FORM TO SPECIFY INPUT DATA FOR SOUND-SPEED PERTURBATION MODEL CBLOB3

An increase (or decrease) in sound speed in up to three localized regions that decays in a Gaussian manner in all three spatial directions.

$$C(r,\theta,\phi) = C_o(r,\theta,\phi)\{1 + \sum_{i=1}^{n} \Delta_i \exp[-(\frac{z-z_i}{W_{zi}})^2 - (\frac{\theta-\theta_i}{W_{\theta i}})^2 - (\frac{\phi-\phi_i}{W_{\phi i}})^2]\}$$

$C_o(r,\theta,\phi)$ is a background sound-speed model, (r,θ,ϕ) are Earth-centered spherical-polar coordinates. $z = r - r_e$, where r_e is the Earth's radius. $\lambda_i = \pi/2 - \theta_i$ is the latitude.

Specify--

the model check number for subroutine CBLOB3 = ____3.____(W175)

the input data format code = _____(W176)

an input data set identification number = _____(W177)

an 80-character description for the sound-speed perturbation model, including description of parameter set:

_____

the number of Gaussian blobs, n = _____(W178)

Δ_1 = _____(W179), Δ_2 = _____(W180), Δ_3 = _____(W181)

z_1 = _____(W182), z_2 = _____(W183), z_3 = _____(W184)

λ_1 = _____(W185), λ_2 = _____(W186), λ_3 = _____(W187)rad,deg,km N

ϕ_1 = _____(W188), ϕ_2 = _____(W189), ϕ_3 = _____(W190)rad,deg,km E

*W_{z1} = _____(W191), W_{z2} = _____(W192), W_{z3} = _____(W193)km

*$W_{\theta 1}$ = _____(W194), $W_{\theta 2}$ = _____(W195), $W_{\theta 3}$ = _____(W196)rad,deg,km

*$W_{\phi 1}$ = _____(W197), $W_{\phi 2}$ = _____(W198), $W_{\phi 3}$ = _____(W199)rad,deg,km

OTHER MODELS REQUIRED: None.

*Setting a W = 0 results in no space variation in that direction.