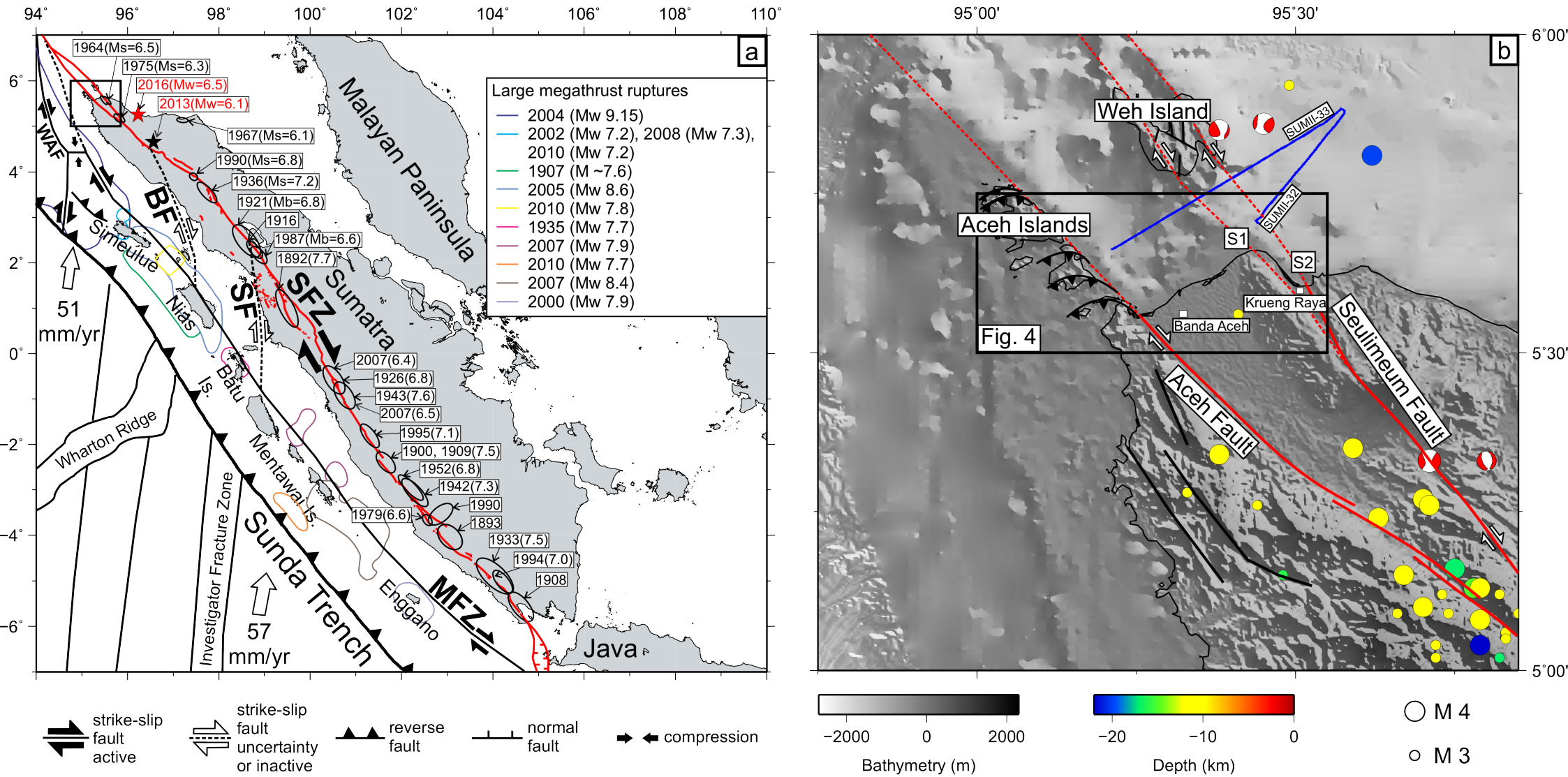
a
b
Large megathrust ruptures
2004 (Mw 9.15)
2002 (Mw 7.2), 2008 (Mw 7.3), 2010 (Mw 7.2)
1907 (M ~7.6)
2005 (Mw 8.6)
2010 (Mw 7.8)
1935 (Mw 7.7)
2007 (Mw 7.9)
2010 (Mw 7.7)
2007 (Mw 8.4)
2000 (Mw 7.9)
Malayan Paninsula
Sumatra
Sunda Trench
Java
Wharton Ridge
Investigator Fracture Zone
Simeulue
Nias
Batu Is.
Mentawai Is.
Enggano
WAF
BF
SF
SFZ
MFZ
51 mm/yr
57 mm/yr
1964(Ms=6.5)
1975(Ms=6.3)
2016(Mw=6.5)
2013(Mw=6.1)
1967(Ms=6.1)
1990(Ms=6.8)
1936(Ms=7.2)
1921(Mb=6.8)
1916
1987(Mb=6.6)
1892(7.7)
2007(6.4)
1926(6.8)
1943(7.6)
2007(6.5)
1995(7.1)
1900, 1909(7.5)
1952(6.8)
1942(7.3)
1990
1893
1979(6.6)
1933(7.5)
1994(7.0)
1908
Weh Island
Aceh Islands
Fig. 4
S1
S2
SUMII-33
SUMII-32
Krueng Raya
Banda Aceh
Aceh Fault
Seulimeum Fault
strike-slip fault active
strike-slip fault uncertainty or inactive
reverse fault
normal fault
compression
Bathymetry (m)
Depth (km)
M 4
M 3

Figure 1