

The main objective of this file is to show **the major intermediate points** on our way from Mekele to Erta Ale and back. We would not like to present quality pictures but we would like to clearly show their sequence and locations. The pictures have been extracted from video made by the **Sony HDR XR500 video camera** with GPS, recording the Latitude and the Longitude relevant to the pictures. Besides, the time of recording is also shown. Since altitude is not recorded it will be shown in a separate file containing information from the **Garmin Geko 201 GPS** (it is a bit old but we like it very much).

Each pictorial line includes **a)** a brief description of the picture; **b)** the picture; **c)** position information; **d)** the time of recording.

1. On the way from Mekele (city) to Berhale (city).



Position information	
Latitude	13° 44' 20.2" N
Longitude	39° 57' 58.7" E
Datum	WGS-84

1:39:33 PM

2. Berhale (city on the way from Mekele to Hamed Ela where we got the permissions and took one policeman with us; his name is Ali)



Position information	
Latitude	13° 51' 44.7" N
Longitude	40° 1' 18.8" E
Datum	WGS-84

2:46:18 PM

3. On the way from Berhale (city) to Hamed Ela (village).



Position information	
Latitude	14° 2' 18.9" N
Longitude	40° 12' 38.4" E
Datum	WGS-84

4:50:30 PM

4. Our camp in Hamed Ela village. You can see a toilet on the right-hand side (just near the car mirror)



Position information	
Latitude	14° 5' 9.5" N
Longitude	40° 16' 46.4" E
Datum	WGS-84

5:42:43 PM

5. **THE NEXT DAY.** On the way from Hamed Ela (village) to Kusrawit (local people said to us that available at the Internet other names, like Kuso Wat, are wrong)



Position information	
Latitude	13° 53' 44.9" N
Longitude	40° 22' 39.2" E
Datum	WGS-84

9:33:29 AM

6. On the way from Hamed Ela (village) to Kusrawit (village)



Position information	
Latitude	13° 47' 52.9" N
Longitude	40° 23' 27.3" E
Datum	WGS-84

10:01:46 AM

7. On the way from Hamed Ela (village) to Kusrawit (village)



Position information	
Latitude	13° 43' 43.8" N
Longitude	40° 24' 4" E
Datum	WGS-84

10:34:53 AM

8. Kusrawit (village)



Position information	
Latitude	13° 26' 45.6" N
Longitude	40° 29' 48.4" E
Datum	WGS-84

1:06:02 PM

9. On the way from Kusrawit (village) to the base camp. Many sites at the Internet call the base camp **Dodom**. From our understanding this is wrong. The local people call **Dodom** different places and this is probably correct. Local people (Afar people) are in nomadic life and they migrate from one place to another. They are, as a rule, cattle farmers and their houses are movable. So, as soon as grass for cattle is not sufficient they move to neighboring places and all such places are considered to be **Dodom**. So, when we talk about **Dodom** it is better to talk about some area but not about the place of a village.



Position information	
Latitude	13° 26' 46.6" N
Longitude	40° 29' 58.7" E
Datum	WGS-84

1:36:58 PM

10. The first part of the way from Kusrawit (village) to the base camp goes through sand area.



Position information	
Latitude	13° 26' 59.1" N
Longitude	40° 30' 9.6" E
Datum	WGS-84

1:44:39 PM

11. Then we enter to the lava field (the way from Kusrawit (village) to the base camp).



Position information	
Latitude	13° 32' 7.1" N
Longitude	40° 31' 46.4" E
Datum	WGS-84

2:20:14 PM

12. The following way goes through the lava field (the way from Kusrawit (village) to the base camp).



Position information	
Latitude	13° 32' 16.7" N
Longitude	40° 32' 1.1" E
Datum	WGS-84

2:27:33 PM

13. The following way goes through the lava field (the way from Kusrawit (village) to the base camp).



Position information	
Latitude	13° 33' 25.7" N
Longitude	40° 34' 42.2" E
Datum	WGS-84

3:16:29 PM

14. The following way goes through the lava field (the way from Kusrawit (village) to the base camp).



Position information	
Latitude	13° 33' 56.2" N
Longitude	40° 35' 15.5" E
Datum	WGS-84

3:29:35 PM

15. We came to the base camp. You can see the volcano Erta Ale in the distance on the back.



Position information	
Latitude	13° 34' 22.3" N
Longitude	40° 35' 40.1" E
Datum	WGS-84

3:46:01 PM

16. This camel will transport different things for sleeping to the final Erta Ale Camp. The exact measurements (including difference in altitudes) will be given at the end of this file. Now just for information we can say that the total distance on foot is almost 10 km (one way). We spent 2 hours and 33 minutes to go from the base camp to the Erta Ale Camp and 1 hour 50 minutes to go from the Erta Ale Camp to the base camp. The total distance including the final ways to the crater is about 24 km (10 km to, 10 km back, 1.5+1.5 = 3 km to the crater, >1 km surrounding walks) for the period about 16 hours.



