

Figure 1. Generalized tectonic map of the western continental margin of India, showing annotated magnetic lineations, pseudofaults (thin blue lines), fracture zones (dashed blue lines annotated as FZ) (Chaubey *et al.* 2002a) and boundaries of the Laccadive and Prathap ridges (thin dashed lines) (Naini and Talwani 1983). The locations of identified SDRs are marked on the seismic lines (thick red bar on RE lines); DSDP drill sites are shown with solid stars (Whitmarsh *et al.* 1974); solid thick dashed line represents the computer-modeled Réunion hotspot track; numbers along the hotspot track are predicted ages in Ma (Shipboard Scientific Party 1988); magnetic lineations in the Laxmi Basin (thin brown lines) (Bhattacharya *et al.* 1994; Malod *et al.* 1997). 2D crustal model, shown in figure 5, was derived along line RE23. Extended (dashed line) portion of the line RE23 into the deep Arabian basin lacks multi-channel seismic reflection data.

**VE~1.0**

**VE~2.1**

$$Y = 2.7/2 = 1.35 \text{ s}$$

$$\rightarrow 6.75 \text{ km}$$

$$X = 27 \text{ km}$$

**+72.2° +8.8°**

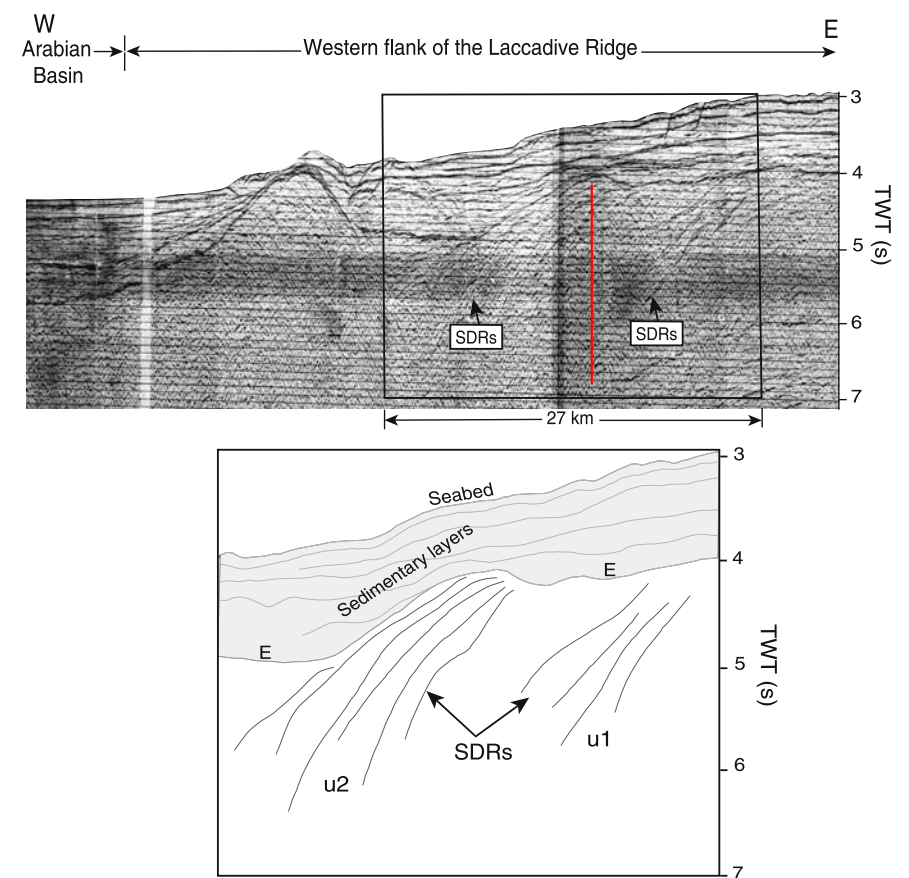
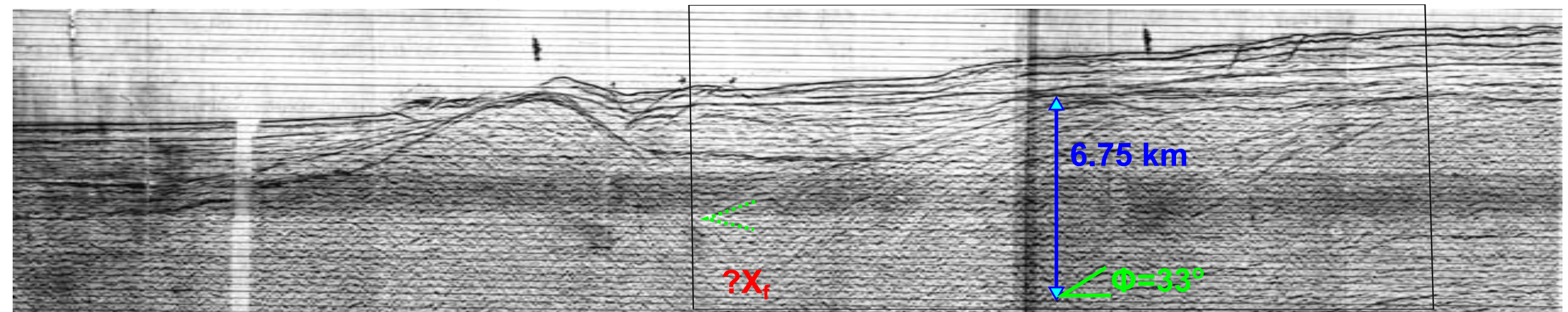


Figure 4. Multi-channel seismic section and interpreted line diagram along part of the line RE23 located on western flank of the Laccadive Ridge. SDRs are interpreted below sedimentary sequence. U1, U2 and reflector E are explained in the text.



**Ajay et al., 2011 fig. 4 TWTT**

**+72.2° +8.8°**

**$X_f = ? \text{ km}$**

**$Ws(X_f) = 6.75 \text{ km}$**

**$\Phi = 33^\circ$**

**$Te_{xf} = ? \text{ m}$**

**$\alpha_{xf} = ? \text{ m}$**

**$Te_y = 1874 \text{ m}$**

**$\alpha_y = 17210 \text{ m}$**

**$Te_{avg} = ? \text{ m}$**

**$\alpha_{avg} = ? \text{ m}$**

**$Te_{err} = ?\%$**

**$Hd = 5589 \text{ m (from } \Phi \text{ and } Te_{avg})$**