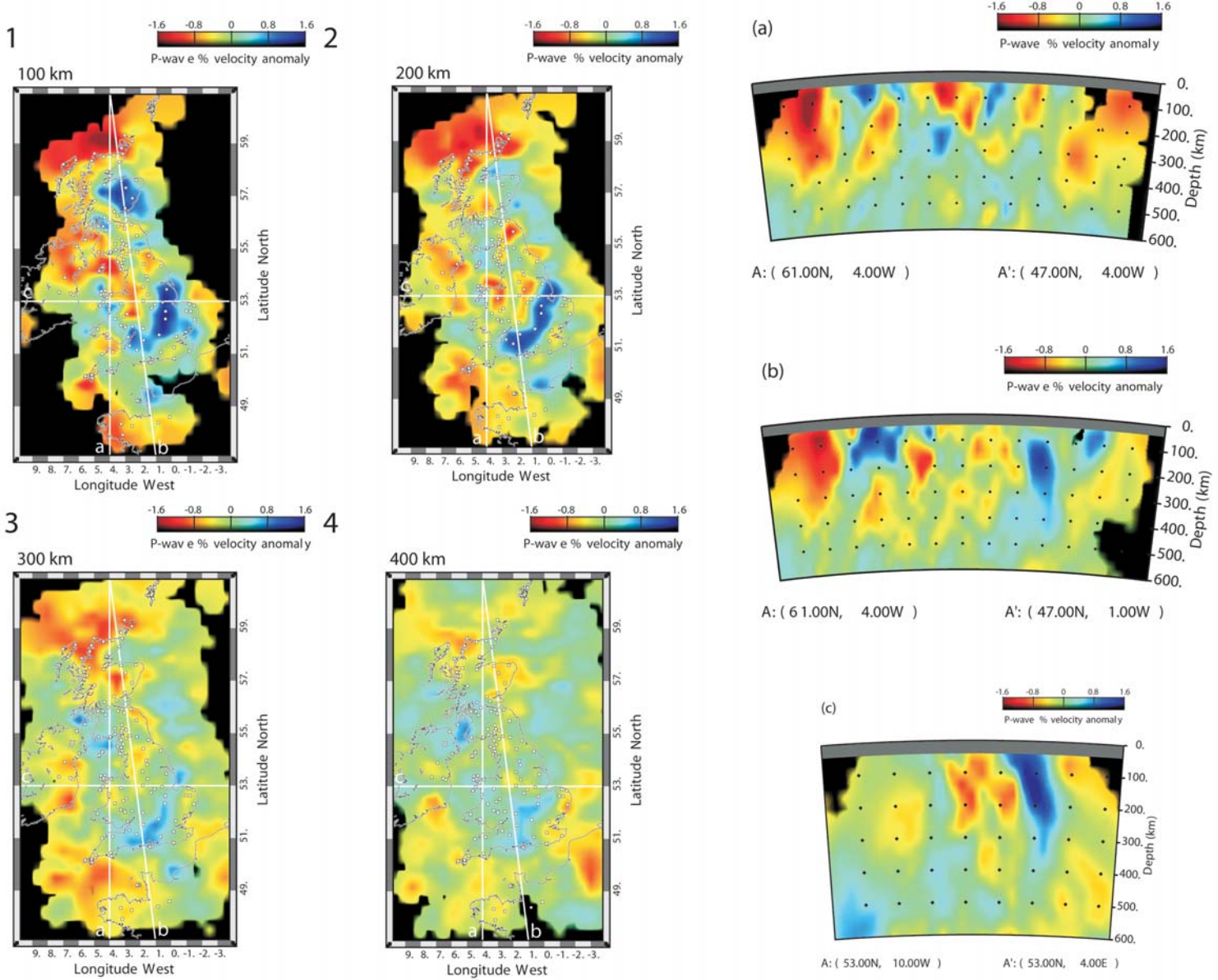
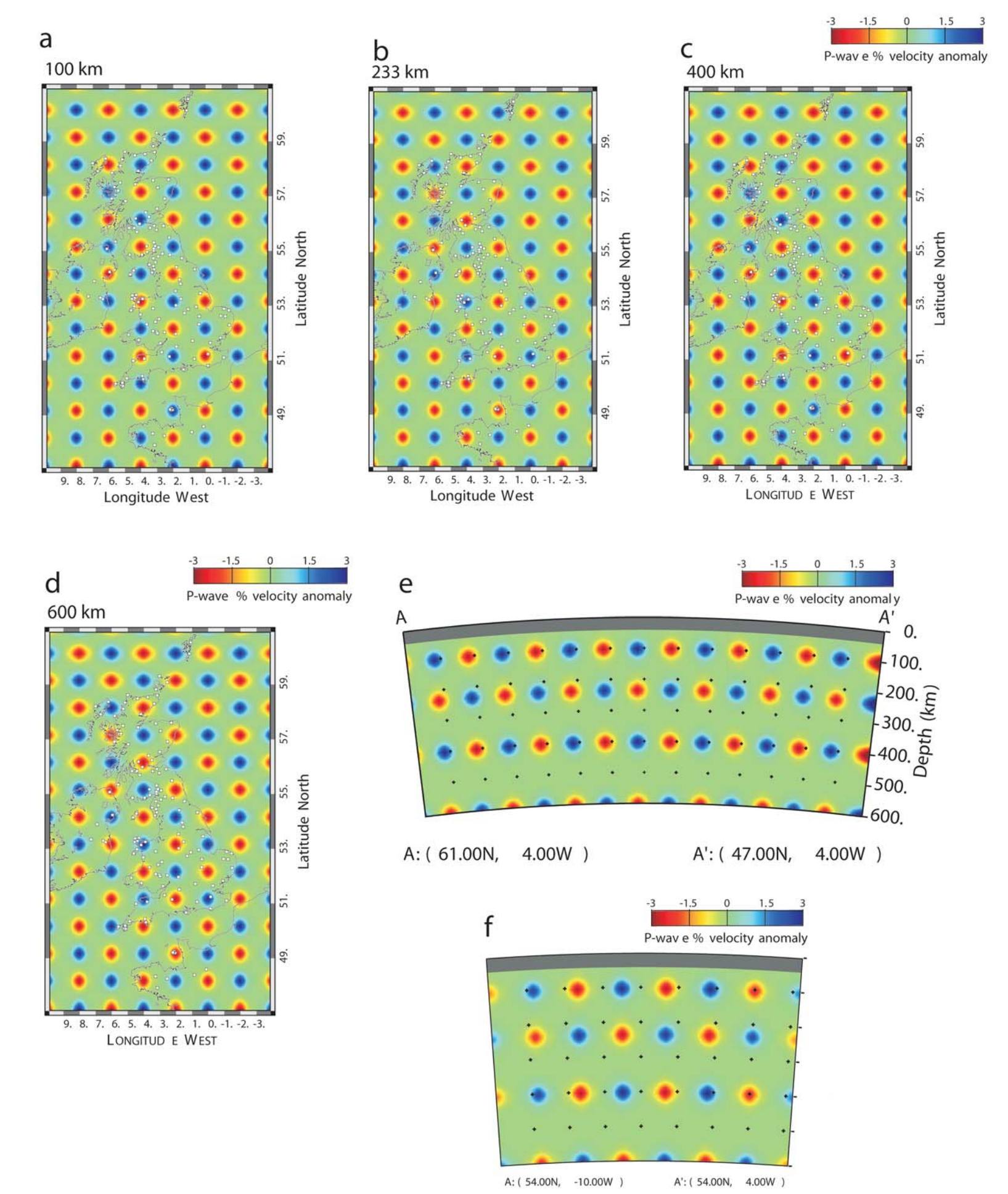
DR2005066

