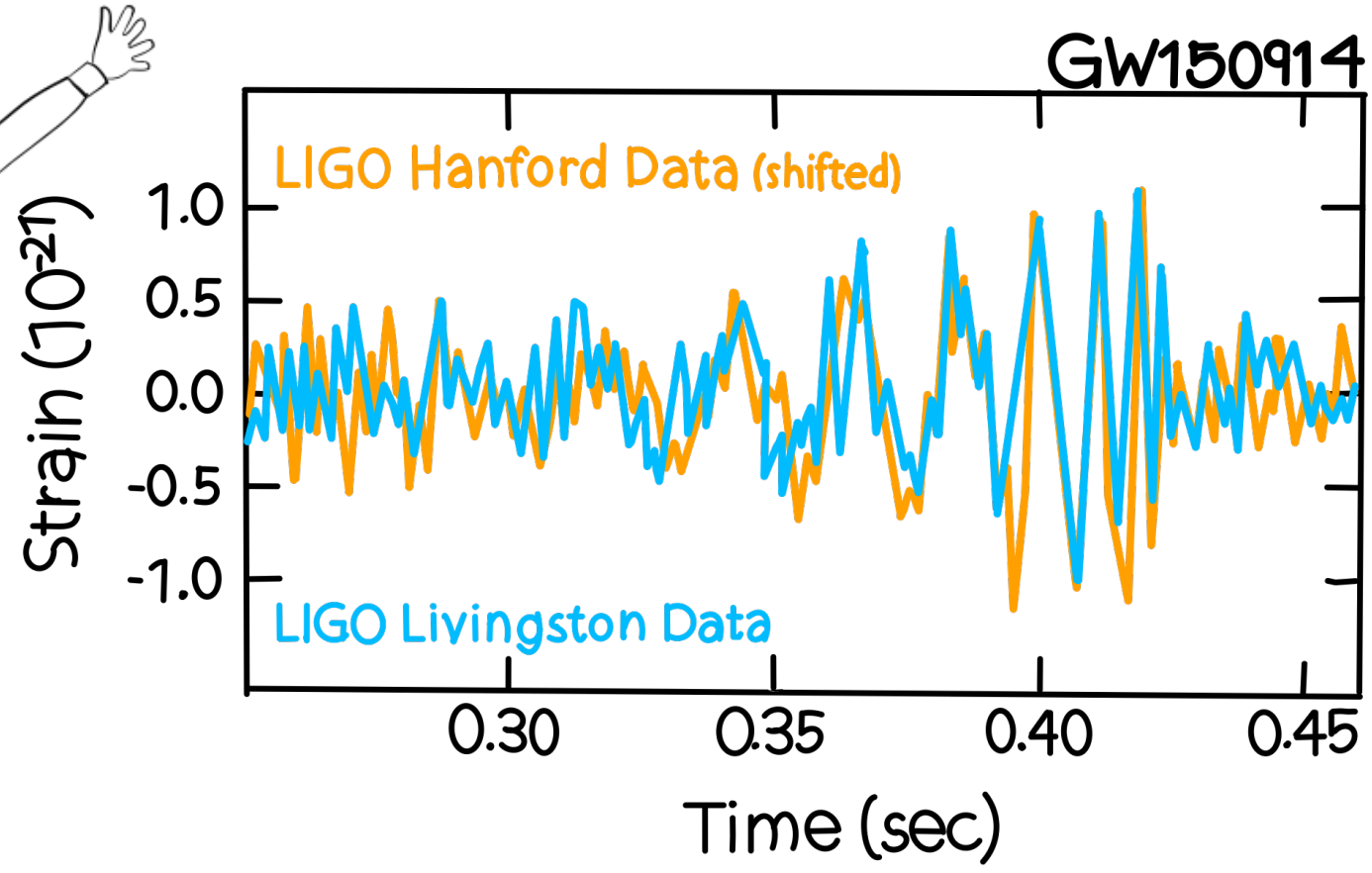
In September 2015, the two LIGO detectors recorded the first GW observation. These waves lasted less than 0.2 seconds and followed a steady inspiral, peak merger, and a quick ringdown that aligned with Einstein's predictions.



The source of the signal–GW150914–was the collision and merger of two black holes, each about 30 times the mass of the Sun, located about 1.3 billion light-years away.

The observed GW signal from GW150914 could be directly compared to the NR waveform, allowing scientists to test the validity of GR in extreme gravitational regimes.