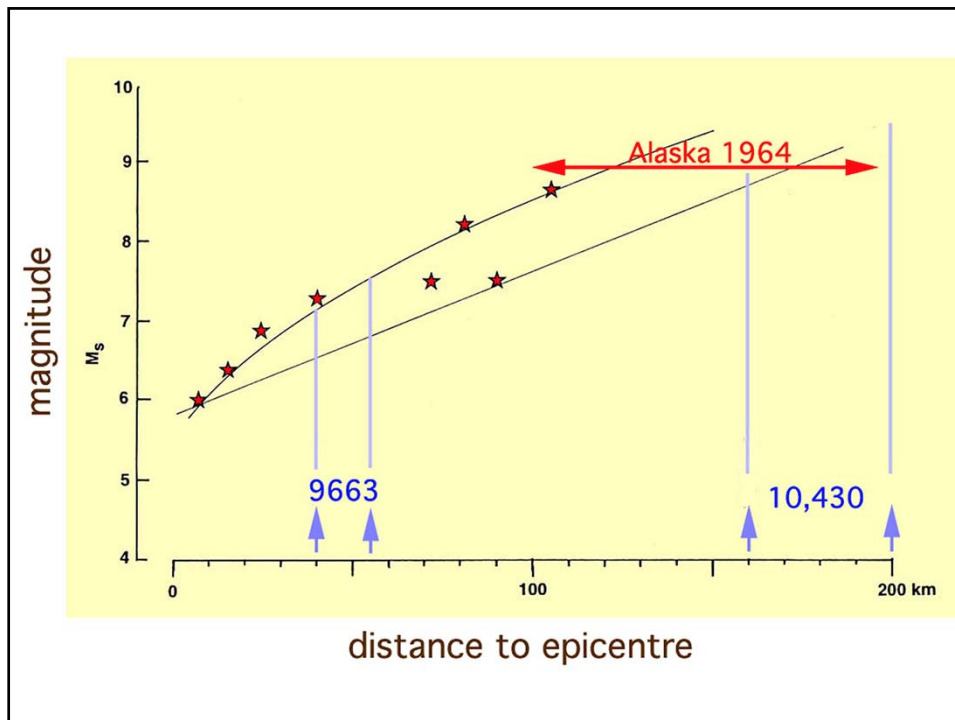


Det rör sig om en fasgräns (temperatur & tryck)
Något syre behöver alltså INTE tillföras för explosiv metanavgång

