

Tablo Referans pou Anviwònman Fizik/SYANS LATÈ

Done sou Dezentegrasyon Radyo-aktif

IZOTÒP RADYOAKTIF	DEZENTEGRASYON	DEMI-VI (ane)
Kabòn-14	$^{14}\text{C} \rightarrow ^{14}\text{N}$	5.7×10^3
Potasyòm-40	$^{40}\text{K} \xrightarrow{\text{radioaktiv}} ^{40}\text{Ar} \xrightarrow{\text{radioaktiv}} ^{40}\text{Ca}$	1.3×10^9
Iranyòm-238	$^{238}\text{U} \rightarrow ^{206}\text{Pb}$	4.5×10^9
Ribidyòm-87	$^{87}\text{Rb} \rightarrow ^{87}\text{Sr}$	4.9×10^{10}

Ekwasyon

Eksantrisite = $\frac{\text{distans ant fwaye yo}}{\text{longè gran aks}}$

Gradyan = $\frac{\text{chanjman nan valè chan}}{\text{distans}}$

Vîtes chanjman = $\frac{\text{chanjman nan valè}}{\text{tan}}$

Dansite = $\frac{\text{mas}}{\text{volim}}$

Chalè Espesifik Materyèl Komen

MATERYÈL	CHALÈ ESPESIFIK (Joul/gram • °C)
Dlo likid	4.18
Dlo solid (glas)	2.11
Vapè dlo	2.00
Lè sèk	1.01
Bazalt	0.84
Granit	0.79
Fè	0.45
Kuiv	0.38
Plon	0.13

Pwopriyete Dlo

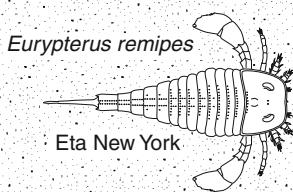
Enèji tèmik ki fòme pandan fizyon an	334 J/g
Enèji tèmik ki degaje pandan konjelasyon	334 J/g
Enèji tèmik ki fòme pandan vaporizasyon	2260 J/g
Enèji tèmik ki degaje pandan kondansasyon	2260 J/g
Dansite a 3.98°C	1.0 g/mL

Konpozisyon Chimik an Mwayèn Kwout Latè, Idwosfè, ak Twoposfè

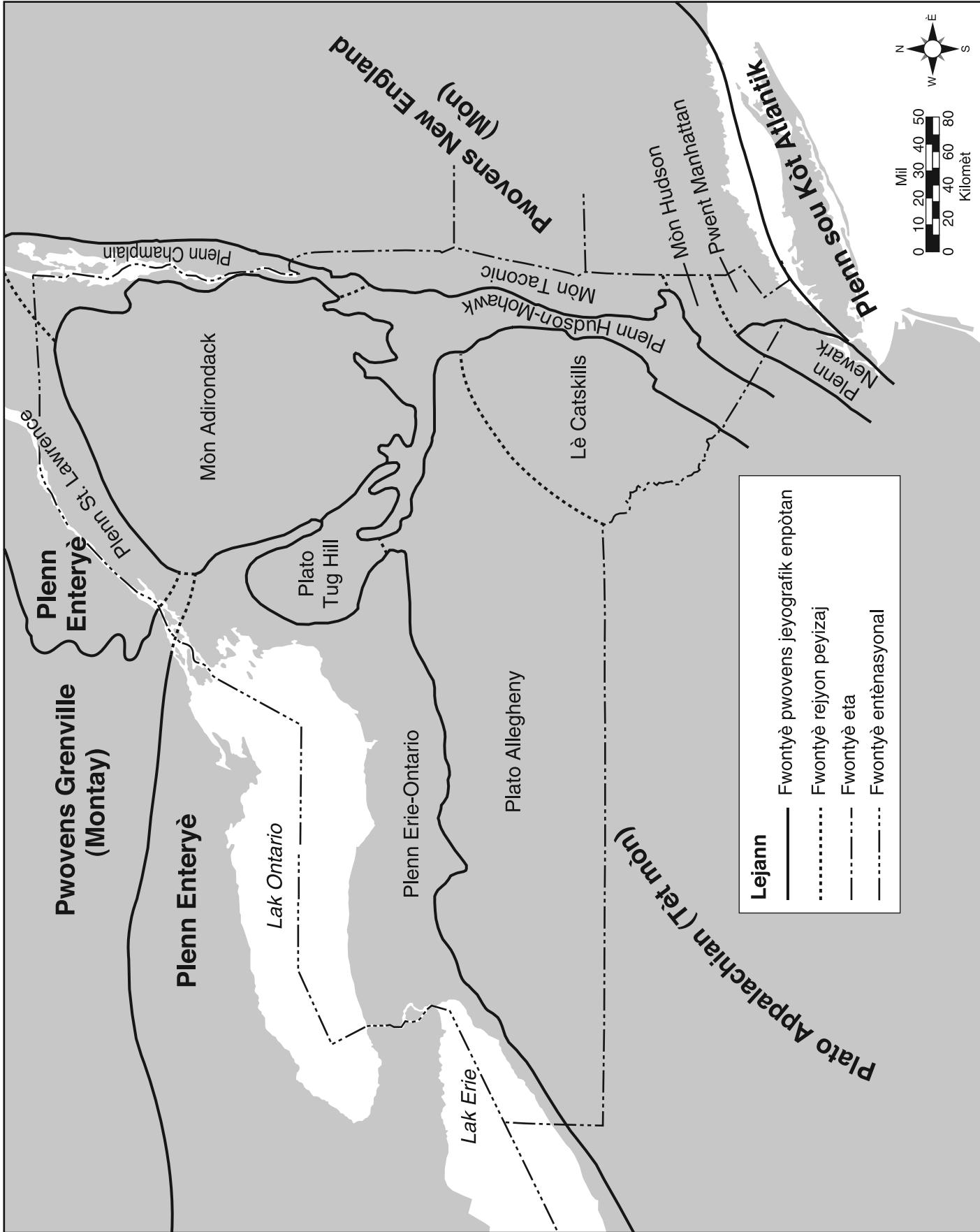
ELEMAN (senbòl)	KWOUT		IDWOSFÈ	TWOPOSFÈ
	Pousantaj dapre mas	Pousantaj dapre volim	Pousantaj dapre volim	Pousantaj dapre volim
Oksijèn (O)	46.10	94.04	33.0	21.0
Silikòn (Si)	28.20	0.88		
Aliminyòm (Al)	8.23	0.48		
Fè (Fe)	5.63	0.49		
Kalsyòm (Ca)	4.15	1.18		
Sodyòm (Na)	2.36	1.11		
Mayezyòm (Mg)	2.33	0.33		
Potasyòm (K)	2.09	1.42		
Azòt (N)				78.0
Idwojèn (H)			66.0	
Lòt	0.91	0.07	1.0	1.0

EDISYON 2010

Ou dwe sèvi ak edisyon Tablo Referans Syans Latè sa a nan salklas la apati ane akademik 2009–2010. Premye egzamen ki pral lakòz ou itilize tablo sa yo se Egzamen Regents Janvye 2010 nan Anviwònman Fizik/Syans Latè.