Position information	
Latitude	13° 34' 20.9" N
Longitude	40° 35' 39.2" E
Datum	WGS-84

5:27:19 PM

17. On the way from the base camp to the final Erta Ale Camp. When we started the temperature in shadow was 37 degree. Due to a low humidity (we did not measure it but we think that it was low) we cannot say that it was very hot.



Position information	
Latitude	13° 34' 36.4" N
Longitude	40° 36' 41.4" E
Datum	WGS-84

6:03:55 PM

18. On the way from the base camp to the final Erta Ale Camp. This track will be better shown on the way back. The way to Erta Ale was the most difficult for me (I am almost 63 years old). So, I stopped for a rest a few times (15-20 minutes totally) before the final destination. Without me the other people would definitely come faster (let us say during 2h15m – 2h20m).



Position information	
Latitude	13° 34' 37.7" N
Longitude	40° 37' 46.7" E
Datum	WGS-84

6:33:29 PM

19. Erta Ale crater. We spent here 1 hour and 30 minutes.



Position information	
Latitude	13° 36' 11.9" N
Longitude	40° 39' 47.7" E
Datum	WGS-84

8:38:37 PM

20. Erta Ale crater. We spent here 1 hour and 30 minutes.



Position information	
Latitude	13° 36' 12.2" N
Longitude	40° 39' 48.8" E
Datum	WGS-84

9:09:30 PM

21. The way back from the crater to the Erta Ale Camp.



Position information	
Latitude	13° 36' 11.8" N
Longitude	40° 39' 49.2" E
Datum	WGS-84

10:14:22 PM

22. THE NEXT DAY. The crater in the morning. We spent here 40 minutes.



Position information	
Latitude	13° 36' 10.8" N
Longitude	40° 39' 49.4" E
Datum	WGS-84

6:33:42 AM

23. The crater in the morning. We spent here 40 minutes.



Position information	
Latitude	13° 36' 10.9" N
Longitude	40° 39' 47" E
Datum	WGS-84

6:58:26 AM

24. The way back to the Erta Ale Camp.



Position information	
Latitude	13° 36' 10.7" N
Longitude	40° 39' 46.9" E
Datum	WGS-84

7:09:11 AM

25. The way back to the Erta Ale Camp. The camp is visible on the top. The exact map of this area is given at the end of this file.



Position information	
Latitude	13° 36' 11.7" N
Longitude	40° 39' 45.7" E
Datum	WGS-84

7:09:45 AM

26. The final raising to the Erta Ale Camp (from the bottom).



Position information	
Latitude	13° 36' 11.8" N
Longitude	40° 39' 38.7" E
Datum	WGS-84

7:13:36 AM

27. The final raising to the Erta Ale Camp (from the top).



Position information	
Latitude	13° 36' 12" N
Longitude	40° 39' 37.6" E
Datum	WGS-84

7:15:41 AM

28. The Erta Ale Camp.



Position information	
Latitude	13° 36' 12.5" N
Longitude	40° 39' 37.9" E
Datum	WGS-84

7:17:50 AM

29. On the way back from the Erta Ale Camp to the Base Camp. We started at 7h24m and came to the Base Camp at 9h14m passing almost 10 km in 1h50m without any stop for the rest.



Position information	
Latitude	13° 36' 3.5" N
Longitude	40° 39' 28.2" E
Datum	WGS-84

7:28:49 AM

30. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 56.1" N
Longitude	40° 39' 23.8" E
Datum	WGS-84

7:33:48 AM

31. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 55.9" N
Longitude	40° 39' 23.5" E
Datum	WGS-84

7:34:15 AM

32. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 55.5" N
Longitude	40° 39' 23.5" E
Datum	WGS-84

7:35:00 AM

33. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 51.8" N
Longitude	40° 39' 22.3" E
Datum	WGS-84

7:36:36 AM

34. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 43.9" N
Longitude	40° 39' 11.9" E
Datum	WGS-84
GPS tag version	2.2

7:41:53 AM

35. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 43.1" N
Longitude	40° 39' 11.8" E
Datum	WGS-84
GPS tag version	2.2

7:42:21 AM

36. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 31.5" N
Longitude	40° 38' 51.1" E
Datum	WGS-84
GPS tag version	2.2

7:52:19 AM

37. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 20.1" N
Longitude	40° 38' 41.5" E
Datum	WGS-84
GPS tag version	2.2

7:58:36 AM

38. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 35' 0.7" N
Longitude	40° 38' 31.3" E
Datum	WGS-84
GPS tag version	2.2

8:07:35 AM

39. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 34' 40" N
Longitude	40° 37' 56.3" E
Datum	WGS-84
GPS tag version	2.2

8:23:32 AM

40. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 34' 37" N
Longitude	40° 36' 38.4" E
Datum	WGS-84
GPS tag version	2.2

8:53:17 AM

41. On the way back from the Erta Ale Camp to the Base Camp.



Position information	
Latitude	13° 34' 28.3" N
Longitude	40° 35' 55.3" E
Datum	WGS-84
GPS tag version	2.2

9:08:44 AM

42. Coming to the Base Camp. All other people will come within subsequent 5 minutes. When we returned to the base camp the temperature was 29 degree in shadow. The way back was comfortable and it was not hot.



