
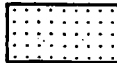



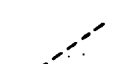


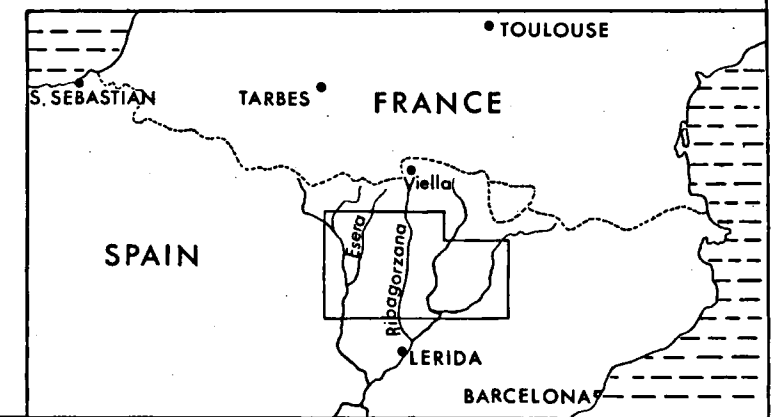
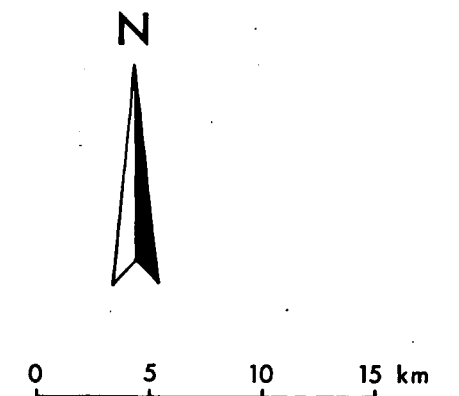
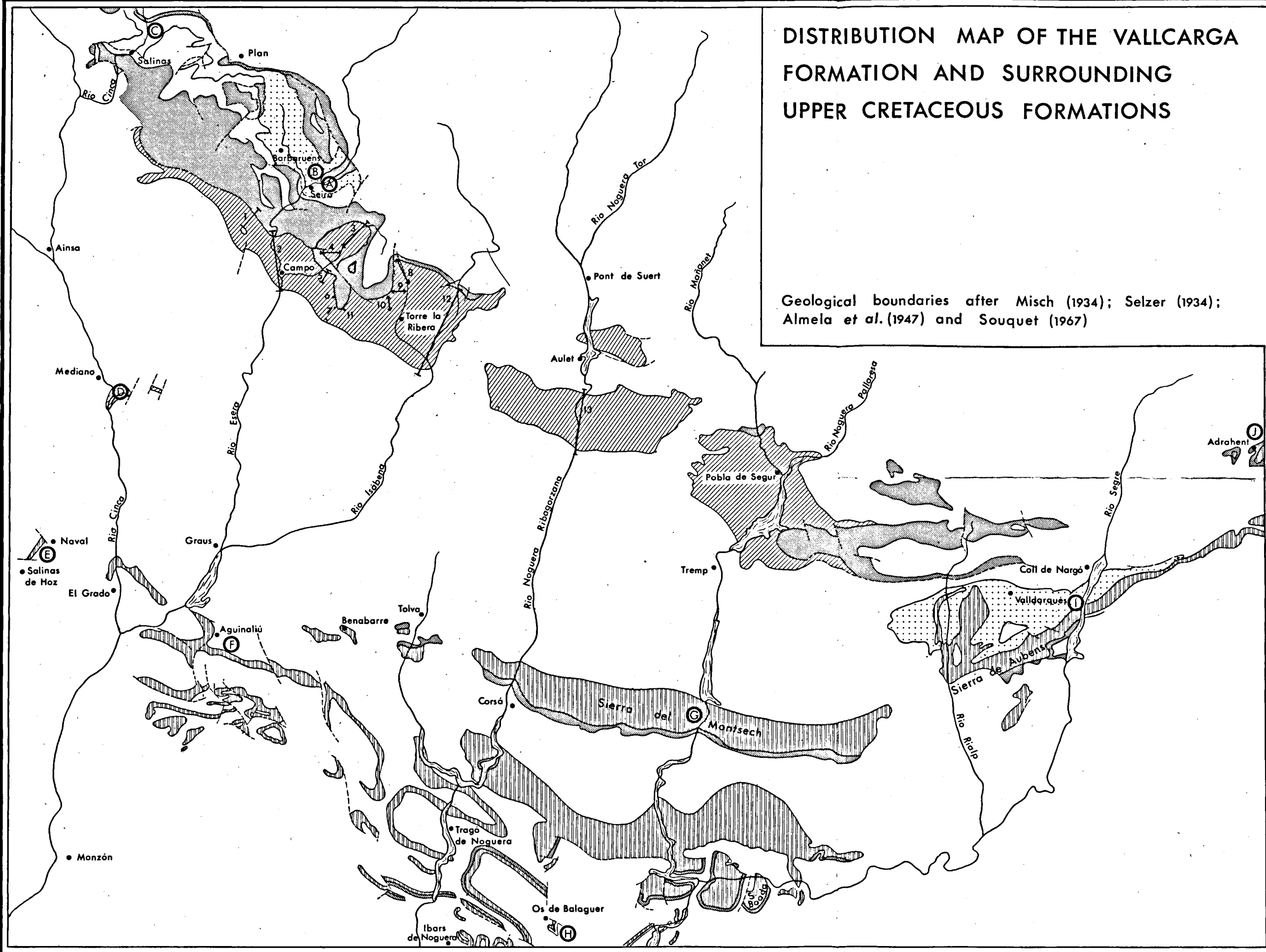


DISTRIBUTION MAP OF THE VALLCARGA FORMATION AND SURROUNDING UPPER CRETACEOUS FORMATIONS

Geological boundaries after Misch (1934); Selzer (1934); Almela et al. (1947) and Souquet (1967)

-  Campanian - l. Maastrichtian sandstones and marls
-  Campanian - l. Maastrichtian nodular limestones and marls
-  Campanian - l. Maastrichtian limestones
-  Santonian limestones, marls and sandstones
-  Vallcarga Formation
-  fault
-  geological boundary
-  location of section

