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Tablo Referans pou Anviwònman Fizik/SYANS LATÈ

Done sou Dezentegrasyon Radyo-aktif

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

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

Ekwasyon

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

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

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

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

Pwopriyete Dlo

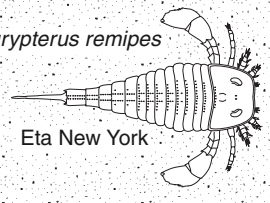
Enèji tèmik ki fòme pandan fizyon an	334 J/g
Enèji tèmik ki degaje pandan konjelasyon	334 J/g
Enèji tèmik ki fòme pandan vaporizasyon	2260 J/g
Enèji tèmik ki degaje pandan kondansasyon	2260 J/g
Dansite a 3.98°C	1.0 g/mL

Konpozisyon Chimik an Mwayèn Kwout Latè, Idwosfè, ak Twoposfè

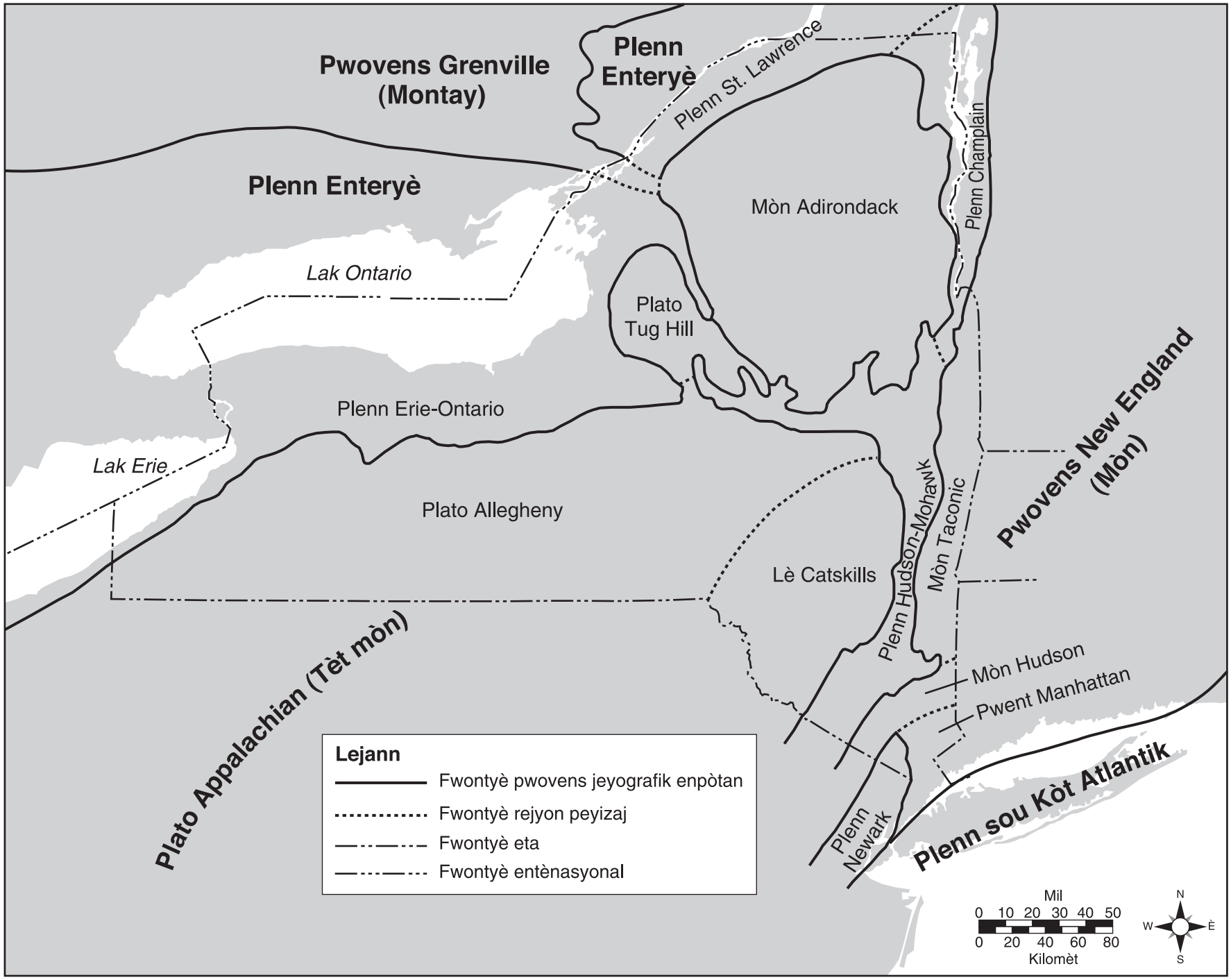
ELEMAN (senbòl)	KWOUT		IDWOSFÈ	TWOPOSFÈ
	Pousantaj dapre mas	Pousantaj dapre volim	Pousantaj dapre volim	Pousantaj dapre volim
Oksijèn (O)	46.10	94.04	33.0	21.0
Silikòn (Si)	28.20	0.88		
Aliminyòm (Al)	8.23	0.48		
Fè (Fe)	5.63	0.49		
Kalsyòm (Ca)	4.15	1.18		
Sodyòm (Na)	2.36	1.11		
Mayezyòm (Mg)	2.33	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 2011

Ou dwe sèvi ak edisyon Tablo Referans Syans Latè sa a nan salklas la apati ane akademik 2011–12. Premye egzamen ki pral lakòz ou itilize tablo sa yo se Egzamen Regents Janvye 2012 nan Anviwònman Fizik/Syans Latè.

