

Technical note

Comparison of HRTP profiles from GOPR versions 7.0ab and 6.0cf - M. Guirlet, ACRI-ST, August 2008

Version details

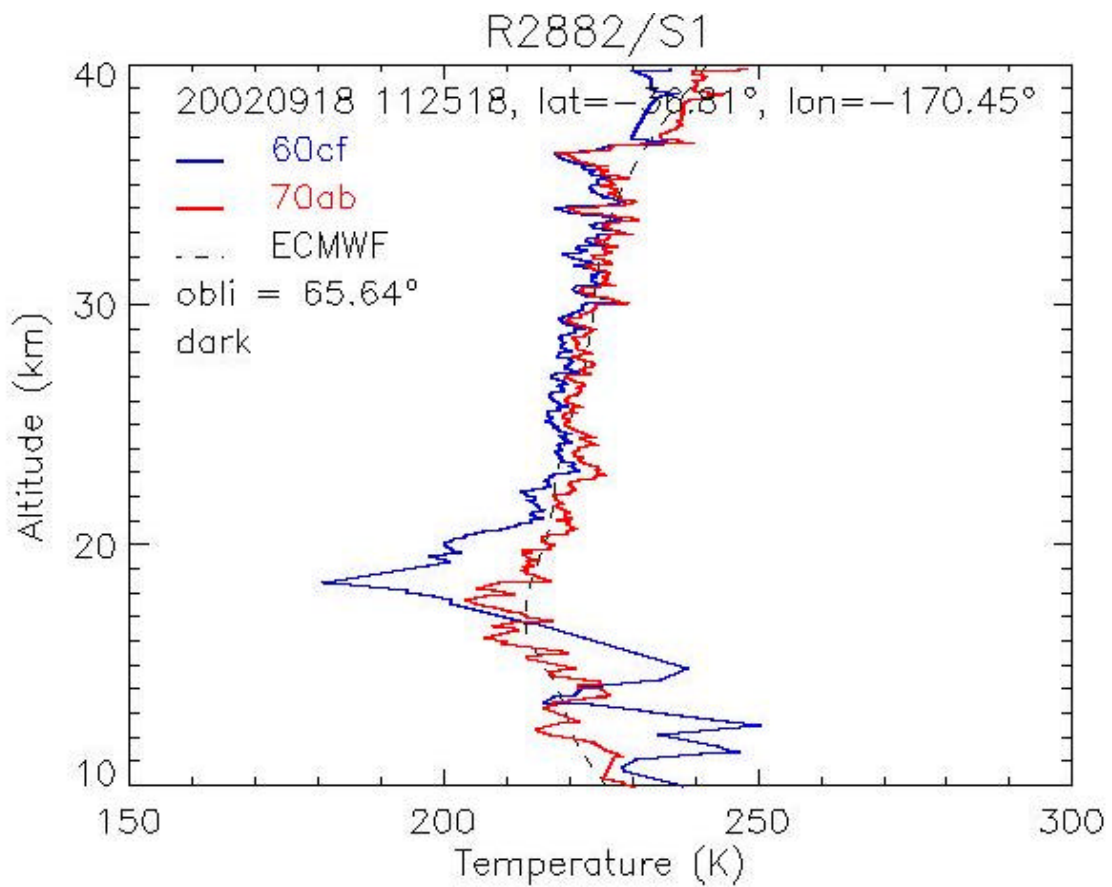
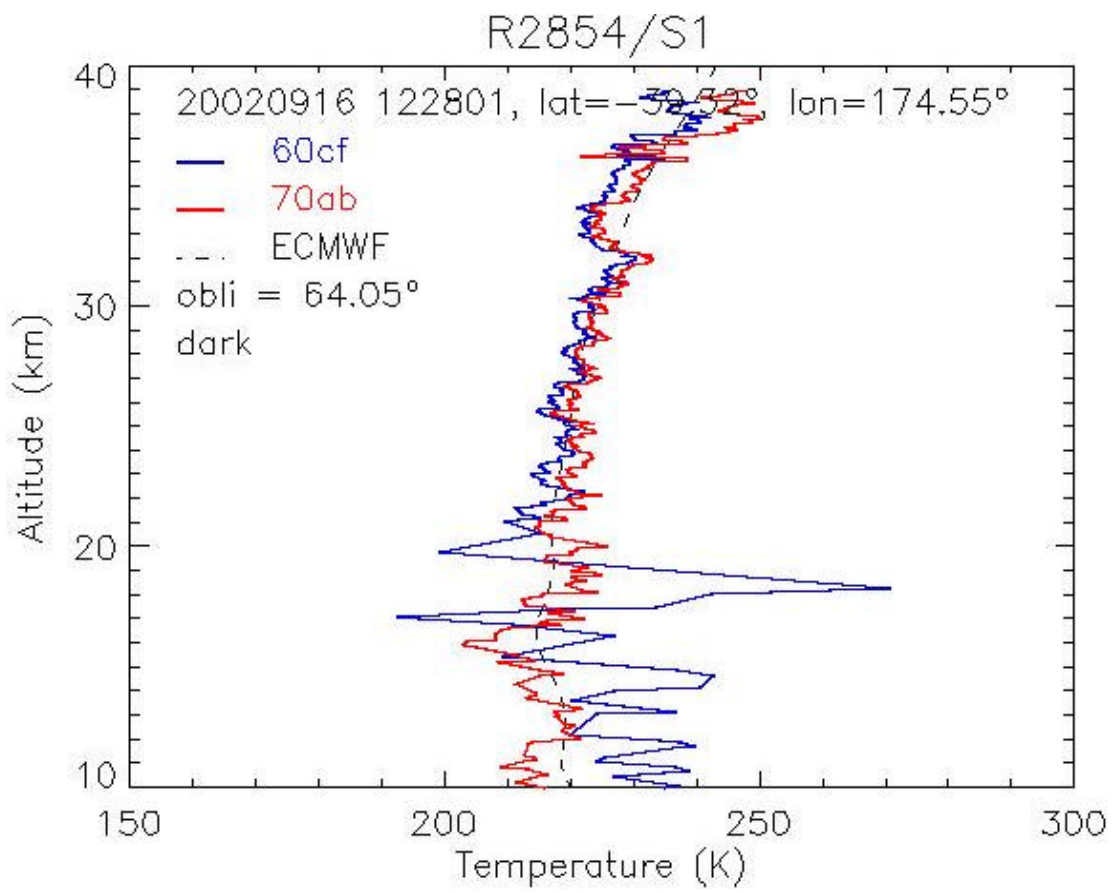
| Name | General description | Date of internal release |
|---------------------------------------|-------------------------------------|--------------------------|
| 7.0ab (ref. version: 6.0cf) | GOPR modified for the next baseline | 08/2008 |

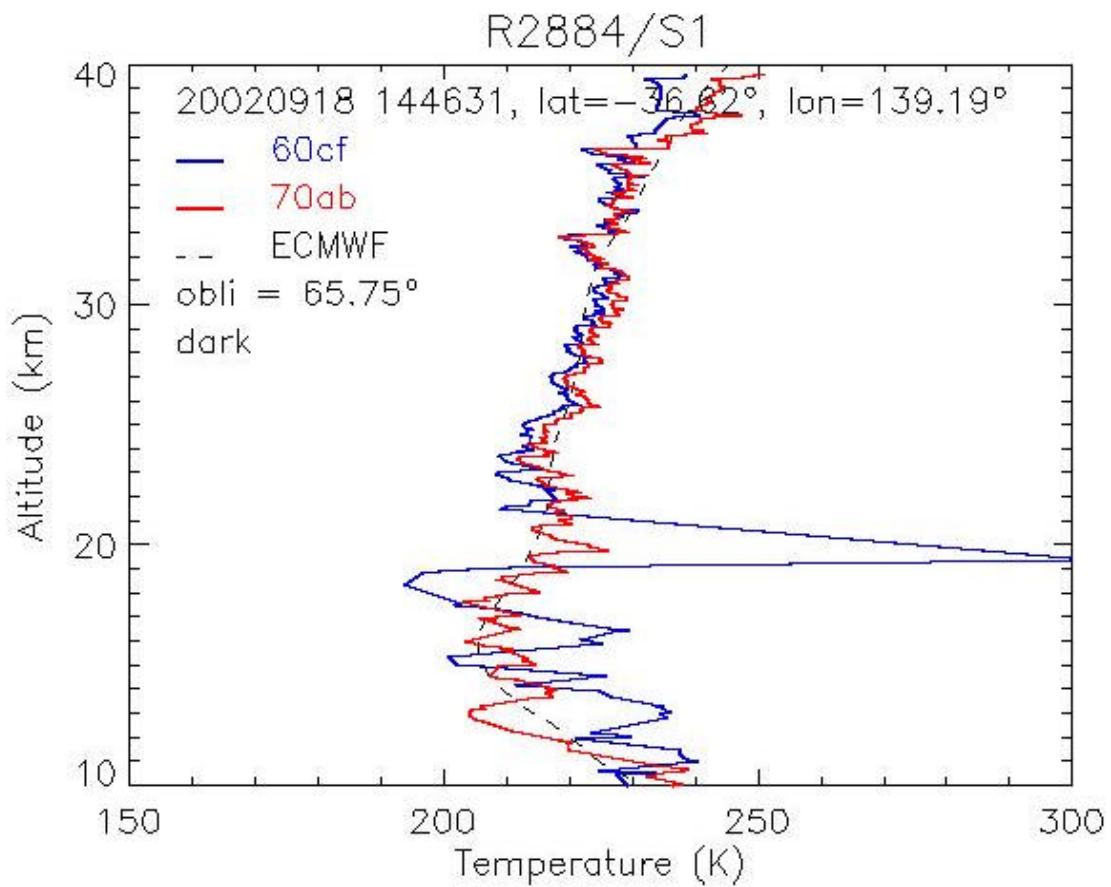
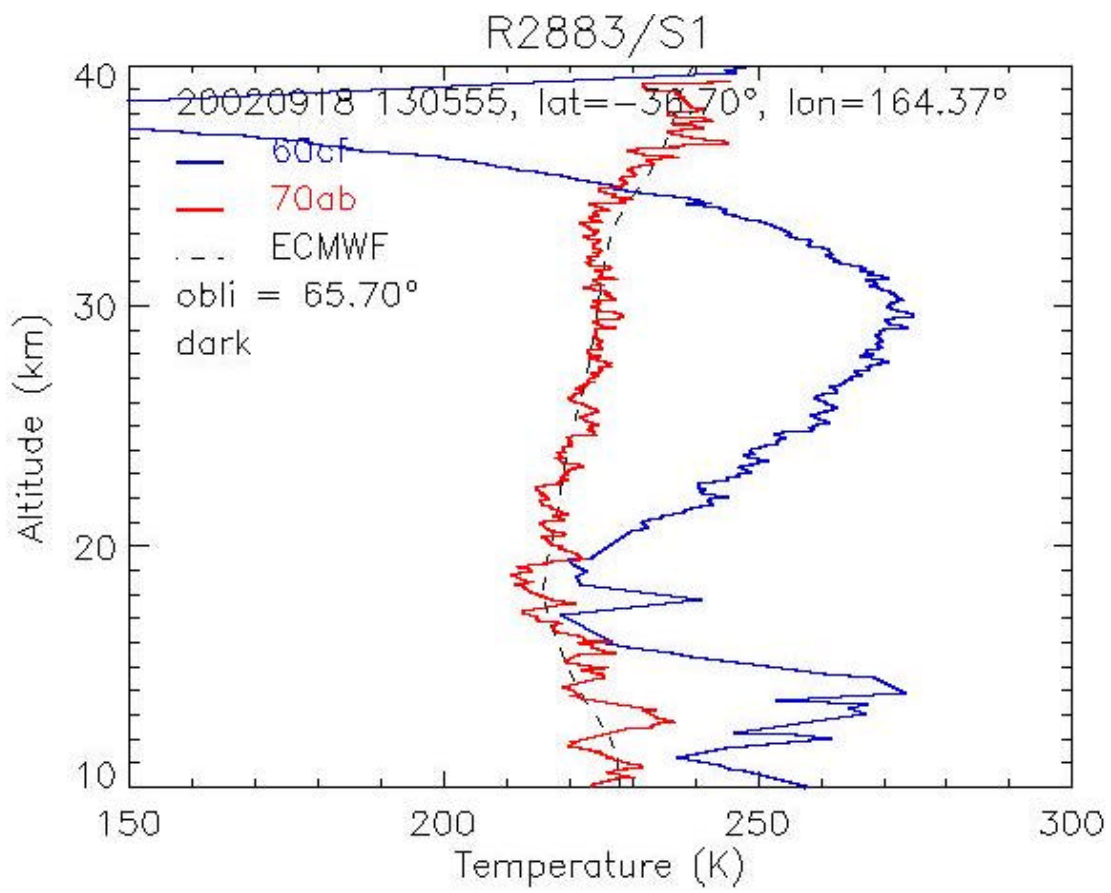
Testing dataset