Position information	
Latitude	13° 34' 22.4" N
Longitude	40° 35' 41.4" E
Datum	WGS-84
GPS tag version	2.2

9:13:49 AM

43. We are ready to go back by cars from the Base Camp.



Position information	
Latitude	13° 34' 21.8" N
Longitude	40° 35' 39.9" E
Datum	WGS-84
GPS tag version	2.2

10:36:26 AM

44. A mine was blown up here 4 years ago killing one person. An accident on the 17th of January of 2012 is well known although the details are even not clear for the local people. 29 days before the 17th of January 2012 a mine recently installed was blown up and this fact was not known for us although we checked all the available information before the trip.



Position information	
Latitude	13° 33' 43.9" N
Longitude	40° 35' 5.6" E
Datum	WGS-84
GPS tag version	2.2

11:16:43 AM

45. Lava field on the way back from the base camp to Hamed Ela (we did not pass through Kusrawit on the way back)



Position information	
Latitude	13° 33' 33.7" N
Longitude	40° 34' 57.9" E
Datum	WGS-84
GPS tag version	2.2

11:21:06 AM

46. We say *good bye* to Afar people and camels. They will continue their way to Kusrawit and we will drive to Hamed Ela.



Position information	
Latitude	13° 33' 18.4" N
Longitude	40° 34' 29.4" E
Datum	WGS-84
GPS tag version	2.2

11:31:12 AM

47. The first part of our way from the base camp to Hamed Ela (we go through lava field).



Position information	
Latitude	13° 32' 9" N
Longitude	40° 32' 57.8" E
Datum	WGS-84
GPS tag version	2.2

11:55:45 AM

48. The first part of our way from the base camp to Hamed Ela (we go through lava field).



Position information	
Latitude	13° 32' 0.7" N
Longitude	40° 31' 14" E
Datum	WGS-84
GPS tag version	2.2

12:21:47 PM

49. The end of lava field.



Position information	
Latitude	13° 31' 39.4" N
Longitude	40° 30' 25.3" E
Datum	WGS-84
GPS tag version	2.2

12:33:09 PM

50. Buying a goat.



Position information	
Latitude	13° 33' 46.9" N
Longitude	40° 27' 4.7" E
Datum	WGS-84
GPS tag version	2.2

1:01:05 PM

51. Transporting a goat.



Position information	
Latitude	13° 33' 48.8" N
Longitude	40° 27' 6.1" E
Datum	WGS-84
GPS tag version	2.2

1:12:56 PM

52. On the way back to Hamed Ela.



Position information	
Latitude	13° 40' 5" N
Longitude	40° 24' 55.5" E
Datum	WGS-84
GPS tag version	2.2

1:49:03 PM

53. The only one stuck during our trip to Erta Ale. «Эх, эфиоп, твою мать» (Russian slang which perfectly characterizes what we are doing now, but, unfortunately, cannot be translated).



Position information	
Latitude	13° 41' 8.2" N
Longitude	40° 24' 31.4" E
Datum	WGS-84
GPS tag version	2.2

1:55:54 PM

54. Stop for rest. This place on the way is also commonly called **Dodom** (see the comments above in point 9).



Position information	
Latitude	13° 48' 59.2" N
Longitude	40° 23' 0.3" E
Datum	WGS-84
GPS tag version	2.2

3:39:03 PM

55. The way to Hamed Ela.



Position information	
Latitude	13° 53' 7.2" N
Longitude	40° 22' 51.8" E
Datum	WGS-84
GPS tag version	2.2

4:29:37 PM

56. The way to Hamed Ela and the last trip of the goat.



Position information	
Latitude	13° 57' 29.4" N
Longitude	40° 20' 20.1" E
Datum	WGS-84
GPS tag version	2.2

4:46:17 PM

We returned back to Hamed Ela and tomorrow we will go to Dallol. The details will be given in a separate file.

The picture below presents the way on foot from the base camp to the Erta Ale camp. This map was done from the following details of GPS Geko 201:

Base camp to which we went by car (from this point we went on foot)

Elevation: 142 m (this value was taken from GPS of *Samsung Galaxy Note 10.1* – see additional details below).
 N: 13° 34' 20.90" (two values below were taken from GPS of *Sony HDR XR500 video camera*).
 E: 040° 35' 39.20"

W1

Elevation: 235 m.
 N: 13° 34' 37.3"
 E: 040° 37' 45.2"

W2

Elevation: 262 m.
N: 13° 35' 32.3"
E: 040° 38' 47.0"

W3

Elevation: 443 m.
N: 13° 35' 42.9"
E: 040° 39' 11.4"

