ICES2- BUENOS AIRES, 2006

THE STATE-OF-THE-ART OF LATE QUATERNARY HUMAN OCCUPATION AND PALEOENVIRONMENTS IN SOUTHERN MENDOZA (ARGENTINA)

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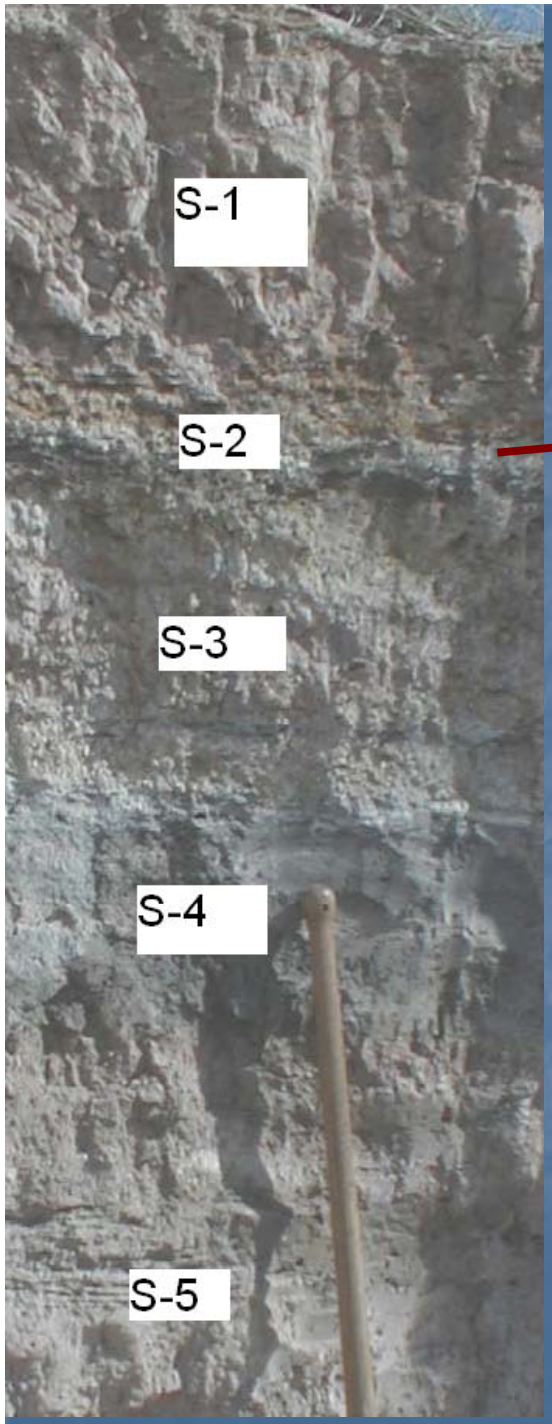
Aims

- To understand the environmental changes that occurred in the region during the late Pleistocene and Holocene
- To study human strategies in those environmental scenaries
- To dilucidate the rol played by wetlands in arid ecosystems and their utilization by human populations



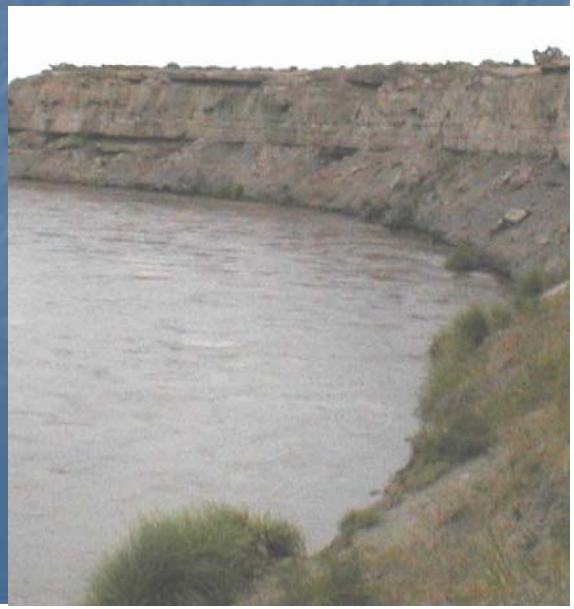
Puesto Moya

- Studied section (ca. 5 m); top levels of probable lacustrine origin.


