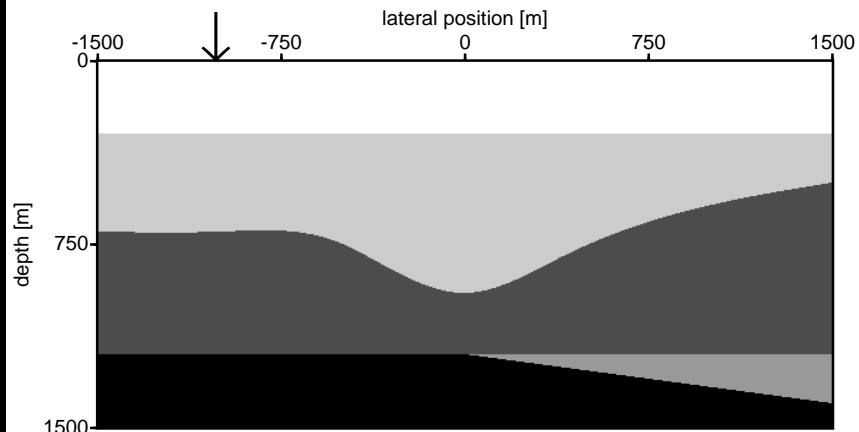


**Evaluation of seismic image quality,
Part 2: Assessment of velocity models**

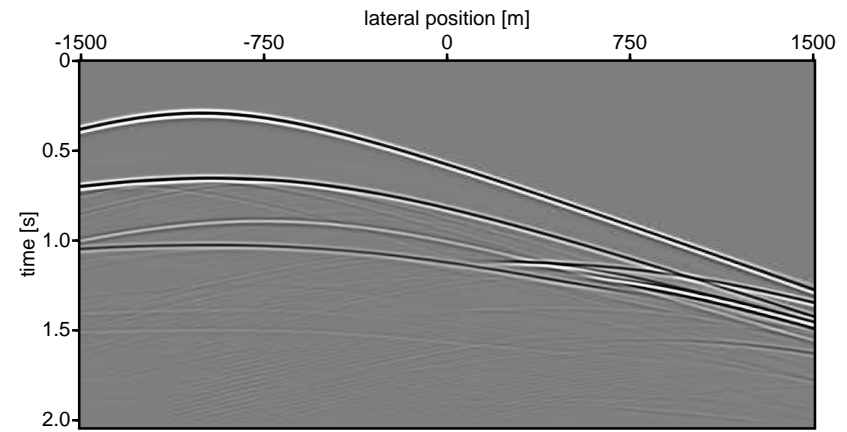
A.J. Berkhout* and J.W. Thorbecke

Tuesday September 15, 1998

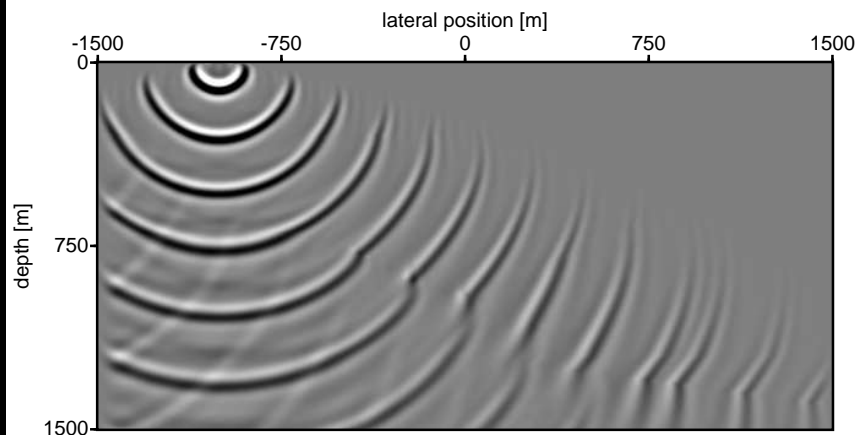
Syncline model: shot gather migration



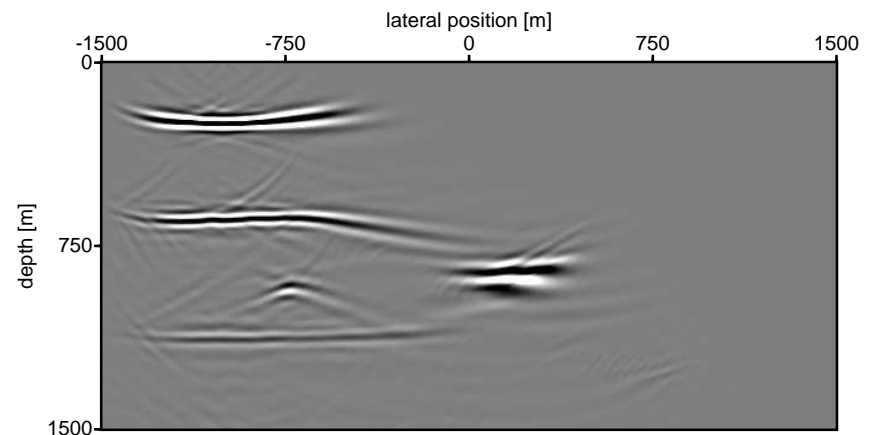
Syncline model, $x=-1000$, $z=0$



Shot gather

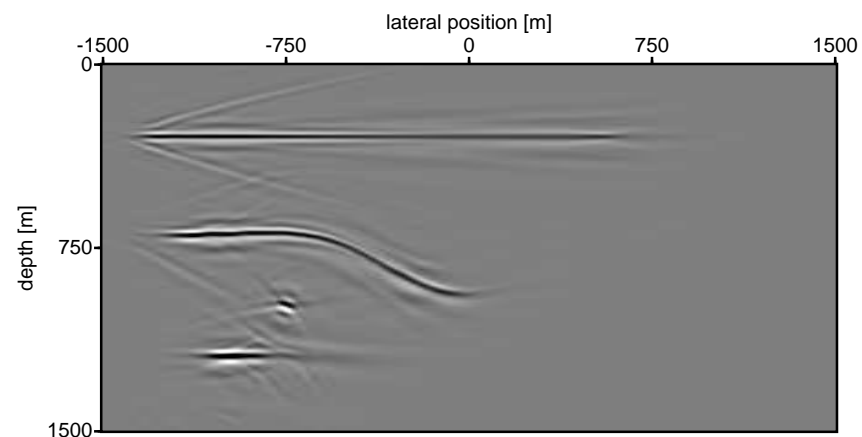
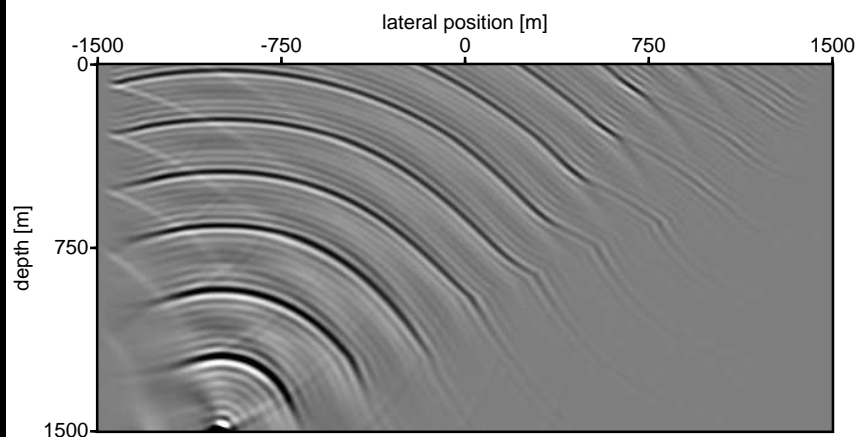
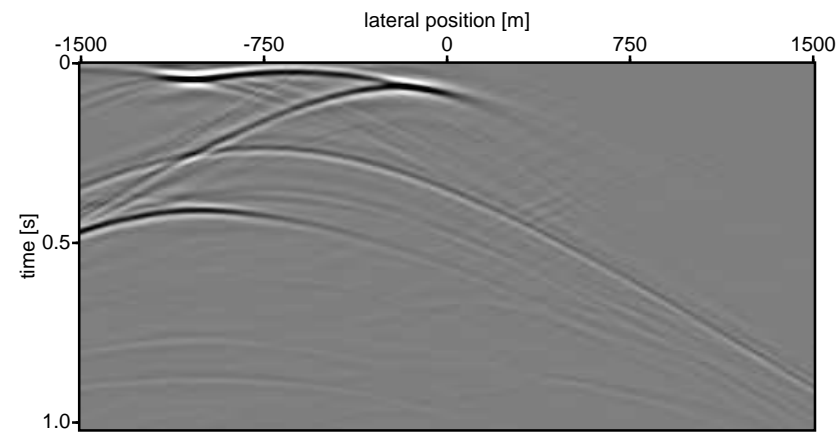
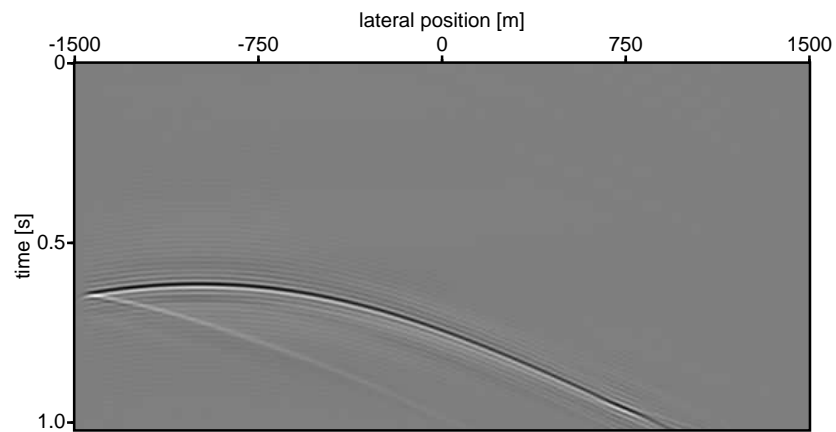


