

Site Surveying in Peru

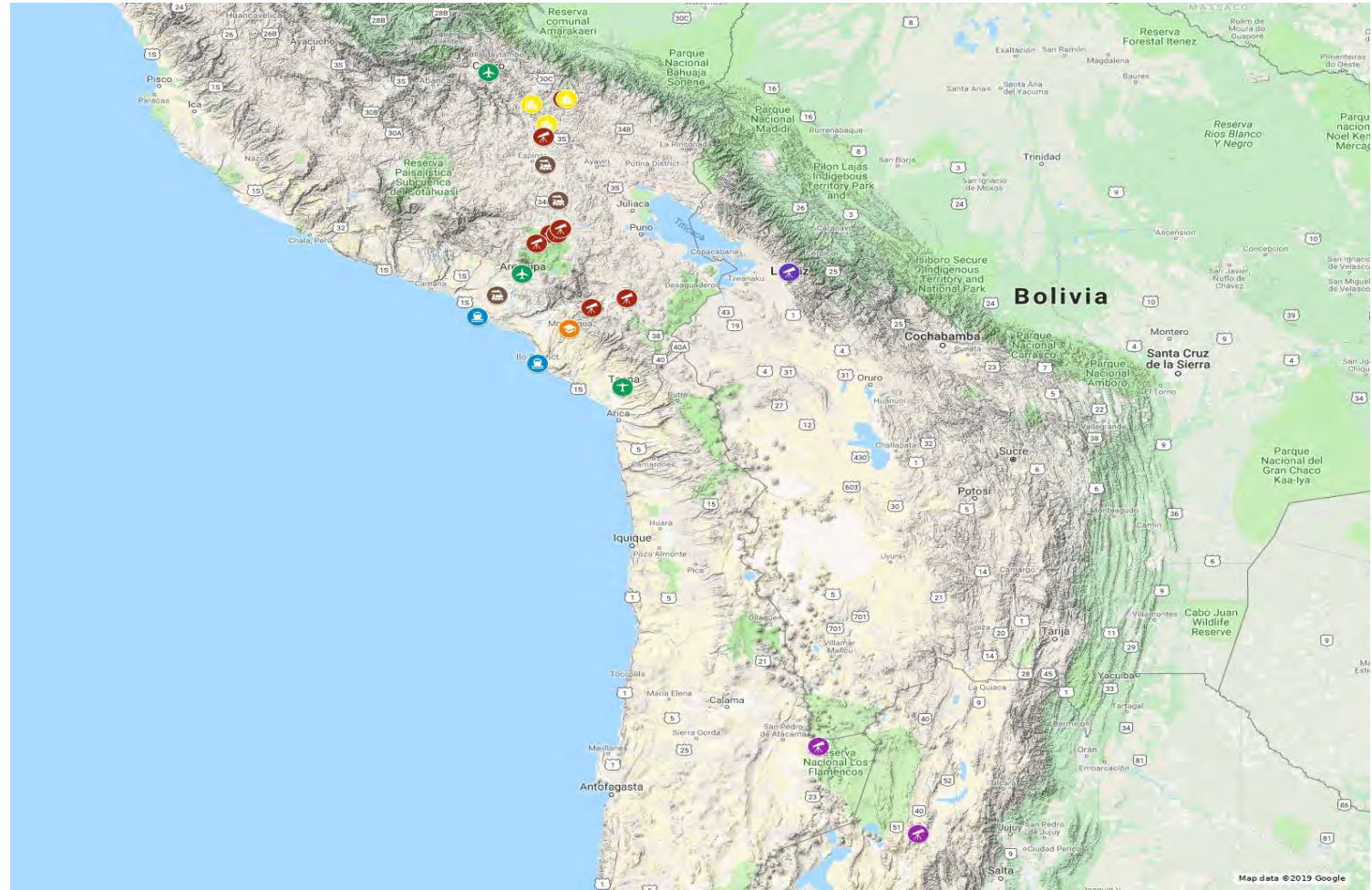
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MPIK