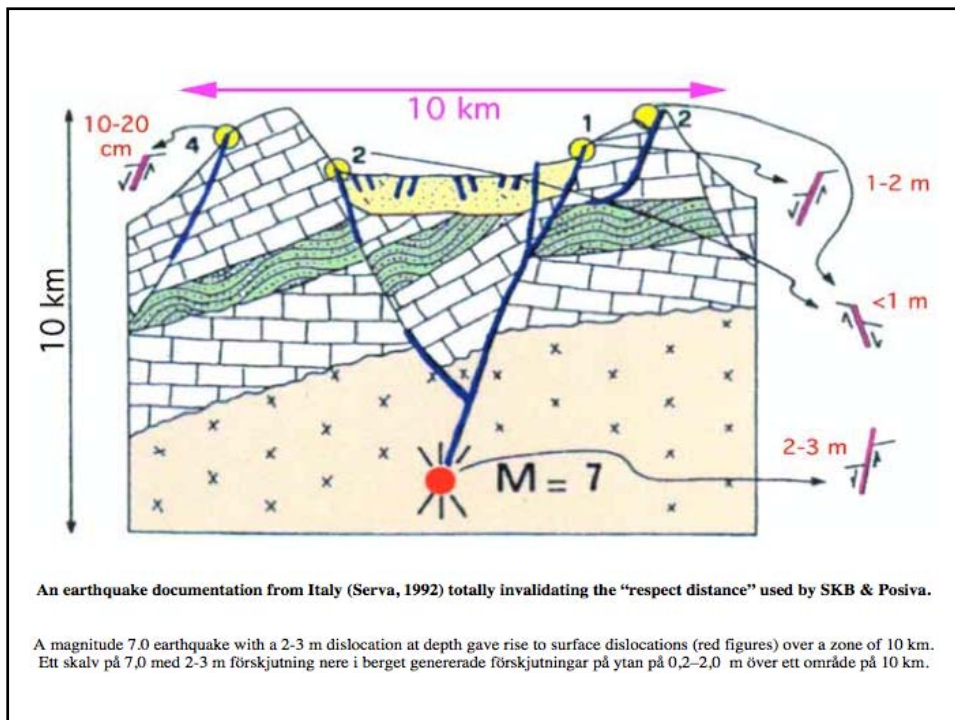
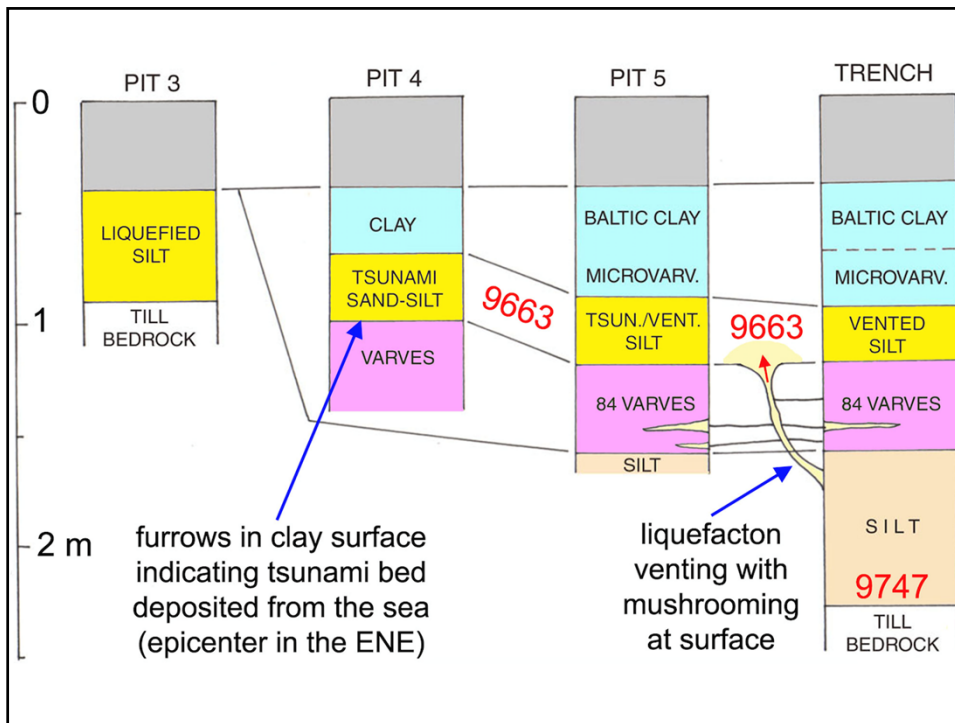
CHART OF THE INQUA ENVIRONMENTAL SEISMIC INTENSITY SCALE 2007 - IES 07
by The Spanish Working Group (modified from Silva et al., 2008)

