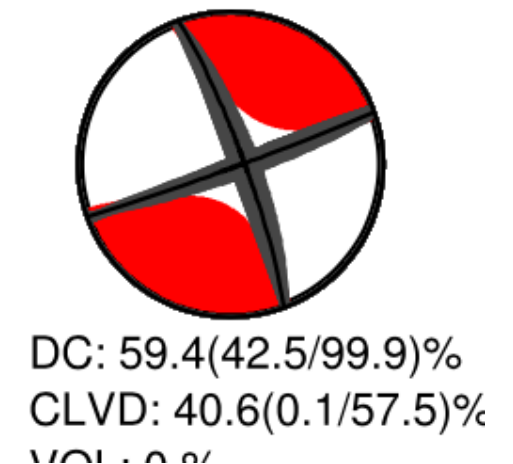
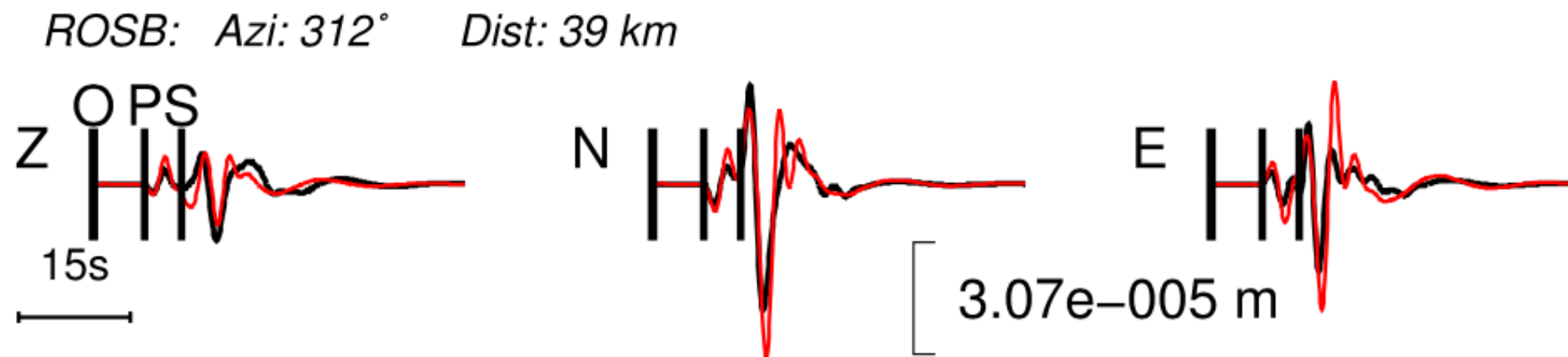
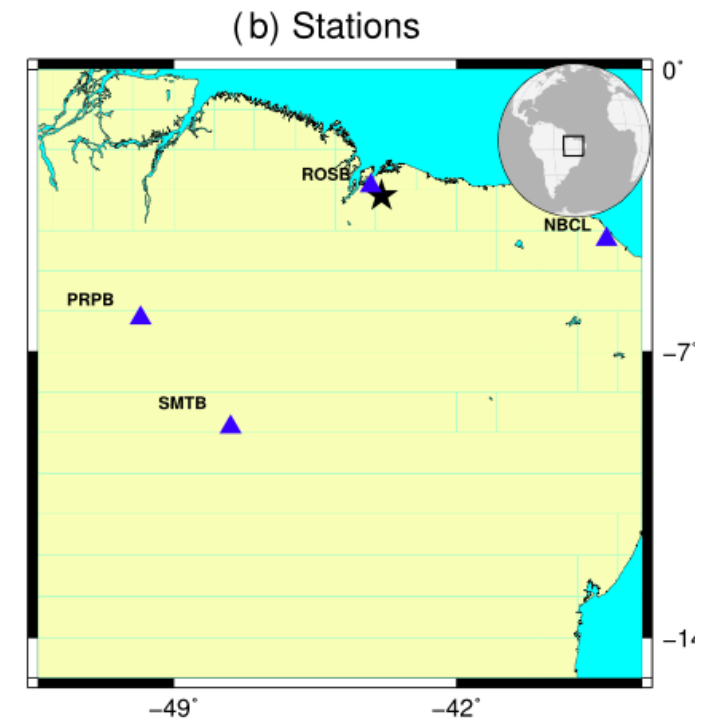
