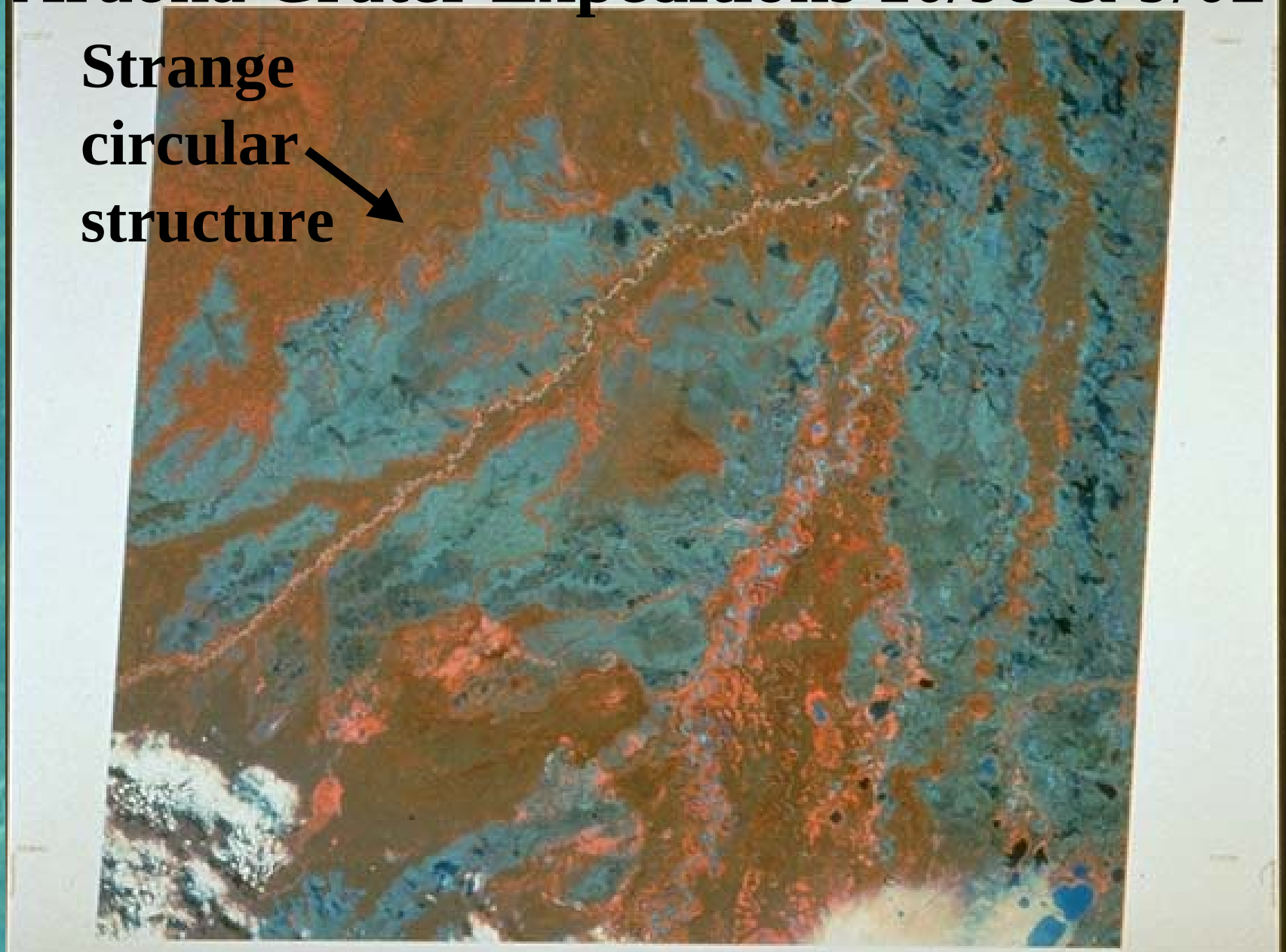
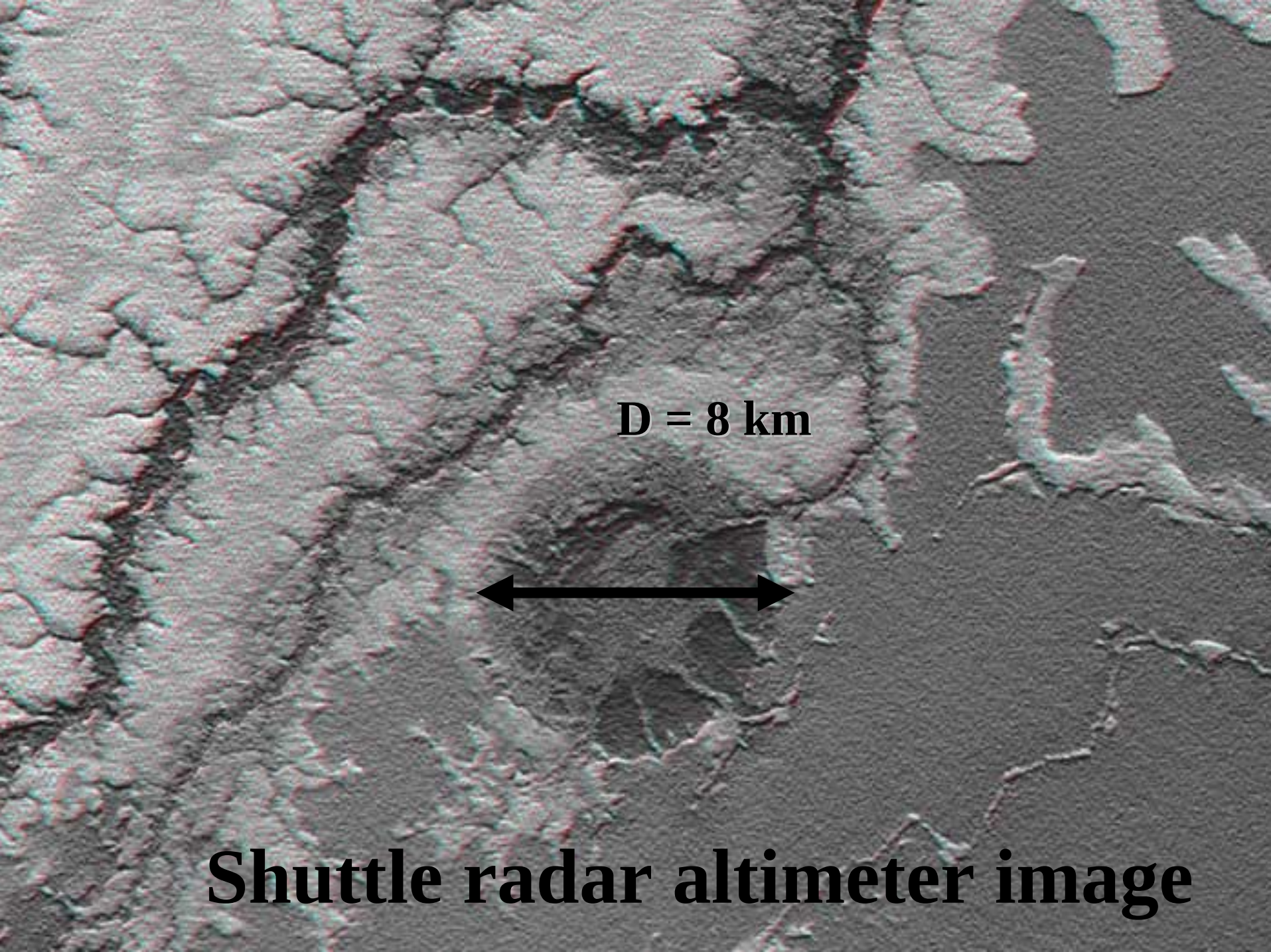
Araona Crater Expeditions 10/98 & 9/02