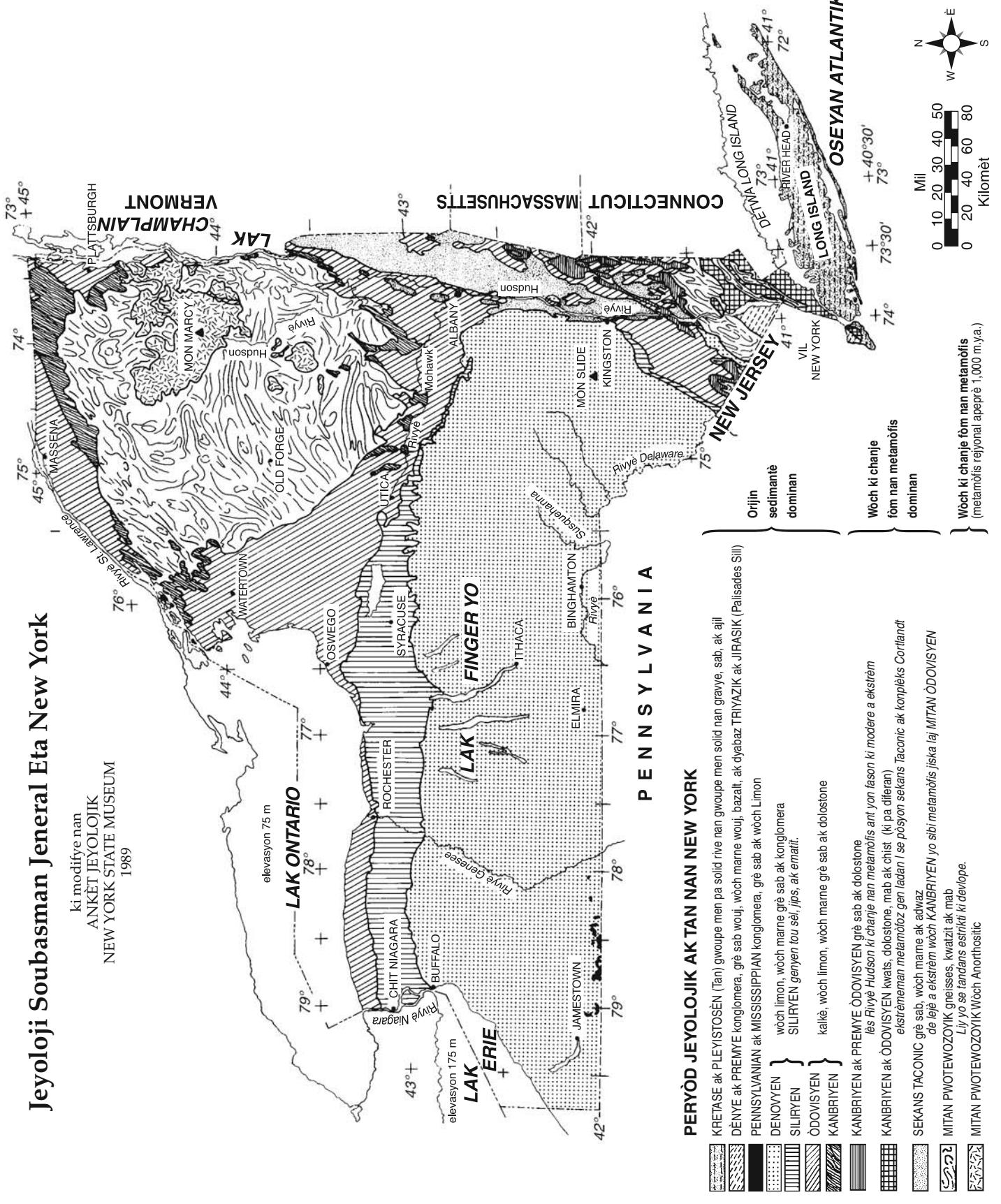


Rejyon Peyizaj Jeneral Eta New York

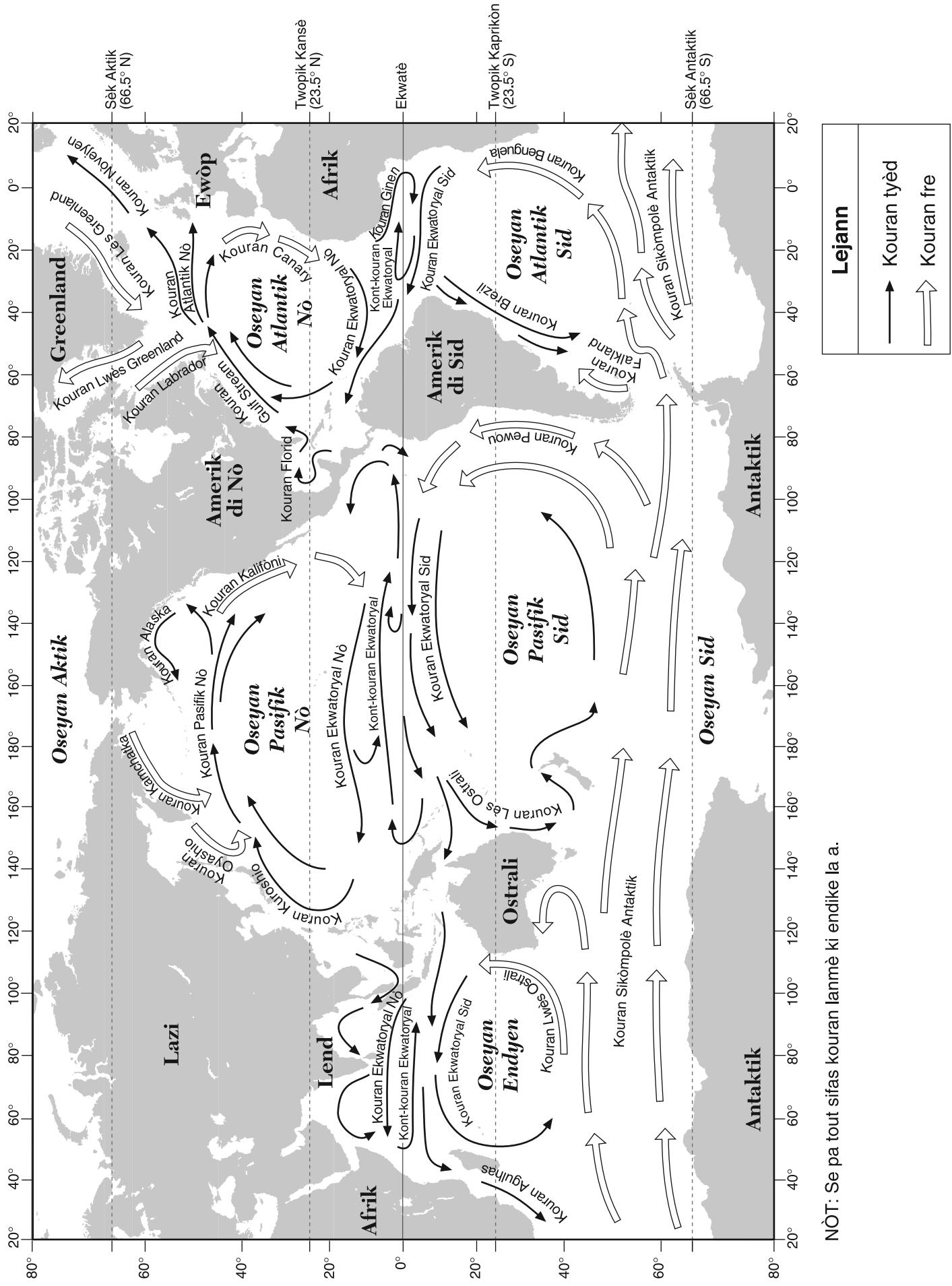


Jeyojoji Soubasman Jeneral Eta New York

ki modifye nan
ANKÈT JEYOLOJIK
NEW YORK STATE MUSEUM
1989

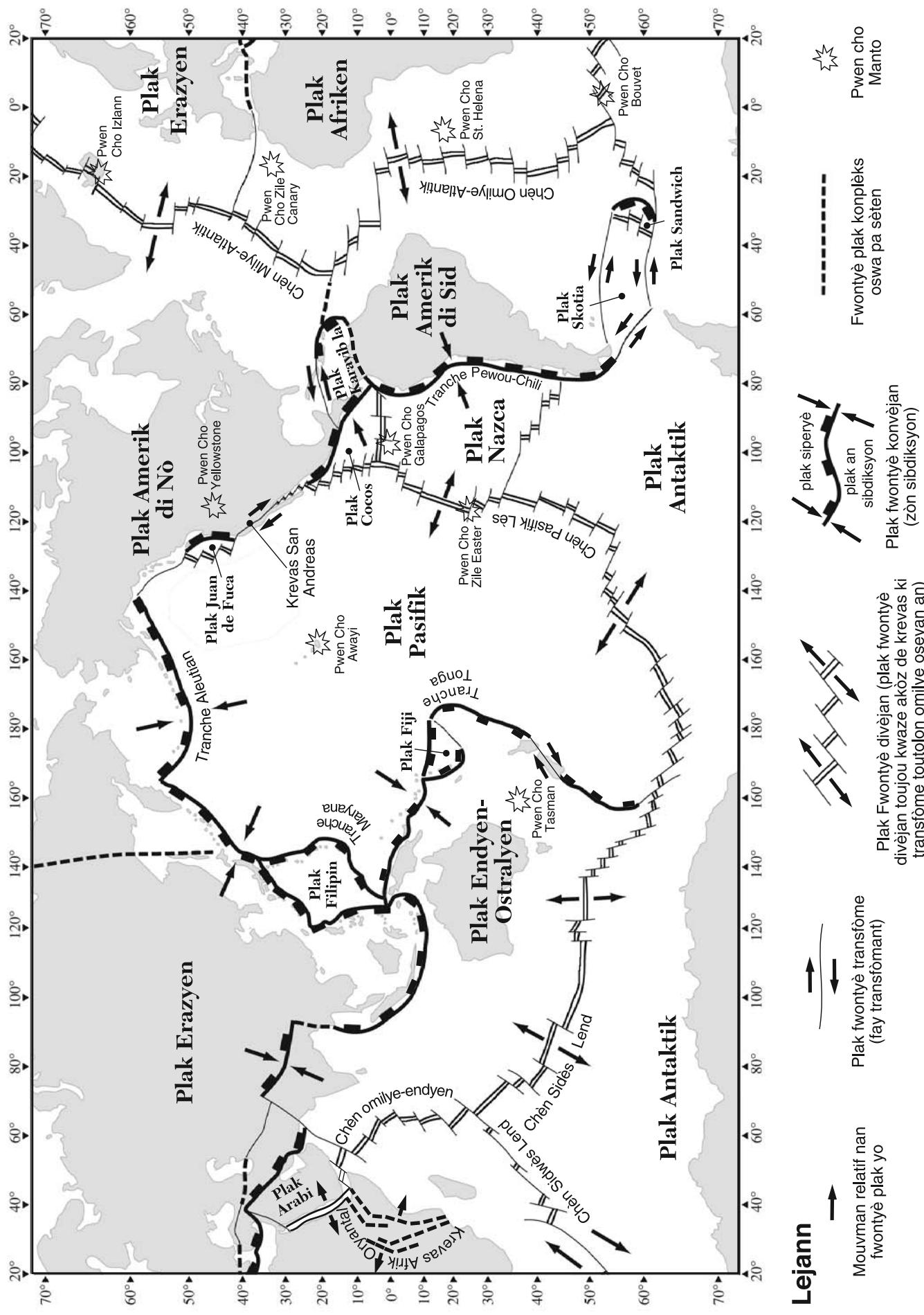


Sifas Kouran Oseyan an



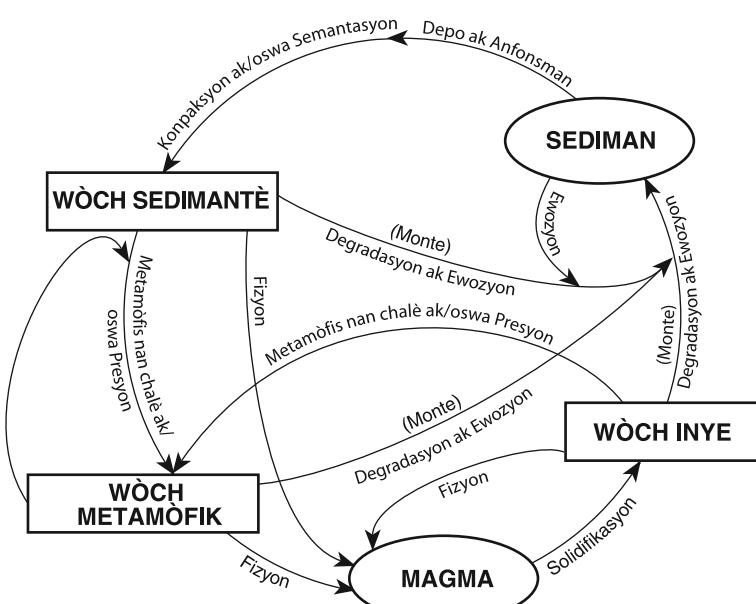
NÒT: Se pa tout sifas kouran lannè ki endike la a.

Plak Tektonik

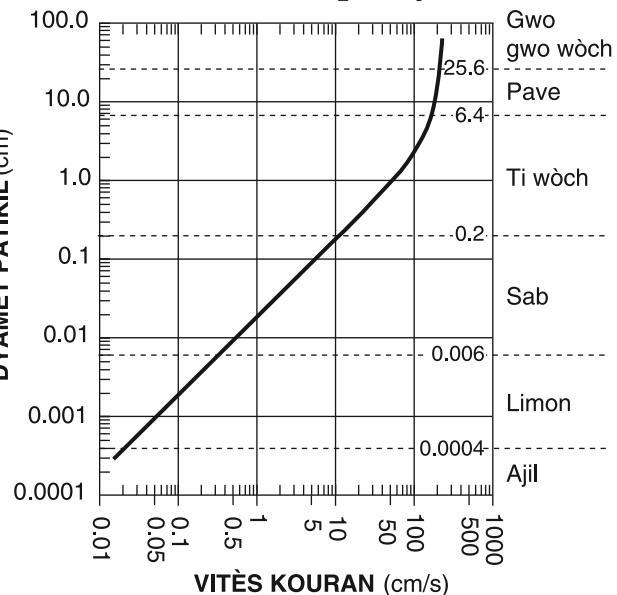


Haitian Creole Edition — Physical Setting/Earth Science Reference Tables — 2010 Edition

Sik Wòch nan Kwout Latè



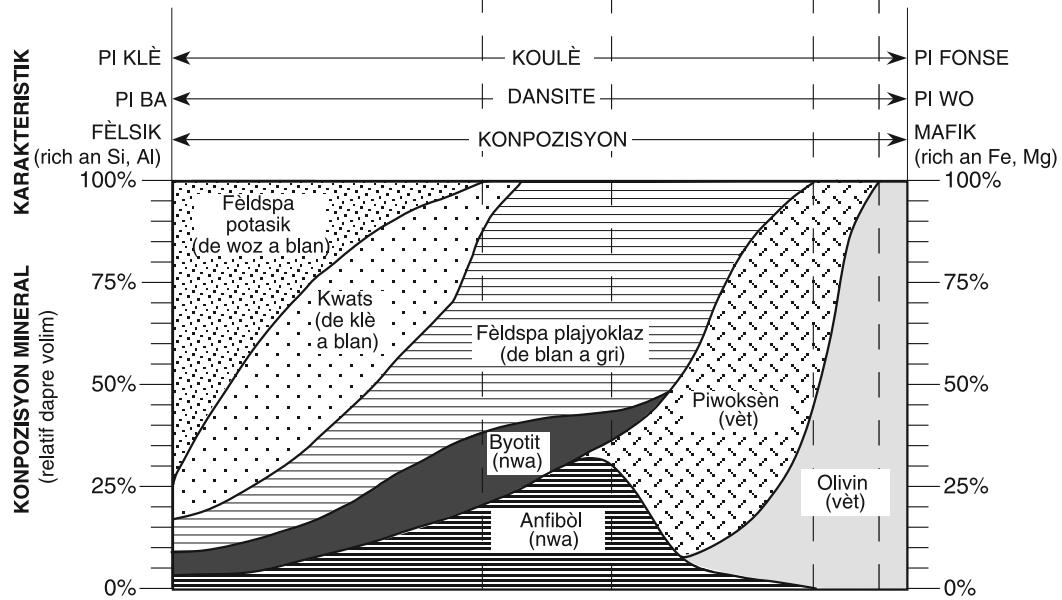
Relasyon ant Gwosè Patikil ak Vîtes Dlo ki pote yo ale



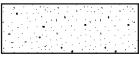
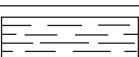
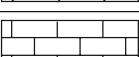