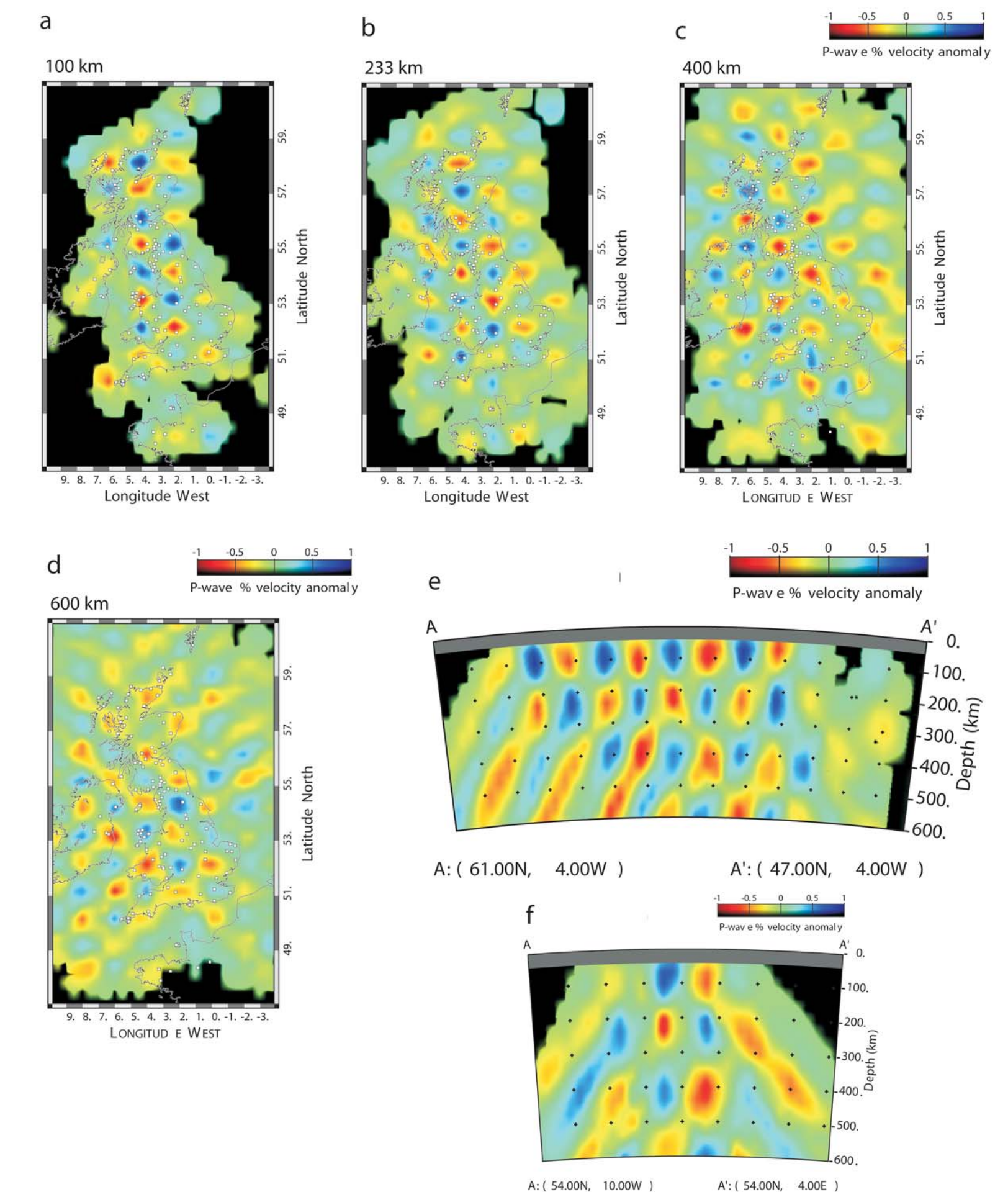
Figure S1 – Two-dimensional slices through the 3D P-wave velocity model. 1 – 4: Horizontal slices at depths of 100 km, 200 km, 300 km and 400 km. a – c: Vertical profiles through the velocity model along the transects shown by white lines in the depth sections (1 – 4). The color scale is the same on all plots and fades to black in regions of the model where the ray coverage is poor.