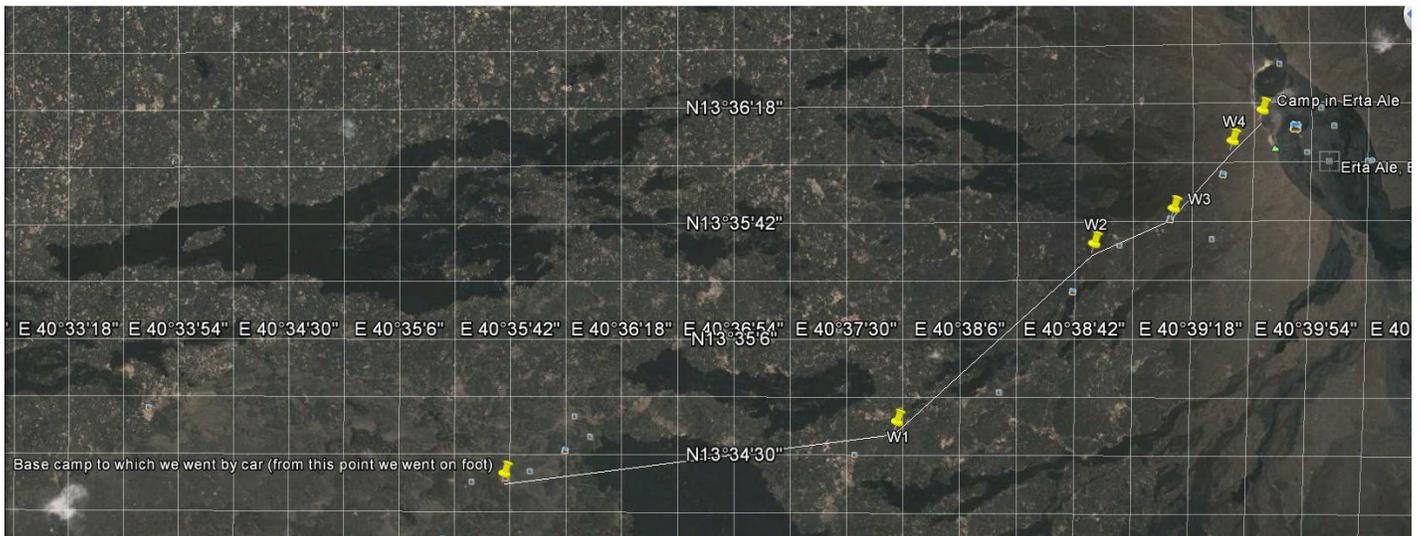
W4

Elevation: 453 m.
N: 13° 36' 03.1"
E: 040° 39' 28.8"

Camp in Erta Ale

Elevation: 530 m.
N: 13° 36' 12.2"
E: 040° 39' 37.5"

We spent 2 hours and 33 minutes to go from the base camp to the Erta Ale camp (starting at 17h39m and coming to the Erta Ale camp at 20h12m). We spent 1 hour and 50 minutes to go from the Erta Ale camp to the base camp (starting at 7h24m and coming to the base camp at 9h14m).



The picture below (see yellow track) presents the way by car from Kusrawit to the base camp. This map was done from the following details of GPS Geko 201:

KUS1

Elevation: -61 m.
N: 13° 29' 45.5"
E: 040° 31' 02.4"

KUS2

Elevation: -54 m.
N: 13° 31' 52.7"
E: 040° 31' 03.4"

KUS3

Elevation: 2 m.
N: 13° 32' 09.0"
E: 040° 32' 22.3"

KUS4

Elevation: 15 m.
N: 13° 32' 44.3"
E: 040° 33' 42.0"

