Spherical Rule of Cosines:

$$\text{distance} = \text{radius} \cdot \arccos(\sin \text{lat}_1 \cdot \sin \text{lat}_2 + \cos \text{lat}_1 \cdot \cos \text{lat}_2 \cdot \cos(\text{lon}_2 - \text{lon}_1))$$

Angle		Cosine	
0.7854	7.8540E-001	0.707105482511236	45 degrees

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0.007854	7.8540E-003	0.999969157500545	4	50km Earth
0.0007854	7.8540E-004	0.999999691573436	6	

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0.000007854	7.8540E-006	0.999999999969157	10	

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0.00007854	7.8540E-005	0.999999996915734	8	
0.000007854	7.8540E-006	0.999999999969157	10	
0.0000007854	7.8540E-007	0.999999999999691	12	5m Earth

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0.00000007854	7.8540E-008	0.999999999999997	14	5m Jupiter

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0.0000007854	7.8540E-007	0.999999999999691	12	5m Earth
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0.0000007854	7.8540E-007	0.999999999999691	12	5m Earth
0.00000007854	7.8540E-008	0.999999999999997	14	5m Jupiter
0.000000007854	7.8540E-009	1.000000000000000	16	5m Sun
0.0000000007854	7.8540E-010	1.000000000000000	18	

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0.0000000007854	7.8540E-010	1.000000000000000	18	
0.00000000007854	7.8540E-011	1.000000000000000	20	
0.000000000007854	7.8540E-012	1.000000000000000	22	

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0.0000000007854	7.8540E-010	1.000000000000000	18	
0.00000000007854	7.8540E-011	1.000000000000000	20	
0.000000000007854	7.8540E-012	1.000000000000000	22	
0.0000000000007854	7.8540E-013	1.000000000000000	24	Sun from galactic centre

Haversine Formula:

$$a = \sin^2\left((lat_1 - lat_2)/2 \right) + \cos lat_1 \cdot \cos lat_2 \cdot \sin^2\left((lon_1 - lon_2)/2 \right)$$

$$c = 2 \cdot \arctan\left(\sqrt{a} / \sqrt{(1-a)} \right)$$

$$distance = radius \cdot c$$