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Eel izbar el izbaraSvil i

dedami wi s kl i matebi

Tbil isi

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Tavi 1. evropis qveynebis kl imatebi

1.1 isl andia

fizikur- geografiul i Taviseburebebi. isl andia warmoadgens kunZul s, roml is rel iefis didi nawil i zegania. Mmisi saSual o simaRI e zRvis donedan 600 metria, xol o cal keul i mwvverval ebi 2000m-s aRwevs. Ddabl obs mcire teritoria ukavia, ZiriTadad sanapiro zol Si. rel iefis mniSvnel ovani nawili ukavia myinvarebs, Tanamedrove gamyinvareba isl andiis farTobis 13%-ze vrcel deba. kunZul i aris dedamiwaze aqtiuri vul kanizmis erT-erTi mniSvnel ovani kera.

isl andiis kl imatis Camoyal ibebaze did gavl enas axdens Semdegi faqtorebi: misi geografiul i mdebareoba maRal ganedebSi, anu pol arul i wris maxl obl ad, atmosferos cirkul aciis xasiaTi, okeanis dinebebi, kerZod Tbil i Crdil o atl antikuri dineba da misi ganStoebebi, roml ebic kunZul s Cauvl is samxreT da dasavl eT sanapiroebTan, da Crdil o- aRmosavl eT sanapiroebTan gamdinare civi aRmosavl eT grenl andiis dineba.

Kkl imati. Kkl imaturi Tavi seburebebis Tval sazrisiT isl andia miekuTvneba zomieri ganedebis atl antukur-arqtikul ol qs.

wl is civi periodis ganmavl obaSi gabatonebul ia aRmosavl eTis qarebi, rac kunZul is rel iefis gavl eniT xSirad icvl is mimarTul ebas. sanapiroebze xSiria qari xmel eTis Sida raionebidan. zamTari samxreT da dasavl eT sanapiroebTan Tbil i Crdil o atl antikuri

dinebis gavl eniT SedarebiT rbi lia. Yvel aze civi Tve FTeberval ia da Tvis saSual i temperatura aq minus 2⁰-ia, xol o samxreT sanapiroze dadebiTic kia. Crdil oeT sanapiroze zamTari gacil ebiT civia, rac aixsneba Crdil oeTis pol arul wrestan misi siaxl oviT da civi aRmosavl eT grenlandiis dinebis gavl eniT. Uufro civia zamTari kunZul is central ur nawil Si, rasac adgil is simaRl is gazrda uwyobs xel s.

wl is civi periodis ganmavl obaSi umTavresad icis Rrubl iani amindi, samxreT sanapiroze, Crdil oeTisagan gansxvavebiT, xSiria nal eqebi. nal eqebi modis ZiriTadad Tovl is saxiT.

wl is Tbil i periodis ganmavl obaSi agreTve gabatonebul ia aRmosavl eTis qarebi. zafxul i, kunZul is maRal ganedebSi ganl agebis gamo, Zal ian civia. ivl issa da agvistoSi yvel aze Tbil dReebSi haeris temperatura 20⁰-s ar aRwevs. ivl isis Tvis saSual o temperatura samxreT, aRmosavl eT da dasavl eT sanapiroebze daaxl oebiT 10⁰-ia, xol o Crdil oeT sanapiroze da kunZul is central ur nawil Si 10⁰-ze nakl ebi. zafxul i nakl ebad Rrubl iania, xSiria nisl i. nal eqebi xSiria samxreT sanapiroze, SedarebiT iSviaTia Crdil oeT sanapiroze. saerTod wl is ganmavl obaSi samxreT sanapiroze modis 2000mm, xol o Crdil oeT sanapiroze, sul 300-400mm nal eqi. **mcenareul i safari.** Ddabal i temperaturebis da Zl ieri qarebis gamo isl andiis mcenareul oba umTavresad tundris xasiaTs atarebs. SedarebiT maRal tianani xe-mcenareebi mxol od samxreTis Tbil sanapiroze gv xvdeba. civi zafxul i

teritoriis did nawil ze did sirTul eebis uqmnis mi waTmoqmedebas.

N1.2. norvegia da SvedeTi

fizikur-geografiul i Taviseburebebi. Ees saxel mwifoebi mdebareoben evropis udi des skandinaviis naxevarKunZul ze. naxevarKunZul is mTel i dasavl eT sanapiros gaswvriV 1500 km-is manZil ze gadaWimul ia masiuri skandinaviis mTianeTi, roml is samxreT nawil Si umaRI esi mwverval i (gl itertini) aRwevs 2481m simaRI es. MmTianeTi dasavl eTiT cicabod eSveba norvegiis zRvisken, xol o aRmosavl eTiT – SedarebiT damrecad bal tiis zRvisken. mTianeTis Crdil oeTi nawil i 400-500m simaRI isaa, Tumca cal keul i mwverval ebi 2000m-s aRwevs. mTianeTi farTo xeobebis saSual ebiT danawevrebul ia cal keul masivebad, saidanac bevri myinvari iRebs saTaves. aRmosavl eTiT mTebi TandaTan gadadis dabl obSi, romel ic gadaWimul ia 150-200km siganeze. Sveciis samxreT nawil Si bevria tba, maTi saerTo farTobi qveynis farTobis 8%-s Seadgens. skandinaviis naxevarKunZul is dasavl eT sanapiro ZI ier danawevrebul ia da bevr yures, anu fiordebs qmnis. aRmosavl eT sanapiro ufro swori moxazul ibisaa. naxevarKunZul is farTobis 15% Crdil oeT pol arul i wris SigniTaa.

Kkl imati. Kkl imaturi Taviseburebebis Tval sazrisiT Nnorvegiis da SvedeTis didi nawil i miekuTvneba zomieri sartyl is atl antikur-arqtikul ol qs, xol o am saxel mwifoTa samxreTi raionebi- atl antikur-ol qs.

wl is civi periodis ganmavl obaSi norvegiis dasavl eT sanapiroze gabatonebul ia dasavl eTis,

samxreT-dasavl eTis da samxreTis mimarTul ebis qarebi. mTagorian raionebSi qariz mimarTul eba ganisazRvrebare reliefis xasiaTiT.

Qqaris siCqare sanapiro zol Si saSual od 5m/wm-ia, xol o naxevarkunZul is Sida raionebSi ar aRemateba 2m/wm-s. Nnorvegiis Crdil oET da Crdil o-dasavl eT sanapiroebze xSiria grigali da qarbuqi.

Nnorvegiis Crdil o-dasavl eT sanapiroze ianvris da Tebervl is saSual o temperatura minus 30⁰-ia, xol o samxreTiT izrdeba plius 20⁰-mde. Aamis mizezia atl antikis okeanidan Tbil i haeris gadmoadgil eba, romelic Tbil i Crdil o-atl antikuri dinebis Sedegad yalibdeba. cal keul dReebSi haeris temperaturam Sesazl oa minus 25⁰-mde daikli os. Uufro dabal i temperaturebi aRiniSneba norvegiis da SvedeTis Sida raionebSi, sadac ver aRwevs atl antikidan Tbil i haeri. Aam SemTxvevaSi skandinaviis mTianeTi klimatgamyofis rols asrulebs da eRobeba Tbil i haeris masebs. cal keul dReebSi aq temperatura ecema minus 30⁰-mde, xol o absoluturi minimumi dafiqsirebul ia minus 51⁰.

norvegiis da SvedeTis Sida raionebSi, sadac skandinaviis mTebi dabl eba, kargad aRwevs Tbil i atl antikuri haeri da temperaturac izrdeba. Bbal tiis zRva ver axdens mniSvel ovan gavl enas SvedeTis havaze, mis sanapiroebze temperatura 3-7⁰-iT dabal ia, vidre atl antikis okeanis sanapiroze. Aamave dros aSkarad aris gamoxatuli zRvebis gavl ena klimatipze-sanapiroebze yvel aze civi Tve Teberval ia, rac damaxasiaTebel ia zRviuri havisaTvis, xol o

naxevarkunzul is Sida raionebSi yvel aze civi Tve
ianvaria.

dasavl eTis da samxreT-dasavl eTis
mimarTul ebis qarebis batonobis gamo norvegiis
sanapiroze umTavresad Rrubl iani da wimiani
amindi dgas. Ddekember-Teberval Si sanapiros
Crdil oeT nawil Si nal eqi umTavresad Tovl is
saxiT modis, samxreTSi Tovl i iSviaTia da,
rogorc wesi swrafad dneba. norvegiis da
SvedeTis Sida raionebSi Tovl is safari TiTqmis
Svidi Tvis ganmavl obaSi devs(oqtombris Sua
ricxvebidan maisis Sua ricxvebamde), xol o
samxreTis sanapiroebze Tovl is safari erT
Tvesac ver sZI ebs.

wl is civi periodis ganmavl obaSi, anu
oqtombridan martis CaTvl iT, sakmao raodenobis
nal eqebi modis da Seadgens sanapiroze 500-700mm-s,
xol o cicabo ferdobebze 1500mm-s.

wl is Tbil i periodis ganmavl obaSi
dasavl eTis, samxreT-dasavl eTis da samxreTis
mimarTul ebis qarebi sustdeba, da aqtiurdeba
Crdil oeTis qarebi, anu qarebi arqtikidan. Aam
dros temperaturis ganawil ebas Sebrunebul i
suraTi aqvs wl is civ periodTan SedarebiT-
norvegiis da SvedeTis Sida raionebSi ufro
Tbil a, vidre dasavl eTis sanapiroebze. Sida
raionebSi ivl isis saSual o temperaturaa 15-17⁰.
zafxul Si nakl ebia Rrubl ianoba, Tumca mainc
gabatonebul ia moRrubl ul i da notio amindebi.
naTel i uRrubl o amindi iSviaTia da TveSi
mxol od erTi-Svidi dRe aRiniSneba. sanapiro
raionebSi xSiria nisl i.

