Glacial striae, roches moutonnées and ice movements on Suðuroy (Faeroe Islands)

(with accompanying map)

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The pre-Quaternary geology of the Faeroe Islands has recently been an object of increased geological research and systematic geological mapping. However, with the exception of a few minor publications of more recent date, our knowledge of the Quaternary geology of the Faeroes is still based on works dating from the last century.

The first person to describe glacial phenomena on the Faeroes, although without ascribing them to glacial action, was Allan (1814). He describes furrows in the bedrock and polished bedrock exposures near the settlement of Eiði, and comments that heavy objects must have moved across the surface. Chambers (1856) describes striae from Vestmanna and Eiði and discusses them as originating from glacial action. He is of the opinion that the islands have been covered by ice coming from the north. However, the principal geological works from the last century are those of Amund Helland and James Geikie.

Helland (1879, 1880) describes both striae and roches moutonnées, and his paper is accompanied by a map showing the directions of ice movement. He shows that the Faeroes have had a local glacial covering, and that the observed roches moutonnées indicate that the glaciers moved outwards in every direction from the islands. He estimates that the northerly islands must have had ice cover to a height of about 500

meters, while on Suðuroy he has observed moutonnée surfaces at heights of up to 440 meters.

Geikie's paper (1880) is also accompanied by a map showing roches moutonnées and glacial striae, demonstrating that the Faeroes have had a local glaciation. He shows that on Suðuroy the glaciers moved eastwards and westwards, although at Hvalbiarfjørður he has only observed roches moutonnées indicating ice movement from east to west.

Grossman & Lomas (1895) mention striae, roches moutonnées, cirques and glacial deposits on the Faeroes. From Suðuroy they mention striae and roches moutonnées along Trongisvágsfjørður. Like Geikie and Helland, they consider the Faeroes to have been locally glaciated, with the ice reaching a height of about 500 m., so that the highest peaks emerged as nunataks. They do not think that the valleys and fjords were created by the ice, but rather that the ice modified pre-Glacial valleys.

With respect to the extent of the ice cover beyond the present coastline, more recent investigations and counts of glacial erratics on the sea-bed southeast of the Faeroes have shown that the ice covered the entire Faeroes shelf in this area, but that the shelf ice was rather thin (Waagstein & Rasmussen 1975).

The following account of the ice movements on Suðuroy, which is based on observations of striae and roches moutonnées, forms part of a more extensive investigation into ice movements on the Faeroes which is in progress under the auspices of the Geological Survey of Denmark. Fieldwork has been carried out by the authors and by Peter B. Konradi, whose observations are included in this article.

The pre-Glacial geology and major landscape features of the Faeroes.

Geologically, the Faeroes belong to the North Atlantic or the Brito-Arctic basalt province, and thus comprise the remains of a basalt plateau whose formation commenced in the Lower Tertiary. The total thickness of the basalt plateau is about 3000 m., and it may be divided into 6 sections which reflect the progress of volcanic activity and the chronological age of the series: 1. the lower basalt series (ca. 900 m.), 2. the coalbearing sequence, 3. the tuff-agglomerate zone, 4. the middle basalt series (ca. 1350 m.), 5. the upper basalt series (ca. 675 m.), and 6. minor intrusions (Rasmussen & Noe-Nygaard 1969, 1970).

The major landscape features are strongly influenced by the structures in the three basalt series mentioned above, so that each of them has its characteristic landscape type.

The lower basalt series is built up of thick, compact lava flows with an average thickness of ca. 20 m. The flows are separated by intercalated, less resistant tuff-clay strata. Weathering thus produces a broad step-like landscape, with steep terminations of exposed basalt flows and evenly-sloping vegetation-clad surfaces.

In the middle basalt series the lava streams are thin, with extremely porous intermediate zones, and the series is thus very little resistant to weathering processes. As these processes are more severe at higher altitudes, the washing-down of weathered material will result in a smooth, convex land form, since the streams are usually so thin that they rarely occur as lava benches.

