



Shallow water (Ape puțin adanci)

Sistemul litoral



Factori si procese

1. Morfologia tarmului

2. Adancimea bazinului

3. Oscilatiile de nivel

4. Energia de bazin

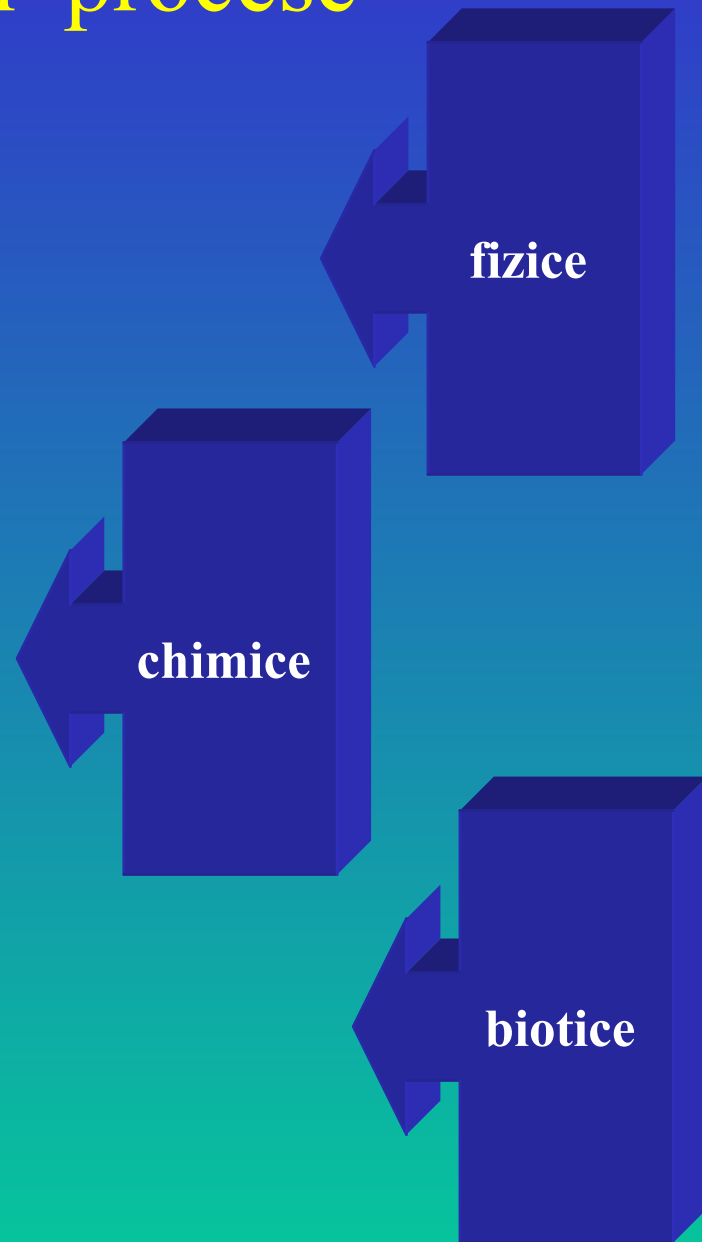
5. Regimul climatic

6. Regimul fotic

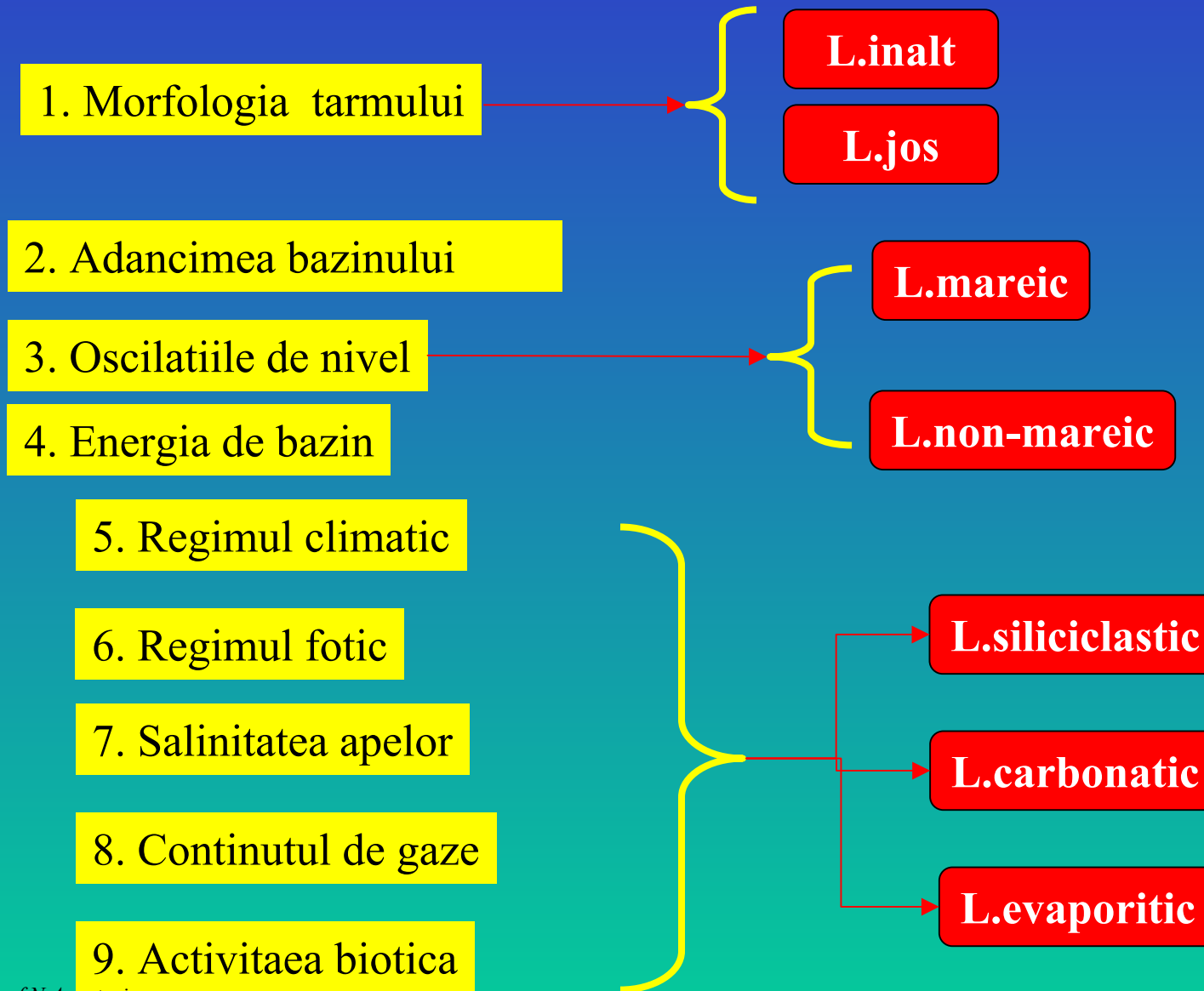
7. Salinitatea apelor

8. Continutul de gaze

9. Activitatea biotica



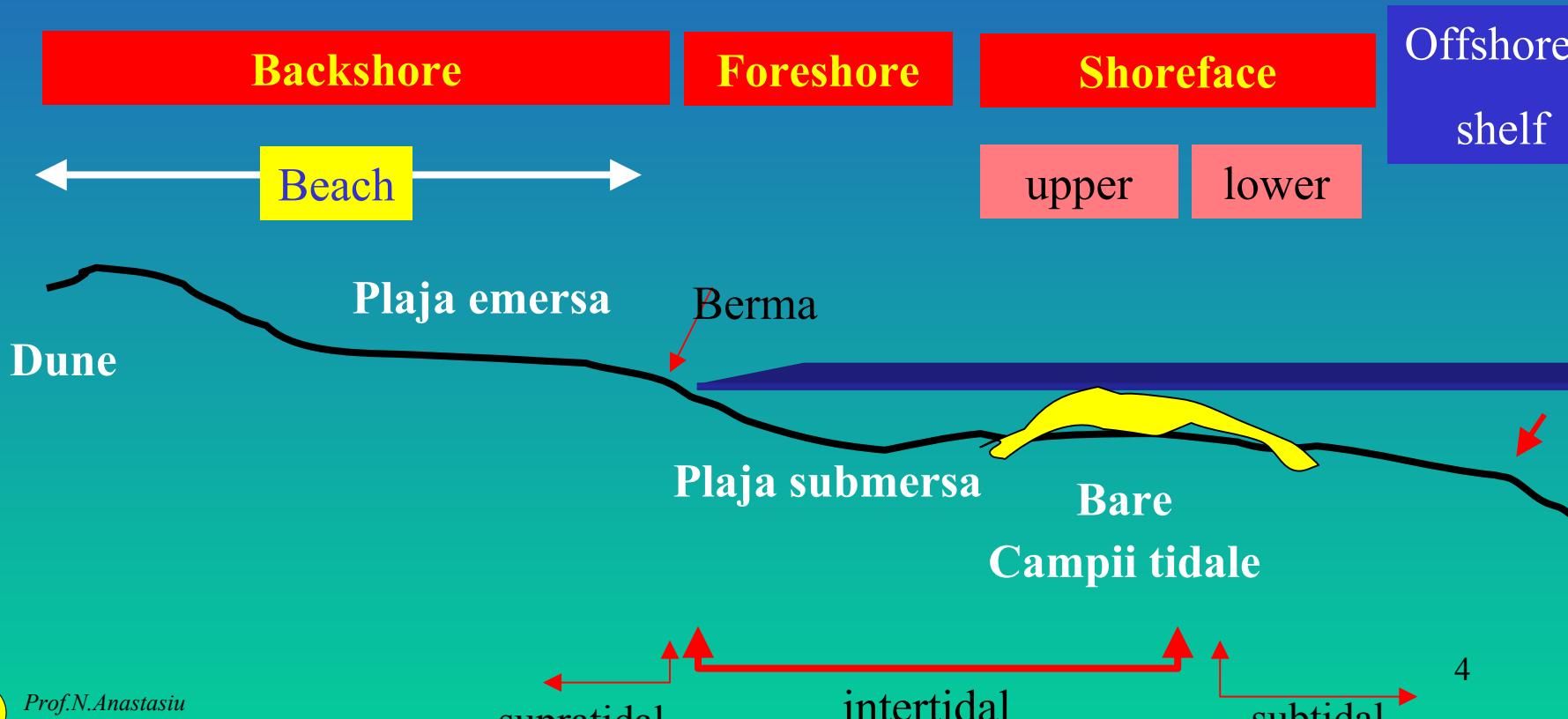
Cum se identifica in subsisteme?





Subunitati batimetrice si dinamice

2. Adancimea bazinului
3. Oscilatiile de nivel
4. Energia de bazin



