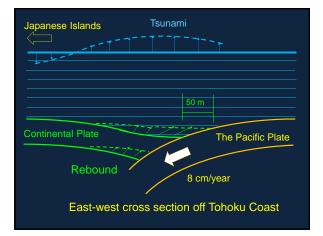
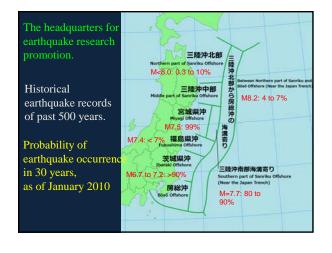
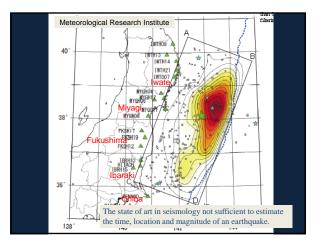
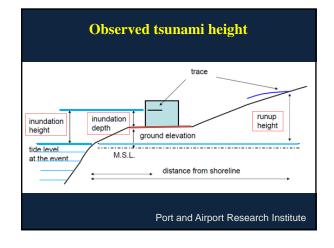
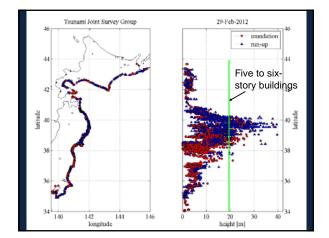
aci Jim O. Jirsa Symposium, ACI Annual Convention, Dallas, Texas, March 19, 2012 Shunsuke Otani is a professor of structures. He specializes reinforced concrete structures, earthquake engineering, structural dynamics, and earthquake resistant building design. He graduated from the Department of Architecture, Faculty of Engineering, University of Tokyo, in 1966. He received M.Sc. and Lessons learned from the 2011 Tohoku, Ph.D. degrees in Civil Engineering, in 1969 and 1973, respectively, from the University of Illinois at Urbana-Champaign. He received a Doctor of Japan, Earthquake Engineering degree from the University of Tokyo in 1982. He was a visiting research assistant professor in the Department of Civil Engineering, the University of Illinois at Champaign-Urbana from 1973-75, assistant professor and associate professor in the Department of Civil Engineering, University of Toronto, from 1975 to 1977, and from 1977 to 1979, respectively. He took a position as an associate professor in the Department of known you for a long time. Your sincere friendship and established leadership Architecture, University of Tokyo in 1979, and was promoted to a professor in 1993. He moved to Chiba University in April 2003. He was a recipient of Architectural Institute of Japan Award (1990) for a research thesis entitled "Study on Elastic-Plastic Earthquake Response Analysis of benefitted the ACI-JCI research Reinforced Concrete Buildings," and Japan Prestressed Concrete Engineering Association Award (1996) for a technical paper entitled "Hysteresis Model for Prestressed Concrete Members and its Effect on Earthquake Response" co-authored with Mitsuo Hayashi, Shin Okamoto, Hiroto Kato, and Jinhua Fu. ACI Shunsuke Otani, University of Tokyo WEB SESSIONS



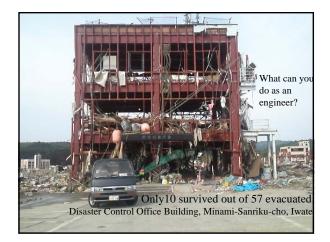


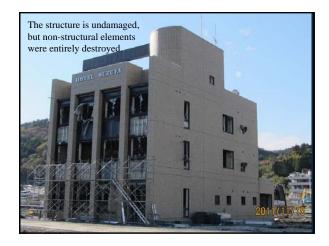




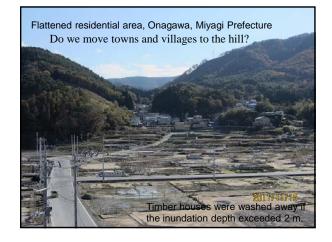


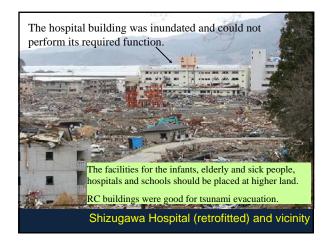
Ca	Casualties in Eastern Tohoku and Kanto				
	National Police Agency, March 8, 2012				
	Prefecture	Dead (drowned)	Missing		
	Aomori	3	1	61	
	Iwate	4,671(89.9 %)	1,297	198	
	Miyagi	9,512(91.4 %)	1,688	25,100	
	Fukushima	1,605(88.5 %)	214	182	
	Ibaraki	24	1	709	
	Chiba	20	2	251	









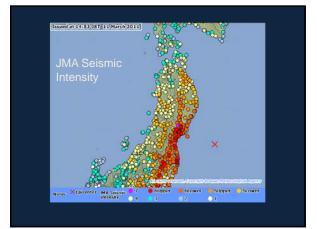


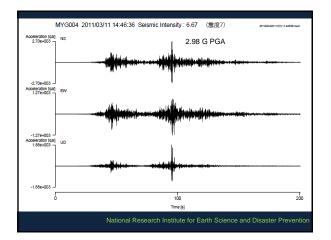


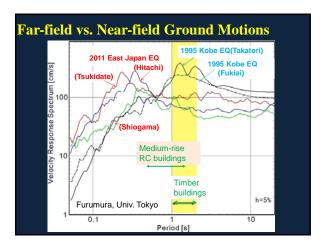












Development of Seismic Design Codes

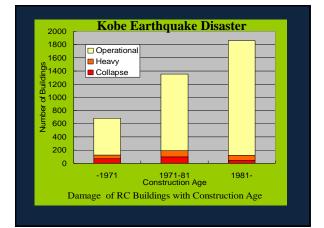
1919 Urban Building Law

1923 Kanto (Tokyo) Earthquake Disaster 1924 Introduction of Seismic Coefficient 0.10

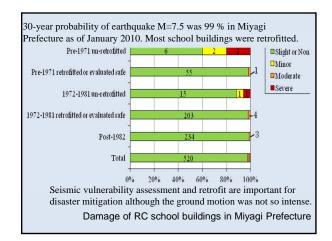
1950 Building Standard Seismic coefficient 0.20 1968 Tokachi-oki Earthquake 1971 Minimum tie spacing of 100 mm

1981 New Seismic Design

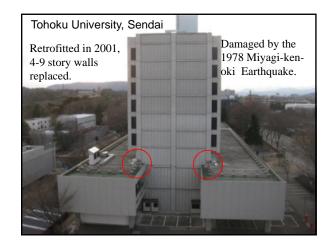
1995 Kobe Earthquake Disaster 1995 Law for promotion of seismic strengthening











Summary

- 1. The state of the art in seismology.
- 2. Tsunami was the major cause of the 2011 Earthquake disaster.
- 3. A far-field earthquake vs. a near-field earthquake motions.
- 4. Seismic vulnerability assessment and retrofit.

Jim and Marion, it is too early for Jim to retire, but we sincerely wish you to enjoy your life with good health.

Shunsuke Otani, University of Tokyo

