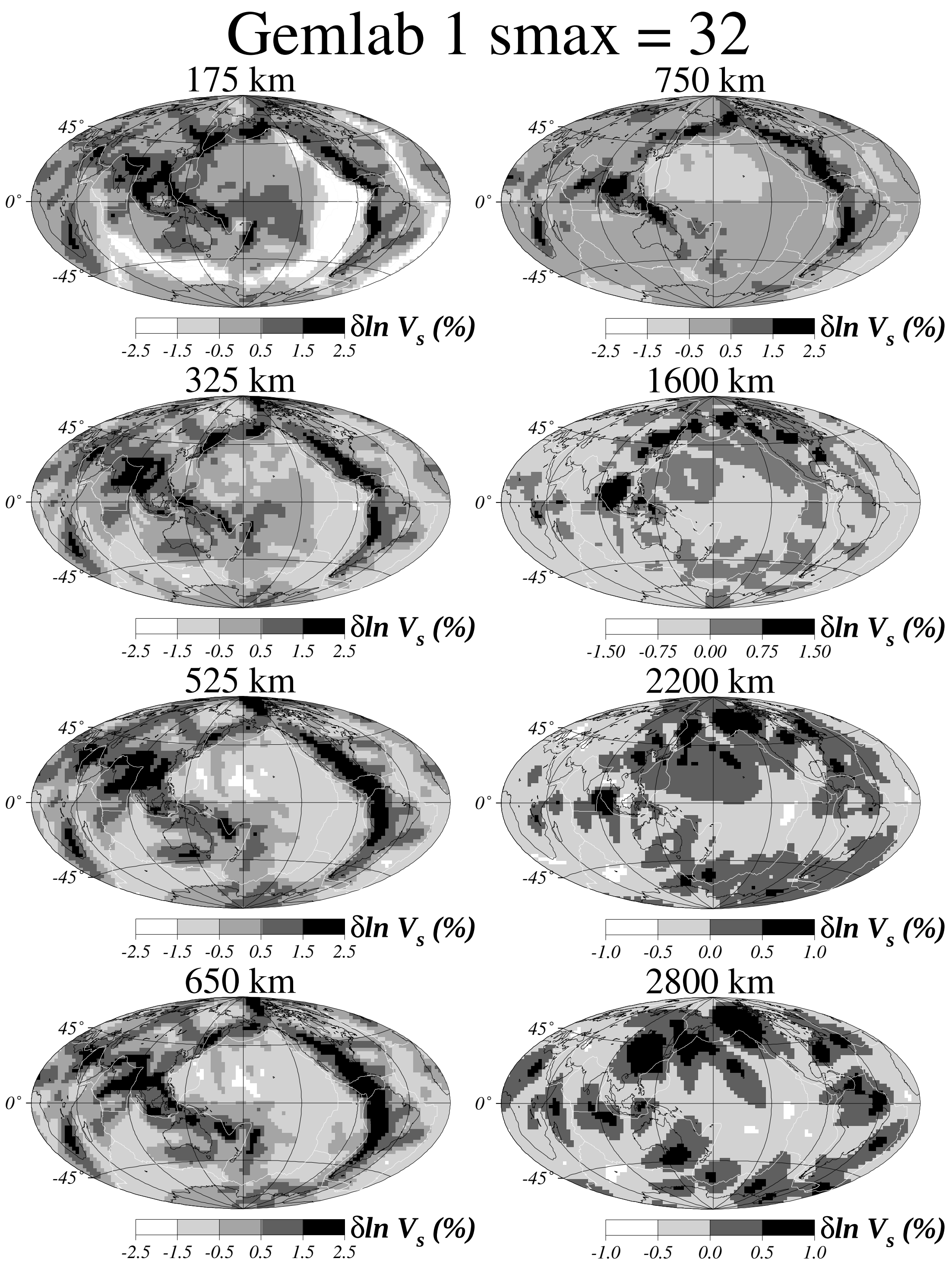
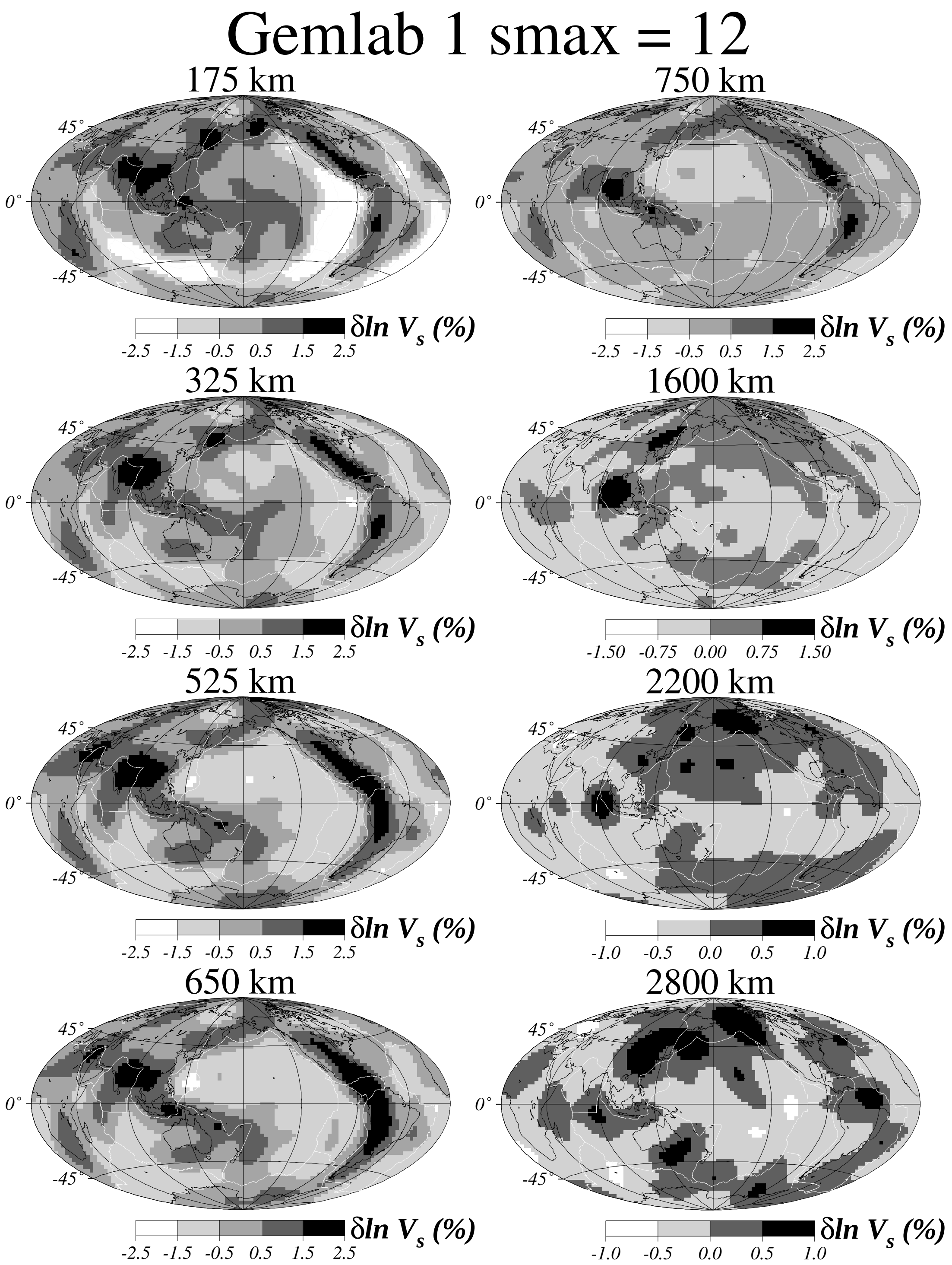