In ce tipuri de faciesuri se reflecta ?

1. Morfologia tarmului



inalt



jos

Granofacies ruditic
Morfofacies rotunjit
Acumulari informe,
conice , pavaje



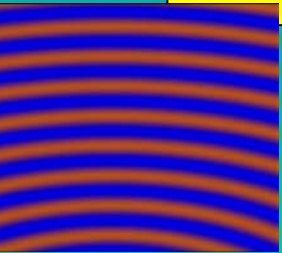
Granofacies arenitic,
nisipos, siltic
Morfofacies variat
Biofacies specific
Plaje emerse si
submerse

In ce tipuri de faciesuri se reflecta ?

3. Oscilatiile de nivel

L. mareic

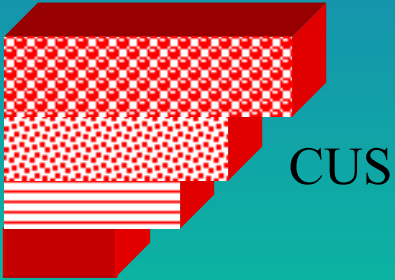
Tidalite
Structofaciesuri
ritmice
Hering bone



High
stand



Low
stand



In ce tipuri de faciesuri se reflecta ?



4. Energia de bazin
valuri, curenti ,
furtuni

5. Regimul climatic

Energie ridicata

Energie scazuta

Granofacies
ruditic, sortare slaba
Morfofacies rotungit
Structofacies neorganizat
Biofacies redus

Granofacies
arenitic, sortare buna
Morfofacies angular
Structofacies organizat
Biofacies bogat

Tempestite

In ce tipuri de faciesuri se reflecta ?

1. Regimul climatic

6. Regimul fotic

7. Salinitatea apelor

8. Continutul de gaze: O₂, C

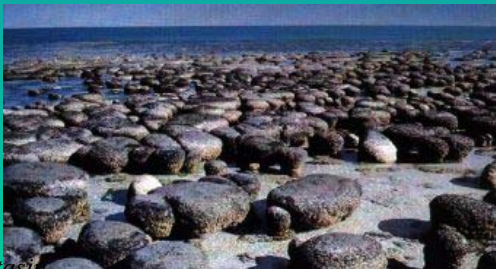


Faciesuri chimice:

Carbonati, sulfati, halogenuri, glauconit

Biofaciesul:

Activitatea sesila.....vagila..



