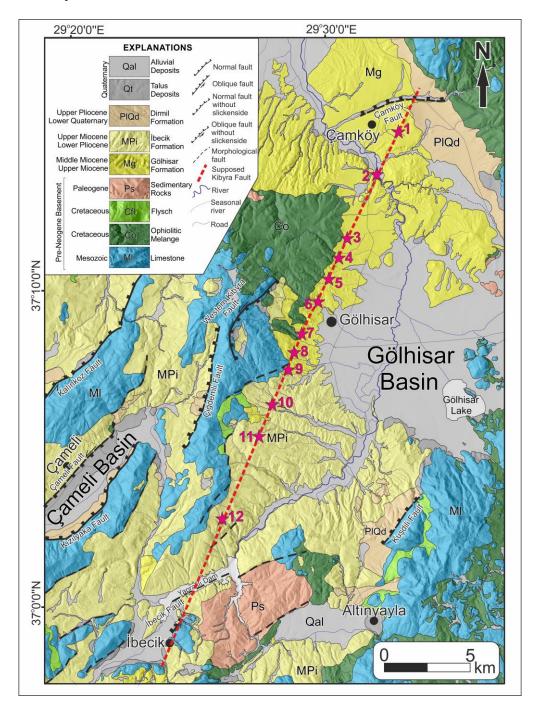
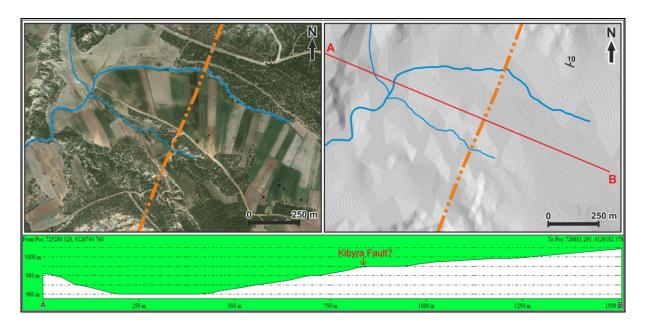
## **Supplementary Material**

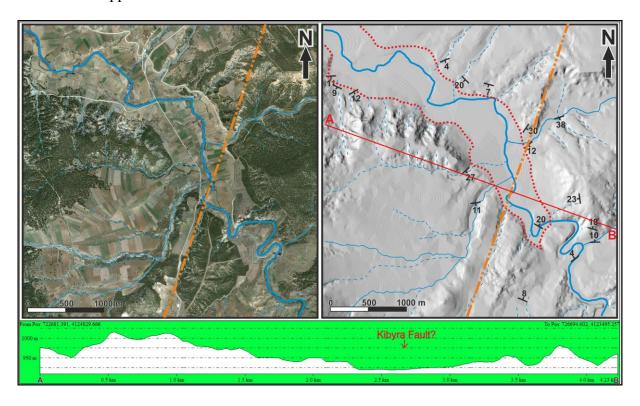


**Supplementary Map 1.** Geological map of the study area. The lithological properties and ages of the basement rocks were modified from 1/500000 Denizli sheet geological map of General Directorate of Mineral Research and Exploration (Şenel, 2002) and the contacts were redrawn by using field observations, DEMs and satellite images. Purple stars indicate the approximate locations of 1-12.

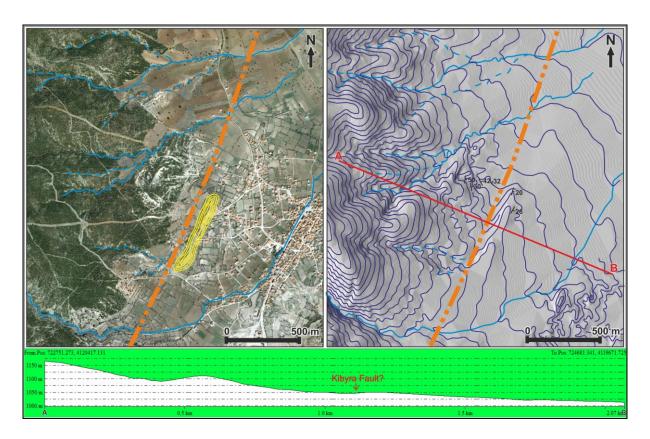
- The satellite images, digital elevation models and topographic profiles of the ridges and rivers along the supposed Kibyra Fault. Blue lines show the rivers, pink dashed lines show the ridges and orange dashed lines show the supposed Kibyra Fault.