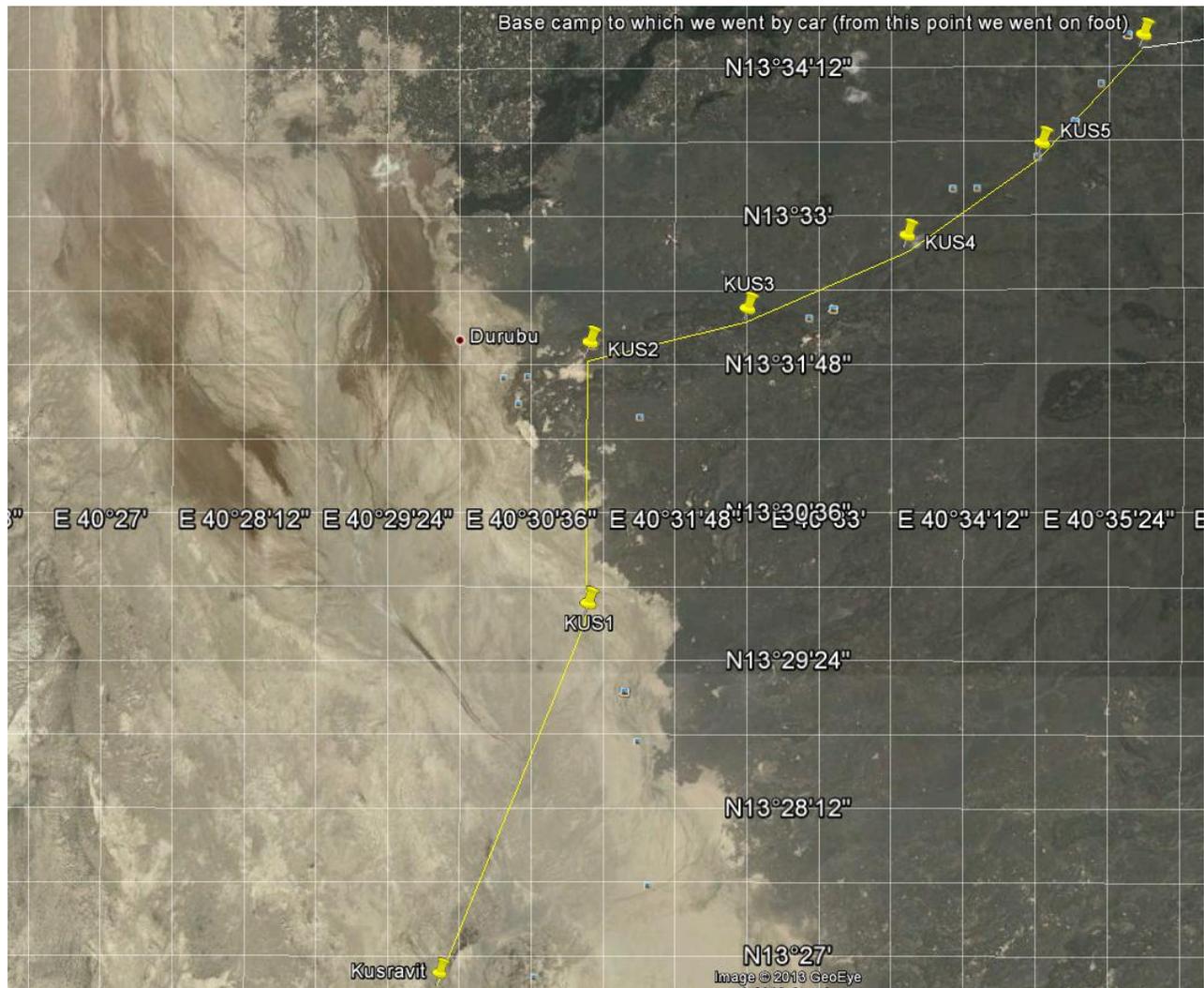
KUS5

Elevation: 131 m.
N: 13° 33' 28.7"
E: 040° 34' 48.9"

KUSRAWIT

Elevation: -50 m.
N: 13° 26' 45.9"
E: 040° 29' 48.2"

We spent 2 hours and 10 minutes to go from Kusrawit to the base camp (starting at 13h35m and coming to the base camp at 15h45m).



The picture below (see blue track) presents the way by car from Hamed Ela to Kusrawit . This map was done form the following details of GPS Geko 201:

HAMED ELA

Elevation: -85 m.
N: 14° 05' 08.9"
E: 040° 16' 46.1"

HAM1 (in about 30 minutes from the beginning)

Elevation: -106 m.
N: 13° 59' 42.8"
E: 040° 19' 02.5"

HAM2 (in about 70 minutes from the beginning)

Elevation: -110 m.
N: 13° 51' 45.7"
E: 040° 23' 06.5"

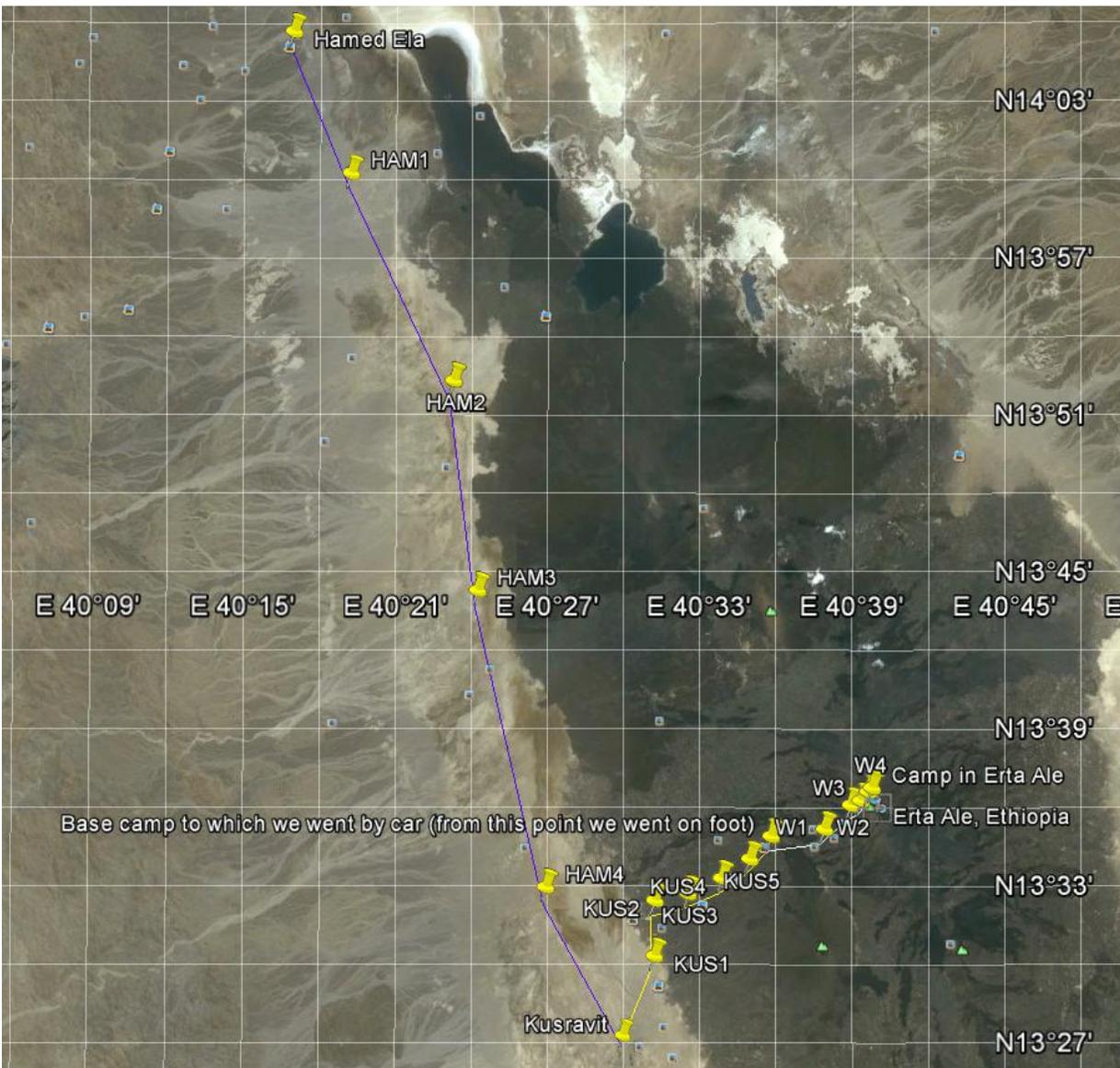
HAM3 (in about 120 minutes from the beginning)