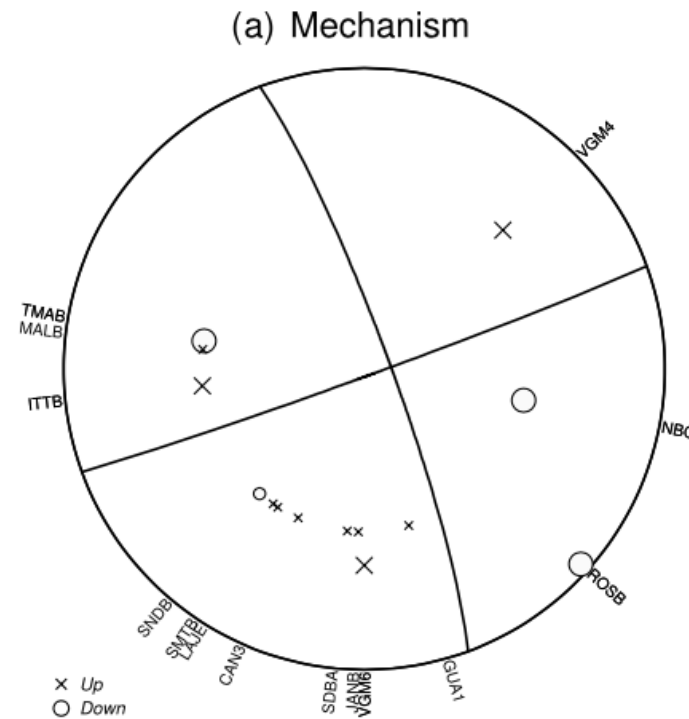
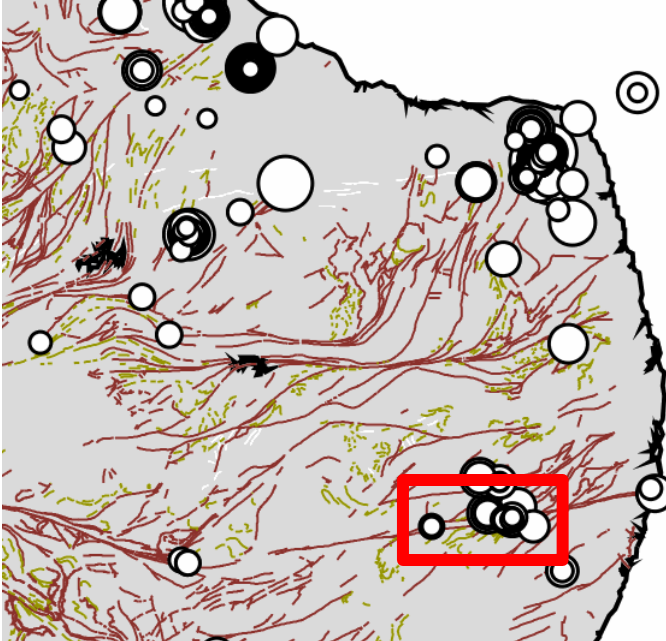


