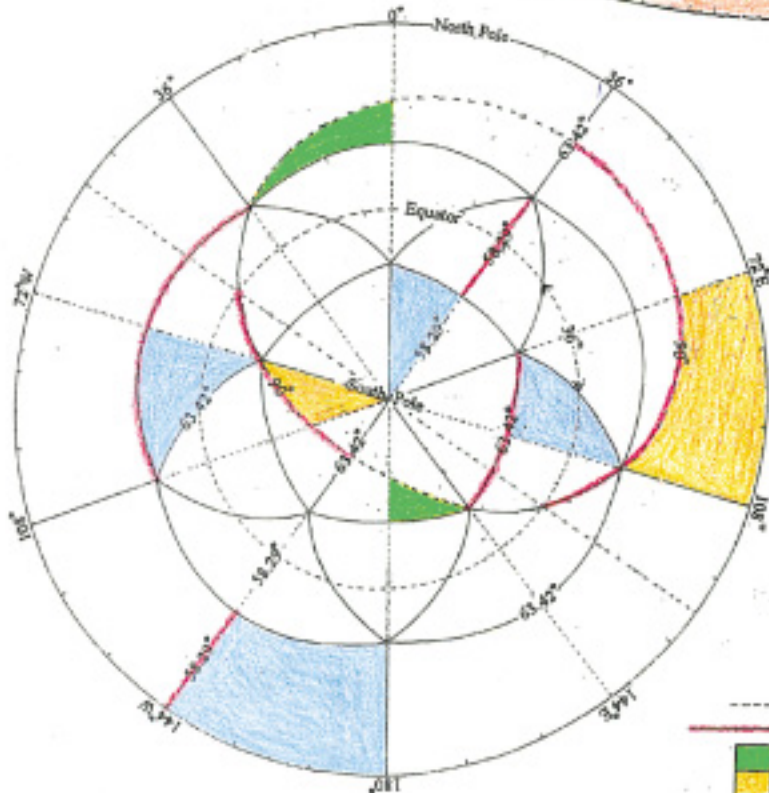
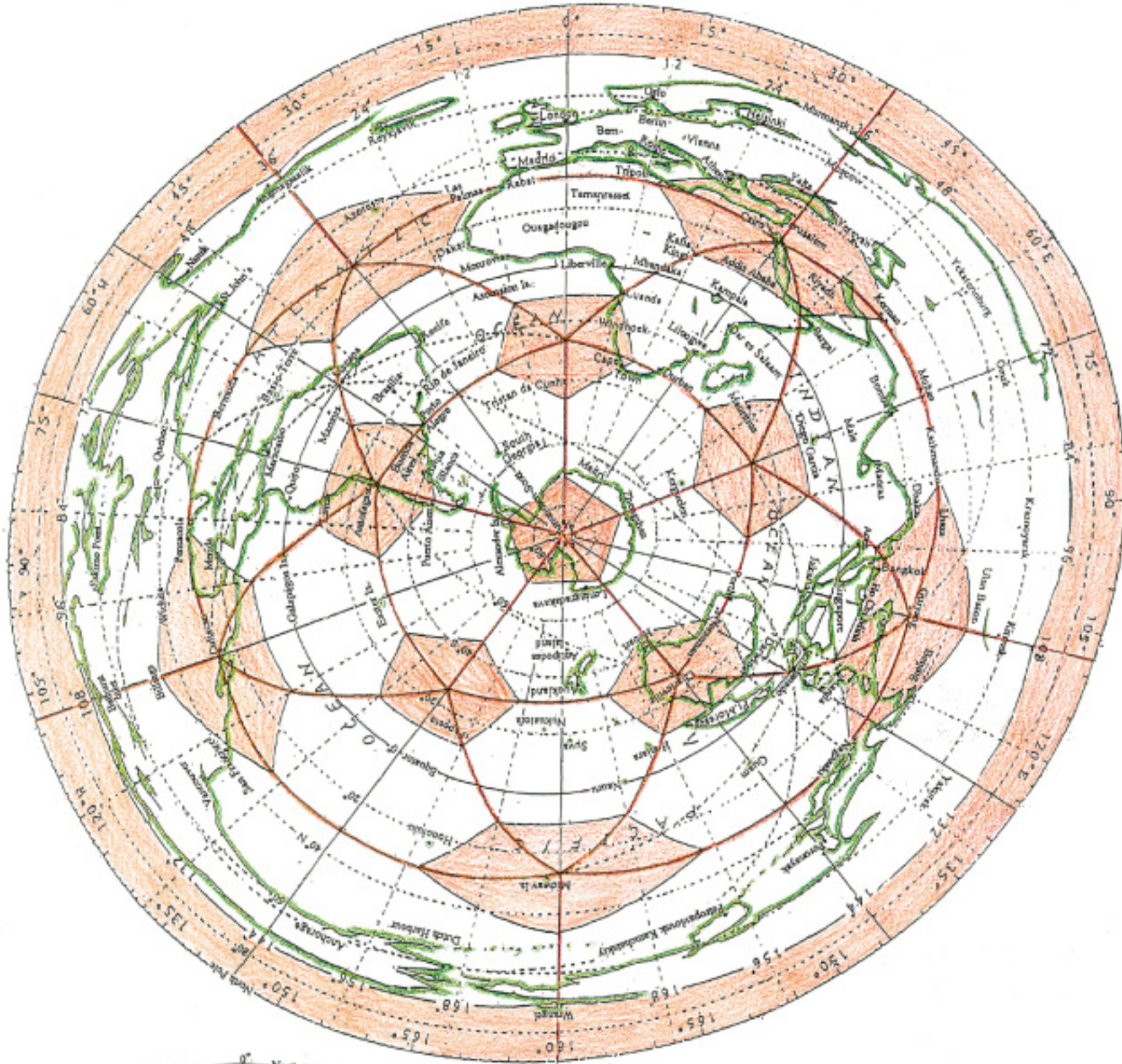


The rotary "icosa cum hex-pen" grid superimposed onto the antipodes map



The mapped out icosahedron (insphered)

Notice how well the "icosa" and "hex-pen" grids synchronise with each other. The arc-angle (63.42°) distance of a side of a triangular face of the icosahedron is equal to the arc-angle distance between the centres of adjacent pentagons of the "hex-pen" grid. And the area of that face (25,503,476.14 sq. kms.) is approximately equal to the area of 1 hexagon and 1/3 pentagon of the "hex-pen" grid. Because of this close alignment between the two grids, all the facts relating to the "hex-pen" grid with reference to distances and area has cross-relevance to the "icosa" grid also. Hence reference can be made to the various tables of the "hex-pen" grid for relevant information.

In the diagram beside, each side, face and vertex of the icosahedron has its corresponding antipodal counterpart. The outermost circle is the magnified point of the north pole.

Are-angle distances and areas approximations using the "icosa" grid

Are-angle	distance in kms.	area of	in sq. kms. (approx. values)	+
36°	4000.8 - 4007.51	1/6 (face)	4,250,579.35	1/120
58.29°	6477.96 - 6488.83	1/3 "	8,501,158.71	1/60
63.42°	7048.07 - 7059.9	1/2 "	12,751,738.07	1/40
90°	10002 - 10018.79	a face of the icosa.	25,503,476.14	1/20
		a hemisphere	255,034,761.4	1/2

+ as a fraction of the earth's superficial area

- great circle circumference
- equal antipodal distances
- areas (1/6 of a face)
- "
- "