**Supplementary Table S1. Samples and outcrop descriptions of the rhyolites and associated rocks around Rajula-Savarkundla-Gariyadhar-Talaja towns, southeastern Saurashtra, Deccan Traps**

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| Sample No. | Sample location | Sample coordinates | Rock type | Remarks |
| RJ21/01 | ~0.5 km N of Kagvadar, on highway to Una (nallah bed under overbridge) | N 20° 58’ 02.0”, E 71° 22’ 49.4”, el. 24 m | Pitchstone | Black, fresh and shiny, rather like obsidian. Strike N0°, dip 25° E based on joint planes. The same eruptive unit as SS3 of Kshirsagar et al. 2012 BV with major oxide analysis. |
| RJ21/02 | Pitchstone | Altered, highly spherulitic, green. The same unit as SS4 of Kshirsagar et al. 2012 BV with major oxide analysis.  |
| RJ21/03 | Pitchstone | Lithophysae in pitchstone. |
| RJ21/04 | 108 m conical hill near Barman Nana | N 20° 57’ 35.3”, E 71° 18’ 34.4”, el. 57 m | Tuff, rhyolitic or andesitic | Greyish white, soft, low-density, abundant white plagioclase phenocrysts |
| RJ21/05 | N 20° 57’ 31.7”, E 71° 18’ 32.8”, el. 53 m | Rhyolite dyke | Rhyolite dyke intruding tuff. Dyke strikes N215°, dips 80° W.  |
| RJ21/06 | N 20° 57’ 27.4”, E 71° 18’ 32.4” | Rhyolitic tuff breccia | Angular fragments in very cherty ash matrix. |
| RJ21/07 | 83 m hill next to Barman Nana water tank | N 20° 57’ 43.1”, E 71° 18’ 53.8”, el. 83 m (summit) | Rhyolitic lapilli tuff | Dark grey with white fragments (pumice?). Also some mafic enclaves (xenoliths?).  |
| RJ21/08 | Rhyolite, lava-like | Dark brown, highly feldspar-phyric. |
| RJ21/09 | Rhyolitic lapilli tuff | Possible accretionary lapilli in rhyolitic tuff. |
| RJ21/10 | 87 m hill ~3 km west of Barman Nana | N 20° 57’ 38.5”, E 71° 17’ 23.0”, el. 74 m  | Rhyolitic tuff breccia | Strike N65°, dip 50° N (not clear if fractures or bedding). Centimeters-thick, short, ~N-S rhyolitic dykelets. |
| RJ21/11 | 66 m mound east of 87 m hill and west of Barman Nana | N 20° 57’ 39.7”, E 71° 17’ 56.4”, el. 52 m | Rhyolitic tuff breccia |  |
| RJ21/12 | Khalsa Kanthariya Ridge (summit 88 m), with villages Khalsa Kanthariya at its S end and Koli Kanthariya to its east | N 20° 58’ 36.4”, E 71° 20’ 46.1”, el. 64 m | Dacite, lava-like, rheomorphic | Medium brown dacite, light grey on fresh faces, with fairly abundant small phenocrysts of white feldspar, and in all this resembling the grey porphyritic rhyolite of Alech Hills. Unit overlies a basaltic lava flow, with NNE strike and ESE dip. The same unit as SS2 of Kshirsagar et al. 2012 BV with major oxide analysis.  |
| RJ21/13 | N 20° 58’ 41.9”, E 71° 20’ 53.2”, el. 44 m | Dacite, basal autobreccia | Up to a few meters thick, in abandoned quarry pit at N end of ridge. Large light grey fragments in dark matrix. Overlies basaltic lava flow RJ21/14. Compact, jointed, dark red bole along contact? Relationships unclear. |
| RJ21/14 | Basaltic lava flow underlying RJ21/13 | Columnar sheet lobe with spheroidal weathering. One fresh spheroid sampled. |
