



**WORKING MATERIAL—Does not Represent U.S. GOVERNMENT POLICY  
FOR TECHNICAL REVIEW ONLY**

	<b>Wildland fire</b>	<b>Earthquakes</b>	<b>Volcanoes Volcanic ash</b>	<b>Landslides</b>	<b>Floods</b>	<b>Extreme weather</b>	<b>Tropical cyclones</b>	<b>Sea and Lake Ice</b>	<b>Coastal hazards, tsunami</b>	<b>Technological disasters, oil spills</b>
Seismicity, seismic monitoring		gap (G)	gap (G)	X					X	
Strong ground shaking, ground failure, liquefaction effects		gap (G)		X					X	
Deformation monitoring, 3-D, over broad areas		gap (G, S = InSAR)	gaps (G, S = InSAR)	X					gap (S = InSAR)	
Strain and creep monitoring, specific features or structures		gap (G, S = InSAR)	X	gap (G, S = InSAR)						
High-resolution measurements of gravity, magnetic and electrical fields		X	X							
Physical properties of earth materials (surface and subsurface)		gap (G, L)	X	gap (G, L)					X	
Characterize regional thermal emissions, flux – all time scales	X	X	X							
Detect and characterize local thermal features at varying time scales	gap (A, S)		gaps (A, S = ASTER)							X
Characterize gas emissions by species and flux		X	gaps (G, S) CO2 monitors							X

**WORKING MATERIAL—Does not Represent U.S. GOVERNMENT POLICY  
FOR TECHNICAL REVIEW ONLY**

	<b>Wildland fire</b>	<b>Earthquakes</b>	<b>Volcanoes Volcanic ash</b>	<b>Landslides</b>	<b>Floods</b>	<b>Extreme weather</b>	<b>Tropical cyclones</b>	<b>Sea and Lake Ice</b>	<b>Coastal hazards, tsunami</b>	<b>Technological disasters (oil spills, etc.)</b>
Detect and monitor smoke or ash clouds, acid and other aerosols	gap (S)		gap (S – no split window)							X
Water chemistry, natural and contaminated		X	X		X				X	X
Detect and monitor sediment, other discharges (oil, etc.) into water	X		X		X				X	X
Water levels (groundwater) and pore pressure		X		X	X					
Stream flow: stage, discharge and volume	X			X	gap (G)	gap (G)	X		X	X
Inundation area (floods, storm surge, tsunami)				X	X	X	X		gap (S= InSAR)	X
Soil moisture	X	X		gap (A ,S) passive microwave	gap (G, S) passive microwave	gap (G, S) passive microwave	X		X	
Precipitation	X		X	gap (G, S)	gap (G, S)	gap (G)	X		X	X
Characterize snow cover or ice cover: area, concentration, thickness, water content, etc.				X	gap (G)	gap (?)		gap (A,S)		
Observe snow melt, ice break up, ice jams					gap (G)	X		gap (A, S)	X	

**WORKING MATERIAL—Does not Represent U.S. GOVERNMENT POLICY  
FOR TECHNICAL REVIEW ONLY**

Navigational hazards or obstructions, including ice								gap (G, S)	X	
---	--	--	--	--	--	--	--	------------	---	--