Elevation: -86 m.
N: 13° 43' 44.0"
E: 040° 24' 04.0"

HAM4 (in about 180 minutes from the beginning)

Elevation: -68 m.
N: 13° 32' 23.1"
E: 040° 26' 45.5"

We spent 3 hours and 30 minutes to go from Hamed Ela to Kusrawit (starting at 8h30m and coming to Kusrawit at 12h00m). We departed from Kusrawit to the base camp at 13h35m.



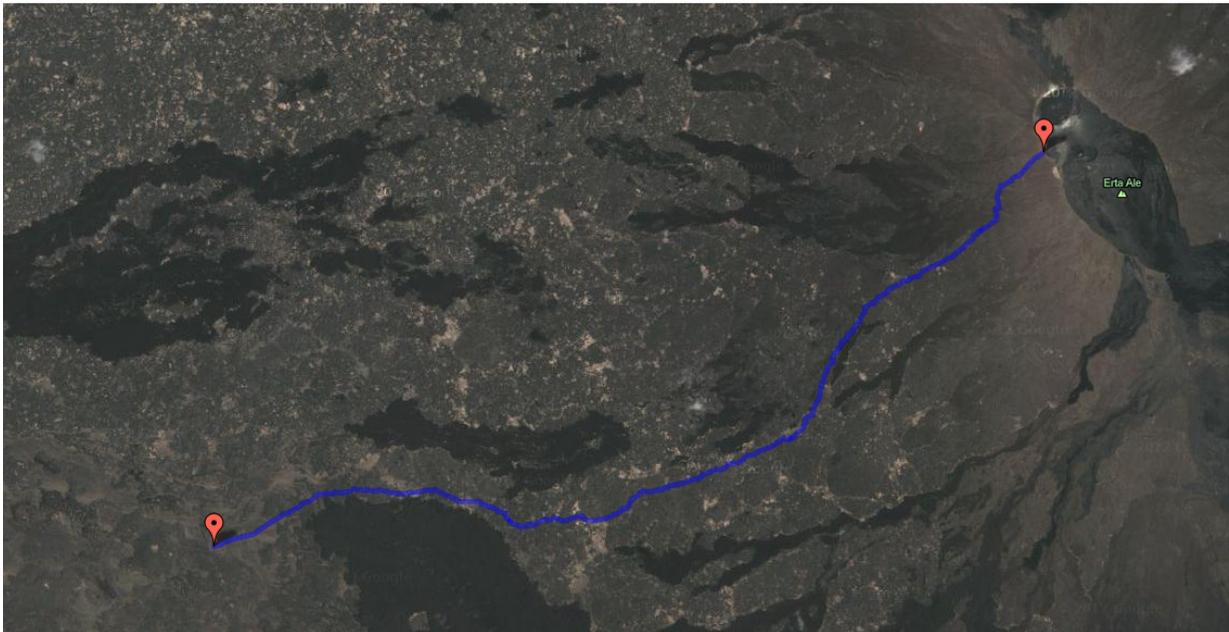
The following details were obtained from *Samsung Galaxy Note 10.1* equipped with GPS (created by MyRoutes on Android). All responsibility for potential errors is on the MyRoutes program.