SGSO Meeting
Lisbon, Portugal
May 20th - 22nd, 2019



19/05/2019

Southern Peru Survey



National Observatory Site (16.88 S, 70.66 W, 4300 – 4400 m)



Conida , UNAM
Along Highway, rare road closure



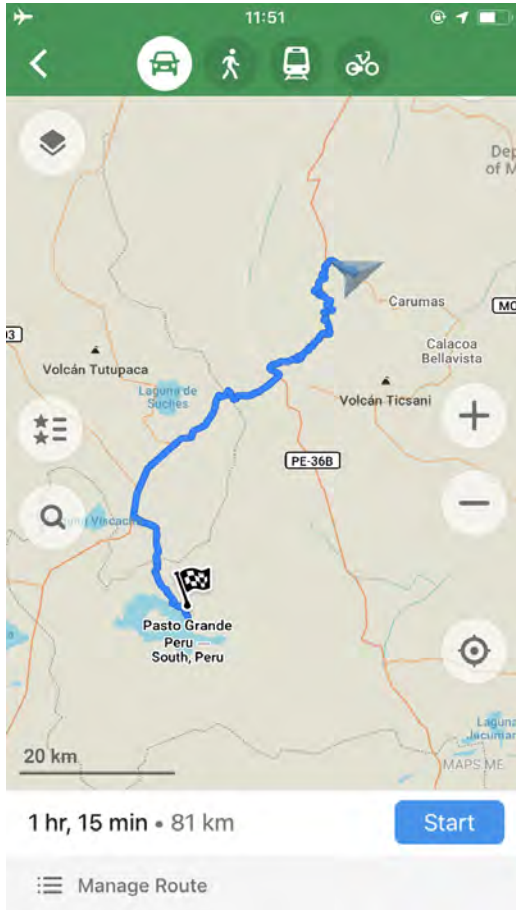
12 MW power ~ 10 mins from site
Internet currently unknown

National Observatory Site (16.88 S, 70.66 W, 4300 – 4400 m)



Along highway linking Tacna to Puno

National Observatory Site (16.88 S, 70.66 W, 4300 – 4400 m)



Tacna (airport and closest major city; 4 hour drive)
Alternative airport (Ilo, closer to site; ~ 3 hour drive)
Port (Ilo), no rail connection to site (closest possibly Puno)

Possible lake near by the national observatory site (not visited)
Altitude ~ 4900 m

National Observatory Site (16.88 S, 70.66 W, 4300 – 4400 m)



Local contact

Laguna Sibinacocha (13.29 S, 71.01 W, 4892 m)

Dam (8 KW?)



Laguna Sibinacocha (13.29 S, 71.01 W, 4892 m)

Trout fishing



Laguna Sibinacocha (13.29 S, 71.01 W, 4892 m)



Wind direction predominantly away from the dam



Water level rises by up to 1 m in a year (melting snow / ice)

Laguna Sibinacocha (13.29 S, 71.01 W, 4892 m)