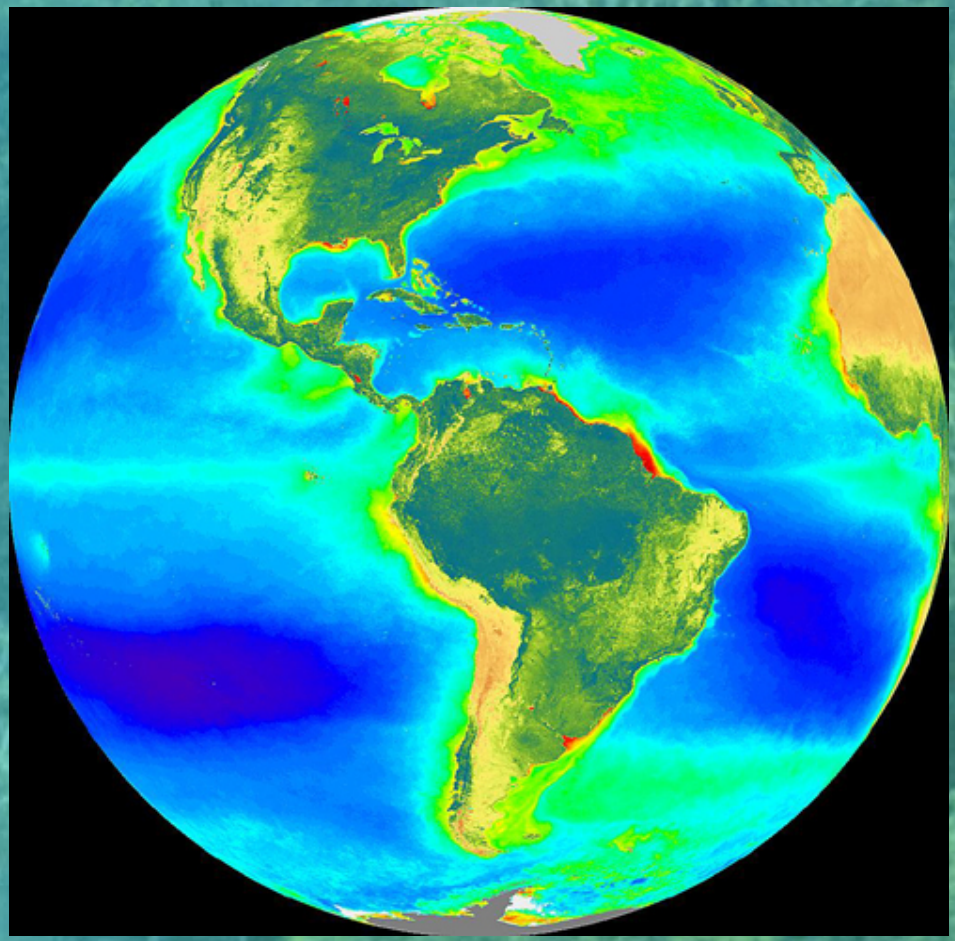
Over the crater

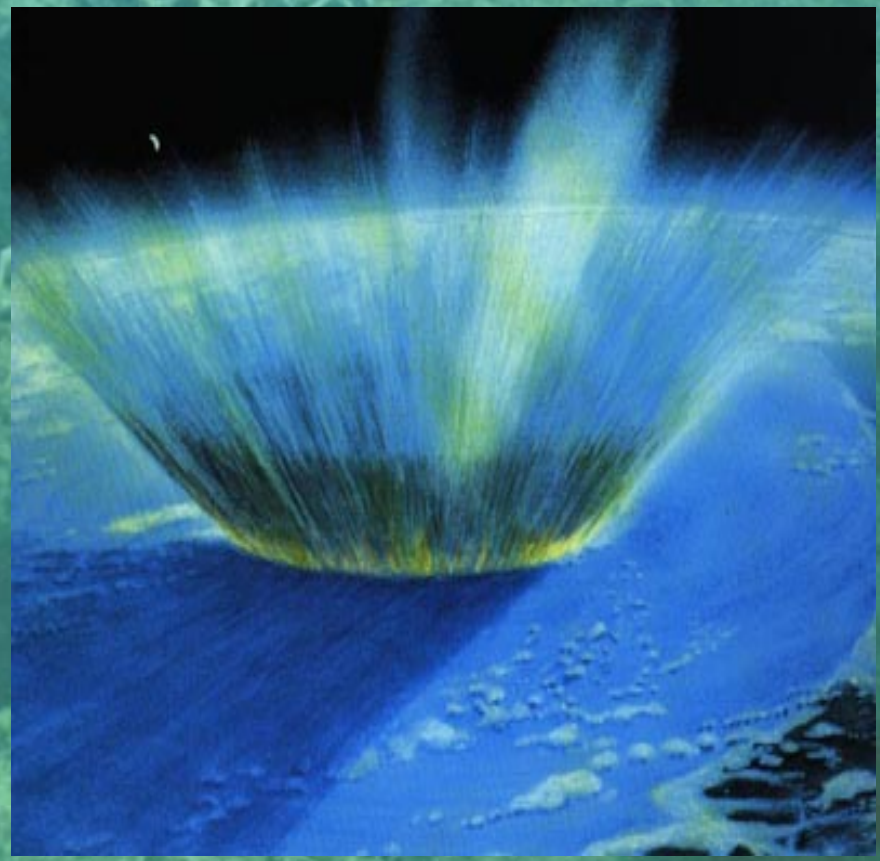
D = 8 km



Shuttle radar altimeter image

Target Earth
50-100 km/sec
$E=mv^2$





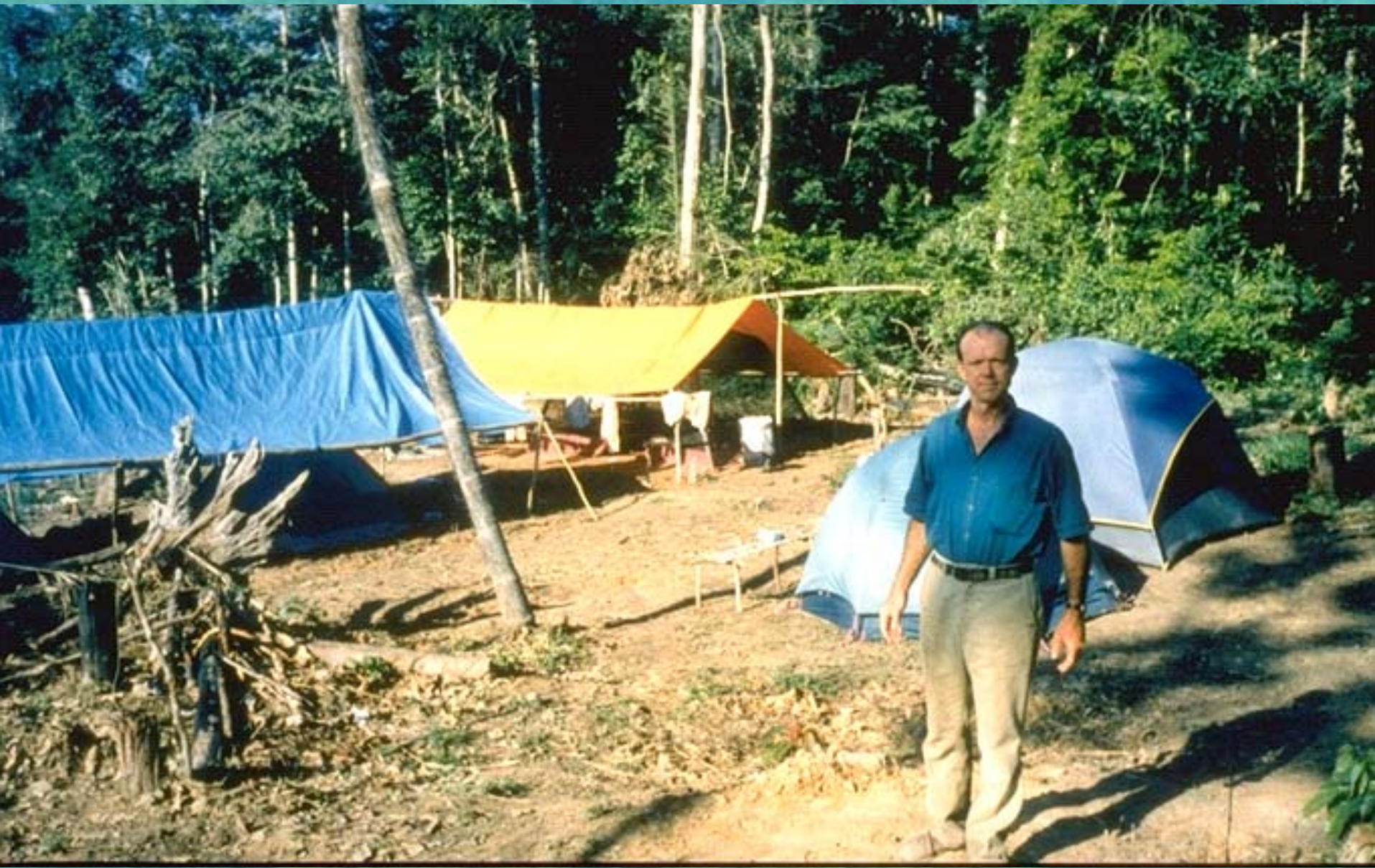
Object size and impact energy

crater diameter	object diameter	energy Joules	TNT Equivalent	Frequen-cy
35 m	2 m	2.1 x 10**12	500 tons	1/44 yr
120 m	6 m	8.3 x 10**12	20,000 tons	1/35 yr
1 km	50 m	4.6 x 10**16	11 MT	1/1.6k yr
7.2 km	360 m	1.7 x10**17	3700 MT	1/55k yr
10 km	500 m	4.6 x 10**19	11,000 MT	1/100k yr
100 km	5 km	4.6 x 10**22	11,000,000 MT	1/26 M yr