Stromatolite

Moluste

Subsisteme acumulative; Arhitecturi specifice



Plaje si bare de regresiune



Insule bariera - Cordoane litorale (Transgresive)



Campii tidale



Tempestite sau “Storm deposits”

Plaje si bare de regresiune



Faciesuri diagnostic

Granof.:

Arenit bine sortat

Structof.:

Beach: str.incl. 7°

Surf: str.ob.conc

Shoreface: ritmite Agr./A.f cu bioturb

Biof.:

Callianasa

Petrof.:

Nisip qz, lit, carb (biocl)



Sol

Washo

Dune

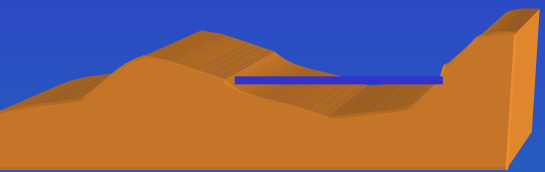
Fore=Plj

Surf

Shf.ext



Insule bariera - Cordoane litorale (Transgresive)



Faciesuri diagnostic

Granof.:

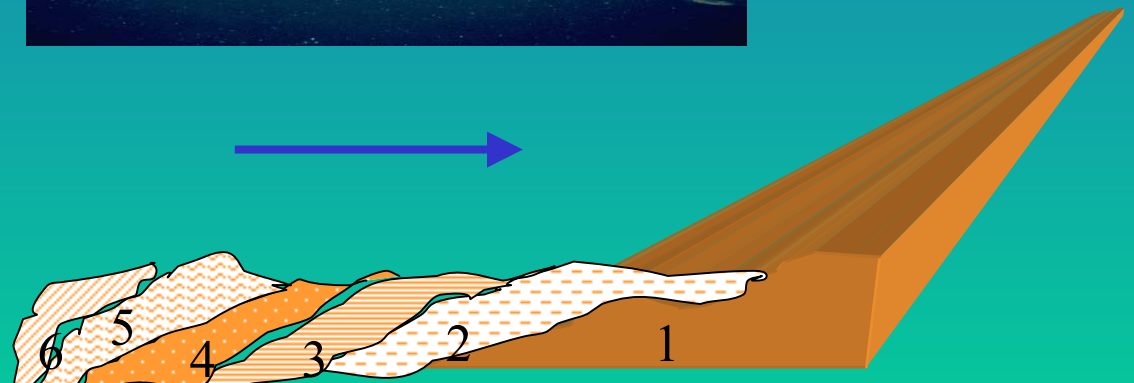
Arenit/silt bine sortat

Structof.:

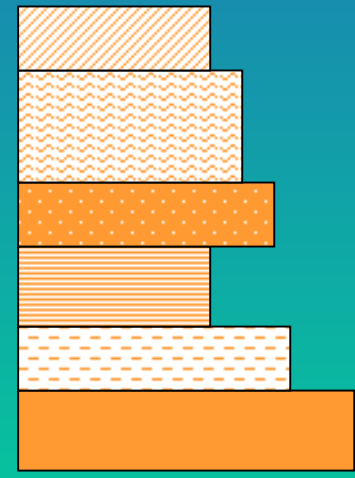
Cross-bedded
wave-ripple
lam.paral

Biof.:

Callianasa



6
5
4
3
2
1



Shoref
Dune-Ins
Wash ove
Lagunar
C. tidala
Cont

Campii tidale



Faciesuri caracteristice

1. Campii nisipoase = Sand flats

Str.: "hering bone"