Mmcenareul i safari. norvegiis da SvedeTis
teritoriis did nawil ze gavrcel ebul ia

wiwvovani tyeebi. maT ukaviaT skandinaaviis mTianeTis aRmosavl eTi ferdobi mTI ianad, da agreTve dasavl eT ferdobis mTebi. Nnorvegiis Crdil oeT da Crdil o-dasavl eT sanapiroebze, zafxul is Tveebis dabal i temperaturebis, agreTve maRali sinotivisa da ZI ieri qarebis gamo, mcnareul oba TiTqmis ar aris, batonobs tundra. samxreT raionebSi ki wiwvovani tyeebi icvl eba Sereul i wiwvovan-foTI ovani tyeebiT. ukidures samxreTSi Cndeba tipiuri farTofoTI ovani tyeebi, sadac Warbobs wifel a. mTebSi tyis sazRvari Crdil oeTSi vrcel deba 500 metramde, xol o samxreTSi 1100 metramde zRvis donedan. Aam maCvenebi is maRI a vrcel deba mTis tundra naxevradbucqnari da bal axis mcnareul obiT.

1.3. fineTi

fizikur-geografiul i Taviseburebebi.

Oorografiul i agebul ebis Tval sazrisiT fineTi warmoadgens pl atoebis, qedebis da Rrmul ebis mraval ferovnebas, romel Ta mniSvnel ovani nawil i ukavia tbebs. tbebis siuxviT mas msofi ioSi pirveli adgil i ukavia, tbebis wyl is zedapiris farTobi qveynis farTobis 12%-s Seadgens. teritoriis didi nawil i mdebareobs zRvis donidan 80-300m fargl ebSi.

Kkl imati. Kkl imaturi kl asifikaciis Tanaxmad fineTi miekuTvneba zomieri sartyl is atl antikur-arqtikul ol qs. skandinaaviis naxevarkunZul isgan gansxvavebiT, fineTis hava xasiaTdeba TandaTanobiTi cvl il ebiT dasavl eTidan aRmosavl eTis da Crdil oeTidan

samxreTis mimarTul ebiT, rac aq mniSvnel ovani mTis qedebis ar arsebobiT aixsneba.

zamTari Crdil oeTSi mkacri icis. arqtikul i haeris xSiri SemoWrebis gamo haeris temperatura ianvar-Teberval Si saSual od minus 15⁰-ia, xol o cal keul dReebSi yinva minus 40⁰-ze dabl a Cadis. Yinvebi saerTod icis oqtombridan april amde, Tovl is safari 8 Tvis ganmavl obaSi devs da xSirad ivnisis dasawyisamde gastans. amindebi umTavresad notio da Rrubl iania.

samxreTis mimarTul ebiT zamTris xangrZl ivoba ikl ebs da yinvebi aRiniSneba dekembridan martamde. Yyvel aze civi Tvis-ianvris saSual o temperatura minus 6⁰-ia, Tumca cal keul dReebSi SesaZl oa daikl os minus 25-30⁰-mde. dasavl eTis da samxreT-dasavl eTis qarebs atl antikidan xSirad moaqvs Tbil i haeri, amitom sanapiroze zamTari rbil i icis, aq yvel aze civi Tve Teberval ia.

Ggazafxul i civi da xangrZl ivi icis. Rrubl ianoba da sinotive zamTarTan SedarebiT mniSvnel ovnad ikl ebs.

wl is Tbil i periodis ganmavl obaSi fineTis TiTqmis mTel teritoriaze gabatonebul ia Crdil oeTis da Crdil o-dasavl eTis qarebi, xol o sanapiro zol Si, gansakuTrebiT samxreTSi ganviTarebul ia Bbrizi, anu periodul i qari, romel ic dRisiT qris sanapirodan xmel eTisaken, xol o RamiT piriqiT-xmel eTidan okeanisaken.

Yyvel aze Tbil i Tve ivl isia. Tvis saSual o temperatura Crdil oeTSi saSual od 12⁰-ia, xol o samxreTSi-17⁰. Rrubl ianoba zafxul Si nakl ebia zamTarTan SedarebiT, magram nal eqebi ufro meti modis. xSiria Tavsxma nal eqebi da setyva.

zafxul i saerTod xanmokl ea da wayinvebi ukve seqtembridan iwyeba.

mcenareul i safari. teritoriis didi nawil i dafarul ia tyeebiT. Crdil oeTSi wiwnari Warbobs, samxreTSi siTbos momatebasTan erTad Cndeba foTI ovani mcenareebic, umTavresad muxa. rel iefis Taviseburebisa (Warbobs vakeebi da Rrmul ebi), zafxul is dabal i temperaturisa da maRal i sinotivis gamo Zal ian bevri tbaa, gansakuTrebiT Crdil oeTSi. tbebs ukavia qveynis mTel i farTobis daaxl oebiT 30%.

D1.4. didi britaneTi

fizikur-geografiul i Taviseburebebi. yvel aze SemaRI ebul ia Ddidi britaneTis Crdil oeTi nawil i, anu Sotl andia da ingl isis Crdil oeT raionebi. Sotl andia ukavia mTianeTs, sadac didi britaneTis umaRI esi mwvverval ia-mTa ben-nevisi (1343m zRvis donedan). ingl isis teritoriaze SedarebiT dabal i simaRI is-peninis mTebia, romel Ta simaRI ec 1000m-s ver aRwevs. ingl isis aRmosavl eT raionebSi Warbobs dabl oebi. sanapiro zol i gansakuTrebiT danawevrebul ia dasavl eTSi, xol o nakl ebad danawevrebul i aRmosavl eTSi da samxreTSi.

kl imati. Ddidi britaneTi miekuTvneba zomieri sartyl is atl antikur-kontinentur kl imatur ol qs. wl is civi periodis ganmavl obaSi gabatonebul ia dasavl eTis da samxreT-dasavl eTis qarebi. sanapiro raionebSi xSiria Zl ieri qarebi, xol o Crdil oeTSi-Stormi. 1953 wl is Teberval Si Crdil oeTis zRvaSi ganviTarda iseTi Stormi, rom mTI ianad datbora ingl isis

aRmosavl eT sanapiro da miwidan aRgava mraVal i dasaxl ebul i punqti.

Ggabatonebul i Tbil i zRviuri qarebis gamo zamTari Zal ian rbil i icis, ianvar-Tebervl is saSual o temperatura 3-5⁰, xol o ingl isis samxreTSi 6-7⁰-ia. teritoriis dasavl eTi nawil i, Tbil i Crdil o-atl antikuri dinebis gamo, ufro Tbil ia, vidre aRmosavl eTi nawil i, sadac xSirad xdeba civi haeris masebis SemoWra evropis kontinenturi nawil idan.

damaxasiaTebel ia Rrubl iani, notio amindi. xSiria nisl i, Tova, Tumca mdgradi Tovl is safari myardeba mxol od mTebSi. Ggazafxul ze temperaturis zrda Zal ian nel a mimdinareobs, rac zRviuri haeris masebis SemoWrebs ukavSirdeba.

wl is Tbil i periodis ganmavl obaSi dasavl eTis da samxreT-dasavl eTis qarebTan erTad aqtiurdeba Crdil oeTis qarebi. rogorc damaxasiaTebel ia zRviuri havisaTvis, zafxul i gril ia, gansakuTrebiT Sotl andiis Crdil oeTSi, sadac yvel aze Tbil i Tvis saSual o temperatura 12-14⁰-ia. ingl isis samxreT nawil Si temperatura 16-17⁰-mde izrdeba.

zafxul Si Rrubl ianoba zamTarTan SedarebiT ikl ebs, Tumca naTel i mziანი dReebi mainc iSviaTia. Nnal eqebi bevri modis, gansakuTrebiT Crdil oeT raionebSi, sadac maTi wl iuri jami 2000mm-mde aRwevs. Nnal eqebis didi raodenobis da zafxul is dabal i temperaturebis gamo mdinareebi wyal uxvia.

Mmcenareul i safari. maRal i tenianobisa da rbil i zamTris gamo mcenareul oba mdidaria. kunZul is samxreT naxevarSi maradmwvane tyeebi da

subtropikul i ol qis buCqnaric kia gavr cel ebul i. Aamave dros iseTi m cenareebi, roml ebic ganviTarebisaTvis moiTxovs mniSvnel ovan siTbos zafxul is TveebSi aq ar xarobs. Zal ian Znel ad mwifdeba marcvl ovani kul turebi da gansakuTrebiT xexil i.