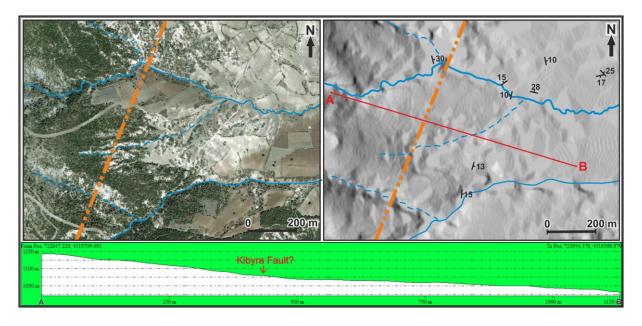
**Location 1.** Approximate coordinates: 37°15'17.86"N 29°32'55.28"E



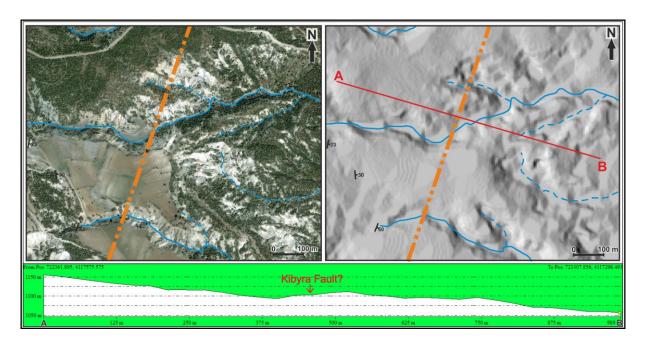
**Location 2.** Approximate coordinates: 37°13'57.18"N 29°32'15.39"E. The red dashed line shows the boundary of the bedrock on the edge of the valley.



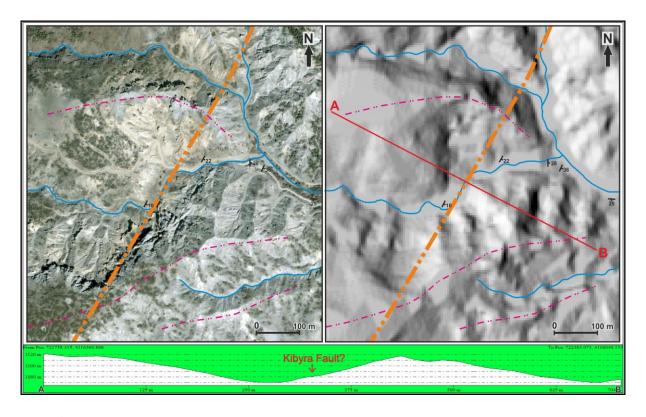
**Location 3.** Approximate coordinates: 37°11'51.68"N 29°31'19.12"E. The yellow lines show supposed contours of the ridge (Karabacak 2011).



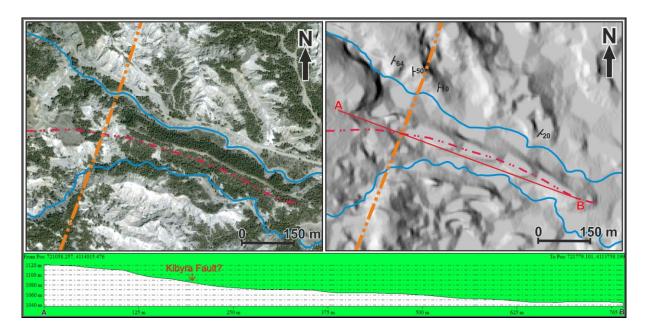
**Location 4.** Approximate coordinates: 37°11'10.73"N 29°30'48.82"E



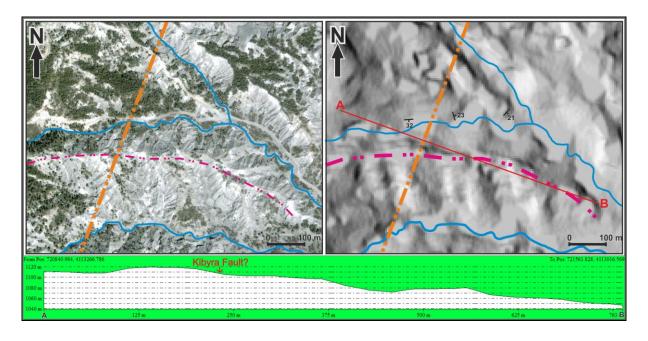
**Location 5.** Approximate coordinates: 37°10'30.88"N 29°30'24.93"E



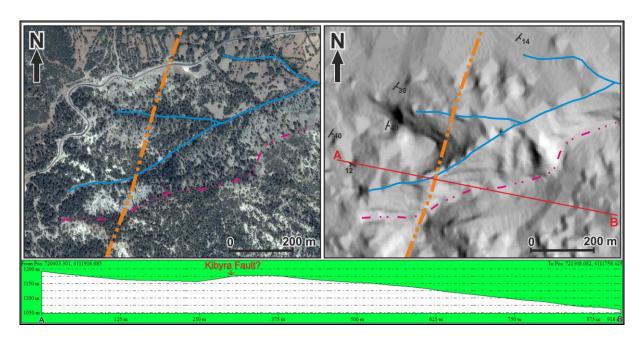
**Location 6.** Approximate coordinates: 37°9'53.90"N 29°30'2.17"E



