

TIDES

FACTS:

RESULT FROM THE GRAVITATIONAL PULL BETWEEN THE EARTH,
SUN, AND MOON

GRAVITATIONAL ATTRACTION BETWEEN TWO BODIES IS:

- A. PROPORTIONAL TO THE PRODUCT OF THEIR MASSES
 - B. INVERSELY PROPORTIONAL TO THE SQUARE OF THE DISTANCE BETWEEN THEM
3. VARIATION OF WATER DUE TO THE EARTH
EARTH IRREGULARITY OF GRAVITY

OCEAN BASINS

HIGH TIDE - HIGHEST WATER LEVEL

LOW TIDE - RETREAT TO THE LOWEST WATER LEVEL

TIDAL RANGE - VERTICAL DISTANCE BETWEEN HIGH AND LOW TIDE

TIDAL PERIOD - TIME BETWEEN SUCCESSIVE HIGH OR LOW TIDES
(24 HOURS AND 50 MINUTES)

ASTRONOMICAL TIDES - RESPONSE TO MOVING SUN AND MOON

$5.06 \times 10^{-8} T_d (\) T_j$ $0.28 \times 10^{-8} T_d (-) T_j$ $0.33 \times 10^{-8} T_d (\) T_j$ $0.003 T_c$ $-0.001 T_w$ $0.28 \times 10^{-8} T_d \ll /MCI$