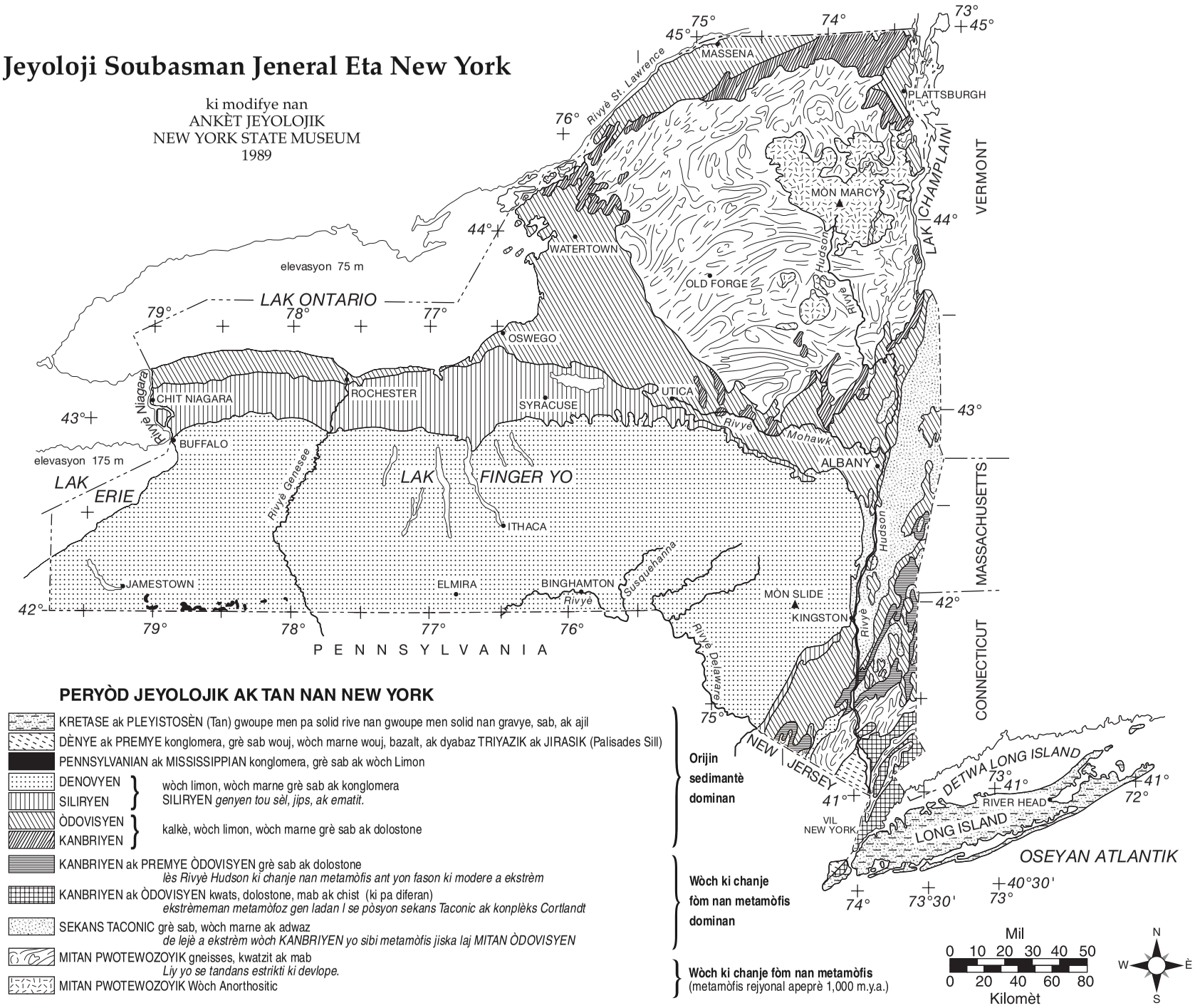


Rejyon Peyizaj Jeneral Eta New York



Jeyoloji Soubasman Jeneral Eta New York

ki modifye nan
ANKÈT JEYOLOJIK
NEW YORK STATE MUSEUM
1989



PERYÒD JEYOLOJIK AK TAN NAN NEW YORK

- KRETASE ak PLEYISTOSÈN (Tan) gwoupe men pa solid rive nan gwoupe men solid nan gravye, sab, ak ajil
- DÈNYE ak PREMYE konglomera, grè sab wouj, wòch marne wouj, bazalt, ak dyabaz TRIYAZIK ak JIRASIK (Palisades Sill)
- PENNSYLVANIAN ak MISSISSIPPIAN konglomera, grè sab ak wòch Limon
- DENOVYEN, SILIRYEN — wòch limon, wòch marne grè sab ak konglomera. SILIRYEN *genyen tou sèl, jips, ak ematit.*
- ÒDOVISYEN, KANBRIYEN — kalkè, wòch limon, wòch marne grè sab ak dolostone
- KANBRIYEN ak PREMYE ÒDOVISYEN grè sab ak dolostone
  lès Rivyè Hudson ki chanje nan metamòfis ant yon fason ki modere a ekstrèm
- KANBRIYEN ak ÒDOVISYEN kwats, dolostone, mab ak chist (ki pa diferan)
  ekstrèmeman metamòfoz gen ladan l se pòsyon sekans Taconic ak konplèks Cortlandt
- SEKANS TACONIC grè sab, wòch marne ak adwaz
  de lejè a ekstrèm wòch KANBRIYEN yo sibi metamòfis jiska laj MITAN ÒDOVISYEN
- MITAN PWOTEWOZOYIK gneisses, kwatzit ak mab
  Liy yo se tandans estrikti ki devlope.
- MITAN PWOTEWOZOYIK Wòch Anorthositic

Orijin sedimantè dominan

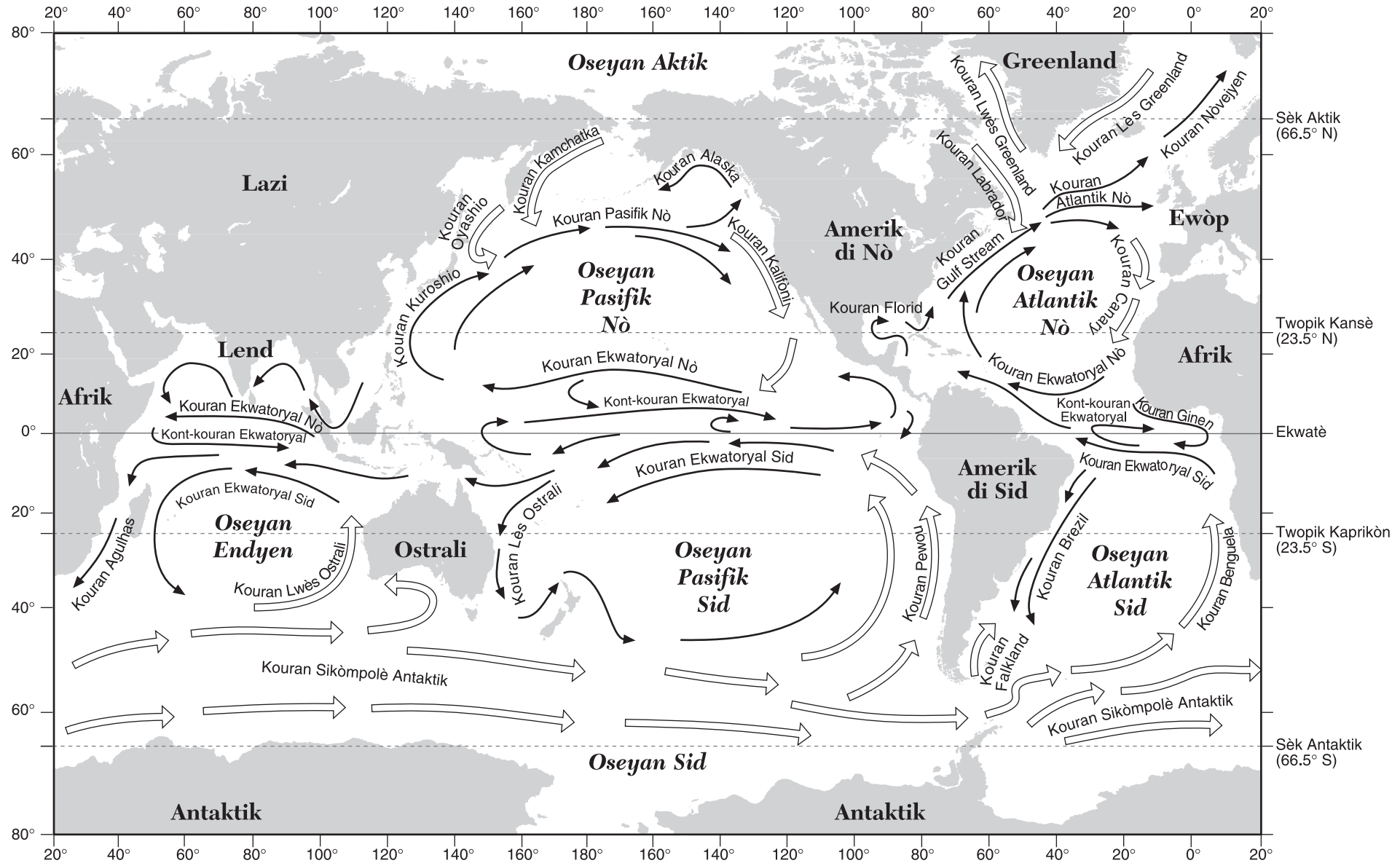
Wòch ki chanje fòm nan metamòfis dominan

Wòch ki chanje fòm nan metamòfis (metamòfis rejyonal apeprè 1,000 m.y.a.)

