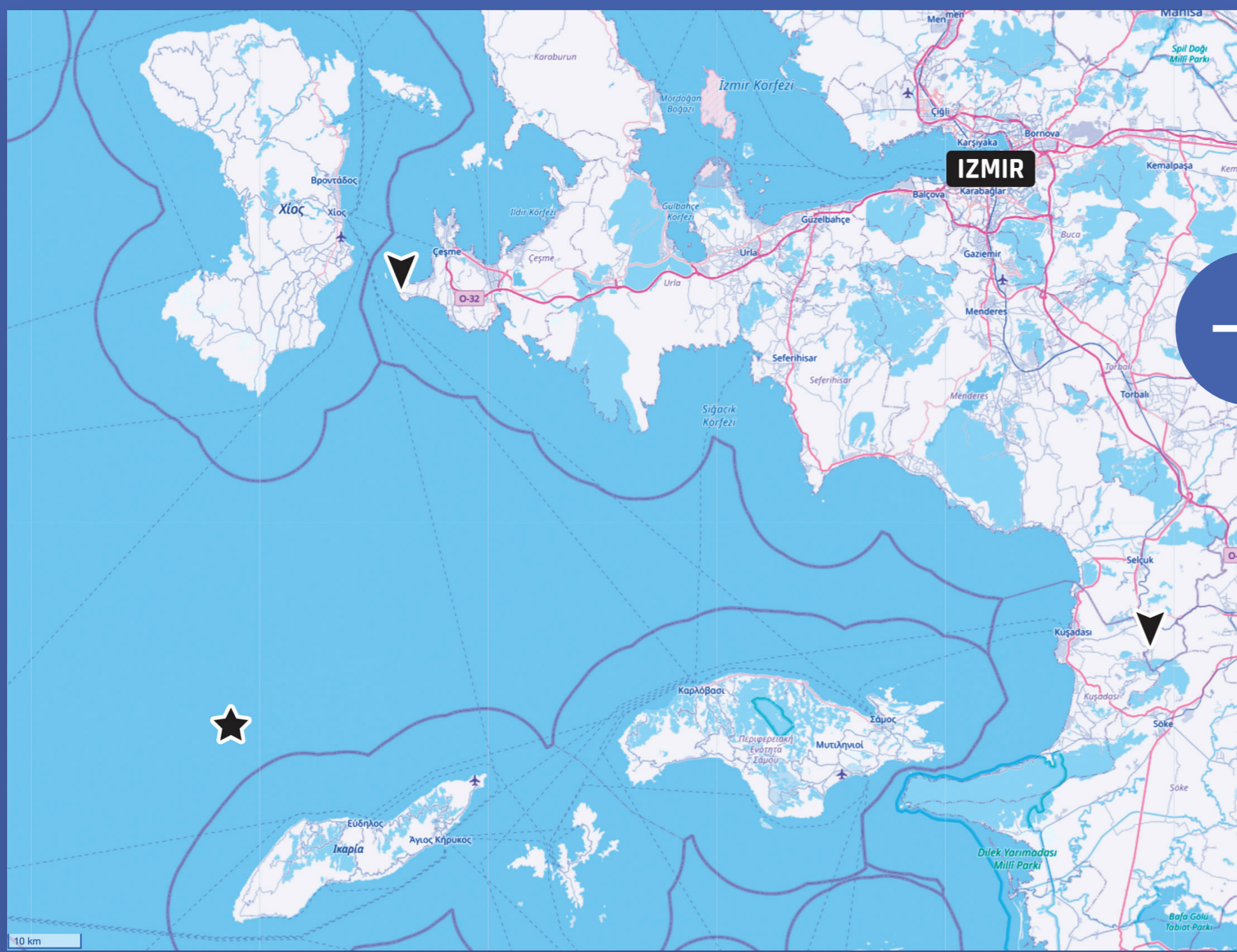


EVENT DETECTION

MAGNITUDE 5.3 EARTHQUAKE 100KM OFFSHORE IZMIR

On November 30, 2021, at 04:00:41, an earthquake of magnitude 5.3 hit offshore western Turkey, approximately 125 km from Izmir. Using two seismic arrays located on the coast line, SeismicAI's system detected the event in real time, providing 16 seconds of warning time.