Facilities ~5-10 m drive from lake

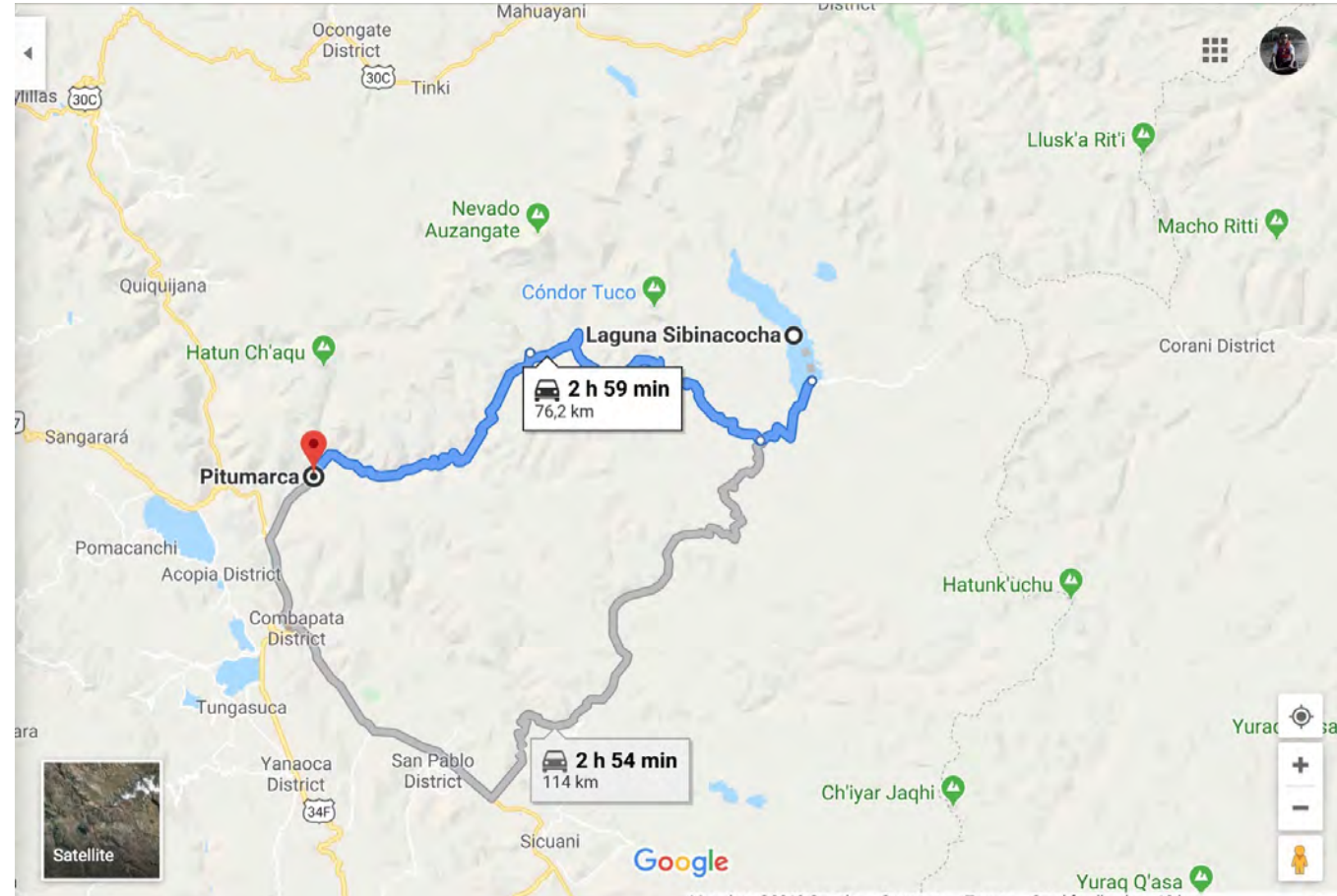


Infirmary dealing primarily with respiratory issues



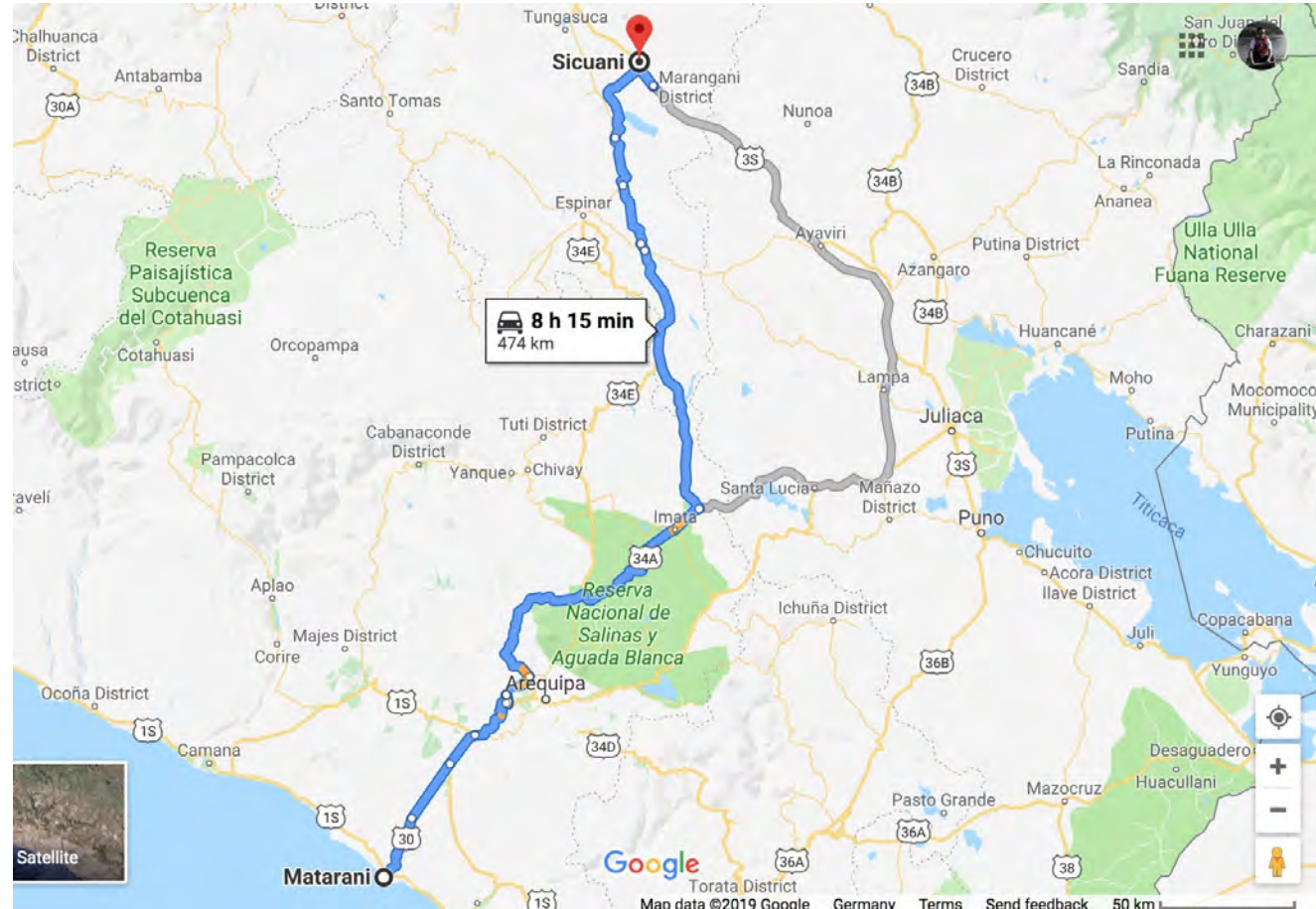
Basic Hotel / Hostel (11 beds ; 3 rooms)

Laguna Sibinacocha (13.29 S, 71.01 W, 4892 m)



Closest Airport : Cusco (~ 3 hrs at 3800 m)
Sicuani (3550 m), Pitumarca (3570 m)

Laguna Sibinacocha (13.29 S, 71.01 W, 4892 m)



Closest Port : Matarani

Train service from Matarani to Sicuani

Laguna Sibinacocha



Local support



Alcalde of Pitumarka

Pitumarka -> Laguna Sibinacocha (I)



