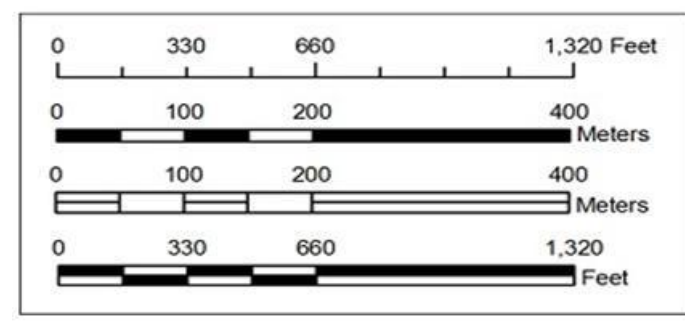


SIGNS AND SYMBOLS: GEOMORPHOLOGICAL CARTOGRAPHY

PRACTICAL WORK

DEFINITION :

- **MAP:** Generally flat conventional representation of the distribution in space of concrete or abstract phenomena
- **TOPOGRAPHY:** (topos: place, graphein: describe) technique of representation on a plane of the shapes of a place (reliefs) with the natural or artificial details that it carries
- **RELIEF:** solid earth -atmosphere interface shaped by erosion (or / and man)
- **SCALE:** Factor of reduction of the horizontal surfaces necessary to pass from the ground one to support of small dimensions :



LINEAR SCALE

- **ALTITUDE:** Third dimension of a relief = the vertical. Altitude of a place = vertical distance place-zero reference level (mean sea level).

* SYMBOLISM :

- * Name, date of publication, scale, orientation, legend ...
- * Standardized colors :
- * hydrography: blue
- * Vegetation: green
- * Orography: bistre (Yellowish brown color)

➤ *All these conventions take into account the multiplicity of factors making it possible to correctly define a cartographic unit or taxon :*

- * **Morphography** (description of shapes): graphic signs and symbols.
- * **Structural context** (lithology, tectonics): "warm" colors and gray signs.
- * **Dynamic context** (morphodynamic systems and superficial formations): "cold" colors.
- * **Chronology:** variations of hue (frames) or indices.

❖ **Considering the complexity of geomorphological maps, it is necessary to recommend the use of color as a means of facilitating their reading.**

* **Hydrography**, in the truest sense, concerns everything related to the survey and cartographic representation of waters, river networks, glaciers, lakes, coasts and coastal seabeds. Hydrographic networks are an excellent geographical tracking system.

LEGEND OF THE CARDS DETAILED GEOMORPHOLOGICAL

C.G.A. System-Tricart

LITHOLOGICAL DATA

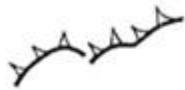
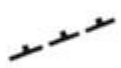
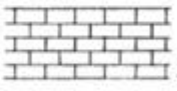
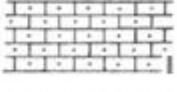
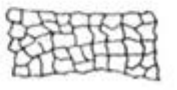
NATURE OF THE ROCKS		COULEUR	Figured
— crystalline rocks	{ healthy	flat orange	
	{ altered	halftone orange	
— limestone	{ little gelling	light blue flat	
	{ gelif	light blue screened	
— sandstone	{ compact	flat light bistre	
	{ crumbly	halftone light bistre	
— marl		light green	
— conglomerates	{ strongly consolidated		
	{ poorly consolidated		

The conglomerates are represented in the color of the dominant rock.

