

2009年インドネシアスマトラ沖地震 復旧支援協力チーム被害調査報告会

調査日: 2009年10月16日-18日
開催日時: 平成21年10月29日(木) 14:00~17:00
開催場所: 土木会館2階講堂



東京大学生産技術研究所
都市基盤安全工学国際研究センター



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JAPAN Society of Civil
Engineers



Japan Association
for Earthquake Engineering
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Engineers Without Borders,
Japan

Bridge

Agenda

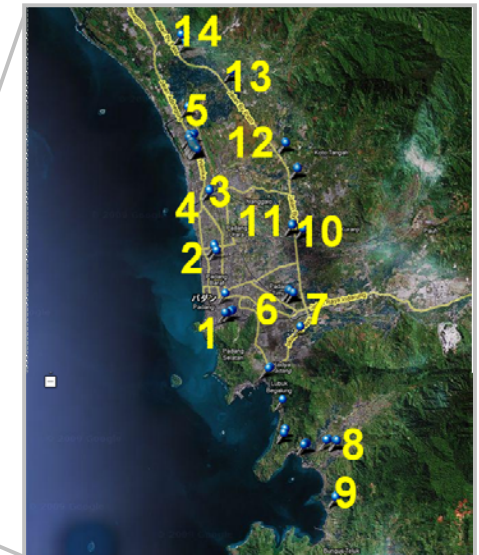
Bridge

Rail way

Road

Industry

Bridge



Bridge

No	name	type	damage
1	Sitinurbaya	concrete	100cm settle down
2	Purus	truss	10cm settle down
3	Mirang rail way	truss	10cm move at abutment
4	Mirang	concrete	20cm settle down
5	Muara Panja Linan	concrete	no
6	Lubeg 1	concrete	slightly crack
7	Lubeg 2	concrete	no
8	Bungus	truss	10cm Lateral def.
9	Timbalun	truss	no
10	Kuranji	concrete	no
11	Kalawi	truss	Abutment push/ move
12	Sungai Sapih	concrete	Settle down/ 21.5cm lateral def.
13	Lubuk Minturun	concrete	15cm lateral def.
14	Kandis	concrete	Settle down back fill soil
15	Unknown	concrete	Pier crack

5

Bridge 1

Type: beam

Use: road

Damage: 100cm settle down

Remarks: liquefaction



6



Bridge 2

Type: truss

Use: road

Damage: 10cm settle down at abutment



7

Bridge 3 rail

Type: truss

Use: railway

Damage: 10cm move at abutment



8

Bridge 4

Type: beam

Use: road

Damage: 2cm lateral move,
Lamp fall down(1)

20cm settle down at abutment(2)



(2)



9

(1)



Bridge 5

Type: truss, concrete

Use: rail way, road

Damage: no



10



Bridge 6

Type: beam

Use: road

Damage: (1)no
(2) slightly crack



(1)



11

(2)



Bridge 7

Type: beam

Use: road

Damage: no

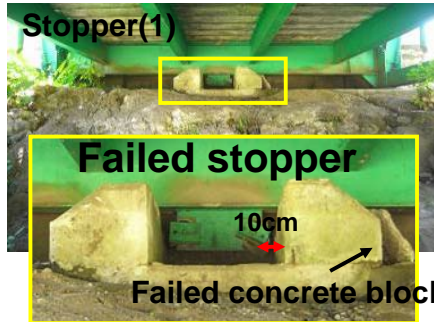


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Bridge 8

Type: truss
Use: road
Damage: lateral deformation,
stopper worked



13



Bridge 9

Type: truss
Use: road
Damage: no



14



Bridge 10

Type: beam
Use: road
Damage: no



15



Bridge 11

Type: truss
Use: road
Damage: moved abutment



16



Bridge 12

Type: beam
Use: road
Damage: lateral movement
21.5cm



17

Bridge 13

Type: beam
Use: road
Damage: lateral movement
15cm



18

Bridge 14

Type: beam
Use: road
Damage: back fill soil
settle down



19

Bridge 15

Type: beam
Use: road
Damage: pier



20

Rail way

21

Rail way

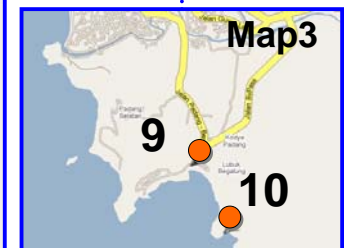
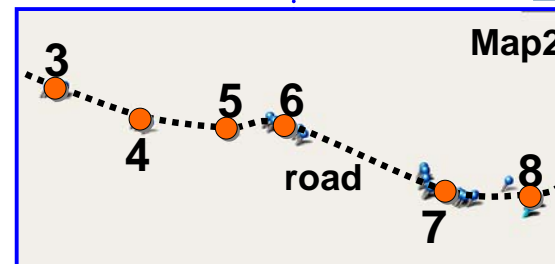


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Road

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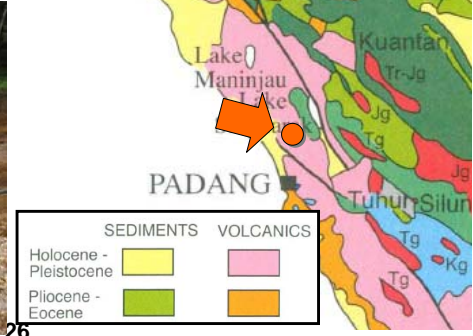
Road



