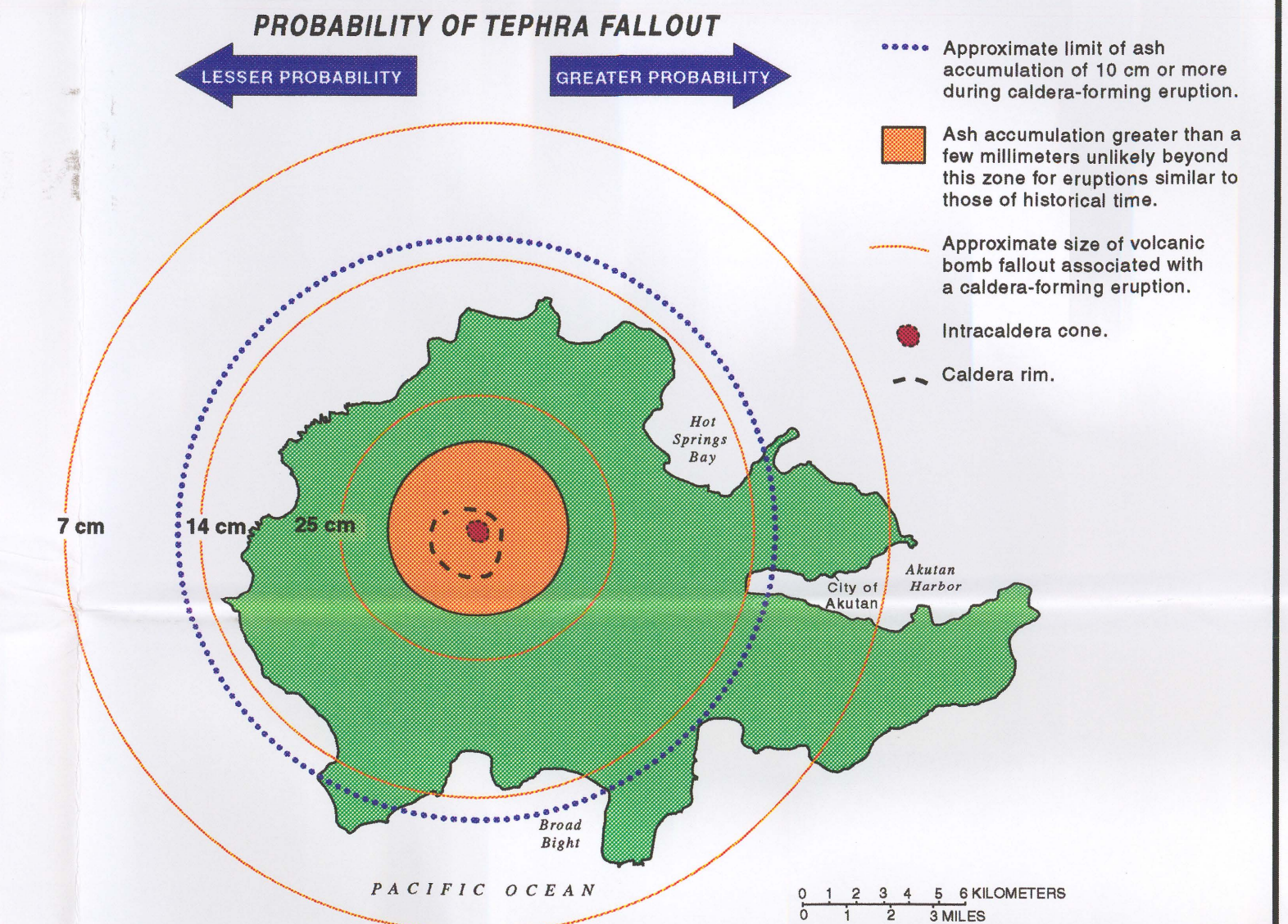
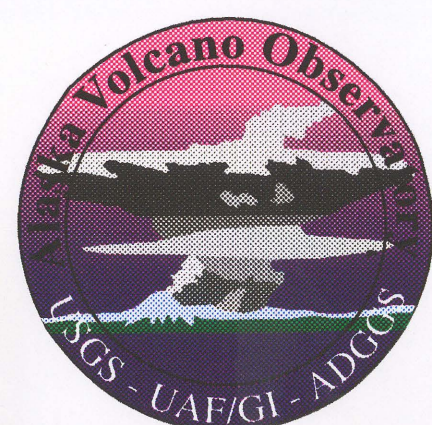
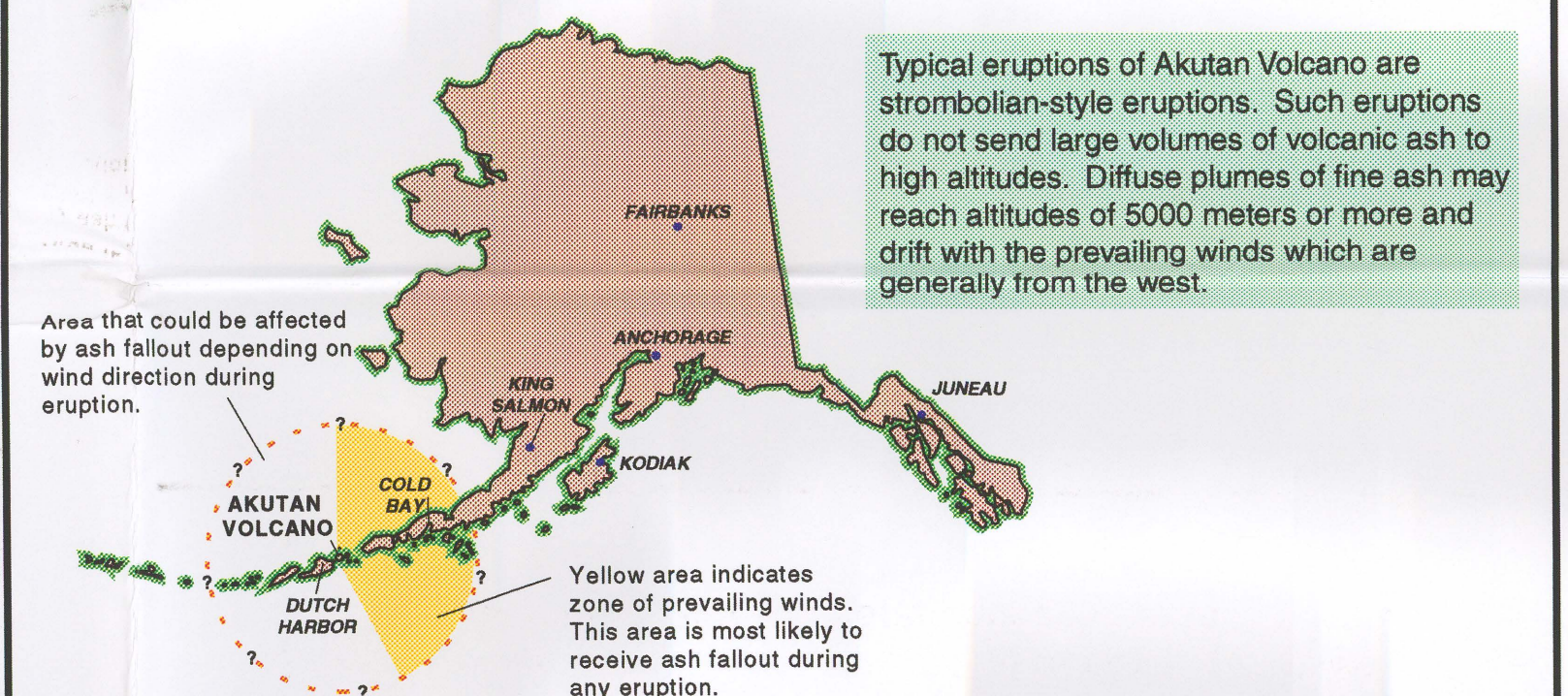