— volcanic rocks dark gray

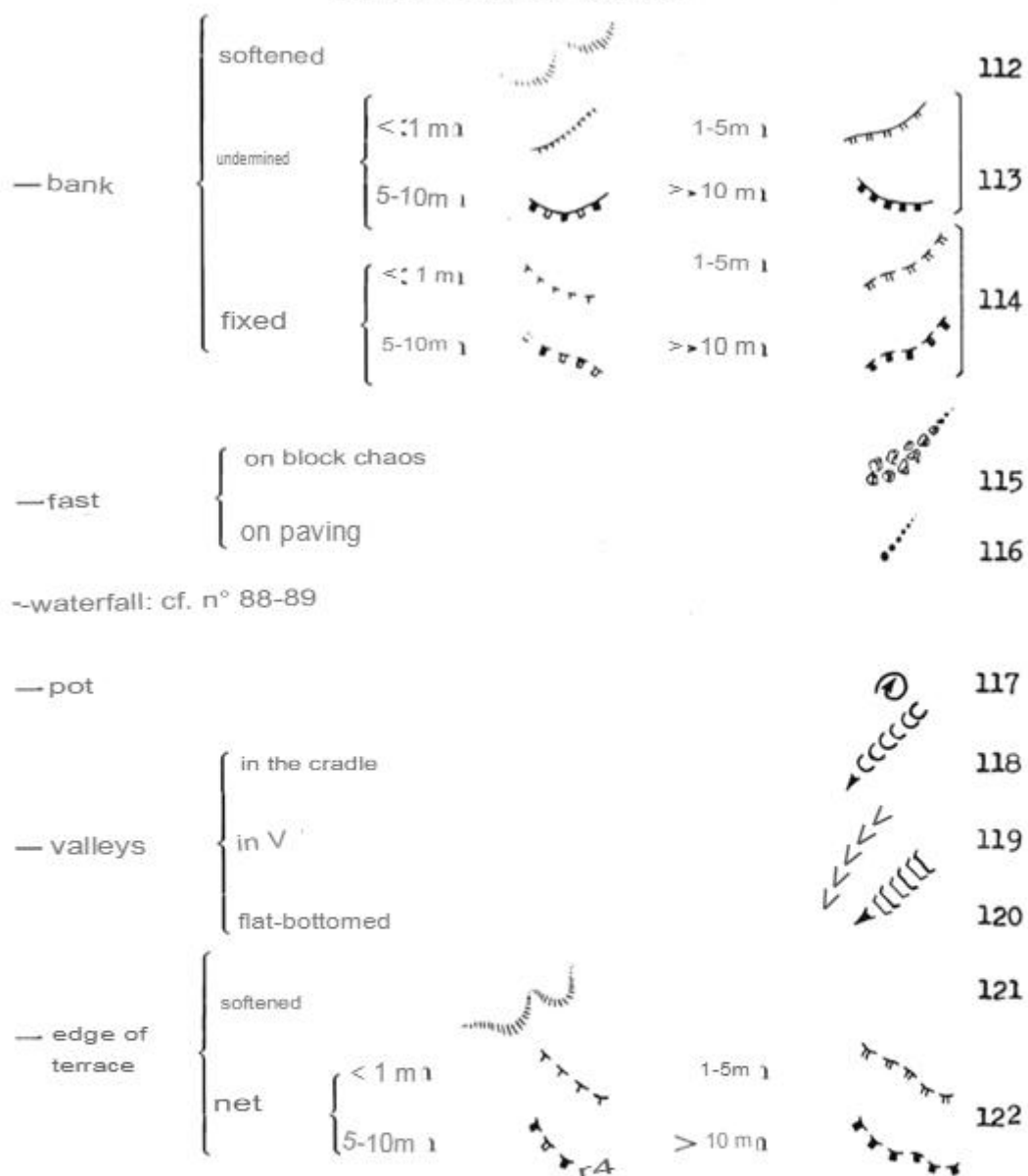
— detrital deposits: they are represented by their particle size representation, either in the color corresponding to their dating, or in medium gray, when it is not possible to date them precisely.

DONNEES STRUCTURELLES

— anticlinal	{	symétrique	++++++ 1
	{	dissymétrique	++++++ 2
— syndinal			----- 3
— corniche: crétacé monoclinique			 4
— cuesta	{	nette	 5
	{	adoucie	 6
— faille			 7
— faille probable			 8
— décrochement			 9
— pendage			 10
— surface structurelle	{	calcaire	 11
	{	grès	 12
	{	conglomérat	 13
	{	basalte	 14

Les données structurelles sont figurées en noir ou dans la couleur indiquant leur âge.

C. PATTERNED NOTCH



D. CLIMATIC INFLUENCES

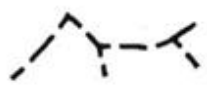
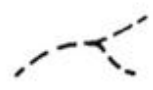
a) Dry regions



LEGEND OF GEOMORPHOLOGICAL MAPS

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C. TOPOGRAPHICAL AND MORPHOMETRIC DETAILS

— corniche	{	less than 5 m		69
		from 5 to 10 m		(4)
		from 10 to 50 m		
		more than 50 m		
— rocky ridge line				70
— watershed				71
— convex croup				72
— replat	{	structural cf. n° 11 to 14		
		with dismantled alluvium		73
		of unspecified origin		74
— rock face				75
— acute peak				76
— rounded top				77

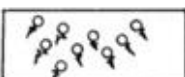
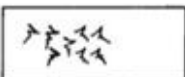
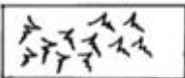
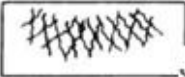
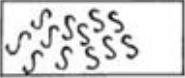
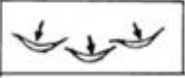
LÉGENDE DES CARTES GÉOMORPHOLOGIQUES