Mil 0 10 20 30 40 50
0 20 40 60 80 Kilomèt

N W È S

Sifas Kouran Oseyan an

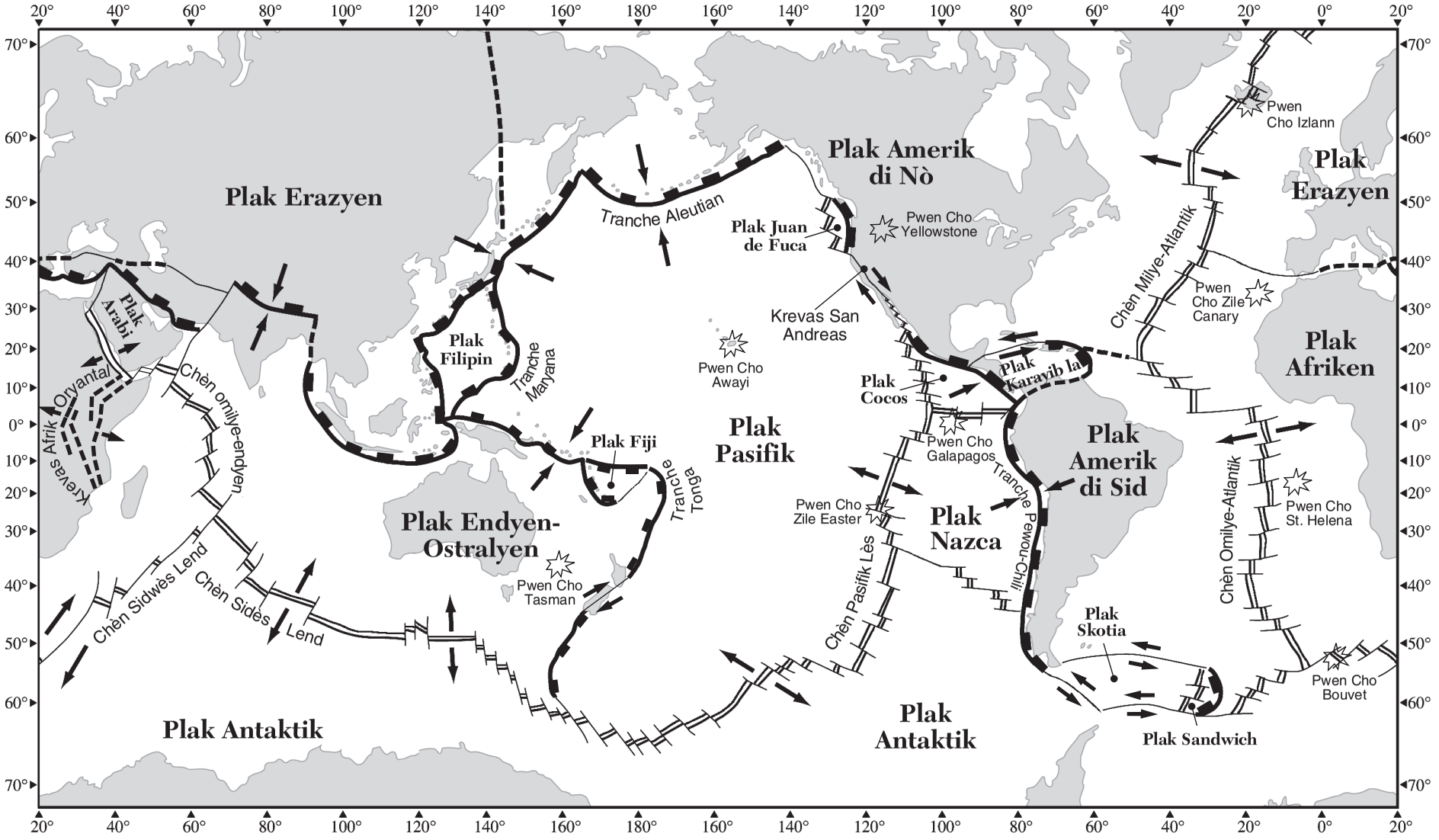


NÒT: Se pa tout sifas kouran lanmè ki endike la a.

Lejann

- → Kouran tyèd
- ⇨ Kouran fre

Plak Tektonik



Lejann

Mouvman relatif nan fwontyè plak yo

Plak fwontyè transfòme (fay transfòmant)

Plak Fwontyè divèjan (plak fwontyè divèjan toujou kwaze akòz de krevas ki transfòme toutolon omilye oseyan an)

plak siperyè

plak an sibdiksyon

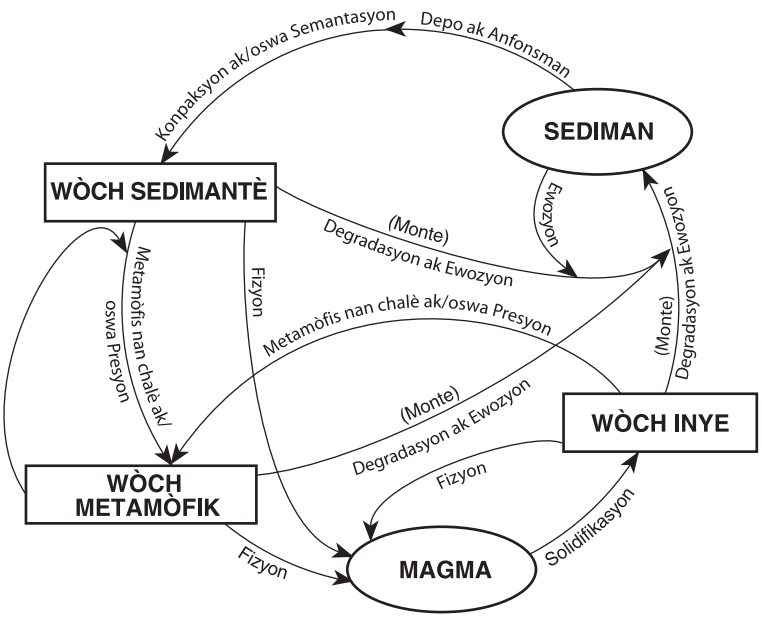
Plak fwontyè konvèjan (zòn sibdiksyon)

Fwontyè plak konplèks oswa pa sèten

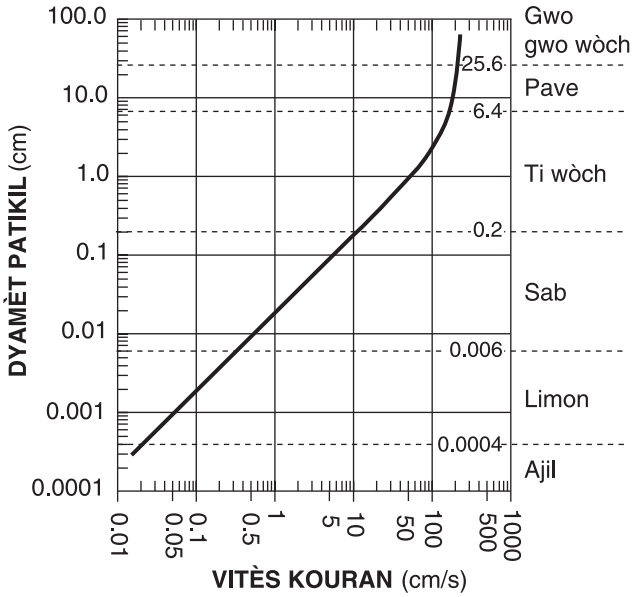
Pwen cho Manto

NÒT: Se pa tout pwen cho manto, plak, ak fwontyè ki endike

Sik Wòch nan Kwout Latè

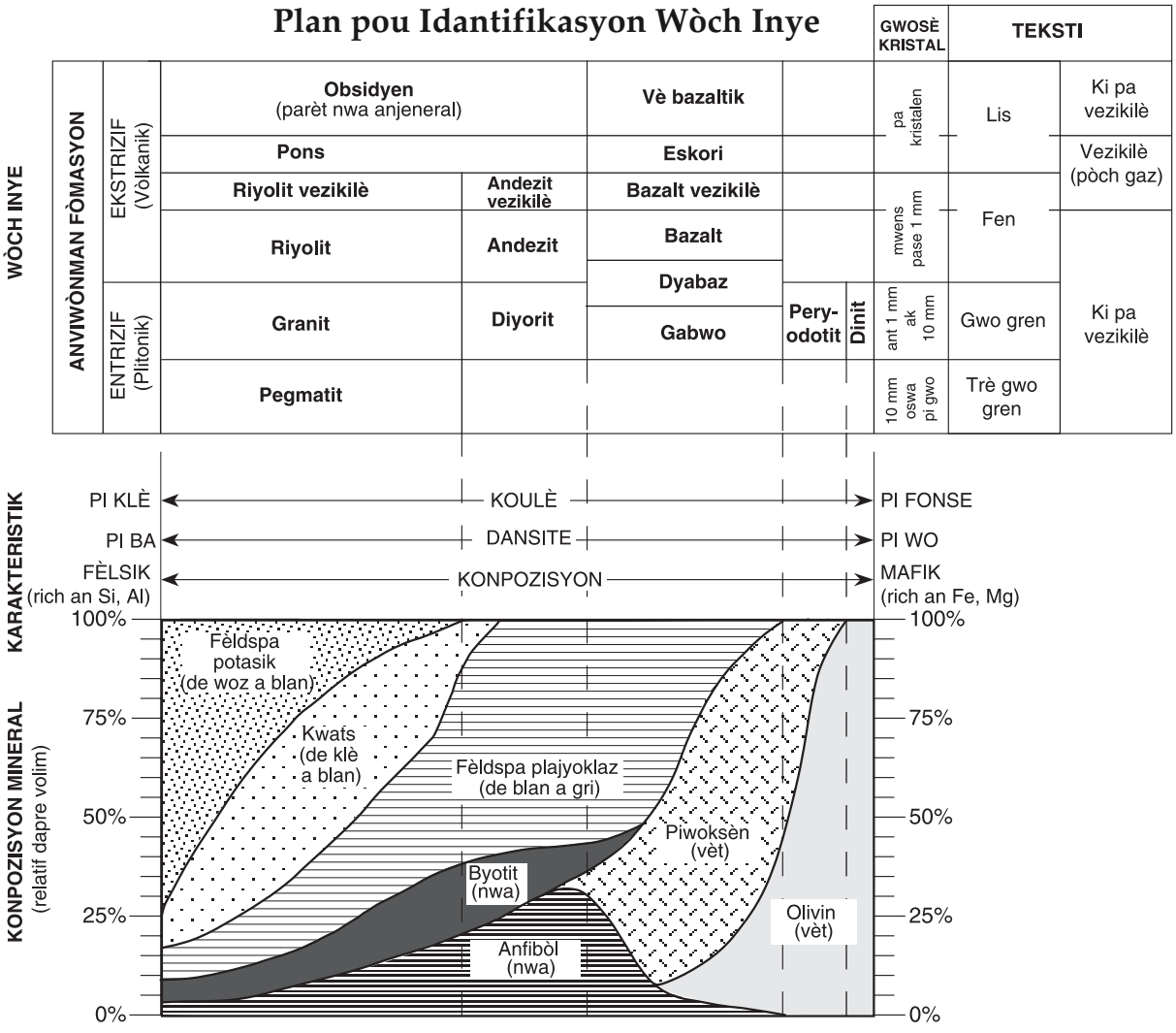


Relasyon ant Gwosè Patikil ak Vitès Dlo ki pote yo ale

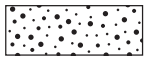
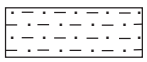


