

**Section1. Night fog development**

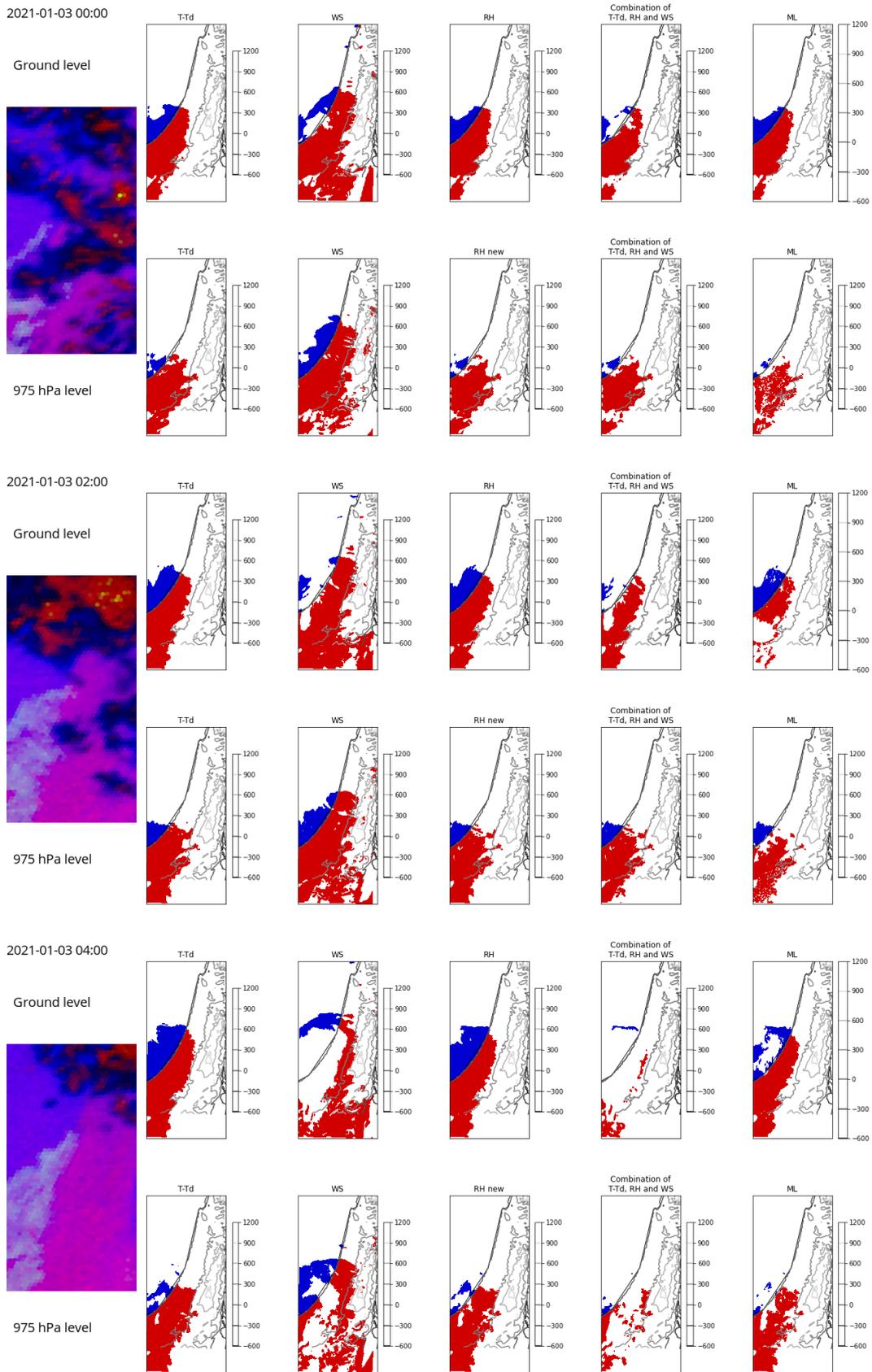


Figure 13. Fog development during 3<sup>rd</sup> January 2021, 00, 02 and 04 UTC

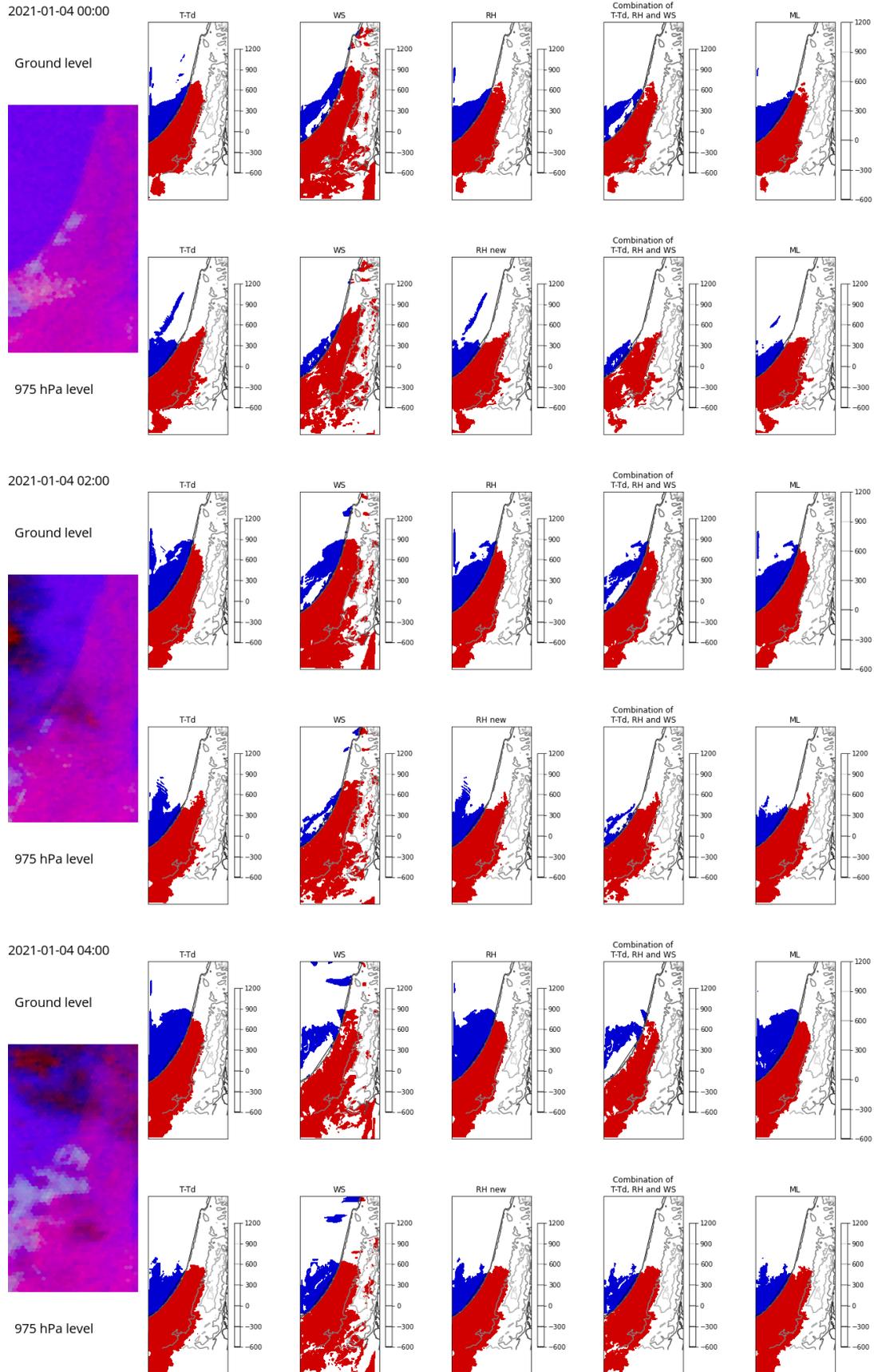


