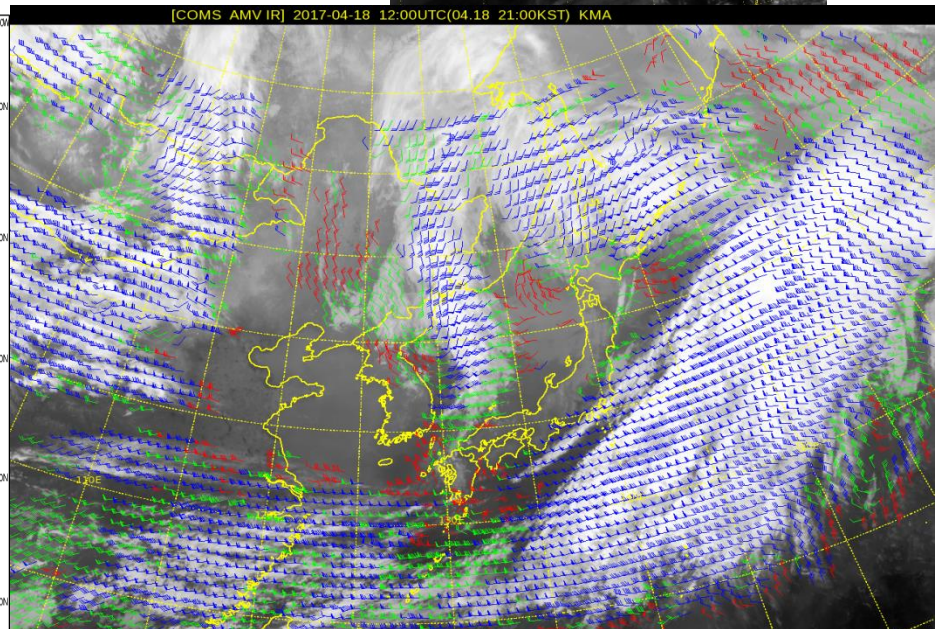
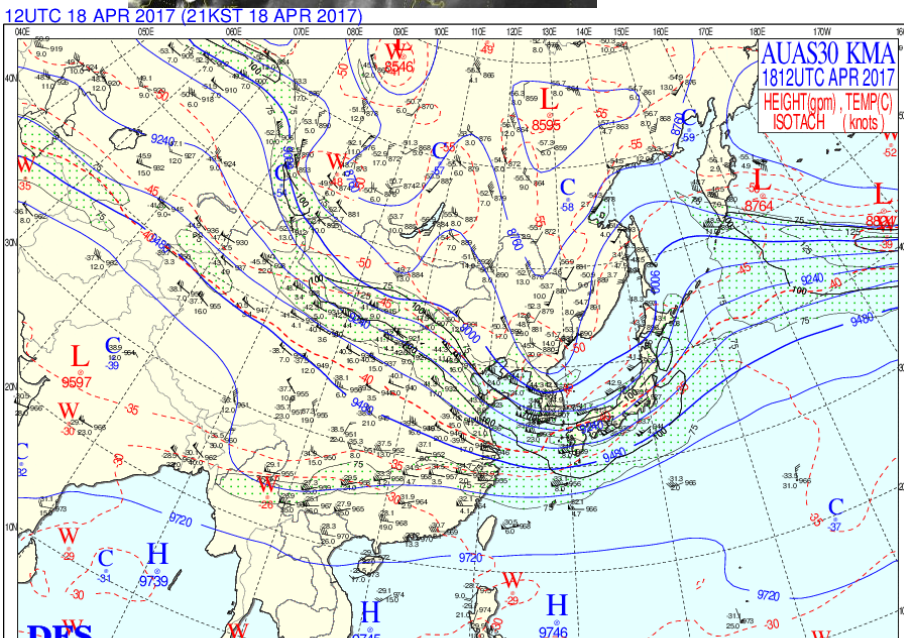