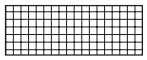
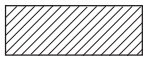
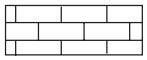
Graf jeneral sa a montre vitès dlo ki nesesè pou konsève mouvman an, men pa pou kòmanse li. Varyasyon yo fèt akòz diferans ki nan dansite ak fòm patikil yo

Plan pou Idantifikasyon Wòch Inye

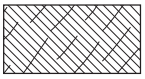
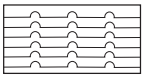
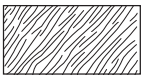
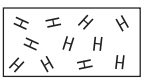
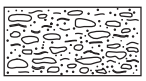


Plan pou Idantifikasyon Wòch Sedimantè

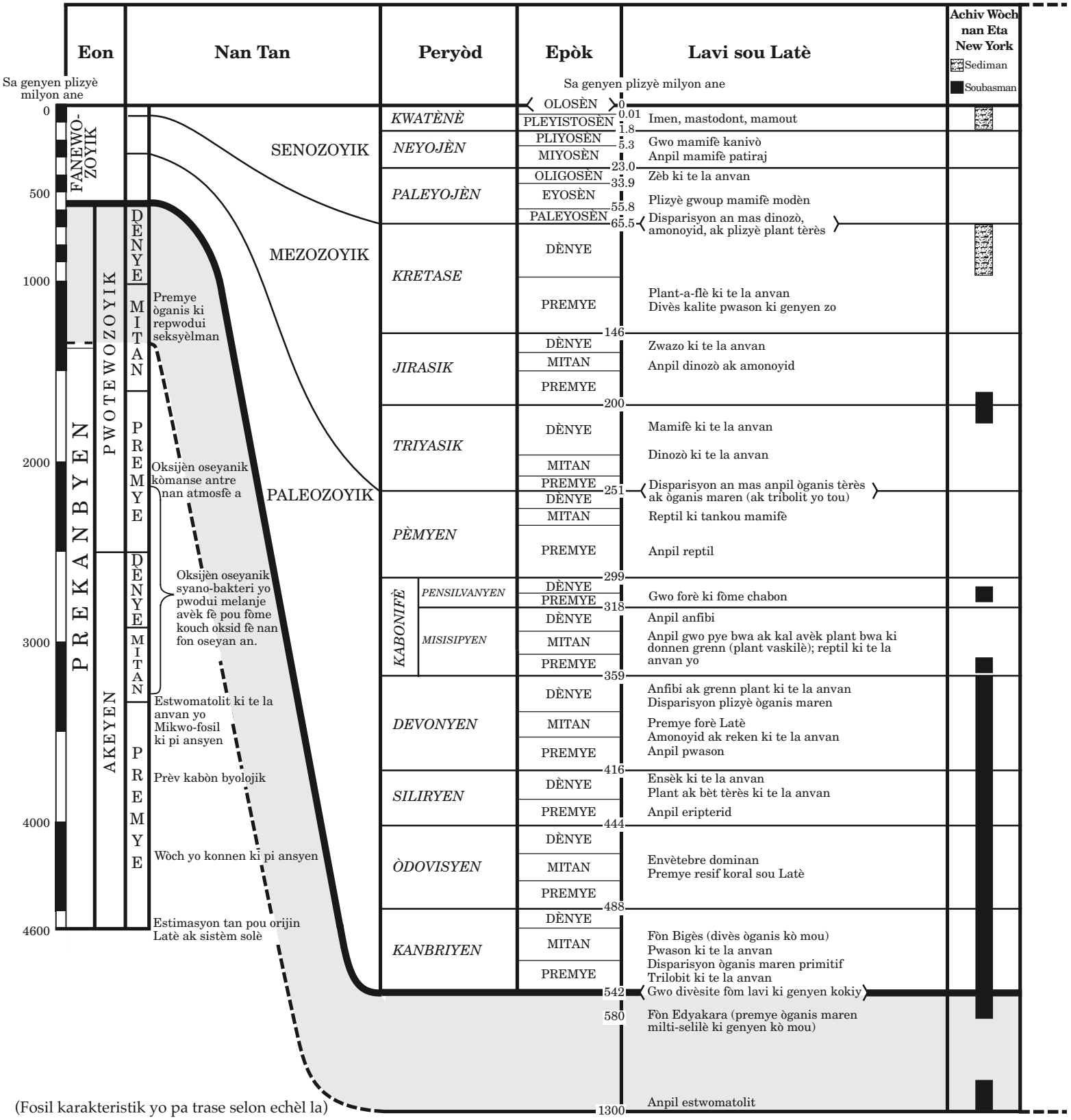
WÒCH SEDIMANTÈ KI FÒME NAN TÈ KI PA ÒGANIK					
TEKSTI	**GWOSÈ GRENN**	**KONPOZISYON**	**KÒMANTÈ**	**NON WÒCH YO**	**SENBÒL**
Klastik (an fragman)	Ti wòch, pave ak/oswa gwo gwo wòch ki antre nan sab, limon, ak/oswa ajil	Pifò kwats, fèldspa, ak mineral ajil; kapab genyen ti mòso lòt wòch ak mineral	Fragman awondi	**Konglomera**	
			Fragman angilè	**Breccia**	
	Sab (0.006 a 0.2 cm)		Fen rive sou gwo	**Grè sab**	
	Limon (0.0004 a 0.006 cm)		Grenn trè fen	**Wòch limon**	
	Ajil (mwens pase 0.0004 cm)		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 kokiy orijin byolojik oswa simante	**Kalkè**	
Byoklastik		Kabòn	rès plant konprese	**Chabon bitim**	

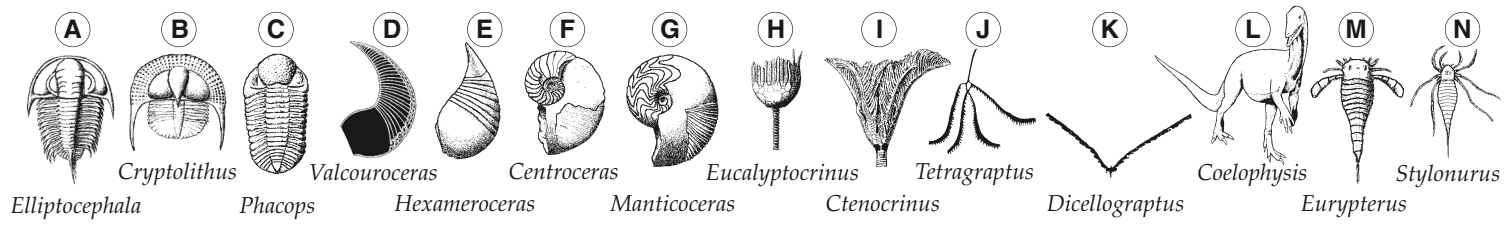
Plan pou Idantifikasyon Wòch Metamòfik

TEKSTI		GWOSÈ GRENN	KONPOZISYON	KALITE METAMÒFIS	KÒMANTÈ	NON WÒCH YO	SENBÒL
FEYTE	ALIYMAN MINERAL	Fen	MIKA, KWATS, FÈLDSPA, ANFIBÒL, GRENA, PIWOKSÈN	Rejyonal (Ogmantasyon chalè ak presyon)	Metamòfis wòch marne kalite enferyè	**Adwaz**	
		Fen a mwayèn			Sifas folyasyon	**Phyllite**	
					Kristal mika lamelè ki vizib nan metamòfis ajil oswa fèldspa	**Chist**	
	KOUCH SOU KOUCH	Mwayèn a gwo gren			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