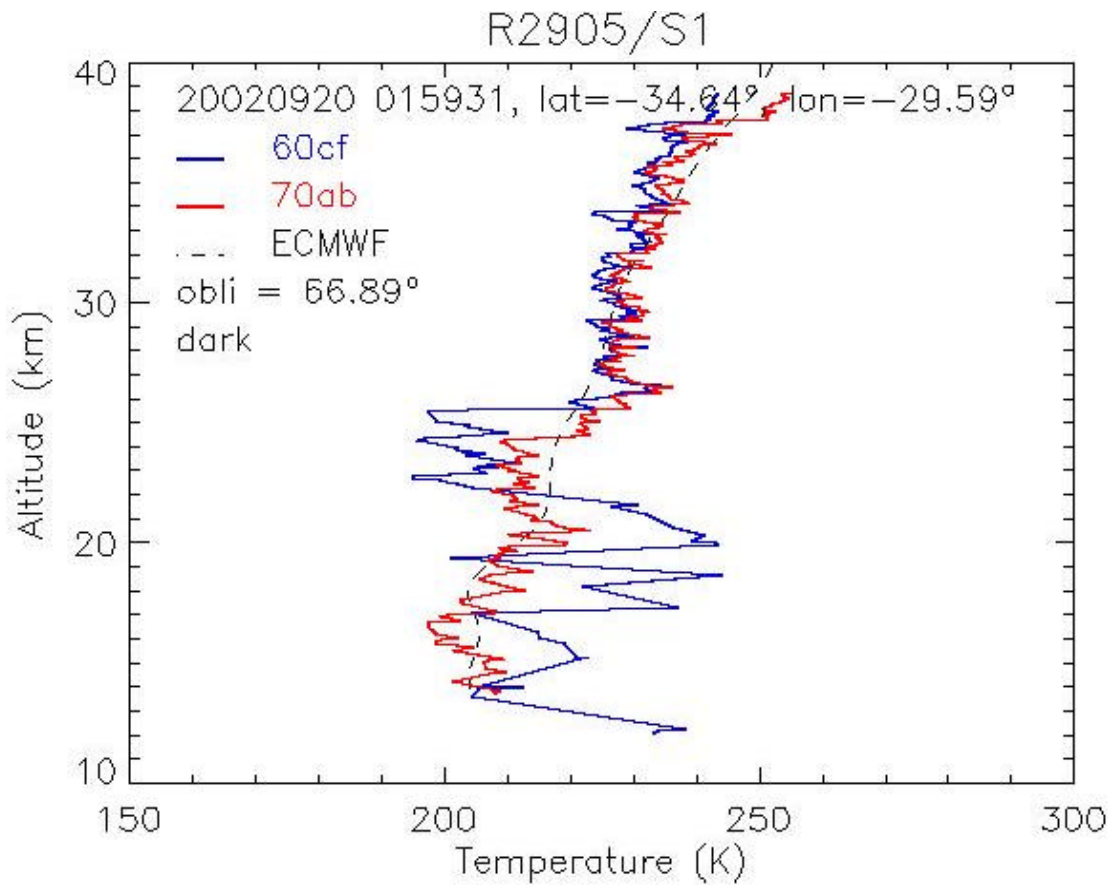
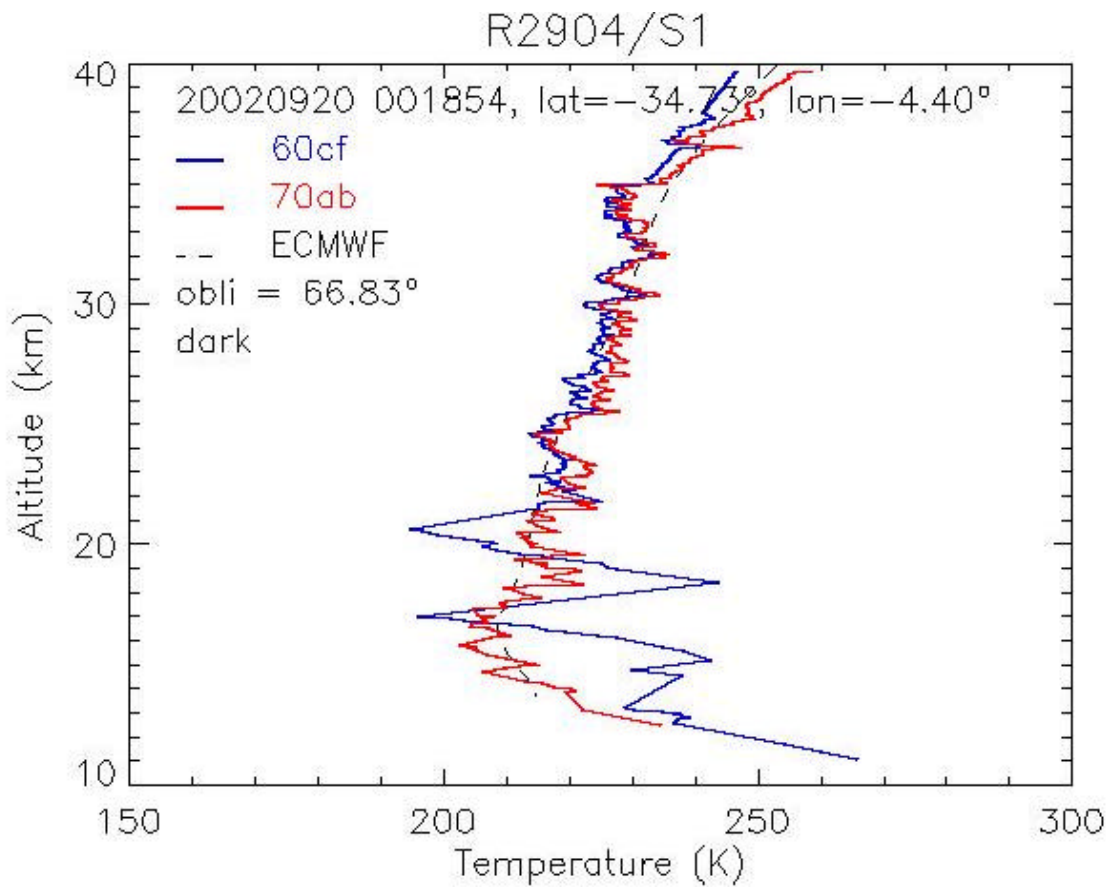
| Comment | Time period | Illumination condition | Number of products |
|--|--|------------------------|--------------------|
| "vs_hrtp": Level 2 products specified by V. Sofieva; | sparse dates in 2002, 2003, 2004, 2005 | full dark | 32 |
| | | twilight | 7 |

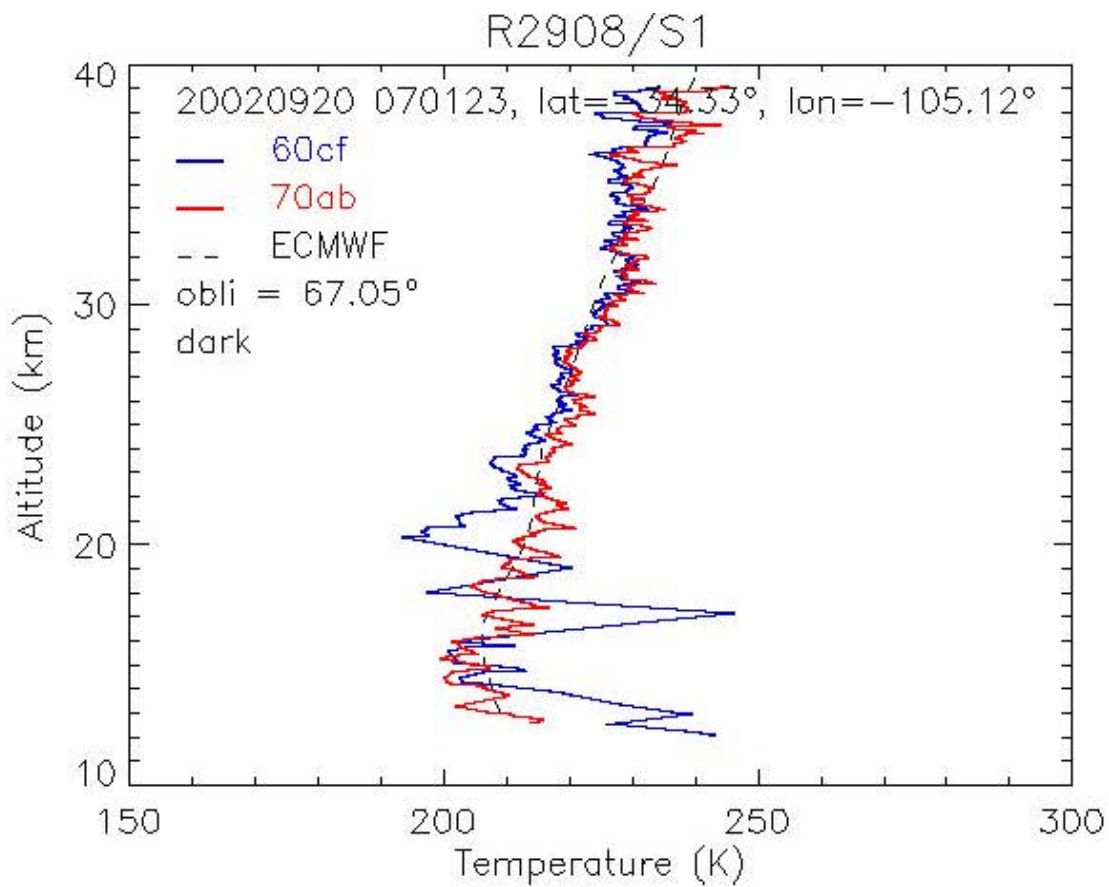
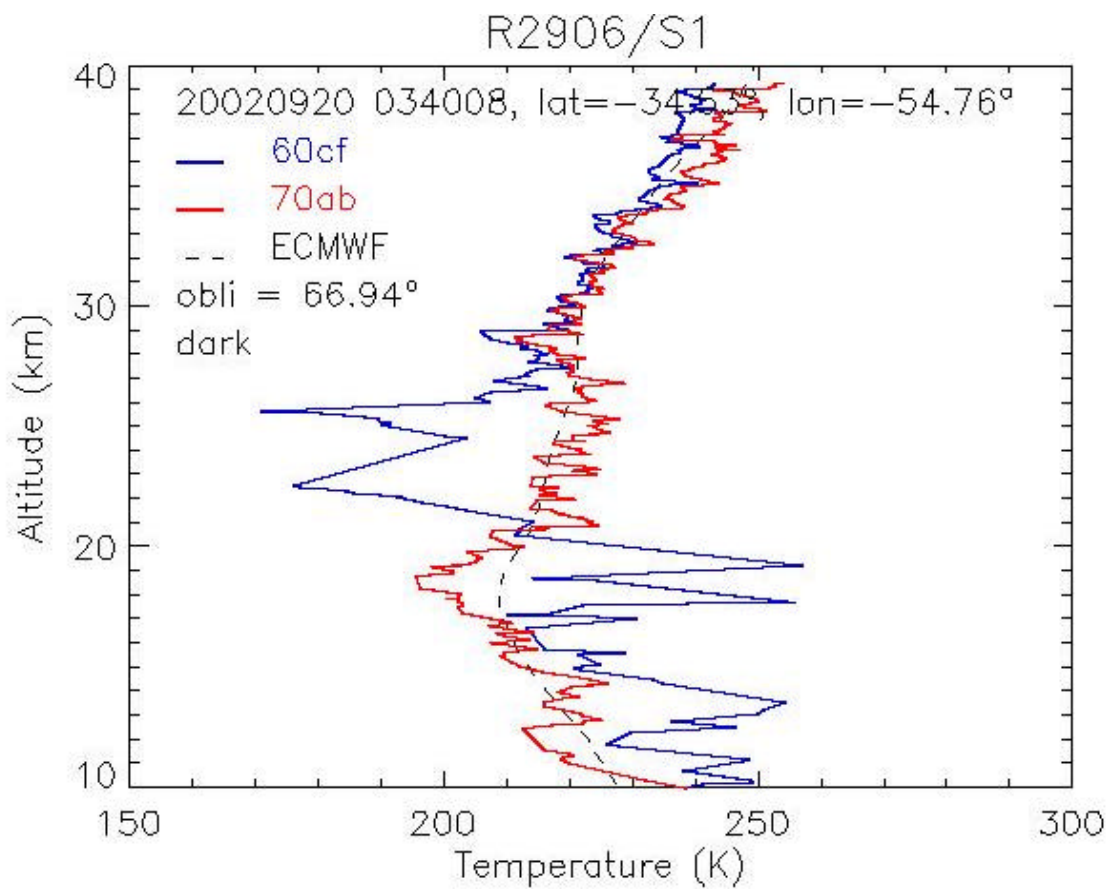
In several cases for which HRTP retrieval with GOPR 6.0cf shows evidence of failure (large peak or outlier values), the same HRTP retrieved with GOPR 7.0ab does not show any more those outlier values. Moreover, in all cases, at most altitudes, the agreement with ECMWF T profile is much improved with this new version of the GOPR prototype. Only at the upper altitudes of the HRTP profiles, above around 30 km or 35 km, the difference with ECMWF T profile might be larger for HRTP retrieved with GOPR 7.0ab than for HRTP retrieved with GOPR 6.0cf. However, in most cases, those high altitudes are at the upper limit or outside the validity altitude range of the HRTP profiles (between 18 km and 35 km for vertical occultations; between 20 km and 30 km for oblique occultations). This feature had already been highlighted at the end of the HRTP dedicated project.

