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Error analyses of a multistatic meteor radar system to obtain a three-dimensional spatial-resolution distribution

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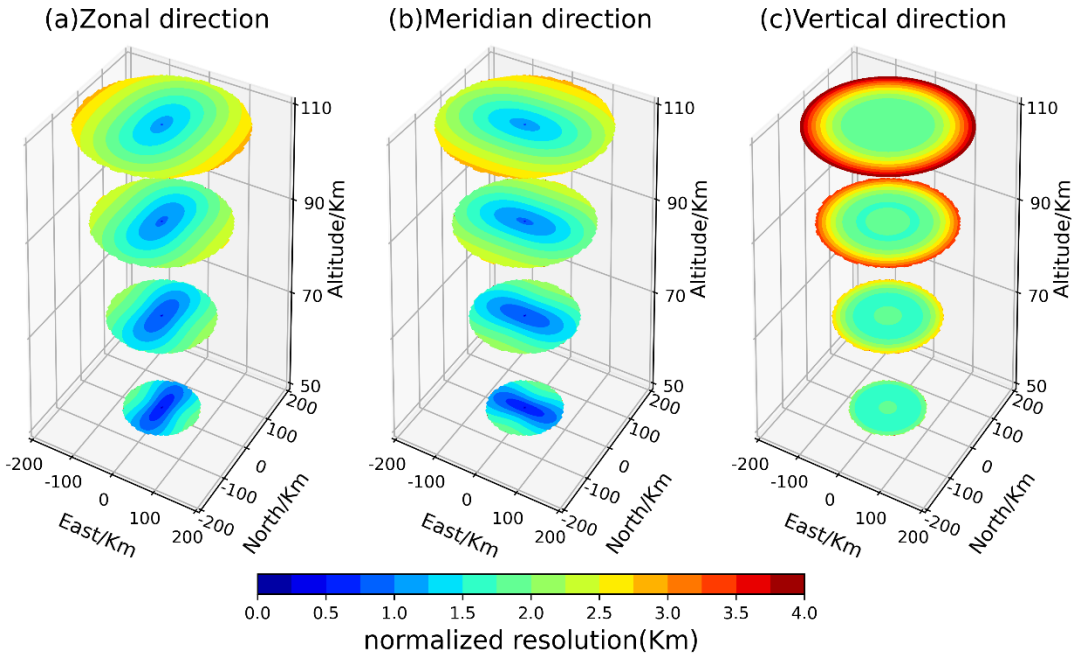
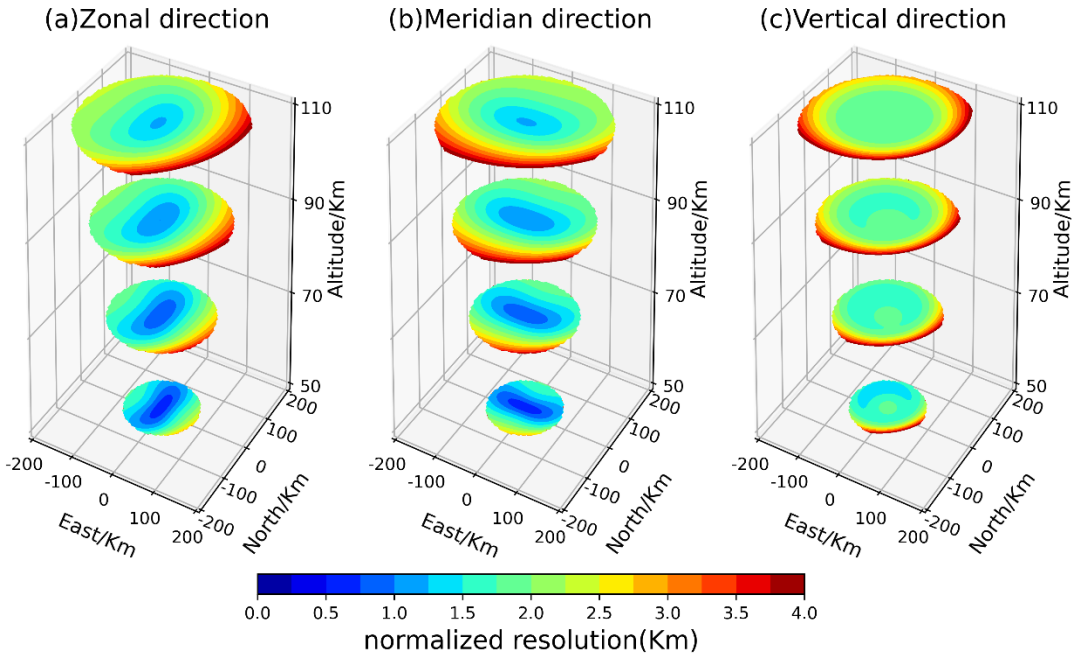
Figures:

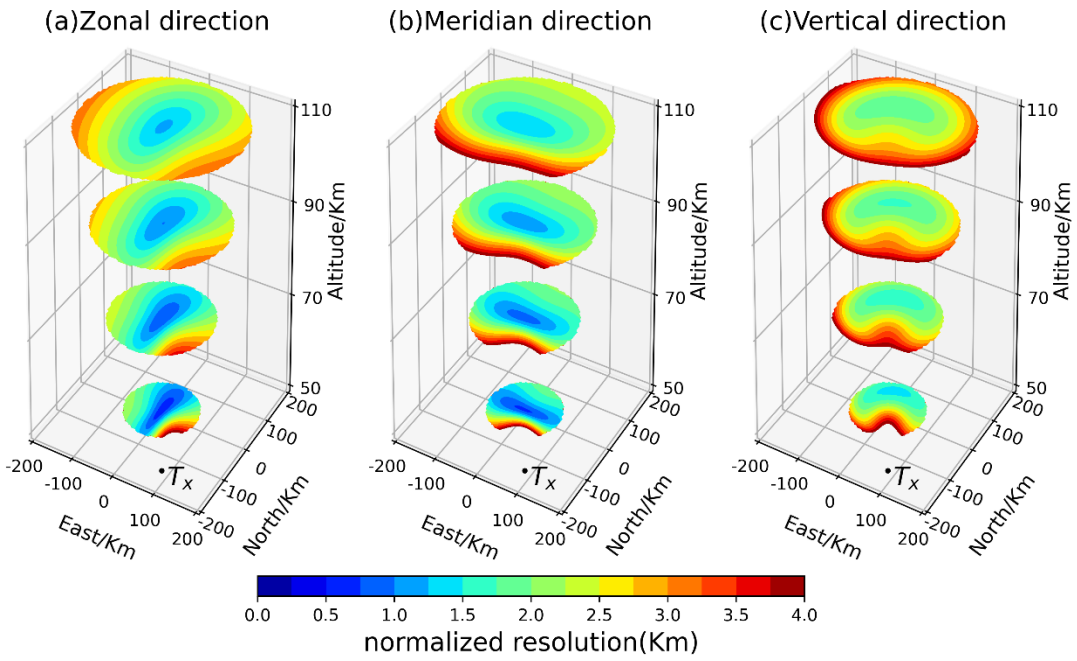
SF1. The 3D contourf plot of the spatial resolution distribution of a Monostatic meteor radar