1.5. safrangeTi

fizikur-geografiul i Taviseburebebi. safrangeTis rel iefi mra val fero vania. teritoriis didi nawil i warmoadgens saSual o simaRI is mTebis da vakeebis kompl eqss. Yyvel aze maRal i mTebi qveynis samxreTSia-pirineis mTebis samxreTi ferdobebi, al pebis dasavl eTi ferdobebi, central uri safrangeTis masivi. Crdil o-dasavl eTis sanapiro zol i Zl ier danawevrebul ia.

kl imati. safrangeTis Crdil oeTi nawil i miekuTvneba zomieri sartyl is atl antikur-kontinentur kl imatur ol qs, xol o samxreTi nawil i subtropikul i sartyl is atl antikur-xmel TaSuazRviur ol qs.

wl is civi periodis ganmavl obaSi qveynis Crdil oeTSi gabatonebul ia samxreT-dasavl eTis, xol o samxreTSi- Crdil o-aRmosavl eTis da aRmosavl eTis qarebi.

dabal ganedebSi mdebareobisa da atl antikis okeanes gavlenis gamo zamTari teritoriis mniSvnel ovan nawil ze Zal ian rbil ia. Ddabl ob raionebSi temperatura zamTarSic dadebiTia, da saSual od aRemateba 7⁰-s, mxol od Crdil oeTSi Camodis temperatura 0⁰-mde. mTebSi zamTari SedarebiT civia.

Rrubl ianoba mniSvnel ovan ia Crdil oeTSi da mTebSi, samxreTSi umniSvnel oa. Bbevri nal eqebi

modis dasavl eT sanapiroze, rac okeanis gavleniT aixsneba. samxreT sanapiroze da Sida raionebSi nal eqebi mcirea.

wl is Tbil i periodis ganmavl obaSi atmosferos cirkul acias gansxvavebul i xasiaTi aqvs. safrangeTis mTel teritoriaze gabatonebul ia dasavl eTis, Crdil o-dasavl eTis da Crdil oeTis qarebi, ris Sedegadac zafxul i zomierad Tbil ia. ivl isis saSual o temperatura qveynis Crdil oeTSi 16⁰-ia, parizSi-18⁰, samxreTSi-20⁰-ze meti, xol o mTebSi zRvis donedan 2000-2500m simaRI eze ecema 10⁰-mde. zafxul Sic bevri nal eqebi modis, xSiria Tavsxma nal eqebi, gamonakl isia samxreT raionebi, sadac zafxul i gval viani icis.

mcenareul i safari. siTbosa da tenis gansxvavebul i reJimebi ganapirobebs arsebiT gansxvavebas mcenareTa saxeobaSi. zomieri ganedebis vake raionebisaTvis damaxasiaTebel ia farTofoTI ovani tyeebi, roml ebic amJamad mniSvnel ovnad aris gaCexil i. samxreT sanapiroze xmel TaSuazRviuri maradmwvane tyeebic gv xvdeba. mTebSi kargad aris gamoxatul i tyeebis vertikal uri zonal oba: qvemod muxnaria, Semdeg wifl nari, ufro maRI a wiwvovani tyeebi, xol o al pebisa da pirineis maRal mTian sartyel Si gavr cel ebul ia subal puri buCqnari da mdel oebi.

1.6. Nniderl andebi, bel gia da l uqsemburgi fizikur-geografiul i Taviseburebebi. Nniderl andebi da bel giis didi nawil i xasiaTdeba brtyel i, erTgvarovani rel iefiT, amaRI ebebi mxol od bel giis samxreTSia, sadac gadaWimul ia mTis masivi. nniderl andebis teritoriis mniSvnel ovani nawil i

zRvis doneze dabl a mdebareobs da dacul ia datborvisagan kaSxal ebis xel ovnuri qsel iT.

kl imati. Kkl imaturi Tval sazrisiT niderl andebs, bel gias da l uqsemburgs gaaCnia SedarebiT erTgvarovani pirobebi, ukaviaT zomieri sartyl is atl antikur-kontinenturi kl imaturi ol qi.

zamTarSi am saxel mwifoebis teritoriaze gabatonebul ia dasavl eTis, samxreT-dasavl eTis da samxreTis qarebi, roml ebic qris Tbili atl antikis okeanedan. Aamis gamo aq zamTari Zal ian rbil ia. ianvris da Tebevli is saSual o Tviuri temperaturebi sanapiro zol Si daaxl oebiT 30° -ia, xol o xmel eTis siRrmeSi 0° -Tan axl osaa.

zafxul i SedarebiT gril i icis. ivl isis da agvistos saSual o temperatura $16-18^{\circ}$ -ia. mTel i wl is ganmavl obaSi gabatonebul ia moRrubl ul i amindi, Tumca zafxul Si zamTarTan SedarebiT sinotive nakl ebia.

mcenareul i safari. Bbunebrivi mcenareul oba warmodgenil ia wifl nari da muxnari tyeebiT, roml ebsac SigadaSig monacvl eoben mdel oebi. teritoriis didi farTobi gamoiyeneba marcvl ovani da teqniki kul turebis mosayvanad.

D1.7. germania

fizikur- geografiul i Taviseburebebi. Dgermaniis zedapiris rel iefi xasiaTdeba didi mraval ferovnebiT. Qqveynis Crdil oeTi nawil i dabl obs warmoadgens, romel ic ZiriTadad zRvis donedan 100m simaRI emde mdebareobs. Ddabl obi samxreTiT icvl eba uZvel esi mTebiT, romel Ta simaRI e ar aRemareba 800-1000m-s. teritoriis

zedapiri daxrilia Crdil oetisaken, da Sesabamisad yvela mTavari mdinare miemarTeba samxreTidan Crdil oetisaken. Crdil oet germaniis dabl obi xasiaTdeba tbebis siuxviT.

kl imati. Kkl imaturi Tval sazrisiT germania miekuTvneba zomieri sartylis atl antikur-kontinentur kl imatur olqs. misi hava mniSvnel ovan wilad ganisazRvreba atl antikis okeanis gavleniT. wlis civi periodis ganmavl obaSi gabatonebulia samxreT-dasavl eTis qarebi. amis gamo, Crdil oet germaniis dabl obze, gansakuTrebit ki mis dasavl eT nawilSi, zamTari Zal ian rbilia. yvelaze civi Tvis -ianvris saSualo temperatura daaxl oebiT 0⁰-ia. aRmosavl eTis mimaRtul eb iT temperatura TandaTan ecema, magram Crdil oet germaniis dabl obze Zlieri yinvebi maincar aRiniSneba. qveynis samxreTsi zamTari Sedarebit mkacria, rasac xels uwyobs adgilis simaRlis gazrda. mdgradi Tovlis safari mxolod mTebSi warmoiqmneba, Crdil oet germaniis dabl obze is swrafad dneba.

wlis Tbil i periodis ganmavl obaSi ufroxSirdeba dasavl eTis da Crdil o-dasavl eTis mimaRtul ebis qarebi, anu qarebi atl antikis okeanedan. Aam dros okeanes wyal i grilia da Sesabamisad germaniis Crdil o-dasavl eT raionebsi zafxuli Tumca xangrZlivia, magram grilia. ivlisis Tvis saSualo temperatura daaxl oebiT 16⁰-ia. aRmosavl eT iT da samxreT iT temperatura mniSvnel ovnad izrdeba. mTebSi zRvis donedan 1000-1200m simaRl eze ivlisis temperatura daaxl oebiT 10⁰-s Seadgens.

Rrubl ianoba zafxul Sic mniSvnel ovania, nal eqebi, rogorc zamTarSi, xSiria. swored amitom germaniis mdinareebi wyal uxvia mTel i wl is ganmavl obaSi.

mcenareul i safari. Bbunebrivi l andSafti Zl ieraa Secvl il i adamanis mier. farTobis didi nawil i dakavebul i aqvs marcvl ovan da teqnukur sasofl osameurneo kul turebs. Mmdinare reinis zemo wel Si, sadac icis cxel i xangrZl ivi zafxul i da Tbil i Semodgoma, ganviTarebul ia mebaReoba, mevenaxeoba, meTambaqooba. cal keul adgil ebSi SemorCenil ia muxa da wifel a, mTebSi ki-fiWvi.

