

n	$m = -3$	$m = -2$	$m = -1$	$m = 0$	$m = 1$	$m = 2$	$m = 3$
0				$\frac{1}{2}$			
1			$\sqrt{3} \sin \theta \sin \phi$	$\sqrt{3} \cos \theta$	$\sqrt{3} \sin \theta \cos \phi$		
2		$\frac{1}{2} \sqrt{15} \sin^2 \theta \sin(2\phi)$	$\sqrt{15} \sin \theta \cos \theta \sin \phi$	$\frac{1}{2} \sqrt{5} (3 \cos^2 \theta - 1)$	$\sqrt{15} \sin \theta \cos \theta \cos \phi$	$\frac{1}{2} \sqrt{15} \sin^2 \theta \cos(2\phi)$	
3	$\frac{1}{2} \sqrt{35} \sin^3 \theta \sin(3\phi)$	$\frac{1}{2} \sqrt{105} \sin^2 \theta \cos \theta \sin(2\phi)$	$\frac{1}{2} \sqrt{21} \sin \theta (5 \cos^2 \theta - 1) \sin \phi$	$\frac{1}{2} \sqrt{7} (5 \cos^3 \theta - 3 \cos \theta)$	$\frac{1}{2} \sqrt{21} \sin \theta (5 \cos^2 \theta - 1) \cos \phi$	$\frac{1}{2} \sqrt{105} \sin^2 \theta \cos \theta \cos(2\phi)$	$\frac{1}{2} \sqrt{35} \sin^3 \theta \cos(3\phi)$

n	$m = -3$	$m = -2$	$m = -1$	$m = 0$	$m = 1$	$m = 2$	$m = 3$
0				$\frac{1}{2}$			
1			$\sqrt{3} \sin \theta \sin \phi$	$\sqrt{3} \cos \theta$	$\sqrt{3} \sin \theta \cos \phi$		
2		$\frac{\sqrt{15}}{4} (1 - \cos(2\theta)) \sin(2\phi)$	$\sqrt{15} \sin \phi \sin \theta \cos \theta$	$\frac{1}{2} \sqrt{5} (3 \cos^2 \theta - 1)$	$\sqrt{15} \cos \phi \sin \theta \cos \theta$	$\frac{\sqrt{15}}{4} (1 - \cos(2\theta)) \cos(2\phi)$	
3	$\frac{\sqrt{35}}{4} (3 \sin \theta - \sin(3\theta)) \sin(3\phi)$	$\frac{\sqrt{105}}{4} \sin(2\theta) \cos \theta \sin(2\phi)$	$\frac{\sqrt{21}}{4} (3 \sin \theta - \sin(3\theta)) \sin \phi$	$\frac{\sqrt{7}}{2} (5 \cos^3 \theta - 3 \cos \theta)$	$\frac{\sqrt{21}}{4} (3 \sin \theta - \sin(3\theta)) \cos \phi$	$\frac{\sqrt{105}}{4} \sin(2\theta) \cos \theta \cos(2\phi)$	$\frac{\sqrt{35}}{4} (3 \sin \theta - \sin(3\theta)) \cos(3\phi)$

n	$m = -3$	$m = -2$	$m = -1$	$m = 0$	$m = 1$	$m = 2$	$m = 3$
1			$(-1)^{-1} 1 - - 1$	10	11		
2		$(-1)^{-2} 2 - - 2$	$(-1)^{-1} 2 - - 1$	20	21	22	
3	$(-1)^{-3} 3 - - 3$	$(-1)^{-2} 3 - - 2$	$(-1)^{-1} 3 - - 1$	30	31	32	33