| Not sampled | Mahadev ni Dhar (56 m mound), Sarovda | N 20° 58’ 59.4”, E 71° 21’ 25.6”, el. 51 m | Rhyolitic tuff breccia | Bedding strikes N75° and dips 85°N and resembles metamorphic foliations. Mound elongated parallel to it. |
| RJ21/15 | 112 m hill ~1 km NW of Katar, on Dedan road | N 21° 00’ 30.3”, E 71° 19’ 50.3”, el. 98 m | Dacite, lava-like, rheomorphic | Isolated hill ~1 km W of N end of Barman Mota Ridge. Expected to be the same unit as the latter. Good columnar jointing. |
| RJ21/16 | Barman Mota Ridge (summit 135 m) | N 21° 00’ 04.4”, E 71° 20’ 02.0”, el. 127 m | Dacite, lava-like, rheomorphic | Medium brown dacite, light grey on fresh faces and with fairly abundant small phenocrysts of white feldspar, in all this resembling the grey porphyritic rhyolite of Alech Hills. Unit overlies a basaltic lava flow, with NNE strike and ESE dip. Good columnar jointing. Same unit as SS1 of Kshirsagar et al. 2012 BV with major oxide analysis. Also described in Sheikh et al. 2020 BV. |
| RJ19/02 | Barman Mota Ridge | N 20° 58’ 57.5”, E 71° 19’ 28.2”, el. 117 m | Dacite, lava-like, rheomorphic | The same unit as RJ21/16. |
| RJ21/17 | ~1 km NW of Katar | N 21° 00’ 26.8”, E 71° 19’ 59.3”, el. 70 m | Basaltic lava flow | Columnar-jointed sheet lobe.  |
| RJ21/18 | ~2 km NW of Katar | N 21° 00’ 50.1”, E 71° 19’ 40.6”, el. 71 m | Rhyolite, lava-like, rheomorphic | Overlies basalt RJ21/19. Maybe RJ21/15 and RJ21/16? |
| RJ21/19 | N 21° 00’ 50.1”, E 71° 19’ 40.6”, el. 71 m | Basaltic lava flow | Sheet lobe underlying rhyolite RJ21/18. Secondary minerals.  |
| Not sampled | 71 m hill between Khalsa Kanthariya and Barman Mota ridges | N 20° 58’ 22.7”, E 71° 20’ 19.7”, el. 77 m | Dacite/rhyolite, rheomorphic and autobrecciated | Probably the same unit as RJ21/12 (Khalsa Kanthariya) and RJ21/16 (Barman Mota), meters-long flow bands but mainly breccia/autobreccia with a preserved vertical thickness of ~20 m. Fragments flow-banded and vesicular. Surrounding fields are probably in basaltic lava flows. |
| Not sampled | ~2 km SE of Samadhiyala | N 21° 02’ 31.3”, E 71° 20’ 17.3”, el. 120 m | Basaltic lava flow | Kilometers-long, segmented ridge of basalt with N30° trend, with huge abandoned quarry in its SE side. |
| RJ21/20 | N 21° 02’ 19.5”, E 71° 20’ 42.4”, el. 82 m | Rhyolite, lava-like, rheomorphic | Glass-rich rhyolite with mm-scale flow banding, resembles several Osham flow-banded rhyolites and pitchstones. Field relations not clear. |
| RJ21/21 | Rhyolite, lava-like, rheomorphic | Altered, spherulitic. Bands of tuff in flow-banded rhyolite, suggesting a lava-like ignimbrite with varying welding intensity. Field relations unclear. |
| Not sampled | N 21° 02’ 08.3”, E 71° 20’ 38.7”, el. 80 m | Basaltic lava flow | Low ridge of basalt SW of RJ21/21, one of several.  |
| Not sampled | 1 km NE of Samadhiyala | N 21° 03’ 28.6”, E 71° 20’ 01.8”, el. 127 m | Basaltic lava flow | High hill, one of many NE-SW-striking cuesta ridges in line. This location is exactly N of the N end of Barman Mota Ridge. Rhyolite shown by Misra 1981 is absent. Good exposures of small-scale compound pahoehoe basalts in river canyons at Samadhiyala and from there to Nesdi. |
