Pre-Proccessing Information

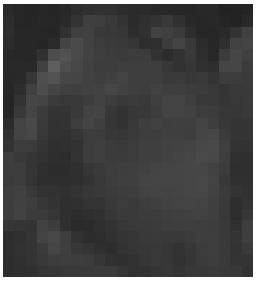
Dataset File	LT04_L1TP_233076_19891214_20170201_01_T1
Sensor	TM / LANDSAT_4
WRS Path/Row	233 / 76
Date Adquired	1989-12-14
Volcano	Lascar

Parameters

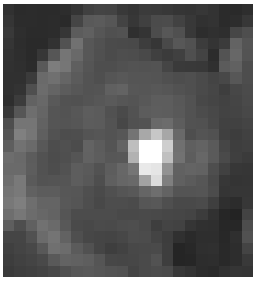
Name	Value	Unit	Default
Spectral Emissivity	0,82	-	✓
Upwelling Atmospheric Radiance	0,19	-	✓
Transmissivity	0,97	-	✓
Total Gas Flux	3192	kg/s	✓
Specific heat capacity of gas	2290	J/kg K	✓
Magma Temperature	1233	K	✓
Air Temperature	278	K	✓
H_2O Flux	2547	kg*s	✓
Latent heat of H_2O condensation	2260000	J/kg	✓
Latent crystallization heat	350000	J/kg K	✓
Crystallized mass fraction	1	-	✓
Magma specific heat capacity	1000	J/kg	✓
Minimum Magma Temperature	421	K	✓
Maximum Magma Temperature	653	K	✓

Region of Interest

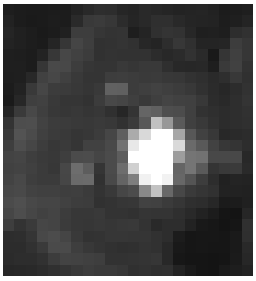
RAW Images



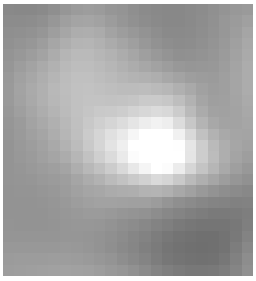
NIR



SWIR 1

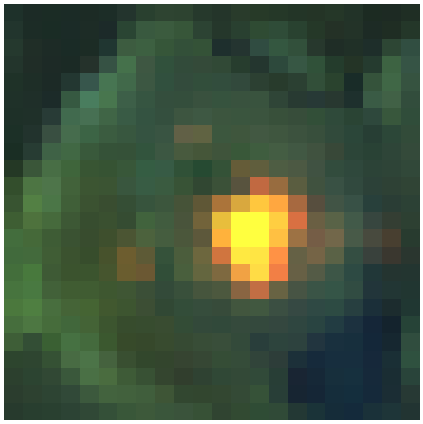


SWIR 2

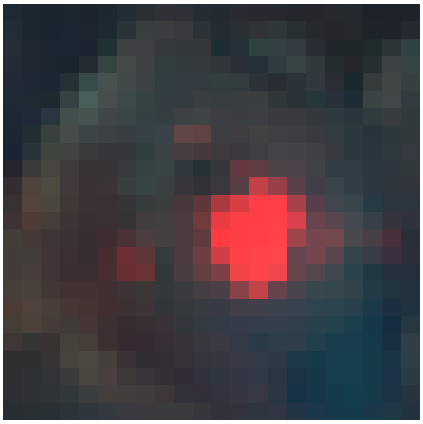


TIR

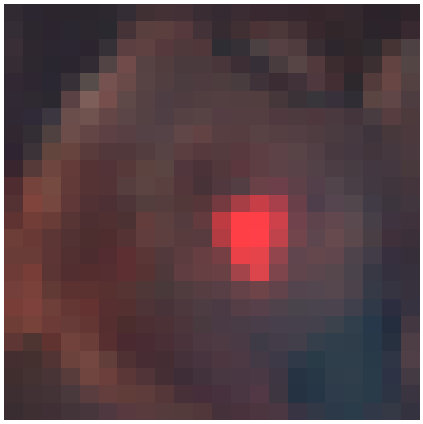
RGB Images (RAW Data)