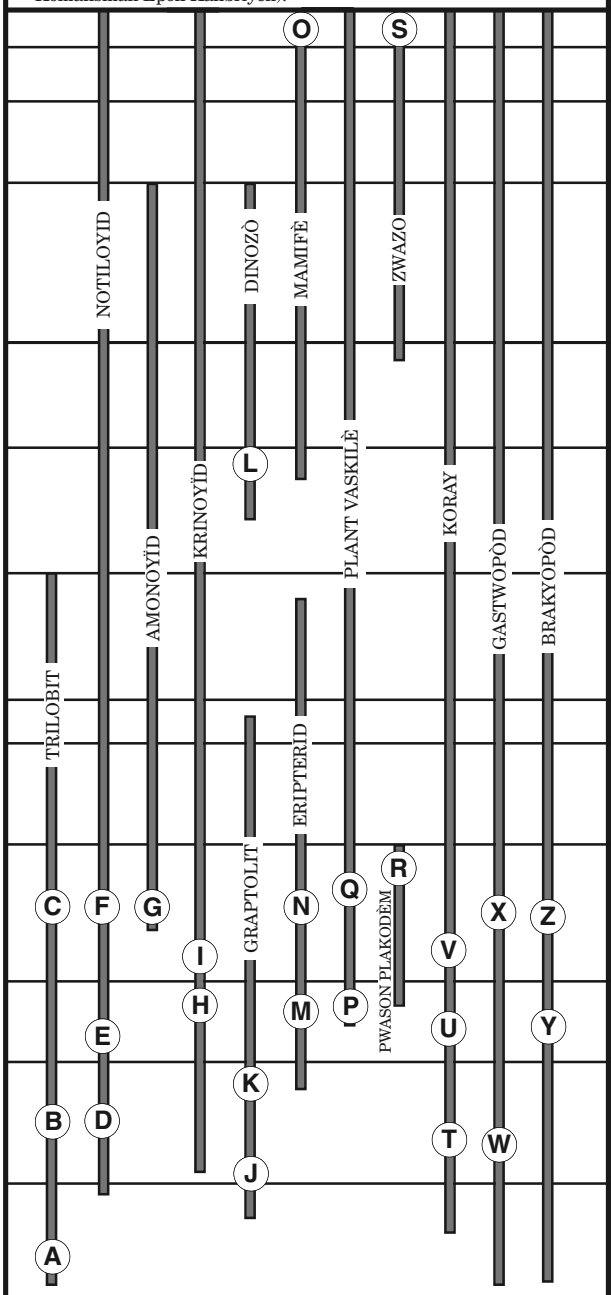
(Fosil karakteristik yo pa trase selon echèl la)



ETA NEW YORK

Distribisyon Tan Fosil yo (ak fosil enpòtan New York yo)

Sant chak sèk ki make ak yon lèt endike tan ki estime pou egzistans yon fosil karakteristik espesifik (sètadi Fosil (A) ki te viv nan fen Kòmansman Epòk Kanbriyen).



Evènman Jeyolojik Enpòtan nan New York

Avans ak rekil dènye glas kontinantal

Sab ak ajil ki anba Long Island ak Staten Island ki fè depo sou kòt Oseyan Atlantik la

Monte an dòm rejyon Adirondack kòmanse

Anbouchi Inisyal Oseyan Atlantik
Amerik di Nò ak Lafrik separe

〈 Antre Rebò Miray Falèz Apik 〉

Panje kòmanse separe

Owojenèz Alejenyen ki fòme akòz kolizyon Amerik di Nò ak Lafrik tou transfòme kòt la, pou fòme Panje

Dèlta Catskill fòme
Ewozyon Montay Akadyen

Owojenèz Akadyen ki fòme akòz kolizyon Amerik di Nò ak Avalon ak fèmti rès pati Oseyan lapetis

Depo sèl ak jips ki nan basen evaporit

Ewozyon Montay Taconic yo; dèlta Queenston fòme

Owojenèz Takonyen ki fòme akòz fèmti pati lwès Oseyan lapetis ak kolizyon ant Amerik di Nò ak ak zile vòlkanik

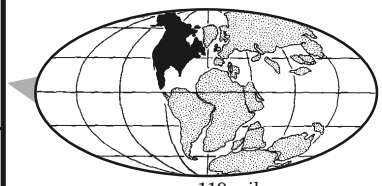
Depo jeneral sou pifò New York toutolon kòt Oseyan lapetis

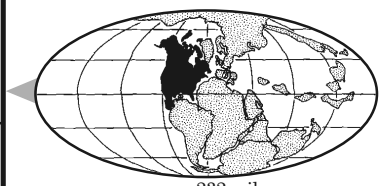
Distansyon kontinantal ak anbouchi inisyal Oseyan lapetis
Ewozyon Montay Grenville

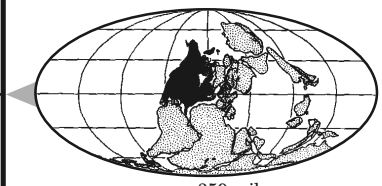
Owojenèz Grenville: metamòfis soubasman ki ekspoze kounye nan Adirondacks ak Mòn Hudson

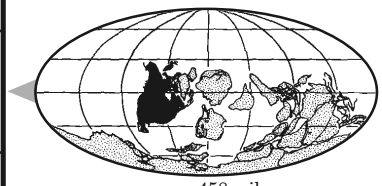
Dediksyon sou Pozisyon Mas tè ki sou Latè