In the upper basalt series we again find the structure of the lower series: alternating layers of basalt and tuff, but since neither the basalt nor the tuff layers are as thick here as in the lower series, the step-like landscape here is made up of smaller steps.

Where they occur, the coal-bearing sequence and the tuffagglomerates form uniform, vegetation-clad slopes between the lower and the middle basalt series.

Suðurov.

Suðuroy is the most southerly of the Faeroe Islands, about 32 km. long, with a maximum breadth of about 13 km. It has an area of about 166 km².

The west coast, which follows an approximately straight line NW—SE, is mostly steep and inaccessible, while the east coast is dissected by many deep inlets: Sandvík, Hvalbiar-fjørður, Trongisvágur, Hovsfjørður and Vágsfjørður, which continue inland as broad, gently rising valleys, all of them except Hovsfjørður reaching almost to the west coast.

The dip on Suðuroy is generally north-easterly; on the southerly part of the island it is to the ENE, while further north it is to the NE and NNE. On the north-westerly part of the island, in the area between Prestfjall and Grímsfjall, the dip is northerly (N 5°). Schrøder (1971) demonstrates geophysically the boundary between the lower and the middle basalt series from here to the west. This boundary could imply a more westerly dip in this area. Only the lower and the middle basalt series of the three mentioned above occur on Suðuroy. They are separated by the coal-bearing sequence and the tuff-agglomerate zone (fig. 1).

The lower basalt series is exposed on Hvalbiareiði and in the valley south of Hvalba; north of Hvalba the middle basalt series predominates. Similarly, the lower series is found in the Trongisvág valley and over the entire island south of Oyrnafjall. Thus in the valley south of Hvalba, in the Trongisvág valley and southwards, we find the valley type with broad step-like valley sides, except in some areas where the strata are thinner. The transition between the lower and the middle basalt series is indicated by a vegetation-clad slope covering the coal-bearing sequence and the tuff-agglomerate zone. The convex landscape characteristic of the middle basalt series is found on the northerly part of the island: Oyrnafjall, the area between Trongisvágur and Hvalba, Grímsfjall, and the area north of Hvalba.

The laminar zones on Suðuroy have, like the dikes, a predominantly NW—SE orientation, particularly in the southern part of the island, i.e. in the lower basalt series. They are usually broad, often strongly brecciated, and it is probable that their formation antedates that of the middle basalt series

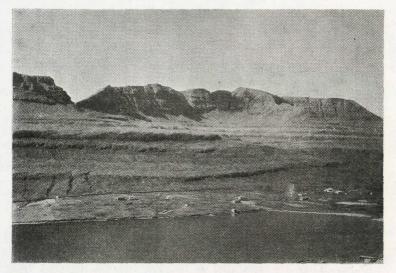


Fig. 1. The lower basalt series and the middle basalt series separated by the coal-bearing sequence at Trongisvágur.

1. mynd. Niðastu basaltfláirnar, kolalindin og miðfláirnar s. f. Trongisvág.

(Rasmussen & Noe-Nygaard, 1969, 1970). Since they run approximately at right angles to the main direction of ice movement, a striped landscape pattern can often be traced, with ridges and hollows running across the valleys.

Ice movement on Suduroy.

The direction of ice movement on Suðuroy has been determined by means of roches moutonnées and striae. Clearly glaciated rock exposures are common both in the valleys and on the valley sides. However, these exposures are often so weathered that they can not be used as indicators for the direction of glacial movement, but typical roches moutonnées are also present in such numbers that they not only give an indication of the direction of glacial movement but also of the position of the iceshed.

The opportunities for observations of striae are very limited,

partly because of the soil cover, and partly because of post-Glacial weathering of the rock exposures. The clearest striae are found in localities where soil and vegetation cover has recently been removed, for example, along streams or at manmade exposures. Striae have been used in combination with the stoss sides and lee sides of the roches moutonnées to determine the direction of movement of the glaciers.

