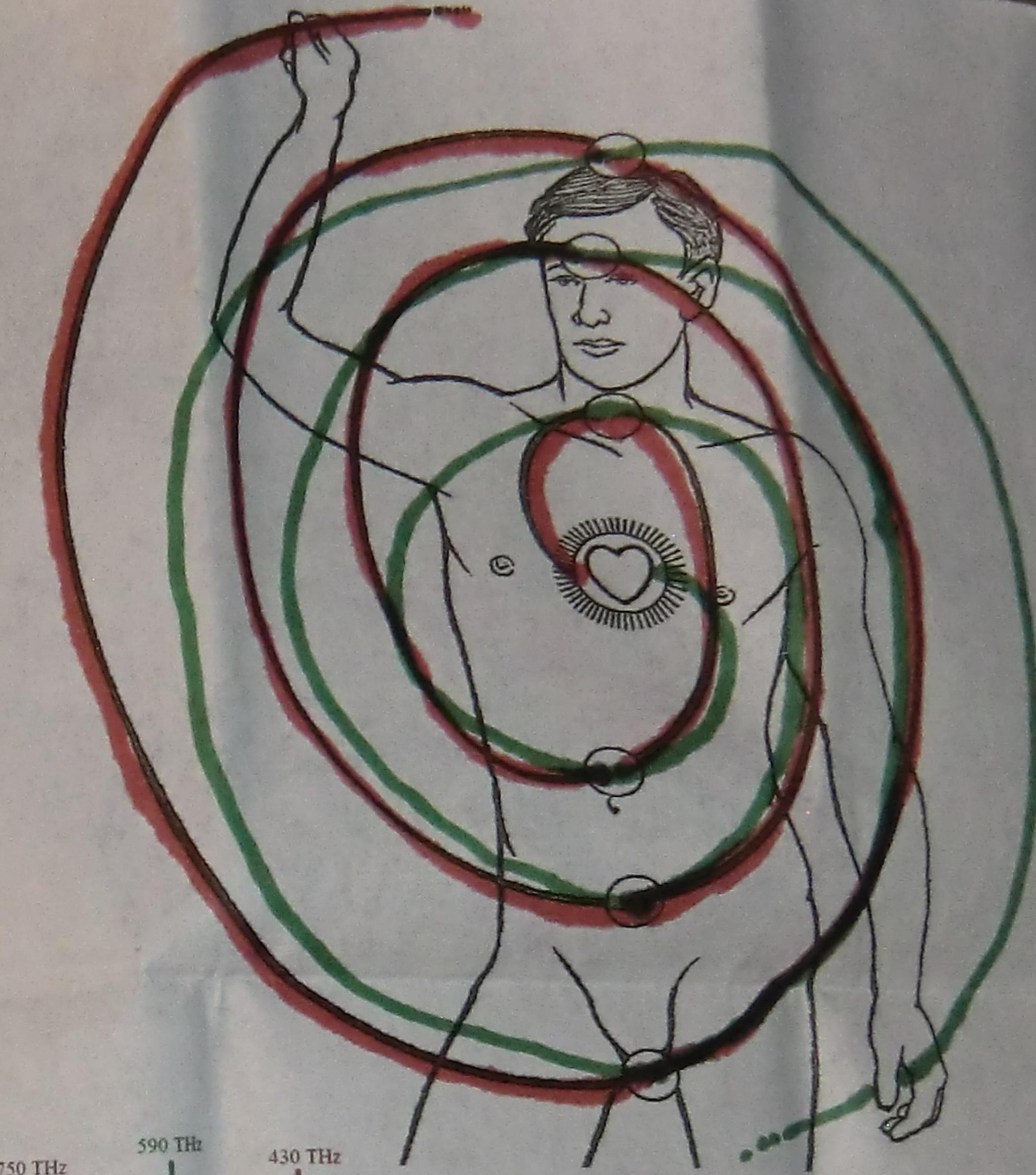
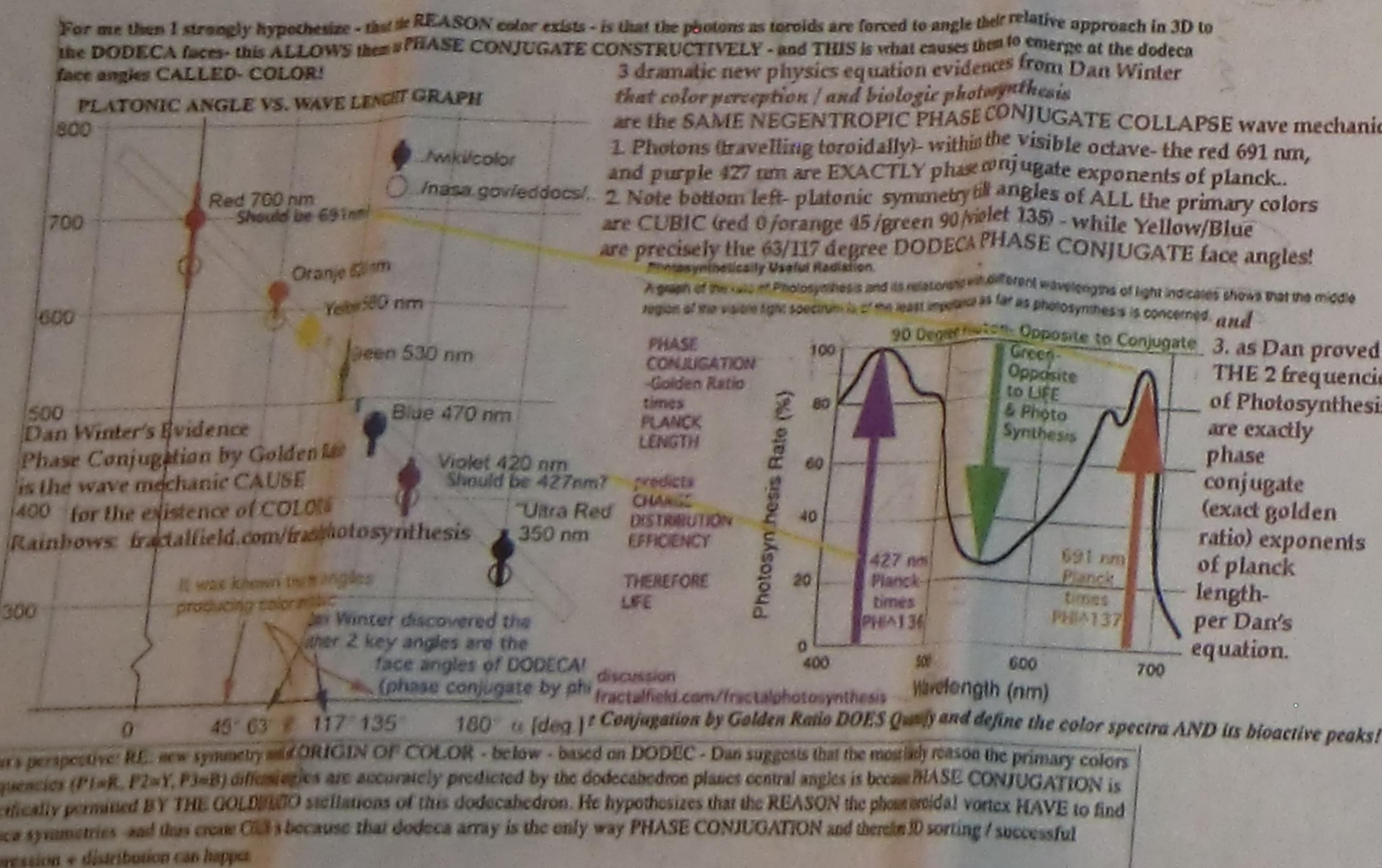