Upper Atmosphere Analysis

2017.04.18. 12UTC

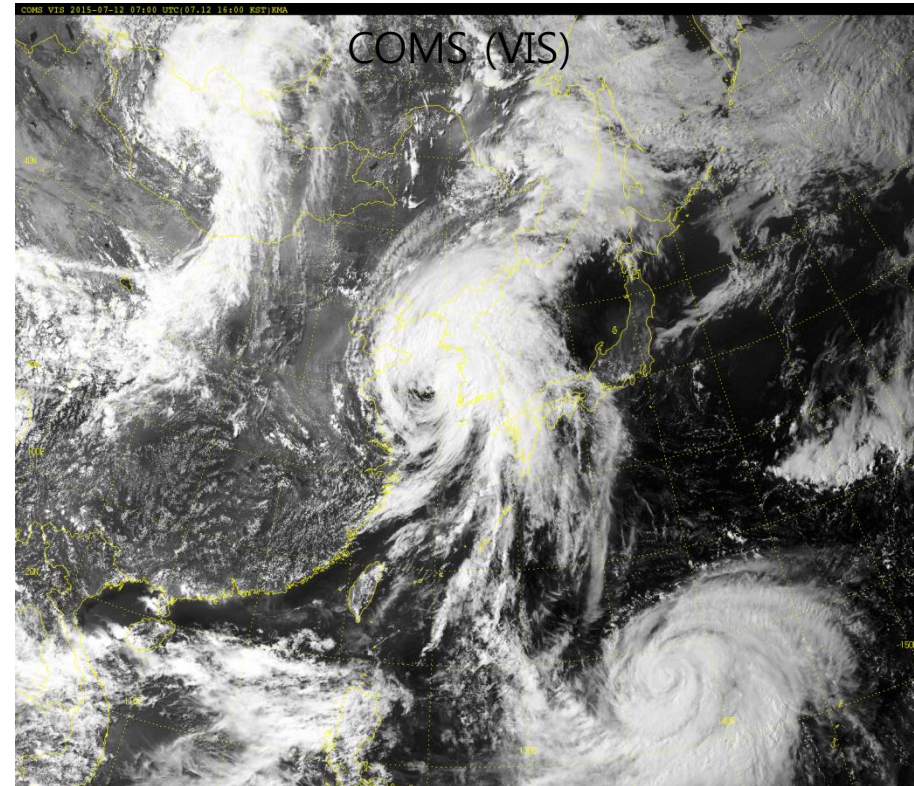
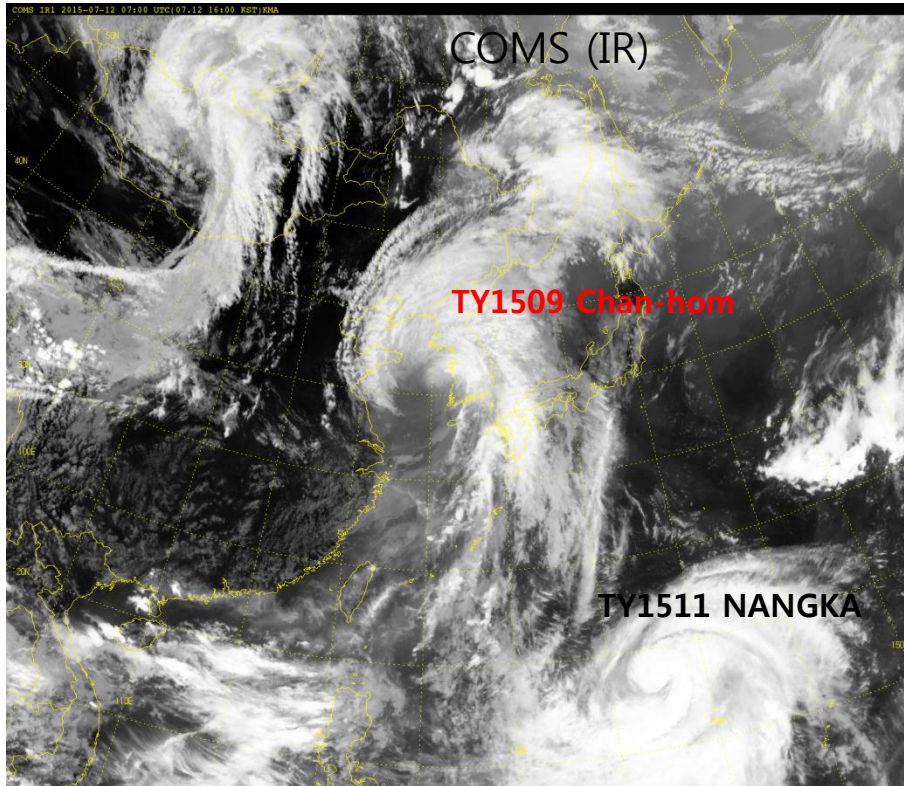


Where is the Jet stream?