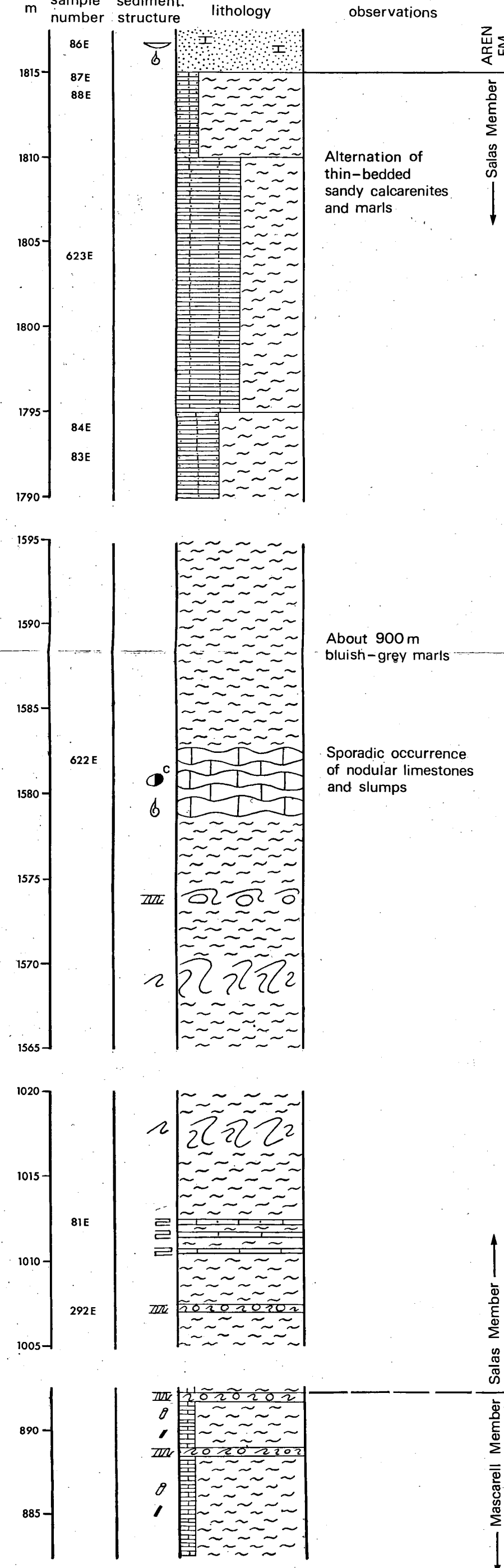
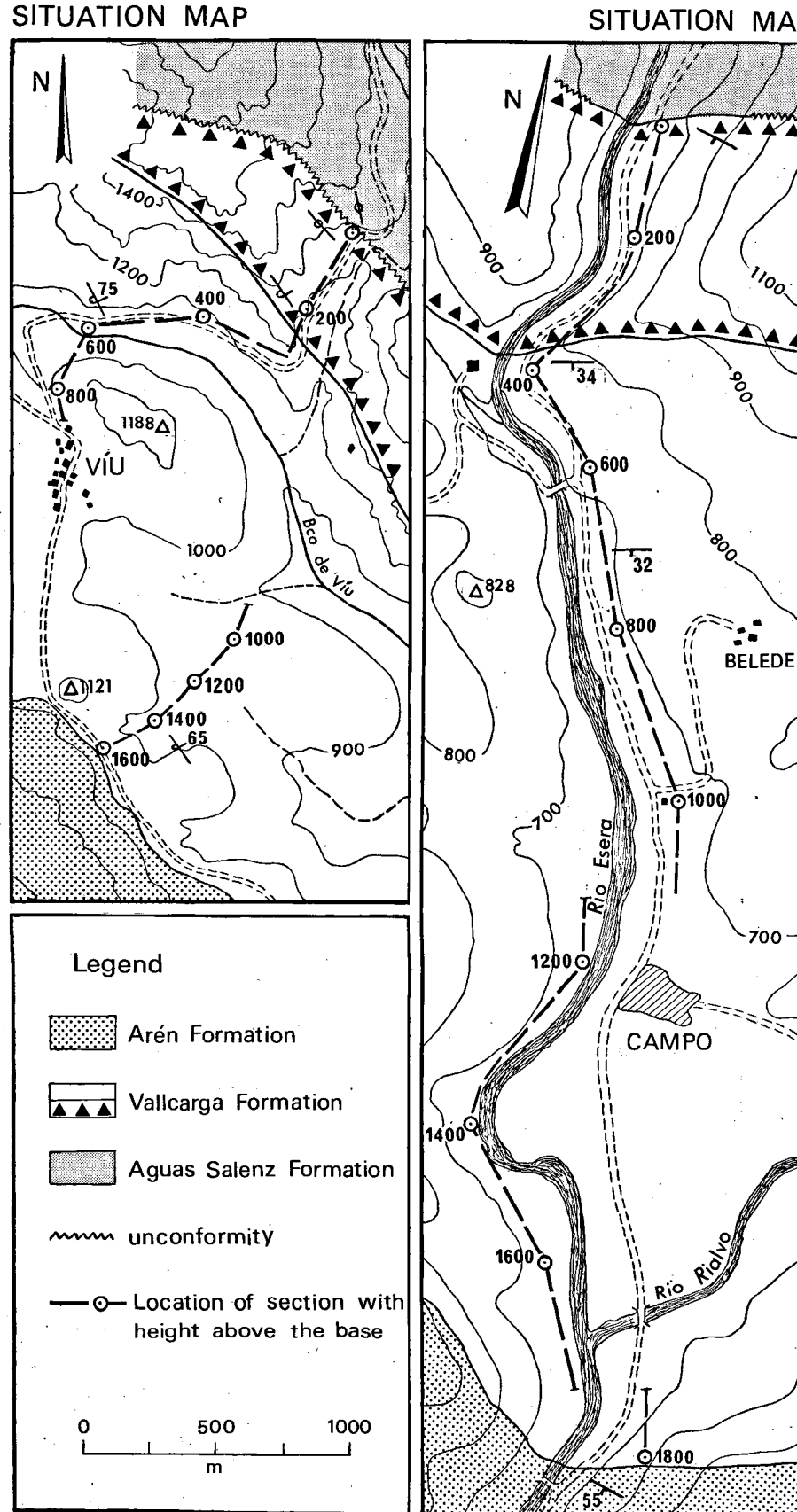