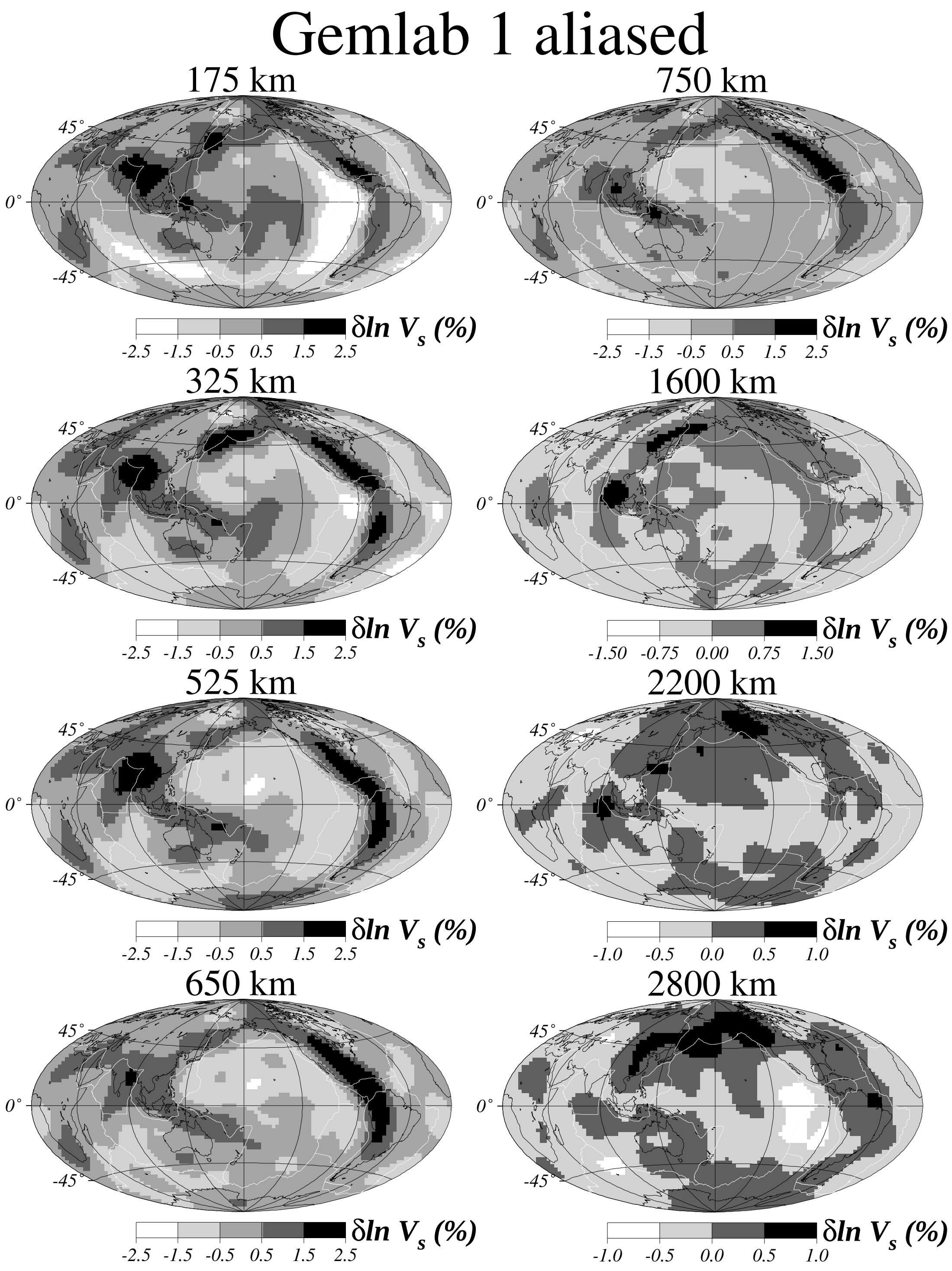