Tropical Cyclone Analysis-Center

2015.07.12. 07UTC (Daytime)



Where is the center of Tropical cyclone ?

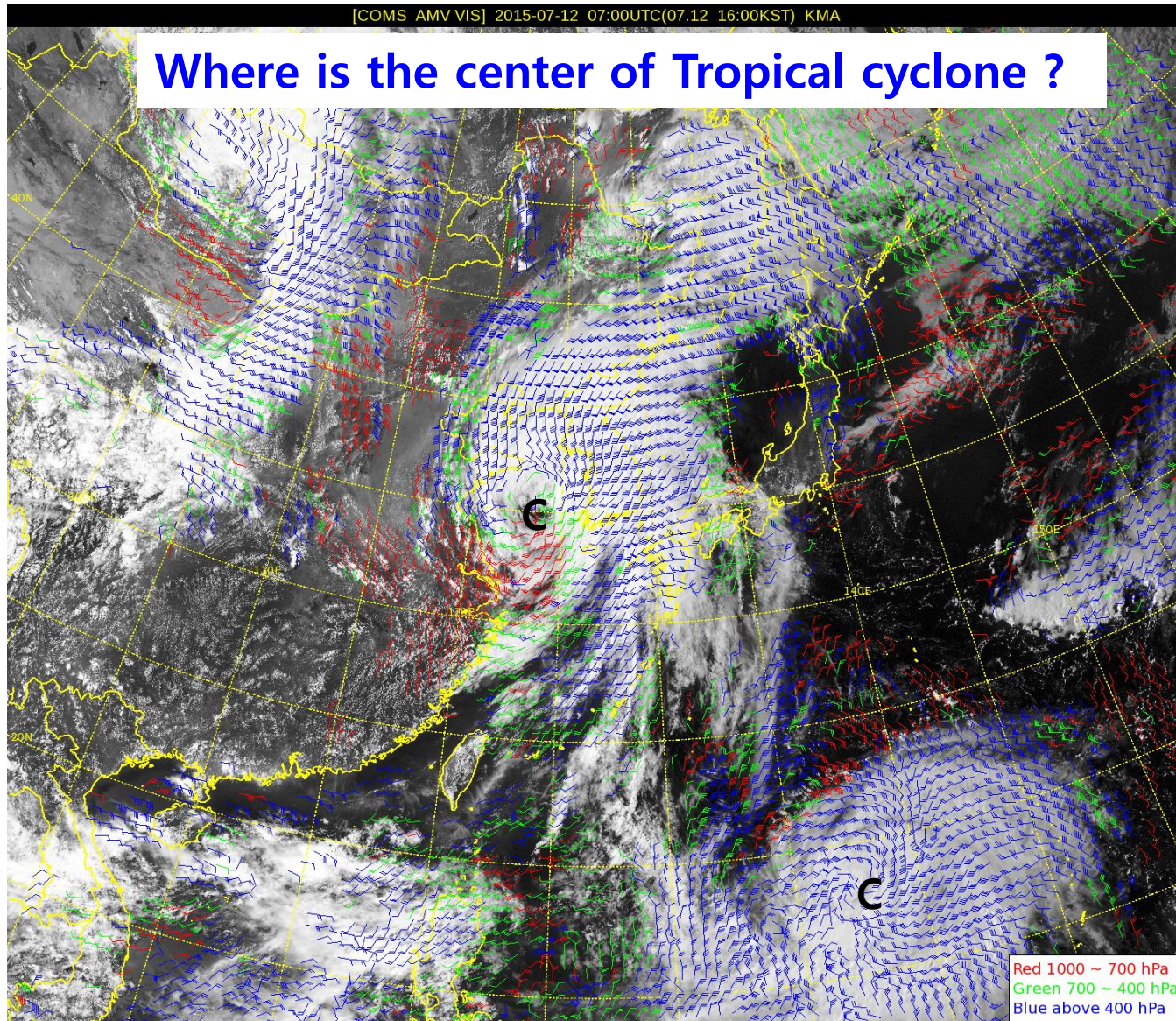
Tropical Cyclone Analysis-Center

