| Dive No. | K 210 | Date | 2001/09/05 |
|---|---|---|---|
| PI | Name | Affiliation | |
| Japanese | 中川 光弘 | 北海道大学地球科学 | |
| English | Mitsuhiro Nakagawa | Department of Earth & Planetary Sciences, Hokkaido University | |
| Specialty | Petrology, Volcanology and Geochemistry | | |
| Purpose | Geological mapping and rock sampling | | |
| Area | South Kona landslide | | |
| Site | Steep slope of bench | | |

| | Latitude | Longitude | Time | Depth |
|---|---|---|---|---|
| Landing | 18° 53.21’ N | 156° 3.8’ W | 09:30 | 3918 m |
| Leaving | 18° 54.00’ N | 156° 2.36’ W | 14:32 | 2784 m |

| Dive Distance | 2900 m | Deepest point | 3918 m |
|---|---|---|---|

| Dive summary | The South Kona landslide from Mauna Loa volcano can be divided into two, the outer and inner areas. The dive K-210 investigated the slope of the bench in the inner area. The slope is mainly composed of debris flow deposits often with massive sandstone and hyaloclastite layers, striking NE and dipping E. These deposits show fractured structure, and jigsaw like crack is commonly observed, suggesting these have been deformed before emplacement. Nearly top of the bench is covered by hyaloclastite dipping nearly flat. Blocks in the debris flow deposits are mainly lavas, showing subrounded shapes with various vesicularity. Oxidized blocks are also found. No pillow lavas are recognized. These suggest that lavas are derived from subaerial eruption. The lavas are aphyric to porphyritic olivine basalt, which must be relatively earlier lavas of Mauna Loa volcano. |
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| Payload | 1 sample basket (large), 1 sample box (small), 4 push core sampler |
| Visual Records | VTR (Broadcasting grade), VTR (center, right & left), Still camera: 296 |
| Sample | Rocks: 24 (two samples were lost during ascending), Cores: 3 |
| Video highlights | (1) 9:37 – 9:48 (2)11:01 – 11:44 (3) 12:53 – 12:55 (4) 14:20 – 14:28 |
| Key words | South Kona, Mauna Loa. landslide, debris flow, jig-saw crack |