

FORM TO SPECIFY INPUT DATA FOR
CURRENT-VELOCITY MODEL WLINEAR

This subroutine specifies constant radial (upward), eastward and southward currents, allowing a linear height gradient of the eastward component.

$$U_{\theta} = U_{\theta 0}$$

$$U_{\phi} = U_{\phi 0} + \frac{du_{\phi}}{dz} z$$

$$u_r = U_{r0}$$

$z = r - r_e$, where r_e is the Earth radius, and r is the radial coordinate of ray point.

Specify--

the model check for WLINEAR = 1.0 (W100)

the input data-format code = (W101)

an input data-set identification number = (W102)

an 80-character description of the current-velocity profile:

the constant upward current, $U_{r0} =$ km/s, m/s (W103)

the constant southward current, $U_{\theta 0} =$ km/s, m/s (W104)

the ground value of the eastward current, $U_{\phi 0} =$ km/s, m/s (W105)

the height gradient of u_{ϕ} , $du_{\phi}/dz =$ km/s/km, m/s/km (W106)

(This subroutine can be used with its input parameters zero when no current field is desired.)

OTHER MODELS REQUIRED: Any current-perturbation model. Use NPCURR if no perturbation is desired.