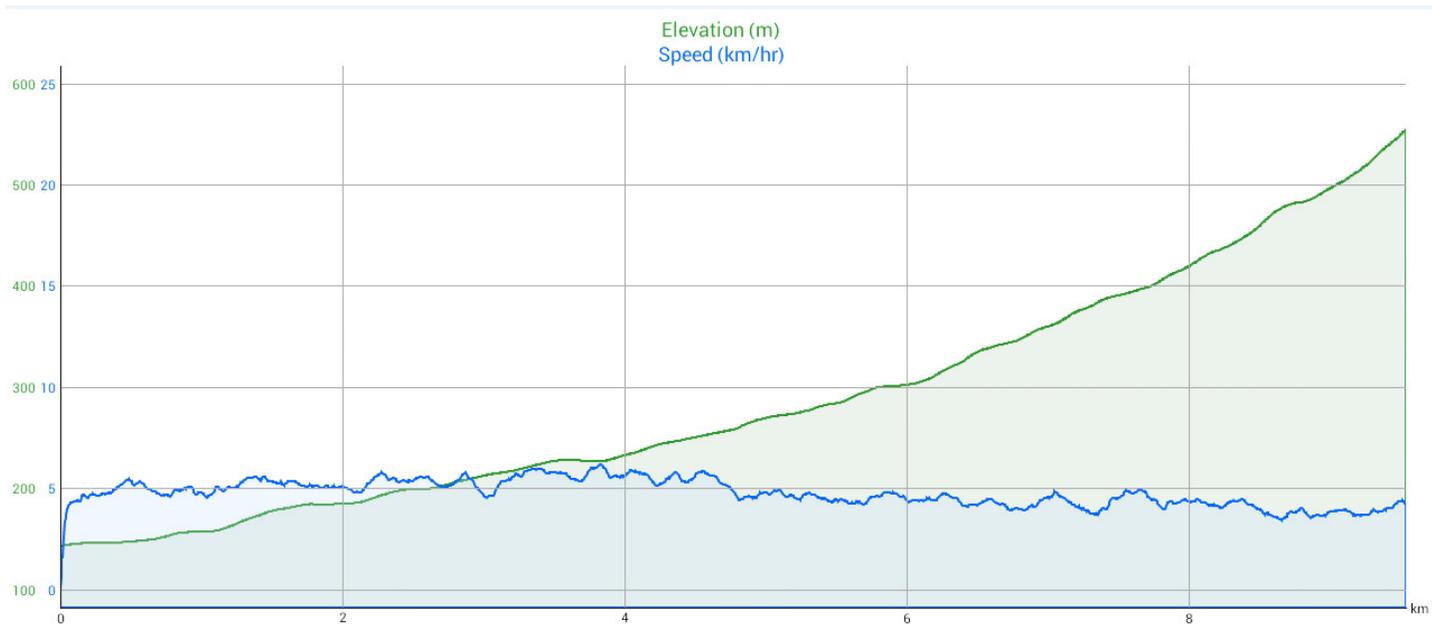
The measurements were done by Iouliia Skliarova as follows:

1. The *Samsung Galaxy Note 10.1* with embedded GPS was switched on at the beginning of the trip segments and was switched off at the end of the trip segments. Thus, all intermediate points were recorded automatically in short periods in between them.
2. We compared the most critical ways with data from other GPS sources and the majority of them coincided. For example, the way on foot from the base camp to the Erta Ale camp was compared with the map at the beginning of this section (see above). The *Samsung Galaxy Note 10.1* was taken with us on all pedestrian tracks (so it was put in a backpack). We think that all the details about this way are exact.
3. When we went by car the *Samsung Galaxy Note 10.1* with embedded GPS was similarly switched on at the beginning of the trip segments and was switched off at the end of the trip segments. But it was done inside the car (intensity of GPS signals was fine inside the car).
4. The used software is free. It is very good but we assume that it might not be precisely tested.
5. We found a fault on the way from Hamed Ela to Berhale because recording of way points was occasionally stopped before the end of the segment.

Other measurements were mainly done by Valeri Skliarov and we think that they are exact with just little faults allowed by technical characteristics of the used devices.

The way on foot from the base camp to the Erta Ale camp





Total distance: 9.95 km (6.2 mi)

Total time: 2:35:23 (GPS was switched on 2 minutes before we started, so the real time is 2h33m)

Moving time: 2:07:29

Average speed: 3.84 km/h (2.4 mi/h)

Average moving speed: 4.68 km/h (2.9 mi/h)