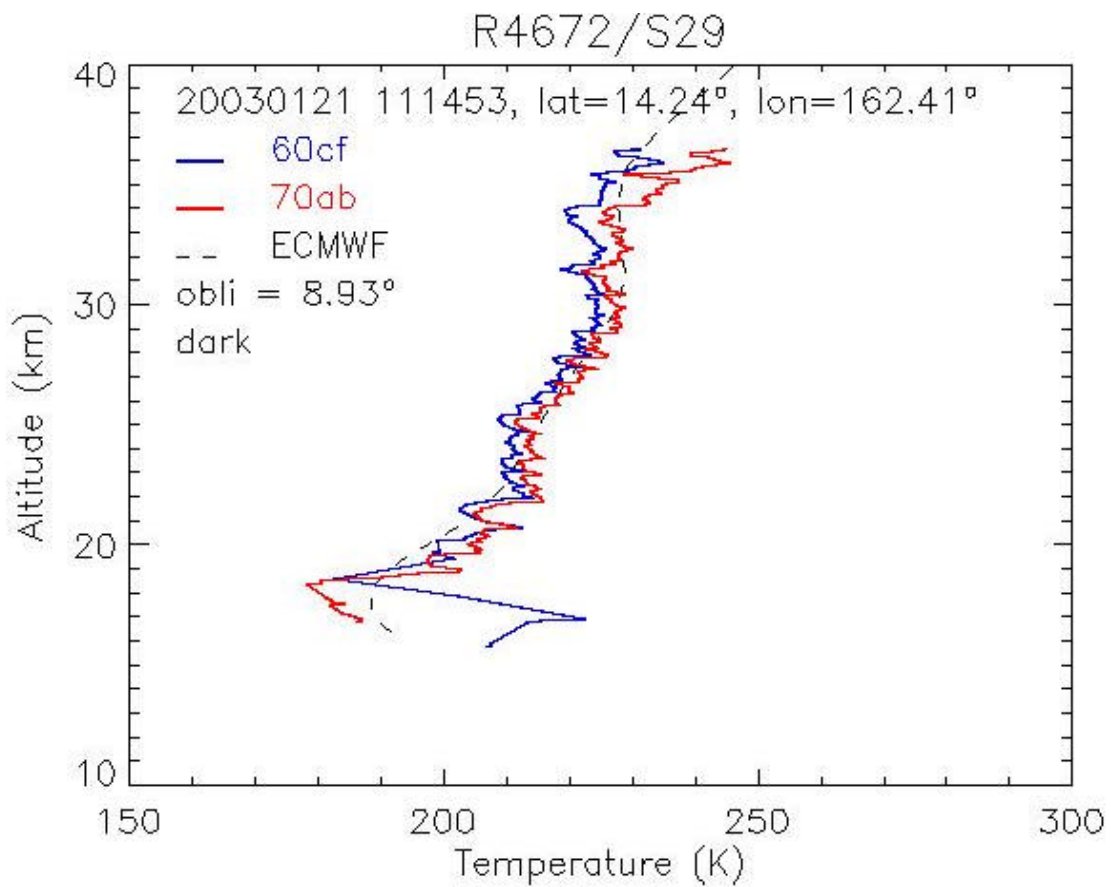
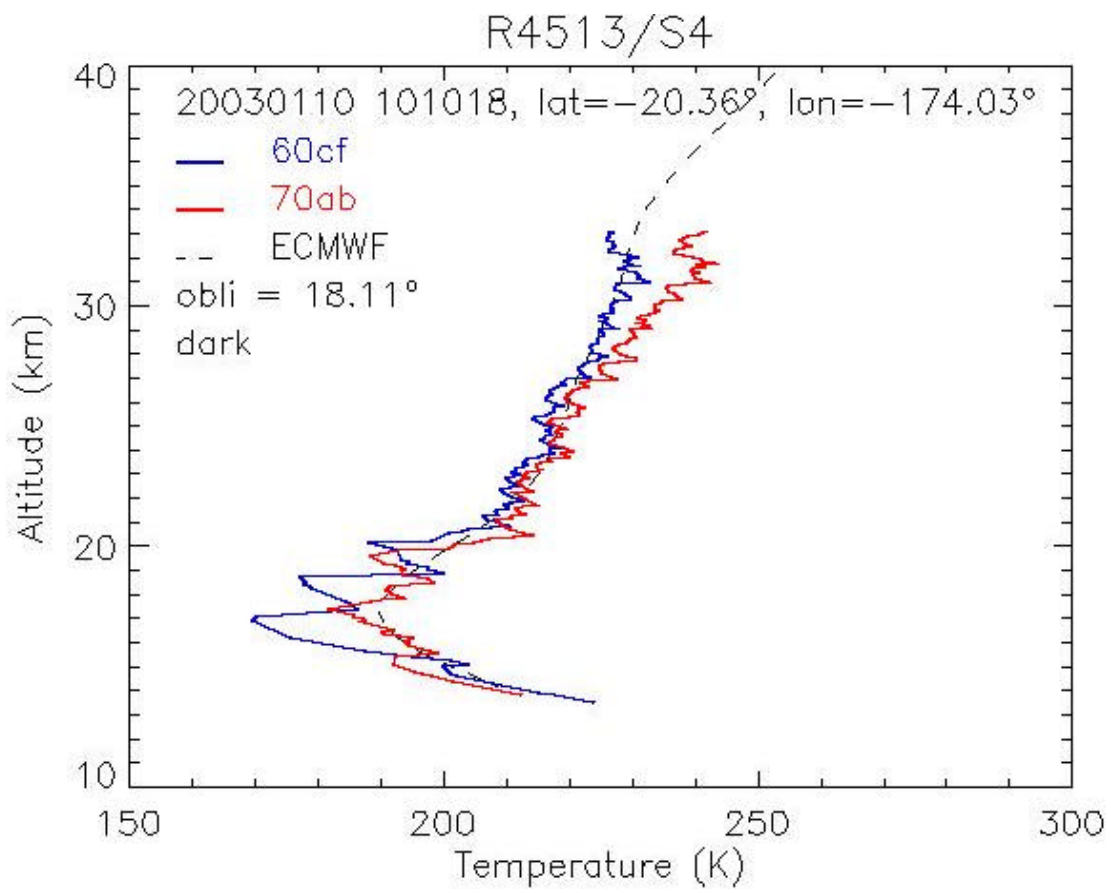
Full dark illumination conditions

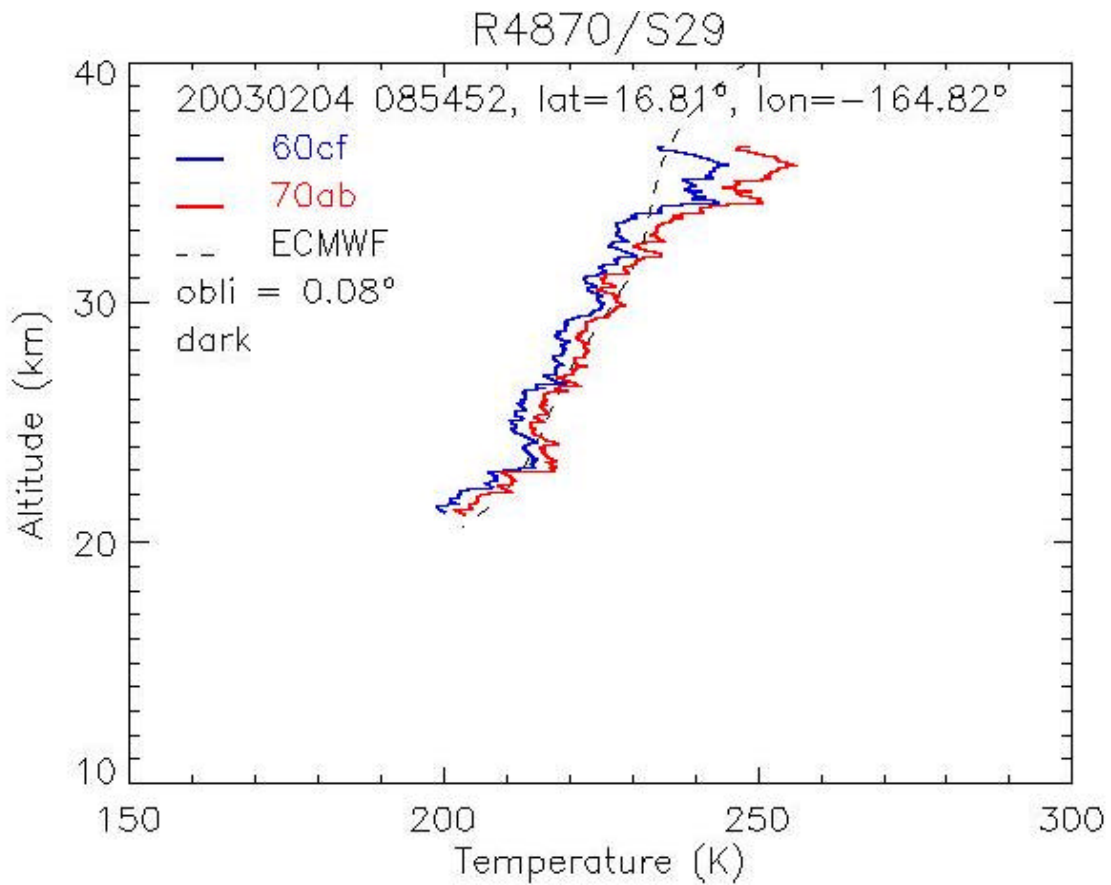
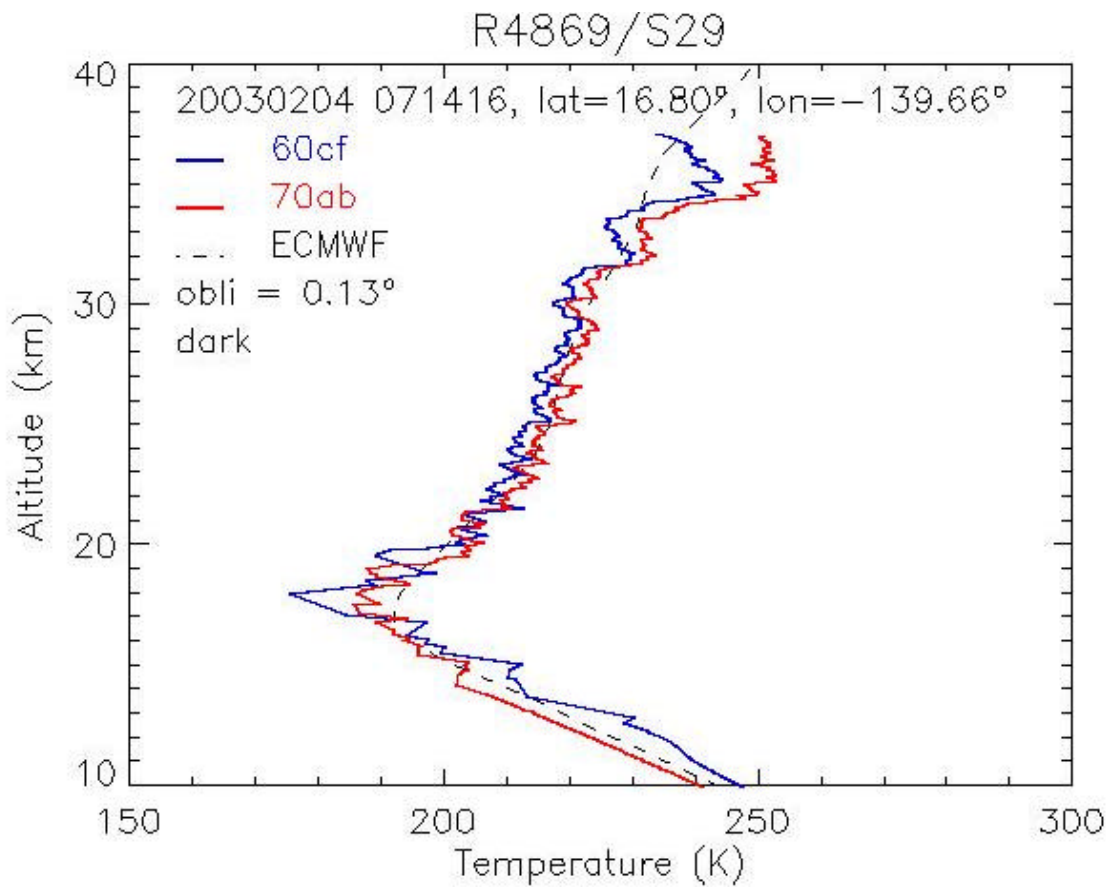