2015.07.12. 07UTC

[COMS AMV VIS] 2015-07-12 07:00UTC(07:12 16:00KST) KMA

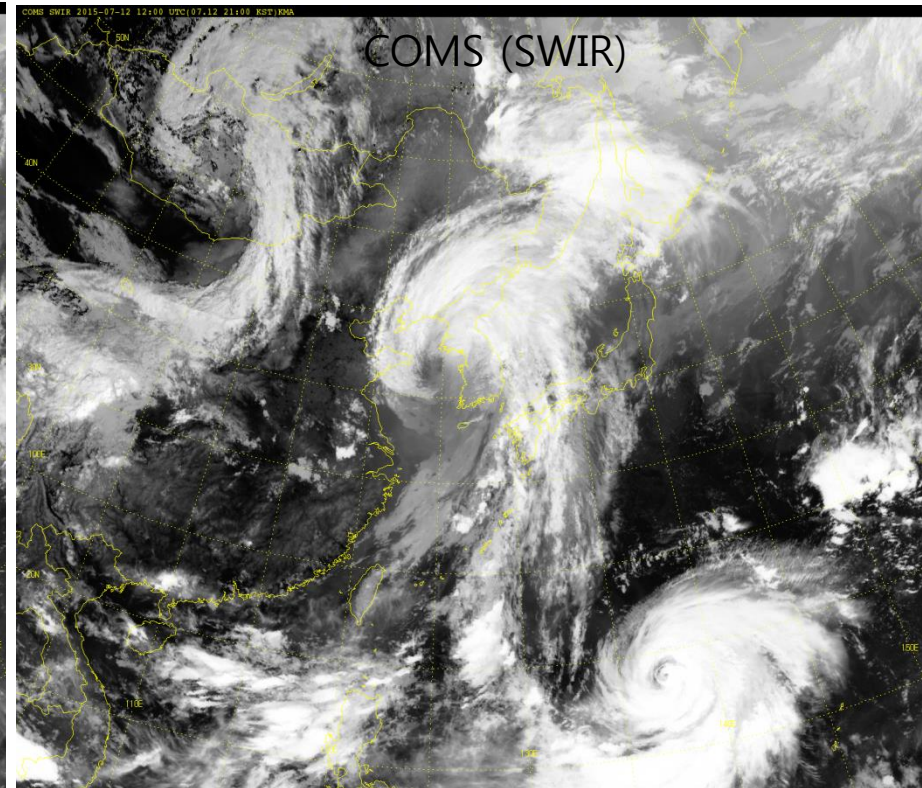
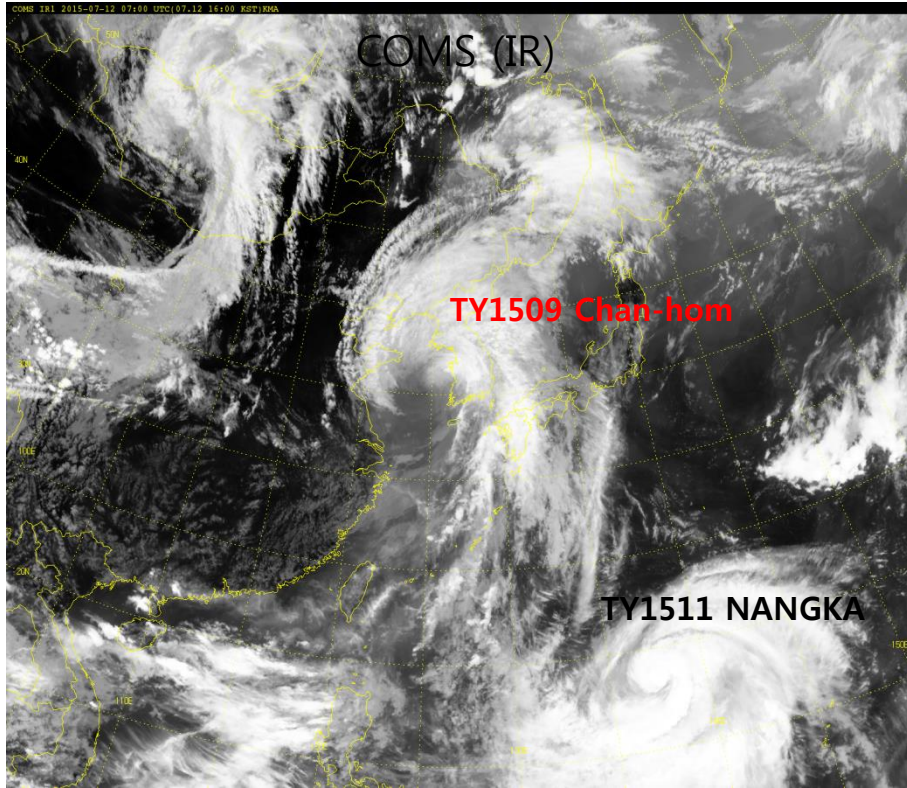
Where is the center of Tropical cyclone ?