Graf jeneral sa a montre vîtes dlo ki nesesè pou konsève mouvman an, men pa pou kòmanse li. Varyasyon yo fêt akòz diferans ki nan dansite ak fòm patikil yo

Plan pou Identifikasiyon Wòch Inye

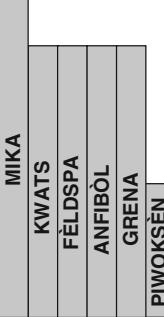
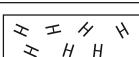
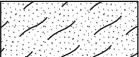
WÒCH INYE	ANVIWÖNMAN FÖMASYON		GWOSE KRISTAL	TEKSTI	
	ENTRIZIF (Plitonik)	EKSTRIZIF (Völkanic)		Lis	Ki pa vezikilè
		Obsidiyen (parèt nwa anjeneral)	Vè bazaltik		
Pons			Eskori		
Riyolit vezikilè	Riyolit	Andezit vezikilè	Bazalt vezikilè		
			Bazalt		
			Dyabaz	Fen	
					Vezikilè (pòch gaz)
Granit		Diyorit	Gabwo	Gwo gren	
Pegmatit				Trè gwo gren	Ki pa vezikilè
			Peryodotit Dinit		
				pa kristalen	
				1 mm	
				mwers pase 1 mm	
				10 mm ak 10 mm	
				oswa pi gwo	
				10 mm	
				oswa pi gwo	