Figure 14. Fog development during 4<sup>th</sup> January 2021, 00, 02 and 04 UTC

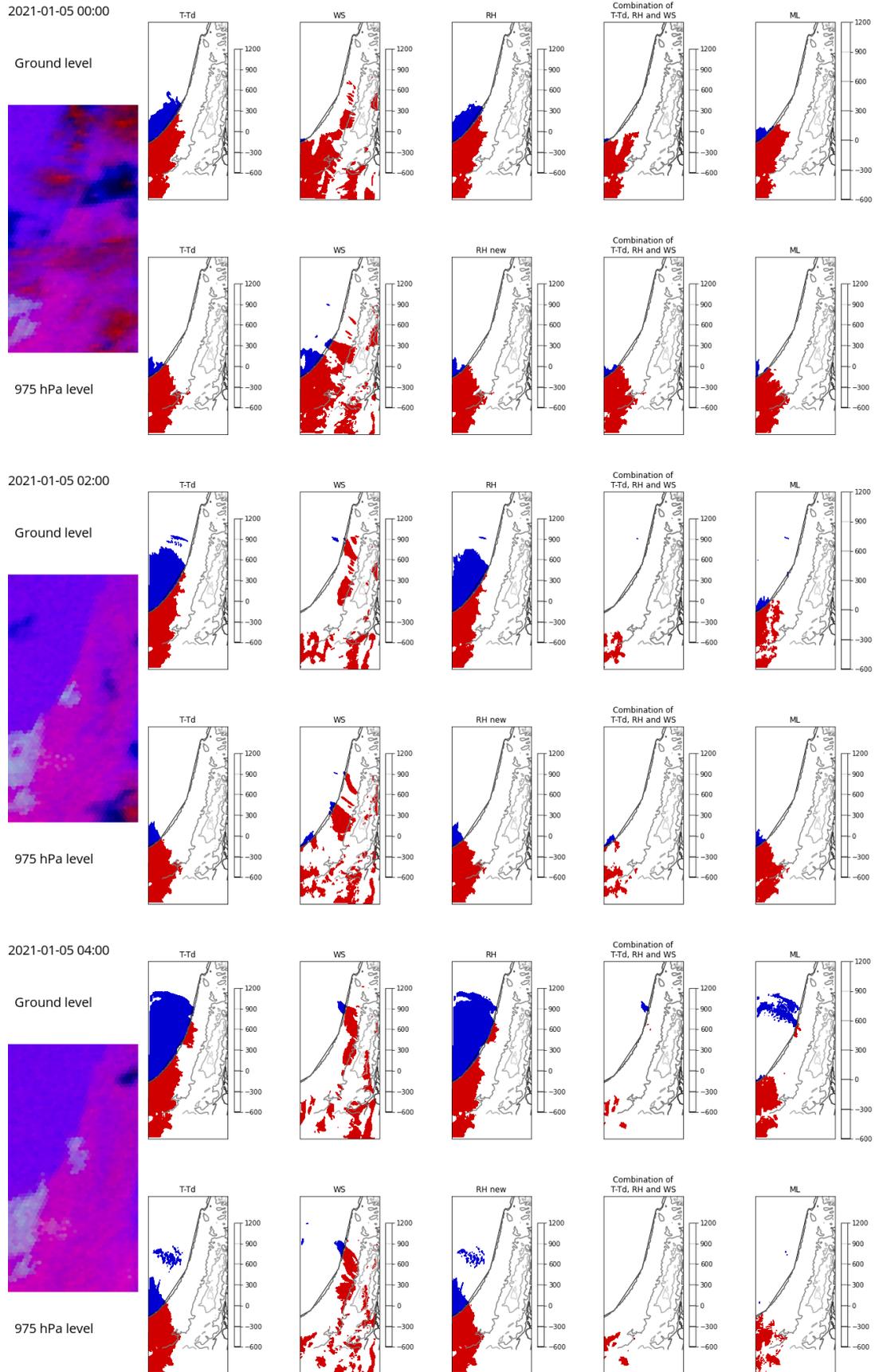
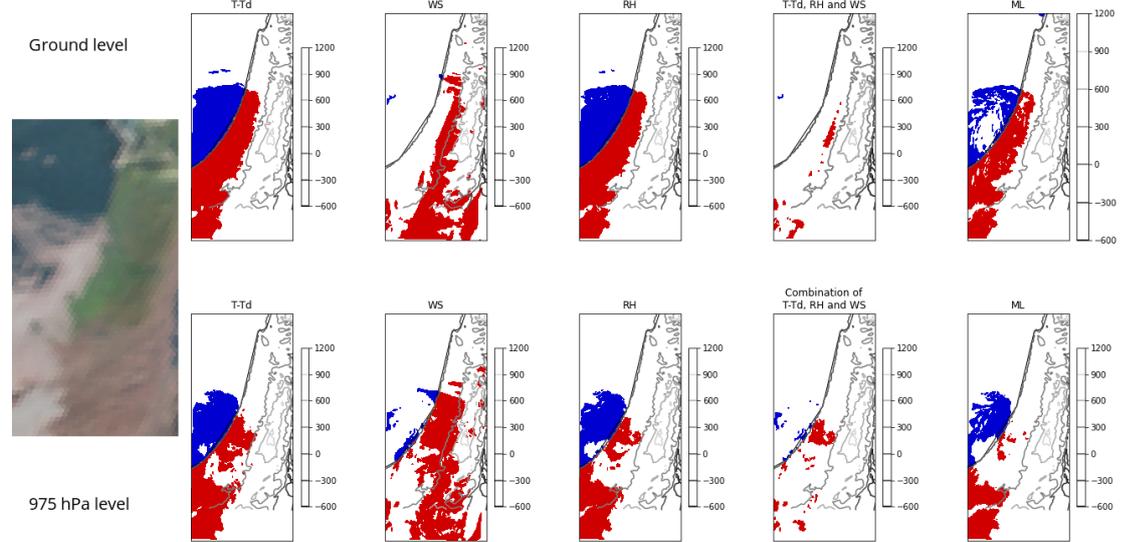