Sismo do Maranhão, 03-Jan-2017 m=4.3

- 1) No diagrama de polaridades da onda P (ao lado), indique a posição dos eixos P (Pressão) e T (Tração)
- 2) Para cada opção do plano de faha, diga se o movimento é dextral ou sinistral
- 3) Coloque os eios P e T na "beachball" abaixo.

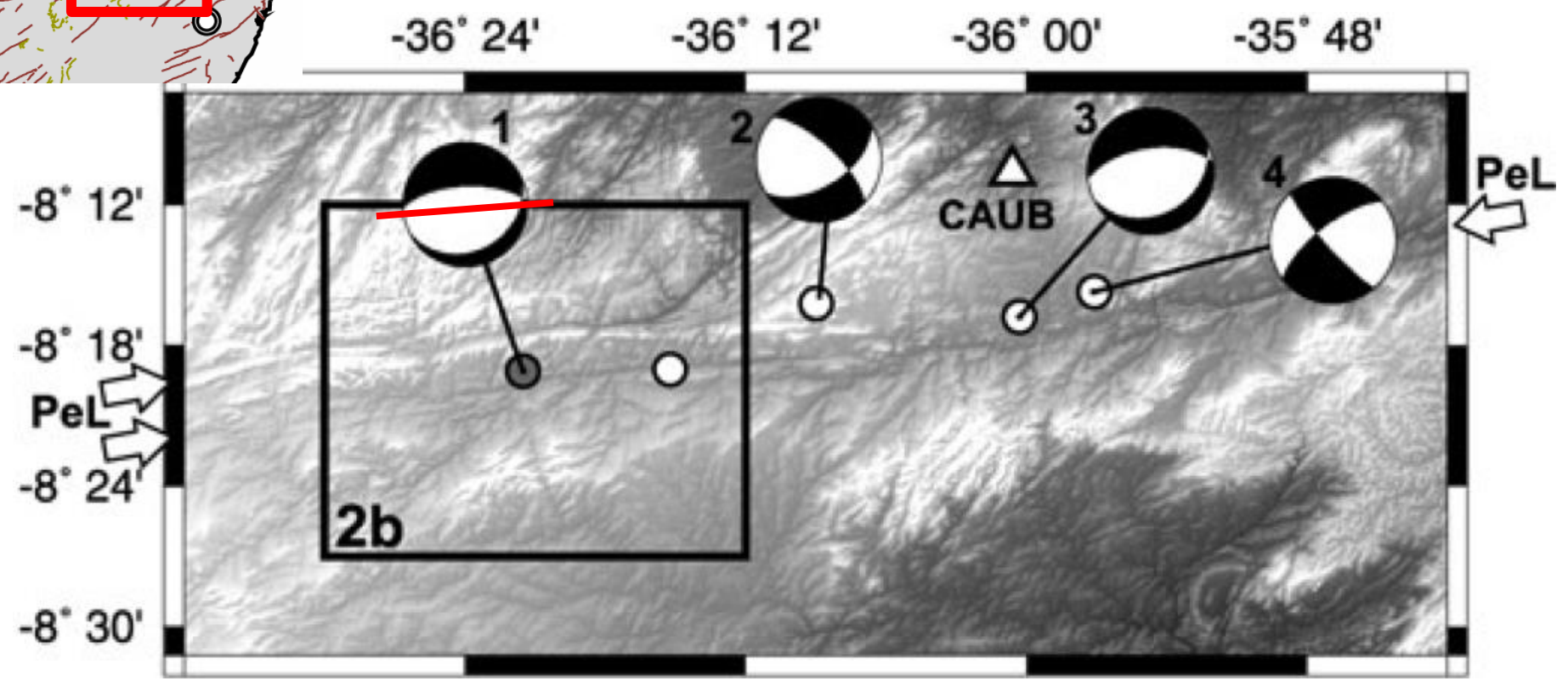




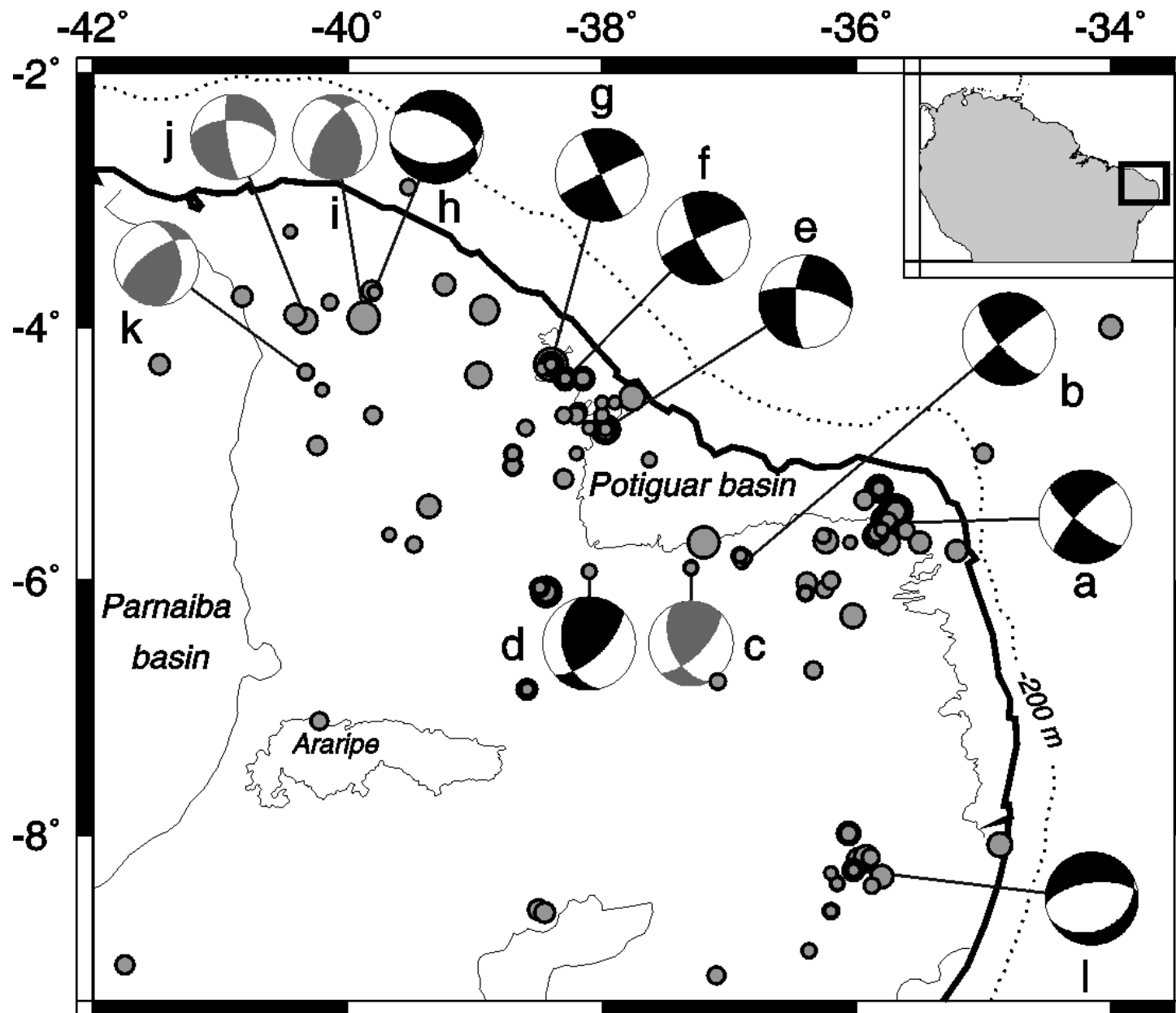
Sismos no Lineamento de Pernambuco:
reativação de estruturas antigas mapeadas na superfície
(caso raro no Brasil)