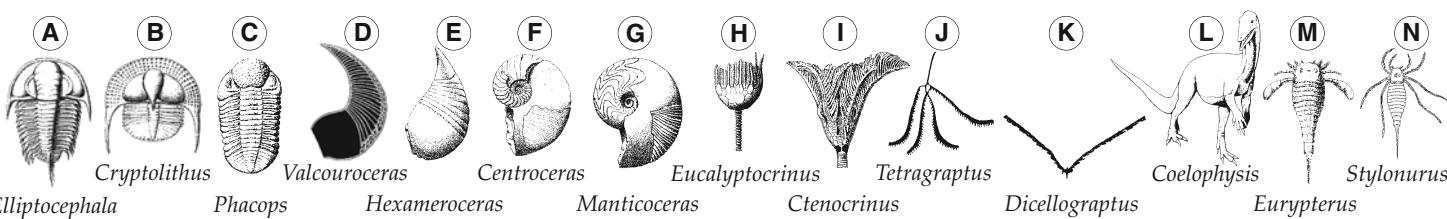
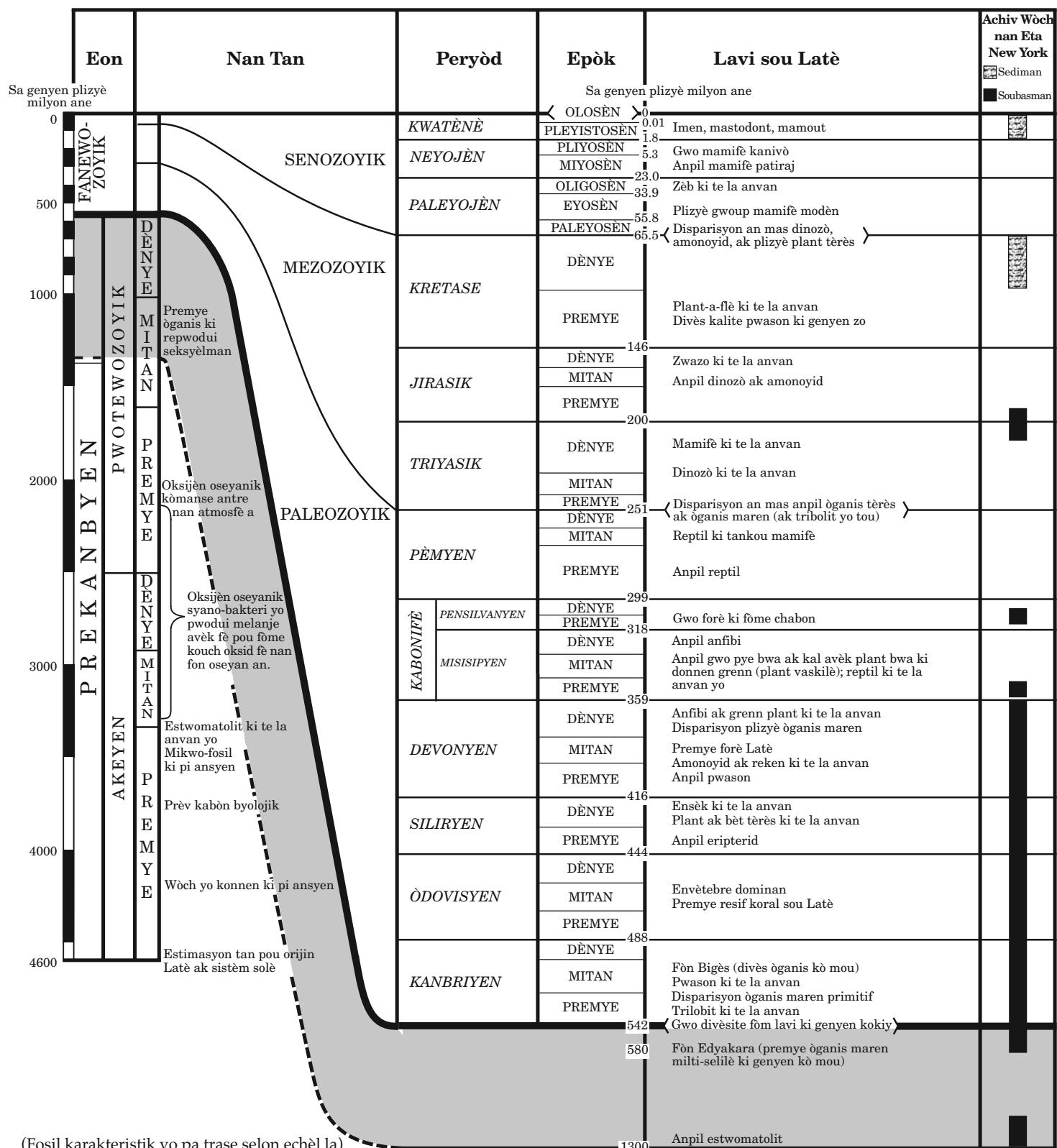
Plan pou Idantifikasyon Wòch Sedimantè

WÒCH SEDIMANTÈ KI FÒME NAN TÈ KI PA ÒGANIK					
TEKSTI	GWOSÈ GRENN	KONPOZISYON	KÒMANTÈ	NON WÒCH YO	SENBÒL
Klastik (an fragman)	Ti wòch, pave ak/oswa gwo gwo wòch ki antre nan sab, limon, ak/oswa ajil	Pifò kwats, fèldspa, ak mineral ajil; kapab genyen ti mòso lòt wòch ak mineral	Fragman awondi	Konglomera	
	Sab (0.006 a 0.2 cm)		Fragman angilè	Breccia	
	Limon (0.0004 a 0.006 cm)		Fen rive sou gwo	Grè sab	
	Ajil (mwens pase 0.0004 cm)		Grenn trè fen	Wòch limon	
			Konpak; kapab fann fasil	Wòch marne	
WÒCH SEDIMANTÈ KI FÒME SOU PLAN CHIMIK AK/OSWA ÒGANIK					
TEKSTI	GWOSÈ GRENN	KONPOZISYON	KÒMANTÈ	NON WÒCH YO	SENBÒL
Kristalen	Kristal fen a kristal gwo gren	Alit	Kristal ki soti nan presipite chimik ak evaporit	Wòch sèl	
		Jips		Jips wòch	
		Dolomit		Dolostone	
Kristalen oswa byoklastik	Trè trè fen pou rive nan trè trè gwo	Kalsit	Presipite orijin fragman koki y orijin byolojik oswa simante	Kalkè	
Byoklastik		Kabòn	rès plant konprese	Chabon bitim	

Plan pou Idantifikasyon Wòch Metamòfik

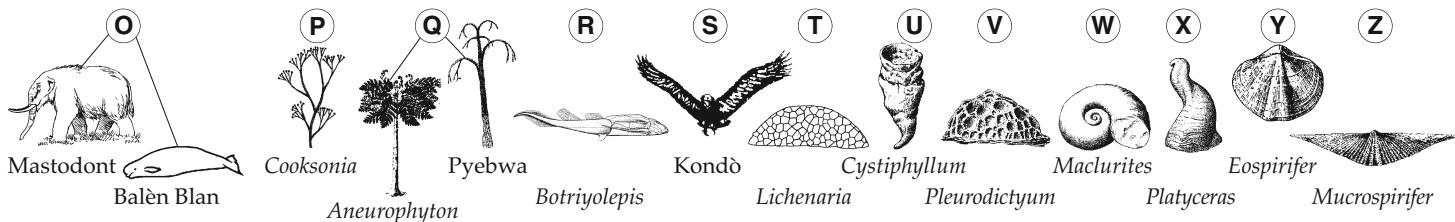
TEKSTI	GWOSÈ GRENN	KONPOZISYON	KALITE METAMÒFIS	KÒMANTÈ	NON WÒCH YO	SENBÒL
FEYTE ALIYMAN MINERAL	Fen	 MIKA KWATS FÈLDSPA ANFIBÒL GRENA PiWOKSÉN	Rejyonal (Ogmantasyon chalè ak presyon)	Metamòfis wòch marne kalite enferyè	Adwaz	
	Fen a mwayèn			Sifas folyasyon	Phyllite	
	Mwayèn a gwo gren			Kristal mika lamelè ki vizib nan metamòfis ajil oswa fèldspa	Chist	
				Metamòfis kalite siperyè; mineral ki separe an mak	Gneiss	
KI PA FEYTE	Fen	Kabòn	Rejyonal	Metamòfis chabon bitim	Chabon antrasit	
	Fen	Plizyè mineral	Kontak (chalè)	Divès kalite wòch ki chanje nan chalè ki toupre magma/lav	Hornfels	
	Fen a gwo gren	Kwats	Rejyonal oswa kontak	Metamòfis grè sab kwats	Kwatzit	
		Kalsit ak/oswa dolomit		Metamòfis kalkè oswa dolostone	Mab	
	Gwo gren	Plizyè mineral		Ti wòch yo kapab defòme oswa detire	Metakonglomera	