The landscape types have the typical characteristics of glaciated areas: U-shaped valley profiles, smooth glaciated mountain sides, and large and small cirques occurring along the valleys or opening towards the sea. While the cirques on the east coast fall smoothly towards the sea, those on the west coast often end in a steep wall.

Synopsis of localities.

A synopsis of localities follows, with an indication of the orientation of striae and roches moutonnées at each site. In the case of roches moutonnées, the compass direction indicates the direction in which the ice moved (see accompanying map).

Sandvík:

Site 19. Striae (E-W). Roches moutonnées (E).

Site 20. Roches moutonnées (W).

Site 21. Roches moutonnées (W).

Site 22. Ridge ENE—WSW across the valley. Roches moutonnées (W).

Site 75. Roches moutonnées (E).

Hvalba:

Site 8. Roches moutonnées (SW).

Site 9. Roches moutonnées (SSW).

Site 10. Striae (NE-SW). Roches moutonnées (SSW).

Site 11. Roches moutonnées (SW).

Site 12. Roches moutonnées (NW).

Site 13. Roches moutonnées (WNW).

Site 30. Ranin. Roches moutonnées (E).

- Site 31. Ranin Roches moutonnées (E).
- Site 32. Valley to the south. Roches moutonnées (NE).
- Site 41. Valley to the south. Striae (NW-SE).
- Site 42. Valley to the south. Striae (NW-SE).
- Site 43. Valley to the south. Striae (NNW—SSE).
- Site 44. Valley to the south. Striae (NNW-SSE).
- Site 45. Valley to the south. Striae (NW-SE).
- Site 80. Hamranes. Roches moutonnées (ENE).
- Site 82. Near Hvítanes. Roches moutonnées (ENE).

Trongisvágur:

- Site 14. Roches moutonnées (E).
- Site 16. Roches moutonnées (E).
- Site 17. Roches moutonnées (E).
- Site 17 a. Roches moutonnées (E).
- Site 23. North side. Roches moutonnées (ESE).
- Site 58. North side. Striae (NW-SE). Roches moutonnées (SE).
- Site 63. North side. Striae (NNW—SSE). Roches moutonnées (SSE).
- Site 69. North side. Roches moutonnées (SSE).
- Site 74. Roches moutonnées (ESE).

Botnsskarð:

- Site 2. Striae (NE-SW). Roches moutonnées (WSW).
- Site 3. Roches moutonnées (WSW).
- Site 4. Roches moutonnées (SW).
- Site 5. Roches moutonnées (SW).
- Site 6. Roches moutonnées (SW).
- Site 7. Roches moutonnées (SW).
- Site 73. Roches moutonnées (SW).

Hvannhagi:

Site 64. Todnes. Roches moutonnées (ENE).

Frodbiarbotnur:

Site 70. Roches moutonnées (SE).

Site 71. Roches moutonnées (SE).

Site 72. Roches moutonnées (E).

Øravík:

Site 28. Roches moutonnées (SE).

Site 55. Roches moutonnées (SE). Striae (NW-SE).

Site 56. Roches moutonnées (SE).

Site 57. Roches moutonnées (E).

Site 62. Roches moutonnées (ESE).

Fámjin:

Site 48. Kirkjuvatn. Roches moutonnées (SW).

Site 49. Kirkjuvatn. Roches moutonnées (SW).

Site 59. Roches moutonnées (NW).

Site 60. Roches moutonnées (NW).

Site 61. Roches moutonnées (NW).

Hov:

Site 27. Roches moutonnées (E).

Site 50. Roches moutonnées (SSE).

Site 51. Roches moutonnées (E).

Site 52. Striae (E-W).

Site 53. Striae (E-W).

Site 54. Roches moutonnées (SE).

Site 79. Roches moutonnées (E).

Porkeri:

Site 26. Drumlin (E).

Botnur:

Site 67. Roches moutonnées (SW).

Vágur:

Site 24. North side. Roches moutonnées (E).