2. Campii mixte

Flaser bedding

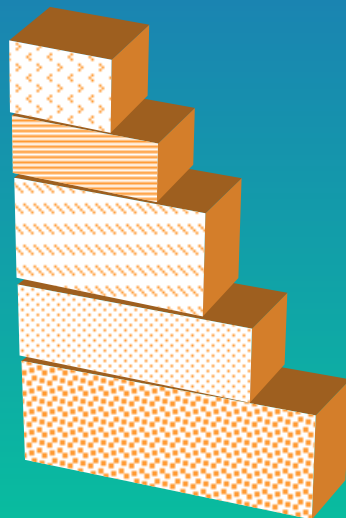
3. Campii maloase = Mud flats

Lamin. par. bioturbata

4. Mlastini sarate = Salt marsh

Salcret

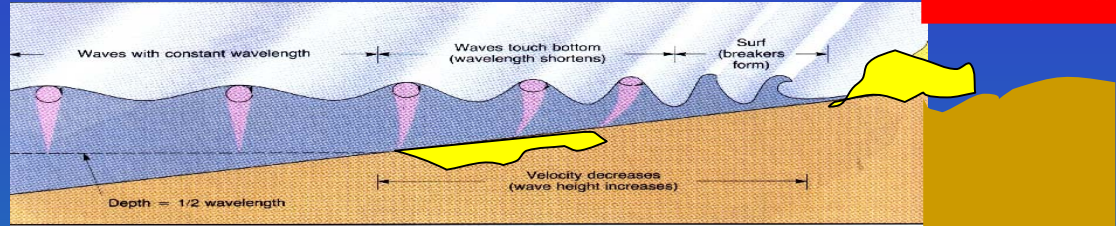
Stromatolite



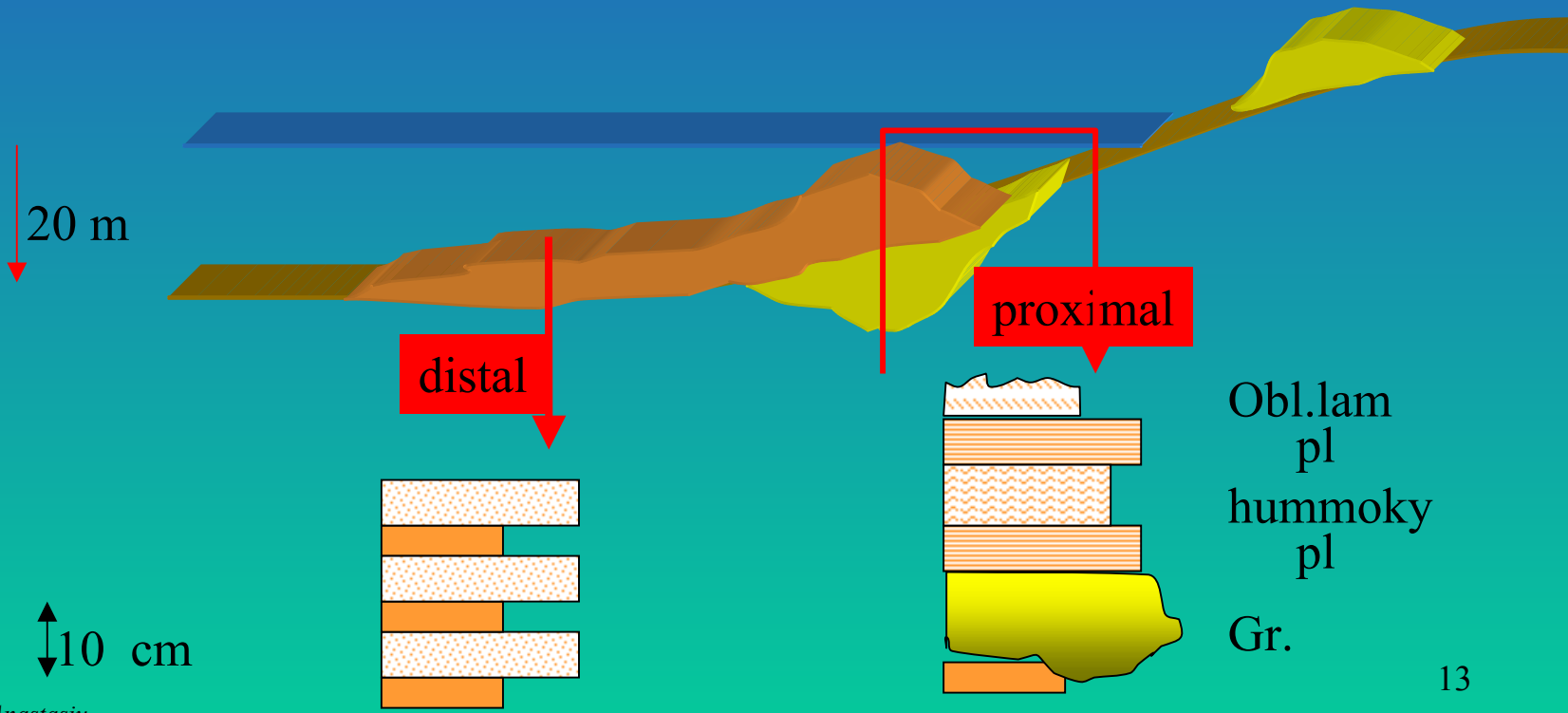
4
3
2
1
Intertidal
Subtidal Channel



Tempestite sau "Storm deposits"