| RJ21/22 | ~1 km N of Adsang | N 21° 07’ 57.6”, E 71° 20’ 25.7”, el. 167 m | Basaltic dyke (multiple-injection) | Dyke strikes N30°, dips 75° NW. Easternmost injection sampled.  |
| Not sampled | Just SW of Adsang | N 21° 07’ 06.6”, E 71° 20’ 37.9”, el. 153 m | Basaltic lava flows | SE shore of lake exposes small-scale compound pahoehoe lava lobes and toes and an ‘a’a flow with flow-bottom breccia and dense core. |
| RJ21/23 | Just out of Ghanshyamnagar, to SW, ~2 km S of Adsang | N 21° 06’ 44.6”, E 71° 20’ 21.4”, el. 157 m | Lithophysae in rhyolite | Very abundant, sizes < 1 cm to ~6 cm, including intergrown ones. |
| RJ21/24 | Rhyolite, lava-like, rheomorphic | Glass-rich brown rhyolite, with mm-scale flow bands. |
| RJ21/25 | Basaltic lava flow | Very fine-grained, dark brown, tuffaceous rhyolite under rhyolite RJ21/24. |
| RJ21/26 | ~1.5 km SW of Ghanshyamnagar  | N 21° 06’ 27.8”, E 71° 20’ 02.5”, el. 152 m | Rhyolite, lava-like, rheomorphic | Pinkish red, banded. |
| RJ21/27 | Rhyolite, lava-like | With mm-size spherulites or lithophysae or accretionary lapilli? |
| Not sampled | Ghanshyampara, ~2.5 km SW of Ghanshyamnagar | N 21° 06’ 01.8”, E 71° 19’ 59.8”, el. 144 m | Rhyolitic breccia | Yellow-brown to black, highly weathered. Poorly exposed, jointed basaltic dyke intrudes it.  |
| Not sampled | Vavdi | N 21° 05’ 22.5”, E 71° 21’ 25.5”, el. 123 m | Basaltic lava flow | 123 m hillock with water tank on top. Basaltic lava flows form this and cuestas all around. |
| Not sampled | NNE of Vavdi | N 21° 05’ 57.1”, E 71° 21’ 41.6”, el. 118 m | Basaltic lava flow | N35°-trending ridge. |
| Not sampled | N 21° 06’ 09.4”, E 71° 21’ 36.5”, el. 115 m | Basaltic dyke | Small basaltic dyke with typical cubical jointing. |
| Not sampled | 3 km SW of Vavdi, at bend in Raydi River | N 21° 03’ 49.4”, E 71° 20’ 30.3”, el. 96 m | Basaltic lava flow | Good plan views of small-scale compound pahoehoe basaltic lava flow. Marked as rhyolite by Misra 1981. Fragments of gabbro on basalt outcrop but no in situ gabbro exposure. |
| Not sampled | Moti Kherali Ridge (summit 174 m) at Barbtana, ~1.9 km NE of Rajula Road (Rajula Junction) railway station. ~8 km from Rajula city | N 21° 06’ 45.5”, E 71° 29’ 35.4”, el. 82 m | Basaltic lava flow | Forms the base of the ridge. Upper contact is at N 21° 06’ 44.0”, E 71° 29’ 39.2”, el. 111 m. |
| RJ21/28 | N 21° 06’ 45.2”, E 71° 29’ 41.2”, el. 111 m | Vitrophyre (altered) | Green-grey altered vitrophyre overlying lapilli tuff RJ21/28A.  |
| RJ21/28A | N 21° 06’ 45.0”, E 71° 29’ 42.9”, el. 110 m | Rhyolitic lapilli tuff | Lapilli tuff underlying altered vitrophyre RJ21/28. Crystal-rich and vitric-rich (pumice-rich) tuff like the ash beds of Pavagadh. Apparently passes laterally into eutaxitic ignimbrite RJ21/28B.  |
| RJ21/28B | Rhyolite, eutaxitic | Ignimbrite of Krishnamacharlu 1974 Geol. Mag. Apparently a lateral equivalent of RJ21/28A. |
| RJ21/29 | N 21° 06’ 44.0”, E 71° 29’ 40.0”, el. 116 m | Rhyolite, red, lava-like, rheomorphic | With lithophysae and a few mafic enclaves. |