- Site 25. Vágseiði. Roches moutonnées (SW).
- Site 35. South side. Roches moutonnées (ESE).
- Site 68. Botndalur. Roches moutonnées (SE).

Lopra:

- Site 37. West side. Roches moutonnées (SSW).
- Site 38. Lopranseiði. Roches moutonnées (WSW).
- Site 78. Akratangi. Roches moutonnées (NNE).

Vikarbyrgi:

- Site 83. Siglidalur. Striae (NNE—SSW). Roches moutonnées (NNE and NE).
- Site 84. Siglidalur. Roches moutonnées (NE).
- Site 85. Siglidalur. Roches moutonnées (ENE).

Description of localities.

Sandvík.

On the most northerly part of Suðuroy, a valley runs almost exactly E-W from the bay at Sandvík to the sheer cliff wall at Látragjógy on the west coast of the island. The valley floor has a more or less continuous soil cover 1.5-2 m. deep, as may be seen along the numerous small streams. The thickest soil cover is found at the eastern end of the valley. Only on the northern valley slope have there been found roches moutonnées (sites 19 and 75), and one occurrence of striae, oriented E-W (site 19). Both localities clearly show ice movement towards the east. On the steeper southern side of the valley there are far more exposures, but because of the poorer insolation on this north-facing slope, the vegetation cover is not strong enough to stabilize the soil cover; weathering is thus more advanced here than on the south-facing north side of the valley, and the chances of finding useful observations are therefore poorer.

At the western end of the valley, roches moutonnées show signs of westward ice movement (sites 20 and 21). Glacial

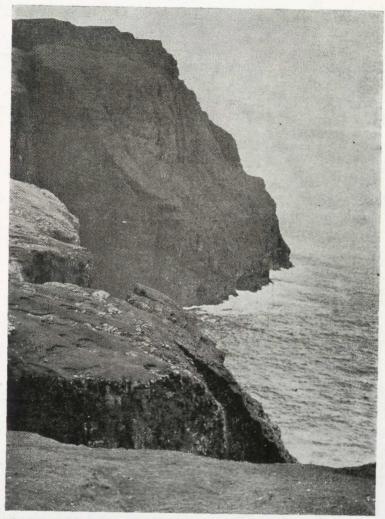


Fig. 2. Glacial action at the westerly cliff face. Sandvík. 2. mynd. İsmerkt landslag ovast í berginum við Látragjógv. v. f. Sandvík.

action can here be traced right out over the most westerly cliff face, where the ice has descended a steep face from a height of about 90 m. (fig. 2).

The watershed lies close to the west coast, immediately east of a low ridge lying WSW—ENE across the valley (site 22).

The westward end of the ridge is a partially exposed, moutonnéed crag, while the easterly part is covered by about 1 m. of soil.

An approx. 300 m. long area of irregular hummocks extends to the east from the ridge. This area is considered to be the most probable locality of the iceshed.

Hvalba.

The valleys Norðbergseiði and Hvalbiareiði extend to the west from the settlement of Hvalba. Norðbergseiði runs in a northwesterly direction to the north of Grímsfjall, while Hvalbiareiði runs southwesterly to the south of Grímsfjall. The shape of Grímsfjall itself with its wedge-shaped east front and its glaciated flanks indicates its role as a bastion dividing a valley glacier which moved from east to west (fig. 3). In the northerly valley there is a rich soil and grass cover, and the whole valley is cultivated. Exposures are rare, but a few roches moutonnées show a stoss side to the SE and ESE, and are thus evidence of ice movement to the NW and WNW (sites 12 and 13).

There is a striking difference in the thickness of the soil cover in the two valleys. This is undoubtedly due to the fact that the northerly valley rests on the often porous and easily weathered middle basalt series, while the southerly valley rests on the lower basalt series with its thick, compact and hard basalt benches. In contrast to the northerly valley, the southerly one has poor soil cover, and the exposed bedrock appears as a well-developed roche moutonnée area, showing glacial movement to the SW and SSW (sites 8—11). Several striae may be seen, oriented NE—SW (site 10).