COMS AMV
(VIS)



Tropical Cyclone Analysis-Center

2015.07.12. 12UTC (Nighttime)



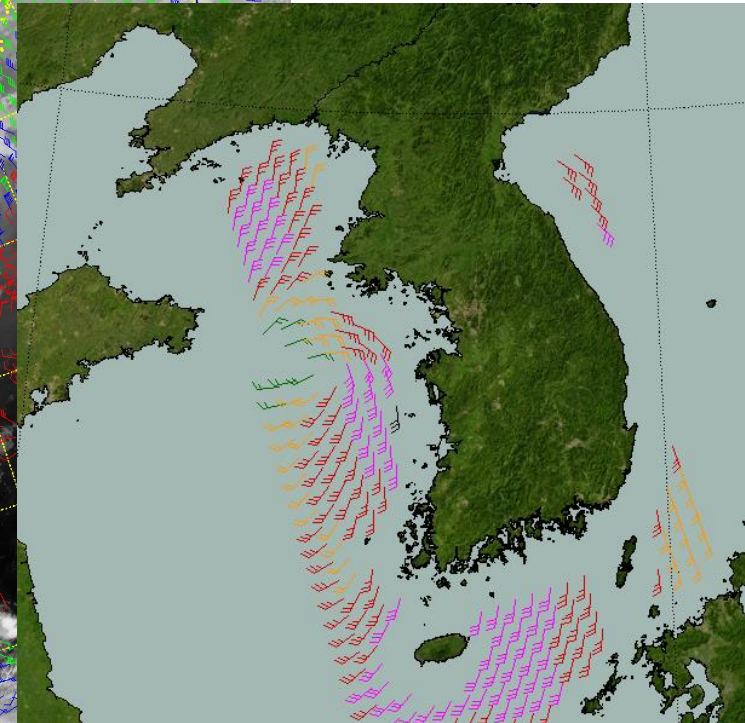
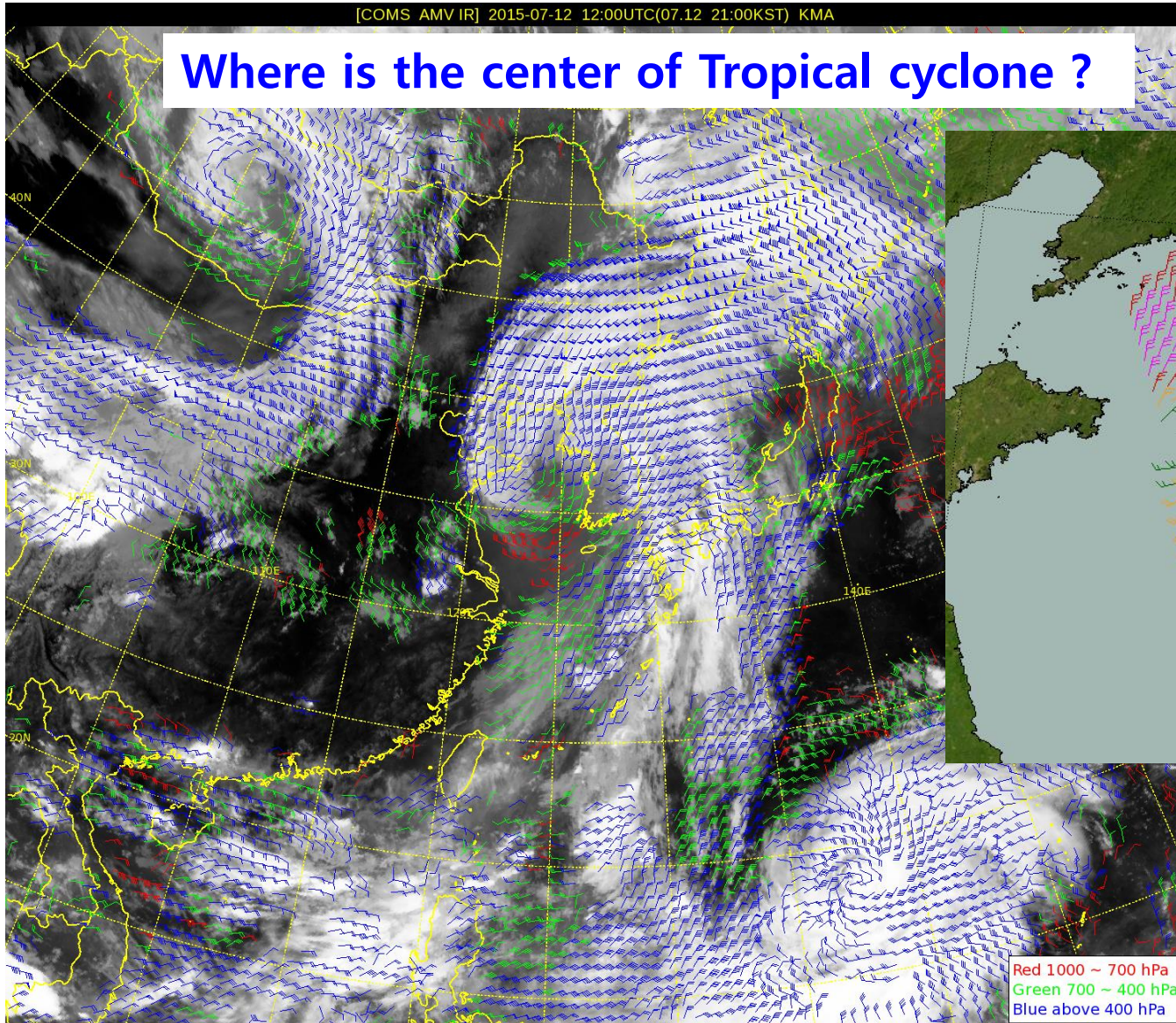
Where is the center of Tropical cyclone ?

