Fig. 7.   Total charge density of lunar half-hill expansion
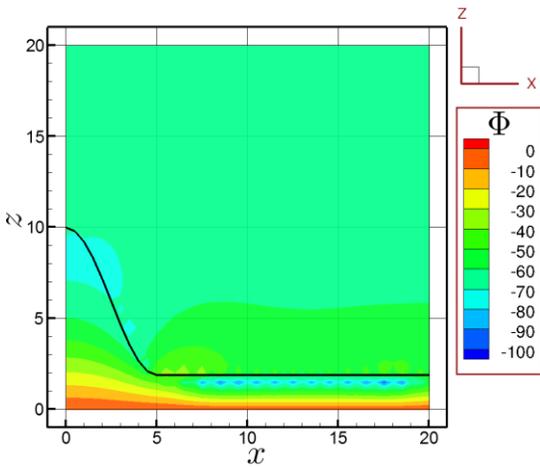

Fig. 8.   Potential in lunar half-hill expansion

surface. Future work will demonstrate this effect for a variety of lunar surface topologies, with extension to fully three-dimensional simulations. In addition, effects due to inclusion of photoelectrons and secondary electrons will be investigated in transition from shadowed to illuminated regions, which may give rise to strong localized electric fields and dust levitation.

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TABLE I.   SOLAR WIND SIMULATION PLASMA PARAMETERS

Species	Number density n (cm^{-3})	Drifting velocity v_d ($\times 10^7$ cm/s)	Thermal velocity v_t ($\times 10^7$ cm/s)	Temperature T (eV)
Electron	8.7	4.68	14.53	12
Ion	8.7	4.68	0.31	10