These observations of ice movement from Hvalba to the NW and SW are supplemented by others showing ice movement towards the east. On the northern side of Hvalbiar-fjørður at Hamranes and Hvítanes there are roches moutonnées

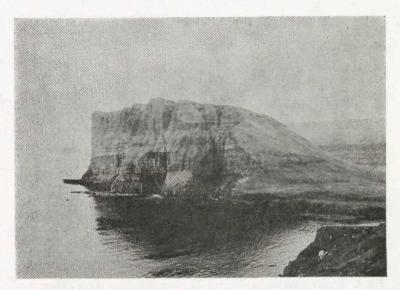


Fig. 3. The glacial flanks of Grímsfjall.
3. mynd. Grímsfjall. Ísurin hevur gingið vestureftir.

which have clearly been shaped by a glacier moving to the east (sites 80 and 82, fig. 4). This is also the case on the southern side of the fjord at Ranin (sites 30 and 31).

In the valley south of Hvalba, striae have been found at the inner end of the valley, oriented NW—SE and NNW—SSE, with roches moutonnées indicating ice movement to the north, out of the valley towards the innermost part of Hvalbiar-fjørður(sites 41—44). At the valley mouth an exposed basalt bench on the easterly slope above the lagoon shows a stoss side towards the SW and a lee side to the NE, thus indicating that the glacier swung to the east out along Hvalbiarfjørður (site 32).

The iceshed must therefore lie between the localities showing westward ice movement and those showing eastward ice movement. The most probable position is thus close to the coast near Hvalba.



Fig. 4. Roches moutonnées showing ice movement from the W. Hamranes. 4. mynd. Seyðagrót á Hamranesi, Hvalba. Ísurin hevur gingið út eftir fjørðinum.

Trongisvágur – Botnsskarð – Trongisvágsbotnur.

The longest valley and fjord system on Suðuroy, Trongis-vágsfjørður — Trongisvágsdalur, has a total length of about 12 km. The fjord runs inland in northwesterly direction, continues as a valley in a westerly direction up to the iceshed at Botnsskarð, and is corresponded on the west side by Trongis-vágsbotnur which runs in a southwesterly direction out to the west coast.

Well-developed roches moutonnées are found on both sides of the fjord. They show an ice movement to the SE out of the fjord (sites 23, 55, 56 and 58), and this is confirmed by striae (sites 55 and 58). In the easterly part of Trongisvágsdalur the glacier movement has been almost due east (sites 14—17).

At Botnsskarð the iceshed can be defined with great accuracy. The area, which extends from the road tunnel to Hvalba out towards the west coast near Gimbrarók, shows signs of

powerful glaciation, with roches moutonnées showing ice movement towards the SW and WSW (sites 2—7). Immediately west of the tunnel is a NW—SE oriented fault with a downthrow of 10 m. towards the west.

On the northerly slope of the valley east of the fault, there are exposures showing stoss sides and lee sides that indicate ice movement towards the east (site 74). This easterly movement is also shown by the glaciation marks on the lava flow forming the north wall of the motor road.

Immediately west of the fault, roches moutonnées indicating ice movement towards the SW are to be seen. These observations lead to the conclusion that the iceshed must have been located right at the fault. In the valley bottom near the ice shed there are no heaps or mounds of glacial debris; the soil cover is thin and there are stony or bare patches. It is first further to the east that the valley floor becomes more uneven with moraine deposits.

In the middle of Botnsskarð there are glaciated ridges and completely flat, smooth basalt surfaces with no well-defined stoss or lee sides. At the most westerly small lake near Gimbrarók there are obvious roches moutonnées, which show ice movement towards the SW (site 73).

Vatnsdalur — Hvannhagi — Froðbiarbotnur.