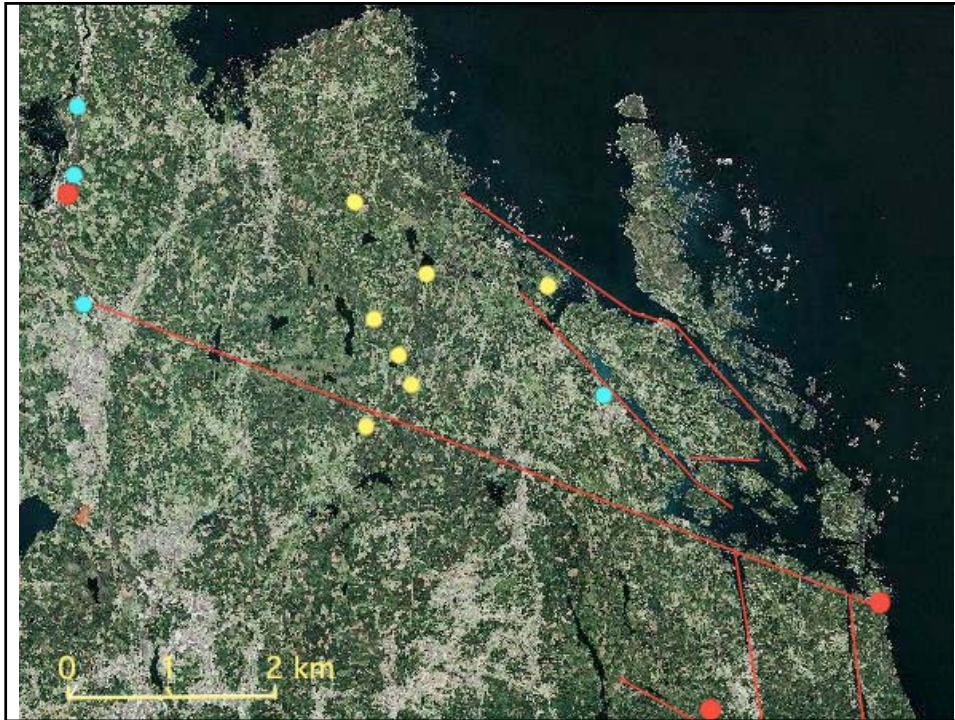
Z/E/S 2002	OBSERVED	PRIMARY EFFECTS	SECONDARY EFFECTS WITH GEOLOGICAL AND GEOMORPHOLOGICAL RECORD			SECONDARY EFFECTS IN COASTAL ENVIRON.	OTHER SECONDARY EFFECTS WITHOUT GEOLOGICAL RECORD			
		SURFACE RUPTURES	CRACKS & FRACTURES	MASS WASTING	LIQUEFACTION	Affected AREA	Type of RECORD	WAVES, TSUNAMIS	HYDROGEO ANOMALIES	TREE SHAKING
IV	A	Permanent ground displacements (< 1m)	Rare and local	Rare and local	Only observed (melt) (substrata)	Local with in epicentral zone	Geological frequent and exceptionally Geomorphological	temporary level changes	temporary level changes	
VII	B	cm	cm	cm	50 cm	1 km ²		temporary sea-level changes	temp. turbidity changes	
VIII		dm	dm	dm	1 m	10 km ²		Waves < 1m	temporary F+Q changes	
X		m	m	m	1 m	100 km ²		temp. changes	temp. spring changes	
XI		10-100 km	> 1m	> 10 ³ m ³	0.5 m	1000 km ²		1-2m	permanent spring changes	
XII		> 100 km	> 5m	> 10 ⁶ m ³	> 5 m	50000 km ²		> 3-5 m	permanent river changes	
		dip and strike-slip, offset of coseismic ruptures	Width and length of cracks and fractures in soils and rocks	Bulk volume of mobilised material	Dimension of liquified levels and sand boils	AFFECTED AREA AND TYPE OF RECORD	Geological and Geomorphological Characteristics	Gigant waves	Base-level changes in springs, rivers, aquifers	Tree branches and tree-trunk falling, ruptures, etc.