| RJ21/30 | N 21° 06’ 44.0”, E 71° 29’ 40.0”, el. 116 m | Vitrophyre  | Patches of fresh vitrophyre within rheomorphic rhyolite RJ21/29. RJ21/30 is apparently the same unit as altered vitrophyre RJ21/28, both of which overlie the lapilli tuff RJ21/28A and eutaxitic ignimbrite RJ21/28B.  |
| RJ21/31 | N 21° 06’ 53.1”, E 71° 29’ 37.5”, el. 79 m | Rhyolitic dyke | Low N50°-trending ridge next to cotton processing factory. Cubical jointing. |
| RJ21/32 | Moti Kherali Ridge, ~1.5 km SE of Moti Kherali towards Doliya | N 21° 07’ 28.0”, E 71° 31’ 15.0”, el. 83 m | Rhyolite, lava-like, rheomorphic  | Very large abandoned quarry. Rhyolite resembles that of the Rajula quarries, being golden yellow when weathered and light grey on fresh surfaces. Flow banding only, no folds, flow bands dip 15° SSE. Rhyolite seen to overlie basaltic lava flow closer to Moti Kherali. |
| RJ21/33 | N 21° 07’ 19.7”, E 71° 31’ 20.4”, el. 77 m (base)  | Rhyolite, lava-like, rheomorphic | Hillock with cut face. The same unit as RJ21/32 which is ~150 m away but showing exquisite flow-folding of various types. Potential geosite. GPS up the hill N 21° 07’ 18.1”, E 71° 31’ 20.2”, el. 80 m. A few small lithophysae found only in the soil (not in situ), all broken. |
| RJ21/34 | Moti Kherali Ridge, at Babariyadhar (Somnath Mahadev temple) | N 21° 08’ 31.1”, E 71° 32’ 42.0”, el. 133 m | Altered basalt | Ridge next to and SW of Babariyadhar electric power station. Sampled ~10 m below basalt-rhyolite contact along staircase. Rhyolite has flow banding (strike N50°, dip 46° due SE) and well-developed columnar jointing. Could not sample due to temple but well sampled at other places along the same ridge. |
| RJ21/35 | Navagam-Meriyana | N 21° 09’ 53.8”, E 71° 31’ 49.1”, el. 130 m | Rhyolitic dyke | N40° trend and subvertical, several meters wide, subvertical flow banding. Abundant feldspar phenocrysts and fewer of dark quartz. Host rock is basalt. |
| RJ21/36 | Vitrophyre  | Small outcrops on S margin of rhyolitic dyke RJ21/35. |
| RJ21/37 | Masundada, near Balapar | N 21° 07’ 53.5”, E 71° 33’ 58.0”, el. 76 m | Rhyolite | Low ridge of rhyolite. Possibly SE part of Moti Kherali Ridge. |
| RJ21/38 | Mota Asrana (summit 118 m) | N 21° 09’ 19.5”, E 71° 36’ 15.5”, el. 105 m | Rhyolite, pink-red, lava-like, rheomorphic | Ridge with large temple. Sampled 50-60 m from temple gate, highly feldspar-phyric. Eastern extension of Moti Kherali Ridge. |
| RJ21/39 | Moti Vadal | N 21° 11’ 27.7”, E 71° 33’ 02.5”, el. 121 m | Rhyolite dyke  | Dyke SS34 of Cucciniello et al. 2020 Lithos, with major and trace elements and Sr-Nd isotopes available. Numerous mafic enclaves.  |
| RJ21/40 | ~3 km N of Mandal | N 21° 07’ 32.6”, E 71° 35’ 25.0”, el. 72 m | Rhyolite | Exposed on the banks of a small pond east of road to Mota Asrana, across from temple on the west. Light greenish grey colour. Surrounding basalts have good secondary minerals.  |
| RJ21/41 | Vitrophyre | Chilled base of rhyolite RJ21/40. Vitrophyre looks surprisingly like a coarse ultramafic rock, especially lherzolite. |