Snapshots of source wavefield

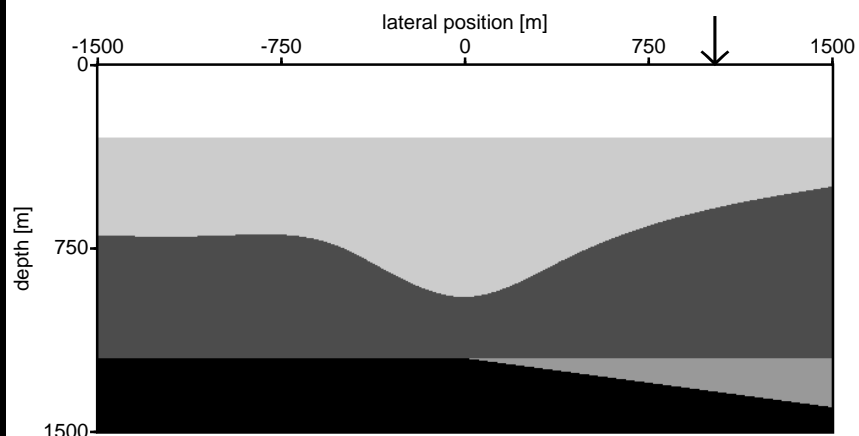


Shot gather migration

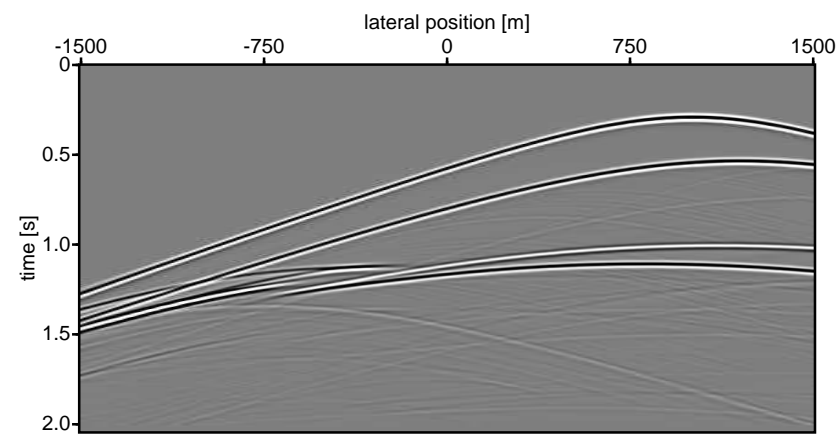
Syncline model: CFP gather migration



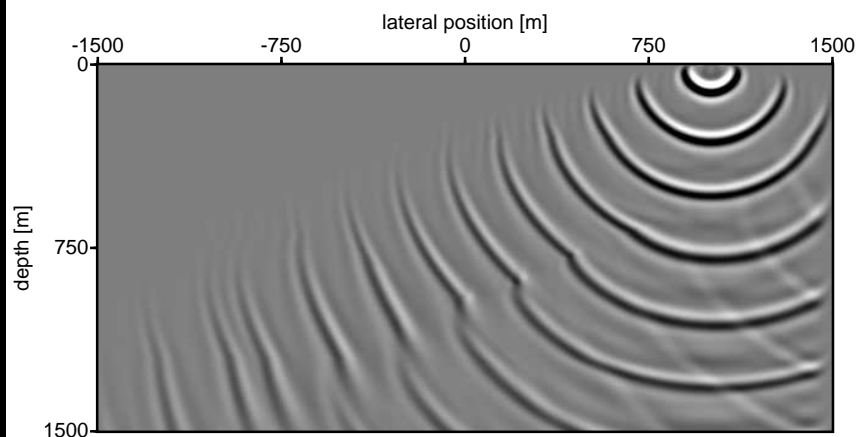
Syncline model: shot gather migration



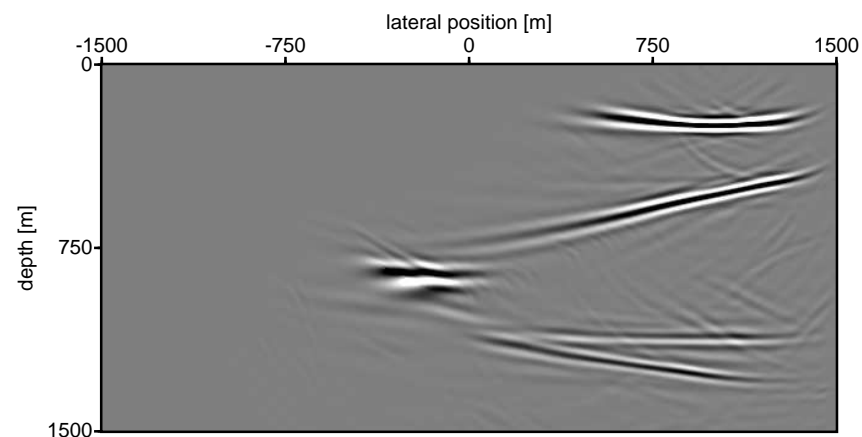
Syncline model, $x=1000$, $z=0$



Shot gather

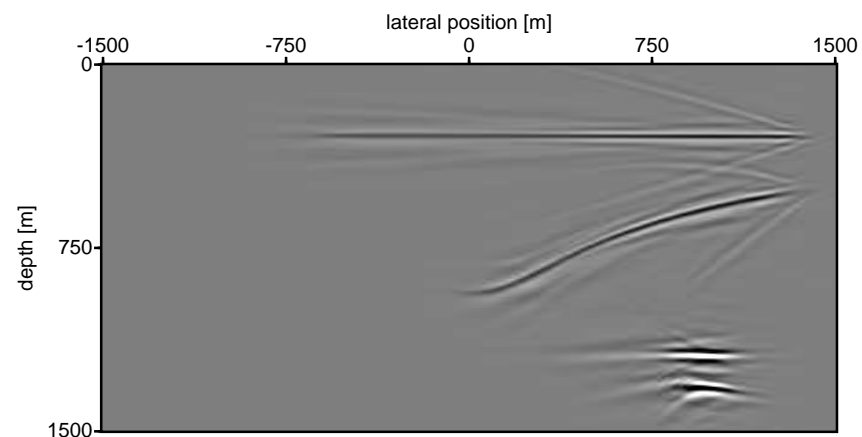
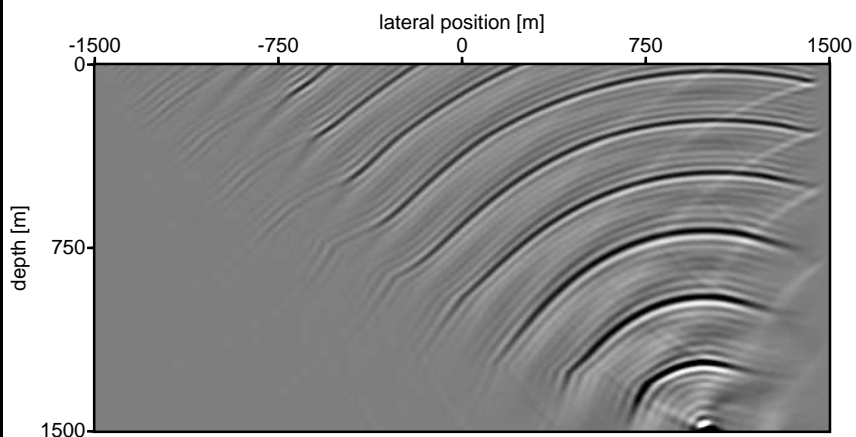
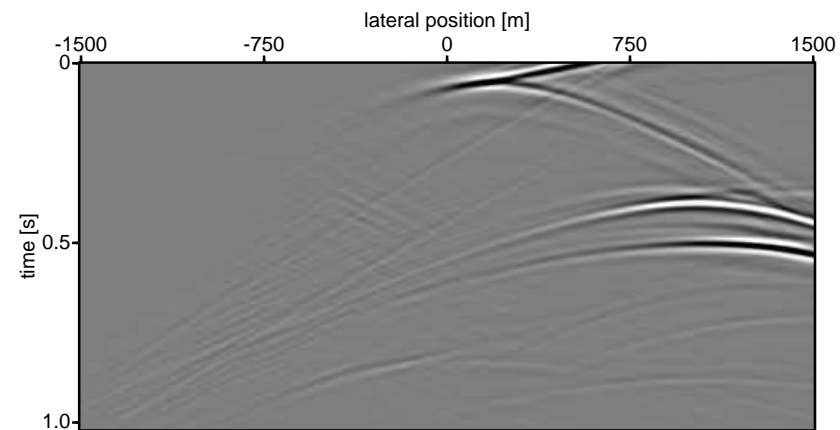
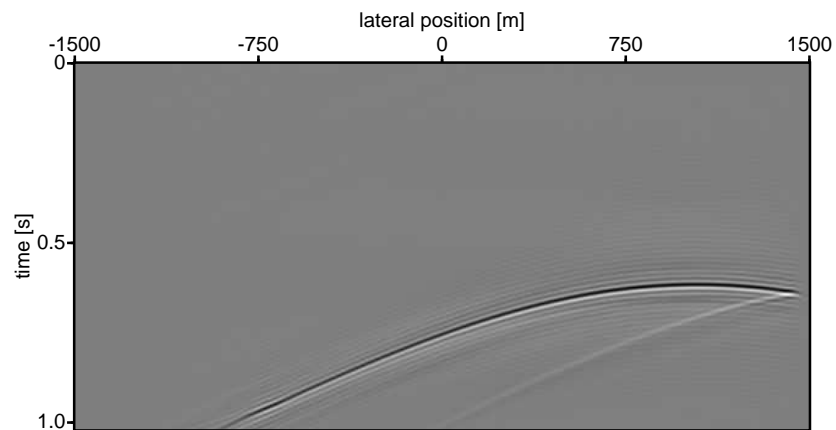


Snapshots of source wavefield

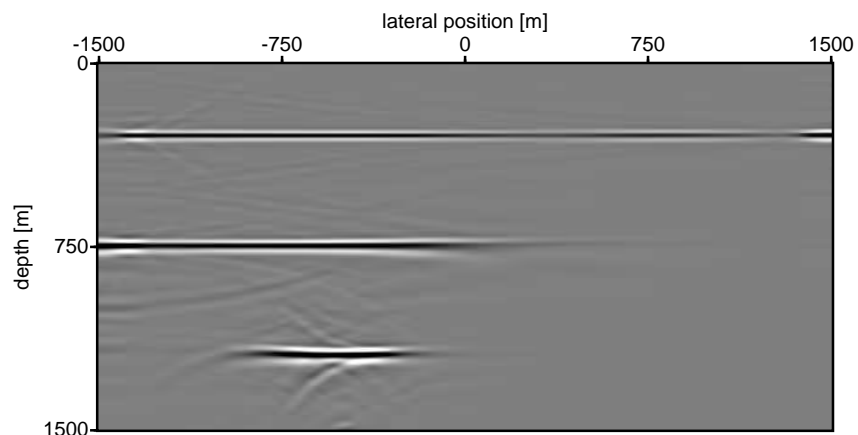
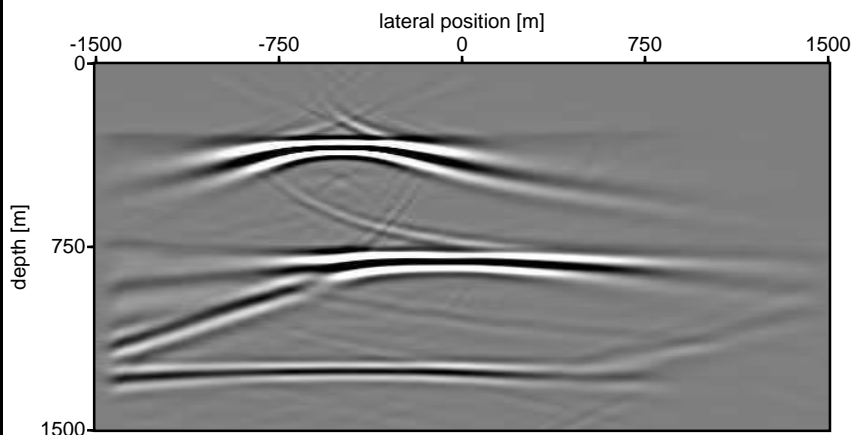
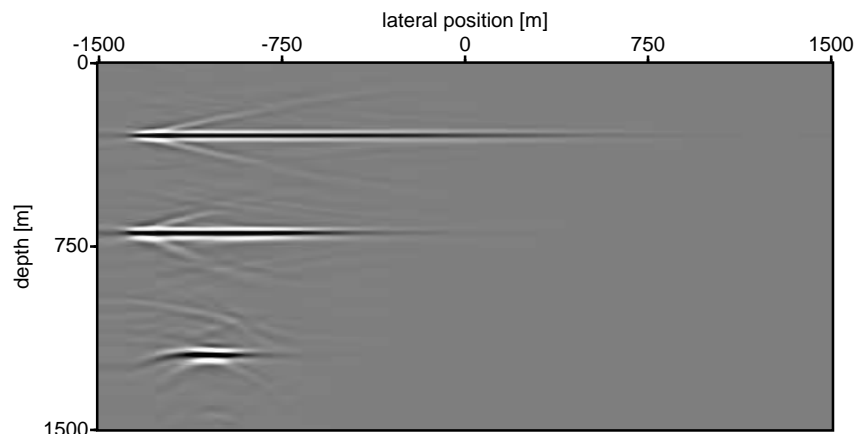
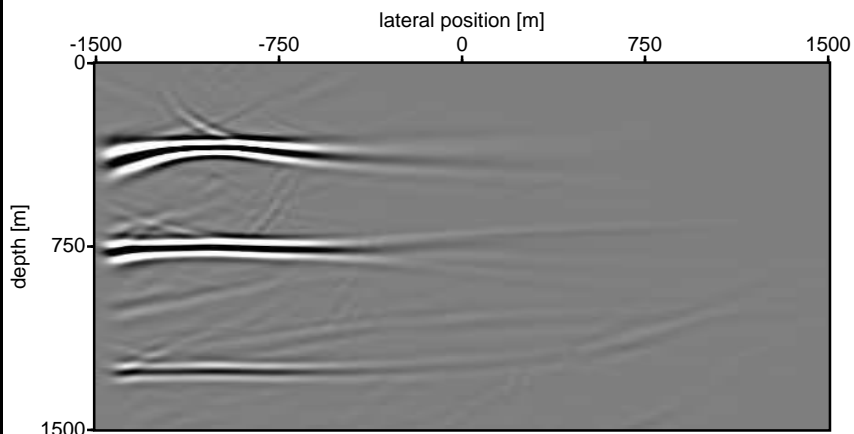


Shot gather migration

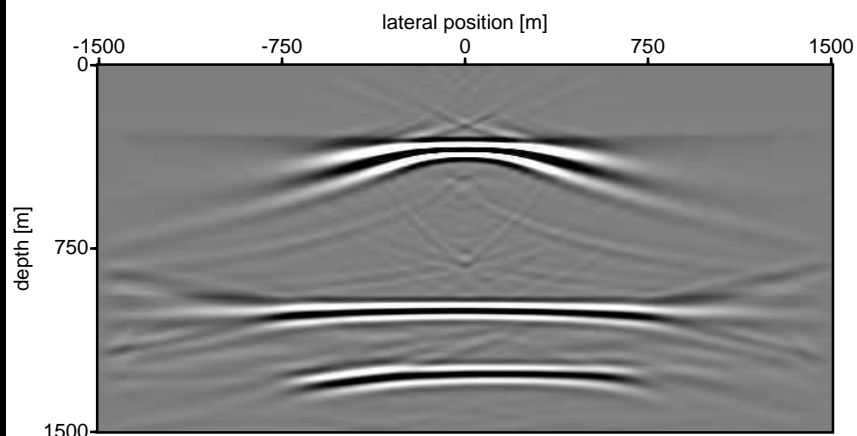
Syncline model: CFP gather migration



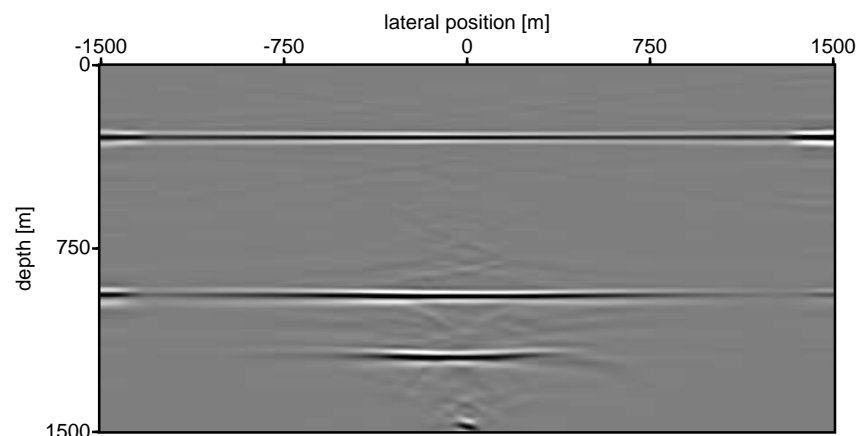
Syncline model: Image gathers (1)