Tropical Cyclone Analysis-Center

2015.07.12. 12UTC

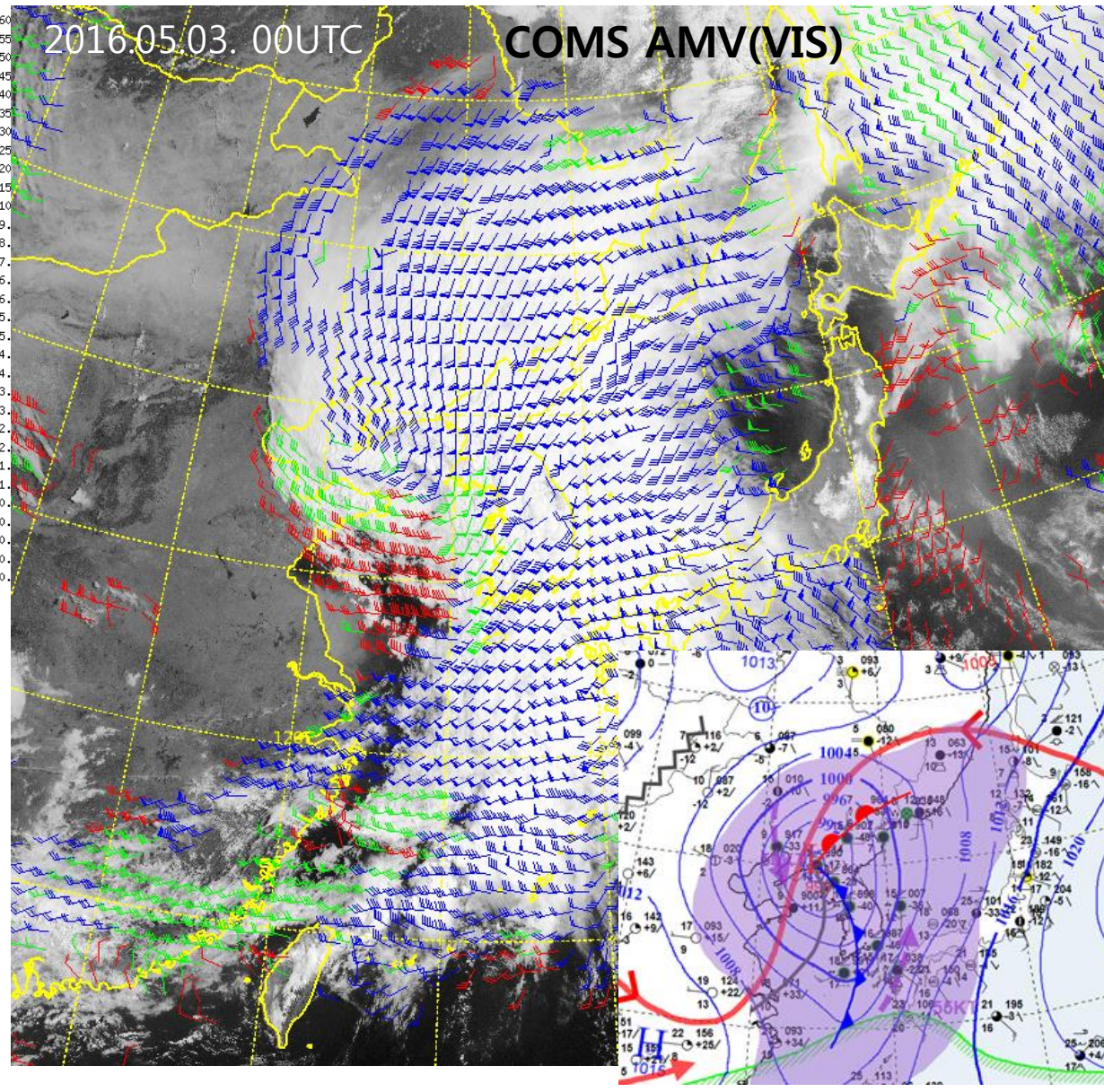
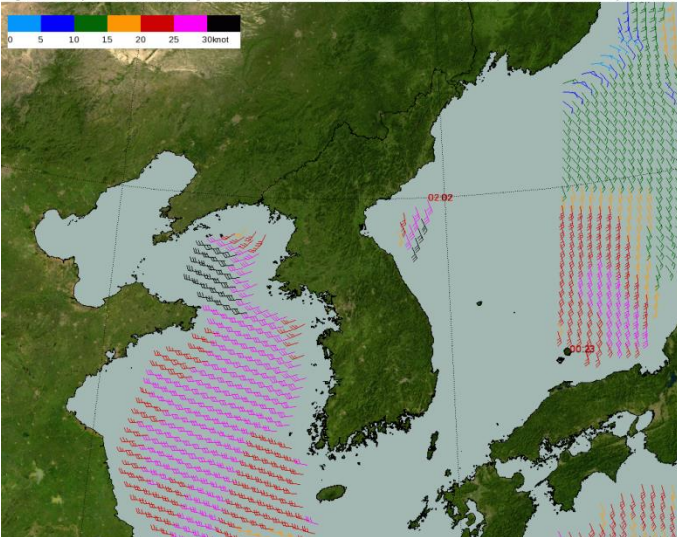