| RJ21/42 | Doliya | N 21° 06’ 12.7”, E 71° 32’ 30.9”, el. 58 m | Vitrophyre | ~50 m S of mobile phone tower outside and SW of the village. Flat fields all around in a wide countryside without outcrops. Maybe the same unit as RJ21/41? |
| RJ21/43 | Just south of Kundaliyala | N 21° 04’ 46.6”, E 71° 30’ 02.5”, el. 40 m | Rhyolite | In abandoned quarry pit on banks of large pond. Red-brown and highly weathered. |
| RJ21/44 | Vitrophyre | Yellow-weathered on exposed surface, short vertical columns (top eroded), chilled top of rhyolite RJ21/43. |
| RJ21/45 | SW of Kundaliyala and ~1km ENE of Zanzarda | N 21° 04’ 35.2”, E 71° 29’ 35.3”, el. 60 m | Rhyolite | Low rhyolite ridge with ~N75° trend. Highly porphyritic rhyolite with abundant fragments or xenoliths of vitrophyre? |
| RJ21/46 | ~1 km SW of Zanzarda | N 21° 04’ 00.3”, E 71° 28’ 50.5”, el. 66 m | Rhyolite, lava-like, rheomorphic | Ridge extensively quarried in the past. Relationship of rhyolite (forming upper parts and lower) and vitrophyre (below) unclear. |
| RJ21/47 | Vitrophyre | Unclear relationship with rhyolite RJ21/46. |
| RJ19/01 | Rajula quarries (summit 74 m) | N 21° 01’ 56.8”, E 71° 26’ 14.5”, el. 46 m | Rhyolite, lava-like, rheomorphic | Same unit/outcrop as SS11 of Kshirsagar et al. 2012 BV with major oxide analysis. |
| RJ21/48 | 41 m hill west of Dhantarvadi River, ~1 km WSW of Hindorna | N 21° 00’ 22.7”, E 71° 25’ 29.6”, el. 43 m | Rhyolite, lava-like, rheomorphic | Dark, nearly black surface in roadcut. Has a few fiamme and rhyolitic blocks in highly flow-banded (on mm-scale) rhyolite. Also several white feldspar phenocrysts. Simple to complex folding everywhere, resembling several Osham rhyolites. The same unit/outcrop as SS5 of Kshirsagar et al. 2012 BV with major oxide analysis. |
| RJ21/49 | 51 m hill west of Dhantarvadi River, ~1.8 km SW of Hindorna | N 20° 59’ 51.8”, E 71° 25’ 10.7”, el. 47 m | Rhyolitic autobreccia | Complex flow folding in rhyolite at N 20° 59’ 52.5”, E 71° 25’ 10.1”, el. 47 m, location ~150 m S30°W of water tank. Sample RJ21/49 from possible autobreccia of flow-banded and -folded lava-like rhyolite. Includes clasts of whitish tuffs. Base not exposed, may be internal breccias rather than basal. |
| Not sampled | Near Rajula, on road to Khambhaliya and Dungar | N 21° 02’ 32.8”, E 71° 27’ 37.2”, el. 45 m | Rhyolitic breccia | May be pyroclastic, or autobreccia belonging to the next outcrop. |
| Not sampled | Near Rajula, ~100 m inside from previous location | N 21° 02’ 30.2”, E 71° 27’ 38.0”, el. 42 m | Rhyolite, lava-like, rheomorphic | Exquisite flow folding in cut face but place not clean. |
| Not sampled | Stream bed ~1 km from previous location, near Khambhaliya | N 21° 02’ 08.0”, E 71° 29’ 10.6”, el. 25 m | Rhyolite, lava-like | Within wide area that has no distinctive landmarks. Blocky-fractured, dyke-like appearance.  |
| Not sampled | Near Khambhaliya | N 21° 02’ 03.2”, E 71° 28’ 54.0”, el. 31 m | Basaltic lava flow | Columnar-jointed basaltic sheet lobe exposed in field, with lots of beautiful secondary minerals. |