RGB (SWIR 2; SWIR 1; NIR)



RGB (SWIR 2; NIR; GREEN)

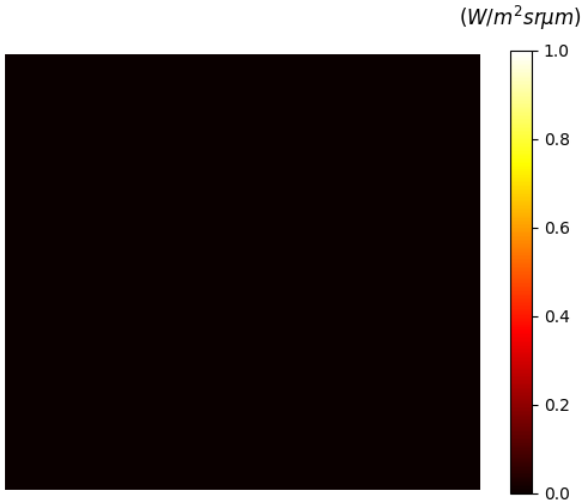


RGB (SWIR 1; NIR; GREEN)

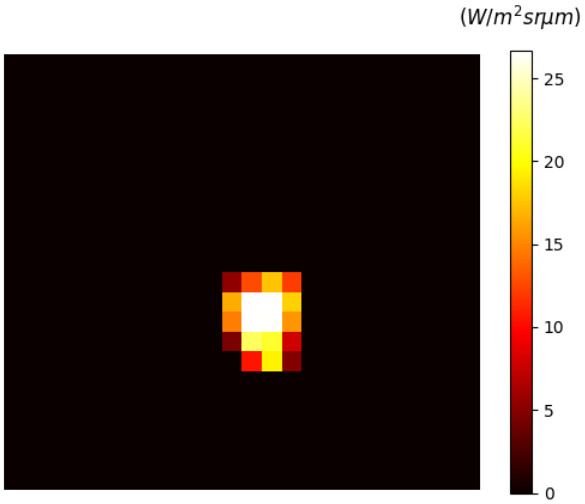
Thermal Radiance (W/m ^{2} srμm)