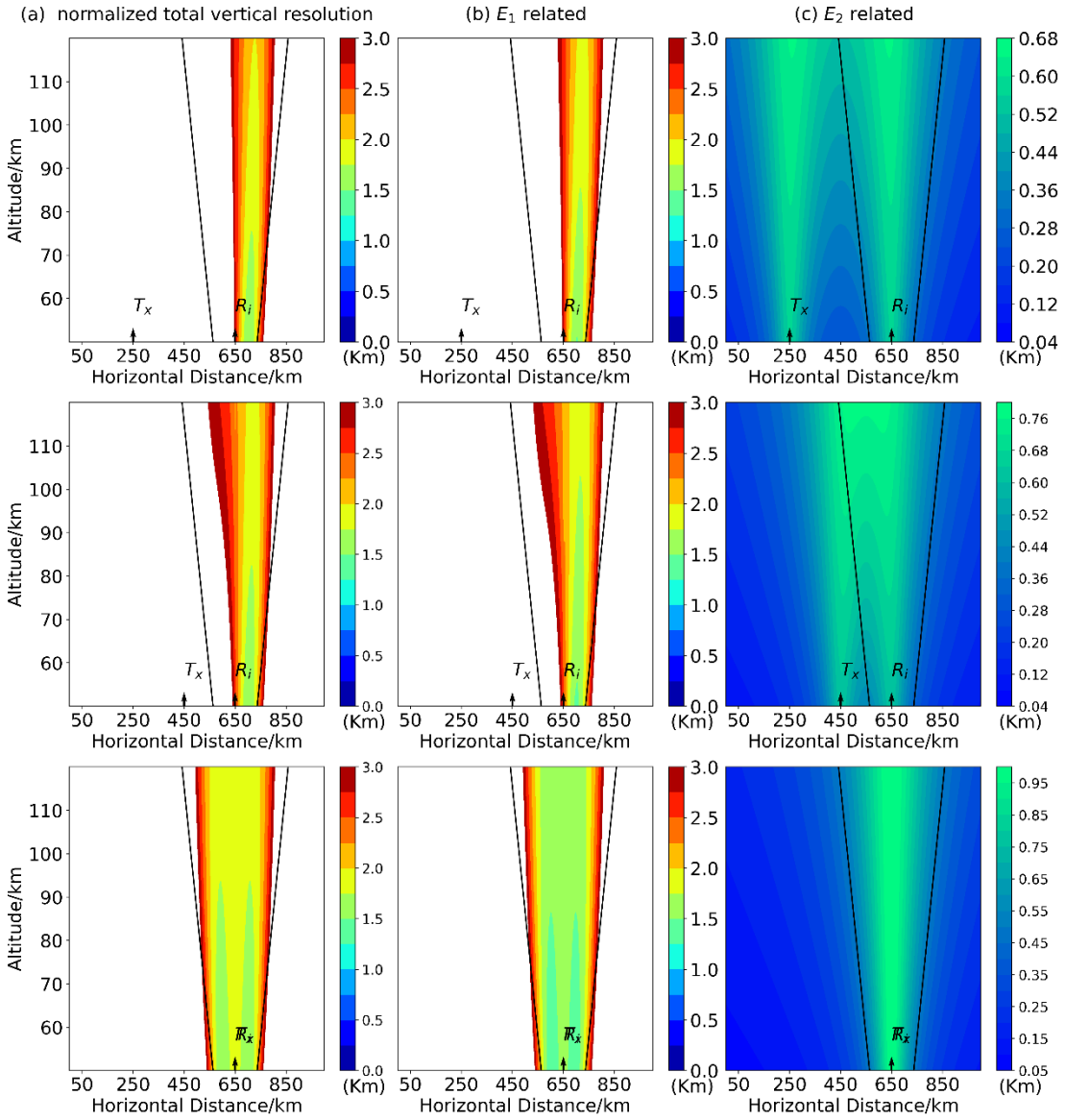
SF2. The 3D contourf plot of the spatial resolution distribution of a monostatic meteor radar with slant receiver.



SF3. The 3D contourf plot of the spatial resolution distribution of the slant receiver, comparing with Figure 8.



SF4. Sampling volume comparing with different transmitter/receiver distance. Except the transmitter/receiver distance, other parameter settings are the same as Figure 7. From the first to third row, the transmitter/receiver distance are 400 km, 200 km and 0 km respectively.



Tables. Parameters settings

Table 1. Parameter settings in F

	Figure 7 1st row	Figure 7 2nd &3rd row	Figure 8/SF3	SF1/SF2
d /km	300	150	180	0
$(\psi_x^{X,i}, \psi_y^{Y,i}\ \psi_z^{Z,i})$	$(0, 0, 0)$	$(0, 0, 0)$	$(0/10, 0/10, 0)$	$(0/15,\ 0/15, 0)$
$(\psi_x^{i,0}, \psi_y^{i,0}\ \psi_z^{i,0})$	$(0, 0, 180)$	$(0, 0, 180)$	$(0, 0, 60)$	$(0, 0, 0)$
$(\delta R\ , \delta(\Delta\Psi_1)\ , \delta(\Delta\Psi_2))$	$(6.3, 35°, 35°)$	$(6.3, 35°, 35°)$	$(6.3, 35°, 35°)$	$(6.3, 35°, 35°)$
$(\frac{D_1}{\lambda}, \frac{D_2}{\lambda})$	$(4.5\ , 4.5)$	$(4.5\ , 4.5)$	$(4.5\ , 4.5)$	$(4.5\ , 4.5)$
S /km	2	2	2	2
PRFs/HZ	625	625	625	625

Unit: δR /km