Road close to river



Natural flood plain

Pitumarka -> Laguna Sibinacocha (I)



windy



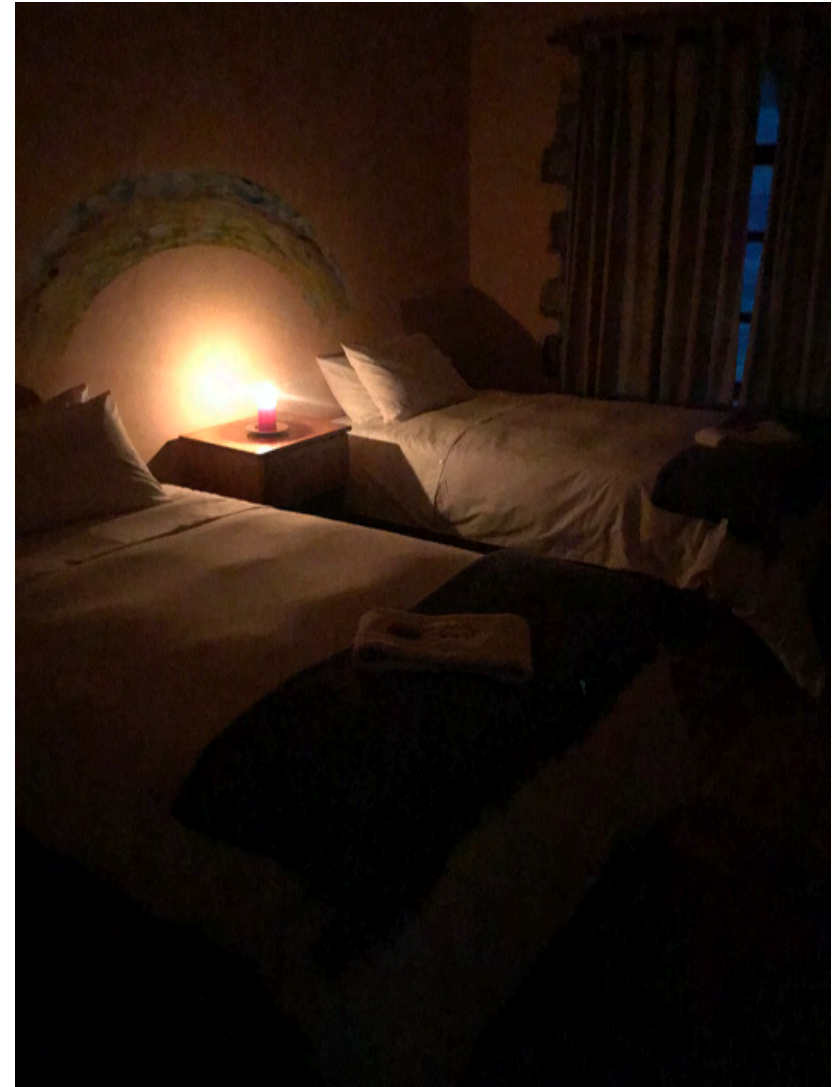
Along cliff

Laguna Sibinacocha

Date & Time: Sun Mar 24 17:03:58 -05 2019
Position: -013.87806° / -071.21665°
Altitude: 4333m
Datum: WGS-84
Azimuth/Bearing: 191° S11W 3396mils (True)
Zoom: 1X



Hotel / Hostel ~ 45 mins from Sibina
(along Pitumarka to Sibina route; 24 beds, 10 rooms)



Pitumarka -> Laguna Sibinacocha (II)



Summer snow



Highest pass

Laguna Sibinachoca -> Sicuani



Access Road

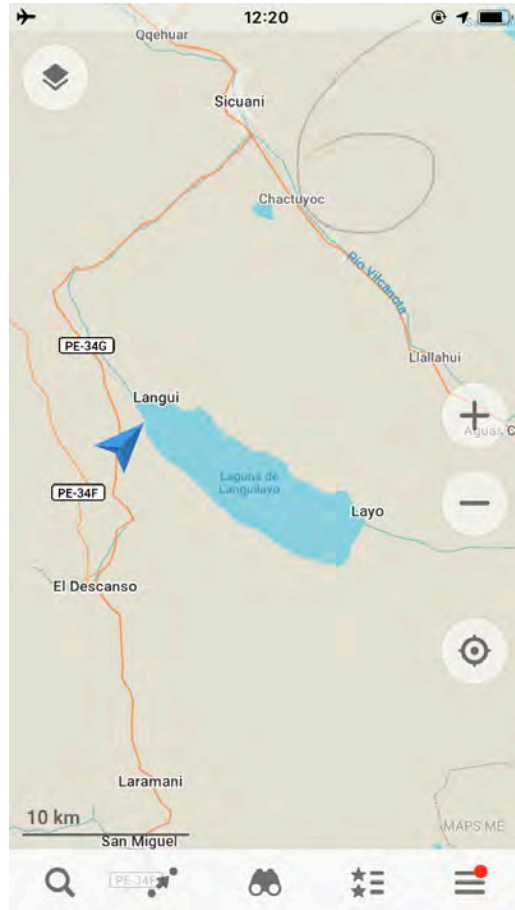
(15 mins from Sibina enroute to Sicuani)



