

Gravitational blue shift of EM radiation from a stationary clock in the non-rotating Earth centred frame of reference.

“r” is the distance from the clock to the centre of the Earth. “R” is the radius of the Earth.
 The clock transmits a frequency 1 Hz, “rate” is the frequency received on the ground.
 F/Fo is the gravitational force on the clock relative to the force on a clock on the ground.

<u>r</u>	<u>rate</u>	<u>F/Fo</u>
10R	1.000000000626	0.0100
9R	1.000000000618	0.0123
8R	1.000000000608	0.0156
7R	1.000000000596	0.0204
6R	1.000000000579	0.0278
5R	1.000000000556	0.0400
4R	1.000000000522	0.0625
3R	1.000000000464	0.1111
2R	1.000000000348	0.2500
1R	1.000000000000	1.0000