Gemlab 1 smax = 32
175 km
750 km
325 km
1600 km
525 km
2200 km
650 km
2800 km
45°
0°
-45°
δln V_s (%)
-2.5 -1.5 -0.5 0.5 1.5 2.5
-1.50 -0.75 0.00 0.75 1.50
-1.0 -0.5 0.0 0.5 1.0

Figure 1:



Gemlab 1 smax = 12
175 km
750 km
325 km
1600 km
525 km
2200 km
650 km
2800 km
45°
0°
-45°
δln V_s (%)
-2.5 -1.5 -0.5 0.5 1.5 2.5
-1.50 -0.75 0.00 0.75 1.50
-1.0 -0.5 0.0 0.5 1.0

Figure 2:



Gemlab 1 aliased
175 km
750 km
325 km
1600 km
525 km
2200 km
650 km
2800 km
45°
0°
-45°
δln V_s (%)
-2.5 -1.5 -0.5 0.5 1.5 2.5
-1.50 -0.75 0.00 0.75 1.50
-1.0 -0.5 0.0 0.5 1.0

Figure 3:

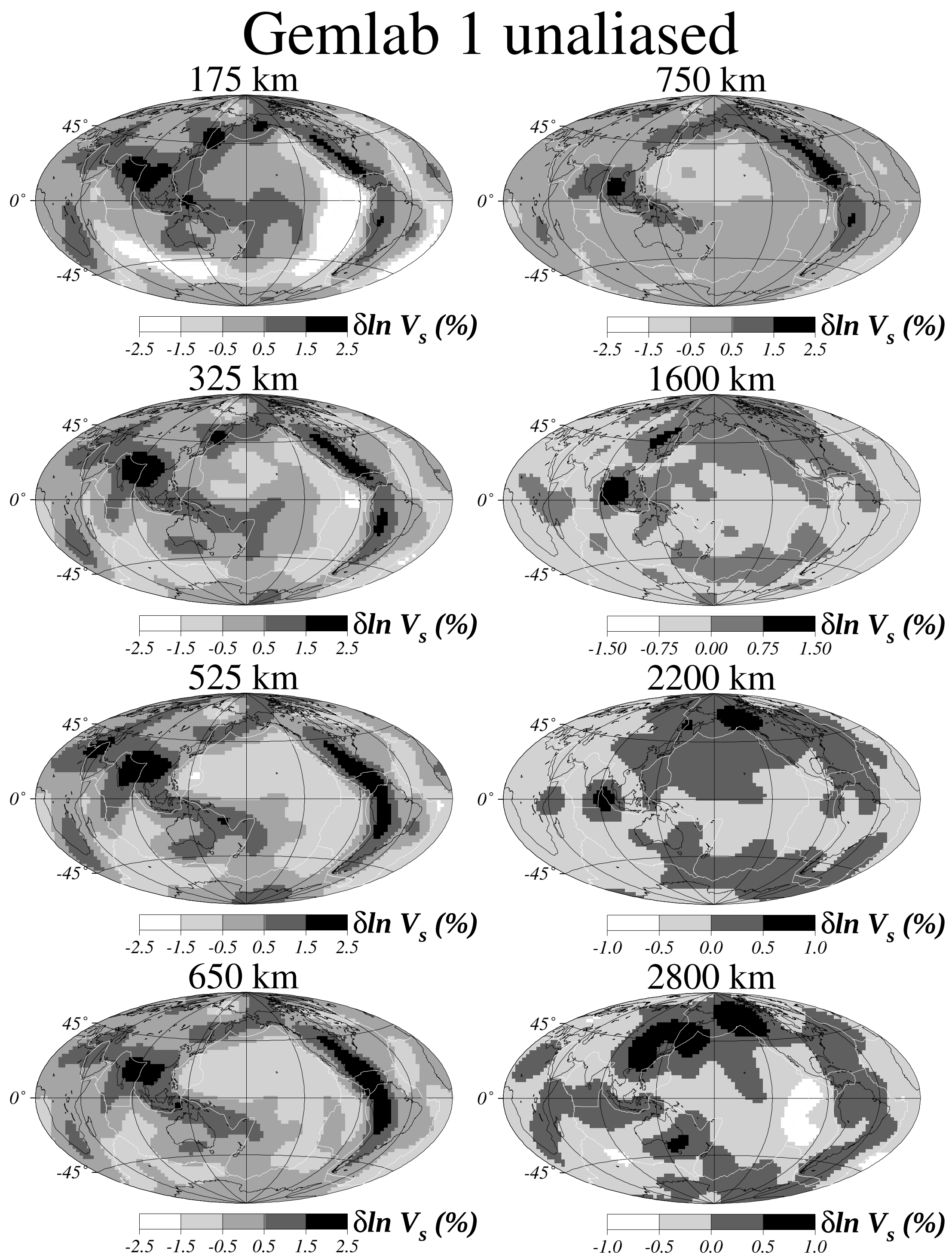
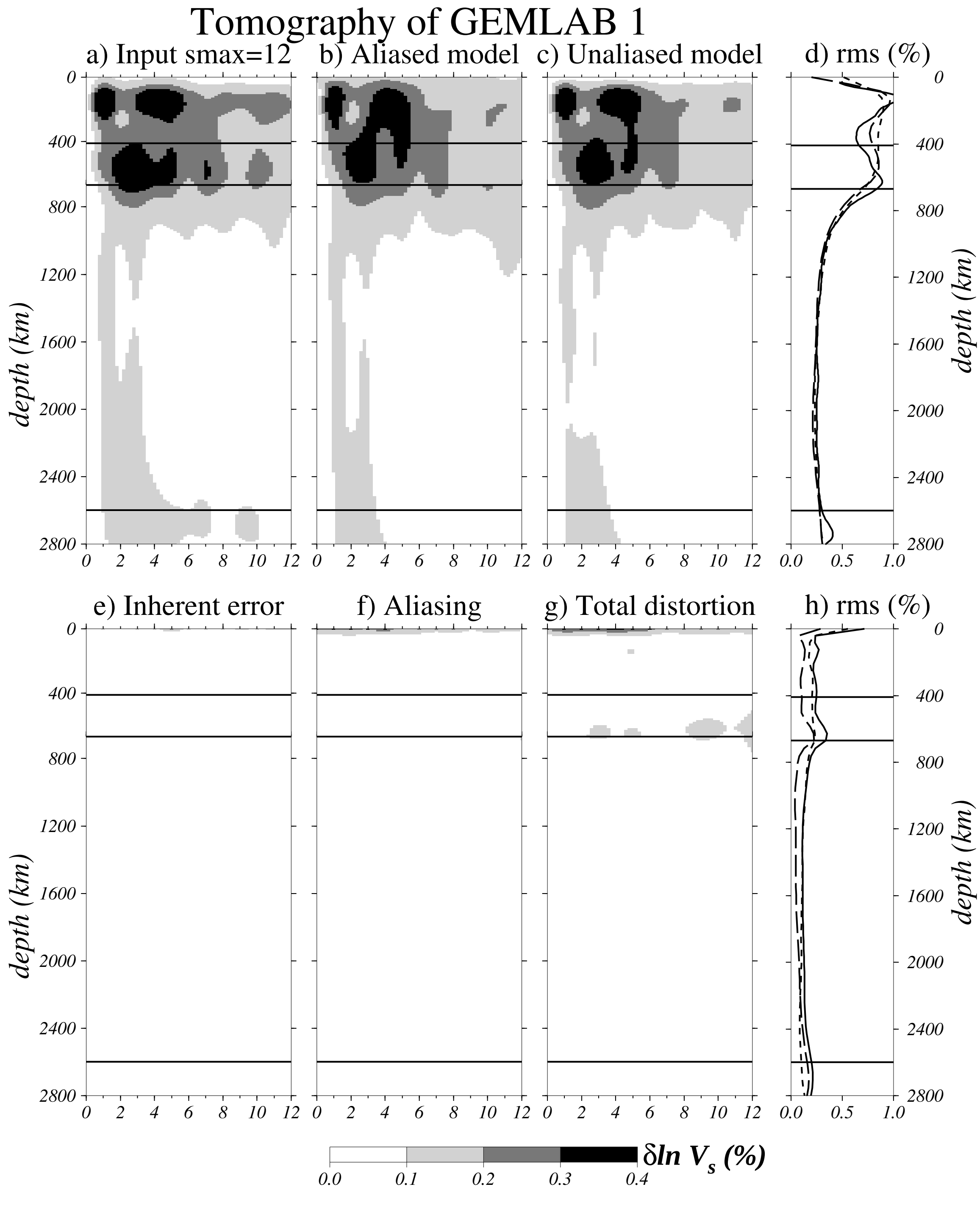