Vatnsdalur opens to the N into Hvalbiarfjørður. The valley mouth lies about 40 m. above sea-level. The valley has continuous vegetation cover, and no observations of striae or roches moutonnées are therefore possible.

At Todnes, west of Hvannhagi, completely unambiguous roches moutonnées have been observed indicating ice movement towards the ENE (site 64).

Froðbiarbotnur, which has a longitudinal axis running E—W, has an unusually acute valley head for a cirque. The valley floor has a uniform vegetation cover, but a number of exposed basalt areas can be seen on the flanks of the valley, and also along the upper boundary of the cirque at an altitude of about

370 m. In the sharp valley head to the west there are seen roches moutonnées showing ice movement to the E (site 72), while the direction of movement becomes more south-easterly further to the east on the valley slopes, (sites 70 and 71), corresponding to ice movement down towards the valley mouth into Suðuroyarfjørður.

Øravík.

The valley at Øravík runs approximately E—W in towards Valdaskarð, which forms the iceshed between the valley and a SW-facing cirque near Fámjin. The valley at Øravík is completely covered by vegetation, so only one site has been found with roches moutonnées showing ice movement to the ESE (site 62). On the north side of Øravík bay the soil cover is scattered and thin, with good bedrock exposures. Roches moutonnées oriented to the SE and striae oriented NW—SE were found here (sites 28, 55 and 56). On the south side of the bay were noted roches moutonnées directed E (site 57).

Fámjin.

The SW-facing cirque from Valdaskarð to Fámjin runs down towards lake Kirkjuvatn. On both west and east sides of this lake there are roches moutonnées with stoss sides oriented to the NE and lee sides to the SW (sites 48 and 49).

The valley south of Fámjin runs NW—SE. Here are found areas with exposed bedrock occurring as flat, glacially worn basalt surfaces. However, distinct roches moutonnées are also found, especially along Ain Mikla near lake Rættarvatn and the lake at Bláfossur, and these bear witness of ice movement towards the NW (sites 59—61).

Hov - Porkeri.

The valley opening towards the east at the settlement of Hov is a particularly fine example of glacial action. The terrain in the cirque is very uneven and hummocky, with elongated mounds or ridges NW—SE across the valley follow-

ing the dominating system of fault lines with lamellar zones several meters in width. The hummocky cross-section is due to the eastward ice movement, for which the lamellae have acted as zones of weakness.

Observations of striae and roches moutonnées have been made along Hovsá. At the western end of the cirque and on its south side the ice movement has been to the east (sites 51, 52, 53, and 27), while on the steep south-facing valley slope it appears to have been towards the SE (sites 50 and 54). Easterly ice movement is recorded by a drumlin at Porkeri (site 26).

Botnur.

The iceshed between the Hov valley and the west-facing valley of Botnur, with its many small lakes, lies on the mountain ridge between Borgarknappur and Hvannafelli. SW of Ryskivatn roches moutonnées have been observed on both sides of the gravel road. These were formed by ice moving towards the SW (site 67).

Vágur.

Because of the rich soil and grass cover of the slopes, no definite roches moutonnées have been found eastward from Vágur along the north side of the fjord until in the vicinity of Nes (site 24), where the stoss and lee sides of the exposures indicate that ice movement has been towards the east. The exposures on the mountain slopes are clearly glaciated but greatly weathered. On the southern side of the fjord roches moutonnées, indicating ice movement towards the ESE, have been found only at site 35.

At Vágseiði the terrain is relatively smooth and has a rich vegetation cover. Only at the extreme east end of the little lake whose basin has been cut out of the bedrock are exposures found, in the shape of well-formed roches moutonnées which indicate ice movement towards the SW (site 25, fig. 5). The U-shaped profile of the short valley is very obvious when seen from the east. To the west the valley is terminated by a sheer coastal cliff about 30 m. high.

