

# Recent changes of the ECMWF NWP system (6p.04)

## ➤ New model cycles: One operational cycle (41R1)

- All sky mode for MHS
- SSMIS sounding moist channels over land and sea-ice
- ATMS surface-sensitive channels over land
- 2D operator for GPSRO
- Upgrade to RTTOV-11
- **Plus many other data assimilation and model changes**

## ➤ Operational changes of satellite data usage

- Many data usage changes due to outages and data problems
- Activation of FY-3B MWHS (see poster 1p.02 by Keyi Chen)
- **Activation of NPP/CrIS** (in addition to 2 IASI, AIRS and 1 HIRS)
- **Activation of AMSR-2 and GPM/GMI** (in addition to F17/SSMIS)

Grid res	HRES	ENS		4DVAR Inner Loops			Outer	EDA	
		LegA	LegB/M'ly	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>		1 <sup>st</sup>	2 <sup>nd</sup>
128 km								TL159	TL159
				TL255	TL255	TL255		TL191	TL191
64 km			TL319		TL319				
						TL399			
32 km			TL639	TCo319			TL399		
16 km								TCo639	
		TL1279	TCo639						
9 km									
		TCo1279							

## ➤ Main upcoming satellite changes (cycle 41R2)

- **Major high resolution upgrade (affecting almost all data assimilation and forecasting components)**
- Situation dependent observation errors for AMSUA (poster 5b.06 by Heather Lawrence)
- Activation of F-18 humidity sounding channels over ocean and extend all-sky mode to snowy land
- Improved IASI aerosol screening (poster 8p.04 by Reima Eresmaa)
- Update of RTTOV coefficient files for microwave instruments (see item 2.03 by Cristina Lupu)
- 25% increase of GPSRO observation errors