ISTWA JEYOLOJIK

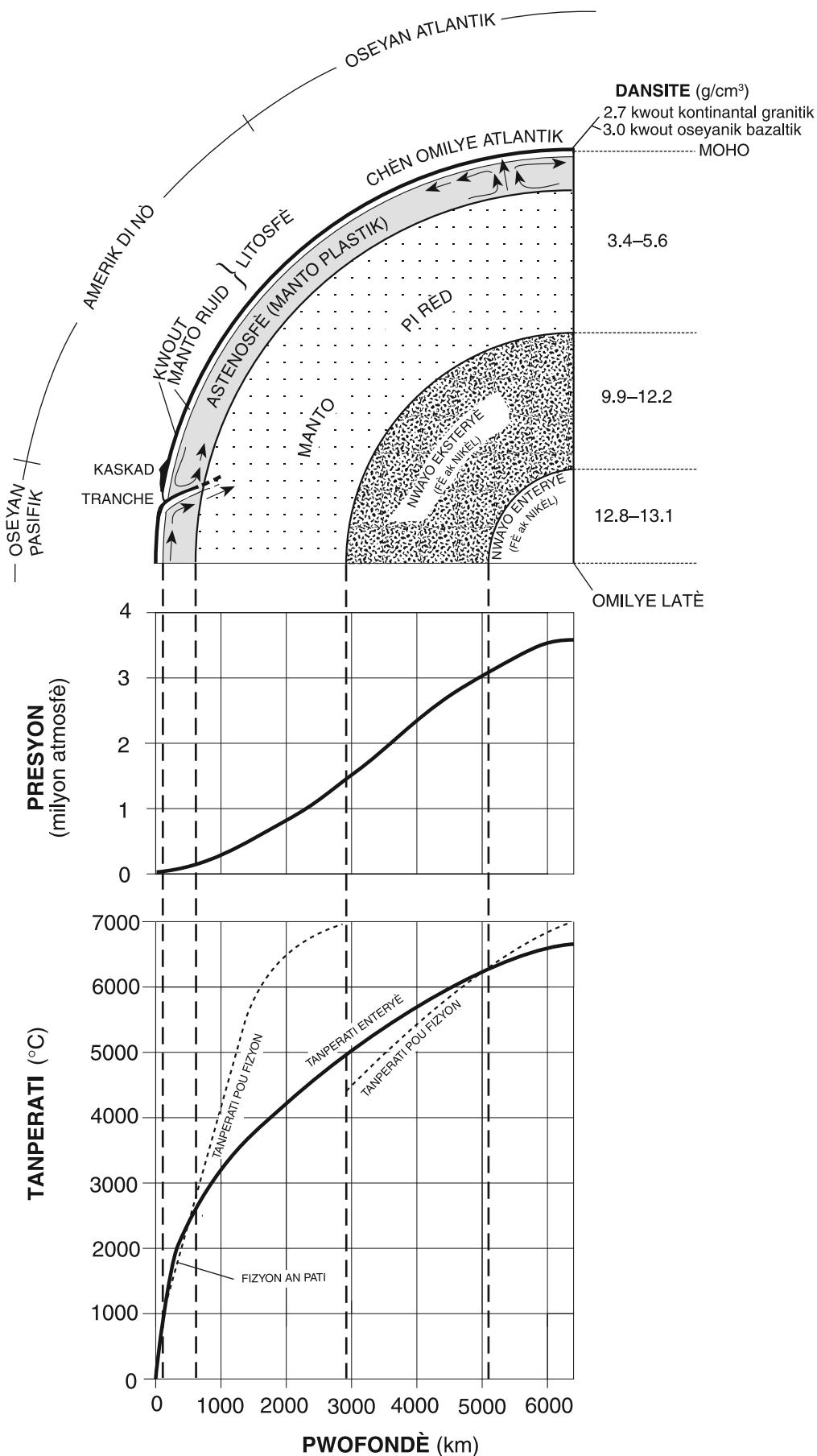


ETA NEW YORK

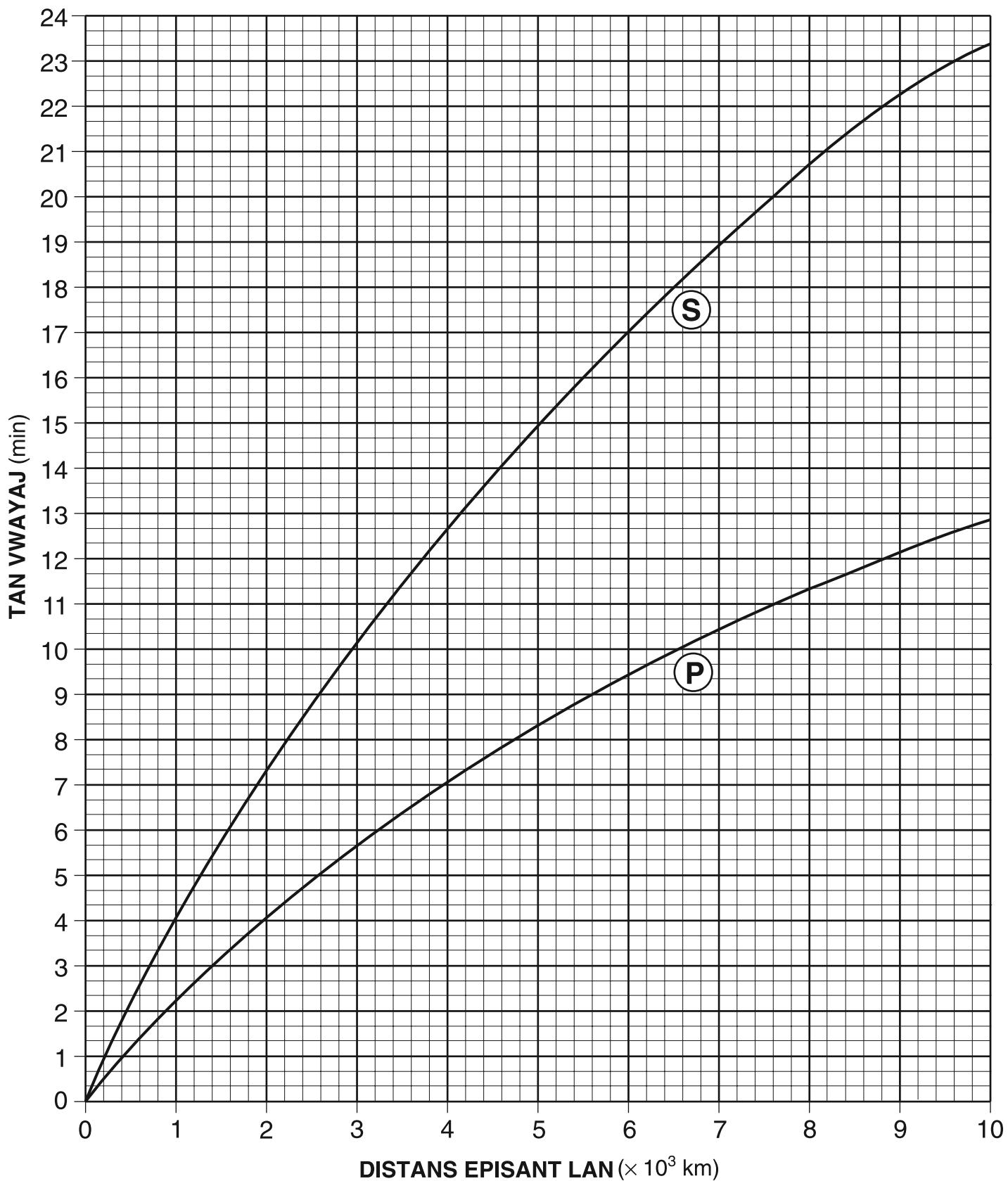
Distribisyon Tan Fosil yo (ak fosil enpòtan New York yo)												Evènman Jeyolojik Enpòtan nan New York	Dediksyon sou Pozisyon Mas tè ki sou Latè
Sant chak sèk ki make ak yon lèt endike tan ki estime pou egzistans yon fosil karakteristik espesifik (sétadi Fosil A) ki te viv nan fen Kòmansman Epòk Kanbriyen.													
O	S											Avans ak rekil dènye glas kontinental	
NOTLOYID													
	DINOZÒ	MAMIFÈ	ZWAZO									Sab ak ajil ki anba Long Island ak Staten Island ki fe depo sou kòt Oseyan Atlantik la	
	L											Monte an dòm reyyon Adirondack kòmanse	
	KRINOID			PLANT VASKILÈ		KORAY	GASTWOPÔD	BRAKYOPÔD				Anbouchi Inisyal Oseyan Atlantik Amerik di Nò ak Lafrik separe Antre Rebò Miray Falèz Apik	
	AMONOYID											Panje kòmanse separe	
TRILOBIT			ERIPTERID										
C	F	G	I	GRAPTOILT	N	Q	R					Owojenèz Alejenyen ki fòme akòz kolizyon Amerik di Nò ak Lafrik tou transfòme kòt la, pou fome Panje	
E	H				M	P	FWASON PIAKODÈM	V	X	Z		Dèlta Catskill fòme Ewozyon Montay Akadyen	
B	D		K					U				Owojenèz Akadyen ki fome akòz kolizyon Amerik di Nò ak Avalon ak fèmti rès pati Oseyan lapetis	
A	J				T	W						Depo sèl ak jips ki nan basen evaporit	
												Ewozyon Montay Taconic yo; dèlta Queenston fòme	
												Owojenèz Takonyen ki fòme akòz fèmti pati Iwès Oseyan lapetis ak kolizyon ant Amerik di Nò ak zile vòlkanik	
												Depo jeneral sou pifò New York toutolon kòt Oseyan lapetis	
												Distansyon kontinental ak anbouchi inisyal Oseyan lapetis Ewozyon Montay Grenville	
												Owojenèz Grenville: metamòfis soubasman ki ekspoze kounye nan Adirondacks ak Mòn Hudson	