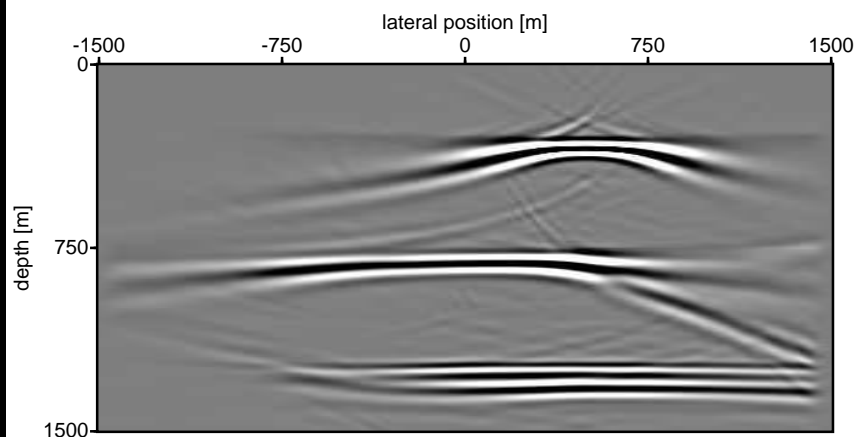
Syncline model: Image gathers (1)



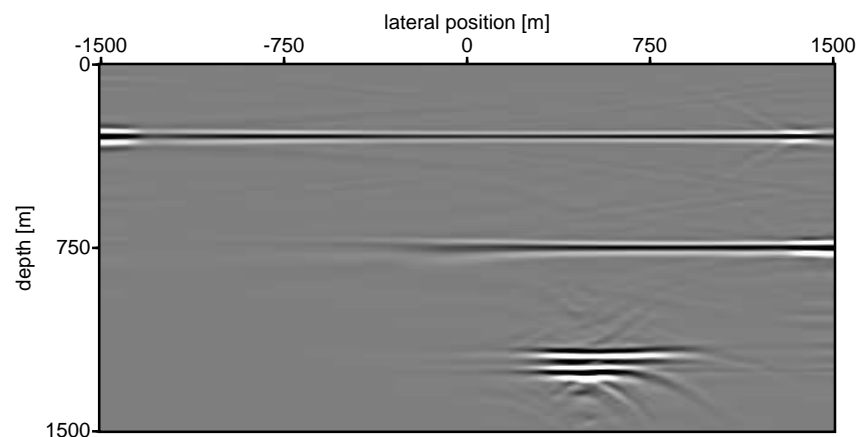
Shot image gather at $x=0$



CFP image gather at $x=0$

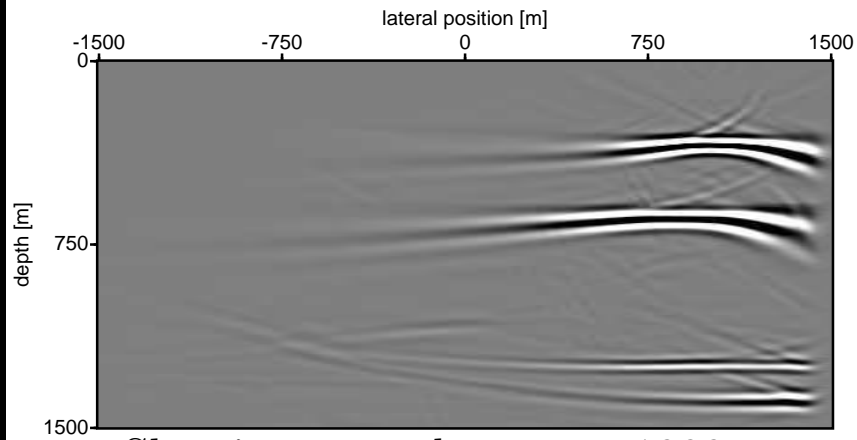


Shot image gather at $x=500$

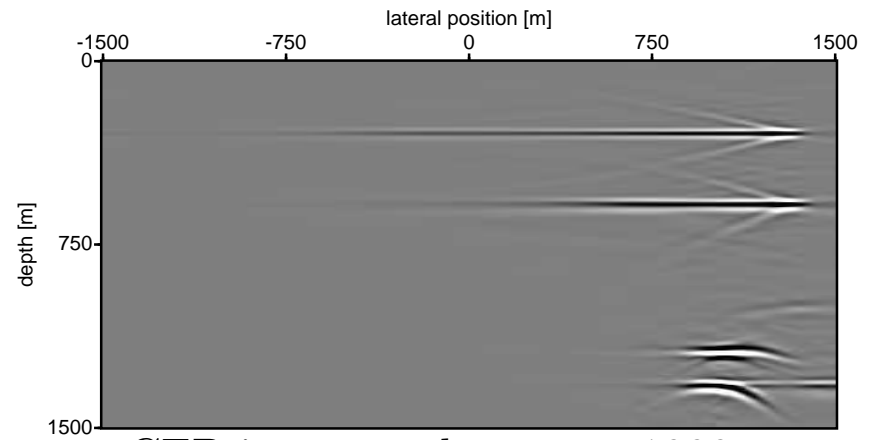


CFP image gather at $x=500$

Syncline model: Image gathers (1)

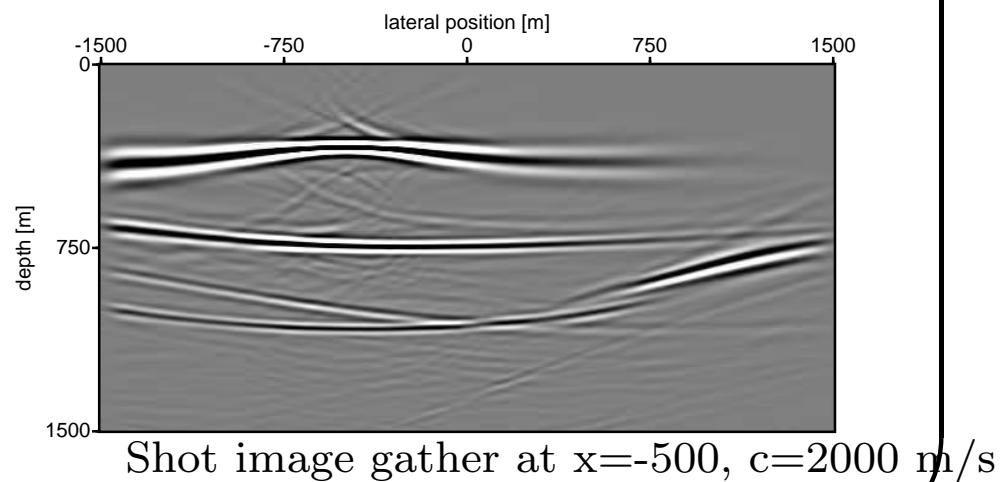
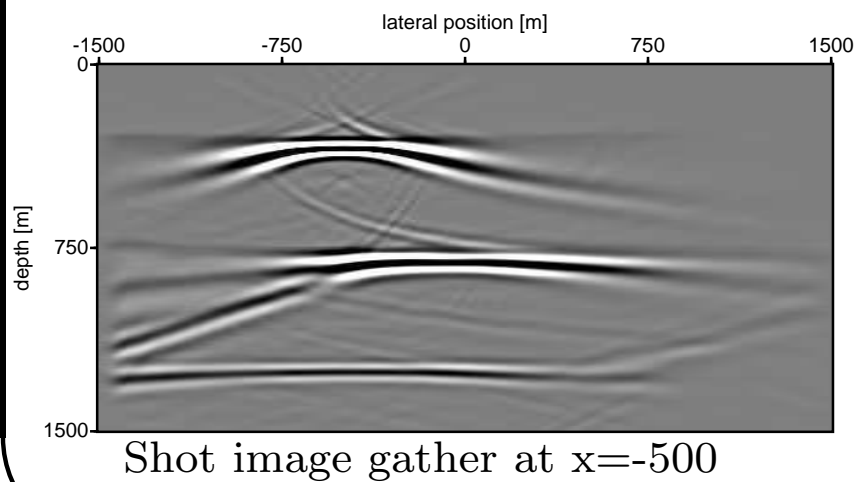
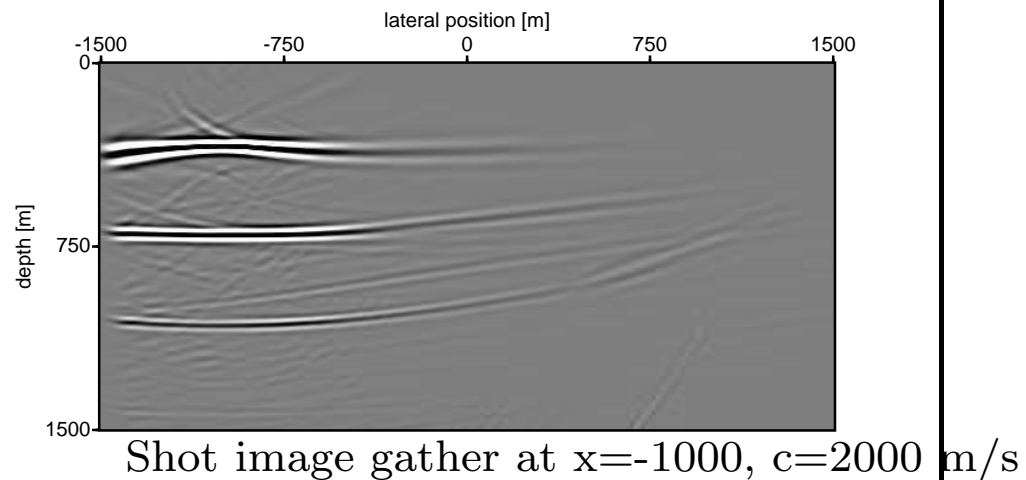
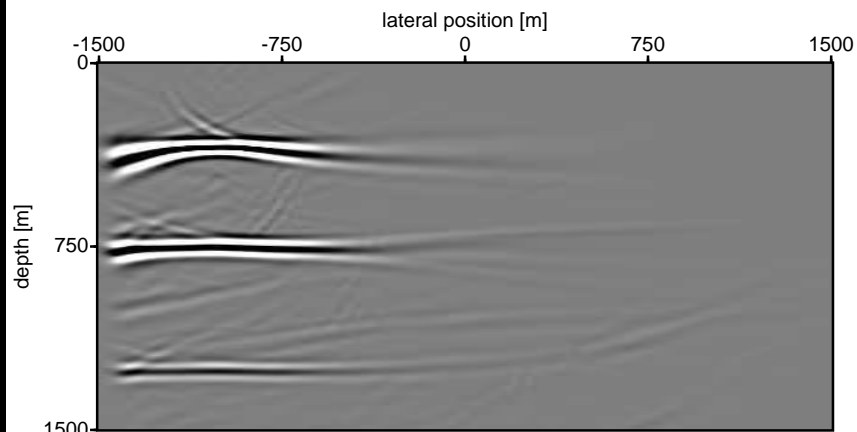