Moto taxis de Beni

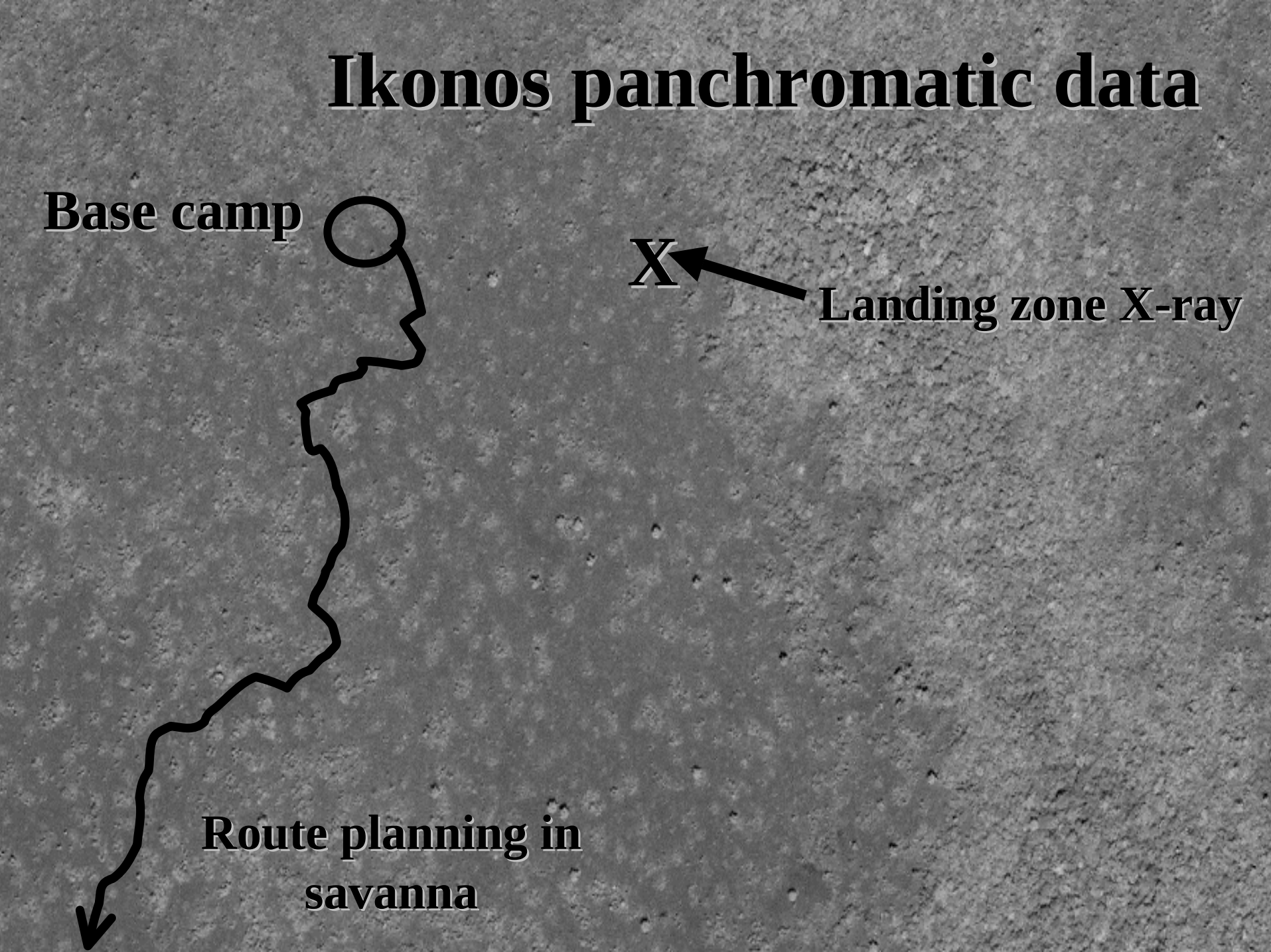
Rio Beni

Puerto Araona Airstrip y capt. Mancho



Social insects

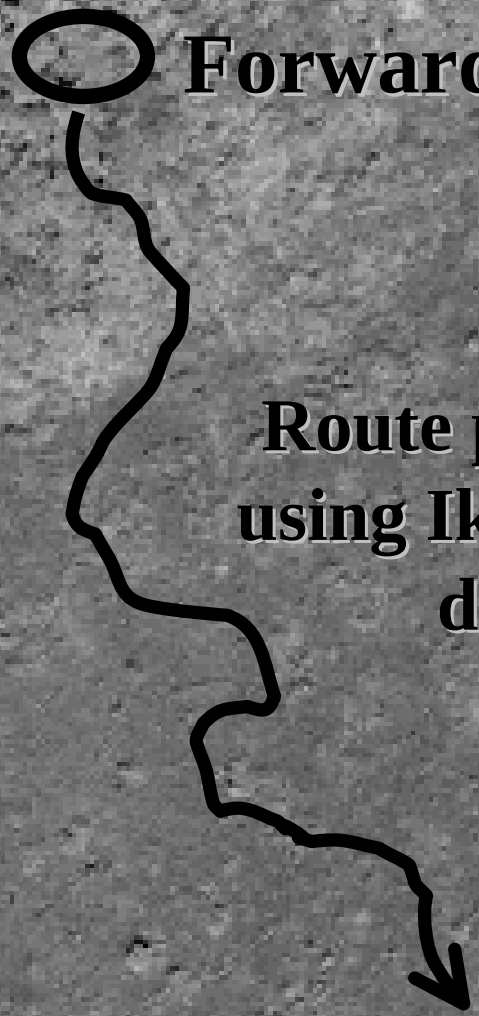
DEA Helicopters

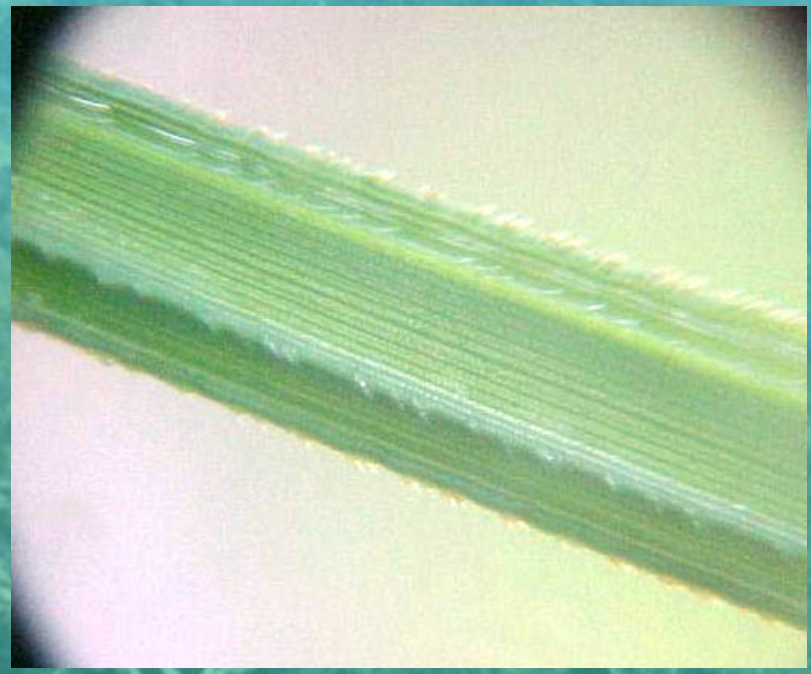

Ikonos panchromatic data
Base camp
X
Landing zone X-ray
Route planning in savanna