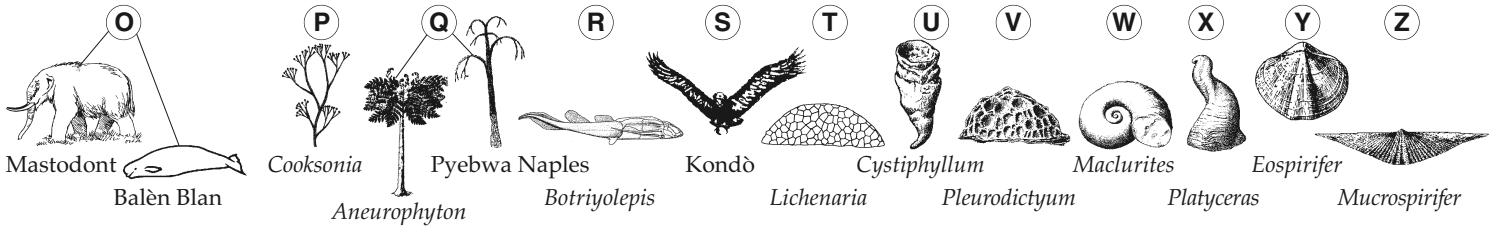

sa genyen 59 milyon ane


sa genyen 119 milyon ane

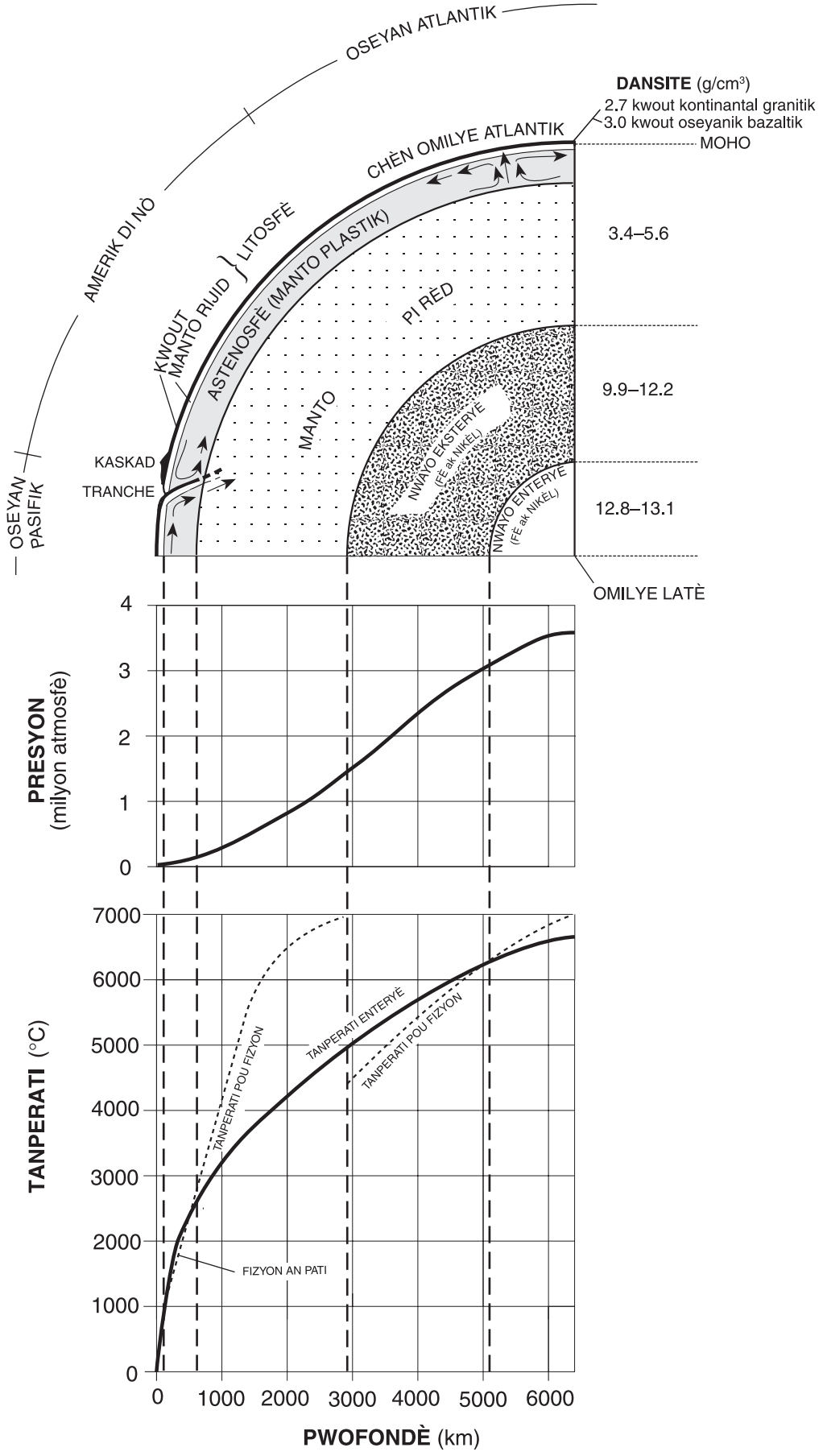

sa genyen 232 milyon ane


sa genyen 359 milyon ane

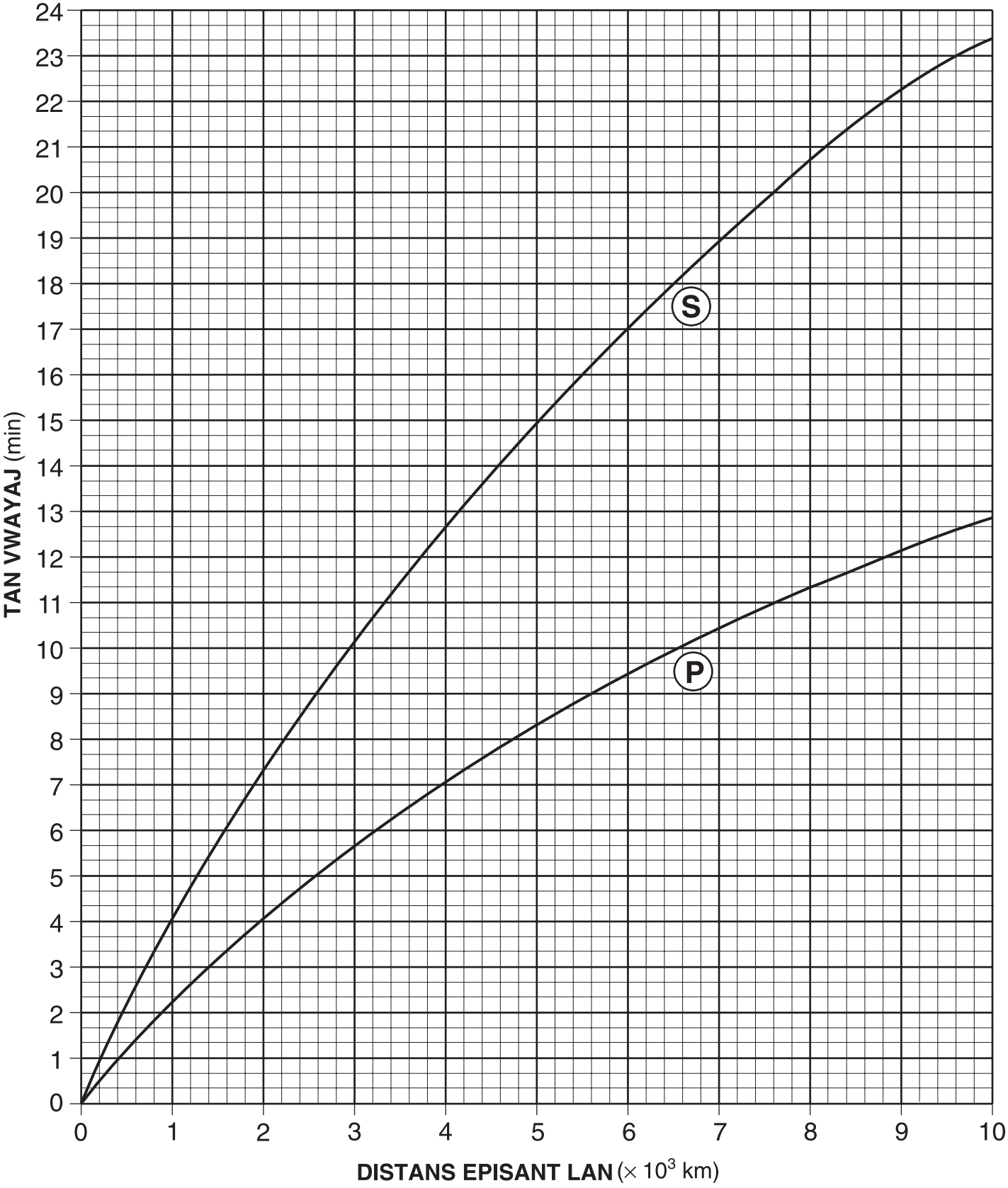

sa genyen 458 milyon ane



Dediksyon ki fèt sou Pwopriyete Andedan Latè



Tan Vwayaj Onn P ak Onn S Tranblemanntè



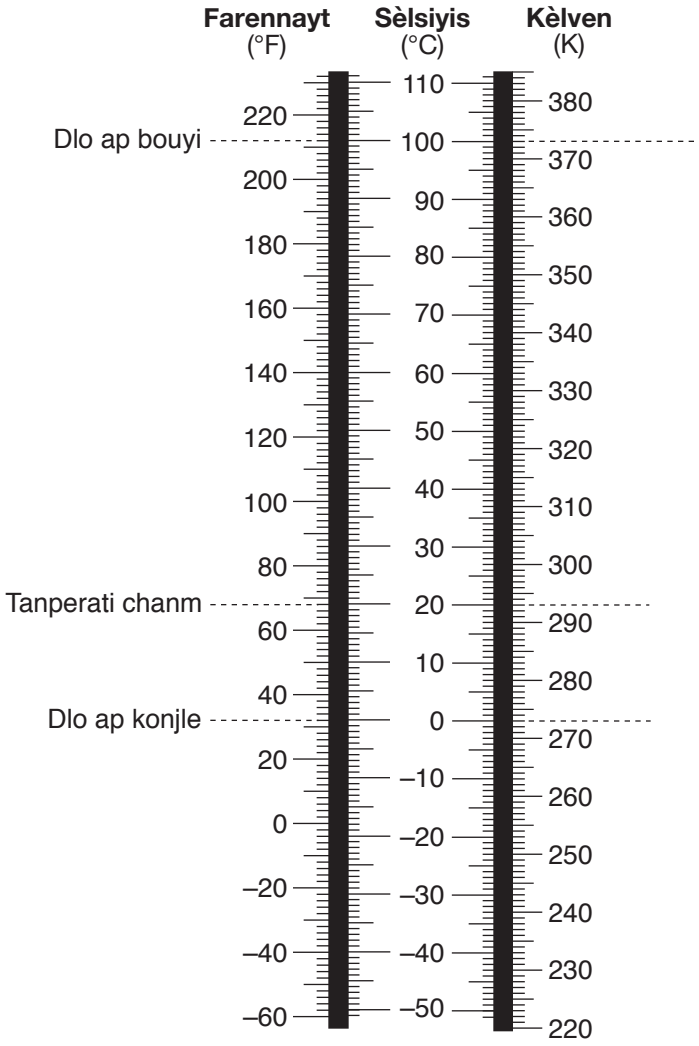
Tanperati Kondansasyon (°C)

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**	**15**
–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	–18
26	26	25	23	22	20	18	17	15	13	11	9	6	3	0	–4	–9
28	28	27	25	24	22	21	19	17	16	14	11	9	7	4	1	–3
30	30	29	27	26	24	23	21	19	18	16	14	12	10	8	5	1