1.8. Sveicaria

fizikur- geografiul i Taviseburebebi. Sveicaria mTagoriani qveyanaa, misi rel iefi Zl ier danawevrebul ia. Mmas ukavia al pebis yvel aze mZl avri nawil i. Mmraval i masivi da mwvverval ia aRmarTul i zRvis donedan 4000m-ze maRI a. Aaq aris evropis umaRI esi mwvverval i monbl ani (4810m). mniSvnel ovani farTobi ukavia Tovl is mindvrebs da farTo myinvarebs. Aal pebs kveTen mdinareTa Rrma xeobebi.

kl imati. Kkl imaturi Tval sazrisiT Sveicaria miekuTvneba zomieri sartyl is atl antikur-kontinentur kl imatur ol qs, amave dros mTis l andSafti gansazRvravs kl imatebis Taviseburebebs, rac gamoarCevs Sveicarias amave kl imatur ol qSi ganl agebul sxva qveynebisagan.

wl is civi periodis ganmavl obaSi SveicariaSi gabatonebul ia atl antikis okeanes haeris masebi. Mmagram qveynis sakmaod didi simaRI is gamo zamTari mainc civia. saSual o

temperaturebi 0° -Tan axl osaa, xol o ramdenadme maRal ia Crdil oeTiT.

zafxul i, maRal mTiani zonis garda, zomiered Tbil ia. zeganze temperatura 18-19⁰-ia, daxurul xeobebSi- 21-22⁰, xol o maRal mTian zonaSi 2500m simaRI eze daaxl oebiT 5⁰. zafxul Si momatebul ia Rrubl ianoba da nal eqebi.

mcenareul i safari. Mmdidari mcenareul obaa dacul xeobebSi, sadac gavrcel ebul ia farTofoTI ovani tyeebi, bevria baRI da venaxi. tye mTebSi vrcel deba daaxl oebiT 1800m simaRI emde. simaRI is zrdiT Sereul tyeebs cvl is wiwvovani tyeebi, ufro maRI a ki al puri mdel oebia. Mudmivi Tovl is sazRvari gadis 2500-3000m simaRI eze.

A1.9. avstria

fizikur- geografiul i Taviseburebebi. Aavstriis mTagoriani raionebi, l andSaftis xasiaTis mxriv, Zal ze waagavs Sveicarias. Qqveynis farTobis 70% ukavia aRmosavl eT al pebs, romel ic gamoyofil ia Sveicariis al pebisagan farTo xeobebiT da qvabul ebiT. Qqveynis yvel aze dasaxl ebul i adgil i aris dunais xeoba.

kl imati. Kkl imaturi Tval sazrisiT avstria agreTve miekuTvneba zomieri sartyl is atl antikur-kontinentur kl imatur ol qs. mdinare dunais xeobaSi zamTari SedarebiT rbil ia, uaryofiT saSual o Tviuri temperaturebi aq mxol od ianvarSia. al pebsi ki, gansakuTrebiT maRal mTian raionebsi zamTari sakmaod mkacria, sadac uaryofiT temperaturebi seqtembridan ivnisis CaTvl iT aRiniSneba, xol o Tebevli is saSual o temperatura minus 14⁰-ia. nal eqebi

zamTarSi umTavresad Tovl is saxiT modis, Tumca mdgradi Tovl is safari mxol od mTebSi yal ibdeba.

zafxul i xeobebSi Zal ian Tbil ia, ivl isis saSual o temperatura venaSi 20⁰-ia. maRal mTian raionebSi zafxul i, ra Tqma unda civia, yvel aze Tbil i Tvis saSual o temperatura 0-Tan axl osaa. zafxul i yvel aze Rrubl iani da nal eqiania.

mcenareul i safari. vakeebSa da qvabul ebSi tye TiTqmis ganadgurebul ia. mTis ferdobebze gv xvdeba Sereul i tyeebi, roml ebsac cvl ian wiwvovani tyeebi, xol o 2000m simaRI idan-subal puri mdel oebi.

1.10. Pportugal ia da espaneTi

fizikur - geografiul i Taviseburebebi. Oorive qveyana mdebareobs pirineis naxevarKunZul ze. naxevarKunZul is rel iefis forma umTavresad mTebi da zegnebia, dabl oebi mxol od sanapiro zol Sia da maT umniSvnel o farTobebi ukavia. gansakuTrebiT maRal ia mTebi naxevarKunZul is Crdil oeT da samxreT nawil ebSi. Crdil oeTSi gadaWimul ia mZl avri pirineis qedi, sadac umaRI esi mwverval is simaRI e aRemateba 3400m-s. samxreTsa da samxreT-aRmosavl eTSi ganl agebul ia mZl avri mTaTa sistema- andal uziis mTebi.

kl imati. Kkl imaturi Tval sazrisiT Pportugal ia da espaneTi miekuTvneba subtropikul i sartyl is atl antikur-xmel TaSuazRviur kl imatur ol qs. amave dros naxevarKunZul is didi ganfenil obis, okeanidan sxvadasxva manZil iT daSorebis da rTul i orografiul i agebul ebis gamo, naxevarKunZul is sxvadasxva nawil Si kl imati arsebiTad gansxvavebul ia.

wl is civi periodis ganmavl obaSi pirineis naxevarkunZul ze gabatonebul ia atl antikis okeanidan wamosul i zomieri ganedebis haeri.

sanapiro raionebi xasiaTdeba Tbil i, wvimiani zamTriT. Yvel aze civi Tvis - ianvris saSual o Tviuri temperatura Crdil oeT da dasavl eT sanapiroebze 8-10⁰-ia, xol o samxreT sanapiroze 12⁰-s aRemateba. Aaq nal egebi wvimis saxiT ufro iSviaTia vidre Crdil oeTSi. Crdil oeTSi zogj er icis Tova.

Pportugal iis da espaneTis central ur raionebsi zamTari ufro civia, radganac mTis masivze gadaadgil ebisas haeri civdeba. central ur raionebsi Rrubl ianobac nakl ebia da SedarebiT nakl ebi nal egebi modis, vidre sanapiroze.

zafxul i Pportugal iis da espaneTis umetes teritoriaze cxel ia. pirineis naxevarkunZul is Crdil oeT da Crdil o-dasavl eT sanapiroze agvistos saSual o temperatura 18-20⁰-ia, xol o samxreT sanapiroze, sadac aRwevs cxel i haeri saharidan, temperatura 26⁰-s Seadgens. zafxul Si wvimebi iSviaTia, yvel aze bevri nal egebi modis gazafxul sa da Semodgomaze. amasTan dakavSirebiT zafxul Si mdinareebi wyal mcirea, xol o wyal uxvoba zamTrisTvisaa damaxasiaTebel i.

mcenareul i safari. kl imaturi gansxvavebebi naxevarkunZul is Crdil o-dasavl eT sanapirosa da mis central ur raionebsa da samxreT sanapiros Soris, mizezia am raionebsi gansxvavebul i mcenareul i safaris gavrcel ebaSi. Crdil oeT da Crdil o - dasavl eT raionebsaTvis damaxasiaTebel ia Suaevropis mcenareul oba, anu xSiri tyeebi da naTel i mwvane mdel oebi.

naxevarkunZul is samxreT, samxreT-dasavl eT da samxreT-aRmosavl eT sanapiroebze mcnareul oba tipiuri xmel TaSuazRviuria, maradmwvane xeSeSfoTl ovani tyeebiT da buCqnarebiT. espaneTis samxreT-aRmosavl eTis cal keul raionebSi gvxdeba naxevradudabnos l andSaftebic. mTebSi tyeebis gavrcel ebaSi vertikal uri zonal oba SeiniSneba- muxa, wabl i, fiWvi, buCqnari da al puri mdel oebi, Tumca amJamad tyis masivebi CenarCunebul ia mxol od umniCvnel o teritoriaze.

1.11. ita lia

fizikur - geografiul i Taviseburebebi.

mdebareobs apeninis naxevarkunZul ze, roml is didi nawil i danawevrebul ia saSual osimaRl is mTebiT. mTel i naxevarkunZul is gaswvri v gadaWimul ia apeninis mTebi. Oqveynis Crdil oeTSi ganl agebul ia l ombardis farTo dabl obi, sadac miedineba mdinare po. Ddabl obi Crdil oeTidan SemosazRvrul ia al pebis mZl avri mTis sistemiT, romel ic gamoyofs naxevarkunZul s mTel i danarCeni evropi sagan.

Kkl imati. Kkl imaturi Tval sazrisiT ita lia, l ombardis dabl obis gamokl ebiT, miekuTvneba subtropikul i sartyl is atl antukur-xmel TaSuazRviur kl imatur ol qs, l ombardis dabl obi ki miekuTvneba atl antukur-kontinentur kl imatur ol qs.

wl is civi periodis ganmavl obaSi apeninis, iseve rohoc pirineis naxevarkunZul ze, gabatonebul ia atl antikis okeanidan wamosul i zomieri ganedebis haeri. Aal pebi aferxebis naxevarkunZul ze evropidan civi kontinenturi

haeris masebis SemoWras. Amitom zamTari italiaSi, misi ukiduresi Crdil oeT raionebis gamokl ebiT, gansakuTrebiT rbil ia. yvel aze civi Tvis, ianvris, saSual o temperatura sanapiroze 7-10⁰-ia. Crdil oeTSi l ombardis dabl obze zamTari ufro civia, aq . ianvris saSual o temperatura 1-2⁰-ia, xol o yinvebma SesaZl oa miaRwios minus 8⁰-s. amis mizezi aris arqtikul i haeris SemoWra Crdil oeTidan.

rogorc xmel TaSuazRviuri kl imatisaTvis aris damaxasiaTebel i, italiaSic zamTari yvel aze wvimiania. xSirad wvimebi katastroful xasiaTs atareben da mdinare poze iwveven wyal didobas.

wl is Tbil i periodis ganmavl obaSi naxevarkunZul ze gabatonebul ia tropikul i haeri da qari qris samxreTidan da samxreT-dasavl eTidan. aseT qarebs, rogorc wesi, moaqvs siTbo da teni. Amitom zafxul i, maRal mTiani raionebis garda, yvel gan cxel ia. ivl is-agvistos saSual o temperatura dabl ob raionebSi 24-26⁰-ia, mTebSi temperatura nakl ebia da 700-800m simaRl eze zRvis donidan daaxl oebiT 20⁰-ia. zafxul Si nal eqebi Zal ian cota modis, samxreTSi ki xSiria gval vebi. Sesabamisad Zal ian cota Rrubl ianoba da umTavresad naTel i mziანი amindi dgas.

mcenareul i **safari**. apeninis naxevarkunZul is mcenareul i safars, l ombardis dabl obisagan gansxvavebiT, xmel TaSuazRviuri xasiaTi gaaCnia gamokveTil i vertikal uri zonal obiT. maradmwvane xemcenareebi da buCqnari aRwevs Sors xmel eTis siRrmeSi da vrcel deba mTebSi Crdil oeTSi 500-600, xol o samxreTSi 700-800m

simaRI emde zRvis donedan. saSual osimaRI is mTebis ferdobebisaTvis damaxasiaTebel ia wabl i. l ombardis dabl obze, sadac zamTari sakmaod gril ia, bunebrivi mcenareul oba atarebs Suaevropul xasiaTs- ZiriTadad izrdeba muxa.