Laguna Languilayo (14.46 S, 71.29 W, 4100 4300 m)



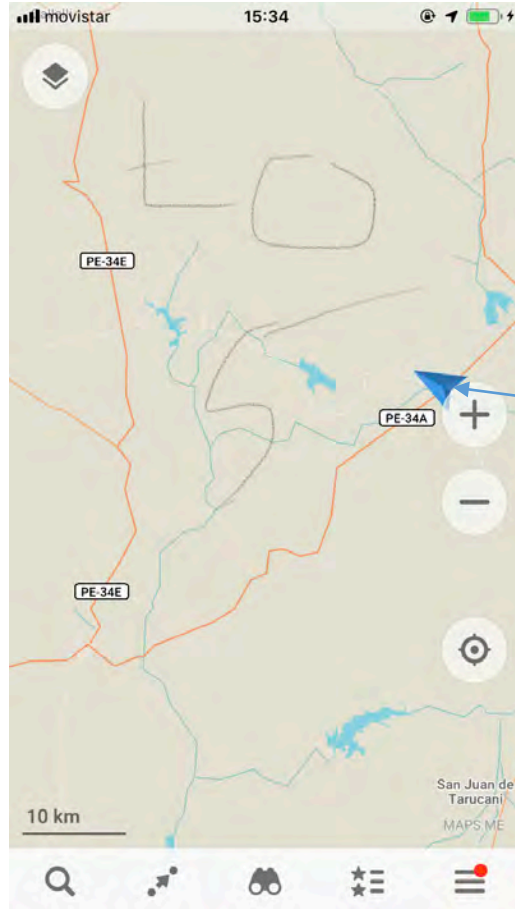
Laguna Languilayo (14.46 S, 71.29 W, 4100 - 4300 m)



Imata (S1 : 15.83 S, 17.18 W, 4384 m)



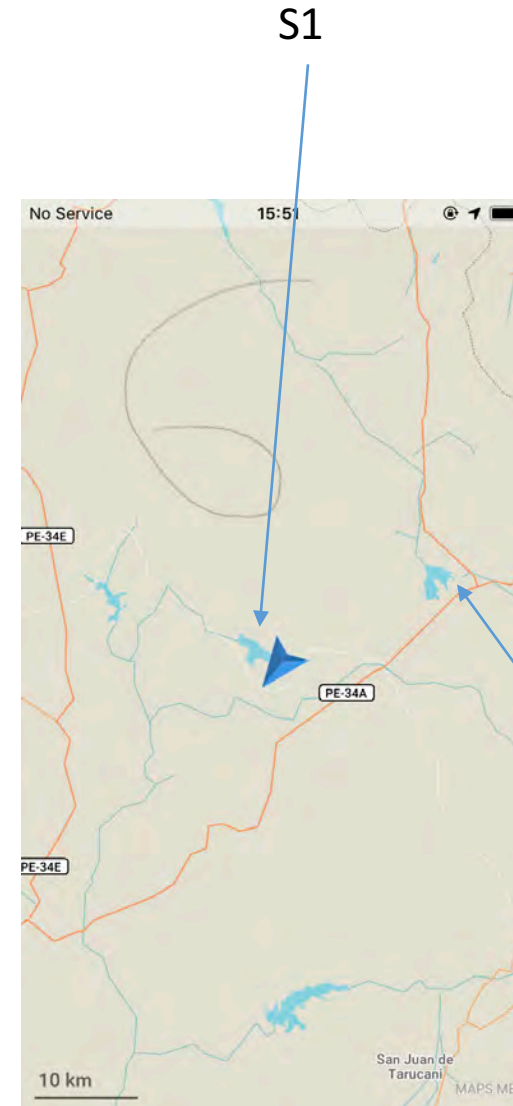
Imata (S1 : 15.83 S, 17.18 W, 4384 m)