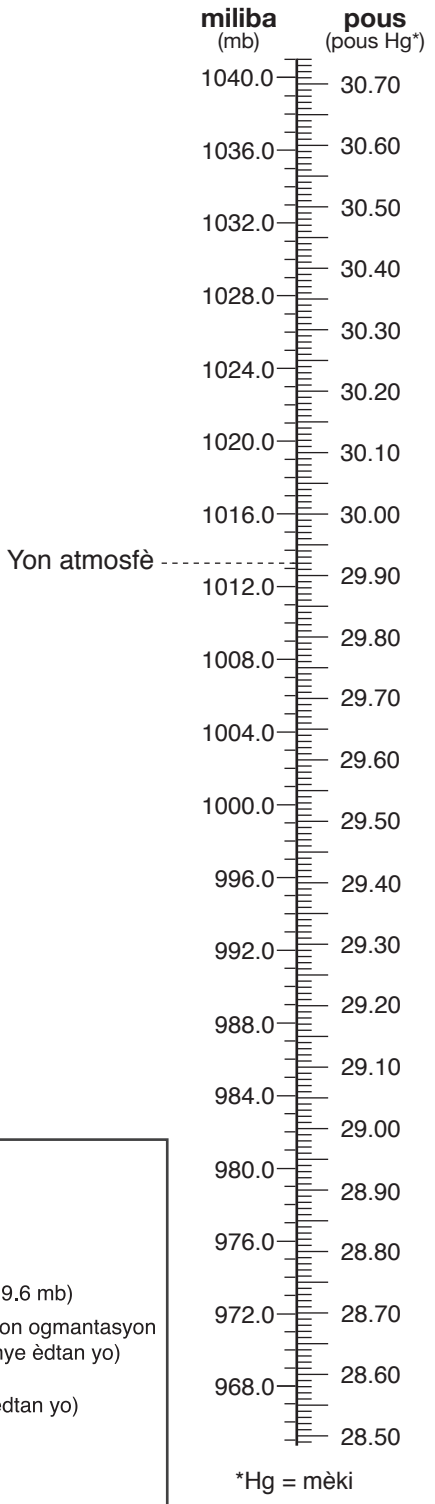
Imidite Relatif (%)

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**	**15**
–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	4
26	100	92	85	77	70	64	57	51	45	39	34	28	23	18	13	9
28	100	93	86	78	71	65	59	53	47	42	36	31	26	21	17	12
30	100	93	86	79	72	66	61	55	49	44	39	34	29	25	20	16

Tanperati



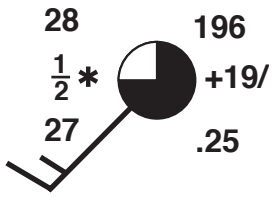
Presyon



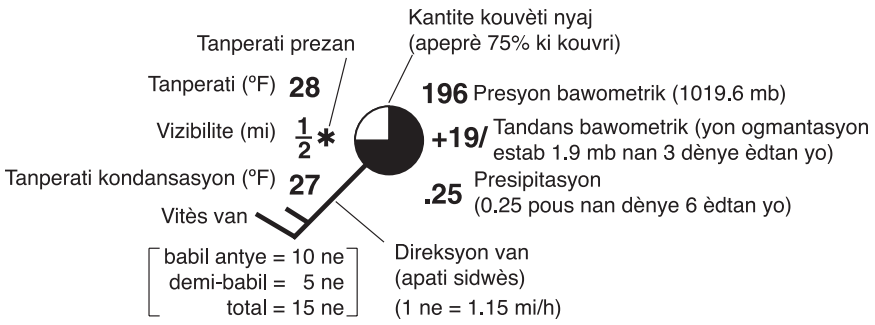
*Hg = mèki

Lejann pou Senbòl Kat Metewolojik

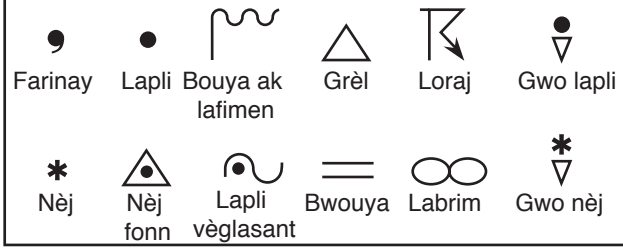
Estasyon Modèl



Eksplikasyon pou Estasyon Akèy



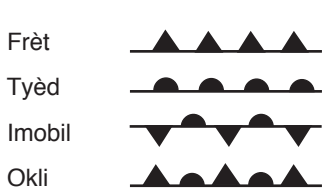
Tanperati prezan



Mas lè

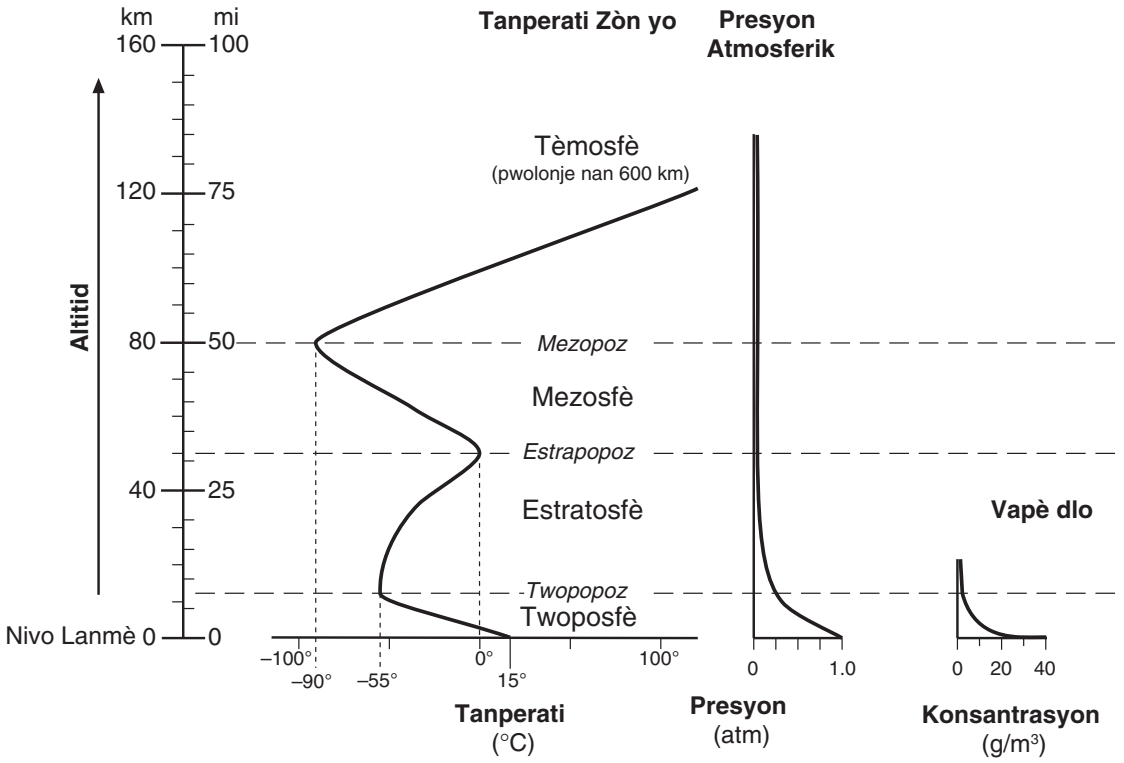
Ak	aktik kontinantal
Pk	polè kontinantal
Tk	twopikal kontinantal
Tm	twopikal maritim
Pm	polè maritim