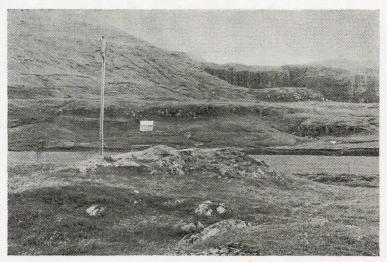


Fig. 5. Roches moutonnées showing ice movements towards the SW. Vágseiði.

5. mynd. Seyðagrót á Vágseiði. Ísurin hevur gingið vestureftir.

The course of a glacier can be traced from Botndalur (site 68) towards the SE down towards Vágseiði. The iceshed is hard to localize, but was presumably in the eastern part of the eiði between the lagoon and the coast.

Lopra.

Lopranseiði is a continuation of Lopransfjørður towards the SW. The terrain is uneven, with exposed basalt knolls which are strongly glaciated, giving an overwhelming impression of having been formed by a glacier flowing WSW (site 38). This is confirmed by numerous roches moutonnées on Oyrnatangi on the west side of Lopransfjørður.

The valley running S and SSE from Lopranseiði has continuous soil cover and is well vegetated; there are no exposures.

Outward along the east side of Lopransfjørður no roches moutonnées have been found before Akratangi, where one large exposure shows traces of ice movement to the NNE (site

78). Helland (1880) describes the ice movement further east at the mouth of Vágsfjørður as having been towards the east.

Vikarbyrgi.

In the valley above Víkarbyrgi, Siglidalur, roches moutonnées have been observed showing ice movement to the NNE and NE (sites 83 and 84) and weak striae oriented NNE-SSW (site 83). North of the stream, weathering is very noticeable, and only one site has been found with obvious roches moutonnées, which showed ice movement to the ENE (site 85).

Blæing - Sumba.

On the most southerly part of Suðuroy the ice movement must be assumed to have been easterly on the east coast at Blæing, but southeasterly at Akraberg on the southern tip of the island. Since no striae or roches moutonnées have been observed here this conclusion can be based only on the nature of the terrain and the landscape morphology. The iceshed probably lay in the vicinity of the ridge Eggjargarður, which connects Knúkur with Skálin. This ridge has been formed by late Glacial landslides (Jørgensen 1972) and is a continuation to the SE of the previously mentioned NW—SE oriented fault system.

Conclusion.

Investigations of the striae, roches moutonnées, and ice shed positions on Suðuroy indicate that this island has had its own ice cap, at least during the last glaciation, and that the principal iceshed lay near the present west coast.

The observations made indicate that the principal iceshed followed the island's long axis in an undulating NW—SE course. It has been shown that in all the E—W oriented valleys the iceshed lay a little to the east of the present watershed. Where the principal iceshed has been observed directly and localized by roches moutonnées, it is shown on the map as a heavy red line with arrows in two opposing directions. Between

observation points its course is interpolated and shown as a stippled line. It is obvious that the glaciers followed the already-existing valleys. In the cirques, which often open directly to the sea, the roches moutonnées show not only ice movement out of the cirque but also downwards towards its bottom. In the open, through-going valleys, of which a number continue as fjords, e. g. Trongisvágsdalur — Trongisvágsfjørður, the orientation of both roches moutonnées and striae reflects the winding course of the valley. No striae, roches moutonnées or other signs of glaciation have been found showing other orientations, and it must therefore be concluded that throughout the whole ice age the direction of movement of the ice was determined by the pre-Glacial landscape morphology.

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ÚRTAK

Flestar ritgerðir um glersetingarjarðfroði Føroya eru frá seinastu øld. Hildið verður at Føroyar vóru eitt glersetingarøki fyri seg, tí ísskøvur og seyðagrót vísa út í allar ættir, og einki ísborið fremmant grót er funnið í oyggjunum. Ísskøvur eru ikki sæddar oman fyri 500 m og gitt varð tí, at ísurin hevði ikki rokkið longri upp. Kanningar seinastu árini hava víst, at ísurin í landsynning úr Føroyum hevur ligið um allan landgrunnin.

Greinin snýr seg um kanningar av ísgongdini í Suðuroy.