sondeo peladero
sondeo peladero
Pto. Vicencio
La Junta 2
La Torta
La Junta 1
Pto. Moya
Image © 2005 MDA EarthSat
Image © 2005 DigitalGlobe
Google
N
W
E
S
Pointer 35°01'08.60" S 69°00'18.52" W elev 4345 ft
Streaming 100%
Eye alt 53.06 mi

Puesto Vicencio

- Studied profile (ca. 10 m).
- Low section: gravel and sands.
- Top section: consolidated muds



- Puesto Moya and Puesto Vicencio showed abundant freshwater and land mollusk shells.
- At present, these mollusks are found inhabiting different types of freshwater environments in the region.
- Some shells constitute new species

Mollusks from Puesto Moya

- Puesto Moya: mollusks in paleosols: assemblages dominated by the land snail *Succinea meridionalis* (90 ind/100ml) and the amphibious fresh water snail *Lymnaea viator*.
- *S. meridionalis* is associated to aquatic environments (very low representation in modern environments).
- *L. viator* lives in very shallow waters (swamps) with submerged vegetation.
- There is also a record of *Heleobia* sp. and *Biomphalaria peregrina,* which indicate shallow water, with scarce circulation and vegetated.

Mollusks from Puesto Vicencio

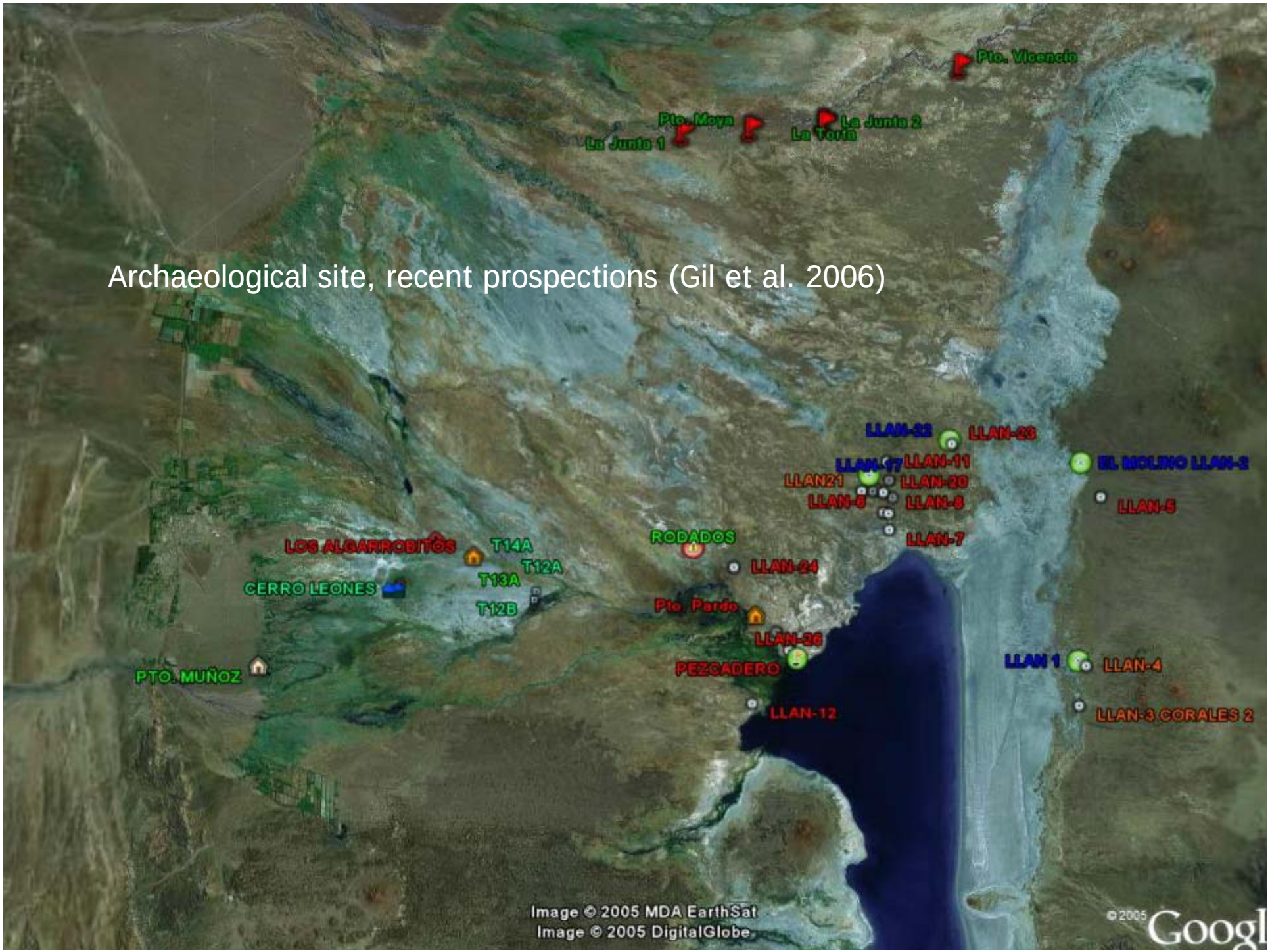
- Level 338-310 (lower): *Heleobia* spp. Specimens corresponding to one of two morphotypes have not been described yet. They are probable new species, and have also been found in modern environments from the area. Their paleoecological value is under study.
- Level 207-89 (higher): Mollusk assemblages composed of *Chilina mendozana*, *L. viator* and small bivalves (Sphaeridae?) not identified yet. This same assemblage was found at present in very shallow waters, associated to river floodplains.