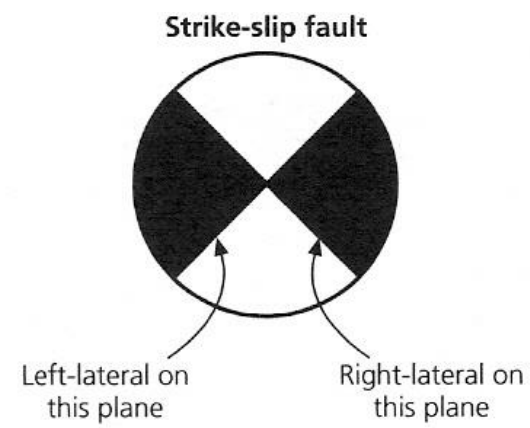
Lin. de Pernambuco

Exercício: Para os mecanismos 2 e 4 (falhas transcorrentes), indicar qual dos planos é a falha e a direção de movimentação (dextral ou sinistral). Indicar a direção provável do S1 (compressão máxima horizontal).

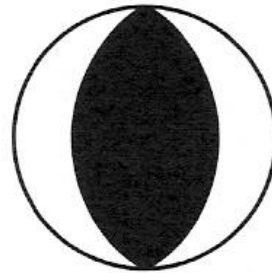


Mecanismos Focales en Nordeste de Brasil

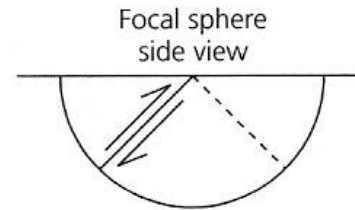




Dip-slip faults



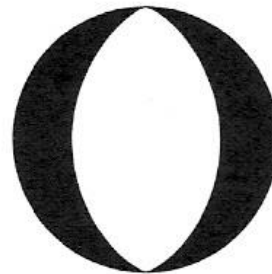
Thrust fault



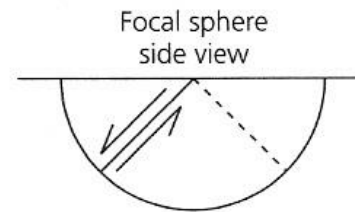
Exercício

Para cada caso,
determinar o
strike, dip e rake

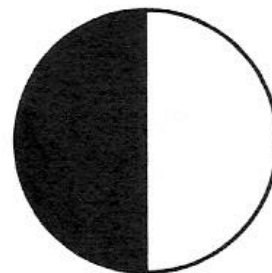
180 45 90



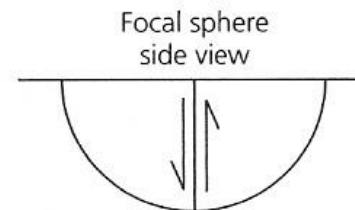
Normal fault



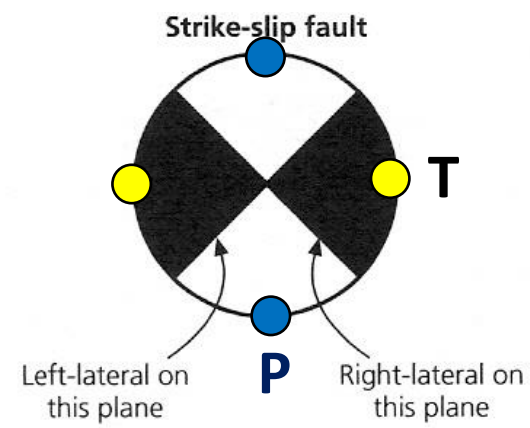
180 45 -90



Vertical dip-slip



0 90 90
180 90 -90

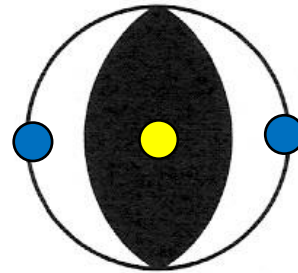


Eixos P e T

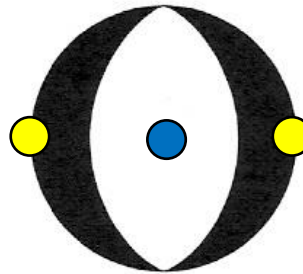
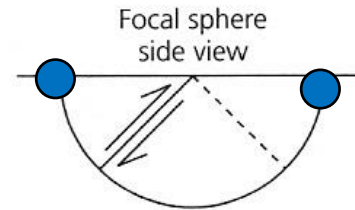