Figure 15. Fog development during 5<sup>th</sup> January 2021, 00, 02 and 04 UTC

## Section 2. Day fog development

2021-01-03 06:00:00



2021-01-03 08:00:00

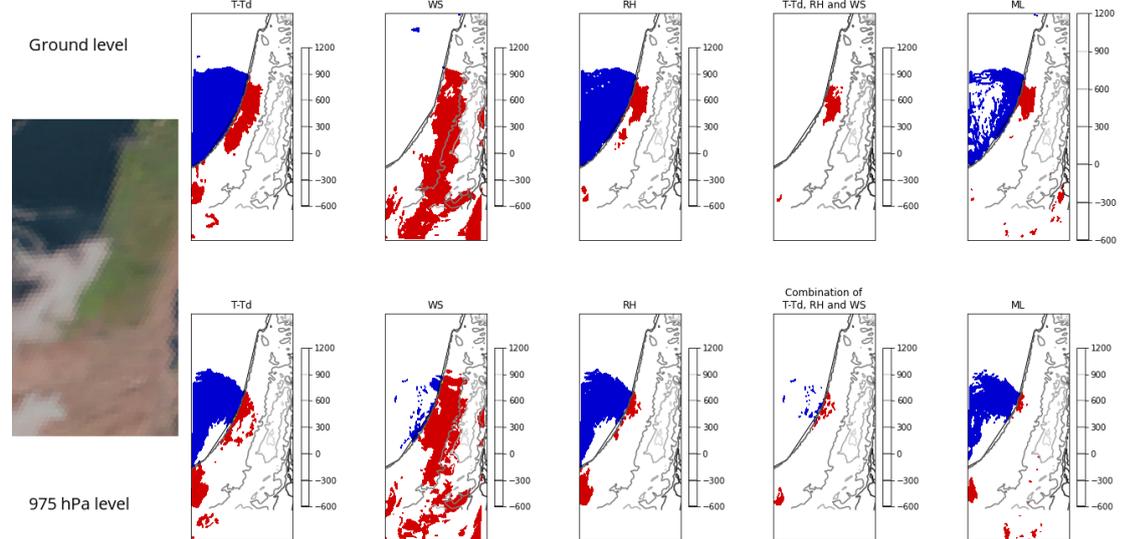


Figure 16. Fog development during 3<sup>rd</sup> January 2021, 06 and 08 UTC

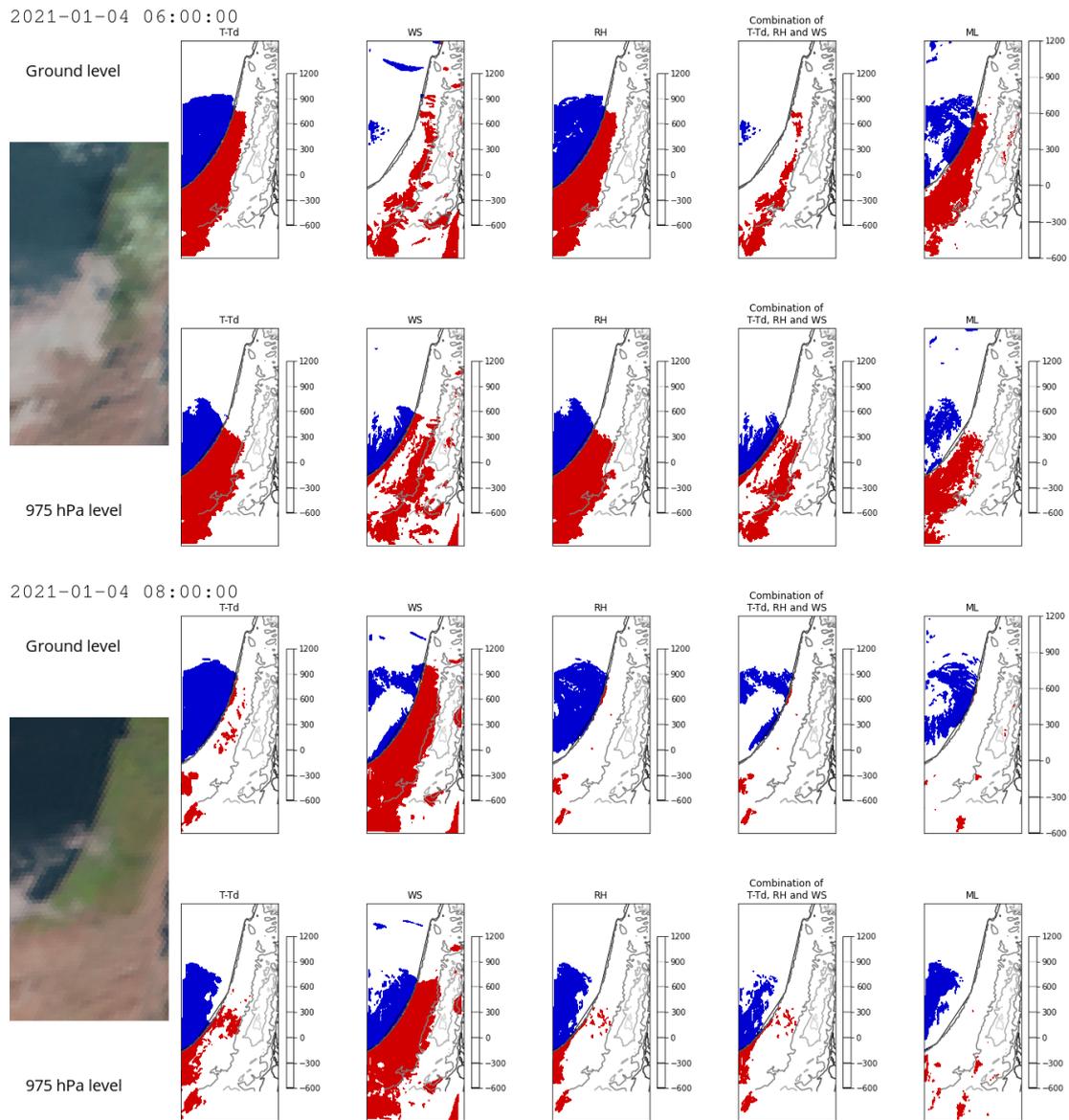


Figure 17. Fog development during 4<sup>th</sup> January 2021, 06 and 08 UTC

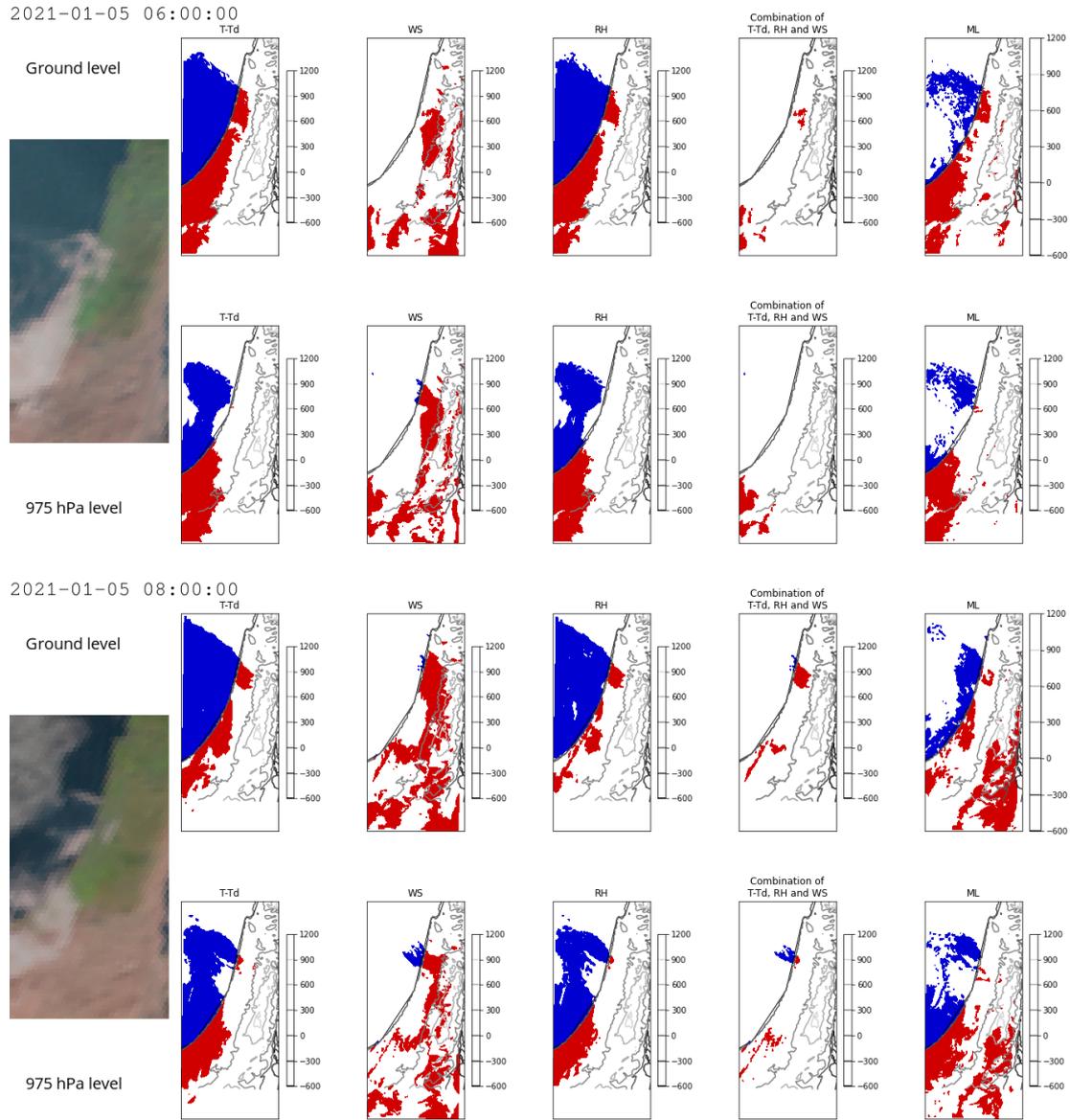