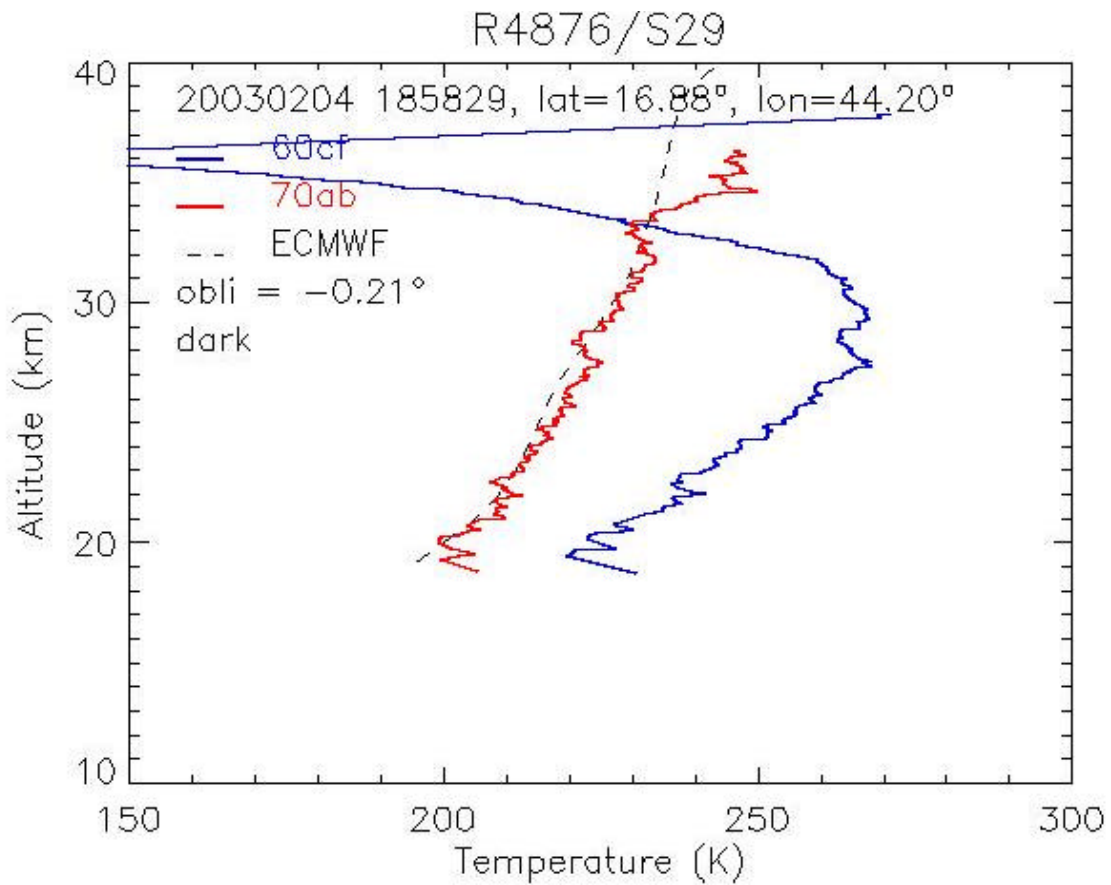
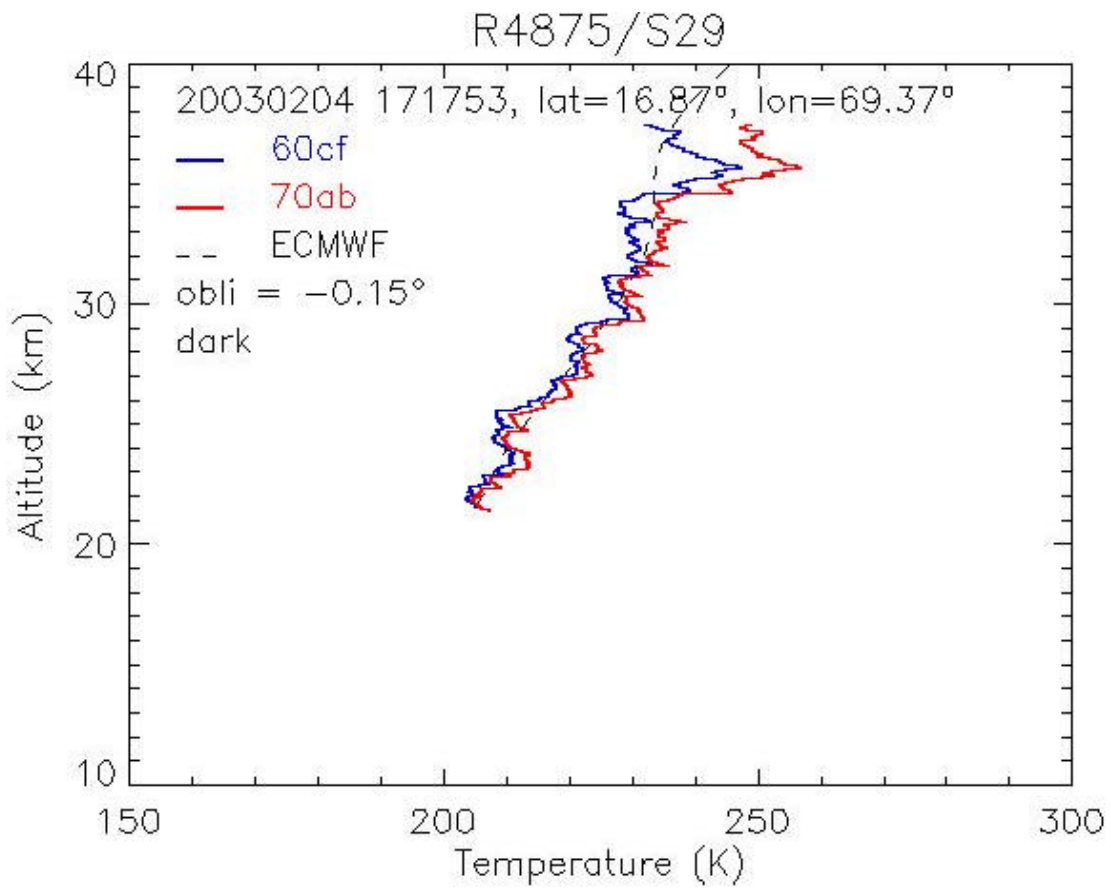


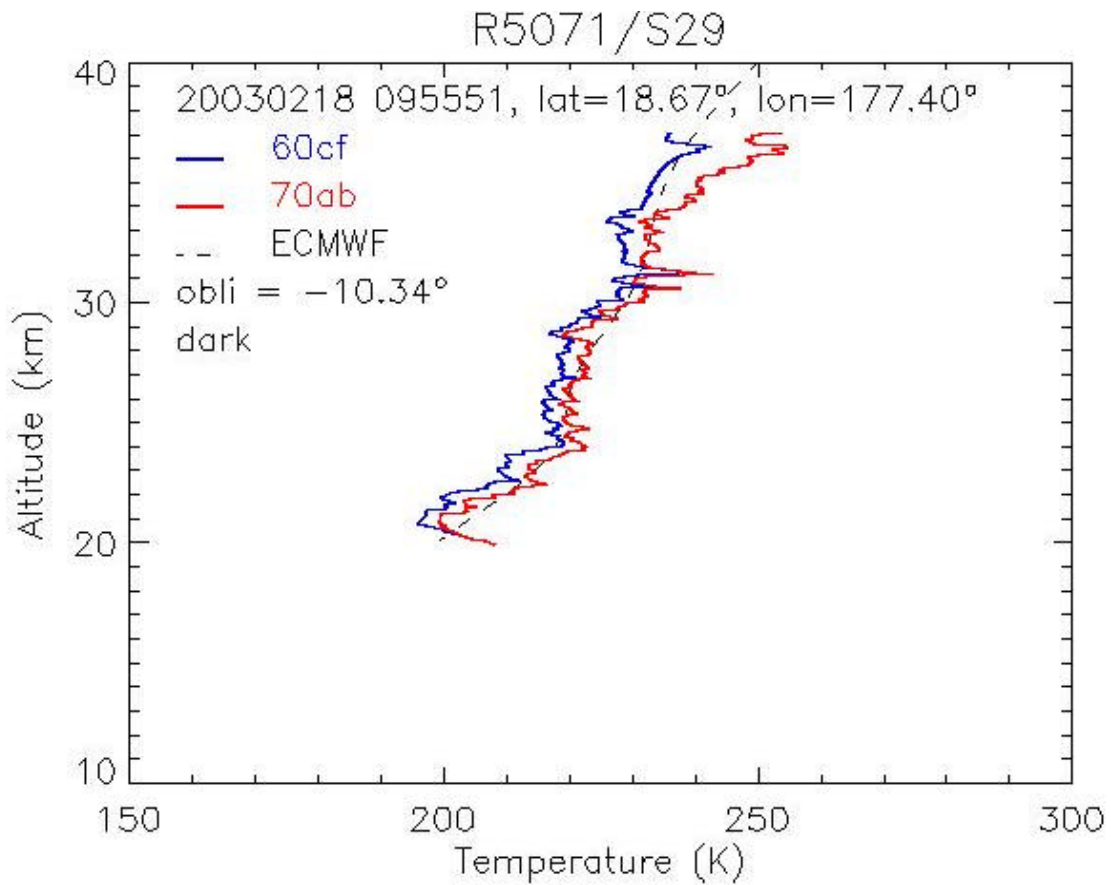
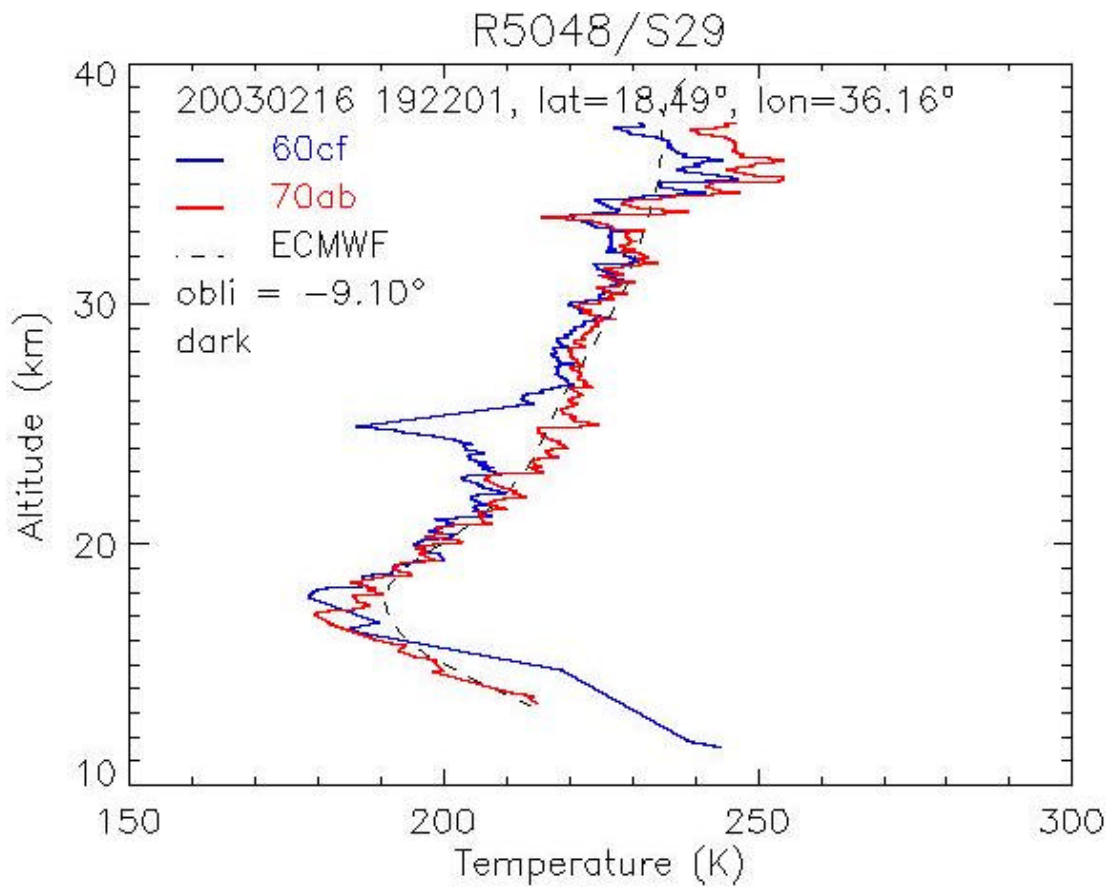


