Some aspects of inversions of radio occultation signals

S. Sokolovskiy, W. Schreiner, Z. Zeng, and D. Hunt

University Corporation of Atmospheric Research, Boulder, Colorado

sergey@ucar.edu

We will discuss some aspects of inversions of radio occultation signals with an emphasis on wave optics transform in the lower troposphere and ionospheric correction in the stratosphere and troposphere. For the wave optics transform we consider adaptive noise filtering. For the ionospheric correction, we consider reduction of the errors induced by the ionospheric scintillation and extension of the ionospheric correction into the lower troposphere.