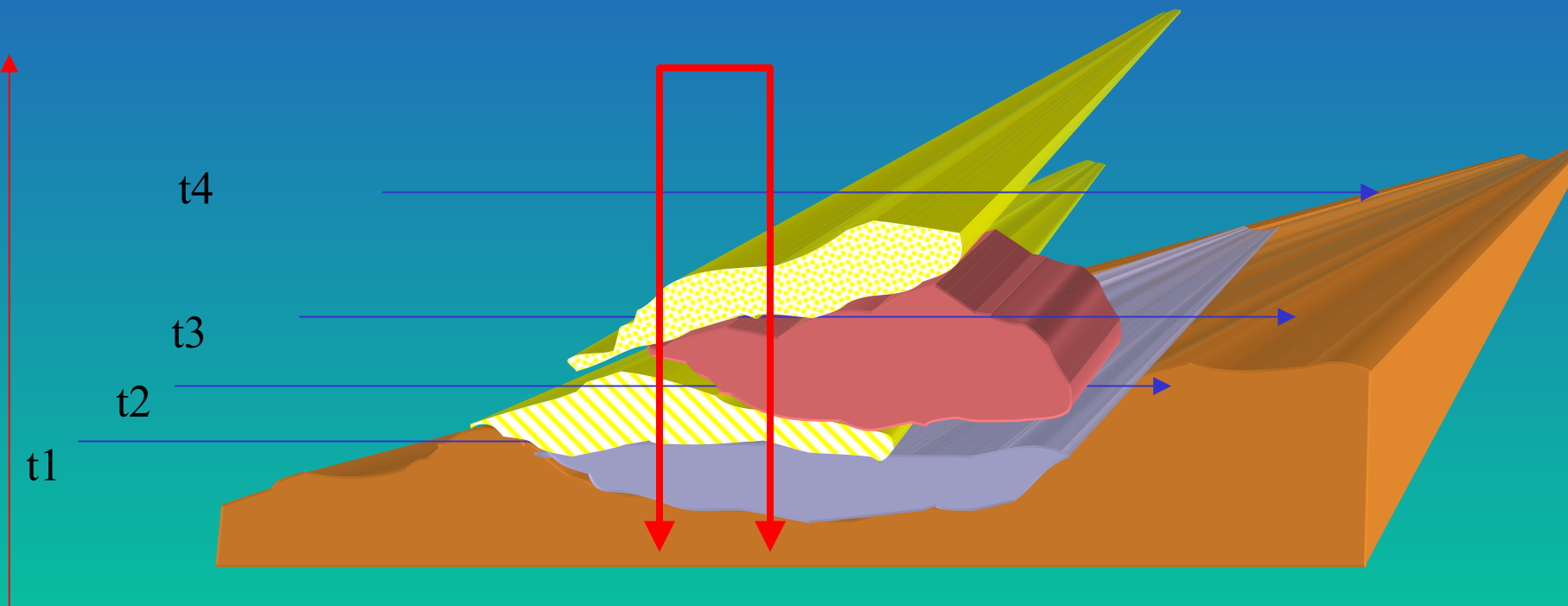
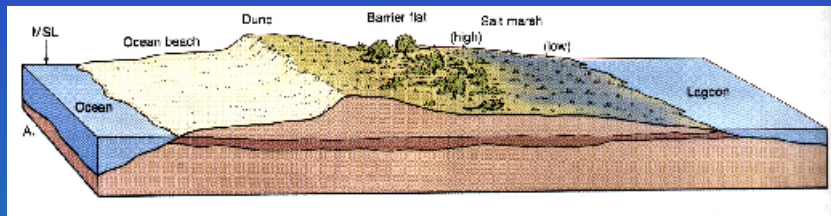