Shot image gather at $x=1000$

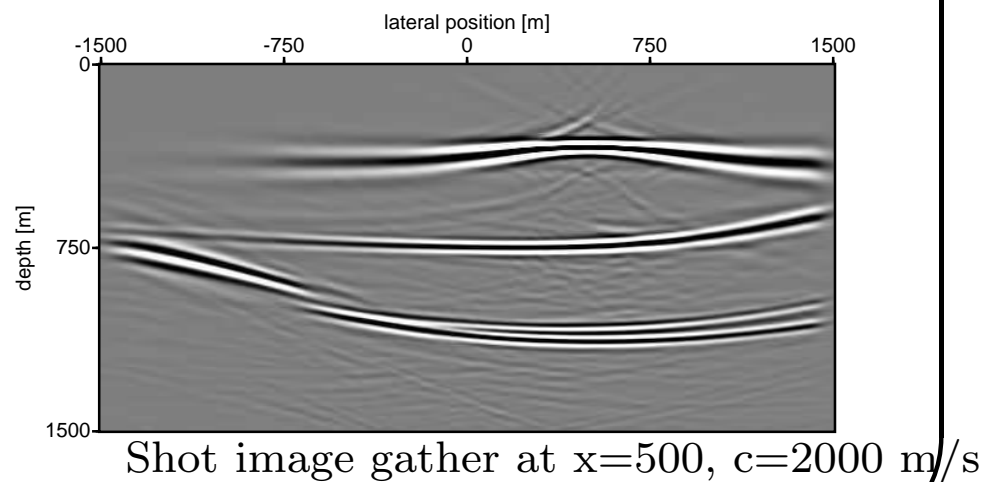
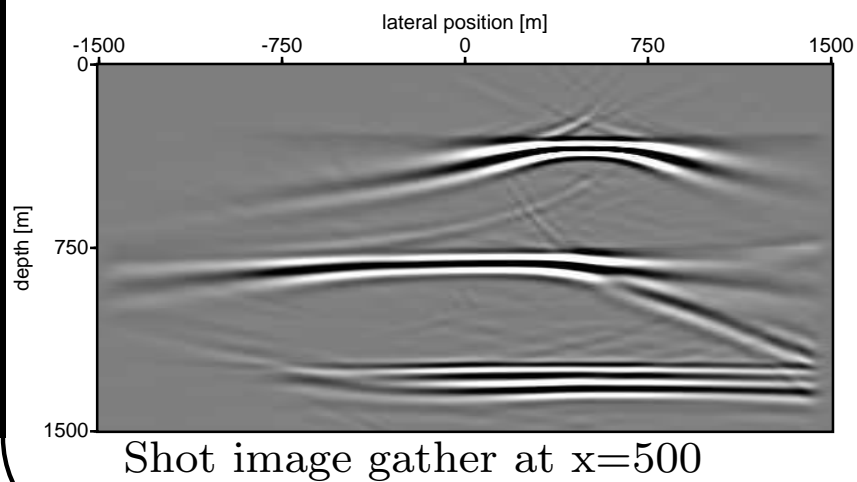
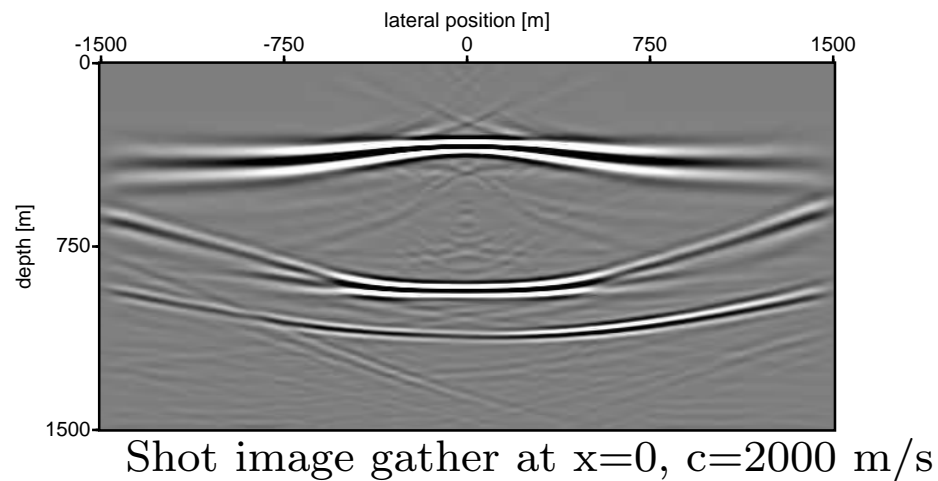
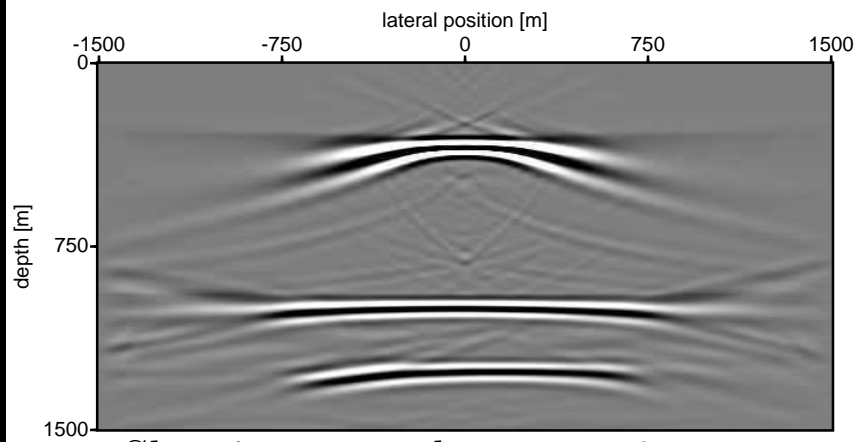


CFP image gather at $x=1000$

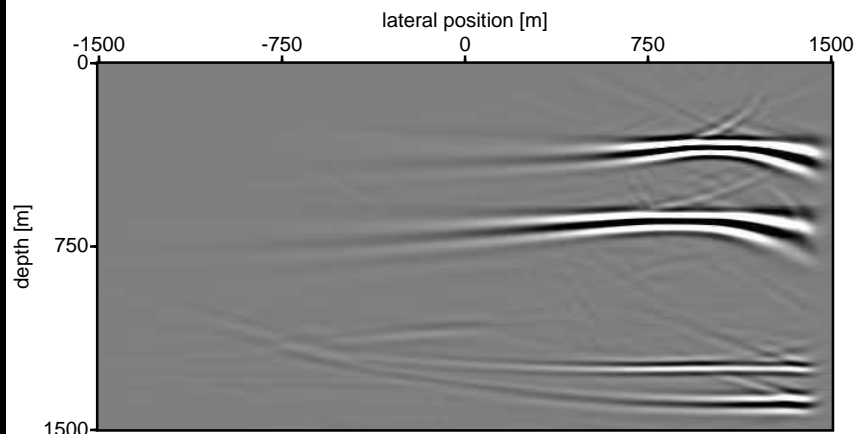
Syncline model: Image gathers (2)



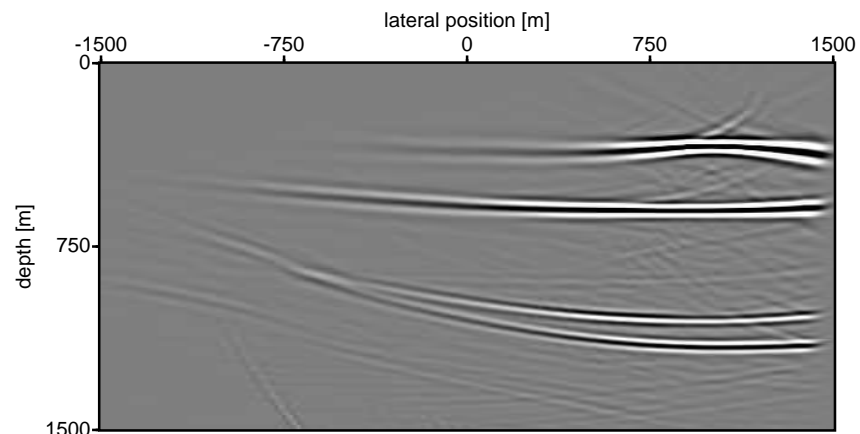
Syncline model: Image gathers (2)



Syncline model: Image gathers (2)

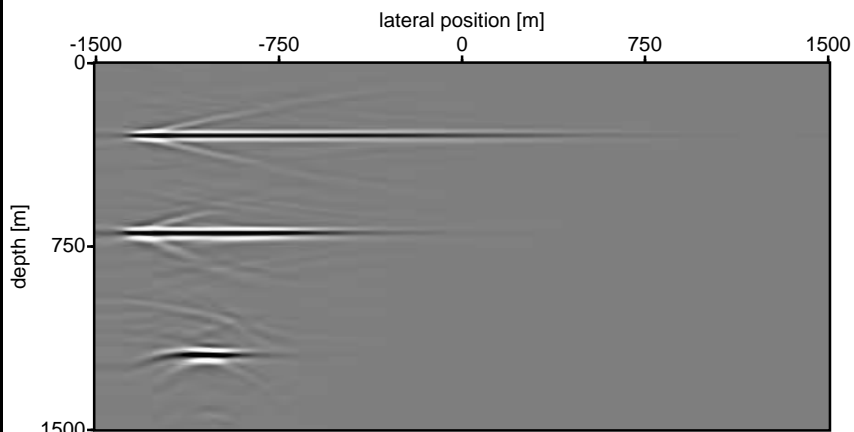


Shot image gather at $x=1000$

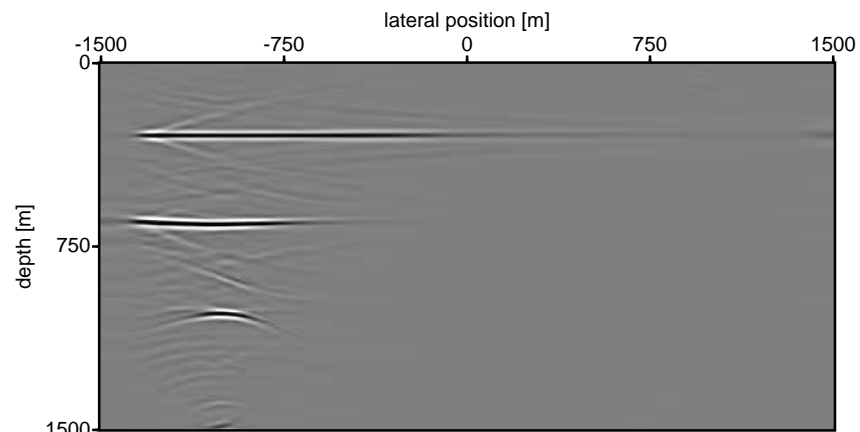


Shot image gather at $x=1000$, $c=2000$ m/s

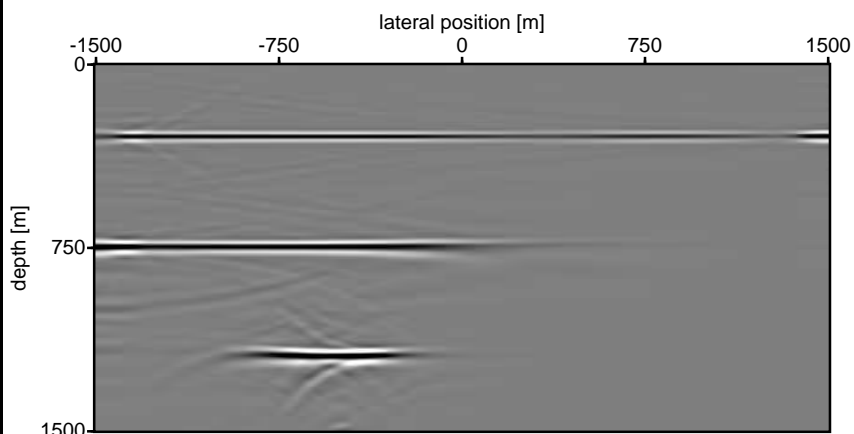
Syncline model: Image gathers (3)



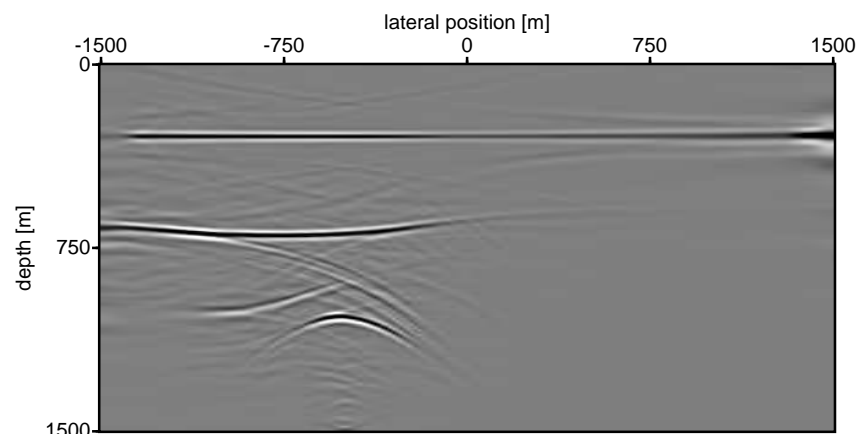
CFP image gather at $x=-1000$



CFP image gather at $x=-1000, c=2000$ m/s

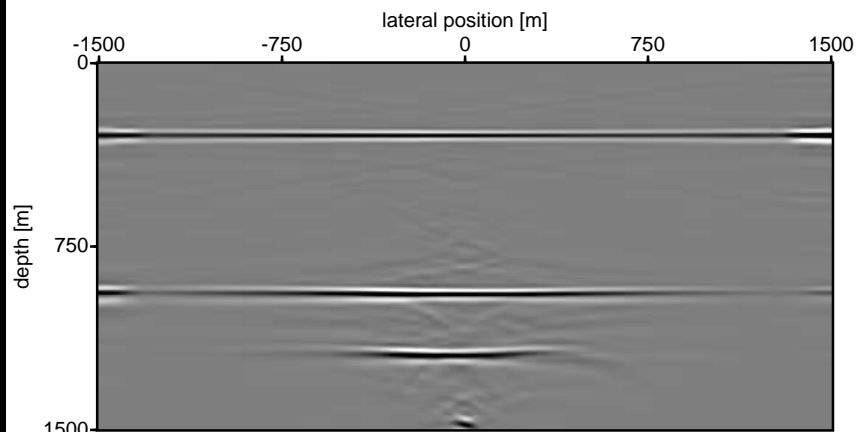


Shot image gather at $x=-500$

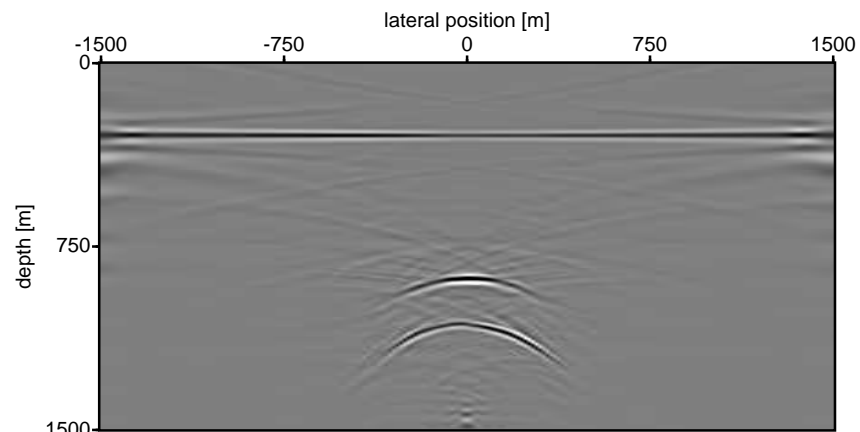


CFP image gather at $x=-500, c=2000$ m/s

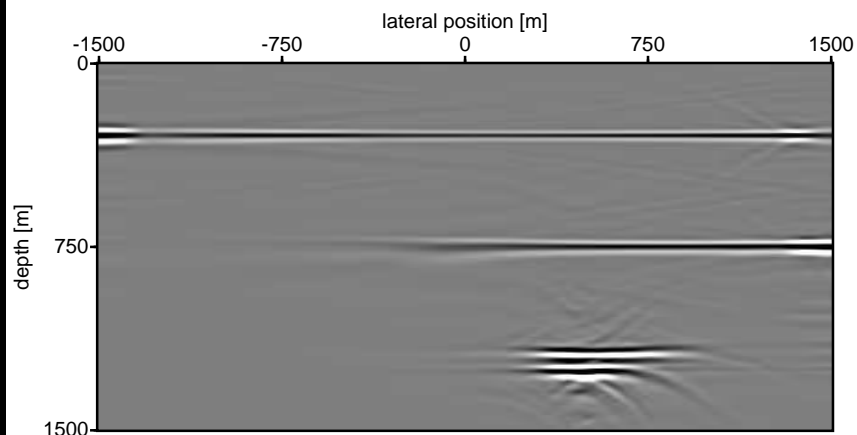
Syncline model: Image gathers (3)