Dediksyon ki fèt sou Pwopriyete Andedan Latè



Tan Vwayaj Onn P ak Onn S Tranblemanntè

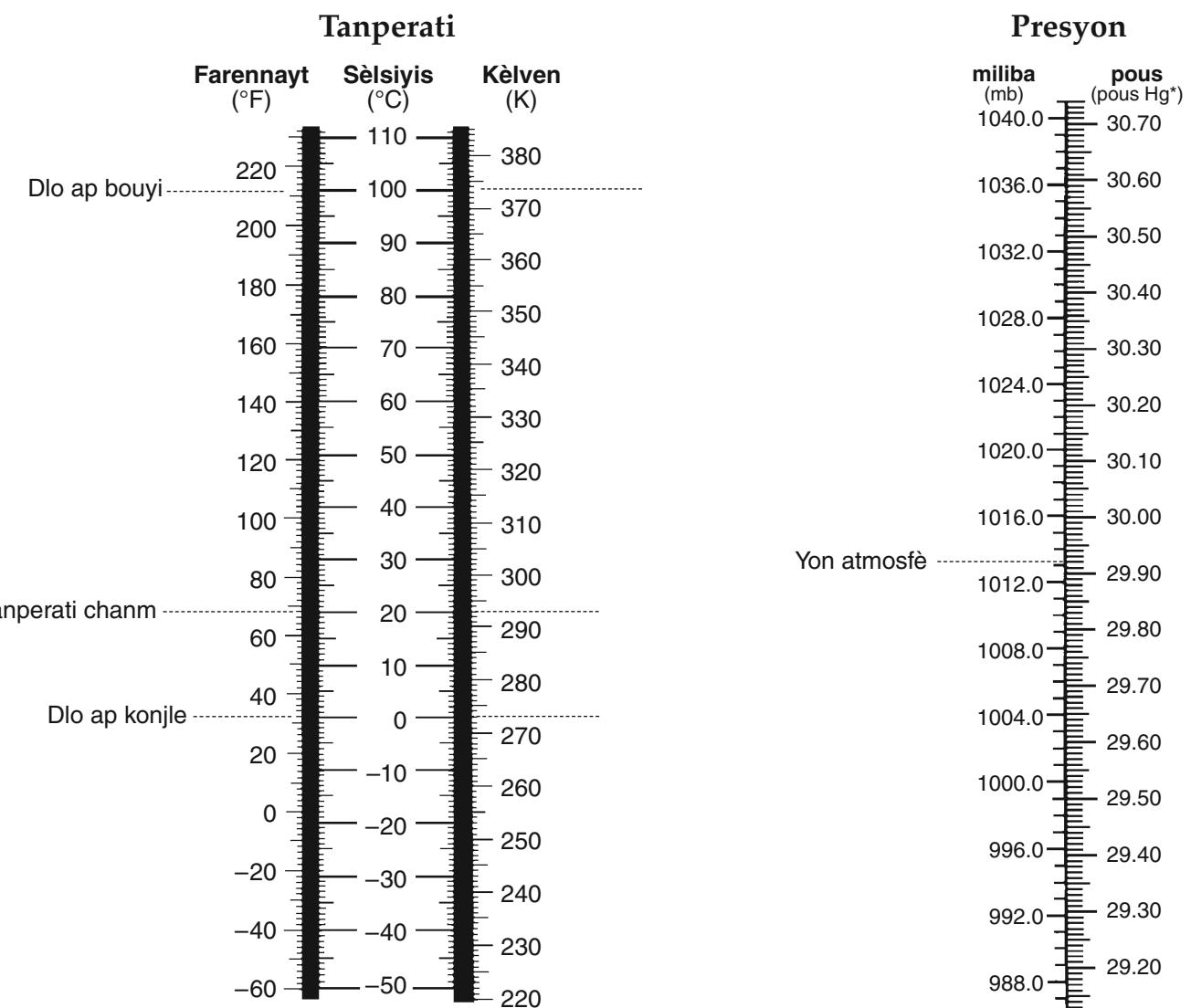


Tanperati Kondansasyon (°C)

Tanperati Bilb Sech (°C)	Diferans Ant Tanperati Bilb Imid ak Tanperati Bilb Sèk (C°)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
-20	-20	-33													
-18	-18	-28													
-16	-16	-24													
-14	-14	-21	-36												
-12	-12	-18	-28												
-10	-10	-14	-22												
-8	-8	-12	-18	-29											
-6	-6	-10	-14	-22											
-4	-4	-7	-12	-17	-29										
-2	-2	-5	-8	-13	-20										
0	0	-3	-6	-9	-15	-24									
2	2	-1	-3	-6	-11	-17									
4	4	1	-1	-4	-7	-11	-19								
6	6	4	1	-1	-4	-7	-13	-21							
8	8	6	3	1	-2	-5	-9	-14							
10	10	8	6	4	1	-2	-5	-9	-14	-28					
12	12	10	8	6	4	1	-2	-5	-9	-16					
14	14	12	11	9	6	4	1	-2	-5	-10	-17				
16	16	14	13	11	9	7	4	1	-1	-6	-10	-17			
18	18	16	15	13	11	9	7	4	2	-2	-5	-10	-19		
20	20	19	17	15	14	12	10	7	4	2	-2	-5	-10	-19	
22	22	21	19	17	16	14	12	10	8	5	3	-1	-5	-10	-19
24	24	23	21	20	18	16	14	12	10	8	6	2	-1	-5	-10
26	26	25	23	22	20	18	17	15	13	11	9	6	3	0	-4
28	28	27	25	24	22	21	19	17	16	14	11	9	7	4	1
30	30	29	27	26	24	23	21	19	18	16	14	12	10	8	5

Imidite Relatif (%)

Tanperati Bilb Sèk (°C)	Diferans Ant Tanperati Bilb Imid ak Tanperati Bilb Sèk (C°)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
-20	100	28													
-18	100	40													
-16	100	48													
-14	100	55	11												
-12	100	61	23												
-10	100	66	33												
-8	100	71	41	13											
-6	100	73	48	20											
-4	100	77	54	32	11										
-2	100	79	58	37	20	1									
0	100	81	63	45	28	11									
2	100	83	67	51	36	20	6								
4	100	85	70	56	42	27	14								
6	100	86	72	59	46	35	22	10							
8	100	87	74	62	51	39	28	17	6						
10	100	88	76	65	54	43	33	24	13	4					
12	100	88	78	67	57	48	38	28	19	10	2				
14	100	89	79	69	60	50	41	33	25	16	8	1			
16	100	90	80	71	62	54	45	37	29	21	14	7	1		
18	100	91	81	72	64	56	48	40	33	26	19	12	6		
20	100	91	82	74	66	58	51	44	36	30	23	17	11	5	
22	100	92	83	75	68	60	53	46	40	33	27	21	15	10	4
24	100	92	84	76	69	62	55	49	42	36	30	25	20	14	9
26	100	92	85	77	70	64	57	51	45	39	34	28	23	18	13
28	100	93	86	78	71	65	59	53	47	42	36	31	26	21	17
30	100	93	86	79	72	66	61	55	49	44	39	34	29	25	20