Figure S2 – Two-dimensional slices through the input synthetic "checkerboard" 3D P-wave velocity model. a – d: Horizontal slices at depths of 100 km, 233 km, 400 km and 600 km. e – f: Vertical profiles through the velocity model along 4°W (N – S profile) and 54°N (E – W profile) respectively. Input velocity anomalies are spheres with 3% anomalies at their centers, which decrease exponentially outwards. The anomalies are approximately 50 km in diameter.

Figure S3 – Two-dimensional slices through the output synthetic "checkerboard" 3D P-wave velocity model. a – d: Horizontal slices at depths of 100 km, 233 km, 400 km and 600 km. e – f: Vertical profiles through the velocity model along 4°W (N – S profile) and 54°N (E – W profile) respectively. The resolution of the morphology of the anomalies is excellent to a depth of 400 km. At greater depths the anomalies become smeared vertically. The color scale fades to black in regions of the model where the ray coverage is poor.


1
-1.6 -0.8 0 0.8 1.6
P-wav e % velocity anomaly
100 km
Latitude North
Longitude West
2
-1.6 -0.8 0 0.8 1.6
P-wave % velocity anomaly
200 km
Latitude North
Longitude West
3
-1.6 -0.8 0 0.8 1.6
P-wav e % velocity anomaly
300 km
Latitude North
Longitude West
4
-1.6 -0.8 0 0.8 1.6
P-wav e % velocity anomaly
400 km
Latitude North
Longitude West
(a)
-1.6 -0.8 0 0.8 1.6
P-wave % velocity anomaly
Depth (km)
A: (61.00N, 4.00W)
A': (47.00N, 4.00W)
(b)
-1.6 -0.8 0 0.8 1.6
P-wav e % velocity anomaly
Depth (km)
A: (6 1.00N, 4.00W)
A': (47.00N, 1.00W)
(c)
-1.6 -0.8 0 0.8 1.6
P-wave % velocity anomaly
Depth (km)
A: (53.00N, 10.00W)
A': (53.00N, 4.00E)


a
100 km
b
233 km
c
400 km
-3 -1.5 0 1.5 3
P-wav e % velocity anomaly
Latitude North
59. 57. 55. 53. 51. 49.
9. 8. 7. 6. 5. 4. 3. 2. 1. 0. -1. -2. -3.
Longitude West
LONGITUD E WEST
d
600 km
P-wave % velocity anomaly
e
A
A'
0.
100.
200.
300.
400.
500.
600.
Depth (km)
A: (61.00N, 4.00W)
A': (47.00N, 4.00W)
f
A: (54.00N, -10.00W)
A': (54.00N, 4.00W)


a
100 km
b
233 km
c
400 km
-1 -0.5 0 0.5 1
P-wav e % velocity anomaly
Latitude North
59. 57. 55. 53. 51. 49.
9. 8. 7. 6. 5. 4. 3. 2. 1. 0. -1. -2. -3.
Longitude West
LONGITUD E WEST
d
600 km
P-wave % velocity anomaly
e
A
A'
0.
100.
200.
300.
400.
500.
600.
Depth (km)
A: (61.00N, 4.00W)
A': (47.00N, 4.00W)
f
A: (54.00N, 10.00W)
A': (54.00N, 4.00E)