section 1

section 2



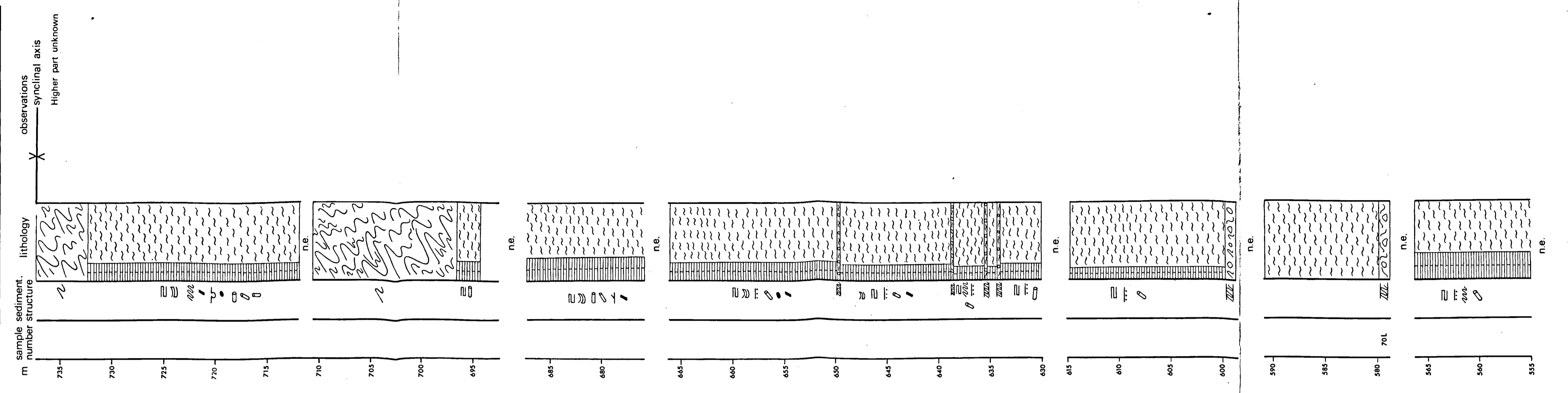
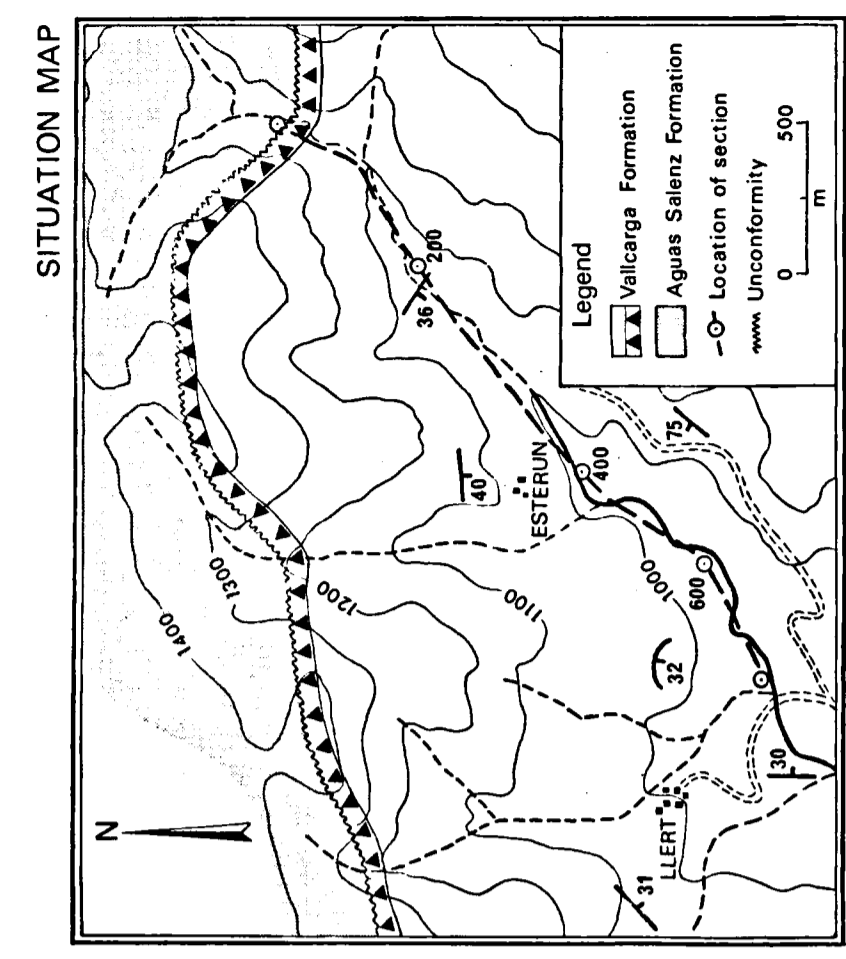
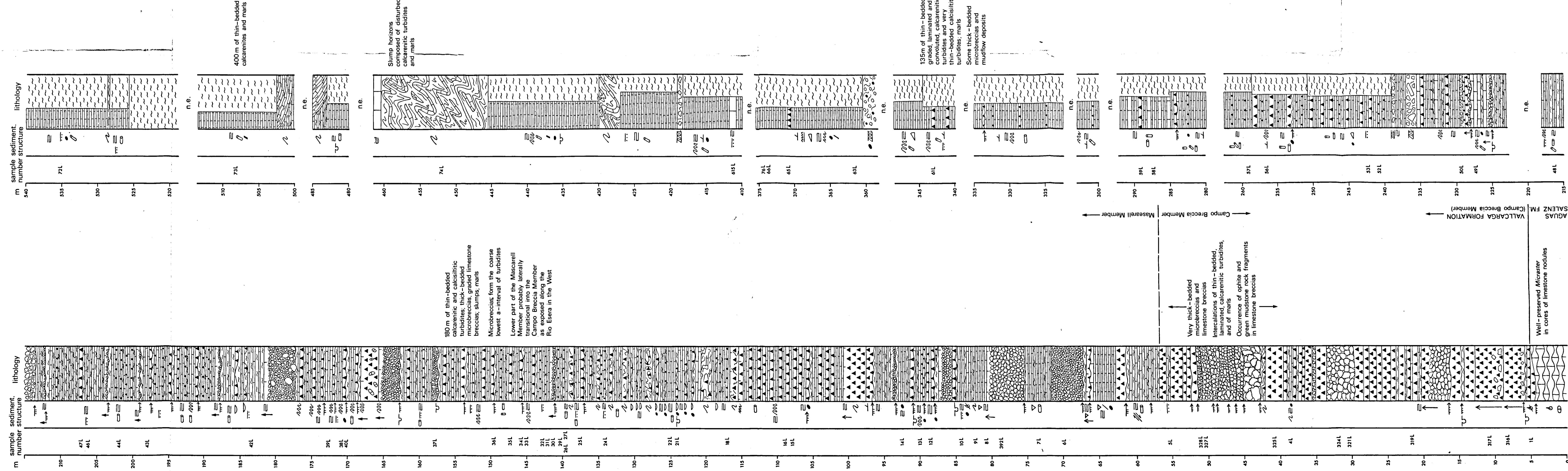
- LEGEND**
- Calcarenites and calcisiltites
 - Sandy calcarenites
 - Sandy calcirudites
 - Calcareous sandstone
 - Limestone microbreccias
 - Limestone breccias
 - Slumps
 - Bbbly mudflow deposits
 - Clayey limestone
 - Marls
 - Calcareous shales
 - Sandy dolomites
 - Sandy calcareous mudstones
 - Cross-stratification
 - Slump structure
 - Current ripples
 - Wave ripples
 - Eroded surface
 - Channel
 - Flute cast
 - Groove cast
 - Load cast
 - Convolute lamination
 - Parallel lamination
 - Wavy lamination
 - Graded bedding
 - Graded breccia
 - Clay gall
 - Nodules
 - Sedimentary fault
 - Mudflow, slump sheet
 - Olistolith
 - Sand volcano
 - Stylolites
 - Burrows
 - Plant debris
 - Microfossils
 - Shell debris
 - Loaded channel
 - Chert nodules