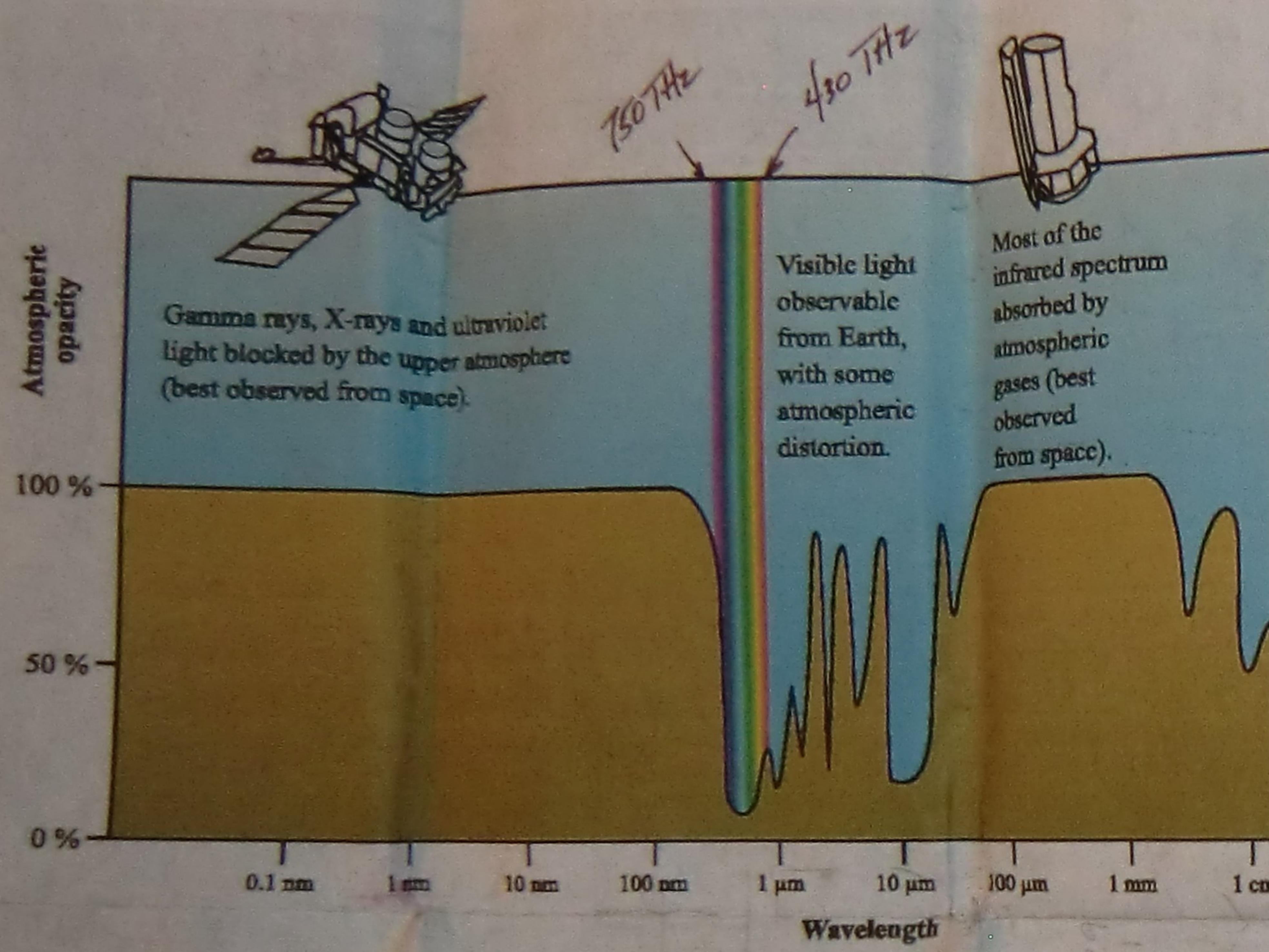