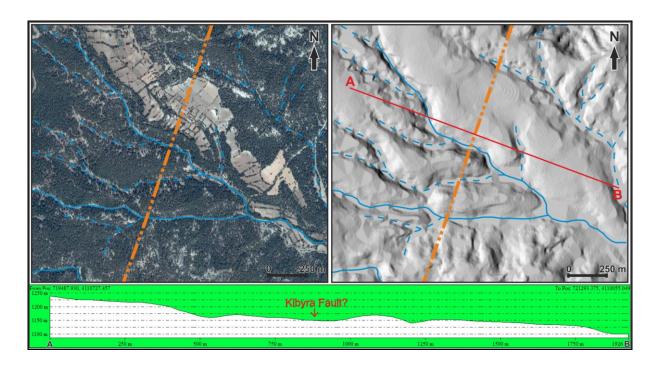
**Location 7.** Approximate coordinates: 37°8'44.58"N 29°29'27.26"E



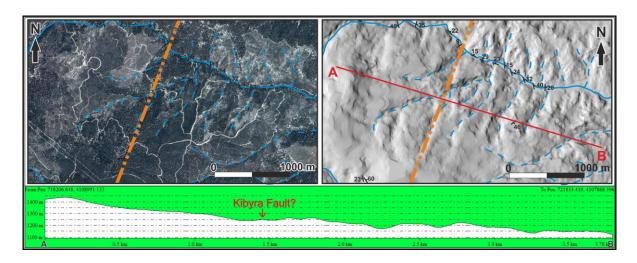
**Location 8.** Approximate coordinates: 37°8'16.63"N 29°29'17.33"E



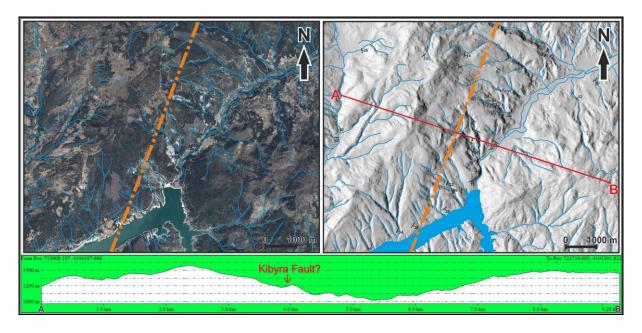
**Location 9.** Approximate coordinates: 37°7'43.27"N 29°29'6.05"E



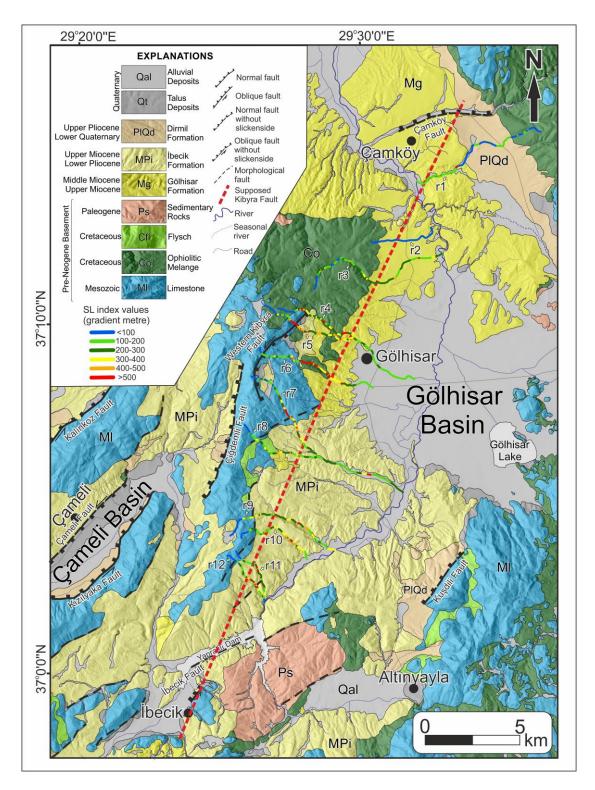
**Location 10.** Approximate coordinates: 37°6'46.80"N 29°28'31.59"E



**Location 11.** Approximate coordinates: 37°5'56.27"N 29°28'6.74"E



**Location 12.** Approximate coordinates: 37°2'13.52"N 29°26'15.35"E



**Supplementary Map 2.** Geological map of the study area showing the SL (stream length-gradient index) indices at 12 locations (from r1 to r12) along the supposed Kibyra Fault.

Some longitudinal river profiles (coloured lines) along the supposed Kibyra Fault (see Supplementary Map 2) and the measured SL index (dashed lines):