VALLCARGA FORMATION

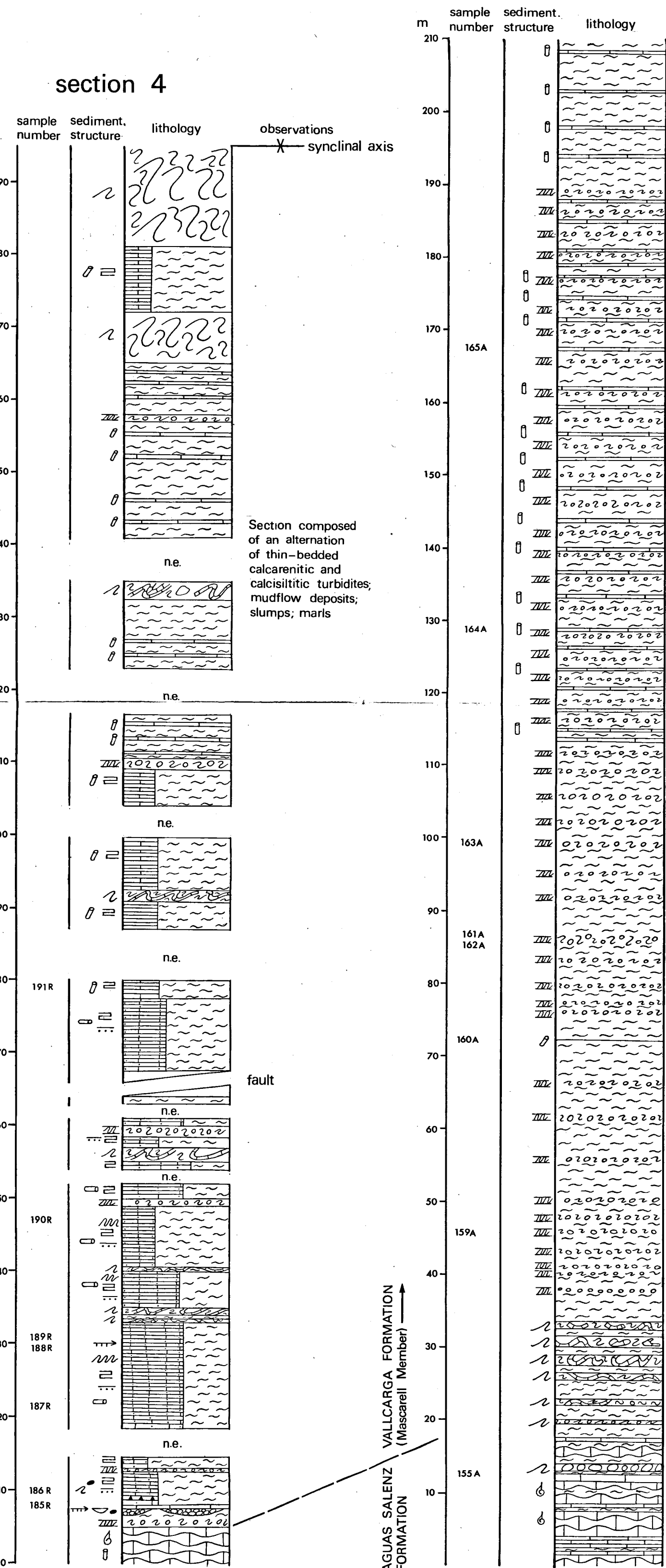
section 3

- LEGEND**
- Calcarenes and calcisiltites
 - Microbreccia
 - Limestone breccias
 - Marls
 - Nodular limestone
 - Slumps
 - Mudflow deposits
 - Cross-stratification
 - Eroded surface
 - Channel
 - Flute cast
 - Groove cast
 - Convolute lamination
 - Parallel lamination
 - Wavy lamination
 - Graded bedding
 - Graded breccia
 - Chert nodules
 - Clay gill
 - Nodule
 - Slump structure
 - Mudflow
 - Load cast
 - Burrows
 - Plant debris
 - Macrofossils
 - Shell debris
 - Sedimentary fault

