QRB and QTE calculations
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1996

There are two stations; stn a and stn b. Stn a is you and stn b is the one you're QSO'ing. Based on the stations' latitude and longitude you can calculate the spherical distance between them. You can also find the azimuth for your antenna (the direction to stn b). (North=0° East=90° South=180° West=270°)

A	Your own latitude	from 90° south (-90) to 90° north (90)
B	The other stn's latitude	from 90° south (-90) to 90° north (90)
C	Your own longitude	from 180° west (-180) to 180° east (180)
D	The other stn's longitude	from 180° west (-180) to 180° east (180)
E	Difference in longitude between stn a and stn b (value from 0 to 180)	

F A part of the QRB formula:

When the stns are on the same hemisphere (Northern or Southern), then:
$F = \sin A - \sin B$

When the stns are on opposite hemispheres, then:
$F = \sin(AbsA) + \sin(AbsB)$ (*AbsX* means the absolute value of X)

G When $0 \le E \le 90$ then:

$$G = 360 + \arcsin\left(\frac{\sin B}{\sqrt{\sin^2 B + (\cos E \bullet \cos B)^2}}\right)$$

When $90 \le E \le 180$ then:

$$G = 180 - \arcsin\left(\frac{\sin B}{\sqrt{\sin^2 B + (\cos E \bullet \cos B)^2}}\right)$$

H A part of the QTE formula:

$$H = \arccos\left(\frac{\sqrt{\sin^2 B + (\cos E \bullet \cos B)^2}}{\sqrt{(\sin E \bullet \cos B)^2 + \left(\sin^2 B + (\cos E \bullet \cos B)^2\right) \bullet \sin^2(G - A)}} \bullet \sin(G - A)\right)$$

I The azimuth at your station (from stn a to stn b; QTE):

If stn b is E° west of stn a, then:
$I = 360 - H$

If stn b is E° east of stn a, then:
$I = H$

R The earth is considered as a sphere with radius R of 6.367.651 meters

X Distance along the earth's surface (QRB).

$$X = R \bullet \frac{\pi}{90} \bullet \arcsin\left(\frac{\sqrt{F^2 + \cos^2 A + \cos^2 B - 2 \bullet \cos A \bullet \cos B \bullet \cos E}}{2}\right)$$