Figure 18. Fog development during 5<sup>th</sup> January 2021, 06 and 08 UTC

### Section 3. T-Td, RH and WS distribution, trimmed by the GBT derived fog, night time

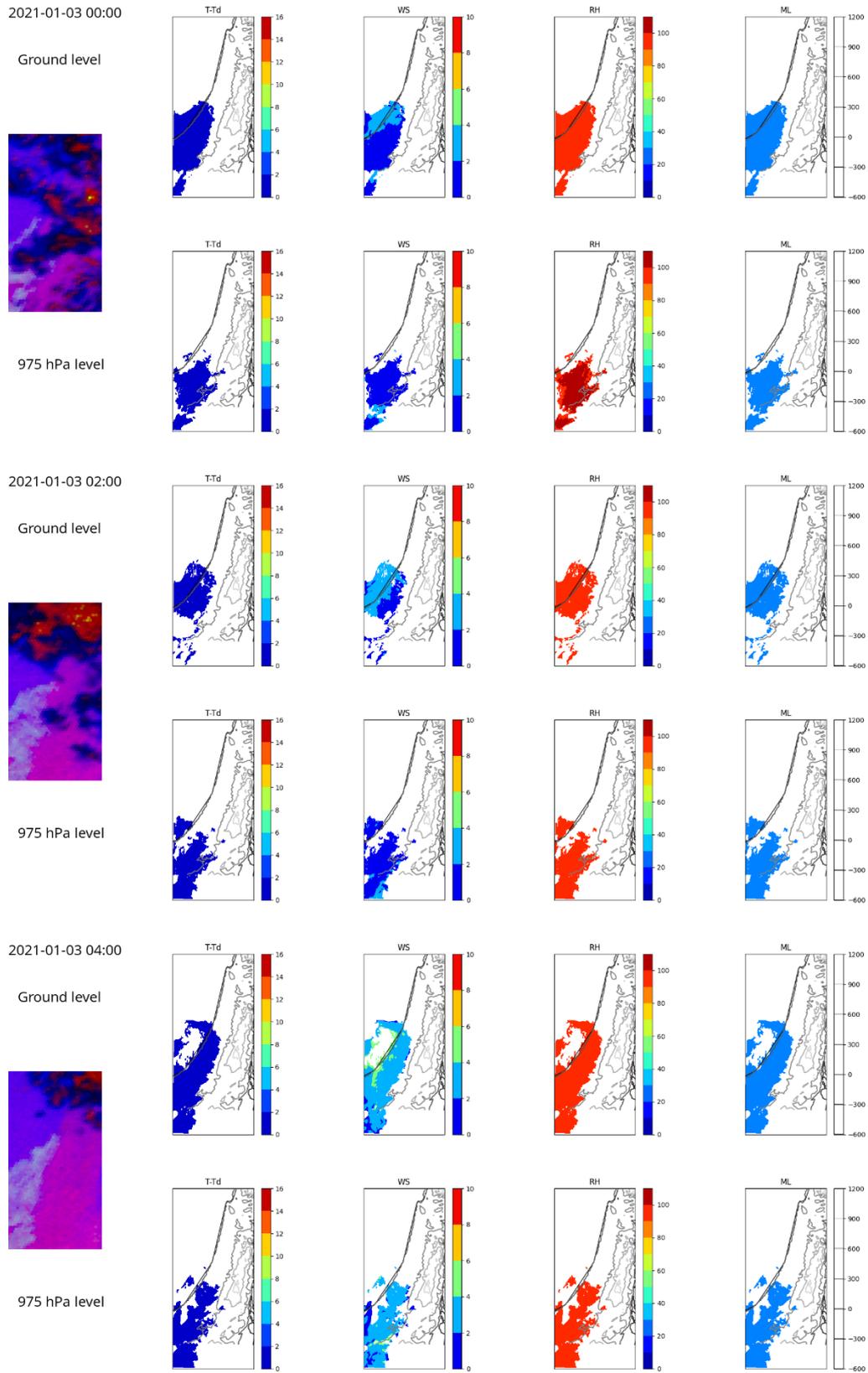


Figure 19. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 3<sup>rd</sup> January 2021, 00, 02 and 04 UTC

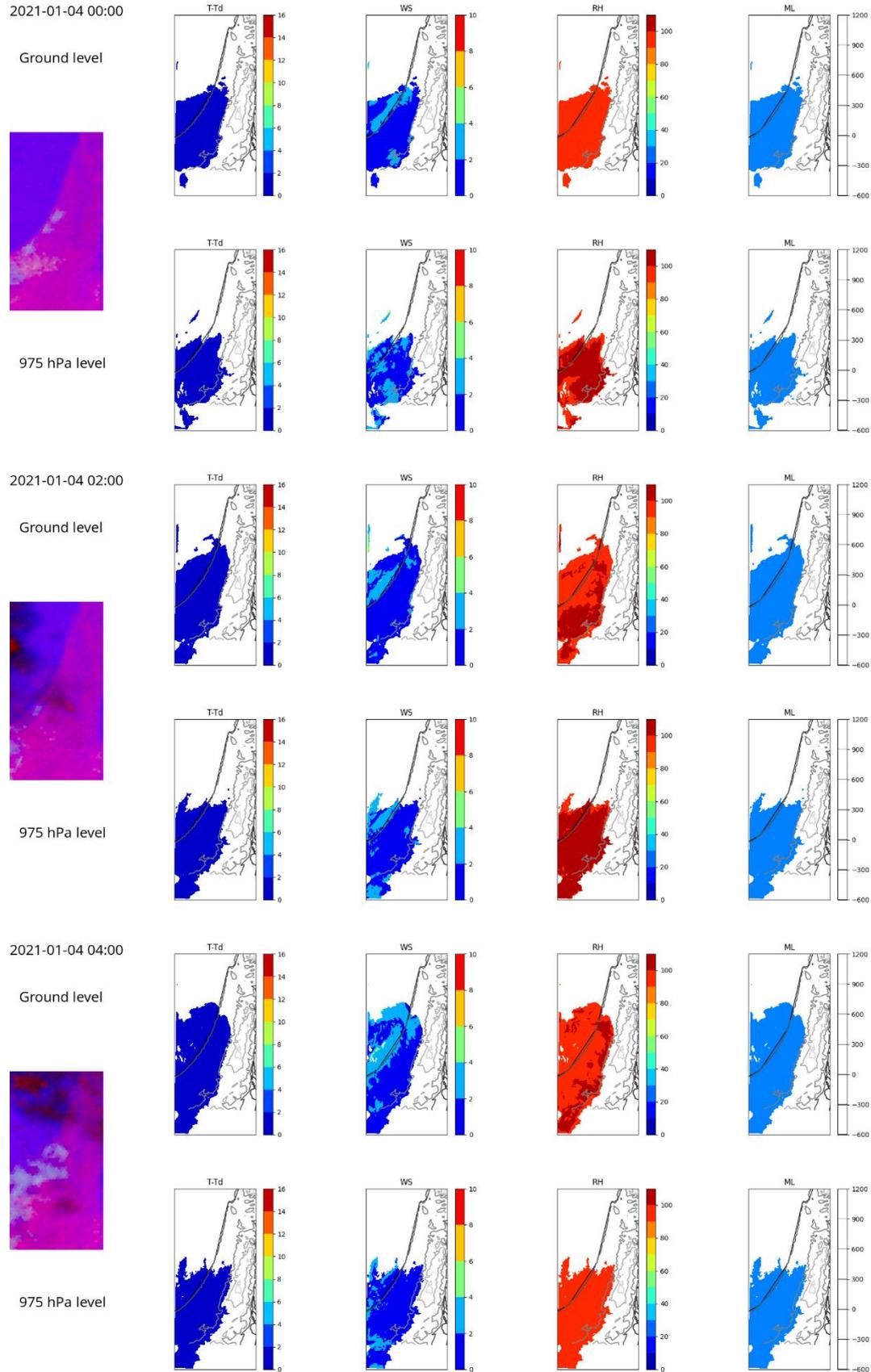


Figure 20. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 4<sup>th</sup> January 2021, 00, 02 and 04 UTC