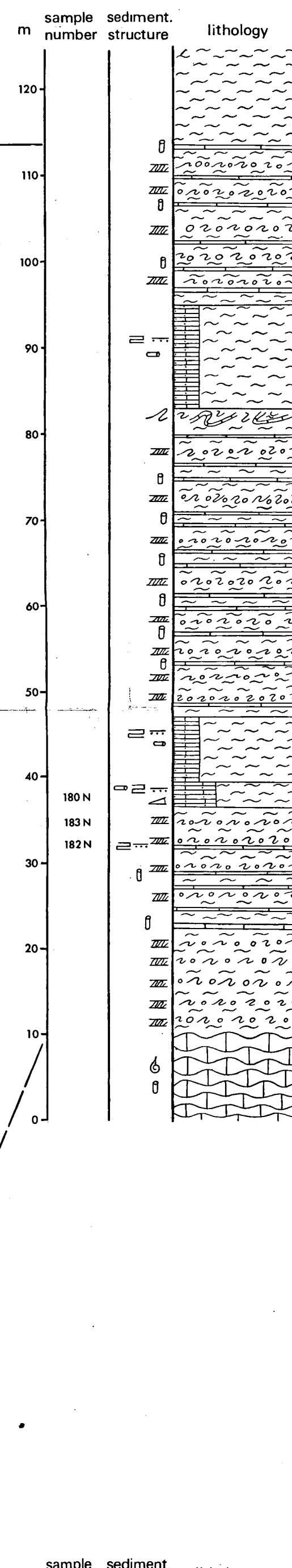


section 5

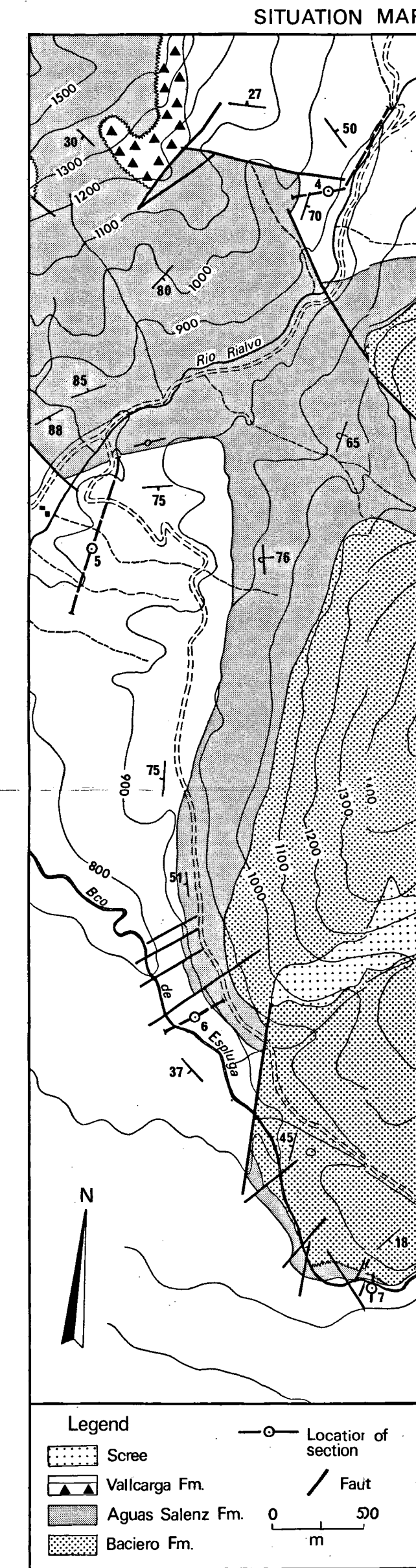
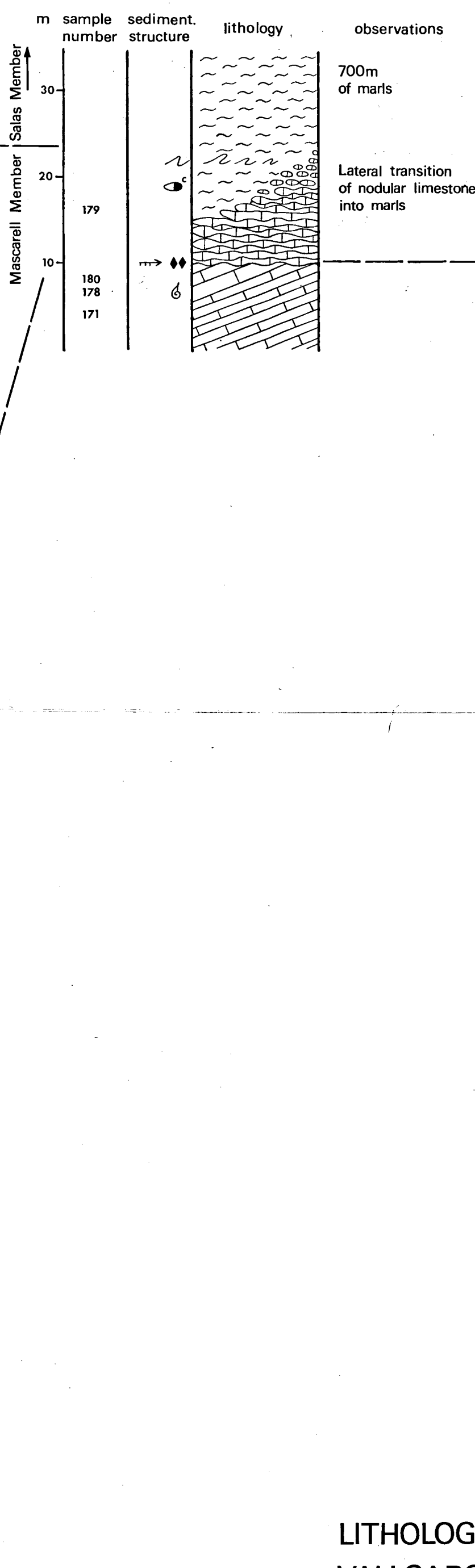
section 4