Pattern of environmental change

- At least two different sceneries characterized by different hydrologic dynamics (different facies within a river?)
- Increase in the availability of effective water (regional climatic variations?)
- Hypothesis of Groeber (1939)

Paleoecological implications

- The malacofauna recovered at Puesto Moya and Puesto Vicencio is represented in the modern fauna of the region
- These species appear to be related to very shallow water bodies developed in the margin of rivers (floodplain)
- This suggests that the paleoenvironments developed at Puesto Moya and Puesto Vicencio were shallow lakes associated to a main riverine course.


Archaeological site, recent prospections (Gil et al. 2006)
Pto. Vicencio
Pto. Moya
La Junta 1
La Junta 2
La Torta
LLAN-22
LLAN-23
LLAN-17
LLAN-11
EL MOLINO LLAN-2
LLAN21
LLAN-20
LLAN-6
LLAN-8
LLAN-5
LLAN-7
RODADOS
LOS ALGARROBITOS
T14A
T12A
T13A
CERRO LEONES
T12B
LLAN-24
Pto. Pardo
LLAN-26
PTO. MUÑOZ
PEZCADERO
LLAN 1
LLAN-4
LLAN-12
LLAN-3 CORALES 2
Image © 2005 MDA EarthSat
Image © 2005 DigitalGlobe
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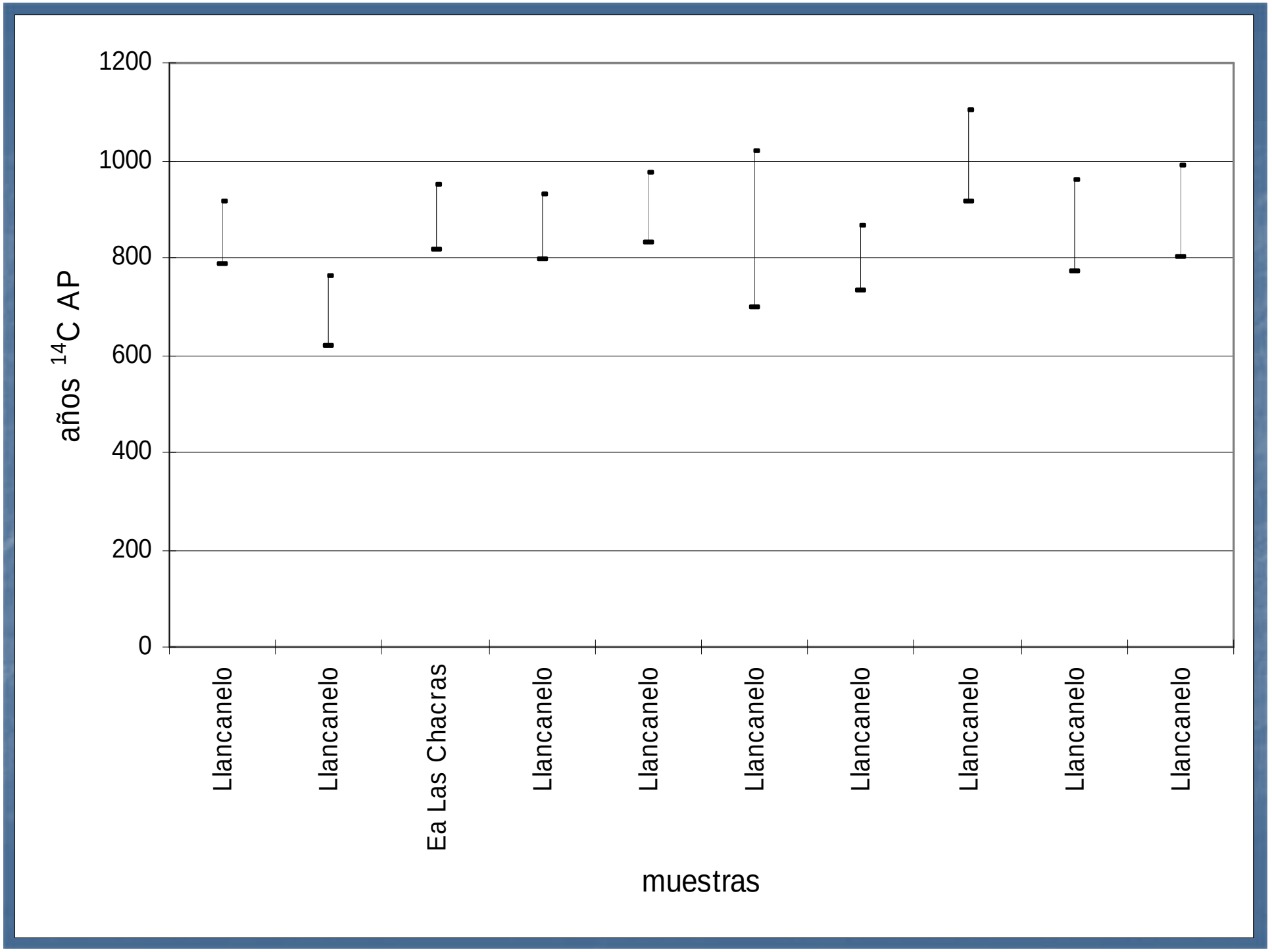
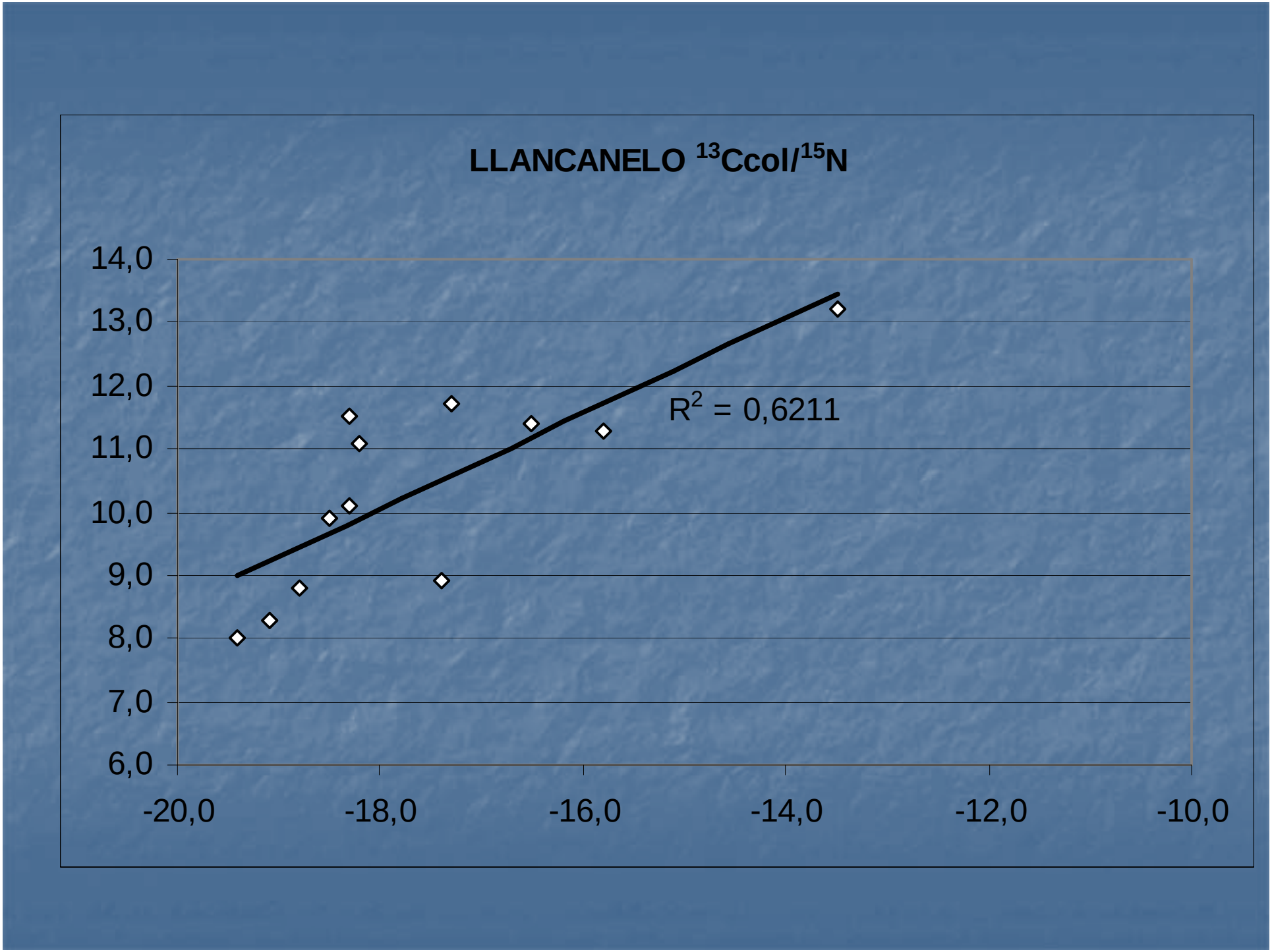