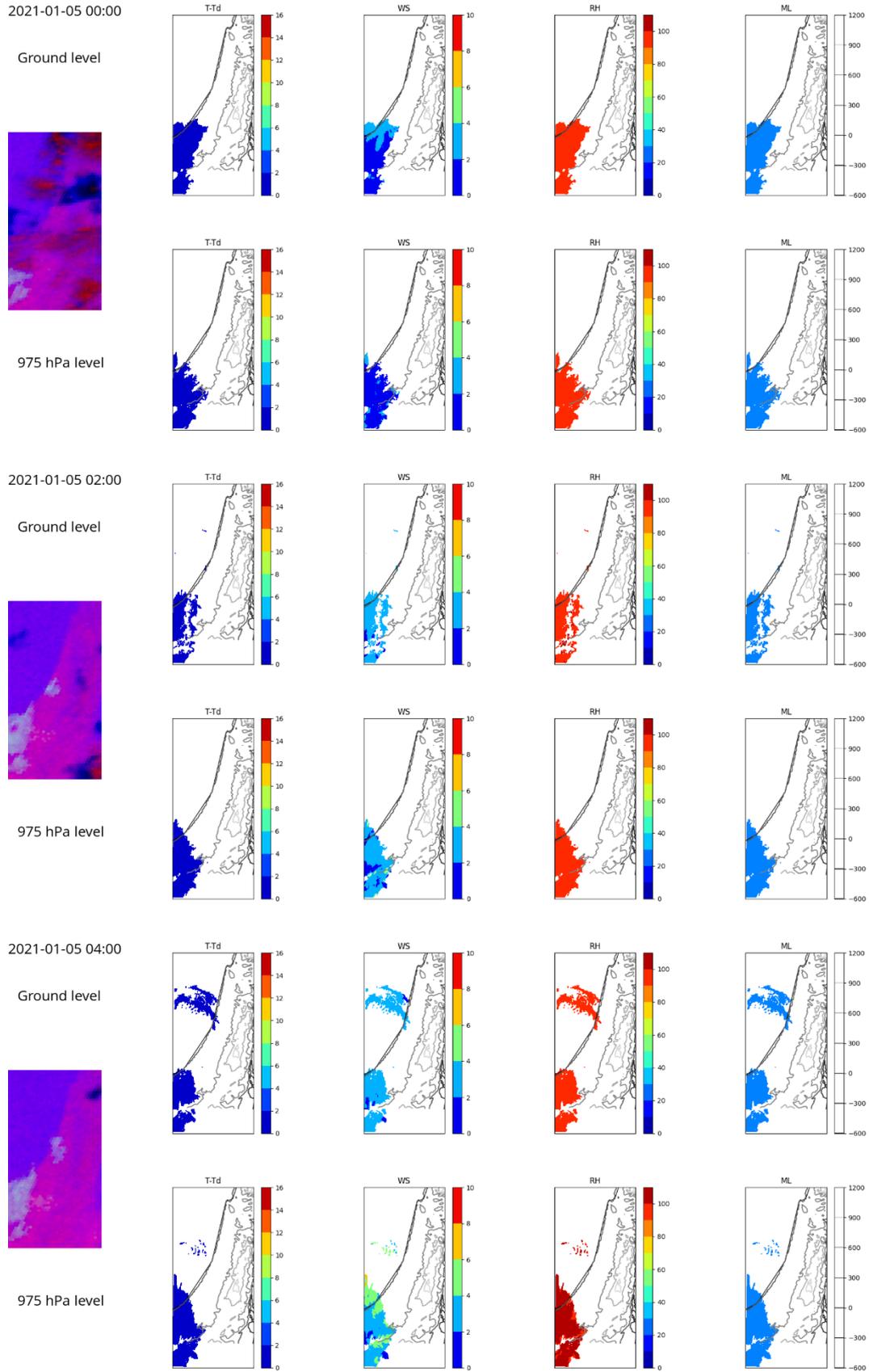


Figure 21. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 5<sup>th</sup> January 2021, 00, 02 and 04 UTC

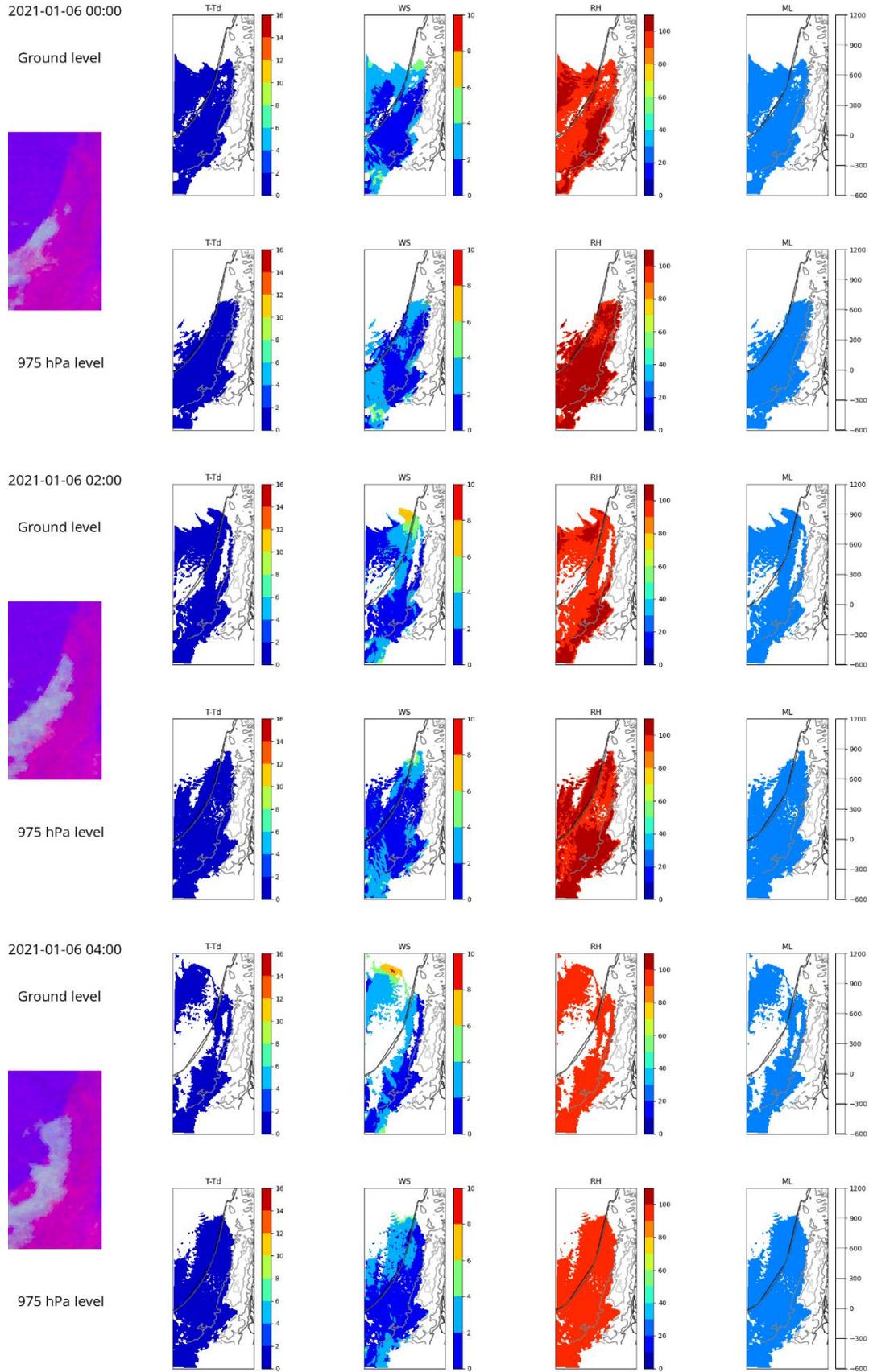
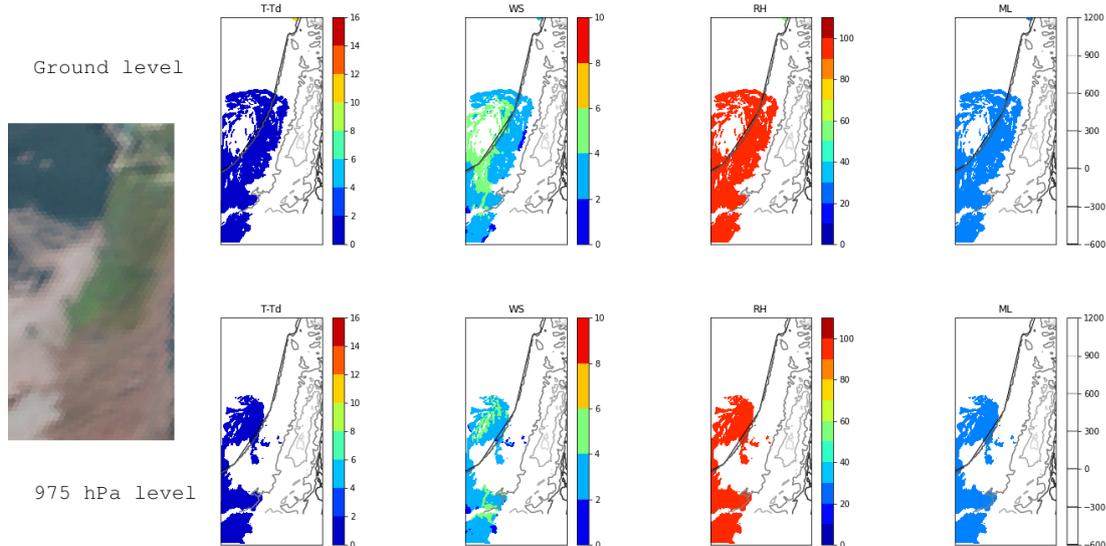