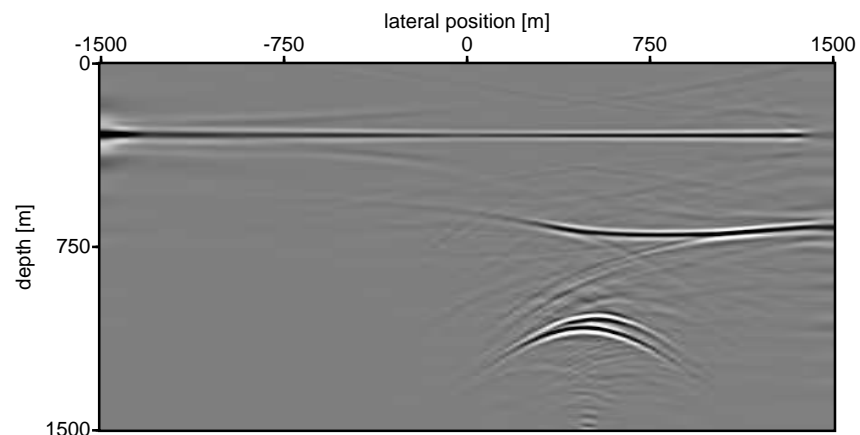
CFP image gather at $x=0$



CFP image gather at $x=0$, $c=2000$ m/s

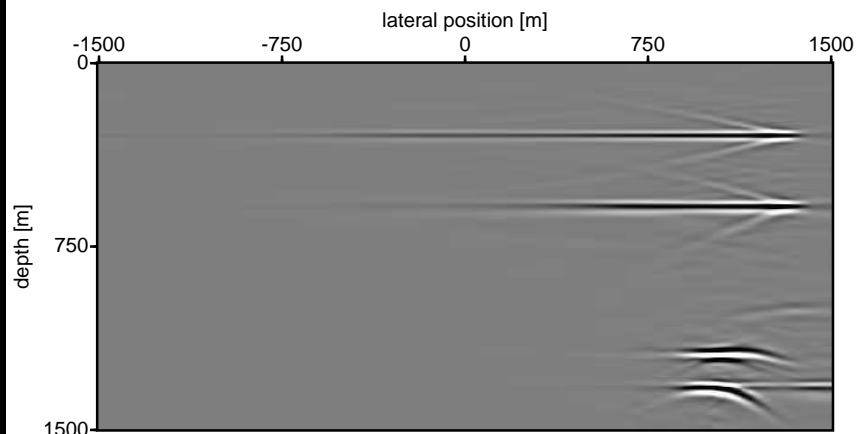


Shot image gather at $x=500$

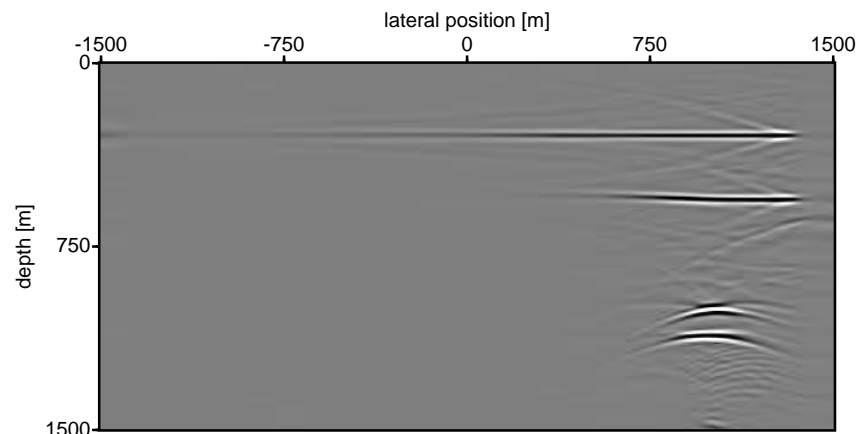


CFP image gather at $x=500$, $c=2000$ m/s

Syncline model: Image gathers (3)

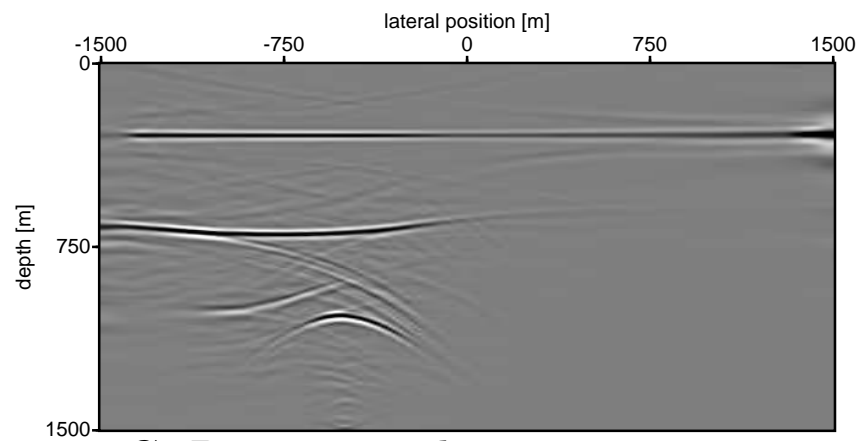
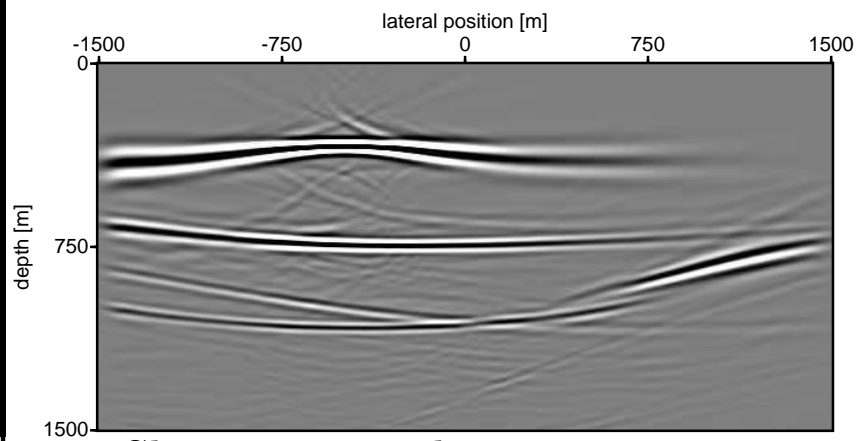
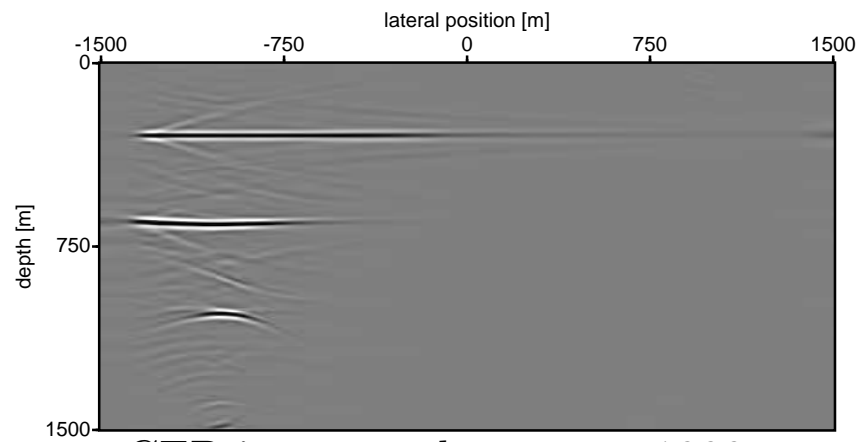
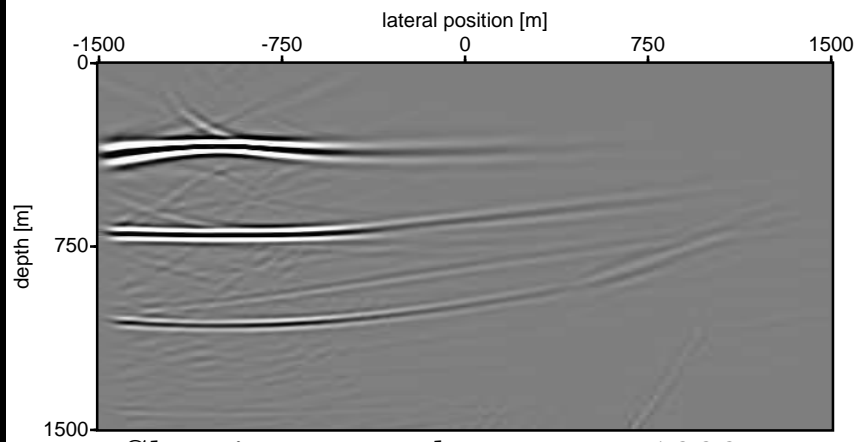


CFP image gather at $x=-1000$

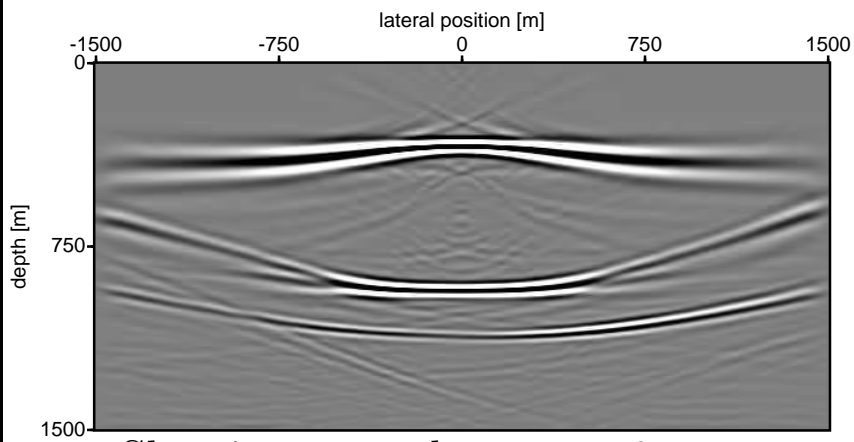


CFP image gather at $x=-1000$, $c=2000$ m/s

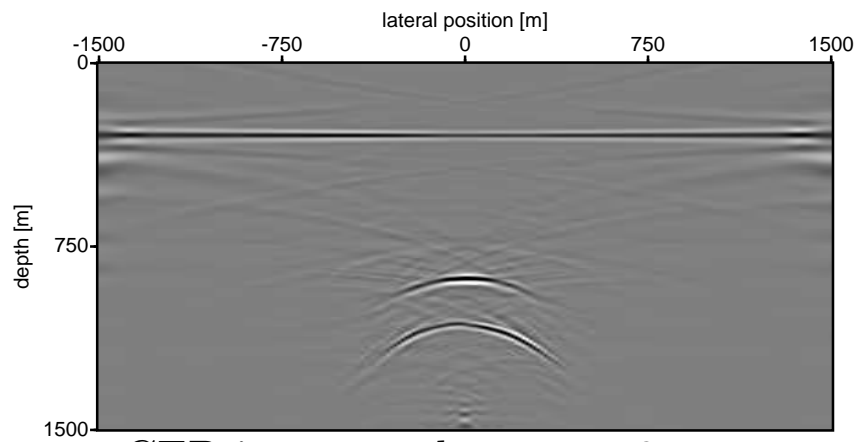
Syncline model: Image gathers (4) $c=2000$ m/s