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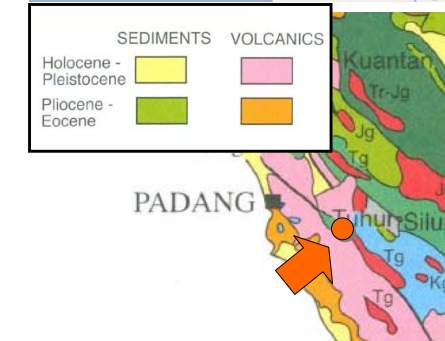
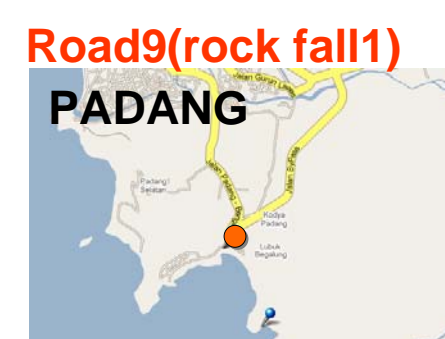
200 casualties



Some houses slide away



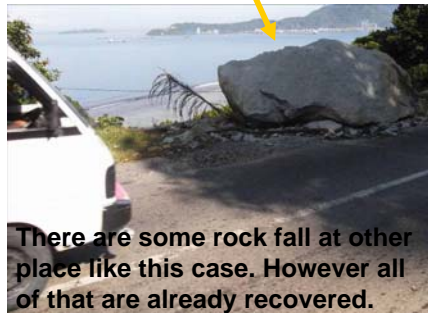
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Road10(rock fall2)



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Industry

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Industry



Electrical power station

Port1(cement, coal)

Port2(Ferry cross)

Petroleum tank

31

Electric power station



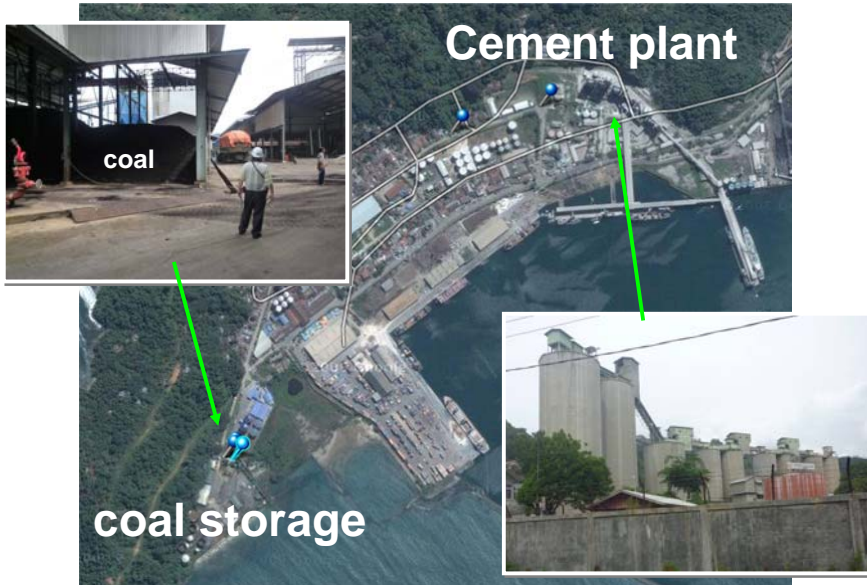
2 ceramic Isolators were broken, 2 days later, recovered.

Towers: No damaged



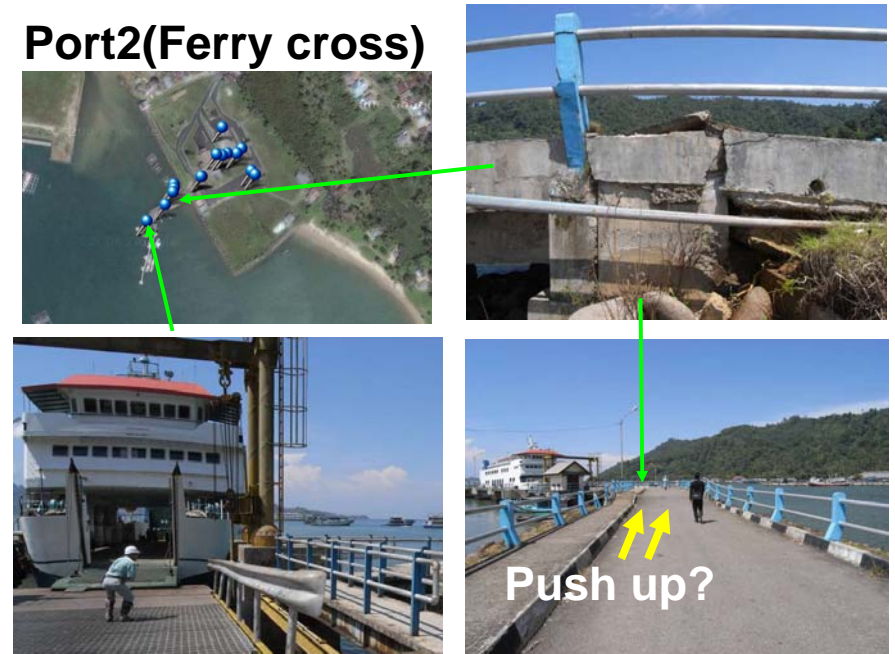
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Port1(cement, coal)



33

Port2(Ferry cross)



34

Petroleum tank



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