MAP LEGEND



REAL-TIME EPICENTER



CATALOG EPICENTER



ARRAY SITE



04:00:41

EARTHQUAKE STARTS

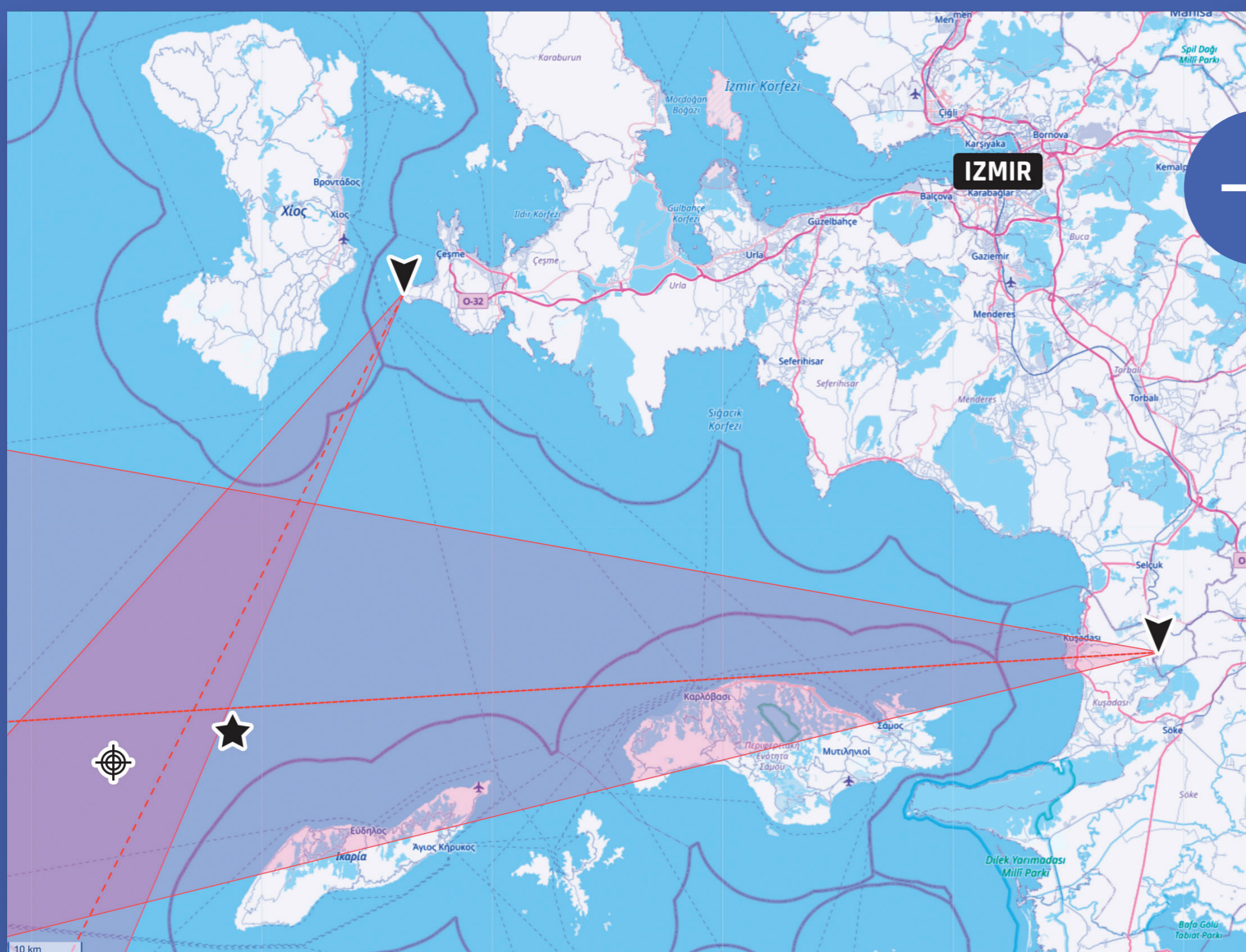
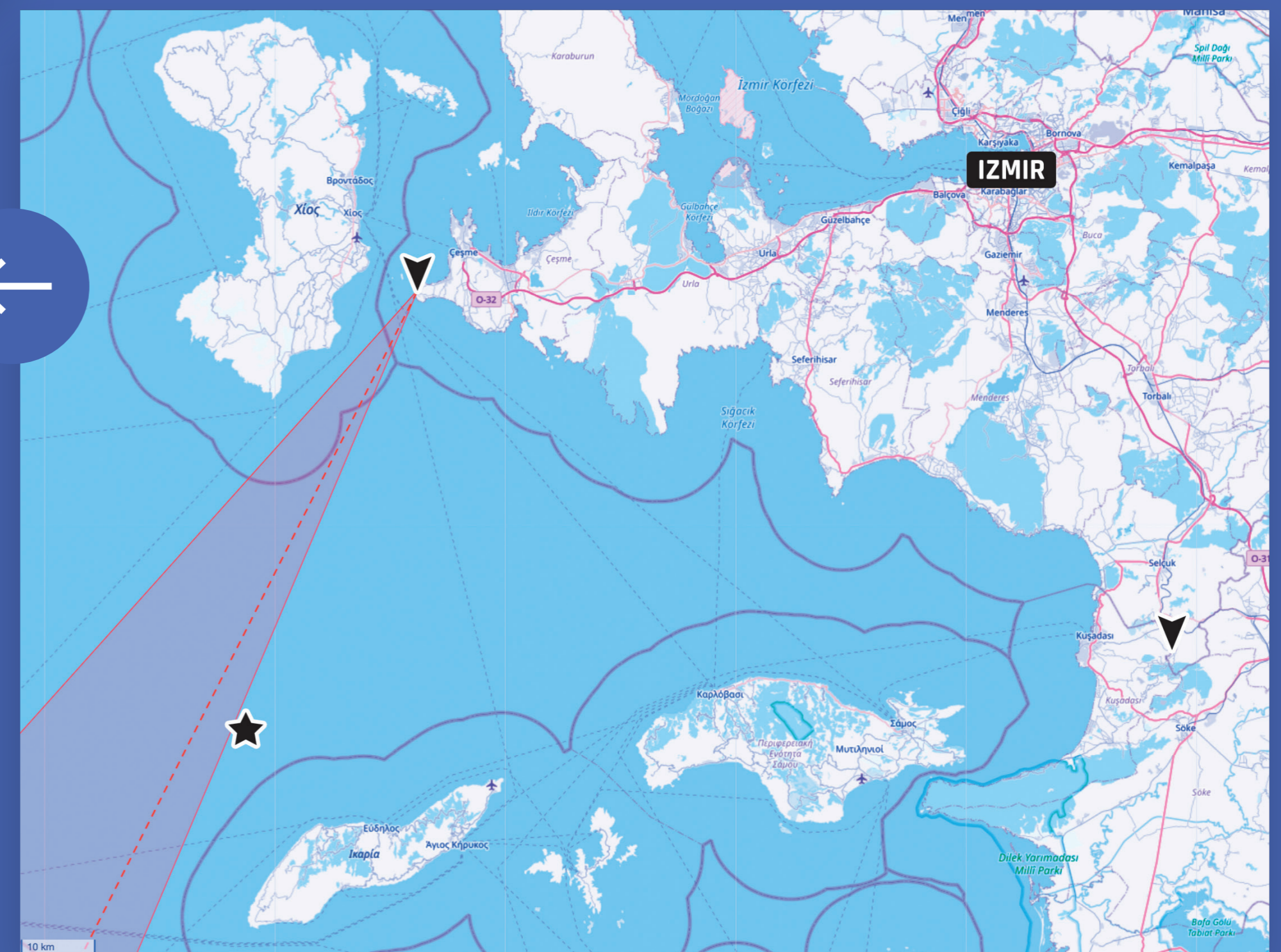
An earthquake of magnitude 5.3 starts at 37.7534°N 25.9719°E, roughly 125km south west of Izmir. SeismicAI monitoring stations are found 62 km and 124 km from the epicenter.

04:00:51

FIRST DETECTION

10 SECONDS AFTER EARTHQUAKE START

At 04:00:51, 10 seconds after the Earthquake started, the P wave arrived at the first station, 62km NNE of the epicenter. Within 300 ms, the station determines the earthquake back azimuth.



04:01:00

LOCATION AND MAGNITUDE ESTIMATED

19 SECONDS AFTER EARTHQUAKE START

At 04:01:00, 19 seconds after the earthquake started the P wave arrived at the second station, 124km east of the epicenter. The station determines the earthquake back azimuth and the system accurately estimates the magnitude to be 5.0 and the epicenter only 10 km west of the catalog location. The lead time before strong shaking arrives at Izmir is 17 - 20 seconds.

04:01:01

S WAVE DETECTED

20 SECONDS AFTER EARTHQUAKE START

At 04:01:01, 20 seconds after the Earthquake started, the S wave arrived at the first station, 62km NNE of the epicenter, strengthening the location and magnitude estimates achieved in the previous step.