Gemlab 1 unaliased
175 km
750 km
325 km
1600 km
525 km
2200 km
650 km
2800 km
45°
0°
-45°
δln V_s (%)
-2.5 -1.5 -0.5 0.5 1.5 2.5
-1.50 -0.75 0.00 0.75 1.50
-1.0 -0.5 0.0 0.5 1.0

Figure 4:



Tomography of GEMLAB 1
a) Input smax=12
b) Aliased model
c) Unaliased model
d) rms (%)
e) Inherent error
f) Aliasing
g) Total distortion
h) rms (%)
depth (km)
δln V_s (%)
0.0
0.1
0.2
0.3
0.4

Figure 5:

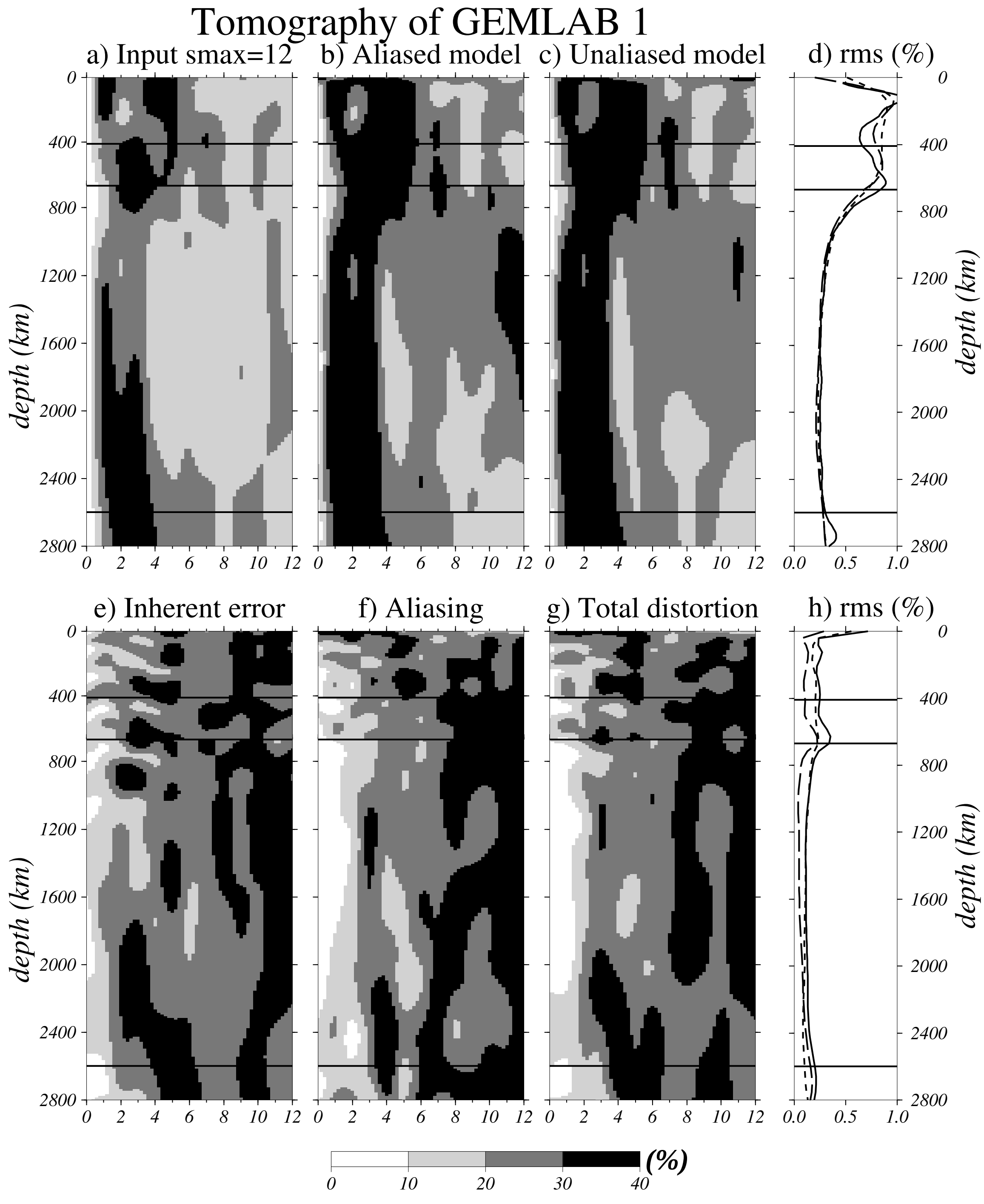

Tomography of GEMLAB 1
a) Input smax=12
b) Aliased model
c) Unaliased model
d) rms (%)
e) Inherent error
f) Aliasing
g) Total distortion
h) rms (%)
depth (km)
(%)

Figure 6:

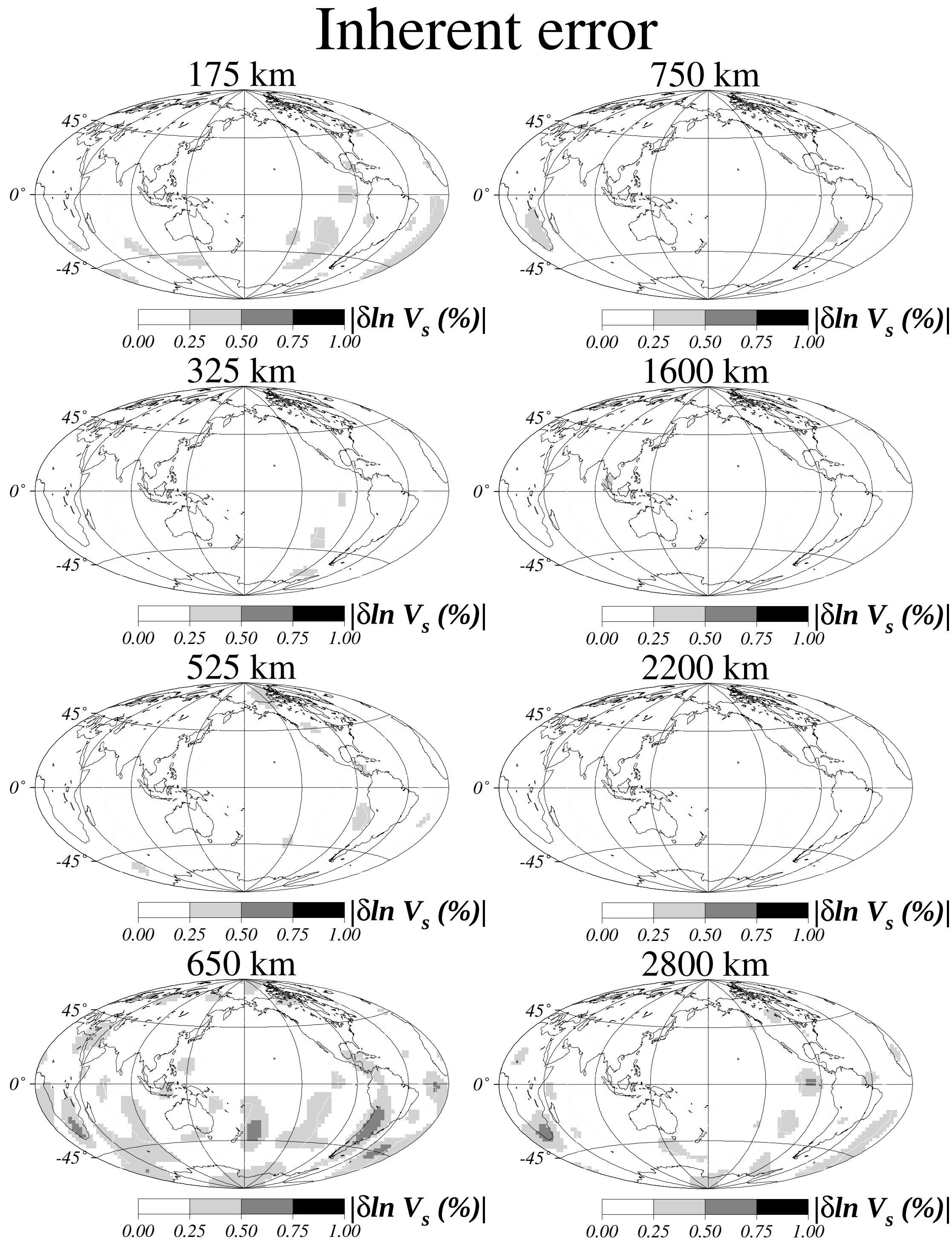

Inherent error
175 km
750 km
325 km
1600 km
525 km
2200 km
650 km
2800 km
45°
0°
-45°
|δln V_s (%)|
0.00 0.25 0.50 0.75 1.00