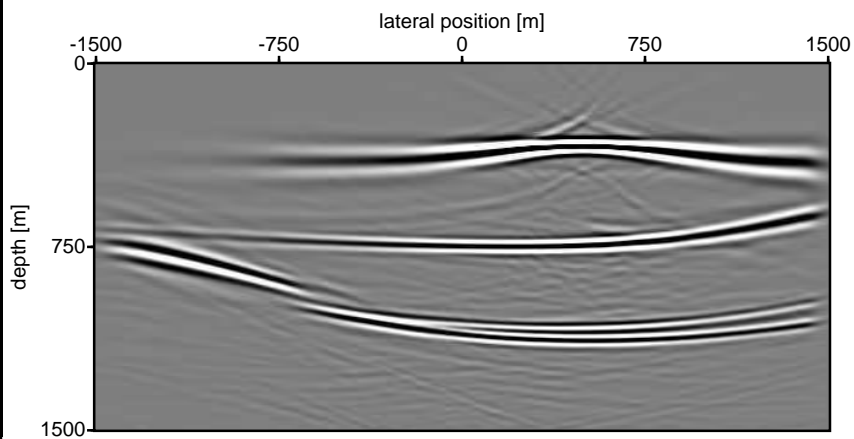
Syncline model: Image gathers (4) $c=2000$ m/s