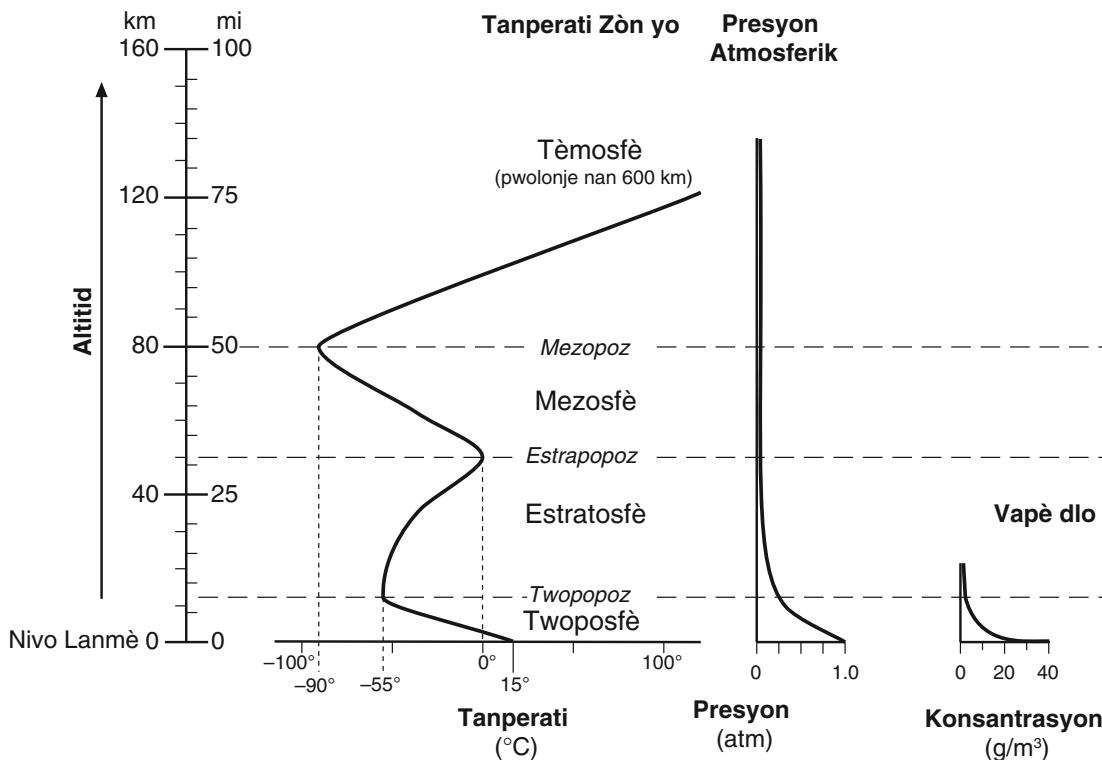
Lejann pou Senbòl Kat Metewolojik

Estasyon Modèl	Eksplikasyon pou Estasyon Akèy
	<p>Tanperati prezan Kantite kouveti nyaj (apeprè 75% ki kouvrir)</p> <p>Tanperati ($^{\circ}$F) 28</p> <p>Vizibilité (mi) $\frac{1}{2} *$</p> <p>Tanperati kondansasyon ($^{\circ}$F) 27</p> <p>Vitès van $\begin{cases} \text{babil antye} = 10 \text{ ne} \\ \text{demi-babil} = 5 \text{ ne} \\ \text{total} = 15 \text{ ne} \end{cases}$</p> <p>196 Presyon bawometrik (1019.6 mb)</p> <p>+19/ Tandans bawometrik (yon ogmantasyon estab 1.9 mb nan 3 dènye èd tan yo)</p> <p>.25 Presipitasyon (0.25 pous nan dènye 6 èd tan yo)</p> <p>Direksyon van (apati sidwès) (1 ne = 1.15 mi/h)</p>

*Hg = mèki

Tanperati prezan	Mas lè	Fwon	Siklòn
<p>Farinay Lapli Bouya ak lafimen Grèl Loraj Gwo lapli Nèj Nèj fonn Lapli vèglasant Bwouya Labrim Gwo nèj</p>	<p>Ak aktik kontinental Pk polè kontinental Tk twopikal kontinental Tm twopikal maritim Pm polè maritim</p>	<p>Frèt Tyèd Imobil Okli</p>	<p>Toubiyon</p>

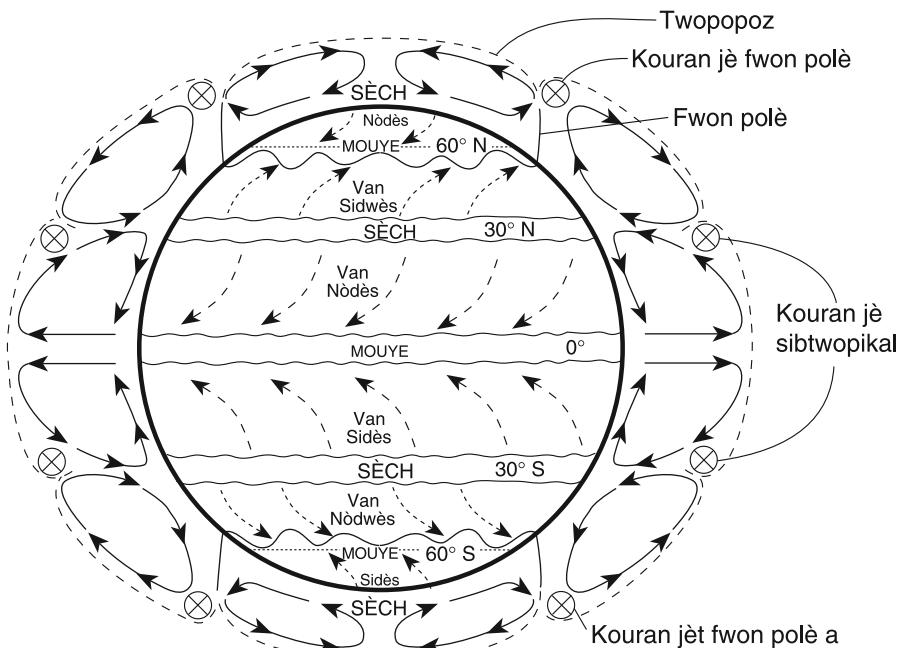
Pwopriyete ki Chwazi nan Atmosfè Latè



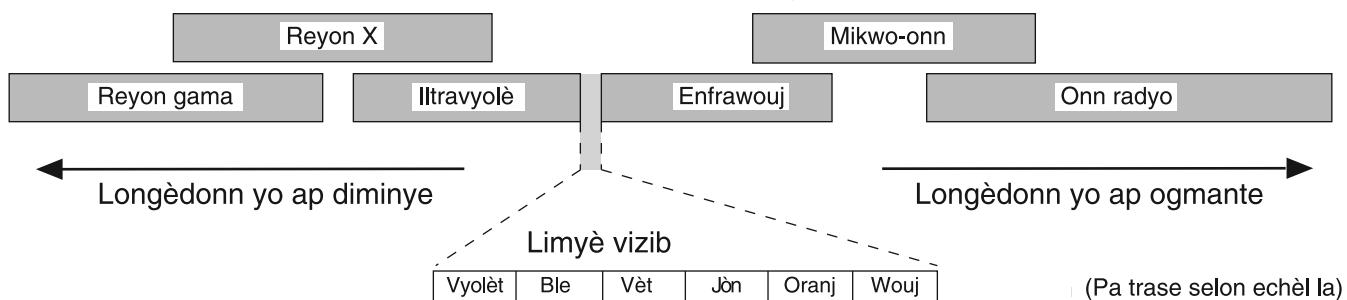
Senti Van ak Imidite Planetè nan Twoposfè

Desen ki adwat la montre pozisyon sent ki toupre tan yon ekinòks. Pozisyon yo chanje enpe avèk chanjman latitud reyon vètikal Solèy la. Nan Emisfè Nò, senti yo chanje nan direksyon nò nan sezon lete epi yo chanje nan direksyon sid nan sezon livè.

