



d. Deconvolution

The approximate deconvolution was accomplished by the application of a whitening filter designed from auto-correlation functions, which were derived from the trace to be deconvolved. Two filters were designed per trace and applied with a 50% overlap, such that the first filter tapered off while the second filter tapered on. The operators were designed as double section operators; i.e., to dereverberate the first and second water bottom reverberations.

e. Time Variant Scaling (TVS)

Time Variant Scalers were computed and applied in time gates to make the average absolute amplitude in each gate equal to a constant. A scaler was computed for each gate on each trace and linearly ramped from a maximum at the gate centre time to zero at the centre times of the adjacent time gates prior to application. Each trace was divided into equal time gates of 500 milliseconds. The initial time of the first gate was maintained at approximately 100 milliseconds after the direct arrival energy. For the dynamite shooting, due to high amplitude first arrivals, each trace was divided into consecutive time gates of 200, 200, 300, 400, 400, 400, 500 milliseconds.