Figure 22. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 6<sup>th</sup> January 2021, 00, 02 and 04 UTC

**Section 4. T-Td, RH and WS distribution, trimmed by the GBT derived fog, day time**

2021-01-03 06:00:00



2021-01-03 08:00:00

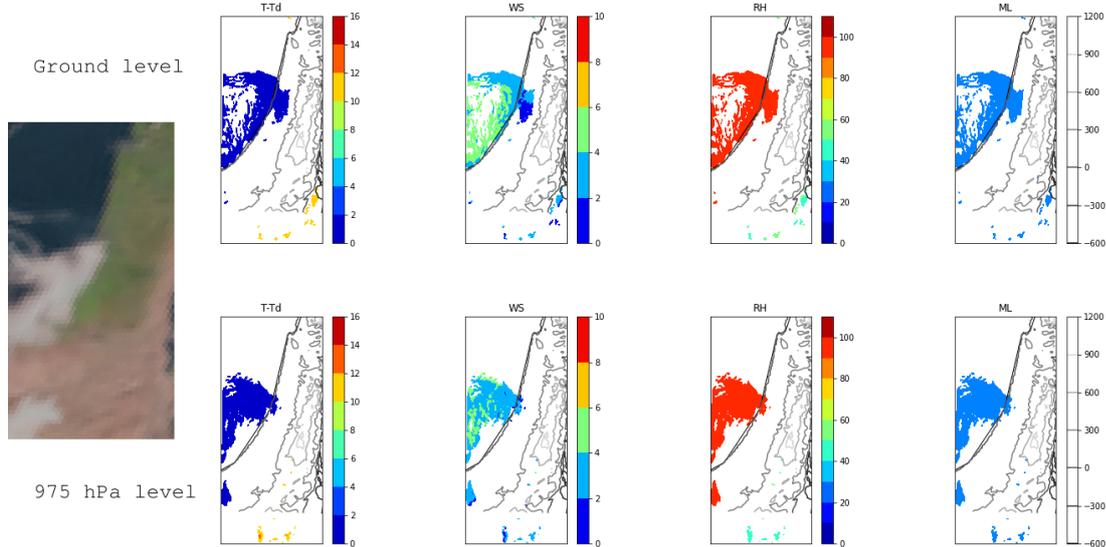


Figure 23. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 3<sup>rd</sup> January 2021, 06 and 08 UTC

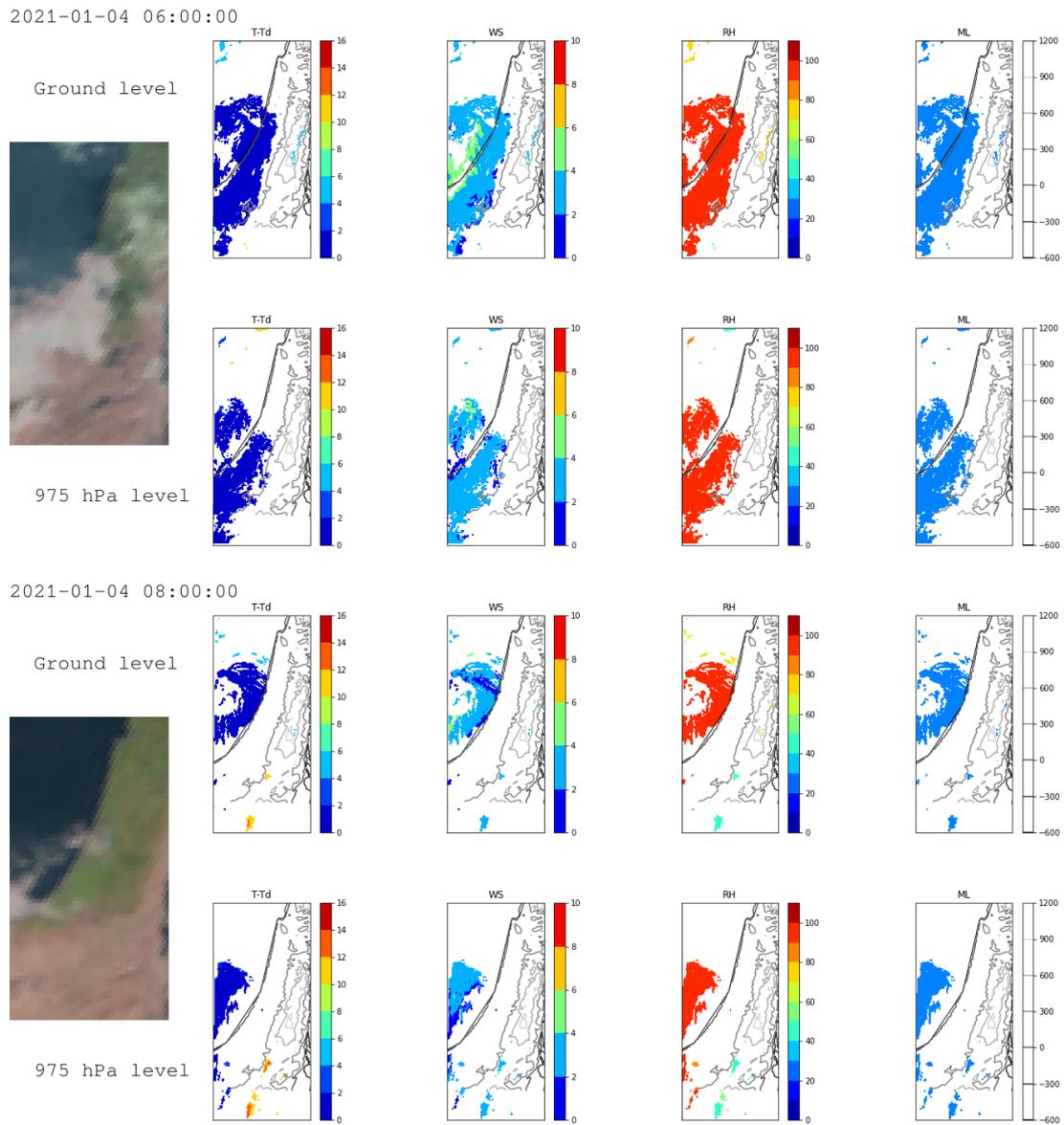


Figure 24. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 4<sup>th</sup> January 2021, 06 and 08 UTC