- Areas that could be inundated by lahars, lahar-runout flows, and floods during eruptions similar to the caldera-forming eruption. It is unlikely that significant parts of this zone will be inundated during smaller eruptions. Extent of lahar inundation will be less during times of low snow cover.
- Maximum(?) extent of pyroclastic flow and surge for the largest eruptions expected at Akutan Volcano.
- Approximate extent of pyroclastic flow and surge during small eruptions, similar to those that have occurred historically. Also includes areas that could be inundated by lahars during all eruptions.
- Most likely path of pyroclastic flows.
- Approximate runout limit of debris avalanche produced by failure of the caldera rim.
- Active fumarole field.
- Area that could be inundated by cohesive lahars associated with small-scale slope failure(s).
- Area of thermal springs.
- Area that could be inundated by lava flows from intracaldera eruptions or by renewed activity at Lava Point.
- Caldera margin, hachures point into crater.
- Older caldera margin (approximate).
- Intracaldera cone.
- Satellite vents and eruptive centers. The Lava Point center was probably active in the late Holocene but eruptions may have occurred here in the last 200 years. All other satellite vents and centers are no longer active and are not likely to be sites of future eruptions.
- Area of ground breakage associated with March 1996 seismic swarm. The area of ground cracks northwest of the caldera could be a site of future eruptive activity.

HAZARDS FROM VOLCANIC ASH AND BOMBS



Location and size of volcanic fallout. Volcanic bombs falling outside the caldera are generally uncommon during a typical eruption. Ash accumulation of more than a few millimeters in the Akutan Harbor area would not be expected during a typical eruption, similar to those that have happened in historical time. Arrows at top indicate the relative probability of tephra fallout as a function of the prevailing winds.



PRELIMINARY VOLCANO-HAZARD ASSESSMENT FOR AKUTAN VOLCANO, EAST-CENTRAL ALEUTIAN ISLANDS, ALASKA

by

Christopher F. Waythomas, John A. Power, Donald H. Richter, and Robert G. McGimsey

1998