1200
1000
800
600
400
200
0
años ^{14}C AP
Llancanelo
Llancanelo
Ea Las Chacras
Llancanelo
Llancanelo
Llancanelo
Llancanelo
Llancanelo
Llancanelo
Llancanelo
muestras

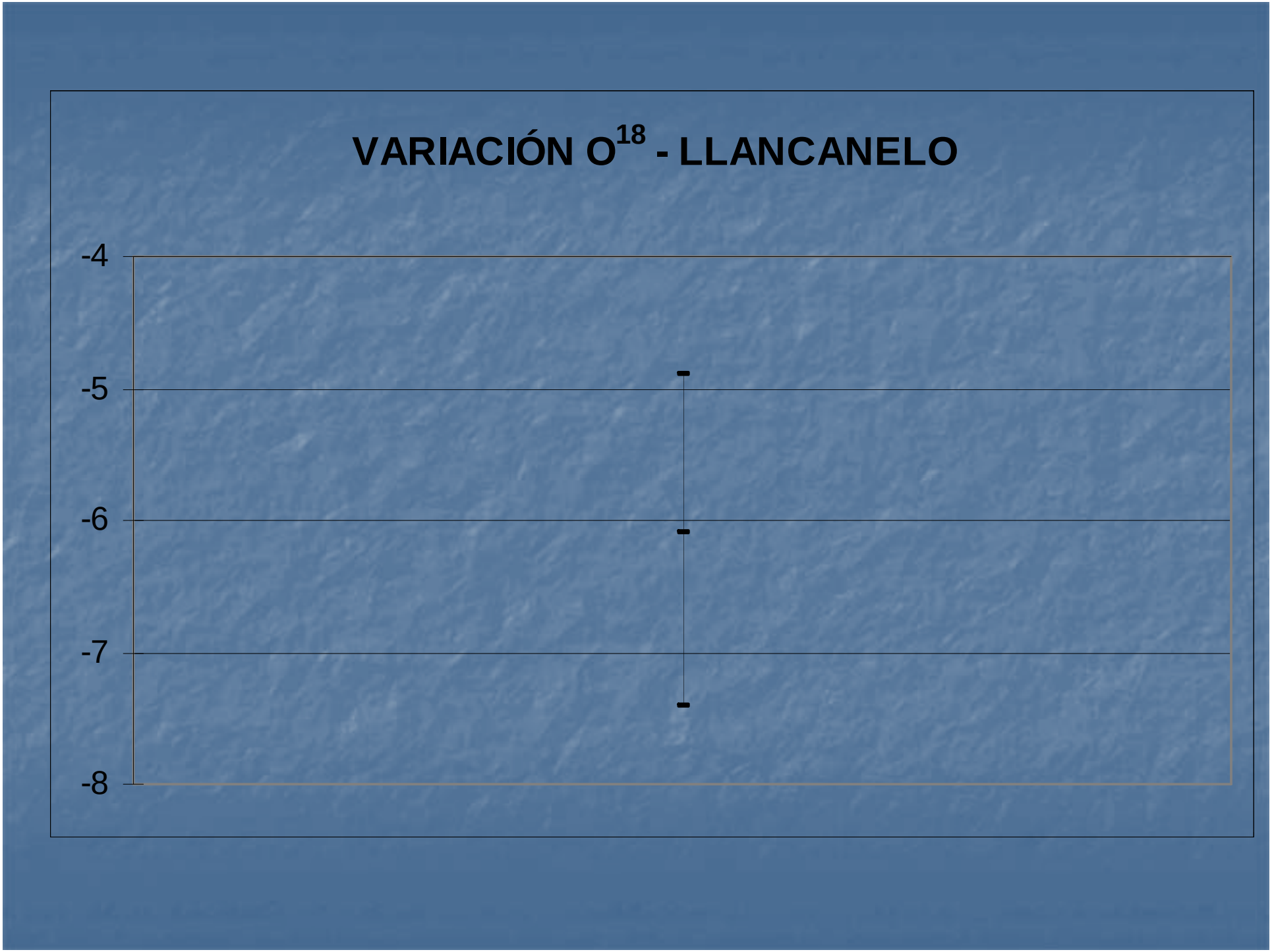
LLAN-17 (NOVEMBER 2005)

COLLECTION MUSEO REGIONAL MALARGUE

Ind. Nº1 (AA6572: 2626 ± 61)

Δ ^{13}C -17.5‰


LLANCANELO ^{13}Ccol/^{15}N
14,0
13,0
12,0
11,0
10,0
9,0
8,0
7,0
6,0
-20,0
-18,0
-16,0
-14,0
-12,0
-10,0
R^2 = 0,6211


VARIACIÓN O18 - LLANCANELO
-4
-5
-6
-7
-8

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