Figure 7:

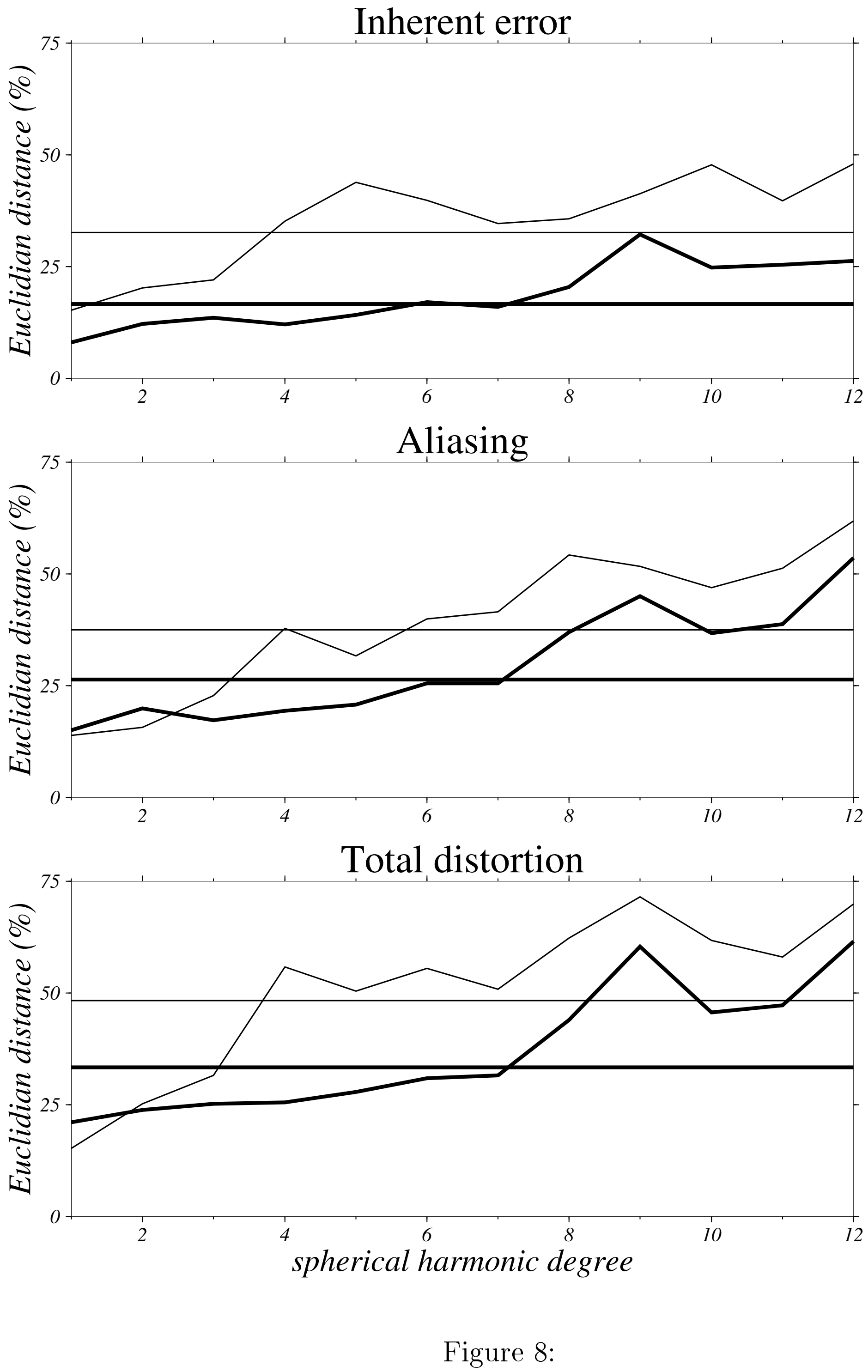

Inherent error
Euclidian distance (%)
75
50
25
0
2
4
6
8
10
12
Aliasing
Euclidian distance (%)
75
50
25
0
2
4
6
8
10
12
Total distortion
Euclidian distance (%)
75
50
25
0
2
4
6
8
10
12
spherical harmonic degree

Figure 8:

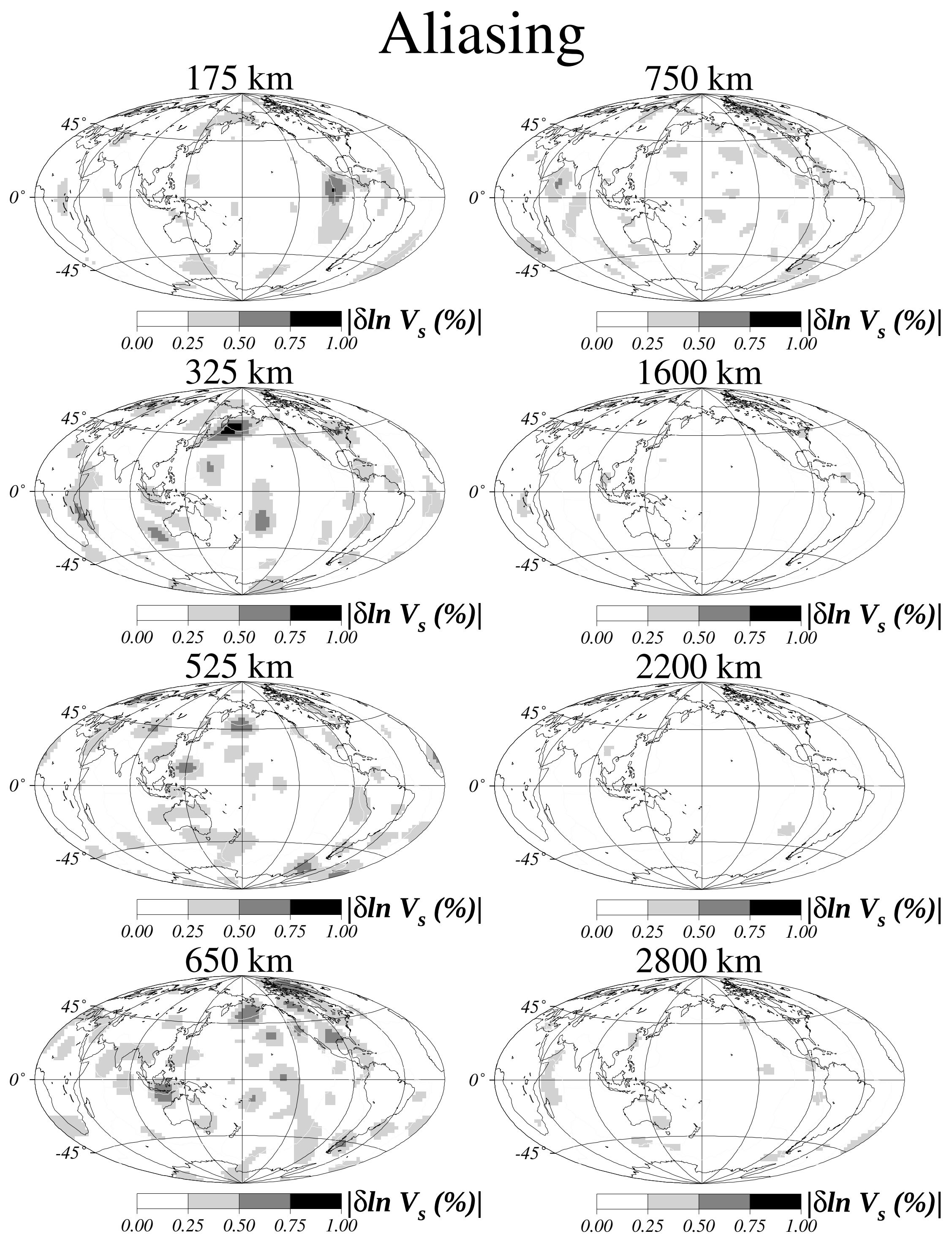

Aliasing
175 km
750 km
325 km
1600 km
525 km
2200 km
650 km
2800 km
45°
0°
-45°
|δln V_s (%)|
0.00 0.25 0.50 0.75 1.00

Figure 9:

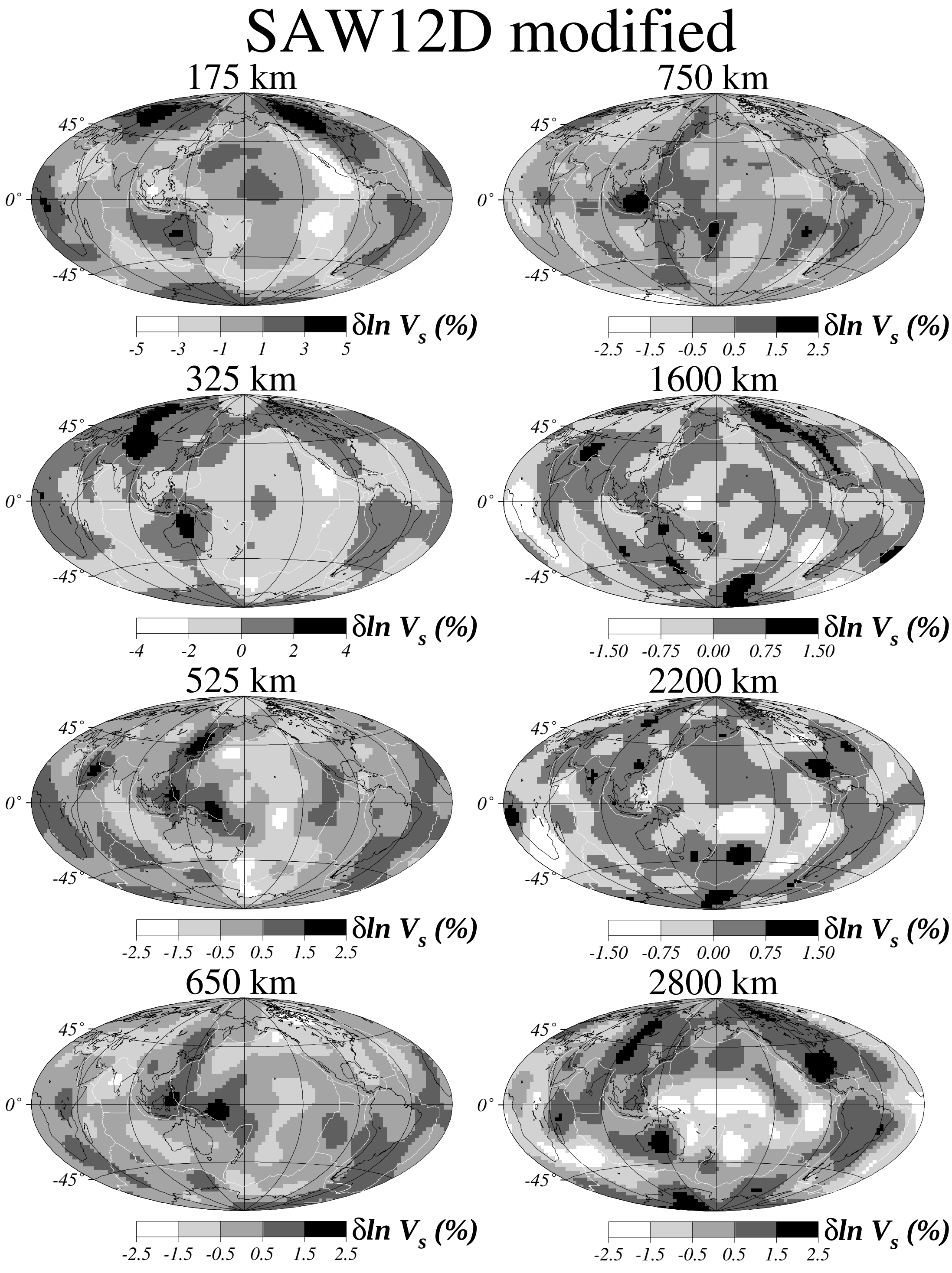

SAW12D modified
175 km
750 km
325 km
1600 km
525 km
2200 km
650 km
2800 km
45°
0°
-45°
δln V_s (%)
-5 -3 -1 1 3 5
-2.5 -1.5 -0.5 0.5 1.5 2.5
-4 -2 0 2 4
-1.50 -0.75 0.00 0.75 1.50

Figure 10:

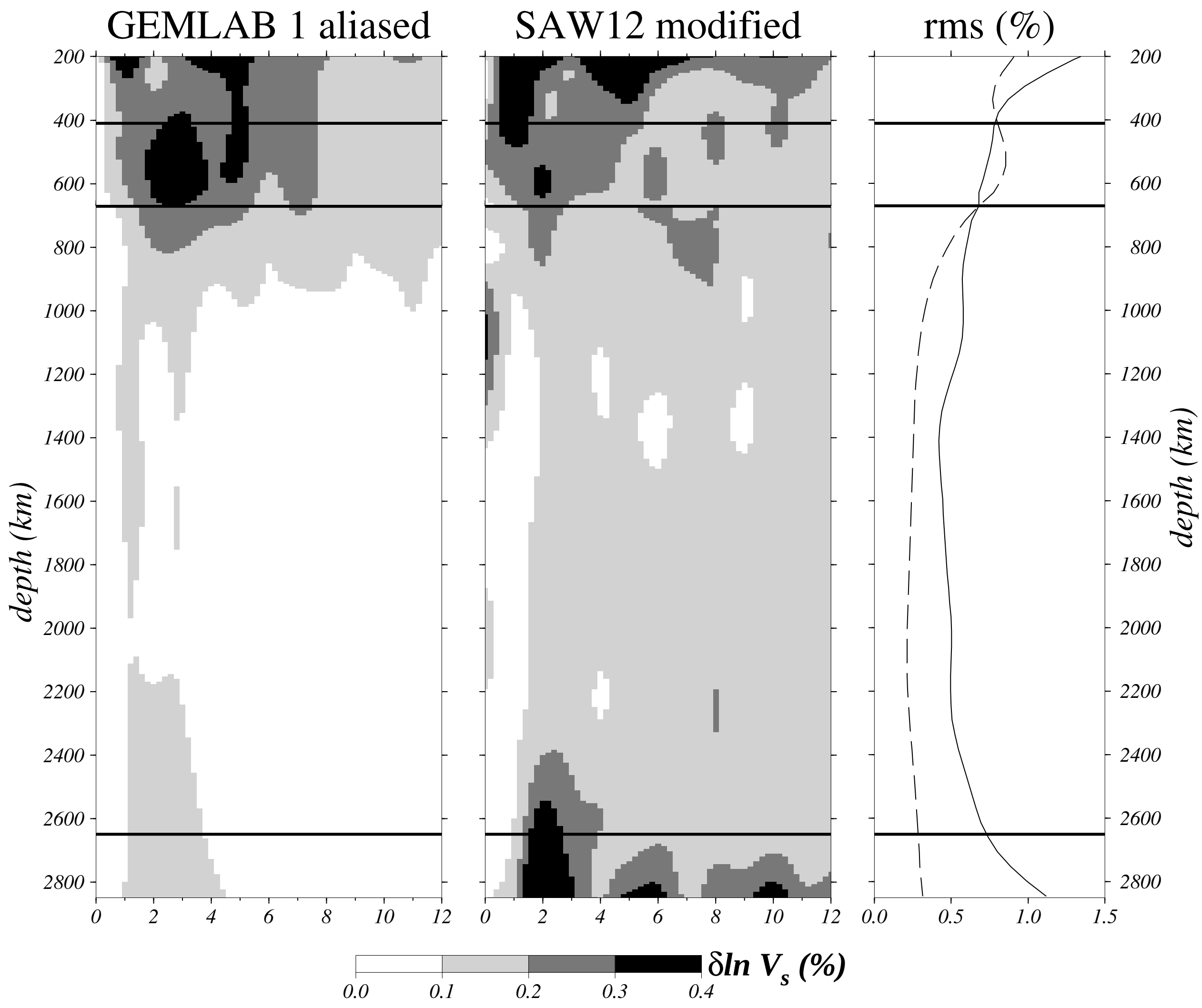

GEMLAB 1 aliased
SAW12 modified
rms (%)
depth (km)
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
0
2
4
6
8
10
12
0.0
0.5
1.0
1.5
0.0
0.1
0.2
0.3
0.4
δln V_s (%)

Figure 11:

Body phase	Number of occurences
S & sS	5,330
SS & sSS	6,578
$S3$ & $sS3$	4,466
$S4$ & $sS4$	2,354
ScS & $sScS$	4,226
$ScS2$ & $sScS2$	3,098
$ScS3$ & $sScS3$	132
S_{diff} & sS_{diff}	1,039
Unidentified phases	854
Total	**28,077**