section 6

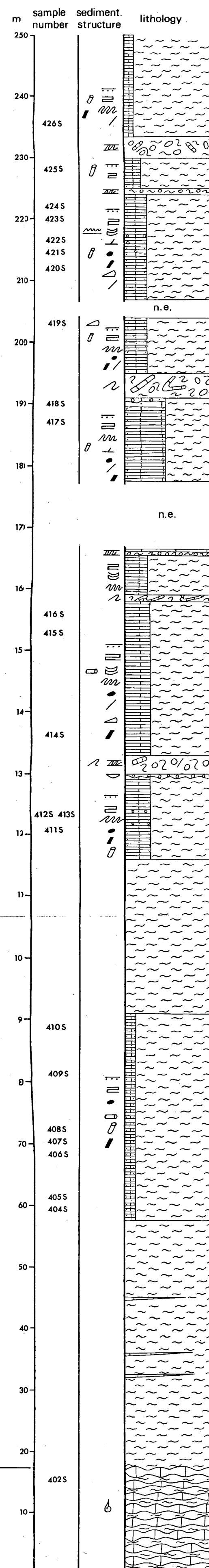


section 7



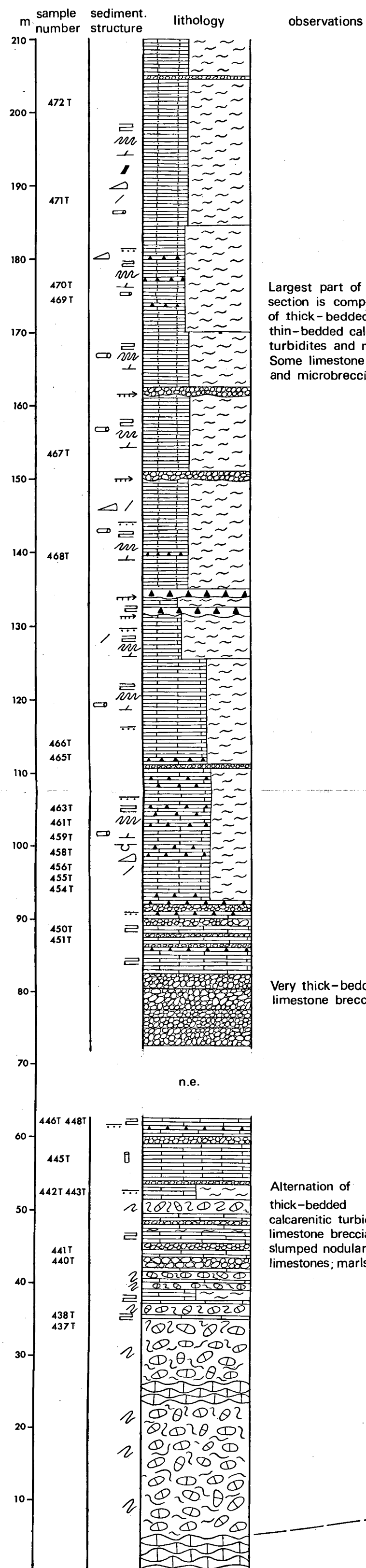
- LEGEND
- Sandy calcirudites
 - Calcarenites and calcisiltites
 - Sandy calcarenites
 - Limestone breccia
 - Microbreccia
 - Nodular limestones
 - Marls
 - Slumped nodular limestones
 - Slumped calcarenites and marls
 - Pebbly mudflow deposits
 - Ironstone
 - Cross-stratification
 - Wave ripples or current ripples
 - Eroded surface
 - Channel
 - Flute cast
 - Groove cast
 - Convolute lamination
 - Parallel lamination
 - Wavy lamination
 - Graded bedding
 - Clay gull
 - Nodule
 - Corrosion surface
 - Slump structure
 - Mudflow
 - Oolite/olstholt
 - Load cast
 - Burrows
 - Plant debris
 - Macrofossils
 - Shell debris
 - Unconformity

section 10

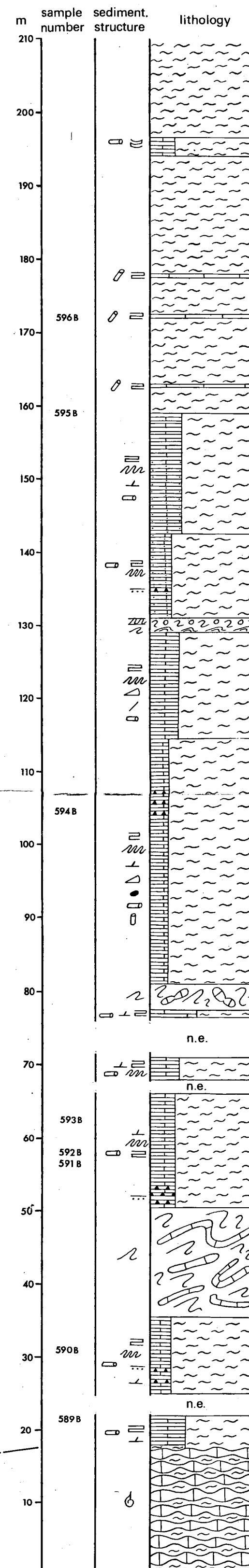


LITHOLOGICAL SECTIONS OF THE LOWER PART OF THE VALLCARGA FORMATION AT THE WESTERN FLANK (sections 4,5,6,7) AND EASTERN FLANK (sections 8,9,10,11) OF THE TURBON ANTICLINE