1.12. saberZneTi

fizikur- geografiul i Taviseburebebi. saberZneTs ukavia bal yaneTis naxevarkunZul is samxreTis viwro nawil i. Oqveynis didi nawil i mTagoriana, dabl obebs Zal ian mcire teritoria ukavia. rel iefi, gansakuTrebiT teritoriis aRmosavl eT nawil Si, Zl ier danawevrebul ia. Ddidi mdinareebi saberZneTSi ar aris. Bbevri mdinare zafxul Si saerTod Sreba. sanapiro zol i Zl ier danawevrebul ia.

kl imati. saberZneTi miekuTvneba subtropikul i sartyl is kontinentur-xmel TaSuazRviur kl imatur ol qs.

wl is civi periodis ganmavl obaSi, rogorc damaxasiaTebel ia subtropikul i kl imatisaTvis, saberZneTSic gabatonebul ia zomieri ganedebis haeri.

dabl obSi zamTari rbil ia, gansakuTrebiT teritoriis dasavl eTSi, sadac xSirad iWreba Tbil i zRviuri haeri. dasavl eT sanapiroze ianvris saSual o temperatura daaxl oebiT 10⁰-ia. xmel eTis siRrmeSi temperatura ramdenadme, xol o mTebSi ufro metad kl ebul obs.

saberZneTis aRmosavl eT sanapiroze zamTari ramdenadme Tbil ia, vidre naxevarkunZul is central ur raionebsi, magram dasavl eT sanapirosTan SedarebiT ufro civia. Ees aixsneba

dasavl eT sanapiroze evropis kontinentidan civi haeris xSiri SemoWrebiT.

wl is civi periodis ganmavl obaSi xSiria Rrubl ianoba da nal eqebi. gansakuTreb iT bevri wvima modis dasavl eT sanapiroze. ianvar Teberval Si Crdil oeT raionebSi, samxreTisagan gansxvavebiT, xSiria Tovl i. maRal mTebSi Tovl i devs wl is didi drois ganmavl obaSi.

wl is Tbil i periodis ganmavl obaSi, iseve rogorc zamTarSi, qarebi aramdgradia. zafxul i mTel saberZneTsi, maRal mTiani raionebis gamokl ebiT, Zal ian cxel i da gval viania. ivl isis da agvistos saSual o temperaturebi dabl obSi da mTebSi dabal simaRI eebze 26-30-ia. nal eqebi zafxul Si Zal ian iSviaTia, gansakuTreb iT samxreT-aRmosavl eT raionebSi, sadac ivl is-agvistoSi mxol od 2-5 nal eqiani dRea. Daq am periodis ganmavl obaSi modis araumetes 5-15 mm nal eqi. dasavl eT sanapiroze nal eqebi ufro xSiria, aq wl is ganmavl obaSi modis daaxl oebiT 1400 mm nal eqi, maSin rodesac aRmosavl eT sanapiroze nal eqebis wl iuri jami Seadgens 300-600mm-s.

mcenareul i safari. dabl ob raionebSi da mTebSi dabal simaRI eebze Warbobs maradmwvane buCqnari. didi teritoria ukavia kul turul mcenareul obas-marcvl eul s, venaxebs, citrusebs. zRvis donedan 1700-2000m simaRI eebze gv xvdeba farTofoTI ovani (wifel a, muxa) da wiwvovani tyeebi. Uufro did simaRI eebze yal ibdeba al puri da subal puri mcenareul oba, bal axisa da dabal taniani buCqnarisagan. Fferdobebis mniSvnel ovani nawil i gaSiSvl ebul ia.

1.13. bul gareTi

fizikur- geografiul i Taviseburebebi. mi uxedavad teritoriis simcirisa, bul gareTi xasiaTdeba rel iefis didi mraVal ferovnebiT. Qqveynis Crdil oeTSi ganl agebul ia dunais vake, misgan samxreTiT ganeduri mimarTul ebiT gadaWimul ia stara pl anina, anu bal yaneTis mTebi., roml is umaRI esi mwverval ia mTa botevi(2376m). Uufro maRal i mTebi ganl agebul ia bul gareTis samxreT-dasavl eTSi- ril a-rodopis mTianeTi, roml is mwverval Ta umravl esobis simaRI e aRemateba 2700m-s. Savi zRva bul gareTis sanapiroze wyal marCxia, xol o sanapiro zol i nakl ebad danawevrebul ia.

kl imati. bul gareTis Crdil oeT nawil i miekuTvneba zomieri sartyl is kontinentur, xol o samxreTi -subtropikul i sartyl is kontinentur-xmel TaSviazRviur kl imatur ol qs.

wl is civi periodis ganmavl obaSi bul gareTis teritoriaze gabatonebul ia dasavl eTis qarebi, dunais vakeze da Savi zRvis sanapiroze- agreTve Crdil oeTis da Crdil o-aRmosavl eTis qarebi. swored kontonenturi haeris batonobis Sedegad bul gareTSi zamTari civi icis. Crdil oeTSi, dunais vakeze, ianvris temperatura 0-ze dabal ia. maRal mTian raionebSi ki ramodenime Tvis ganmavl obaSia SenarCunebul i uaryofiTi saSual oTviuri temperaturebi, SesaZI oa temperaturis dacema minus 40⁰-mde. Savi zRvis sanapiroze ramdenadme Tbil a, magram zRvis Semsrbil ebel i gavlena, Crdil oeTis qarebis sixSirisa da zRvis dabal i siRrmis gamo, SesamCnevad umniSvnel oa. Yyvel aze didi siTbo

zamTarSi qveynis samxreT raionebSia, roml ebic mTebiT dacul ia civi kontinenturi haerisagan.

Rrubl ianoba da SefardebiTi sinotive zamTarSi maRal ia, nal egebi mciremodis. oqtombridan april is CaTvl iT mosal odnel ia Tova.

wl is Tbil i periodis ganmavl obaSi matul obs aRmosavl eTis qarebis sixSire, rac ganapirobebs cxeli da mSral i amindebis Camoyal ibebas. ivl isis saSual o temperatura vakeSi 22⁰-ia, samxreTSi -24⁰ da meti. Rrubl ianoba, zamTarTan SedarebiT ikl ebs, nal egebi ki izrdeba, xSiria el Weqi, Tavsxma nal egebi da setyva, agreTve gval va.

mcenareul i safari. bunebrivi mcenareul obidan gamoirCeva farTofoTI ovani xeebi da buCqnari, romel Ta Soris bevri samxreTevropul i saxeobaa.

Tavi 2. aziis qveynebis kl imatebi

2.1. TurqeTi

fizikur- geografiul i Taviseburebebi. TurqeTi mTagoriani qvqyanaa. Mmisi central uri nawil i ukavia zegans, romel ic aRmosavl eTSi gadadis maRal somxeTis mTianeTSi. Crdil oeTidan zegans esazRvrebba pontos mTebi, romel Ta simaRl e aRwevs 4000m, xoli samxreTidan- tavis da antitavis mTebi. Mmcire aziis naxevarkunZul is dasavl eT sanapiro Zl ieraa danawevrebul i, samxreT da Crdil oeT napirebs ki martivi moxazul oba gaaCnia.

kl imati. Hhava subtropikul i sartyl is xmel TaSuazRviuria. wl is civi periodis ganmavl obaSi xSiria cikl onebi, amitom sanapiro raionebSi es dro yvel aze moRrubl ul i da wvimiania. Yyvel aze civi Tvis, ianvris, saSual o temperatura Savi da egeosis zRvebis sanapiroebze 6-8⁰-ia, xol o xmel TaSuazRvis sanapiroze- 10⁰. magram cal keul dReebSi Crdil oeTSi, sanapirozec ki, SesaZl ebel ia yinvebi minus 8-10⁰-mde da Tova. Qqveynis Sida raionebSi zamTarSi piriqiT uRrubl o amindi Warbobs, da zeganze zRvis donedan 700-800m-ze ianvris temperatura uaryofiTia, cal keul dReebSi ki yinvebi minus 25⁰-s aRwevs.

zafxul Si Warbobs cxel i, uRrubl o amindi, magram zRvis siaxl ovis gamo haeris tenianoba mainc maRal i rCeba. Yyvel aze Tbil i Tveebis, ivl isis da agvistos, saSual o temperatura egeosis da xmel TaSuazRvis sanapiroebze 26-30⁰-ia, xol o Savi zRvis sanapiroze daaxl oebiT 25⁰. zeganzec ki, miuxedavad misi simaRI isa, haeri Zl ier Tbeba da maRal i temperaturebi aRiniSneba, 700-800m simaRI eze 20-22⁰-s aRwevs. Aam dros wvimebi, iseve rogorc TurqeTis mTel teritoriaze, iSviaTia.

mcenareul i safari. mcenareul obis xasiaTi damokidebul ia nal eqebis ganawil ebisagan. sanapiro raionebSi, sadac sakmarisi nal eqebi modis (800-1000mm) izrdeba xmel TaSuazRvis tipis maradmwwane tropikul i mcenareebi. zeganze, sadac nal eqebis wl iuri jami ar aRemateba 300mm-s naxe vr adudabnos da udabnos mcenareul obaa.