Narcotico Air Services helicopters

Tropical savanna
Rough and unforgiving

Ikonos panchromatic data



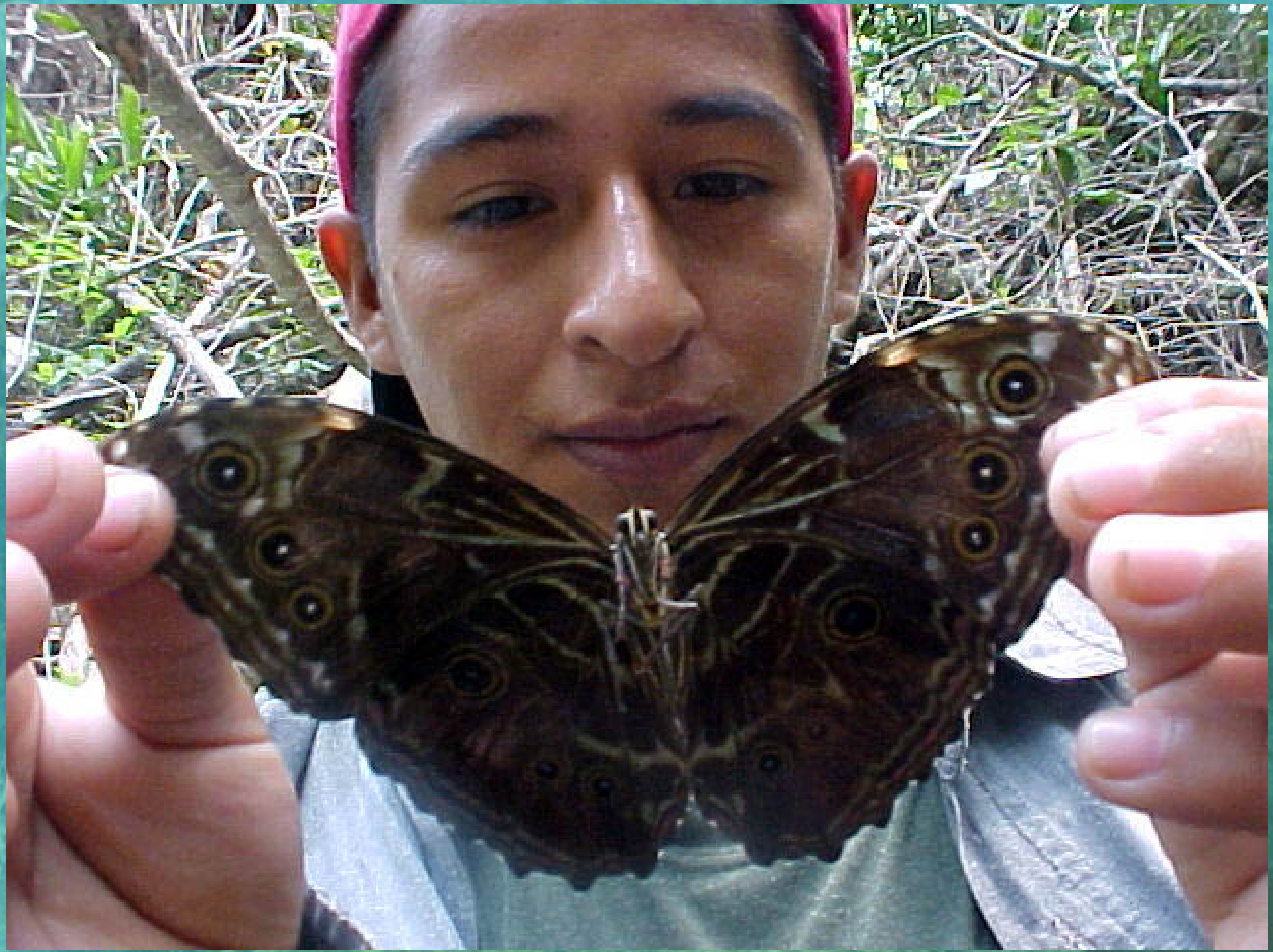


Cutting grass

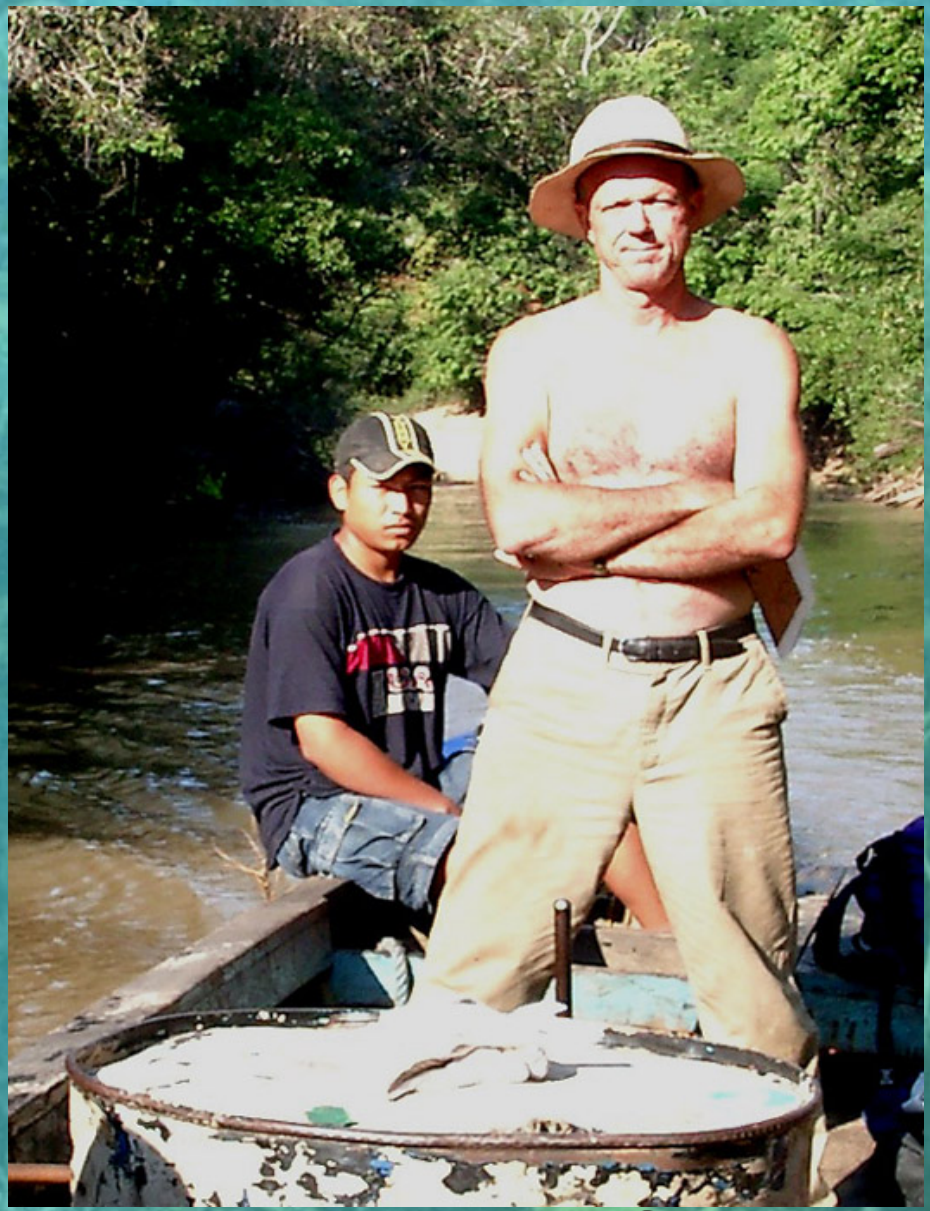
Arachnidphobia?