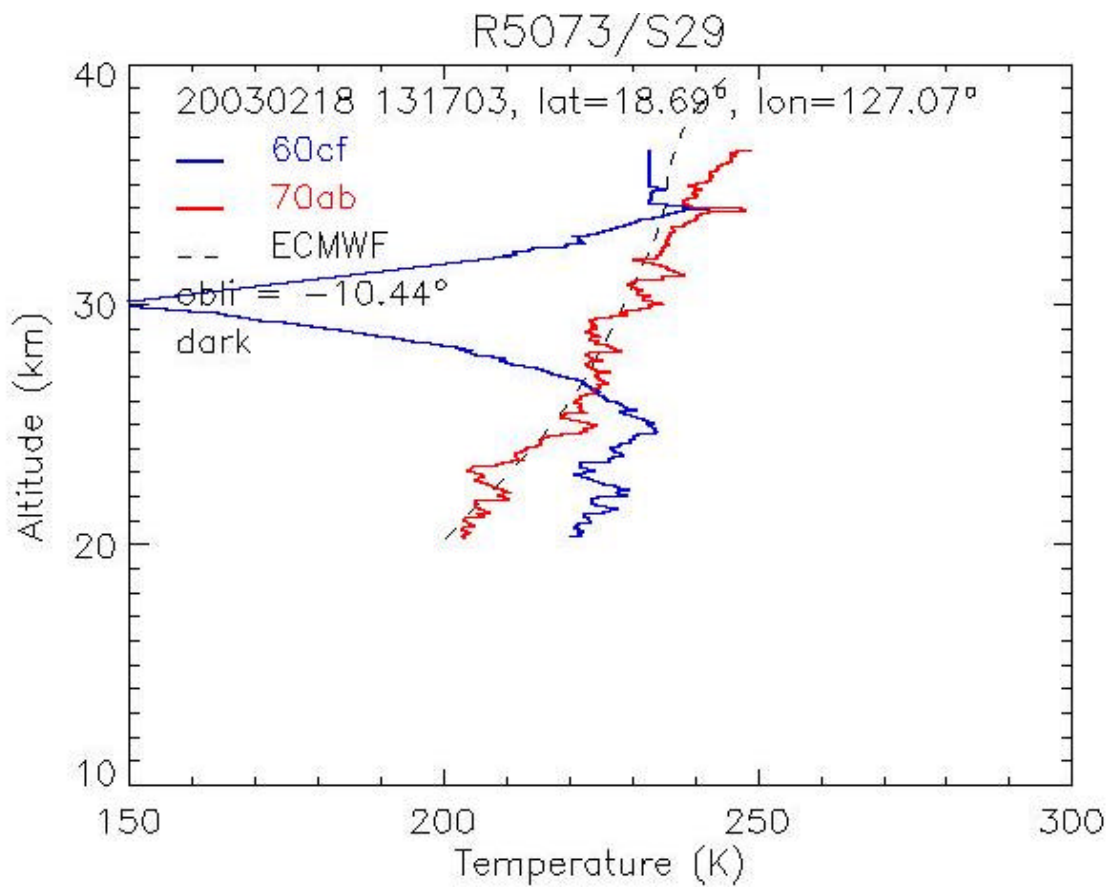
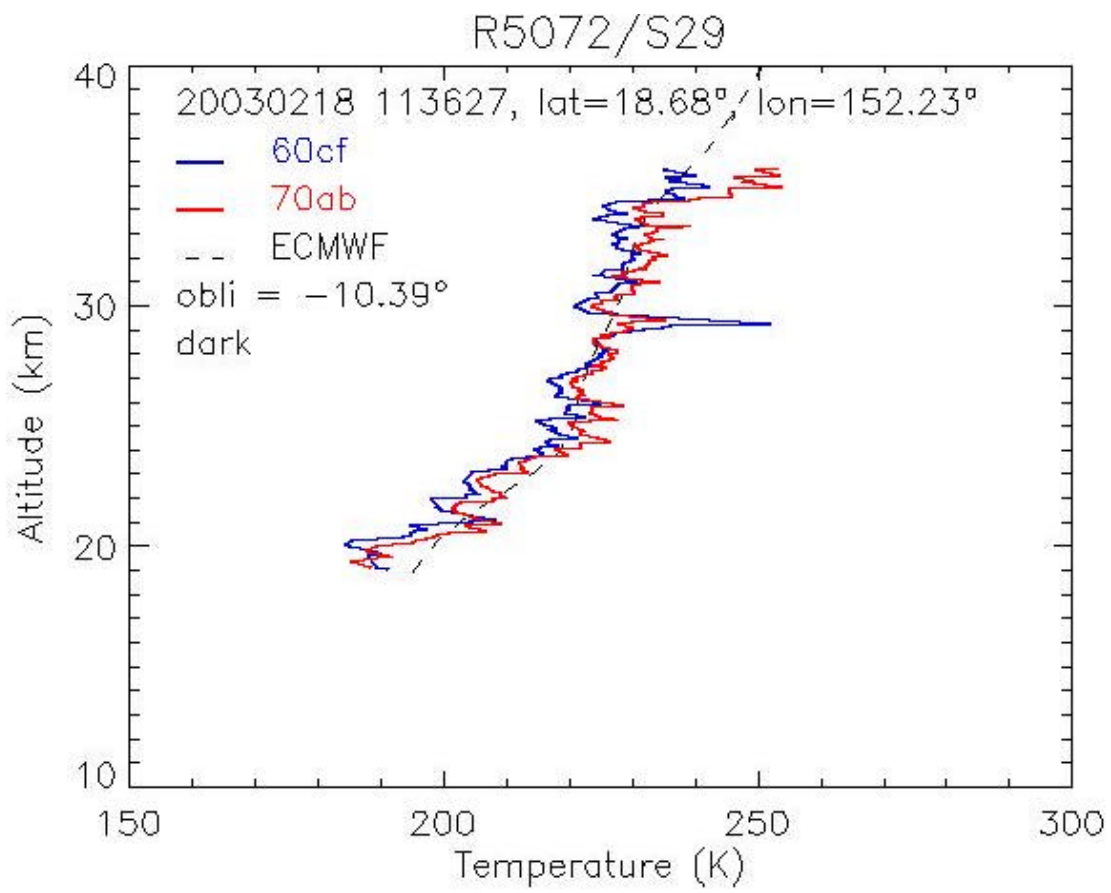


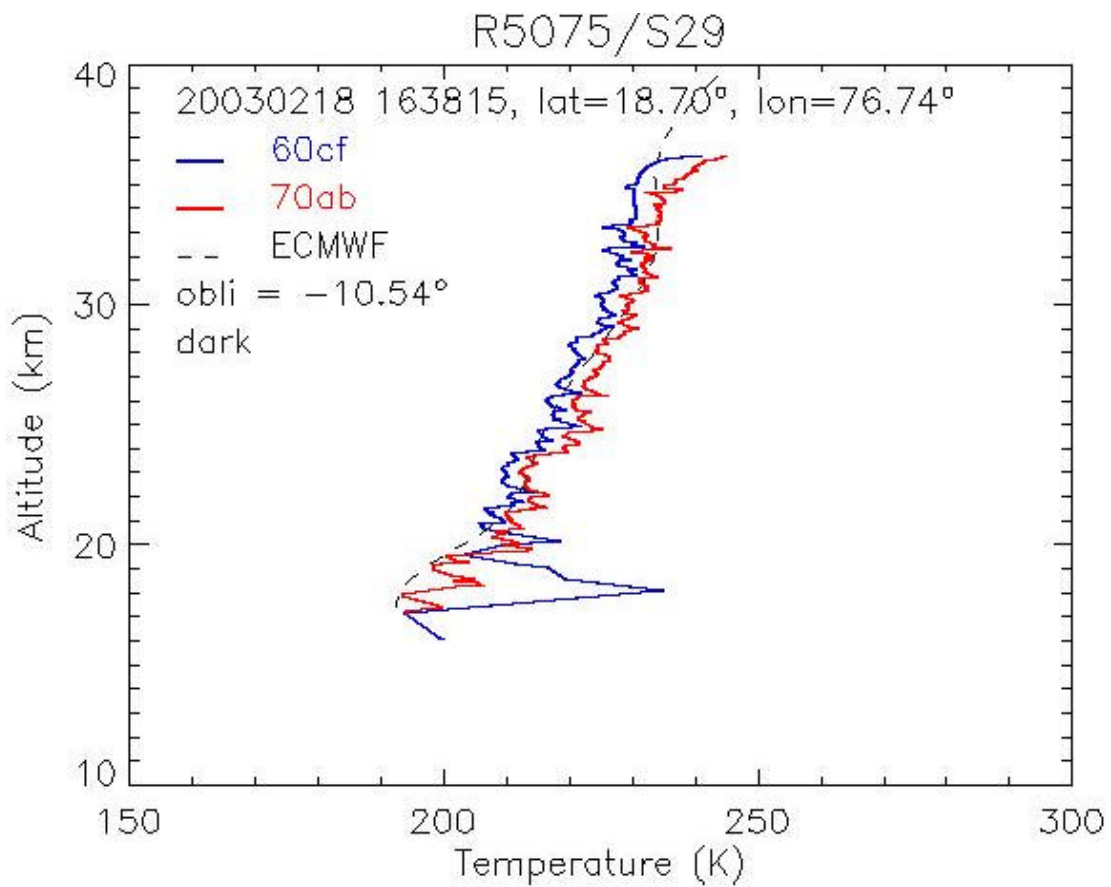
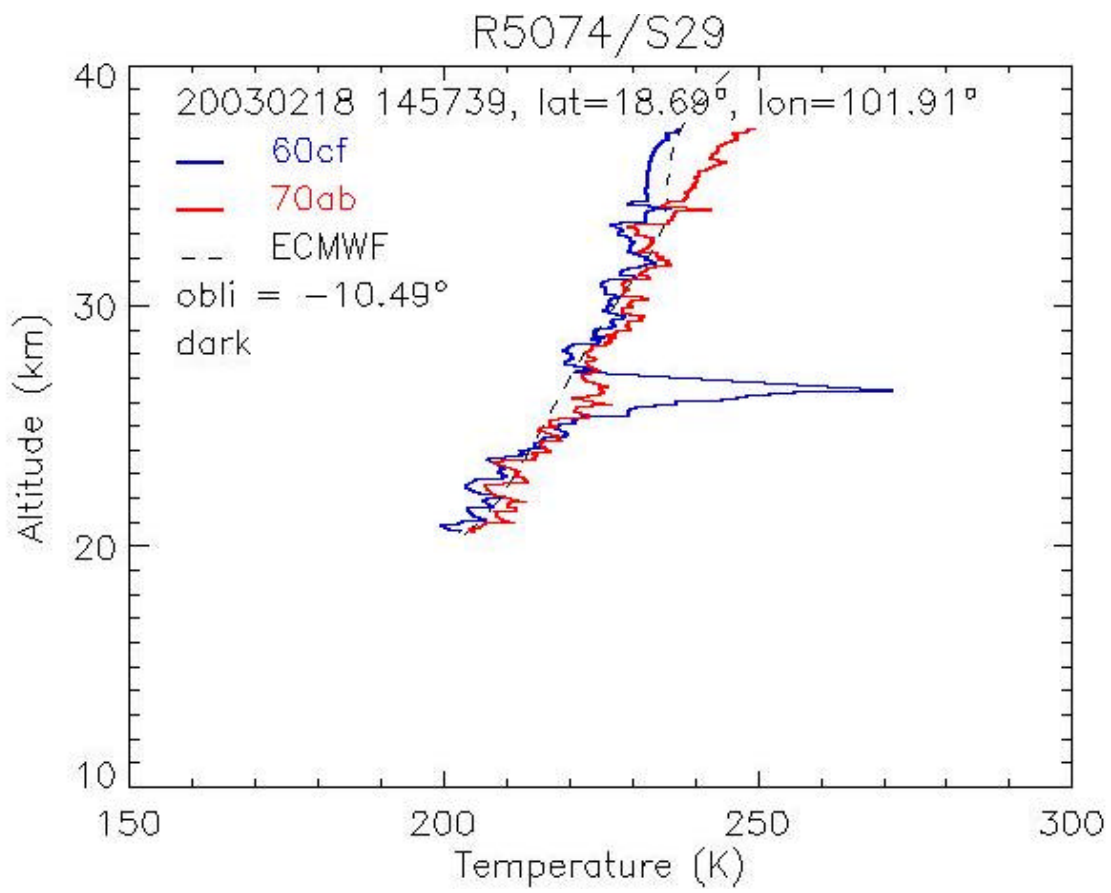