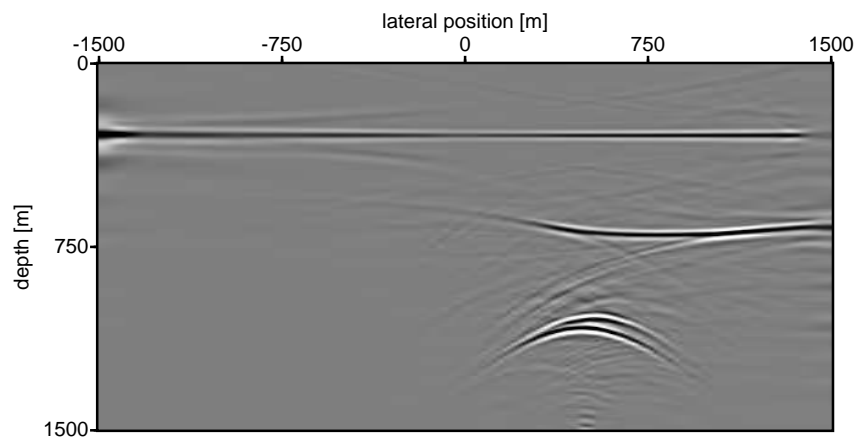
Shot image gather at $x=0$



CFP image gather at $x=0$

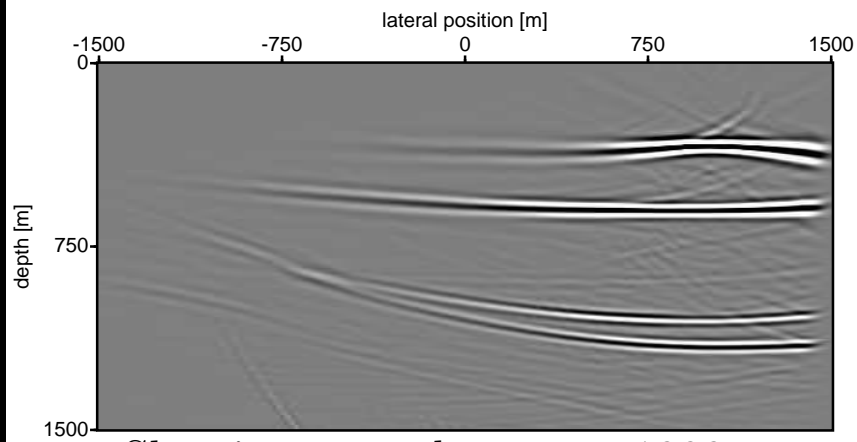


Shot image gather at $x=500$

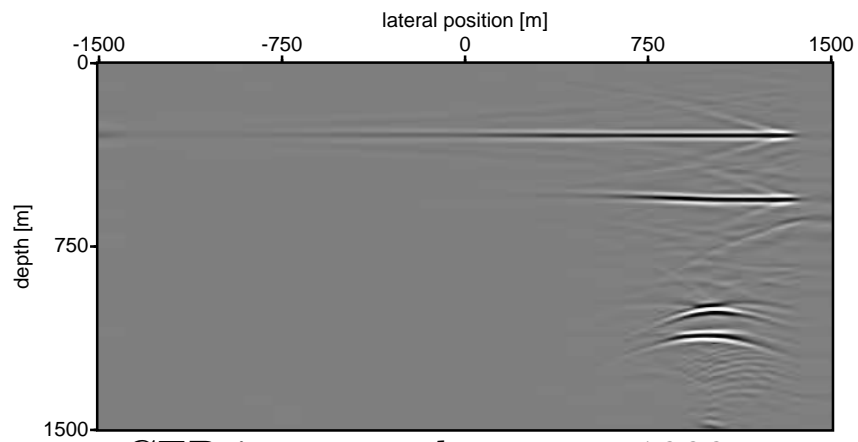


CFP image gather at $x=500$

Syncline model: Image gathers (4) $c=2000$ m/s

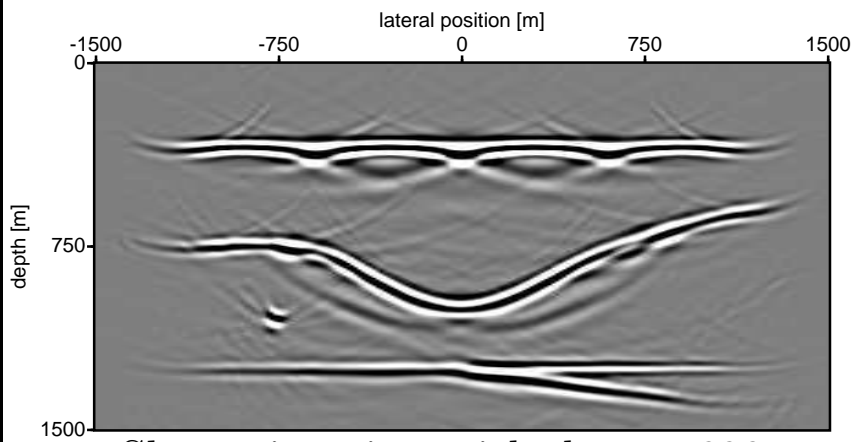


Shot image gather at $x=1000$

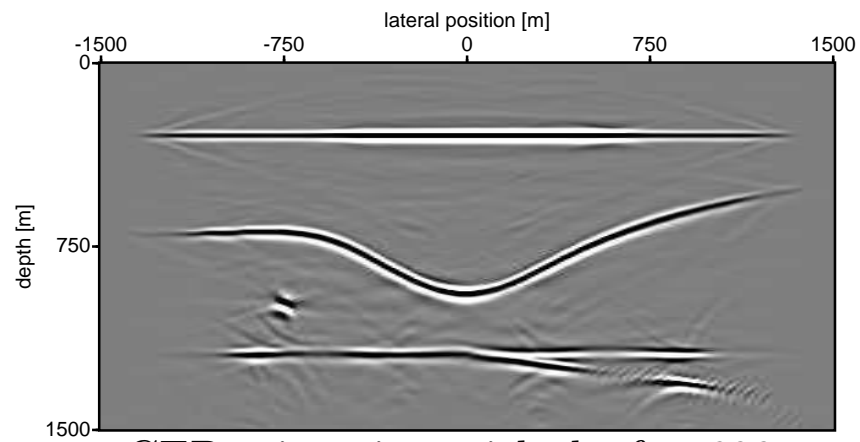


CFP image gather at $x=1000$

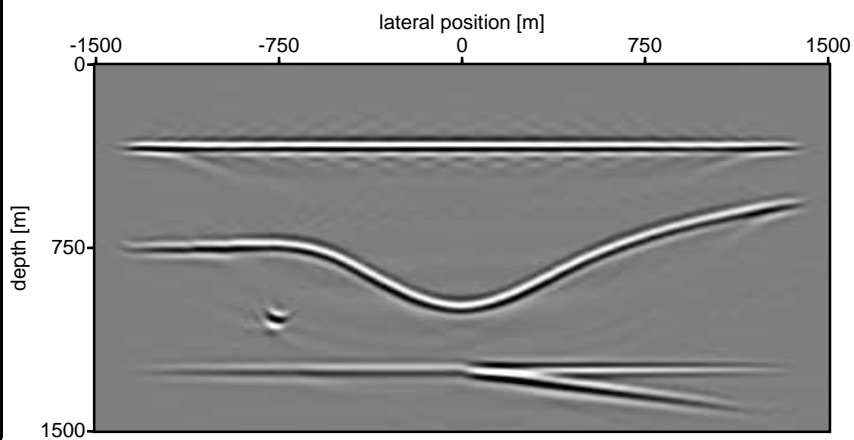
Syncline model: full migration



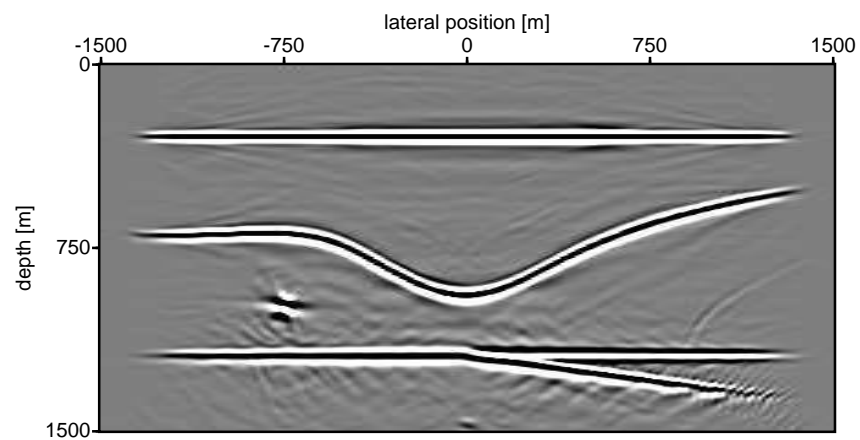
Shot migration with $dx_{src}=600$ m



CFP migration with $dx_{cfp}=600$ m

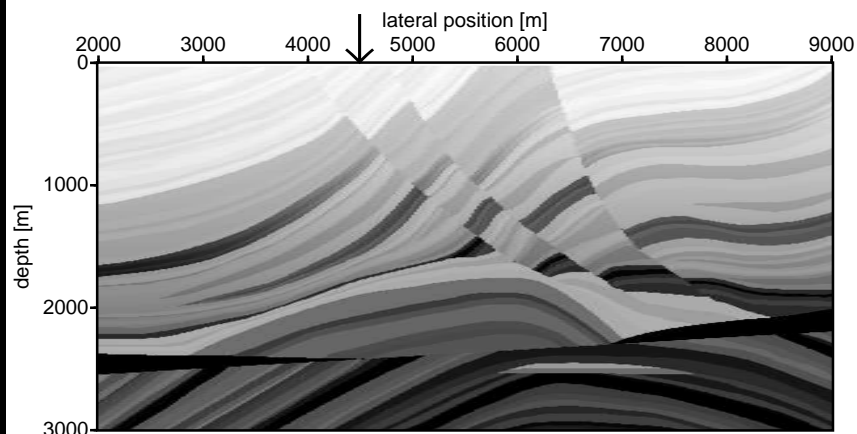


Shot migration with $dx_{src}=150$ m

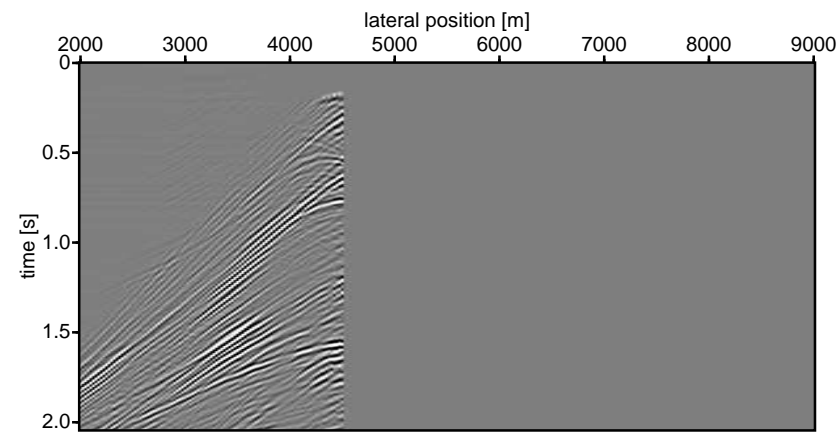


CFP migration with $dx_{cfp}=150$ m

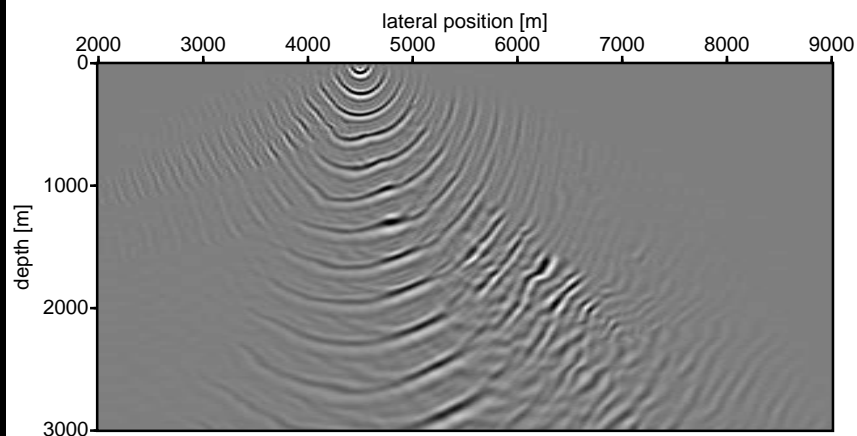
Marmousi model: shot gather migration



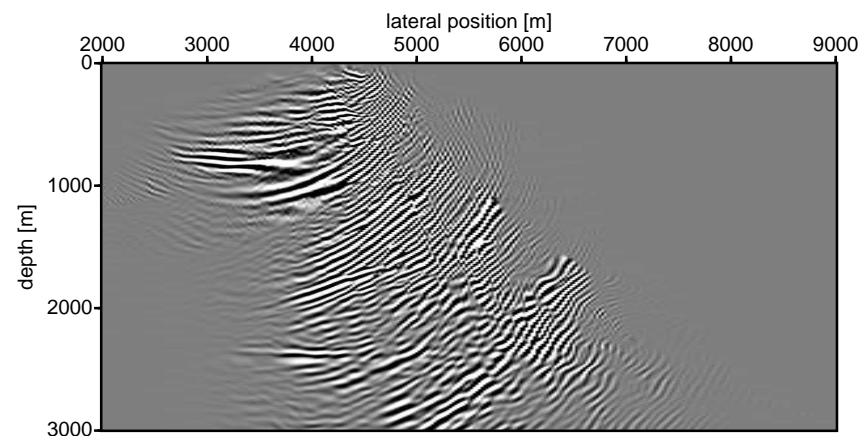
Marmousi model, $x=4500$, $z=0$



Shot gather

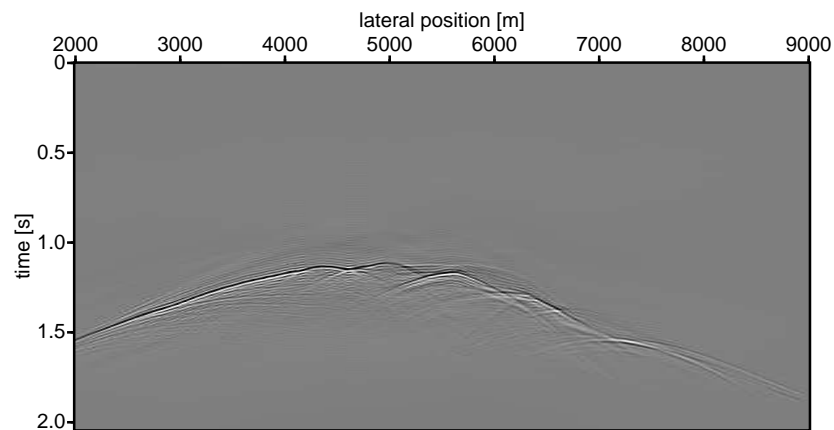


Snapshots of source wavefield

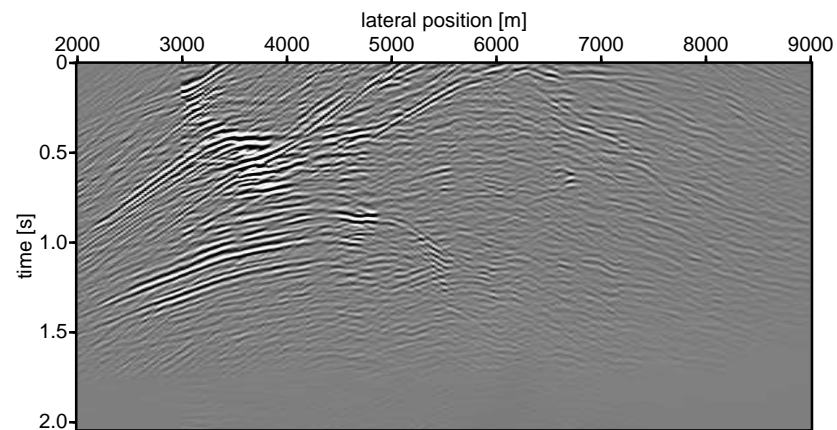


Shot gather migration

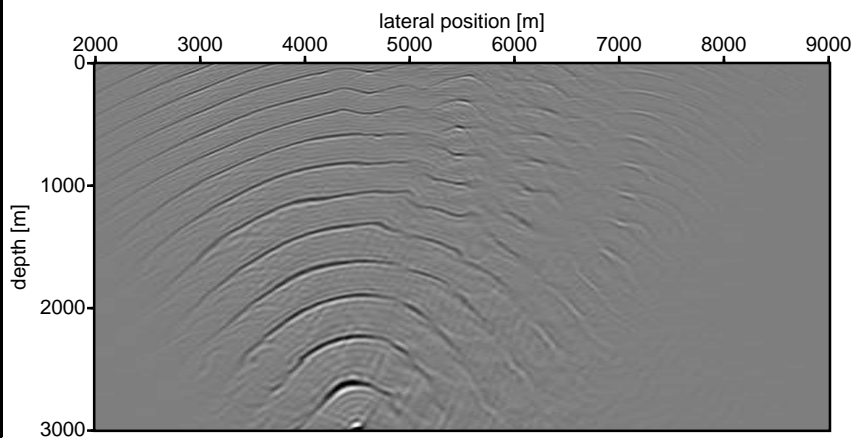
Marmousi model: CFP gather migration



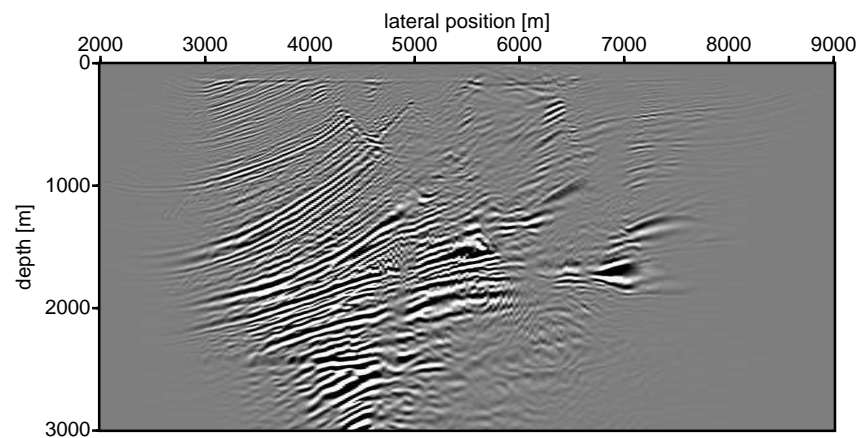
CFP operator, $x=4500$, $z=3000$



CFP gather

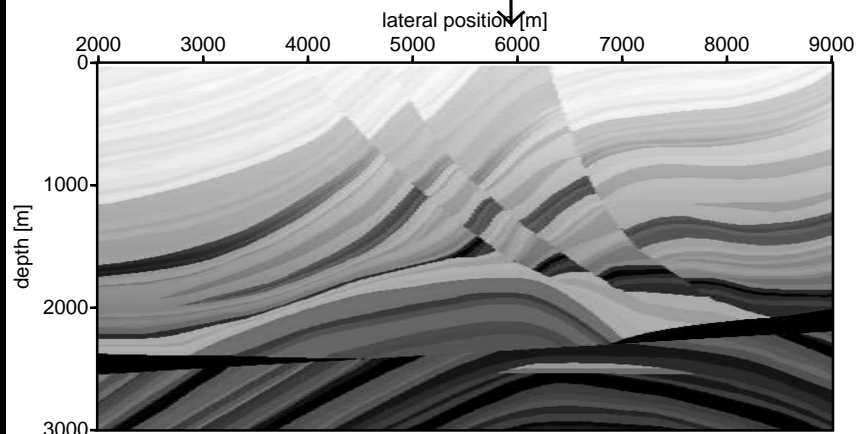