NIR	SWIR 1	SWIR 2	TIR
n.d.	309	453	300

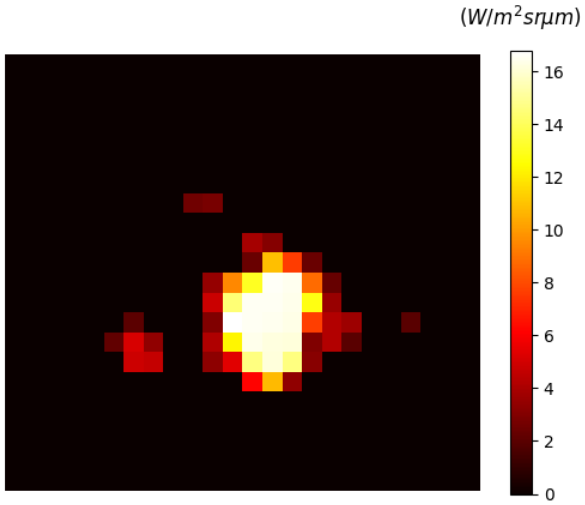
Processed Bands



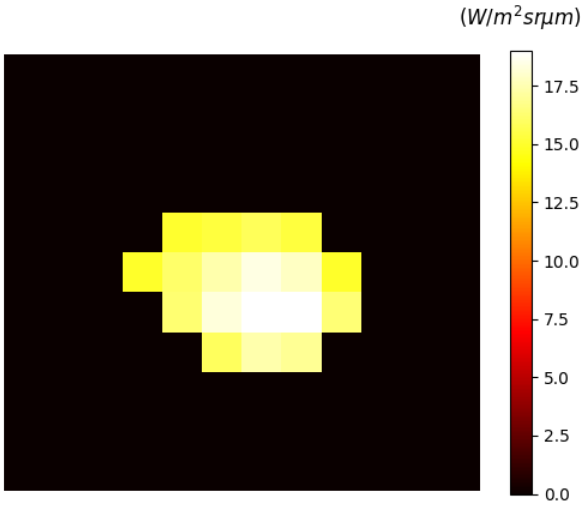
NIR Anomalous Area



SWIR 1 Anomalous Area



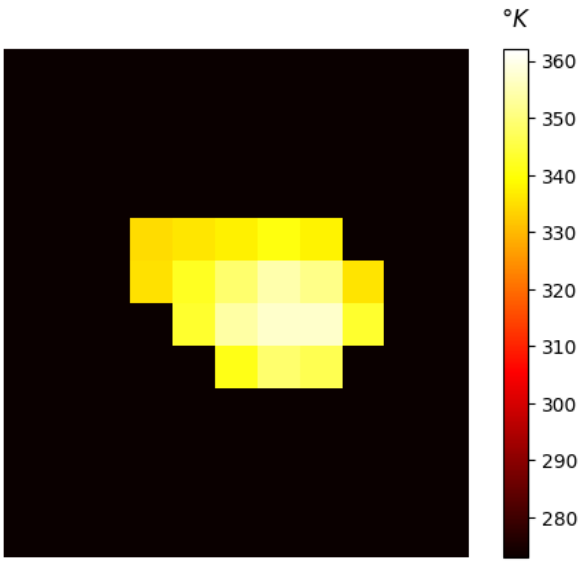
SWIR 2 Anomalous Area



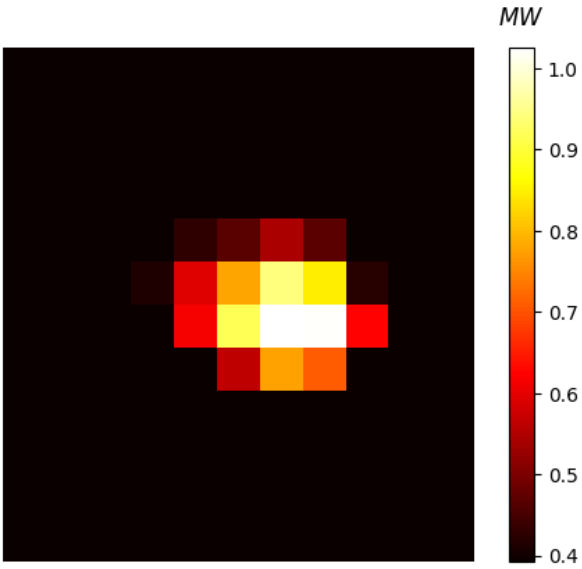
TIR Anomalous Area

Radiative Flux (TIR)	Brightness T° (TIR)	
MW	min (K)	max (K)
12	334	357

Processed Bands



Brightness Temperature (TIR)



Radiative Flux (TIR)

Three Bands Three Components Method

Thermally Radiant Area		Effective T°		Radiative Flux	
min (m^2)	max (m^2)	min (°C)	max (°C)	min (MW)	max (MW)
17100	64799	210	148	43	95

Convective Flux		Total Gas Flux	Total Heat Flux	
min (MW)	max (MW)	(MW)	min (MW)	max (MW)
-	-	12736	12780	12832

Mass Flux ∆ T° Minimun		Mass Flux ∆ T° Maximum	
min	max	min	max
16576	16644	12742	12794

This dataset was processed on April 04 of 2020 at 21:26:59 UTC