fauna

Future butterflies



Bees, wasps, & electric eels



In a coma for 5 weeks--hanta virus

Geology map

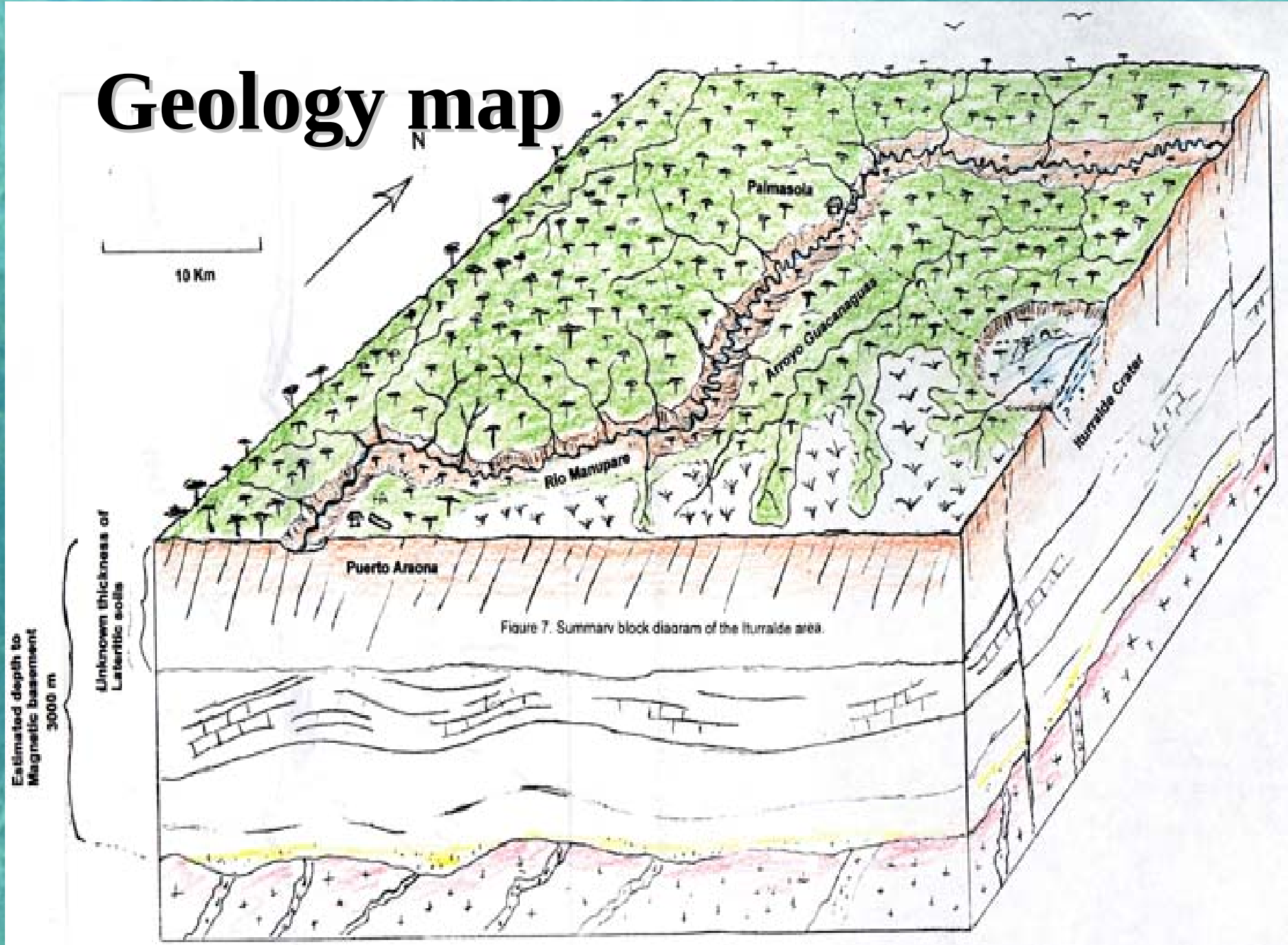


Figure 7. Summary block diagram of the Iturralde area.

Expedition 2002 Summary

Ikonos data are fantastic!