Fwon



Siklòn

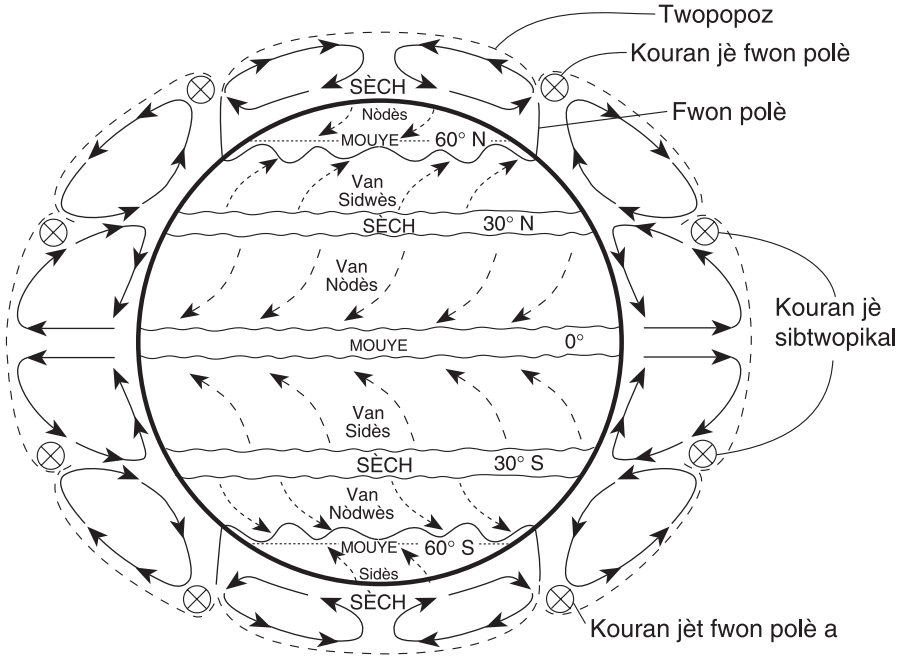
Pwopriyete ki Chwazi nan Atmosfè Latè



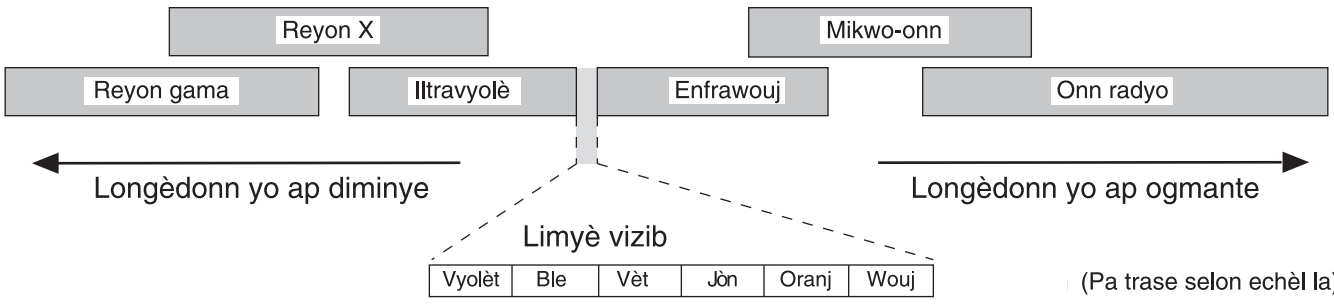
Senti Van ak Imidite Planetè nan Twoposfè

Desen ki adwat la montre pozisyon sent ki toupre tan yon ekinòks. Pozisyon yo chanje enpe avèk chanjman latitid 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

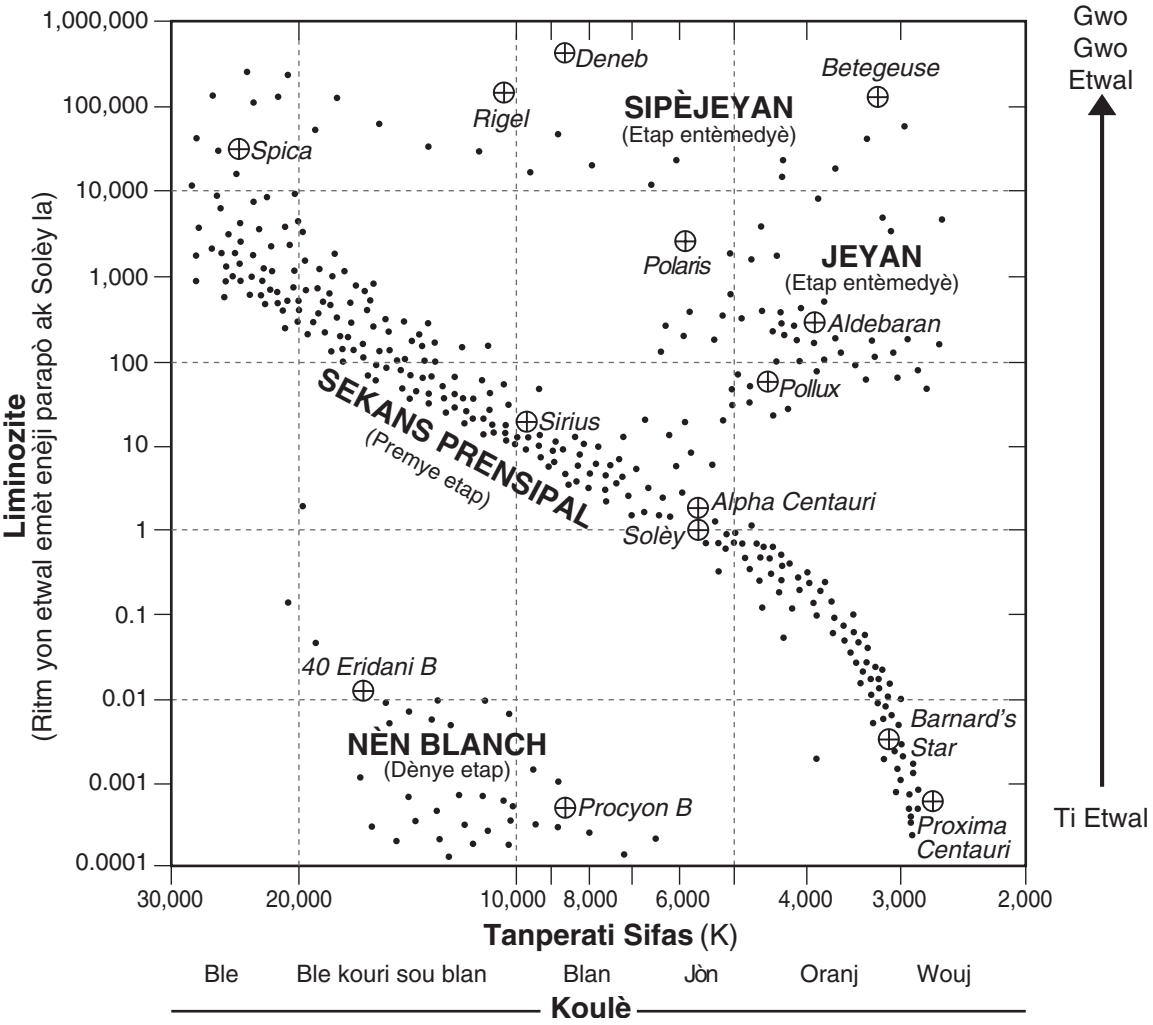


(Pa trase selon echèl la)

Karakteristik Etwal yo

(Non an italik yo gen pou wè ak etwal yo reprezante ⊕)

(Etap yo endike sekans jeneral devlopman etwal)



Done sou Sistèm Solè

Objè Selès	Distans Mwayen parapò ak Solèy la (milyon km)	Peryòd Revolisyon (j=jou) (a=ane)	Peryòd Wotasyon nan Ekwatè a	Eksantrisite Òbit	Dyamèt Ekwatoryal (km)	Mas (Latè = 1)	Dansite (g/cm^3)
SOLÈY	—	—	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 Lòt	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	$Mg_3Si_4O_{10}(OH)_2$	**Talk**
	2		✔	jòn a anb	rè blan-jòn	asid silfirik	S	**Silfi**
	2	✔		blan a woz oswa gri	ki grate fasil avèk zong	plat pari, panno sèch	$CaSO_4 \cdot 2H_2O$	**Jips selenit**
	2–2.5	✔		san koulè pou vin jòn	fleksib an kouch mens	penti, twati	$KAl_3Si_3O_{10}(OH)_2$	**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	$K(Mg,Fe)_3$ $AlSi_3O_{10}(OH)_2$	**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	$CaMg(CO_3)_2$	**Dolomit**
	4	✔		san koulè oswa varyab	klive nan 4 direksyon	asid fliyoridrik	CaF_2	**Fliyorin**
	5–6	✔		nwa a vèt fonse	klive nan 2 direksyon a 90°	koleksyon mineral, bijou	(Ca,Na) (Mg,Fe,Al) $(Si,Al)_2O_6$	**Piwoksèn** (ojit anjeneral)
	5.5	✔		nwa a vèt fonse	klive a 56° ak 124°	koleksyon mineral, bijou	$CaNa(Mg,Fe)_4$ $(Al,Fe,Ti)_3$ $Si_6O_{22}(O,OH)_2$	**Anfibòl** (ònblend anjeneral)
	6	✔		blan a woz	klive nan 2 direksyon a 90°	seramik a glas	$KAlSi_3O_8$	**Fèldspa potasik** (òtoklaz anjeneral)
	6	✔		blan a gri	klive nan 2 direksyon, estriyasyon vizib	seramik a glas	$(Na,Ca)AlSi_3O_8$	**Fèldspa plajyoklaz**
	6.5		✔	vèt a gri oswa mawon	anjeneral vèt pal ak granile	brik fou, bijou	$(Fe,Mg)_2SiO_4$	**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	$Fe_3Al_2Si_3O_{12}$	**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