2.2. Eerayi

fizikur- geografiul i Taviseburebebi. Eerayis central ur mdebareobs farTo mesopotamiis dabl obi. Qqveynis dasavl eT da aRmosavl eT raionebi mniSvnel ovnad SemaRI ebul ia.

Kkl imati. Eerayis samxreTi xasiaTdeba tropikul i haviT, xol o Crdil oeTi- subtropikul i xmel TaSuazRviuri haviT.

wl is civi periodis ganmavl obaSi erayis Crdil oeT raionebze xSiria cikl onebis gavl a, amitom zamTari gansakuTrebiT wvimiania. Nnal eqebi umTavresad Tavsxma wvimis saxiT modis. iSviaTad Tovs, dabl obSi is swrafad dneba. Tovl is safari warmoiqmneba mxol od mTebSi. samxreTSi nal eqebi mcirdeba.

ianvris saSual o Tviuri temperatura mesopotamiis dabl obis Crdil oeTSi daaxl oebiT 7° -ia, samxreTSi -10° . amave dros, zogjer, civi haeris Crdil oeTidan da Crdil o-dasavl eTidan SemoWrebis dros aRiniSneba ZI ieri yinvebi- Crdil oeTSi minus $18-20^{\circ}$, samxreTSi minus 7° .

wl is Tbil i periodis ganmavl obaSi erayis teritoriaze gabatonebul ia mSral i da cxel i Crdil o-dasavl eTis qarebi, romel Tac xSirad axl avs qviSiani qareSxl ebi. Aam dros dgas cxel i amindebi da SesaZI oa ramodenime Tve wvimis wveTi ar Camovardes. ivl isi-agvistos saSual o temperaturebi dabl obSi Seadgens $34-35^{\circ}$ -s, xol o maqsimal uri temperatura aRwevs $45-50^{\circ}$ -s.

mcenareul i safari. kl imaturi Tavisebarebebidan gamomdinare ZiriTadad naxevradudabnos da udabnos mcenareul obaa. Mmesopotamiis dabl obze nayofieri niadagia da melioraciis pirobebSi kargi mosaval i mohyavT.

2.3. irani

fizikur- geografiul i Taviseburebebi. Qqveynis teritoriis didi nawil i zegania, misi simaRI e dasavl eTSi 1000-1200m-s, aRmosavl eTSi ki 500-700m-s Seadgens. zegani Crdil o-dasavl eTidan SemosazRvrul ia qedebiT.

kl imati. iranis hava kontinenturi-subtropikul ia, mxol od qveynis samxreTSia tropikul i hava.

wl is civi periodis ganmavl obaSi iranze gadis pol arul i fronti, anu sazRvari tropikul da zomier haers Soris. Aamitom es periodi gansakuTrebiT wvimiania. ianvris saSual o temperatura 0° -Tan axl osaa, yinvebi SesaZI ebel ia minus 20° -mde. Tbil i zamTari mxol od qveynis samxreTSia, sparseTis yuris sanapiroze, sadac ianvris saSual o temperatura 13-15 $^{\circ}$ -s aRwevs.

wl is Tbil i periodis ganmavl obaSi iranis teritoriaze gabatonebul ia mSral i da cxel i Crdil o-dasavl eTis qarebi. Aamitom myardeba mSral i, uRrubl o, unal eqo amindi. zafxul i cxel ia, ivl isis saSual o temperatura 30-32 $^{\circ}$ -ia, xol o maqsimal uri temperatura aRwevs 40-45 $^{\circ}$ -s.

mcenareul i safari. mcenareul oba mraval ferovania. Kkaspiis zRvis sanapiroze izrdeba xSiri tyeebi. mTebi gaSiSvl ebul ia, an dafarul ia buCqnariT. qvabul ebSi warmodgenil ia stepebisa da udabnoebis mcenareul oba. dabl obebSi nayofieri niadagebia, magram miwaTmoqmedeba SesaZI ebel ia mxol od xel ovnuri morwyvis pirobebSi.

2.4. indoeTi

fizikur- geografiul i Taviseburebebi. indoeTi mdebareobs indostanis naxevarkunZul ze, roml is zedapiric xasiaTdeba didi mraVal ferovnebiT. Crdil oeTSi gadaWimul ia dedamiwaze yvel aze maRal i- himal ais mTebi. farToa mdinareebis indis, gangis da brahmaputris vel ebi. Crdil o-dasavl eTi ukavia qviSian udabnoebs(Taris udabno). naxevarkunZul is samxreTi nawil i dekanis zegans ukavia, romel ic SemosazRvrul ia dasavl eTis da aRmosavl eTis gatebis mTebiT.

kl imati. indoeTi musonebis kl asikuri qveyanaa, is miekuTvneba ekvatorul i musonebis kl imatur sartyel s.

wl is civi periodis ganmavl obaSi musonuri qarebi mimarTul ia xmel eTidan zRvisken. maRal i himal ais mTebi eRobeba central uri aziidan wamosul civ mSral haers, amitom zamTari indoeTSi Zal ian Tbil i, uRrubl o da mSral ia. am dros mcire wyal satevebi da mdinareebi Sreba. ianvris temperatura dabl obze 15-20⁰-ia, xol o himal ais mTebze 3500m simaRl eze- minus 8⁰-ia.

wl is Tbil i periodis ganmavl obaSi musonuri cirkul aciis xasiaTi icvl eba. isini qrian samxreT-dasavl eTidan, anu okeanidan, da mniSvnel ovani teni moaqvT. Mmusonebis dawyebamde, mais-ivniSsi, Zal ian cxel a, temperatura 40-45⁰-mde aRwevs. Dmusonebi uecrad iwyeba da swrafad icvl eba amindi. temperatura ecema, izrdeba Rrubl ianoba da nal eqebi. oTxi Tvis ganmavl obaSi nal eqebis wl iuri j amis 90% modis. swored aq mTa Carapujazea dafiqsirebul i dedamiwaze nal eqebis maqsimumi-11000mm wel iwadSi. cal keul wl ebSi nal eqebi 22000mm-s aRwevs.

mcenareul i safari. mcenareul oba mraVal ferovania. samxreT-dasavl eTSi, viwro sanapiro zol Si izrdeba maradmwvane tropikul i tyeebi, Crdil o-dasavl eTSi Warbobs udabnoebi. aRmosavl eTSi da qveynis central ur raionebsi umTavresad savanebia. mTebSi gv xvdeba arqtikul i tipis mcenareul oba.FfarTobis didi nawil i damuSavebul ia.

2.5. CineTi

fizikur- geografiul i Taviseburebebi. reliefis mraVal ferovnebis Tval sazrisiT erT-erTi pirvel Tagania. Aaq aris msofilios umaRI esi mTebi- aRmosavl eT tian-Sani, himal ai, kun-l uni, yvel aze umaRI esi zegani-tibeti, roml is saSual o simaRI e 3500-4000m-ia, mraVal ricxovani qedebsi 7000-8000m-simaRI iT, da qveynis aRmosavl eTSi ganl agebul i farTo dabl obebi. CineTis udidesi mdinareebia xuanxe da ianczi, roml ebic dasavl eTidan aRmosavl eTisken miemarTebian. ivl is-agvistos wimebis dros isini gadmodian kal apotidan da tboraven mimdebare teritoriebs. wyal didobebi da wyal movardnebi xSiria da didi zaral is, zogjer ki msxverpl is momtani.

kl imati. Qqveynis didi ganfenil obis da l andSaftebis mraVal ferovnebis gamo, misi cal keul i provinciebis kl imaturi pirobebi gansxvavebul ia. teritoriis did nawil ze hava subtropikul ia, samxreT-aRmosavl eTi nawil i ki miekuTvneba ekvatorul i musonebis kl imatur sartyel s.

wl is civi periodis ganmavl obaSi Qqveynis Crdil oeTSi civi musonuri qarebi qris aRmosavl eT cimbiridan. Aamitom zamTari civia.