T.subtractive



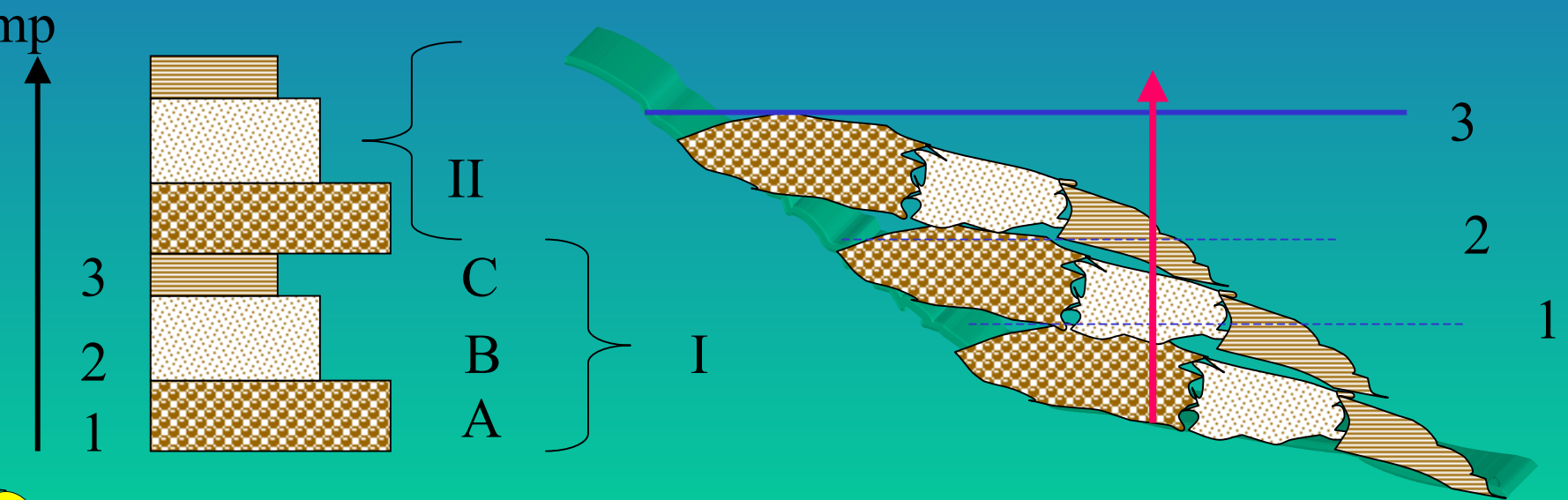
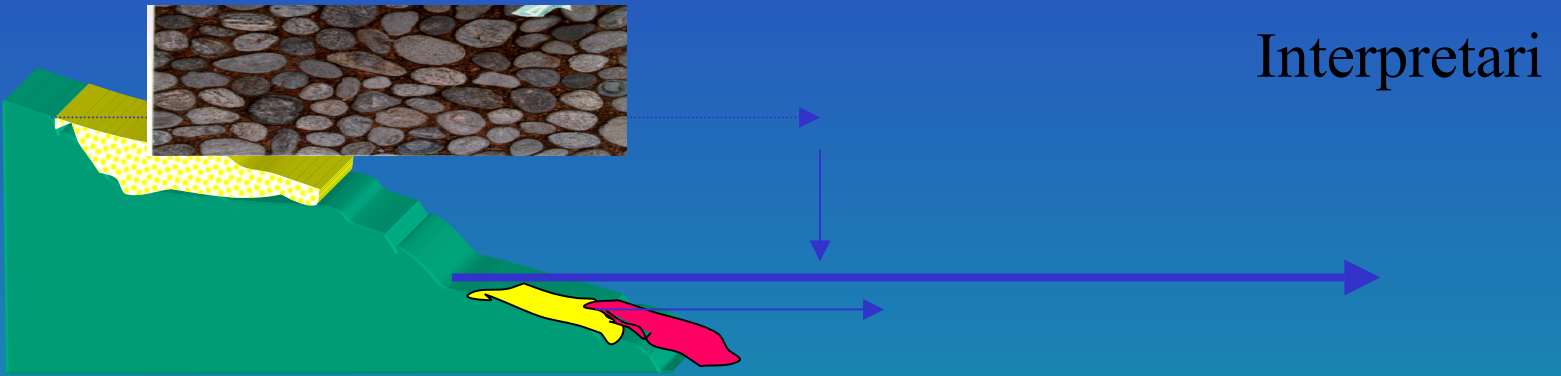
Model generalizat

Conditii de "high stand" - "transgressive stand"