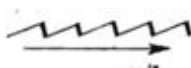
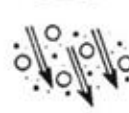
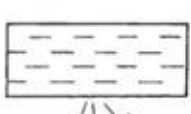
195

FORMES DES VERSANTS ET INTERFLUVES

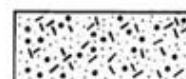
A. FORMES D'ÉTABLISSEMENT

a) Fagonnement généraliser

— éboulis de gravite				15	
— (boulis ordonnée				16	
— chaos de blocs				17	
— ruissellement	{	embryonnaire		18	
		aréolaire		19	
		diffuse	moyen		20
			intense		21
		intense avec des rigoles		22	
		concentré		23	
				24	
— reptation généralisée				25	
— solifluxion	{	pelliculaire		26	
		en coulées		27	
— sol strie				28	

— ös		I82
— erratic blocks		I83
C. FORMS OF MARGINAL ACCUMULATION		
— terrace of kâme		I84
— morainic arc		I85
— thrust moraine		I86
— iceberg moraines		I87
— proglacial delta		I88
— proglacial cone		I89
— proglacial spreading		I90
— proglacial channel		I91
— varve clays		I92
— glacial river cone		I93
— glacial river delta		I94
— fluvioglacial spreading		I95

— sable niveo-éolien



207

— loess et citron



208

B. FORMES D'ÉTABLISSEMENT

a) Formes de déflation

— cuvette de déflation

{
 fixe
 non fixe



209



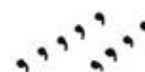
210

— alignement



211

— caoudeyré



212

b) Formes de correspondance

— eoliennes cailloux



213

— vermicules cailloux



214

— yardang



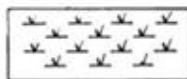
215

LÉGENDE DES CARTES GÉOMORPHOLOGIQUES

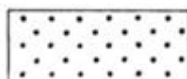
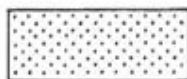
201

B. FORMES D'ACCUMULATION ET NATURE DES ALLUVIONS

a) Formes d'accumulation

— digue;		99	
— cône de rupture de digue		100	
— cuvette de décantation		101	
— tourbière		102	
— marais		103	
— dépôts lacustres	{ argilo-sableux argileux		104
			105
— épandage de débâcle		106	

b) Nature des alluvions

— blocs		107
— galets		108
— sable		109
— citron		110
— argile		111 d
— - sommet de rembourrage intact		111 d

LEGEND OF GEOMORPHOLOGICAL MAPS

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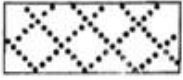
WIND ENERGY ACTIONS

A. FORMS OF ACCUMULATION

a) Dunes

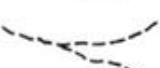
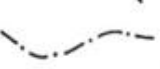
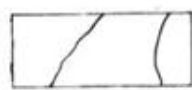
— dune	{	sandy		I96
		clayey		I97
— dune	{	viva		I98
		partly fixed		I99
		fully fixed		200
— shape of the dunes: direction of the ridges				
ex. :	{	longitudinal dunes		201
		crossed dunes		202
		parabolic dunes		203
		barkhanes		204

b) Wind farms

— sand		(I96)
— blanket sands		205
— sandy sprinkling		206

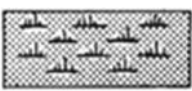
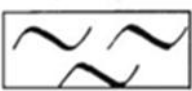
ACTION OF RUNNING WATER

A. HYDROGRAPHIC DATA

— minor bed	{	simple		78				
		with rambling channels		79				
		with anastomosed channels		80				
— flow	{	perennial		81				
		seasonal		82				
		sporadic		83				
		underflow		84				
— limitations of the major bed				85				
— flood arm				86				
— dead arm				87				
— waterfall	{	on slabs		88				
		in canyon		89				
—lake, pond	{	permanent		90				
		temporary		91				
—chott and sebkha				92				
— source	93		— sourcin	94		—oozing	95	
—source niche	96		— resurgence	97		— loss	98	

These signs are depicted in black.

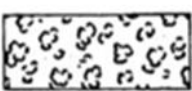
b) Coastal accumulations

—mudflats	{ shikke		228
	{ schorre		229
—mangrove			230
—coastal marshes			231
—coastal dunes	{ net		232
	{ dismantled		233

c) Prelittoral accumulations

—coastal cord		234
—coastal arrow		235
—prelittoral wrinkles		236
—underwater delta		237

d) Coral constructions

—corals	{ alive		238
	{ dead		239
—underwater embankment			240