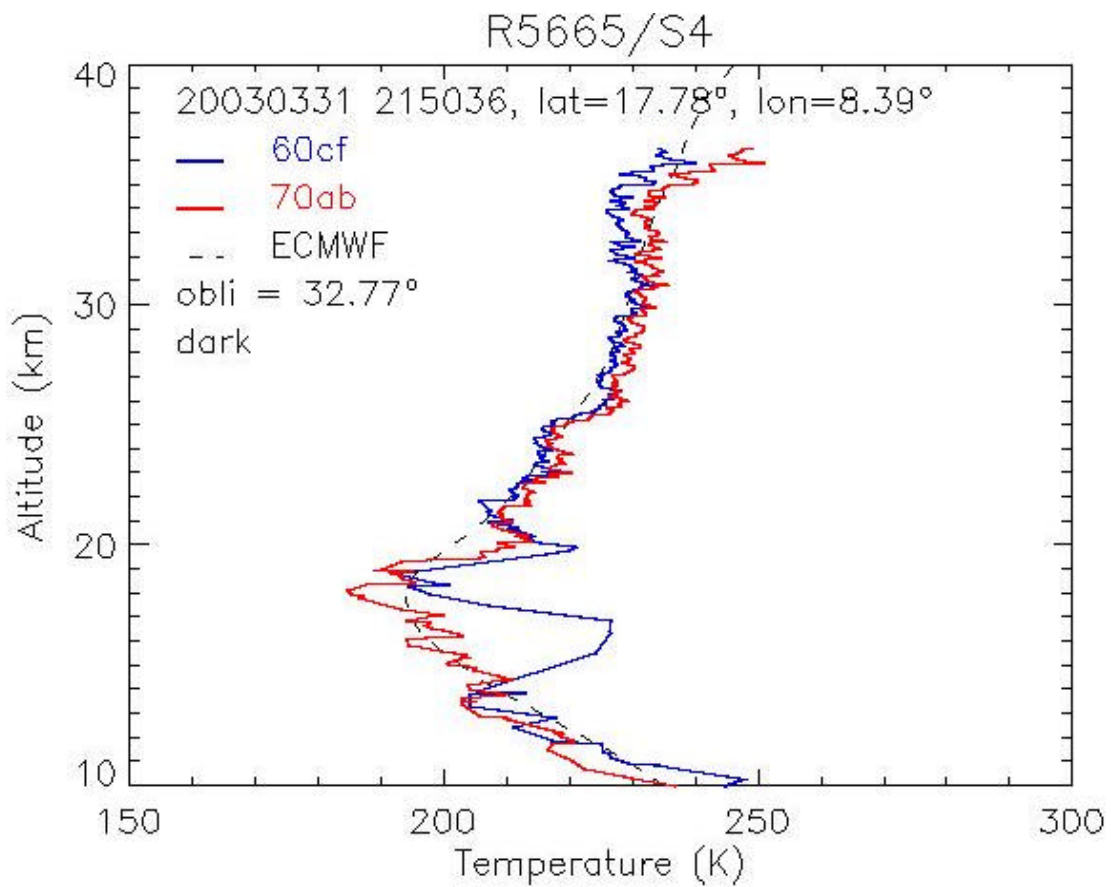
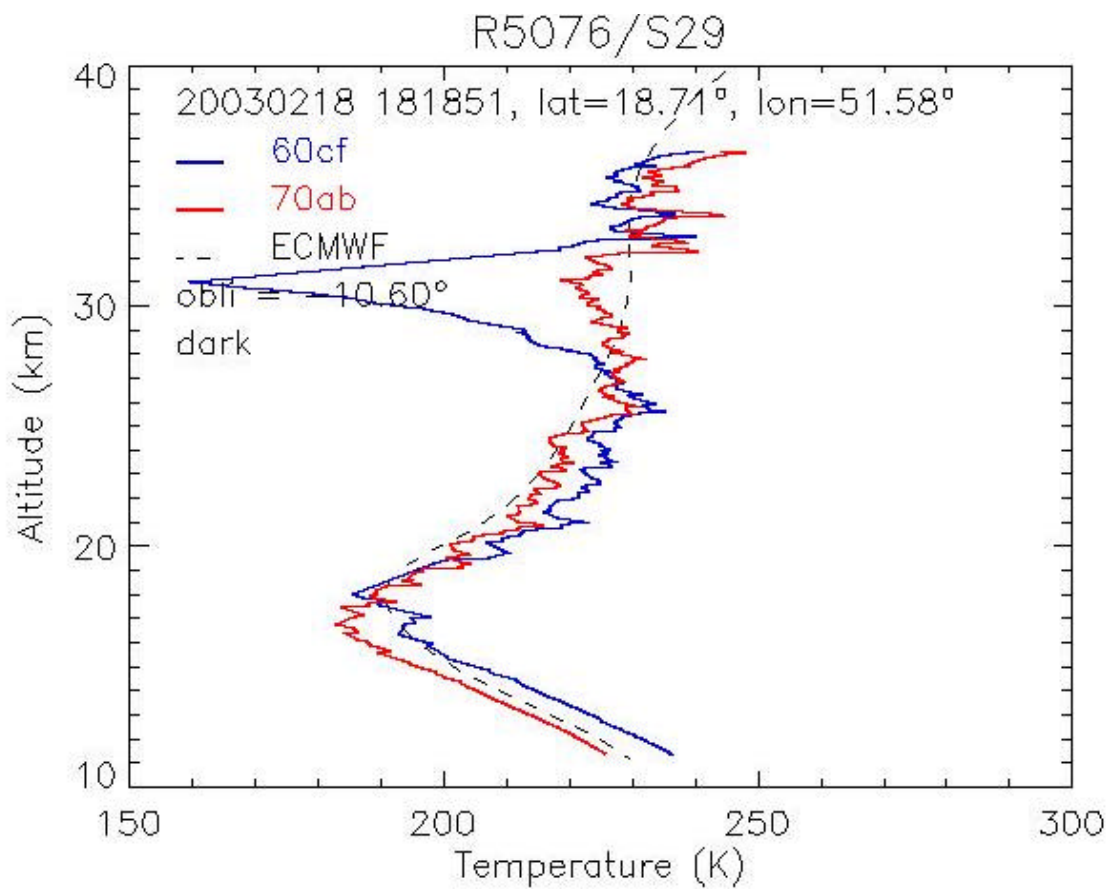


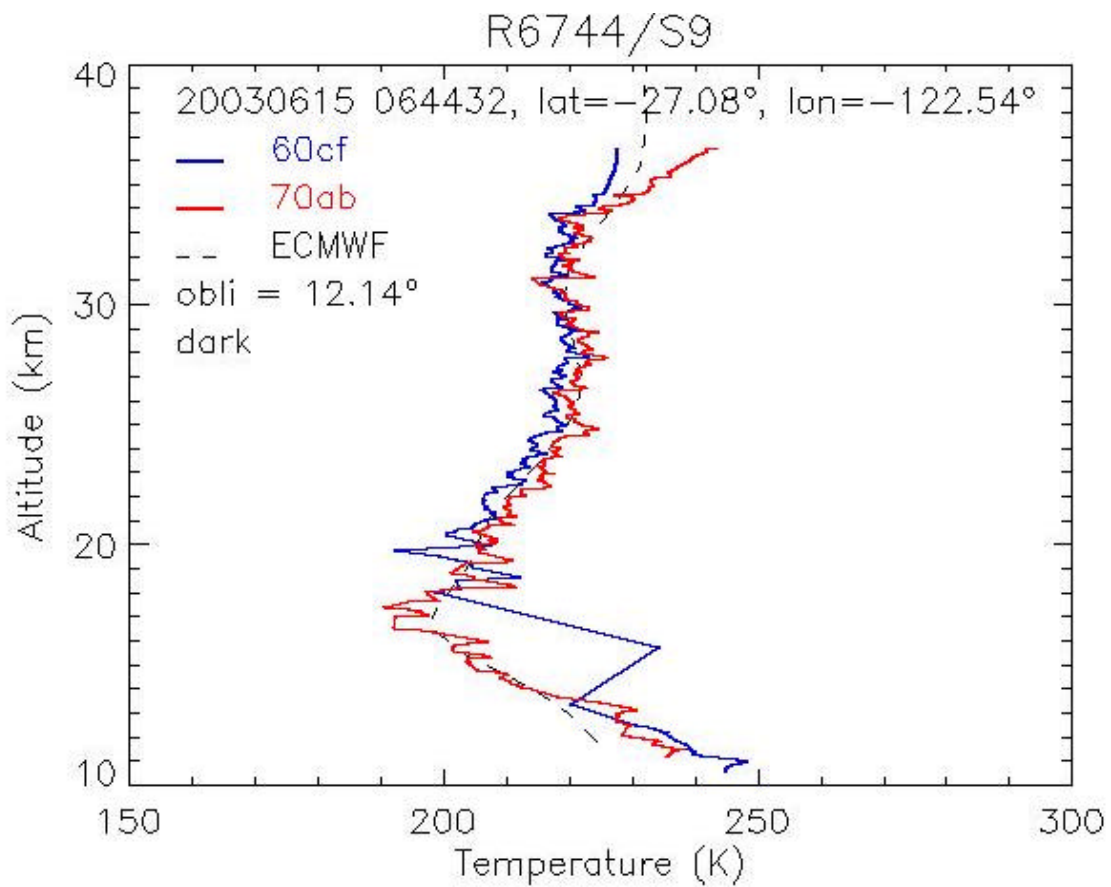
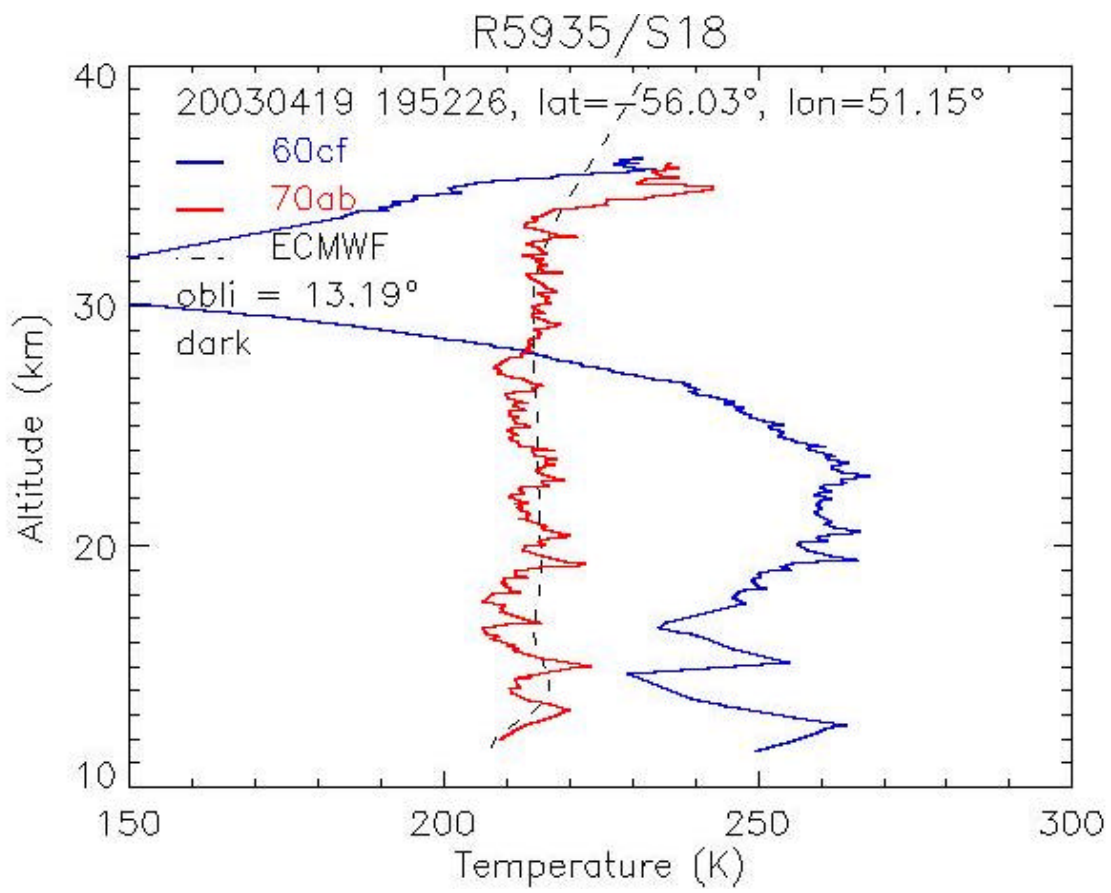