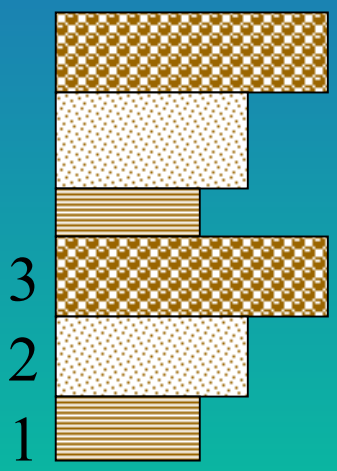
Fapte de observatie - Dovezi



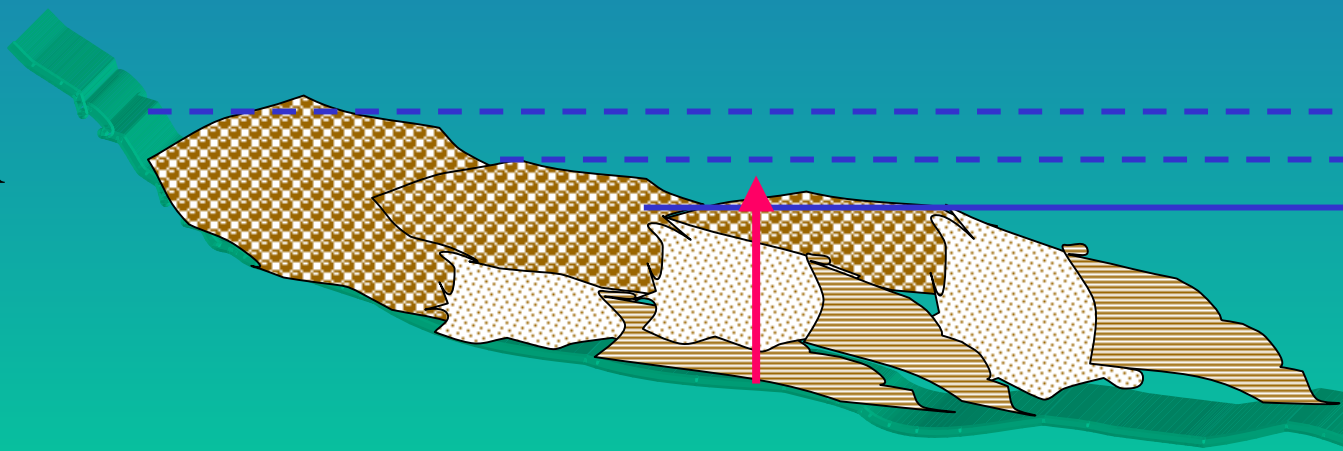


Reversul

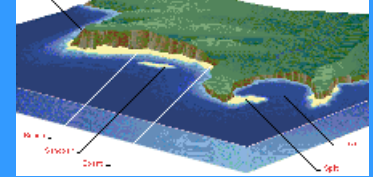
mp



A
B
C



evaluare-III-5



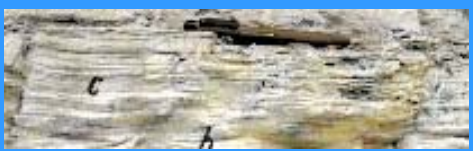
Codificati si interpretati

E



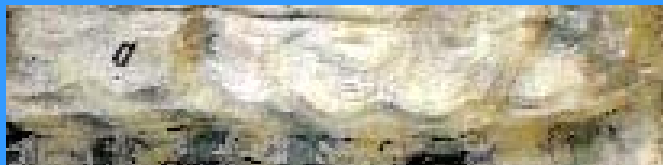
Wave ripples

D



Str.paralela

C



Str.hummoky

B



Str.paralela

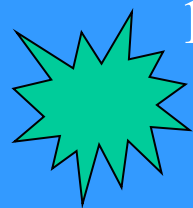
A



Str.gradata



evaluare-III-5



1. Care sunt principalele faciesuri acumulative in sistemul litoral?

2. Enumerati faciesuri diagnostic in bare si cordoane litorale

3. Care sunt subunitatile batimetrice si dinamice ale litoralului?

4. Comparati si plasati sistemic structofaciesurile “hering bone”, hummoky” si “flaser beding”.

5. Comparati secventa tempestitica cu cea turbiditica

6. Comentati secventele CUS si FUS in termenii

“ratelor de acumulare”, “subsidenteii” si “oscilatiilor de nivel”



Titluri recomandate:

- **Miall A.** (2000) *Principles of Sedimentary Basin Analysis*. Springer. Berlin
- **Walker & James** (1992) *Facies Models*. Geol Soc. Canada, Sp. Publ.