CFP operator snapshots

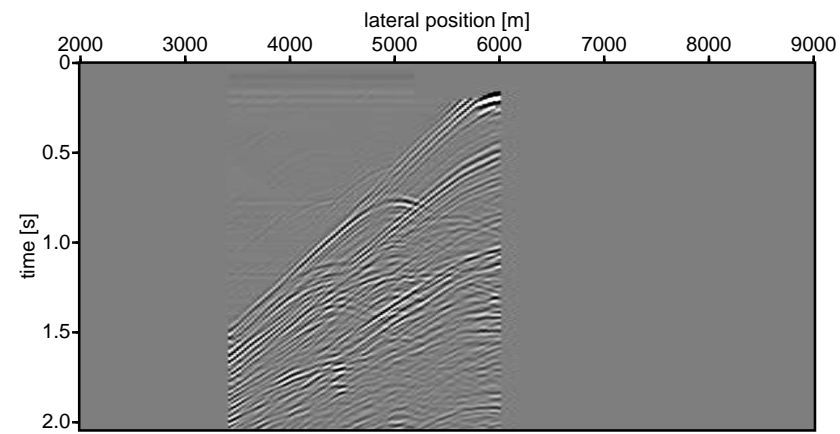


CFP gather migration

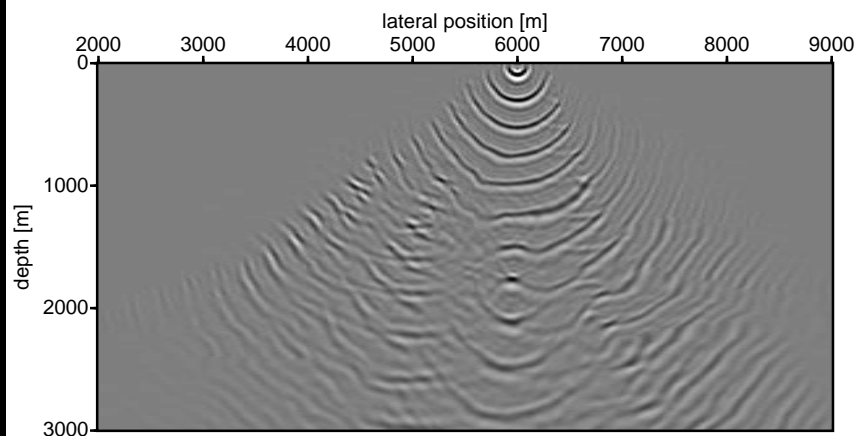
Marmousi model: shot gather migration



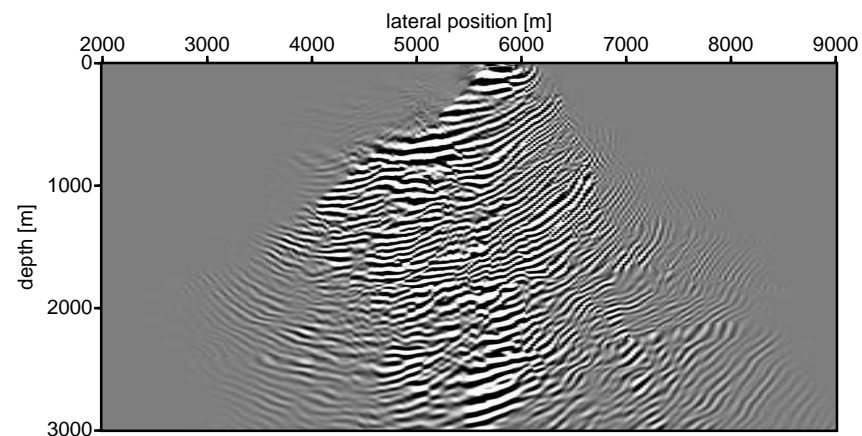
Marmousi model, $x=6000$, $z=0$



Shot gather

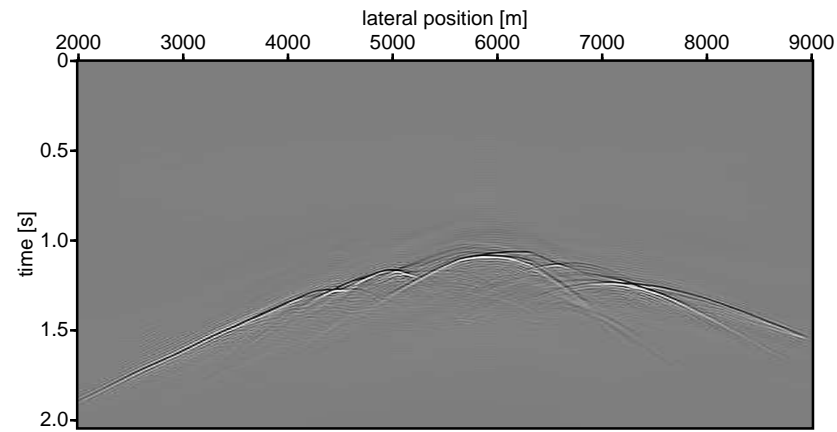


Snapshots of source wavefield

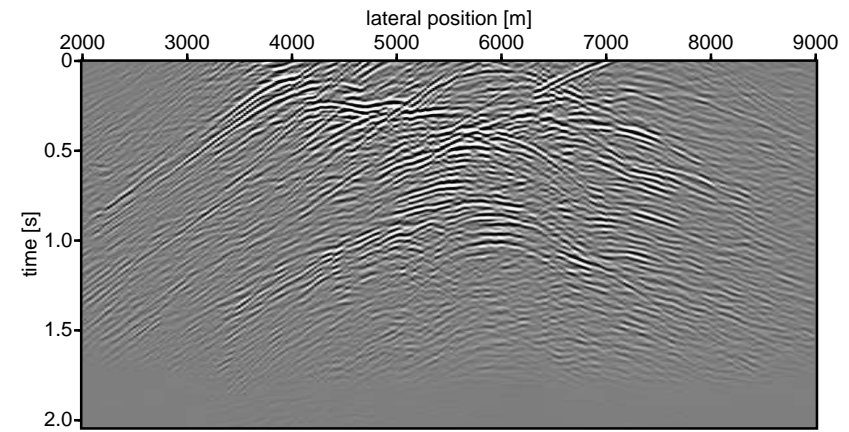


Shot gather migration

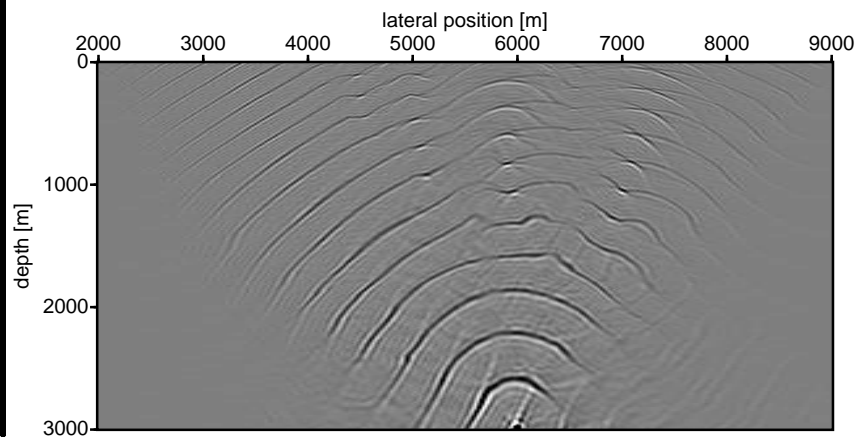
Marmousi model: CFP gather migration



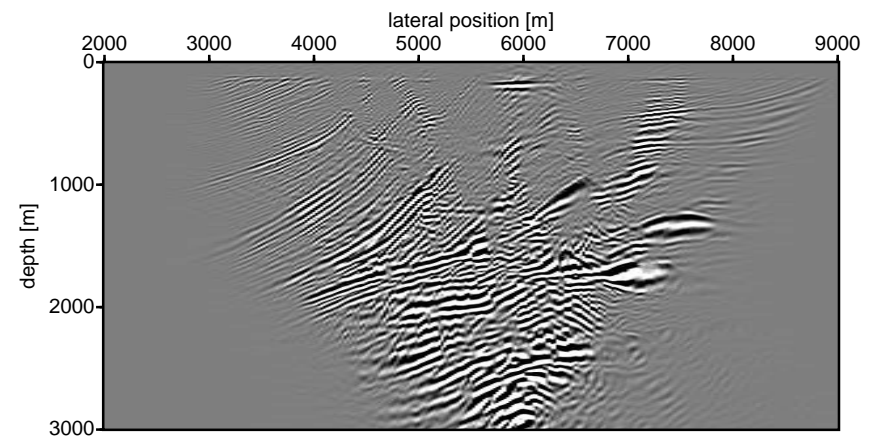
CFP operator, $x=6000$, $z=3000$



CFP gather

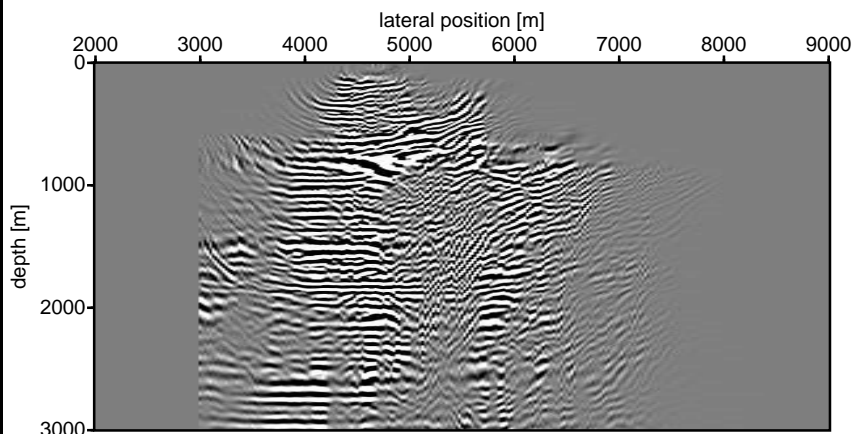


CFP operator snapshots

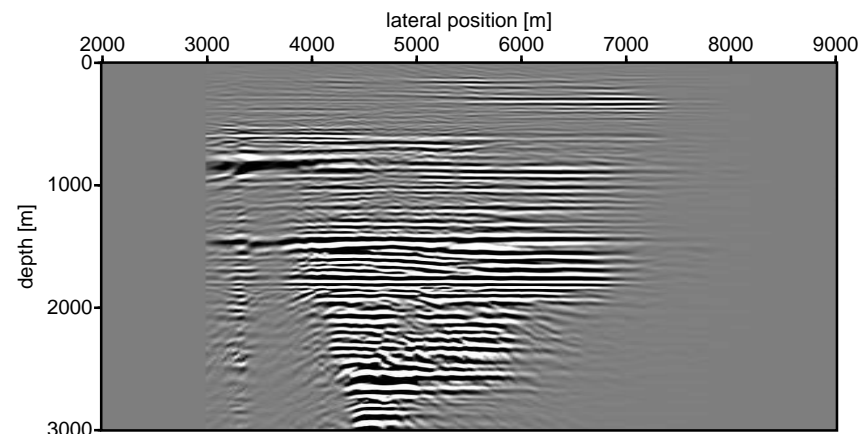


CFP gather migration

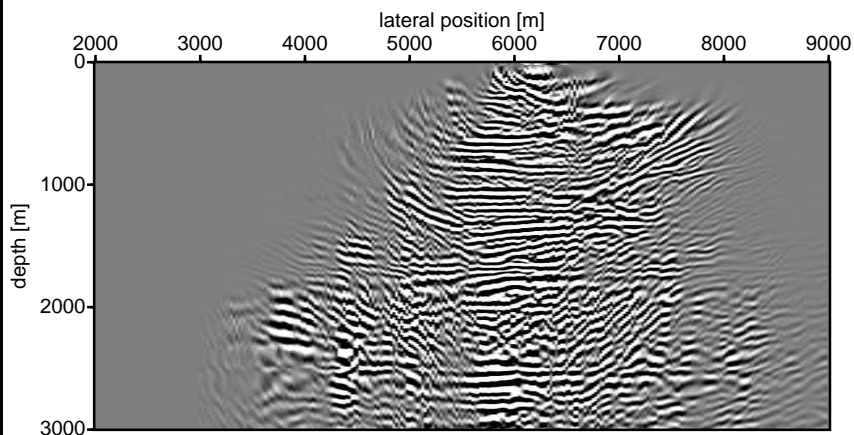
Marmousi model: Image gathers



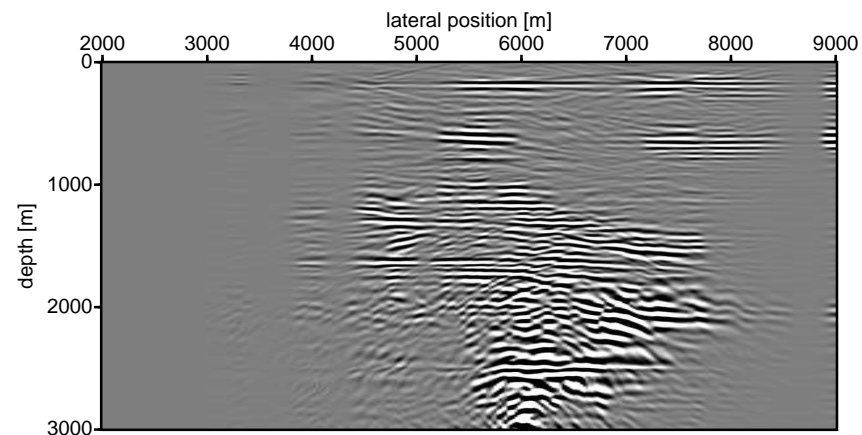
Shot image gather at x=4500



CFP image gather at x=4500

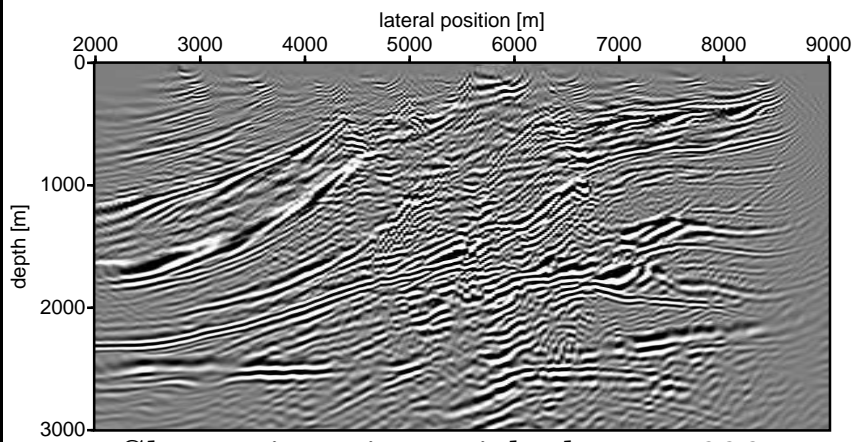


Shot image gather at x=6000

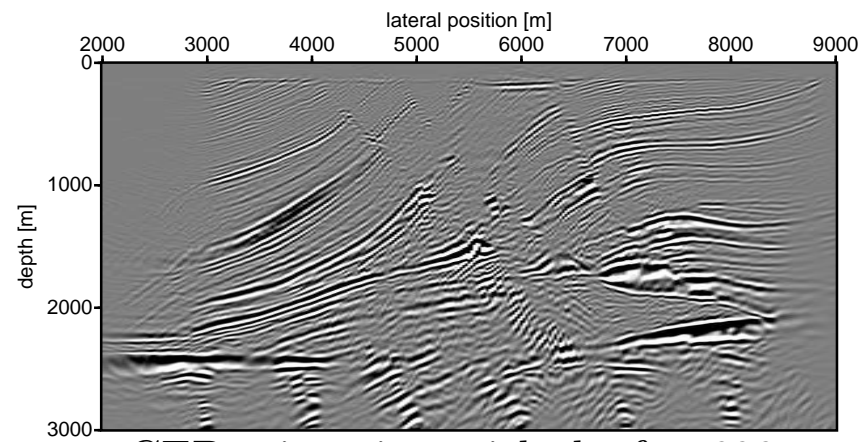


CFP image gather at x=6000

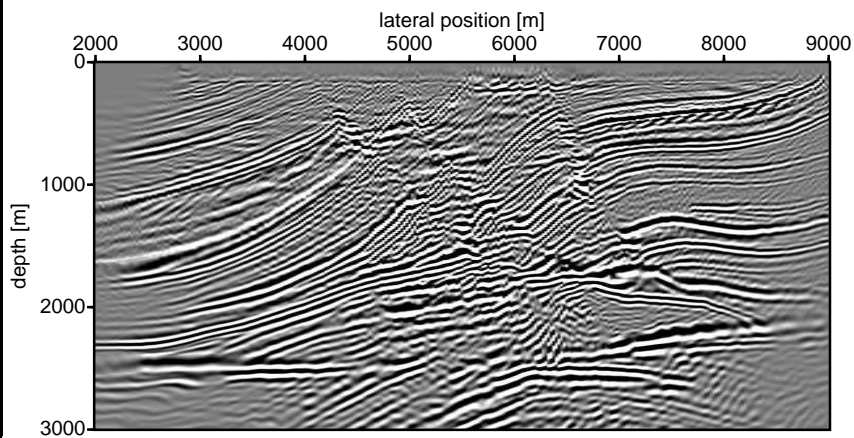
Marmousi model: full migration



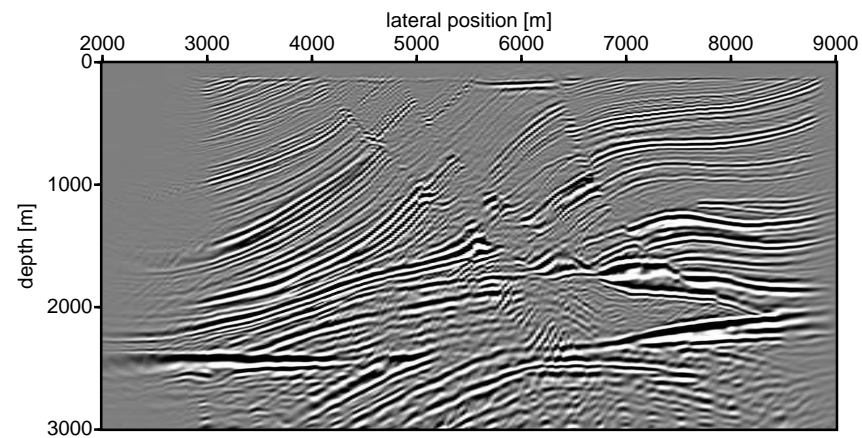
Shot migration with $dx_{src}=600$ m



CFP migration with $dx_{cfp}=600$ m



Shot migration with $dx_{src}=150$ m



CFP migration with $dx_{cfp}=150$ m