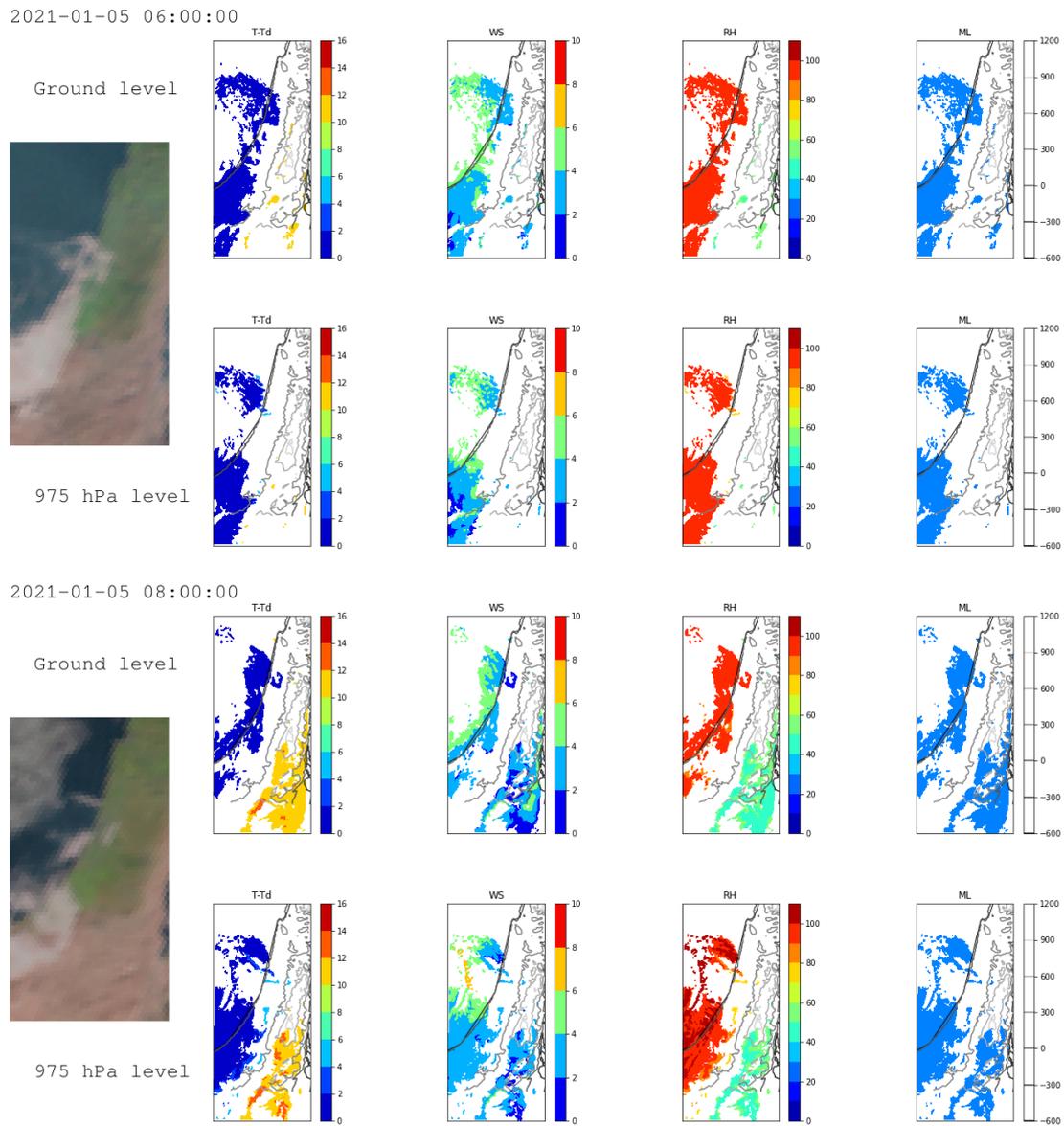


Figure 25. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 5<sup>th</sup> January 2021, 06 and 08 UTC

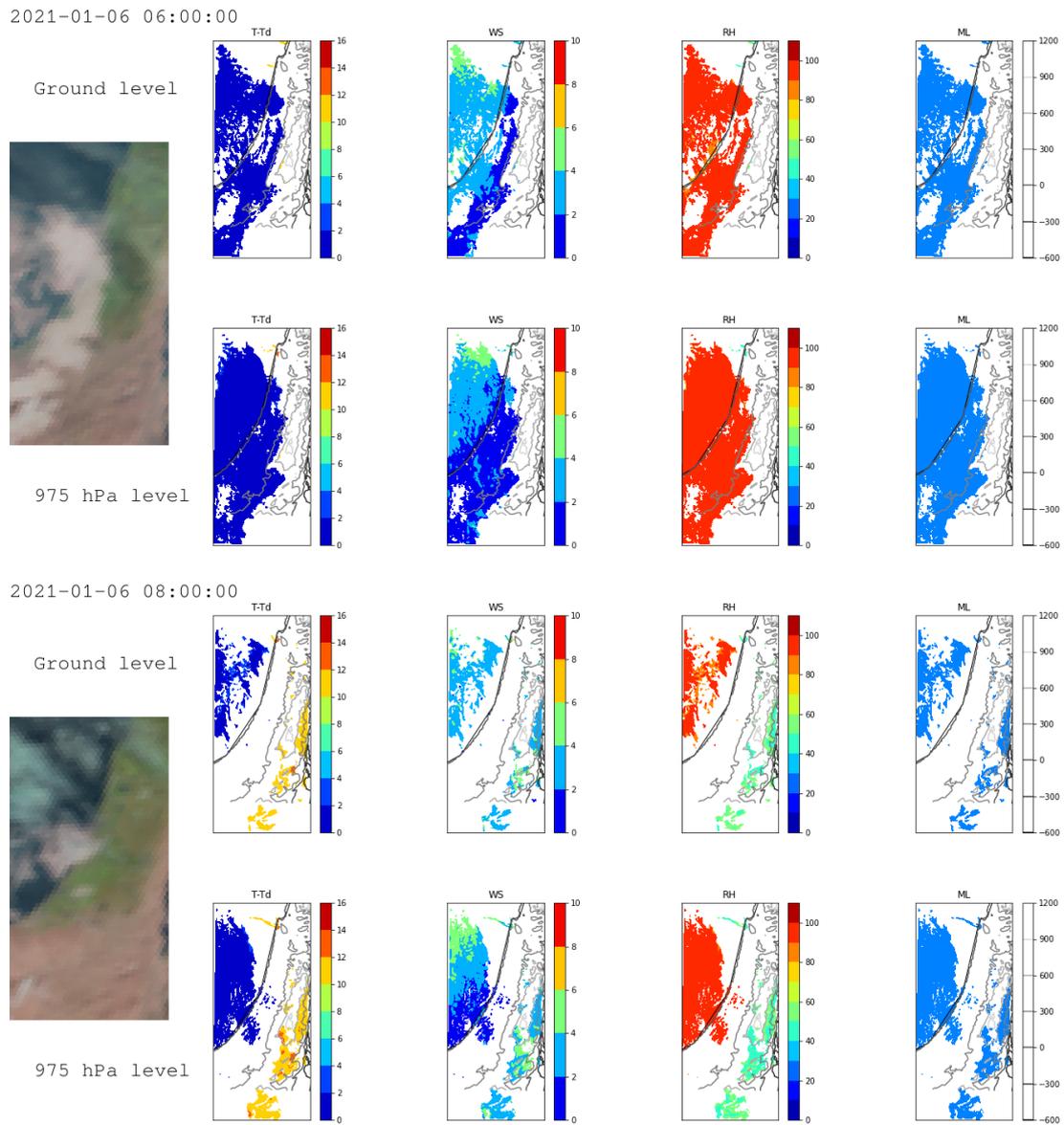


Figure 26. T-Td, RH and WS distribution, trimmed by the GBT derived fog for 6<sup>th</sup> January 2021, 06 and 08 UTC

## Section 5. Radiosonde vertical profiles, compared to the WRF prediction values

**Radiosonde : Beit dagan vs WRF , 03/01/21 23 UTC**

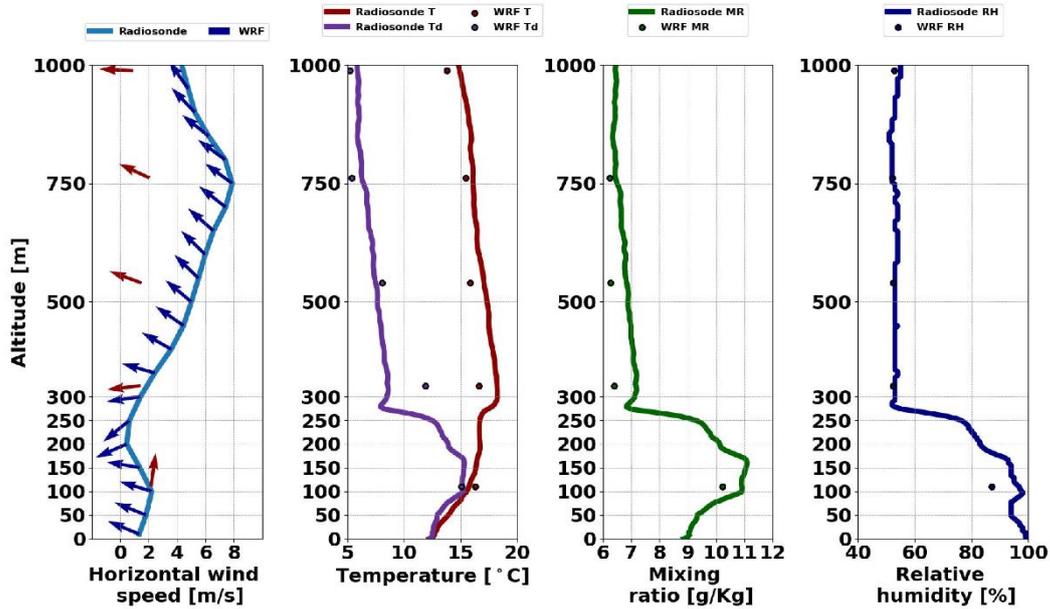


Figure 27. Vertical profiles of winds (arrows), temperature, dew point temperature, relative humidity, and mixing ratio of radiosonde on 3<sup>rd</sup> of January 2021, 23 UTC. Single symbols along the profiles represent the WRF-RTFDDA forecast values at the available vertical levels.