Imata (S2)

Imata - Trucker Stop, very basic accomodation only

Train line from Matarani via Arequipa to Imata



S3

Closest Port : Matarani, Closest Airport: Arequipa (2 – 3 hrs)

Imata (S1 : 15.83 S, 17.18 W, 4384 m)



Access Road

Imata (S2 : 15.83 S, 71.09 W, 4453 m)



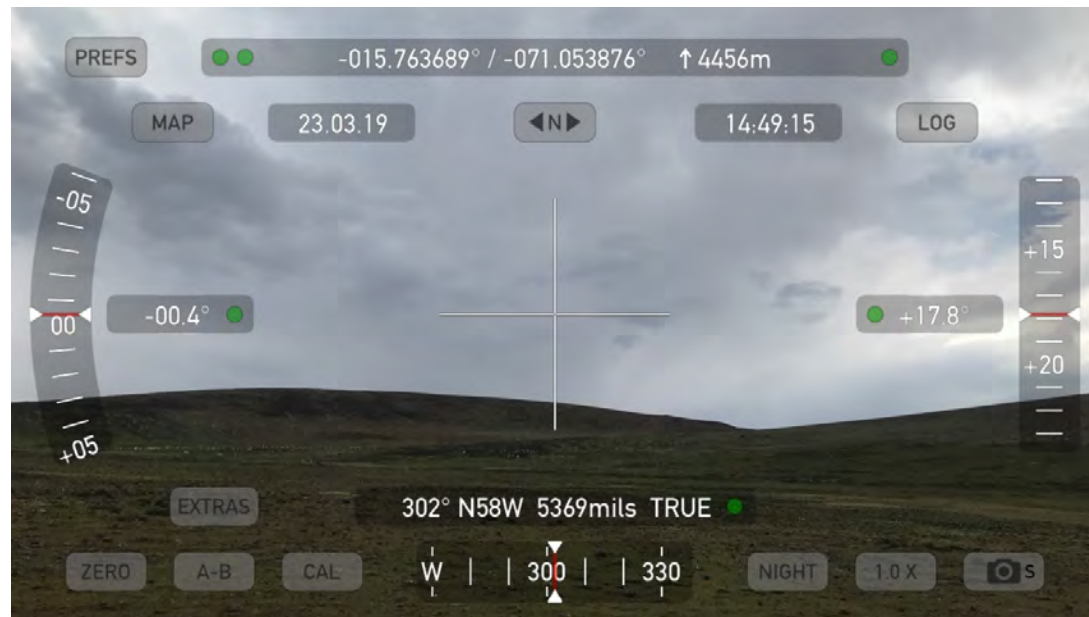
Imata (S2 : 15.83 S, 71.09 W, 4453 m)



Imata (S3 : 15.76 S, 71.05 W, 4462 m)



Imata (S3 : 15.76 S, 71.05 W, 4462 m)



Imata (S3 : 15.76 S, 71.05 W, 4462 m)



Artificial Canal flowing away from lake towards Imata

Imata (S3 : 15.76 S, 71.05 W, 4462 m)



Access Road



Mostly flat lands but damp

Sumbay (15.97 S, 71.34 W, 4119 m)



Sumbay (15.97 S, 71.34 W, 4119 m)



Sumbay (15.97 S, 71.34 W, 4119 m)



Sumbay (15.97 S, 71.34 W, 4119 m)



Thank You!