

Description and photos of AVO overflight of Redoubt Volcano and DROT, afternoon of Thursday, 3/26/2009.

Highlights: Redoubt overflight, March 26, 2009:
Game McGimsey & Chris Waythomas (both AVO/USGS)
Era Helicopters, Lambert DeGavere, pilot

Departed Anchorage International about 4:00 PM, refueled at Nikiski and headed for Redoubt.

Lower Drift River/Drift River Oil Terminal

No additional inundation around the facility. Flows associated with this eruption appear to have not been as extensive as those of March 23. The flow in Drift River is now going down Rust Slough and other channels south of DROT. No flow observed on the main stem of the Drift River, which is largely blocked by the lahars of March 23. The southwest end of the dike system surrounding the tank farm appears to be the only area near actively flowing water. It appears that some water just overtopped the dike along Rust Slough during the morning of March 26 because the overflow streaks seen in the photo are not covered with new snow, as are the other overflow streaks from 3/23. Although there has been some flow down Montana Bill Creek to the north, no water/lahar has yet reached the pipeline crossing of Montana Bill Creek, which is still frozen and snow covered.

Drift River Valley

No indications that the flows generated on March 26 were larger than those of March 22. The area of the valley inundated by the March 26 flows could be as much as 20-30% less than the flows of March 22. Boulder size particles on the channel bed were a combination of glacier ice, rock, or frozen "mud". We did not observe any steaming boulders or blocks and saw nothing obviously hot and steaming in the Drift River drainage, including on Drift glacier.

Drift Glacier

Most of the narrow part of the glacier below the large waterfall is gone and bedrock is exposed. A substantial part of the ice remaining in the canyon below the waterfall has been smoothed and fluted by water, and an ice canyon is developing. We observed a bouldery deposit covering the bedrock where ice had been eroded from Drift glacier. This deposit was cold and likely all that remains of the 1990 dome.

West Flank

Ash fall from activity on March 22, largely buried by snow. Observed small, patchy, granular pyroclastic-flow deposits in a gully on the upper west flank. These were still steaming and likely formed by column collapse this morning. A small debris flow tendril was observed extending from these PF's.

Southwest Flank

Continuous ash mantle from March 26 AM eruptions over most of the south-southwest flank. Landed in the upper Crescent River drainage and collected ash sample, about 1 cm thick on snow, mostly silt sized medium grey ash with small granule sized lapilli. Ballistic impact craters on upper southwest flank.

Crescent River Valley

Although we did not fly down the Crescent River valley we could clearly see a continuous ash cover all the way to the coast



Drift River Valley

Rust Slough

Drift River



Photo by Game McGimsey, AVO/USGS, 3/26/2009 5:49 pm



Photo by Game McGimsey, AVO/USGS, 3/26/2009 5:50 pm



Photo by Game McGimsey, AVO/USGS, 3/26/2009 5:50 pm



Photo by Game McGimsey, AVO/USGS, 3/26/2009 4:12 pm



3/23 debris
against N dike

3/23 debris
against E dike