Skøvut hella (ísskøvur) og avbrýndur klettur (seyðagrót) eru merki eftir ísi, har hann er farin um eitt landslag. Ísgongdin í Suðuroy er vorðin kannað við at geva hesum merkjum gætur, og eru tær einstøku eygleiðingarnar av ísskøvum og seyðagróti settar upp í yvirliti. Ættin, sum nevnd er í sambandi við seyðgrót, er tann ættin, ísurin er gingin í.

Úrslitið av kanningunum er, at Suðuroyggin í hvussu so er í seinastu ístíð hevur verið egið glersetingarøki, og at meginísmarkið, markið millum ísin, sum gekk vestureftir og ísin sum gekk eystureftir, hevur ligið nær út ímóti vesturstrondini. Ísmarkið hevur ligið eitt sindur eystan fyri vatnsmarkið, ið nú er; tað er á kortinum avmerkt sum feit reyð strika og ørvar vísa ísgongdina báðar vegir. Merki eftir aðrari ísgongd — frá einari eldri ístíð — eru ikki sædd; tað verður tí hildið at ísurin gjøgnum alla ísøldina er farin um eitt landslag, sum líkt var landslagnum nú er.

Sjá annars hjálagda kort yvir ísgongdina í Suðuroy.

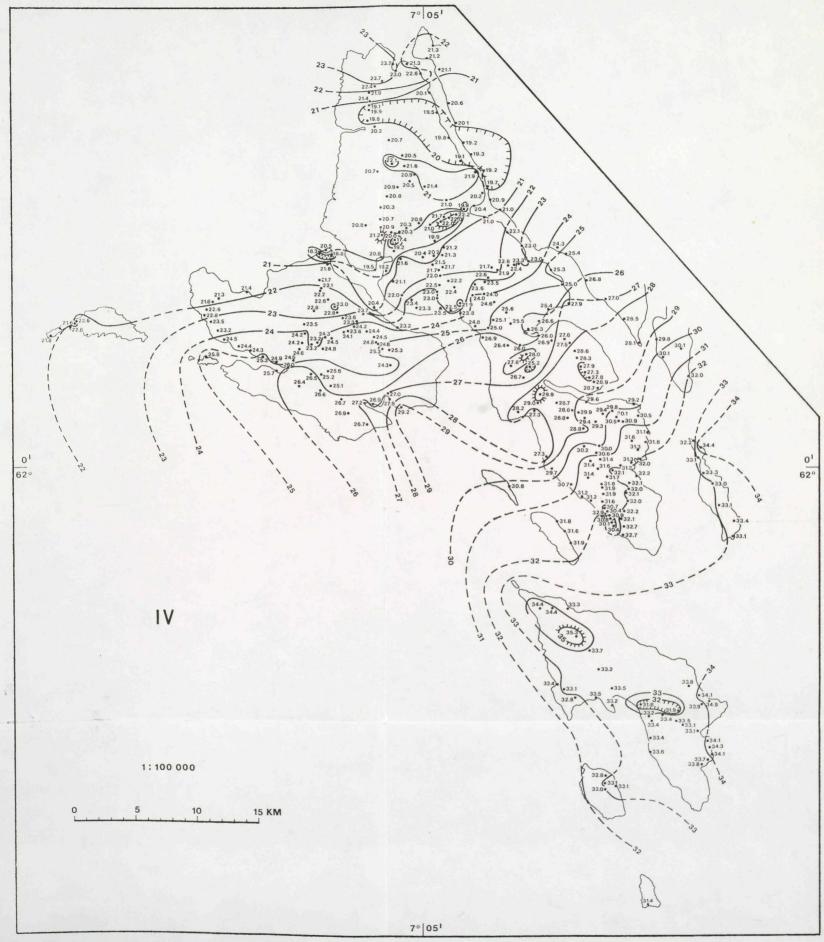


Fig. 8. Bouguer anomalies including topographic correction in Vágar and Streymoy (area IV).