| RJ21/50 | Chhatadiya-Khambhaliya Ridge (summit 56 m) | N 21° 01’ 43.3”, E 71° 28’ 16.6”, el. 35 m | Rhyolite, lava-like | Maroon red colour. No flow banding. Three large-scale joint sets (strike and dip N80° and 20° S, N20° and 80° NW, N45° and 70° SE). |
| Not sampled | Hindorna Hill (71 m) | N 21° 00’ 47.7”, E 71° 25’ 53.9”, el. 52 m | Rhyolite, lava-like, rheomorphic, with autobreccia | Breccia/autobreccia below exposed base of extensively flow-banded and flow-folded rhyolite. |
| RJ21/51 | Khakhbai Hill(60 m) | N 21° 00’ 52.8”, E 71° 25’ 02.9”, el. 58 m | Vitrophyre (altered) | Overlies basalt (not sampled) and underlies fresh vitrophyre RJ21/52.  |
| RJ21/52 | N 21° 00’ 53.2”, E 71° 25’ 02.9”, el. 58 m | Vitrophyre | Between altered vitrophyre RJ21/51 (below) and rhyolite RJ21/53 (above), is apparently the fresh upper part of the altered vitrophyre below.  |
| RJ21/53 | N 21° 00’ 53.3”, E 71° 25’ 03.1”, el. 61 m | Rhyolite | Brown. Overlies pitchstone RJ21/52. |
| RJ21/54 | Bhaguda Hill (97 m), N end | N 21° 15’ 08.7”, E 71° 53’ 43.6”, el. 97 m | Rhyolite, red, lava-like, rheomorphic | Same as BGD19/01. |
| RJ21/55 | N 21° 15’ 08.4”, E 71° 53’ 42.7”, el. 90 m | Vitrophyre | 10 m below summit. Same as BGD19/02. |
| RJ21/56 | N 21° 15’ 08.0”, E 71° 53’ 42.3”, el. 86 m | Rhyolite, green, eutaxitic | Ignimbrite. Same as BGD19/03. Underlies the vitrophyre RJ21/55. |
| BGD19/04 | Between Bhaguda and Longdi | N 21° 13’ 42.7”, E 71° 53’ 25.5”, el. 41 m | Lithophysae | Various sizes, in pale green tuff forming fields 3 km S of Bhaguda and 2 km N of Longdi. |
| RJ21/57 | Sakhpur Ridge (summit 198 m) at Nana Rajkot | N 21° 34’ 28.2”, E 71° 33’ 00.1”, el. 130 m | Rhyolitic tuff breccia, pale cream to white | Ridge of rhyolitic tuff breccias with angular pyroclasts up to several cm in size within fine ash-sized matrix. Completely unsorted and massive without bedding and extensively silicified. Subvertical contact with small-scale compound pahoehoe basaltic lava flow. Sampled ~100 m SW of Khodiyar Mata temple outside Nana Rajkot.  |
| RJ21/58 | Rhyolitic tuff breccia | Another sample. |
| RJ21/59 | Sakhpur Ridge at Sakhpur  | N 21° 33’ 38.6”, E 71° 31’ 22.3”, el. 124 m | Rhyolitic tuff breccia | Ridge of rhyolitic tuff breccias with angular pyroclasts up to several cm in size within fine ash-sized matrix. Completely unsorted and massive without bedding and extensively silicified. |
| Not sampled | Sakhpur Ridge (S end), 149 m hill ~2 km E of Bhoringda  | N 21° 30’ 10.2”, E 71° 28’ 56.5”, el. 112 m | Rhyolitic tuff breccia | As above and very densely forested. |
| RJ21/60 | Bovadi Ridge (summit 172 m) at Bhoringda police checkpost (N end)  | N 21° 29’ 43.0”, E 71° 29’ 17.6”, el. 110 m | Rhyolitic tuff breccia | Ridge of rhyolitic tuff breccias with angular pyroclasts up to several cm in size within fine ash-sized matrix. Completely unsorted and massive without bedding and extensively silicified. Ridge appears to be en echelon with and S of Sakhpur Ridge. |
| RJ21/61 | Bovadi Ridge at Bovadi | N 21° 27’ 08.3”, E 71° 28’ 24.5”, el. 114 m | Rhyolitic tuff breccia | As above and with Khodiyar Mata temple on top. |