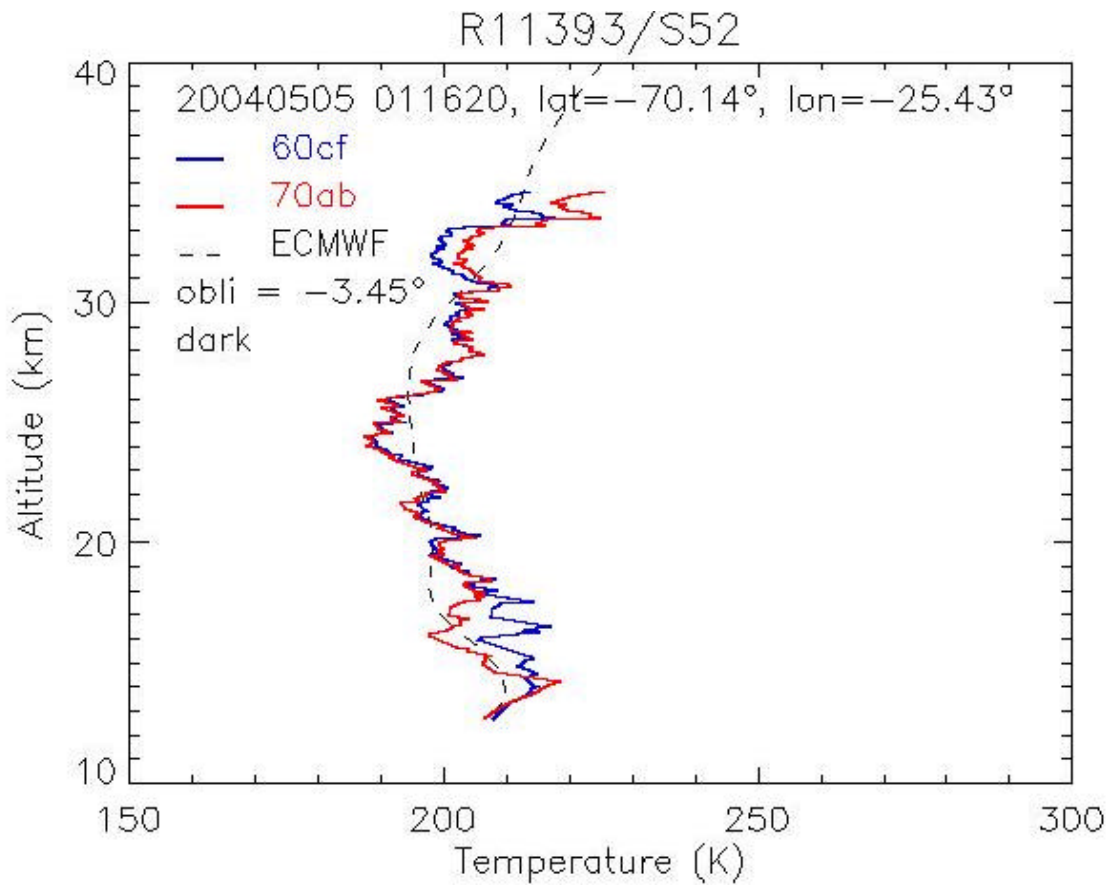
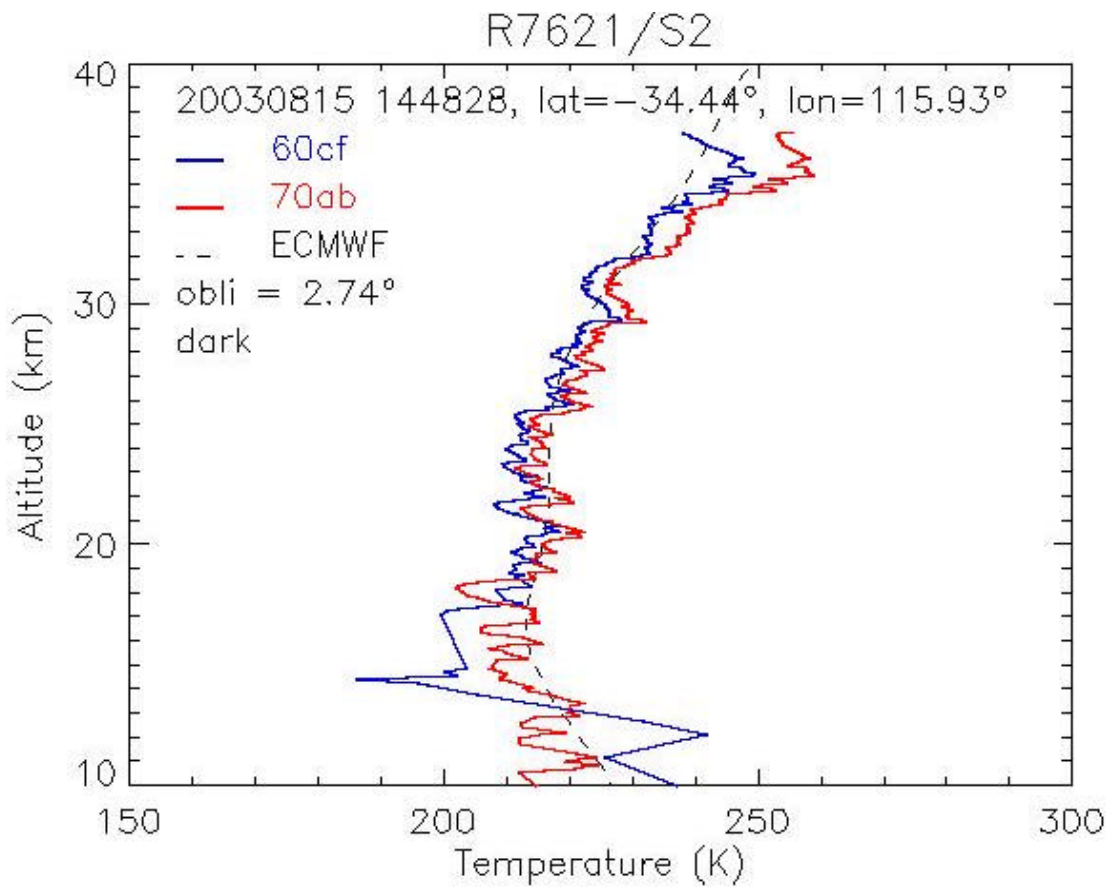


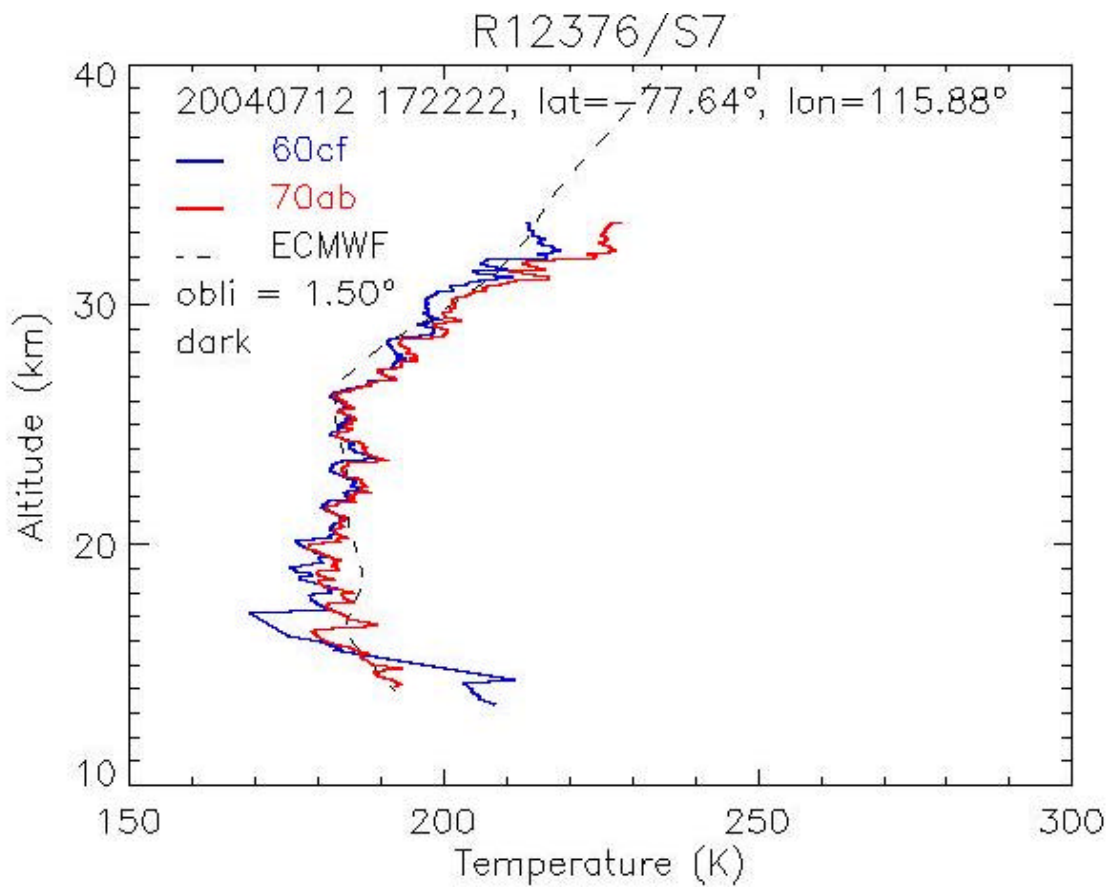
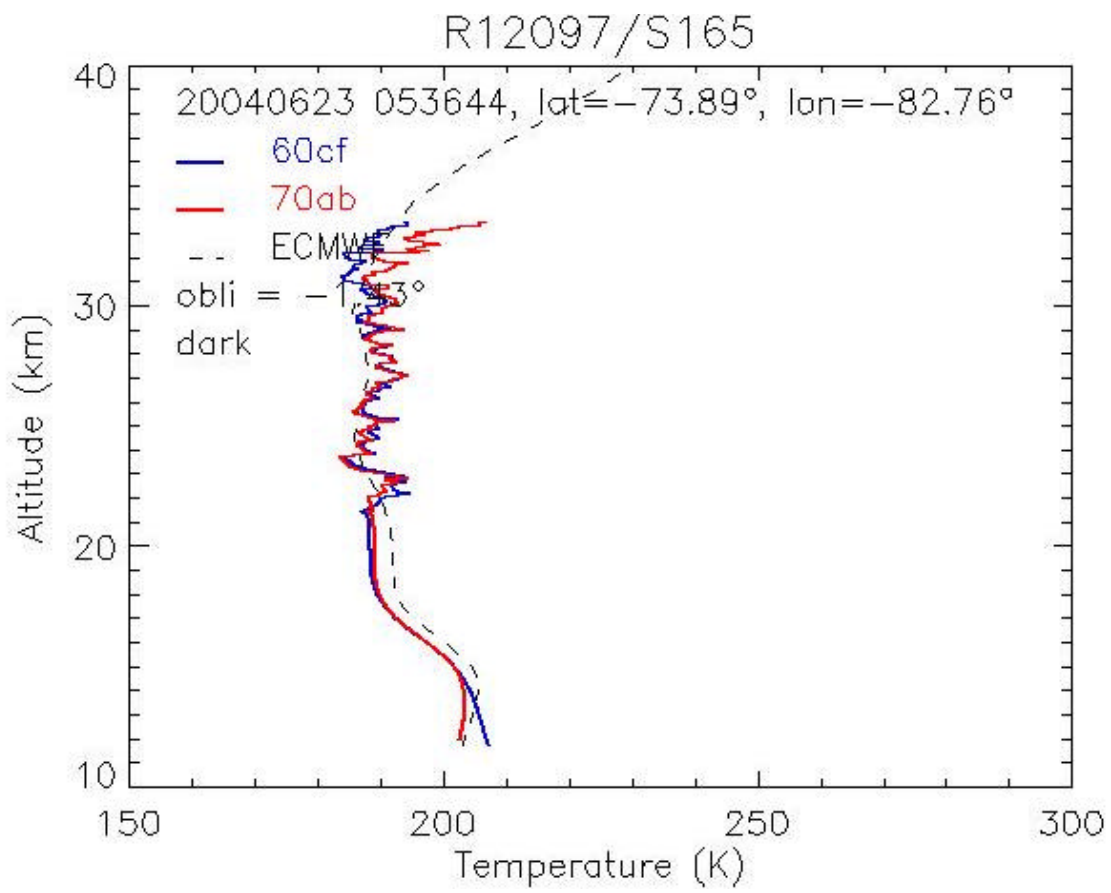