Med detta schema kan man överföra strukturer till intensitet & magnitud



THE 10,430 vBP PALEOSEISMIC EVENT	THE 9663vBP PALEOSEISMIC EVENT
<p>PRIMARY NORMAL FAULT Reactivation of old East-West fault Segmentation with 7 events 102 years Total fault length 400-700 m, vertical throw unknown</p> <p>LATERAL-SYMPATHETIC FAULT At 45° angle and 1 km north of the main fault, there is a fault of 6-8 m throw and >1 km length</p> <p>HEAVY BEDROCK FRACTURING A: numerous sites over an area of 50x100 km B: a "paleoseismograph" indicating epicentre</p> <p>EARTH SLIDES A: slides recorded at some sites B: dated at the autumn of varve 10,430 vBP</p> <p>SHAKING A: shaking of sand, silt and clay beds recorded B: shaking of fine particles recorded by magnetic means C: it is dated at the autumn of varve 10,430 vBP</p> <p>HEAVY LIQUEFACTION A: recorded at several sites over an area of 320x100 km B: multiple phases recorded at some sites C: liquefaction event dated at the autumn of varve 10,430 vBP</p> <p>STRONG TSUNAMI EVENT A: recorded at several sites over 300x400 km B: wave height of 15-20 m with opening of the Narke Straight allowing marine water to enter the Baltic (the Yoldia Sea) C: the tsunami is dated at the autumn of varve 10,430 vBP</p> <p>EXTENSIVE TURBIDITE A: recorded at numerous sites of varved clay B: extending over an area of 200x320 km C: dated exactly at varve 10,430 vBP</p> <p>MAGNETIC GRAIN ROTATION A: "seisomagnetization" over 500x600 km B: 90° polarity rotation over 18 varves</p>	<p>PRIMARY THRUST FAULT ~20 m thrust, ~20° angle, ~50 m slip fault length 20-150 km</p> <p>HEAVY BEDROCK FRACTURING A: some 100 sites (49 investigated in details) over a distance of 50 km from the epicentre B: extensive rock avalanches at some sites</p> <p>EARTH SLIDES (obscured by vegetation and sediment-cover) 3-4 slides recorded at the Boda Cave and dated at 9663 vBP</p> <p>HEAVY LIQUEFACTION A: recorded at 13 sites over an area of 80x40 km B: 5 separate phases recorded at 2 independent sites C: liquefaction event dated at varve 9663 vBP</p> <p>STRONG TSUNAMI EVENT A: recorded at 14 sites over an area of 175x25 km (probably 300 km south and east, too) B: wave-height at least 15 m C: tsunami event dated at varve 9663 vBP and 9150 C14-years BP</p> <p>EXTENSIVE TURBIDITE A: recorded at 25 varved clay sites in the near field and several additional sites in the far field B: extending over an area of 310 km in N-S direction C: dated exactly at varve 9663 vBP</p> <p>METHANE VENTING A: recorded in the varved clay (the "spotted zone") B: the spots end sharply with varve 9663 vBP (i.e. the seabed at the time of the event) C: methane venting tectonic recorded at the Boda Cave and some other sites</p>





Nacka Tingsrätt, Punkt 24, 7/9, Nils-Axel Mörner

Bild 11

En seriös riskbedömning måste baseras på paleoseismiska data. SKB:s jordbävningsscenario behandlar paleoseismiska data på ett oacceptabelt, ovetenskapligt och klandervärt sätt. SKB anger maximalt 1 jordbävning av magnitud 6 på 100.000 år. Paleoseismiska data ger en helt annan bild (gult fält): 1000 M 6, 100 M 7, 10 M 8 och 2-3 M 9 jordbävningar. Det är **1000 miljarder mer** seismisk energi utlösning i det gula fältet än i SKB:s blåa fält.

Energy Release	Richter Scale	Earthquakes in Sweden	in Future 100,000 years	
6.6×10^{11}	9	Geologic database ↑ GEOLOGY paleoseismic field observations ↓		2-3
2.2×10^{10}	8			10
7.3×10^8	7		0,1	100
2.4×10^7	6		1	1000
8.1×10^5	5	↑ SEISMOLOGY instruments ↓ ↑ HISTORIC records (observations) ↓ SKB:s database		1000 billion times more seismic energi in yellow field
2.7×10^4	4			
9×10^2	3			
3×10	2			
1	1			

Från: Detta Eviga Avfall, 2009; Collapse, 2013