Crdil oeTSi ianvris saSual o temperatura minus 15⁰-ia, maSin rodesac dasavl eT evropaSi igive ganedebze temperatura 8-10⁰-ia. civi zamTaria dasavl eT raionebSic. samxreTSi temperatura izrdeba, ise rom ianczi ar iyineba. Yvel aze Tbil i zamTari CineTis ukidures samzreT-aRmosavl eTSia, sadac yvel aze civi Tvis, Tebervl is, temperatura 15⁰-mde aRwevs.

wl is Tbil i periodis ganmavl obaSi musonebi qris okeanidan- aRmosavl eTidan, samxreT-aRmosavl eTidan da samxreTidan. maT moaqvT teni, amitom am dros Rrubl ianoba da nal eqebi maqsimums aRwevs. Tova mosal odnel ia qveynis mTel teritoriaze, ukiduresi samxreT-aRmosavl eTis gamokl ebiT. Mmagram Tovl is safari Zal ian Txel ia da xSirad saertod ar warmoi qmneba.

Ddabl ob raionebSi zafxul i Zal ian Tbil ia. ivl isis saSual o temperatura 25-30⁰-ia. tibetSi, l xasaSi temperatura 17⁰-ia, xol o 5000m simaRl eze – daaxl oebiT 10⁰.

mcenareul i safari. Kkl imaturi pirobebis didi mraval ferovnebis gamo qveynis sxvadasxva raioni gansxvavebul i mcenareul obiT gamoirCeva. CineTis dabl obebze tyeebi ar aris. Crdil o-aRmosavl eTis vakeebze bunebrivi mcenareul oba stepuria, dasavl eTSi-udabnos mcenareul obaa. Qveynis samxreTSi mcenareul obas subtropikul i xasiaTi aqvs-muxa, pal ma, citrusebi. Ddidi sameurneo mniSvel oba aqvs ianczis auzSi da samxreT provinciebSi gavrcel ebul bambuks. tyis masivebi ZiriTadad ganadgurebul ia, isini mxol od Znel ad miuval mTebis qedebzea SemorCenil i. Ddidi

farTobebi ukavia sasofl o-sameurneo kul turebs,
gansakuTreb iT bevria brinj is naTesebi.

2.6. monRol eTi

fizikur-geografiul i Taviseburebebi.
teritoriis ZiriTadi nawil i SemaRI ebul vakes
warmoadgens, romel ic cal keul adgil ebSi
danawevrebul ia mTis qedebiT. maT Soris farTo
qvabul ebia, roml ebSic bevri msxvil i tbaa.

kl imati. monRol eTi okeaneebidan did manZil zea
daSorebul i. is Crdil oeTidan da samxreTidan
garsSemortymul ia samxreT cimbris da
central uri aziis mTebiT. Aamitom misi hava
mkveTrad kontinenturia. monRol eTi miekuTvneba
zomieri sartyl is kontinentur kl imatur ol qs.

zamTrisaTvis damaxasiaTebel ia uRrubl o,
yinviani amindi. ianvris saSual o temperatura
minus 25⁰-ia. Tova iSviaTi movl enaa, Tovl is
safari warmoiqmneba mxol od mTebSi. Ddabal i
temperaturebisa da Tovl is safaris ararsebobis
gamo, niadagi iyineba did siRmeze, xol o
Crdil oeT mongol eTSi niadagi mudmivad mzral ia.

radganac hava kontinenturia zafxul i cxel i
icis. zRvis donedan 900m simaRI eze ivl isis
saSual o temperatura 25⁰-s aRwevs. Nnal eqebi
Zal ian mcirea, wl is ganmavl obaSi mxol od 200mm
modis.

mcenareul i safari. Bbunibrivi mcenareul oba
stepuria. samxreTSi stepebi gadadis
naxebradudabnoSi da udabnoSi (udidesi gobis
udabno). tye mxol od Oveynis Crdil o-
aRmosavl eTSia mTebis Crdil oeT ferdobebze.

2.7. iaponia

fizikur- geografiul i Taviseburebebi. iaponia mdebareobs kunZul ebze, romel Ta Soris udidesebia hokaido, honsiu, sikoku da kiu-siu. kunZul ebi wagrZel ebul ia Crdil oeTidan samxreTis mimarTul ebiT. wynari okeanes sanapiroebi Zl ier danawevrebul ia, xol o dasavl eTis sanapiroebi, roml ebiC mimarTul ia iaponiis zRvisken, SedarebiT gl uvia. wynari okeane iaponiis sanapiroebTan Zal ian Rrmaa.

kunZul ebis rel iefis didi nawil i mTagoriana. cal keul i qedebi aRweven 3500m simaRI es, umaRI esia vul kani fuZiama(3790m). Zal ian bevri momqmedi vul kania, xSiria miwisZvrebi. vul kanebis maxl obl ad cxel i vul kanuri wyaroebia. Mmdinareebi mokl ea, magram swrafi da wyal uxvi.

kl imati. miekuTvneba subtropikul i sartyl is musonuri ol qis kl imats. Ggamonakl isia mxol od kunZul i hokaido da honsius Crdil oeT nawil i, romel ic zomieri sartyl is musonuri kl imatur ol qs miekuTvneba.

iaponiis kl imatis Camoyal ibebaze did gavl enas axdens okeanes dinebebi- Tbil i kuro-sivo, romel ic Cauvl is samxreTis kunZul ebs da civi oia-sivio, romel ic gaedineba qveynis Crdil o-aRmosavl eT napirebis gaswvriV.

wl is civi periodis ganmavl obaSi iaponiis kunZul ebze gabatonebul ia Crdil o-dasavl eTis musonebi. iaponiis zRvaze gadaadgil ebisas haeri mdi drdeba teniT da amitom aseT musonebs dasavl eT sanapiroze da dasavl eTiT mimarTul ferdobebze bevri nal eqi moaqvs. Aam dros aRmosavl eTis ferdobebi sakmaod mSral ia.

Tovl i icis yvel gan, magram samxreTSi Zal ian iSviaTad devs. Crdil o-dasavl eT raionebSi, uxvi Tovisa da dabal i temperaturebis gamo, warmoiqmneba mZl avri Tovl is safari. Tovl is gamo bevri uRel texil i iketeba.

radganac civi musonuri qarebi qris Crdil o-dasavl eTidan, dasavl eT sanapiroebi ufro civia. kunZul hokaidoze ianvris saSual o temperatura minus 5⁰-ia, xol o mis ukidures Crdil oeTSi-minus 10⁰. samxreTis kunZul ebze Tbil a-honsius dabl ob raionebSi ianvris temperatura daaxl oebiT 5⁰-ia, xol o kiu-siuze -7⁰. yinva mosal odnel ia yvel a kunZul ze. Mminimal uri temperatura kunZul hokaidoze dafiqsirebul ia minus 25⁰, xol o qveynis samxreTSi-minus 7⁰.

wl is Tbil i periodis ganmavl obaSi musonebi qris samxreT-aRmosavl eTidan. Aamitom aRmosavl eT sanapiroebze da aRmosavl eTis ferdobebze Warbobs Rrubl iani, nal eqiani amindi. dasavl eTis ferdobebze ki piriqiT, zafxul Si SeiniSneba Rrubl ianobis da nal eqebis ramdenadme Sencireba.

Yyvel aze Tbil i Tve agvistoa. Agvistos saSual o temperatura hokaido 17-20⁰-ia, honsiuze da samxreT kunZul ebze ki 25-28⁰.

mcenareul i safari. siTbosa da nal eqebis siuxvis gamo iaponia gamoirCeva mcenareul obis simdidrit. kunZul hokaidos Crdil oeTi nawil i ukavia taigas, samxreT iaponiaSi ki tropikul i da subtropikul i tyeebia. maTTan Sereul ia foTI ovani da wiwvovani tyeebi. mTis ferdobebi dafarul ia foTI ovani da wiwvovani tyeebiT.

sasofl o-sameurneo kul turebidan udidesi mniSvnel oba aqvs brinj s, bambas da Cai s.

Tavi 3. afrikis, avstral iis da okeaneTis qveynebis kl imatebi

3.1. al Jiri, I ibia, egipte

fizikur- geografiul i Taviseburebebi. ukaviaT afrikis Crdil oeTi nawil i. rel iefis zedapiri warmoadgens axagaris da tibestis mTis masivebs, romel Ta mwverval ebis simaRI e aRemateba 3000m-s zRvis donedan.

kl imati. samive qveyanaSi tropikul i havaa, mxol od al Jiris ukiduresi Crdil oeTi moqceul ia subtropikul kl imatur sartyel Si. kl imatis formirebaze ZiriTad gavl enas axdenen pasatebi, mudmivi qarebi, roml ebic qris Crdil o- aRmosavl eTidan, anu kontinentidan. aseT pasatebs moaqvs ukiduresad mSral i kontinenturi haeri. amitom nal eqebi Zal ze cotaa. Uufro metic, udabnoebSi aris adgil ebi, sadac nal eqebi wl ebis ganmavl obaSi ar modis.