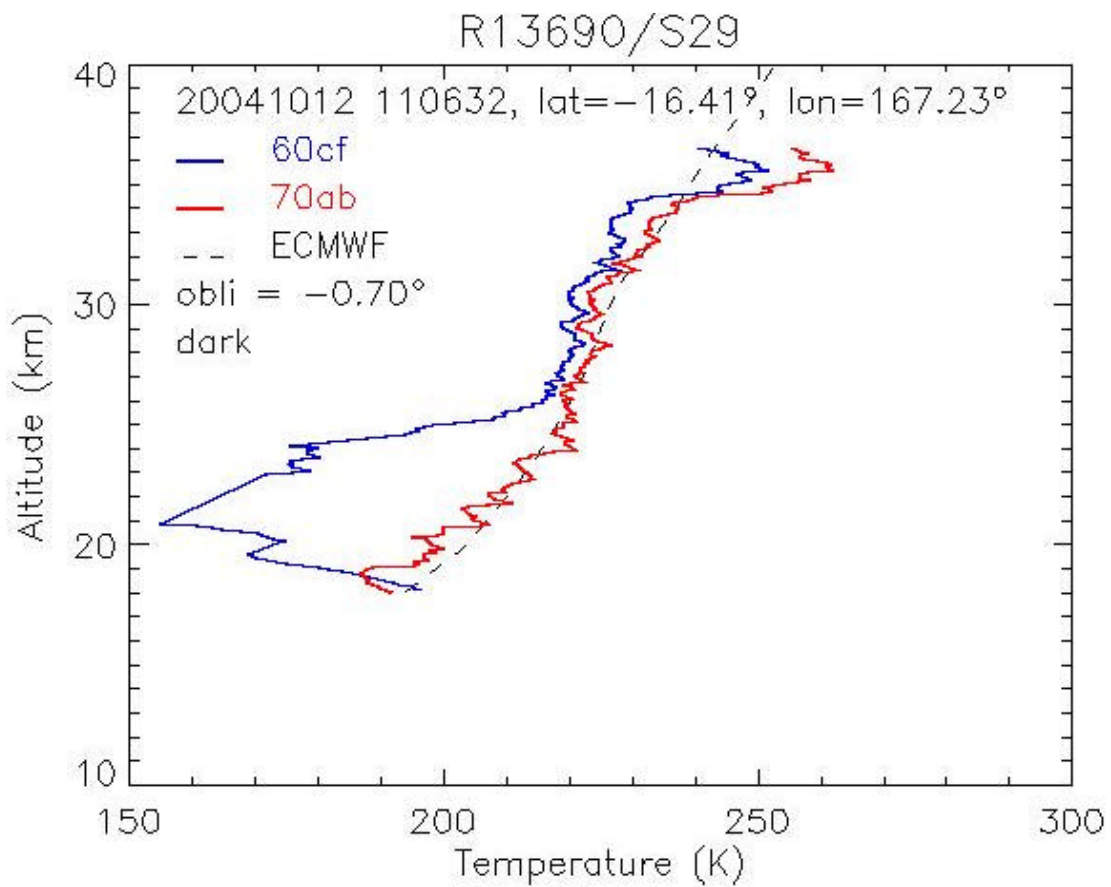
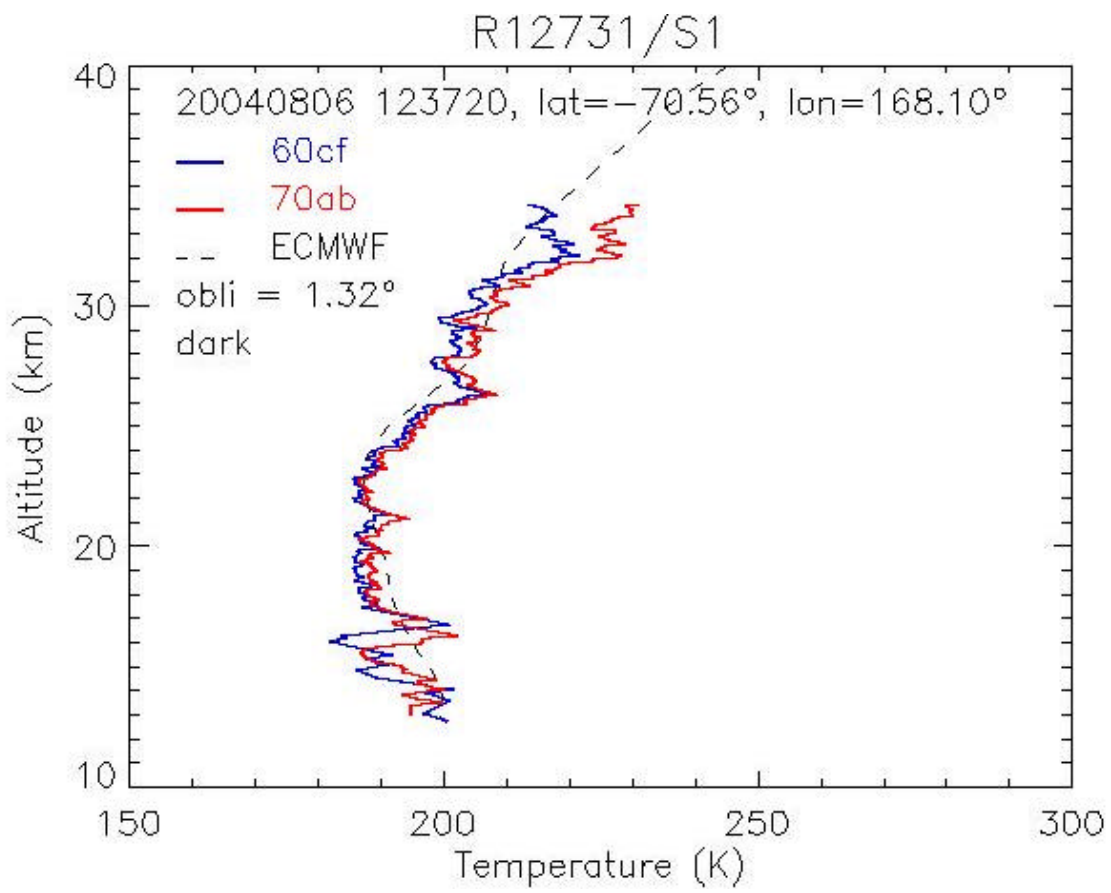


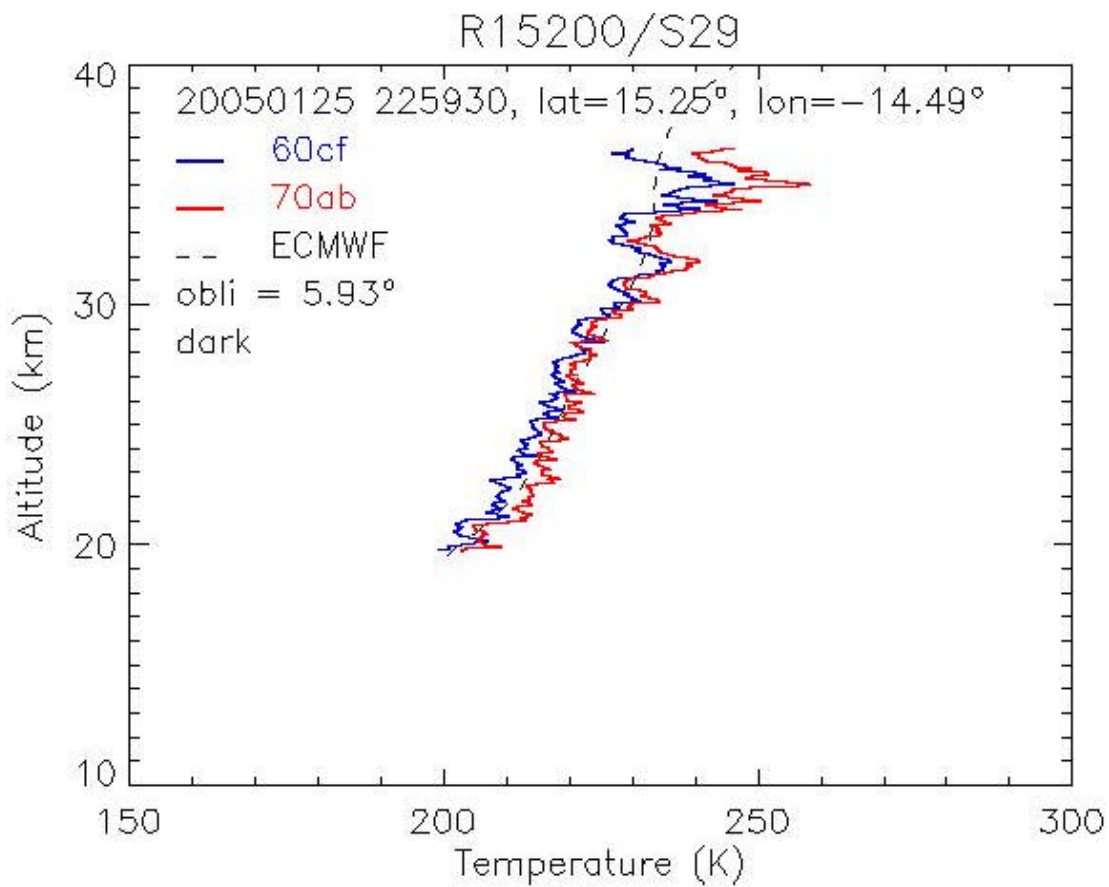
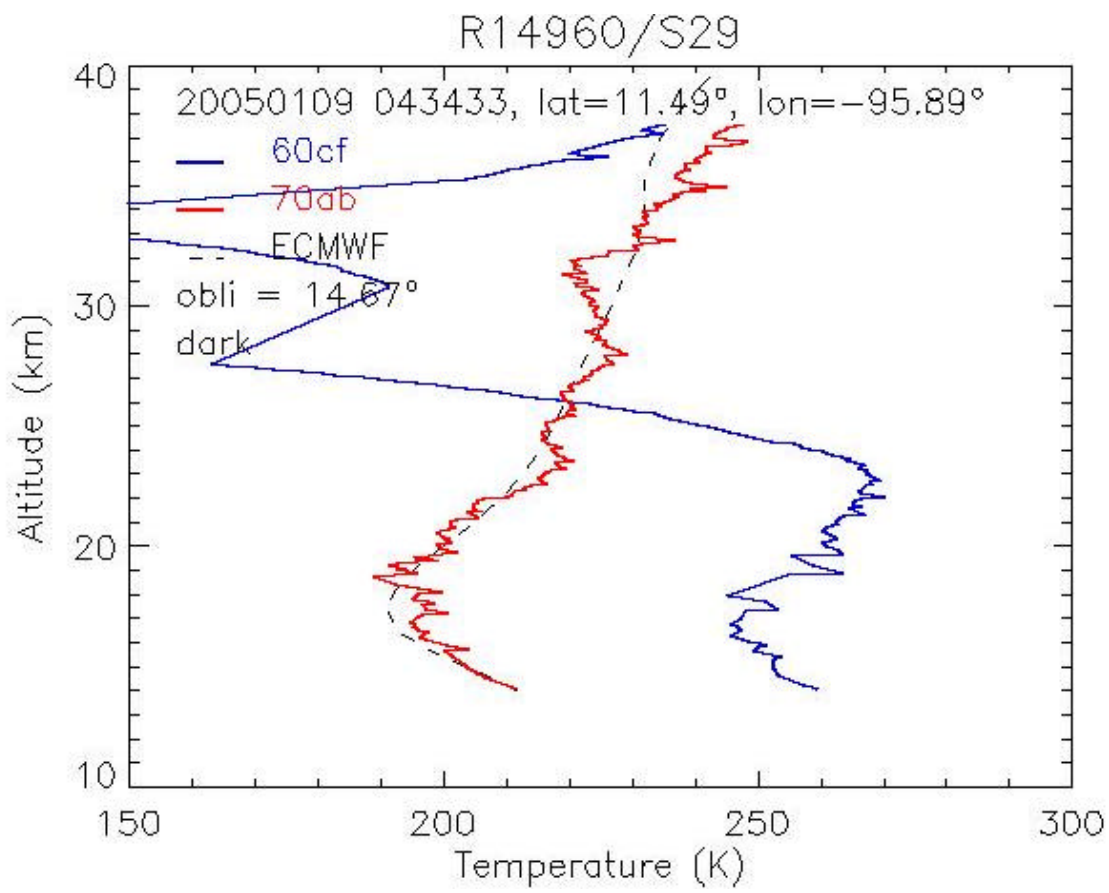












Twilight illumination conditions

