



Maps for 2017-08-21 solar eclipse, longitude  $-110^\circ$ , latitude  $43^\circ$ , 17:37 UTC assuming rather transparent air. Lines from N(E,S,W) to zenith shown (crosses each  $10^\circ$ ). Centered on  $\zeta$  UMa = Mizar, which is  $48^\circ$  to the right from N, at  $41^\circ$  height. Detailed maps  $50^\circ$  vertically, the first four maps  $100^\circ$ . *Jan Hollan, CzechGlobe*