(a 45 graus de cada plano)

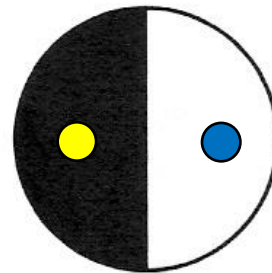
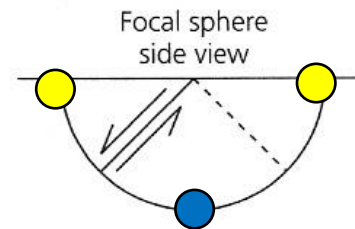
Dip-slip faults



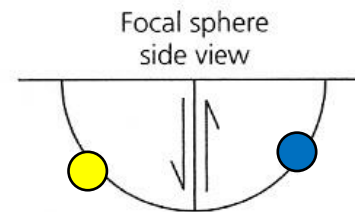
Thrust fault



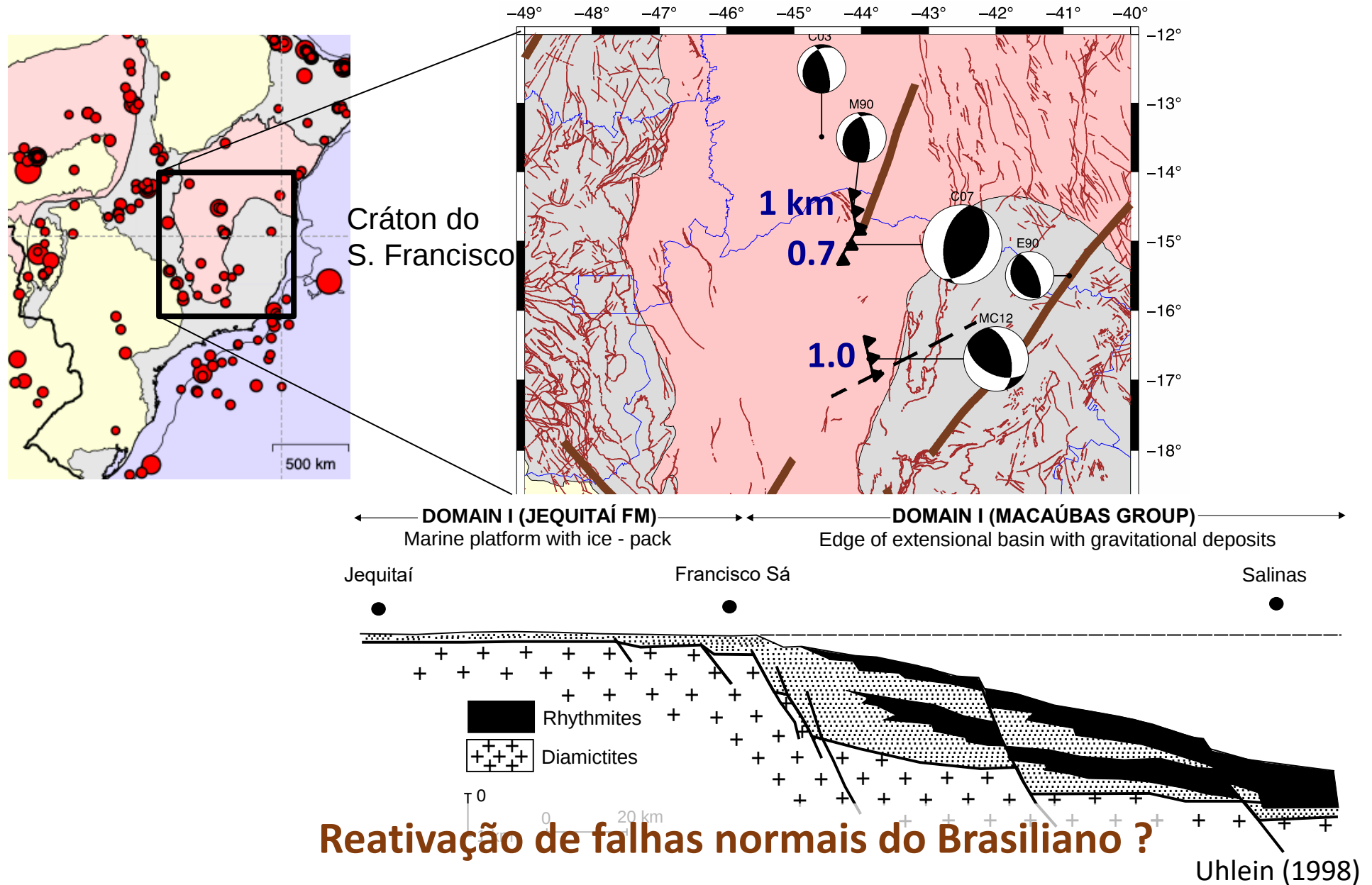
Normal fault



Vertical dip-slip

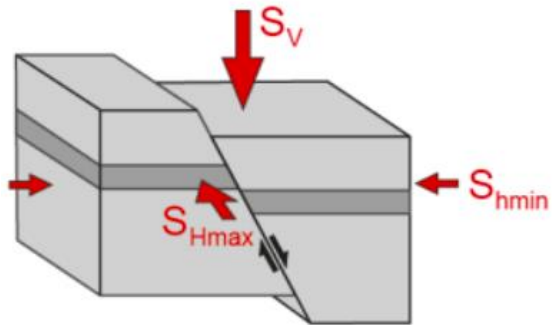


Qual o tipo de falhamento e a direção dos eixos P e T?



Regimes de Esforço (*Stress Tensor Regime*)

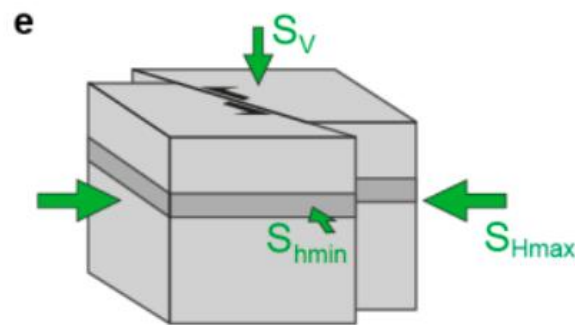
$$S_1 > S_2 > S_3$$