| Not sampled | Bovadi Ridge segment at Hathila ni Vav  | N 21° 25’ 06.7”, E 71° 26’ 57.5”, el. 91 m | Rhyolitic tuff breccia | As above and with Chamunda Mata temple on top.  |
| Not sampled | Bovadi Ridge segment at Dhar  | N 21° 23’ 22.3”, E 71° 25’ 23.3”, el. 96 m | Rhyolitic tuff breccia | As above and very densely forested. |
| RJ21/62 | Bovadi Ridge segment at Mota Zinzuda | N 21° 20’ 24.3”, E 71° 22’ 45.7”, el. 173 m | Rhyolitic breccia or bleached, altered basalt? Light grey | As above and with Khodiyar Mata temple on top. |
| RJ21/63 | Rhyolitic tuff breccia, red-brown | As above |
| Not sampled | Talaja Hill (119 m) | N 21° 21’ 16.9”, E 72° 01’ 59.6”, el. 119 m | Pumice blocks and rhyolitic tuff-breccias | Large pumice blocks and ash blocks tens of cm to meters in size, angular fragments up to several cm in size, within fine ash-sized matrix. Completely unsorted and massive breccias and tuff breccias without bedding. Rare small spherulites. Extensively silicified. Jain temples on hill. |
| ESD9, ESD9N, ESD9NB | Devgana Ridge at Devgana village ~12 km SE of Sihor town | N 21° 38’ 04.6”, E 72° 01’ 01.4”, el. 140 m  | Rhyolitic tuff breccia | N-S ridge of rhyolitic tuff breccias with angular pyroclasts up to several cm in size within fine ash-sized matrix. Completely unsorted and massive without bedding and extensively silicified. Temple on top. Tuff breccias are samples ESD9 (Kshirsagar et al. 2012 BV with major oxide analysis) and ESD9N (December 2019 sampling, coordinates given on the left). The tuff breccias are intruded by basaltic dyke ESD9B, exposed at N 21° 38’ 01.4”, E 72° 01’ 03.6”, el. 135 m. Dyke strikes N320o and dips 42o NE.  |
| SS20-21-22 | Chhapariyali, south of Jesar | N 21° 18’ 22.0”E 71° 40’ 07.5”el. ~165 m | Rhyolite dyke  | N57o rhyolite dyke (SS20) with an intensely spherulitic axial part (SS21) and vitrophyre portions (SS22) within the axial part. Dyke contains basaltic enclaves and a gabbroic crystal cargo. Belongs to the SE Saurashtra dyke swarm. Mineral chemical and whole-rock major and trace element data (SS20-21-22) and Sr-Nd isotopes (SS22) are in Cucciniello et al. 2020 Lithos and Sheikh et al. 2023 Geochemistry.  |
| SS25 | SW of Tantaniya | N 21° 16’ 07.9”E 71° 39’ 01.2”el. 148 m | Rhyolite dyke | N60o rhyolite dyke, medium-grey, feldspar-phyric, a few mafic enclaves. Belongs to the SE Saurashtra dyke swarm (major and trace element data and Sr-Nd isotopes are in Cucciniello et al. 2020 Lithos). |
| SS28 | Near Kotamoi, on road to Sedarda | N 21° 15’ 23.1”E 71° 40’ 32.9”el. 118 m | Rhyolite dyke  | N60o rhyolite dyke, pink to light brown, with a few mafic enclaves (SS29). Belongs to the SE Saurashtra dyke swarm (major and trace element data and Sr-Nd isotopes are in Cucciniello et al. 2020 Lithos). |
| SS34 | Moti Vadal | N 21° 11’ 27.7”, E 71° 33’ 02.5”, el. 121 m | Rhyolite dyke  | Dyke RJ21/39 of 2021 field trip, with numerous mafic enclaves (SS35). Belongs to the SE Saurashtra dyke swarm (major and trace element data and Sr-Nd isotopes are in Cucciniello et al. 2020 Lithos). |