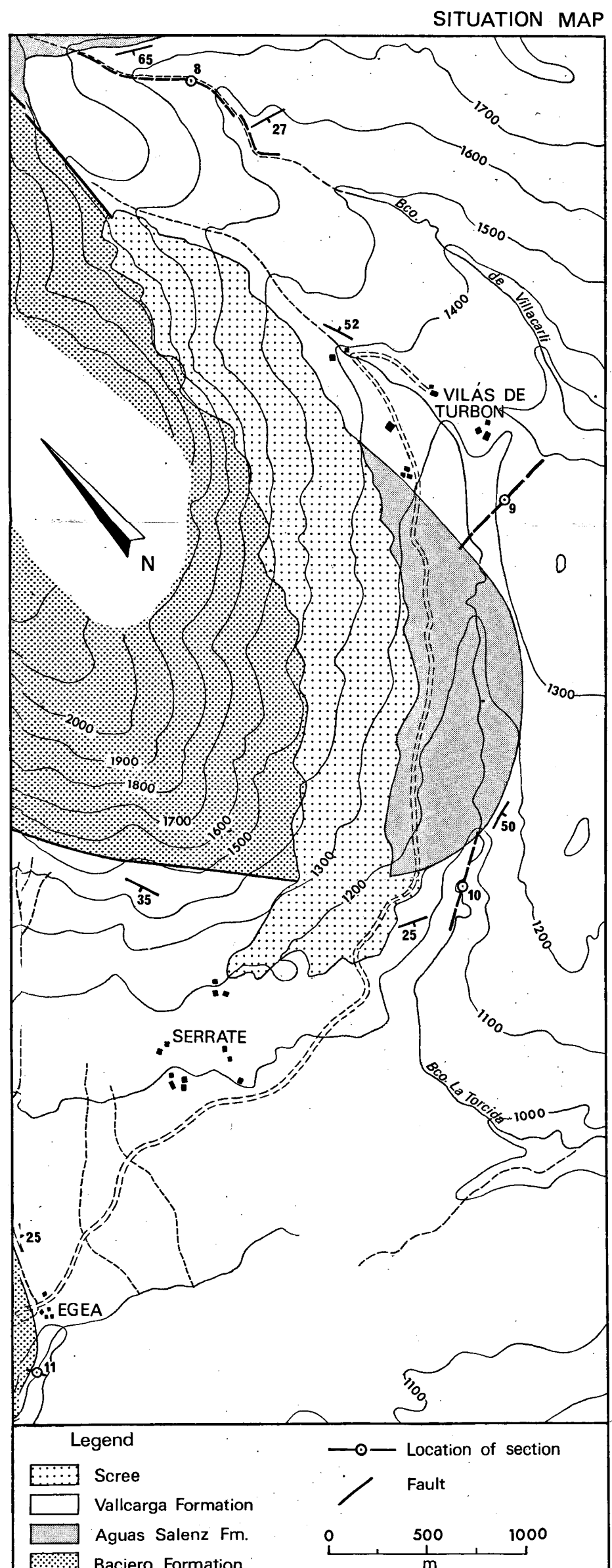
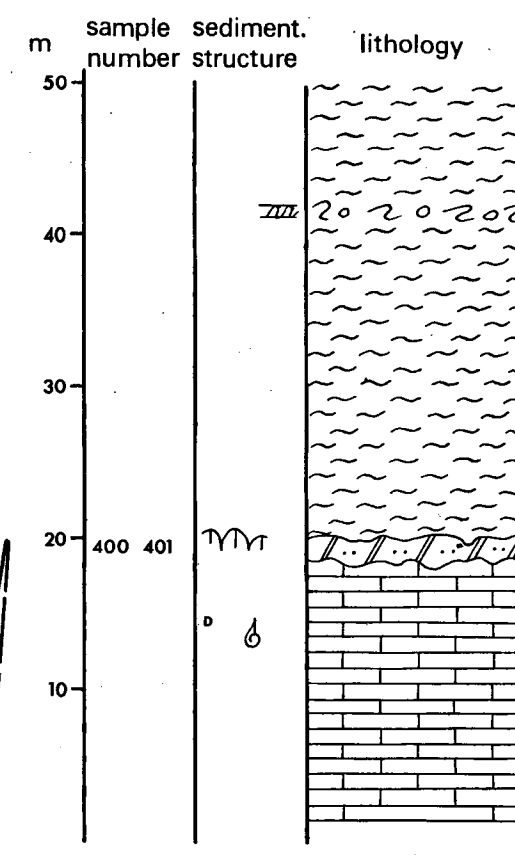
section 8



section 9



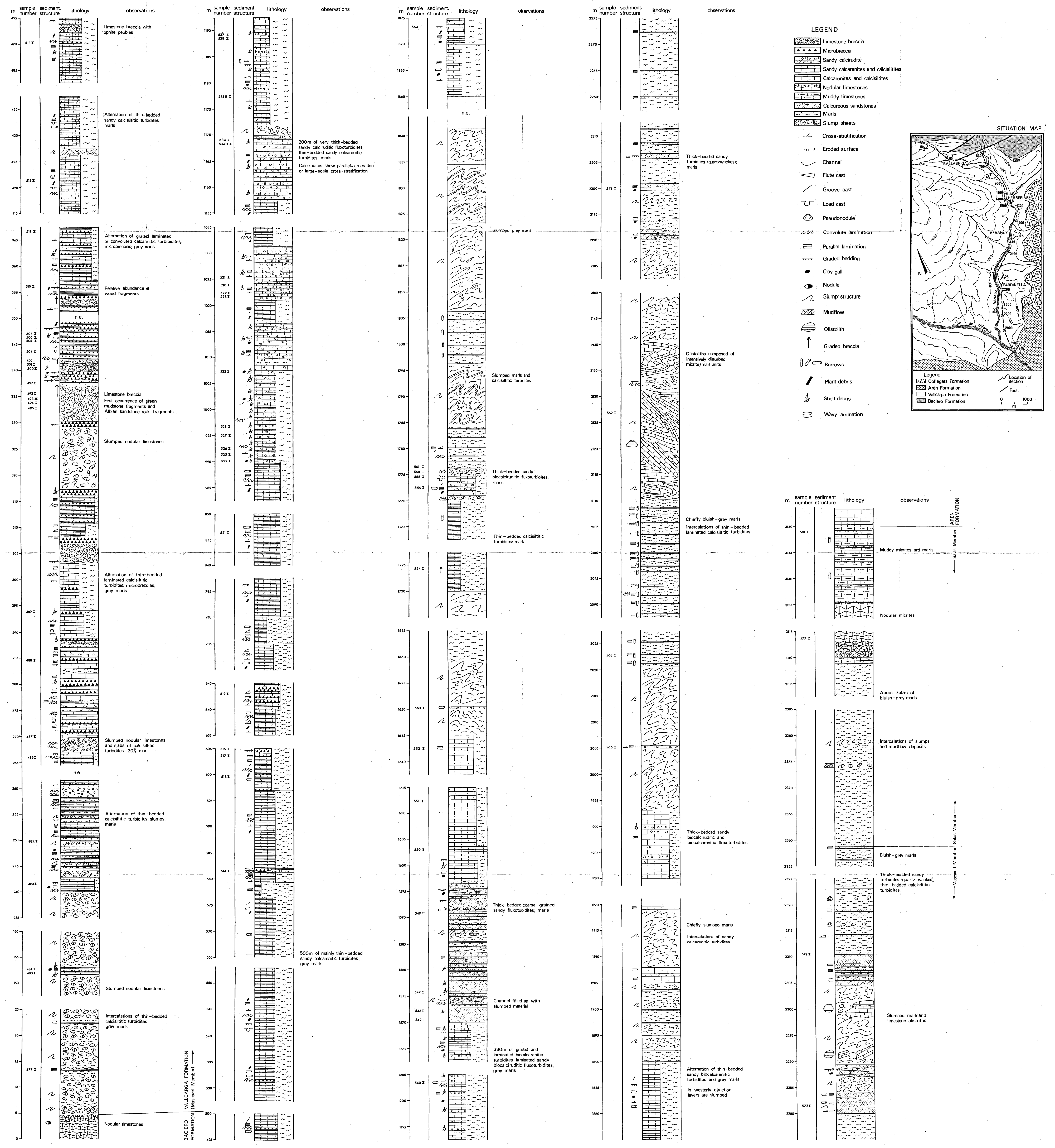
section 11



- LEGEND
- Scree
 - Vallcarga Formation
 - Aguas Salenz Fm.
 - Baciero Formation
 - Location of section
 - Fault