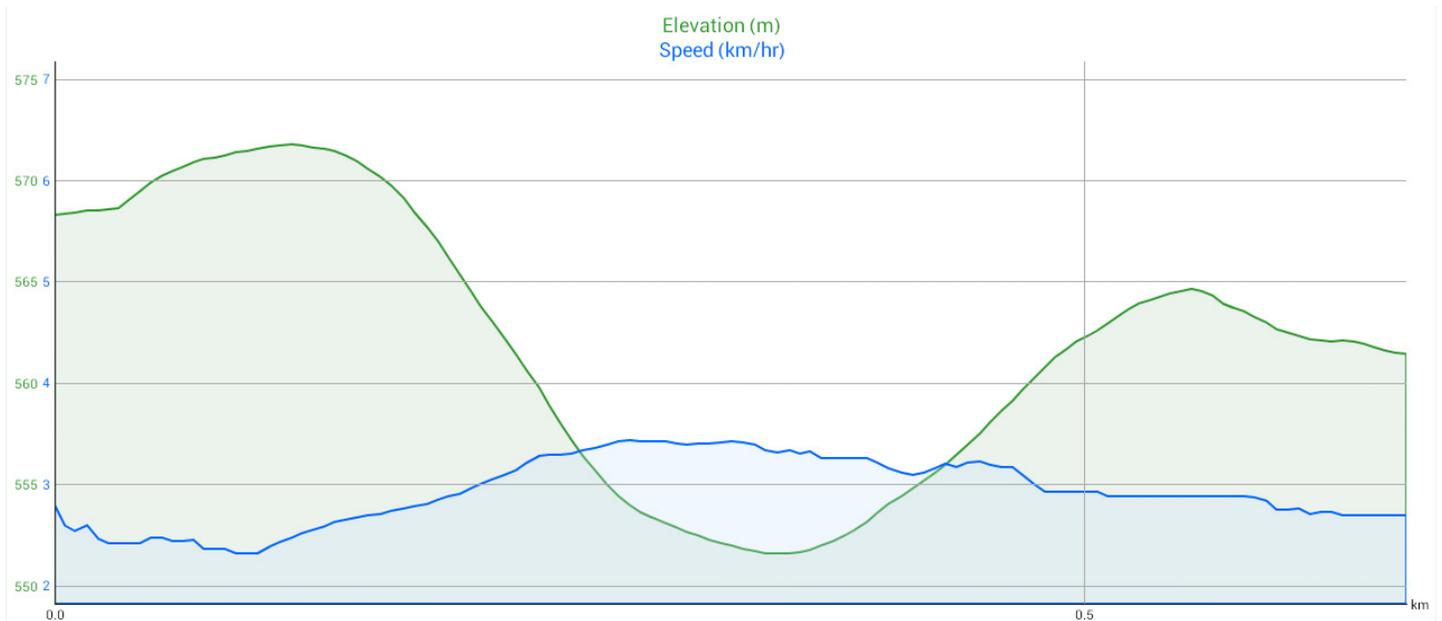
Average pace: 15.62 min/km (25.1 min/mi)

Max elevation: 565 m (1854 ft)

Min elevation: 142 m (466 ft)

The way on foot from the Erta Ale camp to the volcano crater





Total distance: 1.08 km (0.7 mi)
 Total time: 1:37:51
 Moving time: 19:18
 Average speed: 0.66 km/h (0.4 mi/h)
 Average moving speed: 3.35 km/h (2.1 mi/h)
 Max speed: 5.38 km/h (3.3 mi/h)
 Max elevation: 574 m (1883 ft)
 Min elevation: 550 m (1805 ft)

The way by car from the base camp to the end of lava field

Total distance: 12.73 km (7.9 mi)
 Total time: 1:36:01
 Moving time: 1:20:06
 Average speed: 7.96 km/h (4.9 mi/h)
 Average moving speed: 9.54 km/h (5.9 mi/h)
 Max speed: 32.67 km/h (20.3 mi/h)
 Max elevation: 149 m (489 ft)
 Min elevation: -62 m (-204 ft)

The way by car from the end of lava field to Hamed Ela

Total distance: 78.24 km (48.6 mi)
 Total time: 4:45:39
 Moving time: 2:56:18
 Average speed: 16.43 km/h (10.2 mi/h)
 Average moving speed: 26.62 km/h (16.5 mi/h)
 Max elevation: -56 m (-184 ft)
 Min elevation: -124 m (-406 ft)

The way by car from Hamed Ela to Berhale

Total distance: 35.84 km (22.3 mi) – this value was given by **Samsung Galaxy Note 10.1** but we think that actual distance is larger and this value is wrong
 Total time: 1:19:11
 Moving time: 51:12

Average speed: 27.15 km/h (16.9 mi/h)

Max speed: 89.96 km/h (55.9 mi/h)

Max elevation: 386 m (1266 ft)

Min elevation: -107 m (-352 ft)

The way by car from Berhale to Mekele

Total distance: 110.29 km (68.5 mi)

Total time: 3:26:40

Moving time: 3:12:04

Average speed: 32.02 km/h (19.9 mi/h)

Average moving speed: 34.45 km/h (21.4 mi/h)

Max speed: 83.74 km/h (52.0 mi/h)

Max elevation: 2406 m (7892 ft)

Min elevation: 659 m (2162 ft)

A special file will be dedicated to the tour giving all necessary comments and additional details.

Please use freely the given details. However if you copy any part of the description above to other documents please provide a reference to the original made by Valeri Skliarov & Iouliia Skliarova.