Normal Faulting (NF)
 $S_v > S_{Hmax} > S_{Hmin}$

Normal
 $S_v = S_1$

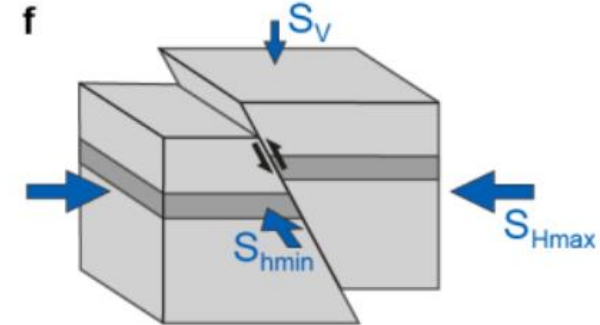
$S_{Hmax} = S_2$



Strike-Slip (SS)
 $S_{Hmax} > S_v > S_{Hmin}$

Transcorrente
 $S_v = S_2$

$S_{Hmax} = S_1$



Thrust Faulting (TF)
 $S_{Hmax} > S_{Hmin} > S_v$

Inverso
 $S_v = S_3$

$S_{Hmax} = S_1$

S_1, S_2, S_3 = tensões principais “absolutas”; eixos P e T = tensões “relativas”

Desenhar a “bola de praia” de cada mecanismo focal indicando os eixos P e T