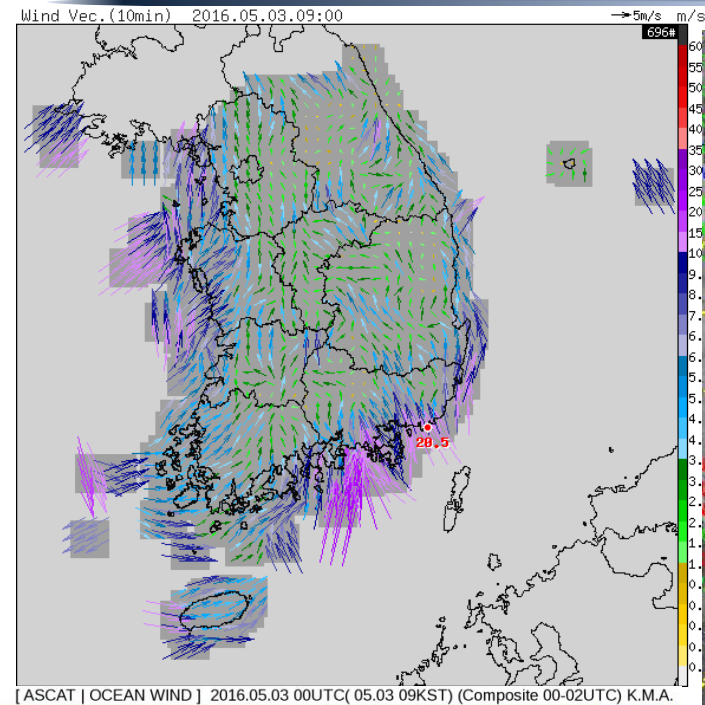
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Where is the center of Tropical cyclone ?