**Radiosonde : Beit dagan vs WRF , 04/01/21 23 UTC**

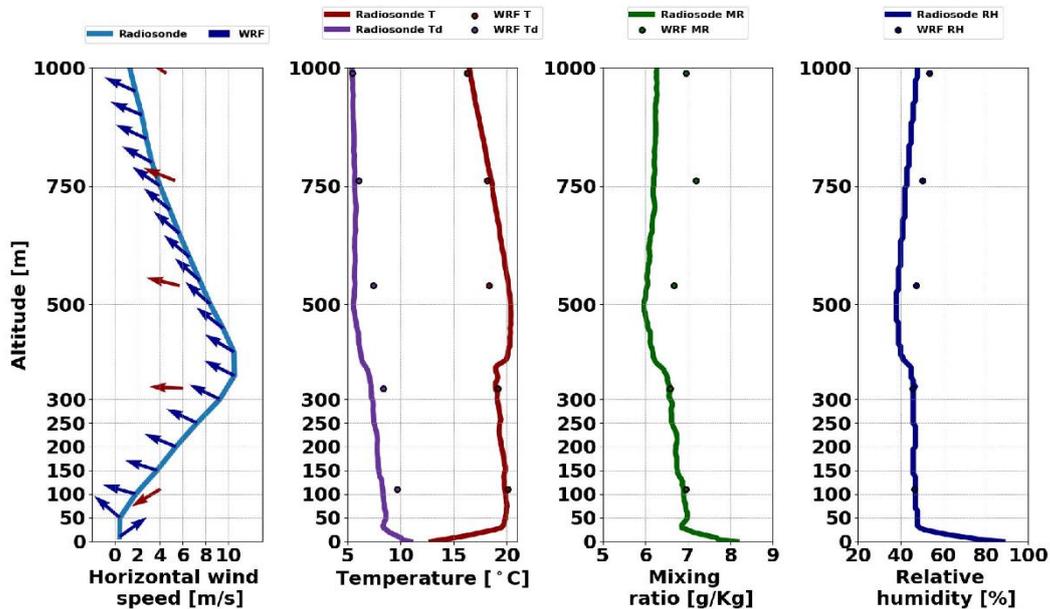


Figure 28. Vertical profiles of winds (arrows), temperature, dew point temperature, relative humidity, and mixing ratio of radiosonde on 4<sup>th</sup> of January 2021, 23 UTC. Single symbols along the profiles represent the WRF-RTFDDA forecast values at the available vertical levels.

### Radiosonde : Beit dagan vs WRF , 06/01/21 23 UTC

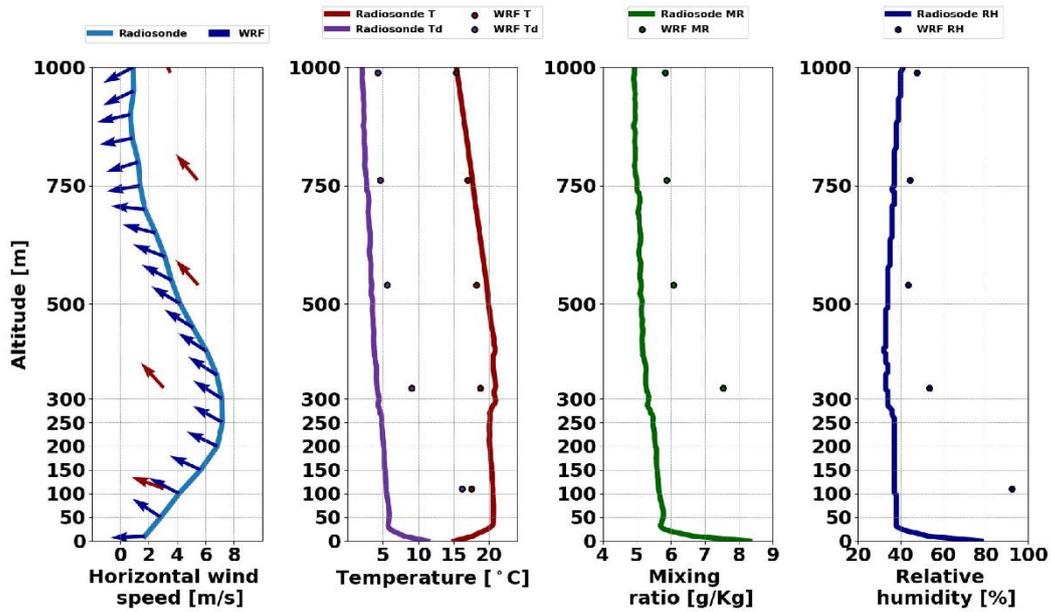


Figure 29. Vertical profiles of winds (arrows), temperature, dew point temperature, relative humidity, and mixing ratio of radiosonde on 6<sup>th</sup> of January 2021, 23 UTC. Single symbols along the profiles represent the WRF-RTFDDA forecast values at the available vertical levels.

### Radiosonde : Beit dagan vs WRF , 07/01/21 23 UTC

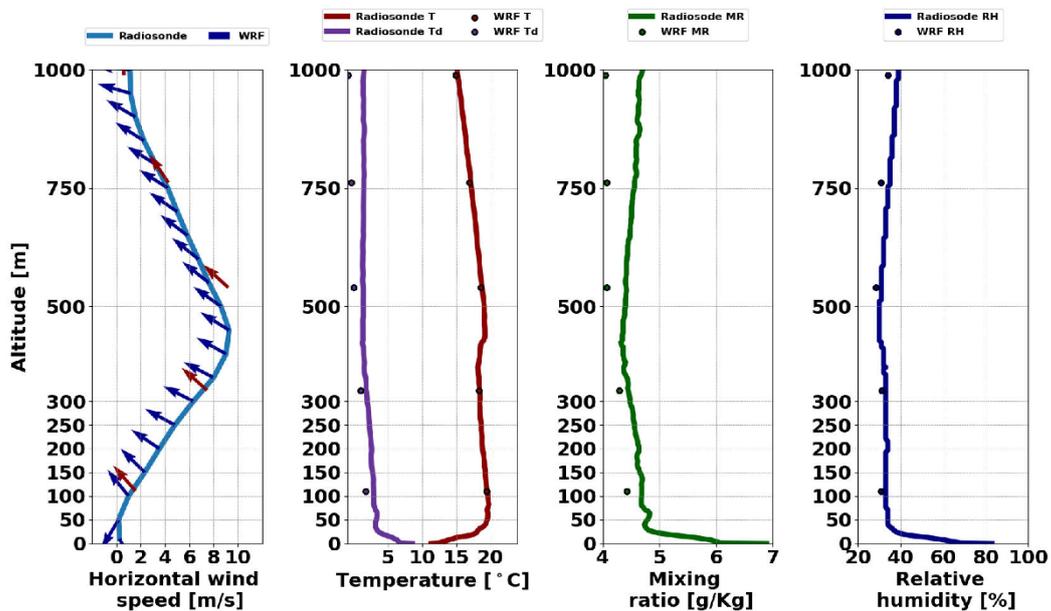


Figure 30. Vertical profiles of winds (arrows), temperature, dew point temperature, relative humidity, and mixing ratio of radiosonde on 7<sup>th</sup> of January 2021, 23 UTC. Single symbols along the profiles represent the WRF-RTFDDA forecast values at the available vertical levels.