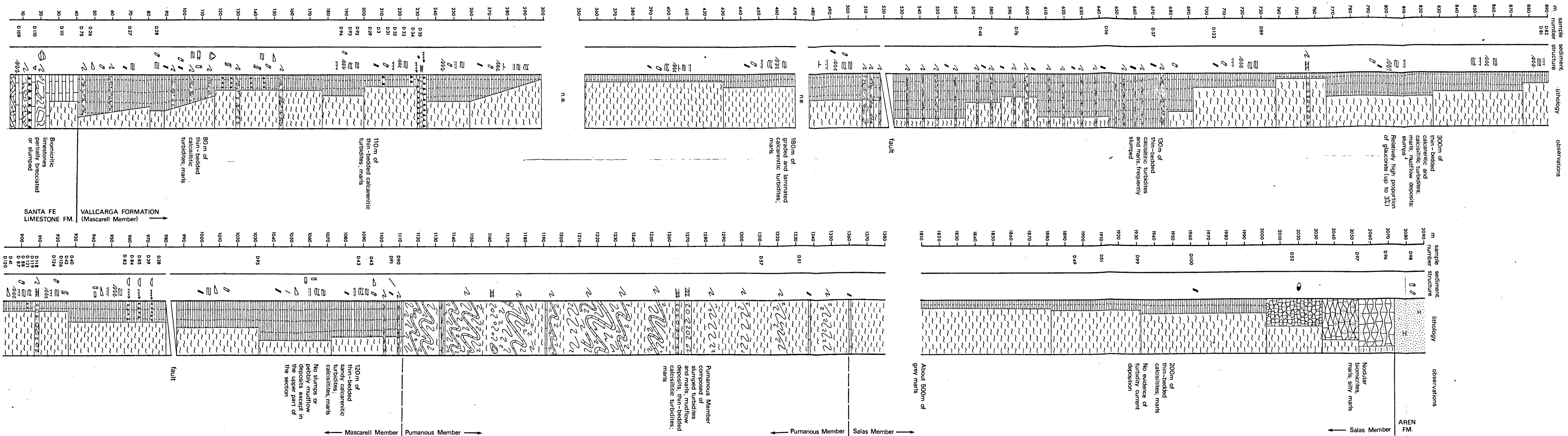
VALLCARGA FORMATION

section 12



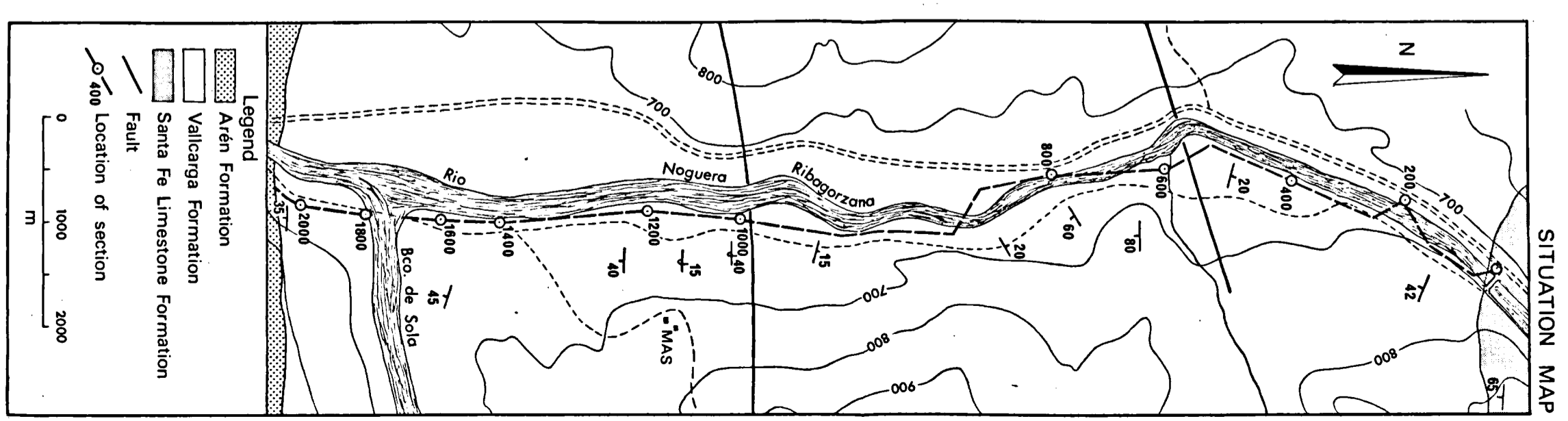
VALLCARGA FORMATION

section 13



LEGEND

- Calcarenites and calcisiltites
- Sandy calcarenites and calcisiltites
- Microbreccias
- Nodular limestones
- Silty nodular limestones
- Marls
- Silty marls
- Slumps
- Pebbly mudflow deposits
- Calcareous sandstone
- Cross-stratification
- Eroded surface
- Channel
- Flute cast
- Groove cast
- Convolute lamination
- Parallel lamination
- Wavy lamination
- Graded bedding
- Clay gill
- Nodules
- Slump structure
- Mudflow
- Burrows
- Plant debris
- Sedimentary fault
- Chert nodules
- Pseudonodules



- Legend
- Aren Formation
 - Vallcarga Formation
 - Santa Fe Limestone Formation
 - Fault
 - Location of section

after data by J. Ditzel (1966)