6/2/2020 2:13



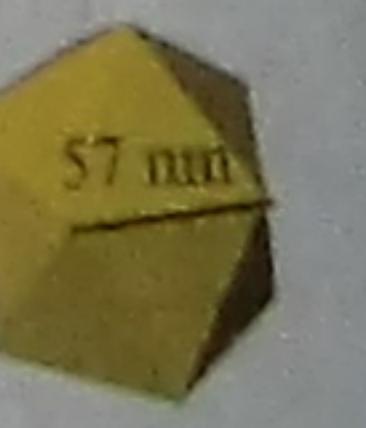
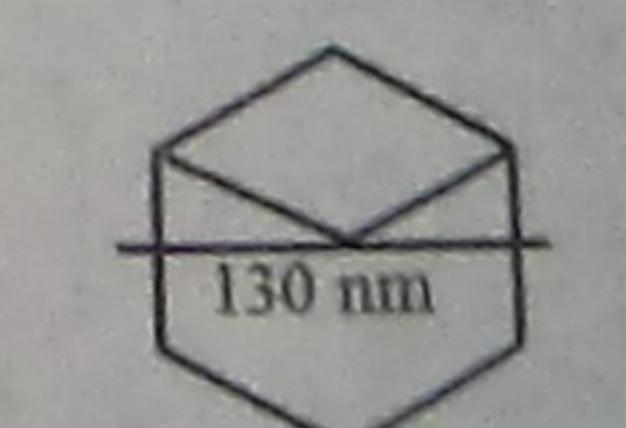
Visible Light Example:

750 THz
590 THz
430 THz
400 nm
550 nm
700 nm
VIBGYOR

BACKGROUND

US CDC Patent #776521 2010, Page 4

The coronaviruses (order Nidovirales, family Coronaviridae, genus Coronavirus) are a diverse group of large, enveloped, positive-stranded RNA viruses that cause respiratory and enteric diseases in humans and other animals. At approximately 30,000 nucleotides (nt), their genome is the largest found in any of the RNA viruses. Coronaviruses are spherical, 100-160 nm in diameter with 20-40 nm complex club shaped surface projections surrounding the periphery. Coronaviruses share common structural proteins including a spike protein (S), membrane protein (M), envelope protein (E), and, in a subset of coronaviruses, a hemagglutinin-esterase protein (HE). The S protein, a glycoprotein which protrudes from the virus membrane, is involved in host cell receptor binding and is a target for neutralizing antibodies.



6/2/2020 2:14