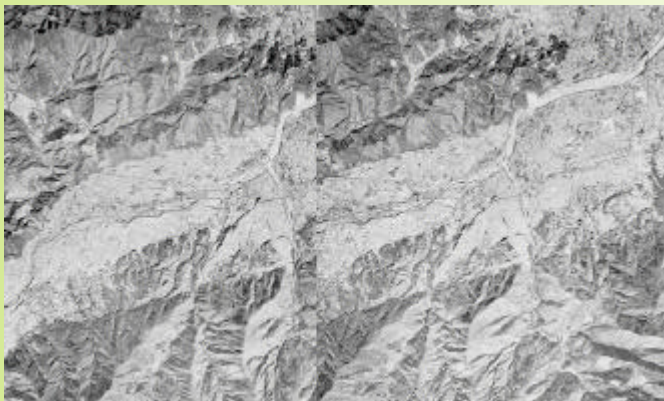


OBJECTIVE AND SCOPE

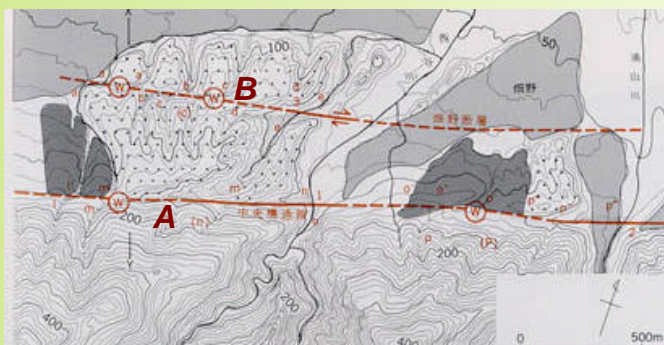
A number of devastating earthquakes took tragically place in rapid succession in the closing year of the International Decade for Natural Disaster Reduction (IDNDR). Among them, Aug. 17, 1999 Kocaeli Earthquake in Turkey and Sept. 21, 1999 Chi-Chi Earthquake in Taiwan were extraordinary. One of the most spectacular aspects of these earthquakes was the damage to structures inflicted directly by faulting, which poses difficult problems to us about minimizing the fault-related damage. A discussion on this issue, thus, must be based on a quite different scenario from those for ordinary designs in which ground accelerations and/or velocities are crucial factors.

In Chi-Chi earthquake, Taiwan, the activated fault appeared branching east off the recognized trace of the Chelungpu fault in the vicinity of Feng-Yuan City, and crossed the Shih-Kang dam causing three of its spillways to be completely destroyed by vertical offsets of up to 10 meters. In the Kocaeli earthquake, faulting and the resulting ground ruptures caused the collapse of hundreds or more buildings and modern engineered structures. There will be a great deal of arguments over this issue. In some less populated regions, limiting development within known and active fault zones would be very effective, and actually in California, USA, a law to this effect has been enacted since the early 1970s. This limitation, however, might be very difficult in overpopulated countries such as Taiwan and Japan. It is therefore very important to comprehend how soils and rocks immediately next to active fault traces would be deformed. With this knowledge provided, we could discuss possible remedies to minimize losses of life and damage to a variety of structures.

The workshop gives an excellent opportunity for engineers and other professionals to exchange information and to discuss not only the state-of-the art researches of faulting and fault-inflicted damages but also future tactics that they should map out.



The pair of photographs are perceived as a single image in terms of depth.



STRIKE-SLIP DISLOCATION OF MEDIAN-TECTONIC LINE, JAPAN:

The Median Tectonic Line, the red broken line **A**, is one of the biggest faults in Japan.

Another red broken line **B**, about 400 m north of **A**, is Hatano fault.


Build up of right lateral dislocations of these faults are recognized from the traces of several rivers flowing from Ishizuchi-mountains rising south.

(after Kaizuka, S.: *Geomorphology Illustrated*, University of Tokyo Press, 1985)

WELCOME MESSAGE

On behalf of the JSPS Project Team, (Grant-in-Aid for Scientific Research, No. 12355020), and Special Research Group of “Faulting and Fault-related Damage,” Earthquake Engineering Committee, JSCE, the Organizers take great pleasure in welcoming you to the Workshop on Seismic Fault-Induced Failures – Possible Remedies for Damage to Urban Facilities –.

Among 17 contributions appearing in the proceedings, 16 will be presented in the workshop. Among them, five keynote lectures will be given by invited speakers; the lectures covering a variety of aspects of fault-induced damage, and providing excellent overviews of fault-related research, social issues and possible remedies. “Experience is believing”. As a mid-workshop arrangement, the organizers invite you all to experience 70% of the 1995 Kobe shake. We believe your enthusiastic participation in the plenary discussion on the last day of the workshop will contribute to make the entire workshop a rewarding experience for both you and our colleagues and friends. It is sincerely hoped that the workshop will promote further active interchange of information over different fields and give you ample opportunity to make new friends and to start new collaborations. Please do not be hesitant about letting us know what we can do for this aim.



Kazuo KONAGAI, Project Leader
Research Project 2000, Grant-in-Aid for Scientific Research (No. 12355020)



Neodani fault (1891):
The fault appeared across
Midori area, Neodani. The
vertical and lateral offsets
of 6m and 4m were
reached respectively.

PLACE AND DATE

The Workshop is held from Thursday 11 to Friday 12, January 2001 at the Auditorium, Research Center for Advanced Science and Technology (RCAST), next to IIS, University of Tokyo, about 2 km west of Shibuya, one of the busiest downtown centers in Tokyo.