(Pa trase selon echèl la)



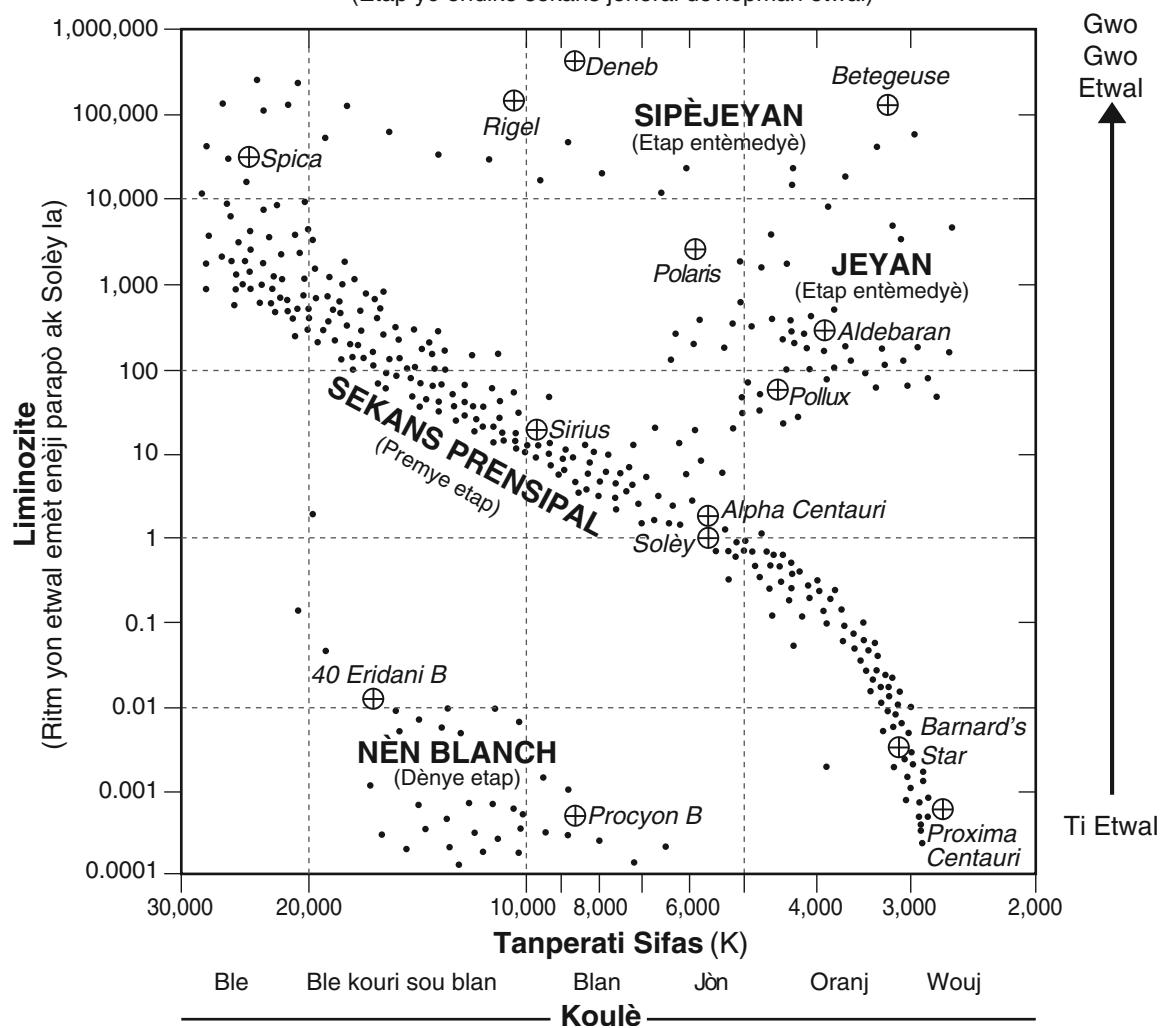
Espèk Elektwomayetik



Karakteristik Etwal yo

(Non an italic yo gen pou wè ak etwal yo reprezante \oplus)

(Etap yo endike sekans jeneral devlopman etwal)



Done sou Sistèm Solè

Objè Selès	Distans Mwayen parapò ak Soleyl la (milyon km)	Peryòd Revolisyon (j=jou) (a=ane)	Peryòd Wotasyon nan Ekwatè a	Eksantrisite Öbit	Dyamèt Ekwatoryal (km)	Mas (Latè = 1)	Dansite (g/cm ³)
SOLEY	—	—	27 j	—	1,392,000	333,000.00	1.4
MÈKI	57.9	88 j	59 j	0.206	4,879	0.06	5.4
VENIS	108.2	224.7 j	243 j	0.007	12,104	0.82	5.2
LATÈ	149.6	365.26 j	23 h 56 min 4 s	0.017	12,756	1.00	5.5
MAS	227.9	687 j	24 h 37 min 23 s	0.093	6,794	0.11	3.9
JIPITÈ	778.4	11.9 a	9 h 50 min 30 s	0.048	142,984	317.83	1.3
SATIN	1,426.7	29.5 a	10 h 14 min	0.054	120,536	95.16	0.7
IRANIS	2,871.0	84.0 a	17 h 14 min	0.047	51,118	14.54	1.3
NEPTIN	4,498.3	164.8 a	16 h	0.009	49,528	17.15	1.8
LALIN LATÈ	149.6 (0.386 de LATÈ)	27.3 j	27.3 j	0.055	3,476	0.01	3.3

Pwopriyete Mineral Komen

EKLA	DITE	CLIVAJ	FRAKTI	KOULÈ KOMEN	KARAKTERISTIK DISTENGE	ITILIZASYON (YO)	KONPOZISYON*	NON MINERAL
Ekla metalik	1–2	✓		ajan a gri	rè nwa,sansasyon grès	min kreyon, librifyan	C	Grafit
	2.5	✓		ajan metalik	rè gri-nwa, klivaj kibik, dansite = 7.6 g/cm^3	minrè plon, batri	PbS	Galèn
	5.5–6.5	✓		nwa a ajan	rè nwa, mayetik	minrè fè, asye	Fe_3O_4	Mayetit
	6.5	✓		jòn kuivre	rè vèt-nwa, (pirit)	minrè souf	FeS_2	Fo lò
Youn oswa Löt	5.5 – 6.5 oswa 1	✓		ajan metalik oswa wouj tè	rè bren-wouj	minrè fè, bijou	Fe_2O_3	Ematit
Ekla ki pa metalik	1	✓		blan a vèt	sansasyon grès	seramik, papye	$\text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$	Talk
	2	✓		jòn a anb	rè blan-jòn	asid silfirk	S	Silfi
	2	✓		blan a woz oswa gri	ki grate fasil avèk zong	plat pari, panno sèch	$\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$	Jips selenit
	2–2.5	✓		san koulè pou vin jòn	fleksib an kouch mens	penti, twati	$\text{KAl}_3\text{Si}_3\text{O}_{10}(\text{OH})_2$	Mika moskovit
	2.5	✓		san koulè pou vin blan	klivaj kibik, gou sale	aditif alimantè, fè glas fonn	NaCl	Alit
	2.5–3	✓		nwa a mawon fonse	fleksib an kouch mens	materyo konstwiksyon	$\text{K}(\text{Mg},\text{Fe})_3$ $\text{AlSi}_3\text{O}_{10}(\text{OH})_2$	Mika Biotit
	3	✓		san koulè oswa varyab	ti boul ki gen asid, klivaj wonboyedral	siman, lacho	CaCO_3	Kalsit
	3.5	✓		san koulè oswa varyab	ti boul ki gen asid lè yo an poud	pyè konstwiksyon	$\text{CaMg}(\text{CO}_3)_2$	Dolomit
	4	✓		san koulè oswa varyab	klive nan 4 direksyon	asid fliyordik	CaF_2	Fliyorin
	5–6	✓		nwa a vèt fonse	klive nan 2 direksyon a 90°	koleksyon mineral, bijou	$(\text{Ca},\text{Na})(\text{Mg},\text{Fe},\text{Al})$ $(\text{Si},\text{Al})_2\text{O}_6$	Piwoksèn (ojit anjeneral)
	5.5	✓		nwa a vèt fonse	klive a 56° ak 124°	koleksyon mineral, bijou	$\text{CaNa}(\text{Mg},\text{Fe})_4$ $(\text{Al},\text{Fe},\text{Ti})_3$ $\text{Si}_6\text{O}_{22}(\text{O},\text{OH})_2$	Anfibòl (ònblend anjeneral)
	6	✓		blan a woz	klive nan 2 direksyon a 90°	seramik a glas	KAIS_3O_8	Fèldspa potasik (òtoklaz anjeneral)
	6	✓		blan a gri	klive nan 2 direksyon, estriyasyon vizib	seramik a glas	$(\text{Na},\text{Ca})\text{AlSi}_3\text{O}_8$	Fèldspa plajyoklaz
	6.5	✓		vèt a gri oswa mawon	anjeneral vèt pal ak granile	brik fou, bijou	$(\text{Fe},\text{Mg})_2\text{SiO}_4$	Olivin
	7	✓		san koulè oswa varyab	ekla lis, kapab fòme kristal egzagonal	vè, bijou, elektwonik	SiO_2	Kwats
	6.5–7.5	✓		wouj fonse a vèt	obsève souvan kòm grenn lis wouj nan wòch metamòfik Eta New York	bijou (wòch presye Eta New York), abrazif	$\text{Fe}_3\text{Al}_2\text{Si}_3\text{O}_{12}$	Grena

*Senbòl chimik:

Al = aliminyòm

Cl = klò

H = idwojèn

Na = sodyòm

S = silfi

C = kabòn

F = fliyò

K = potasyòm

O = oksijèn

Si = silikòn

Ca = kalsyòm

Fe = fè

Mg = mayezyòm

Pb = plon

Ti = titàn

✓ = fòm dominan kasaj