COMS AMV
(IR)

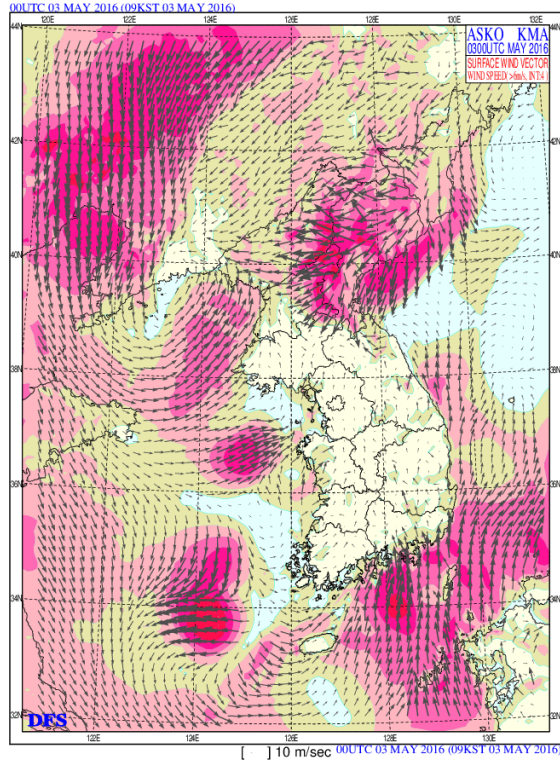
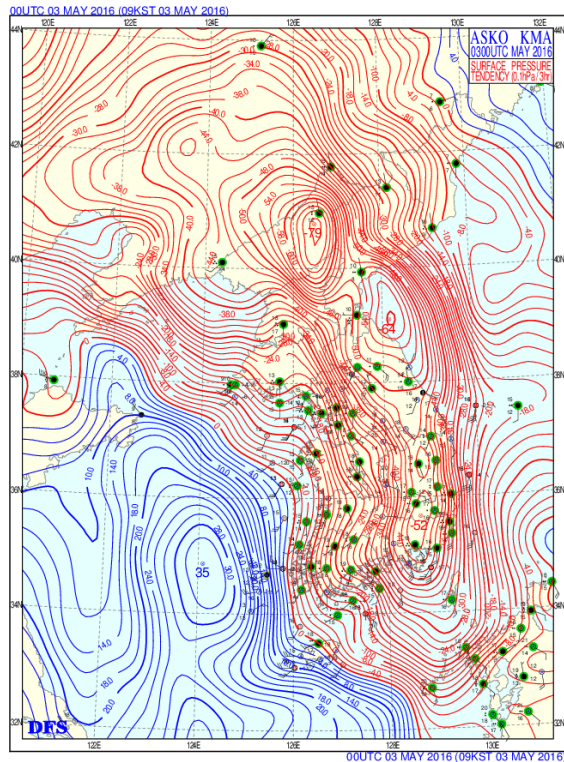
Front analysis – Bomb Low (Strong wind)



Effects of Bomb Low

Surface pressure tendency(0.1hPa/3hr)

Winds Vector



Central pressure drop more than 24hPa a day

Strong wind above 20m/s all over the Korean Peninsula & wind shear

➔ Aircraft cancellation(173 in Jeju), No ships, breakage of building, roadside trees etc