Rrubl ianoba dabal ia, zogan ki iSviaTia. amitom mze xangrZl ivad anaTebis da Sesabamisad miwa Zl ier xurdeba. Aamis gamo haeris temperatura maRal ia da Seadgens ivl isSi 30-35⁰-s, xol o ianvarSi- 15⁰. udabnos pirobebSi didia sxvaoba dRisa da Ramis temperaturebs Soris da saSual od aRwevs 15-20⁰-s, xol o dedamiwis zedapirze temperaturis ampl ituda 70⁰-sac ki aRwevs.

mcenareul i safari. Yyvel aze gavrcel ebul i l andSaftia qviSiani naxevradudabnoebi da udabnoebi, bunebrivi mcenareul oba mxol od wyaroebSa da mdinareebTan axl osaa. Mmdinare nil osis xeobaSi da del taSi yal ibdeba oazisebi,

sadac brinj is da sxva marcvl ovnebis mdidar mosaval s iReben wel iwadSi 2-3 j er. Eegviptis miwaTmoqmedebis safuZvel s warmoadgens mdinare nil osi. Eapril i-seqtembris eTiopiis mTianeTSi uxvi nal eqebis gamo mdinare gadmodis kal apitidan da tboravs mimdebare teritorias. mdinaris dinebis mimarTul ebiT agebul ia kaSxl ebi, romel Ta saSual ebiTac xdeba misi reJimis regul ireba.

3.2. sudani da eTiopia

fizikur-geografiul i Taviseburebebi. mdebareoben afrikis aRmosavl eTSi. Warbobs vake sivrceebi, simaRI eebiT 300-400m. umaRI esi mwverval ia sudanSi mTa j ebel -mara(3088m).

kl imati. pasatebi qris Crdil o-aRmosavl eTidan-evraziis kontinentidan, maT moaqvT mSral i haeri. amitom noembridan april is CaTvl iT aq dgas gval viani periodi da nal eqebi Zal ze iSviaTia, Crdil oeT raionebSi zogierT wl ebSi saerTod ar modis. samxreTSi matul obs nal eqebi. temperatura maRal ia mTel i wl is ganmavl obaSi, xol o maqsimal uria gazafxul ze(maisi).

mcenareul i safari. Nnal eqebis ganawil ebis Sesabamisad icvl eba mcenareul i safari. samxreT raionebSi tropikul i tyeebia, Crdil oeTis mimarTul ebiT maT cvl is savanebi, Semdeg stepebi, da bol os naxevradudabnoebi. Sasofl o-sameurneo kul turebidan gavrcel ebul ia bamba, simindi, brinj i da sxv.

3.3. samxreT afrikis respubl ika

fizikur-geografiul i Taviseburebebi. mdebareobs afrikis kontinentis ukidures samxreT nawil Si.

orografiul i Tval sazrisiT warmoadgens zegans. dabl obi mxol od ukidures samxreT-dasavl eT nawil Sia.

kl imati. hava subtropikul ia. zafxul i mSral ia, zamTari wvimiani, Tumca nal egebi mcire modis.Hhaeris temperatura ramdenadme nakl ebia, vidre anal ogiur ganedebSi Crdil oeT naxevarsferoSj, rac okeanis civi dinebiT aixsneba. igive mizeziT aixsneba is, rom qveynis aRmosavl eTi nawil i dasavl eTze ramdenadme Tbil ia.

3.4. avstral ia

fizikur- geografiul i Taviseburebebi. rel iefis xasiaTis Tval sazrisiT avstral ia SeiZl eba davyoT 3 nawil ad. aRmosavl eT sanapiros gaswvriw gadaWimul ia didi wyal gamyofi qedi. Crdil oeTSi misi simaRI e ar aRemateba 500-600m-s, samxreTSi maRI deba da aRwevs 2000m-s, xol o umaRI esi mwverval ia kosciuSko-2290m. didi wyal gamyofi qedis dasavl eTiT ganl agebul ia central uri afrikis dabl obi, sadac miedineba kontinentis udidesi mdinare murei Tavisi SenakadiT-darl ingiT. Qqveynis dasavl eTi nawil i warmoadgens SemaRI ebul zegans 300-500m simaRI iT. Mmisi Crdil oeT sanapiro danawevrebul ia, kontinentSi SeWriL ia karpentariis yure da ori didi naxevarKunZul ia-arneml endis da keip-iorkis. samxreTi sanapiro mosworebul ia, akravs tasmaniis KunZul i.

kl imati. wl is civi periodis ganmavl obaSi haeris moZraoba mimarTul ia xmel eTidan okeaniskan, amitom nal egebi mcire modis.

ivl isis saSual o temperatura Crdil oeT raionebSi 20-25⁰-ia, samxreTisaken swrafad ikl ebs, da samxreTis tropikTan Seadgens 15⁰.

wl is Tbil i periodis ganmavl obaSi icvl eba haeris cirkul aciis xasiaTi. Kkontinentis cal keul raionebSi xSirdeba okeanuri haeris masebis SemoWra da am adgil ebSi izrdeba nal egebi. aseTebia aRmosavl eTi da Crdil oeTi raionebi. samxreT sanapiroze ki haeris cirkul acia sustdeba da nal egebi ikl ebs.

zafxul Si haeris temperatura samxreT sanapiroze daaxl oebiT 20⁰-ia, Crdil oeTis mimarTul ebiT matul obs da udabnoebSi 30⁰ aRwevs. mTebSi temperatura 15-18⁰-ia.

mcenareul i safari. Teritoriis didi nawil i dakavebul ia savanebiT, stepebiT da udabnoebiT. tyeebs ukavia mcire farTobi sanapiro zol Si. Crdil o-aRmosavl eT sanapiros viwro zol Si, sadac bevri nal egebi modis, izrdeba maradmwwane notio tropikul i tyeebi. tropikul i tyeebi aris agreTve central uri afrikis dabl obis Crdil oeTSi. samxreTSi tropikul tyeebs cvl is subtropikul i tyeebi, sadac Warbobs evkal ipti da akacia. Kkontinentis samxreT-dasavl eT raionSi gavrcel ebul ia subtropikul i maradmwwane tyeebi da buCqnarebi.

sofl is meurneoba ganviTarebul ia umTavresad sanapiro raionebSi, gansakuTrebiT samxreT-aRmosavl eT StatebSi. Aaq mohyavT xorbal i, simindi, bamba, Saqris l erwami, Saqris Warxal i, Tambaqo da sxv. savanebis da stepebis farTo sivrceebi gamoiyeneba saZovrebad.

3.5. indonezia

fizikur- geografiul i Taviseburebebi. indoneziis kunZul ebis reliefi ZI er danawevrebul ia. sumatras, iavas, mcire zondis da mol ukis kunZul ebze Crdil o-dasavl eTidan samxreT-aRmosavl eTis mimarTul ebiT gadaWimul ia mTebi, sadac mraval i momqmedi vul kania. Ddabl obi sanapiroebi daWaobebul ia. kunZul axal i gvineis gaswvriV gadaWimul ia farTo mTianeTi, roml is central uri nawil is simaRI e 5000m-s aRwevs. amave kunZul is samxreT nawil Si dabl obia. farTod aris ganviTarebul i mdinareTa qsel i. Mmdinareebi didi ar aris, magram wyal uxvia.

kl imati. hava ekvatorial uria. Ees imas niSnavs, rom wl is ganmavl obaSi sezonuri sxvaobebi umniSvnel oa. zafxul i da zamTari erTmaneTisagan TiTqmis ar gansxvavdebian. saSual o Tviuri temperaturebi wl is ganmavl obaSi dabl obze 25-28⁰-ia, xolo mTebSi 1500-2000m simaRI eze daaxl oebiT 15-18⁰-ia.

Nnal eqebi bevria, gansakuTrebiT ekvatoris maxl obl ad da Seadgens 2000-3000mm-s wel iwadSi. mTis qarpira ferdobebze ki nal eqebi izrdeba 4000mm-mde. Nnal eqebi ramdenadme mcirea mcire zondis kunZul ebze da axal i gvineis samxreTSi, rac aixsneba mSral i samxreT-aRmosavl eTi pasatebis moqmedebiT, roml ebic gamoivl ian avstral iis kontinents da ZI er Srebian.

mcenareul i safari. Mmcenareul oba mraval ferovania. Bbunibrivi mcenareul oba dabl ob adgil ebSi warmodgenil ia notio tropikul i tyeebiT. Mmcenareebi ramodenime iaruss qmnan. zRvis donedan 1500-3000m simaRI eze ganl agebul ia notio mTis tyis sartyel i

(wiwvovani subtropikul i tyeebi, zomieri sartyl is mcenare wabl i da sxv.). ufro maRI a 3500m-mde mTis dabal taniani tyeebia. SedarebiT mSral raionebSi, maT Soris mcire zondis kunZul ebze gavrcel ebul ia savana.

Tavi 4. Crdil oeT da central uri amerikis qveynebis kl imatebi

4.1. kanada

fizikur-geografiul i Taviseburebebi. teritoriis didi nawil i warmoadgens borcvian vakes, romelic dasavl eTidan aRmosavl eTis mimarTul ebiT dabl deba. dasavl eTSi ganl agebul ia kordil ieris mTebi, roml ebic Sedgeba paral el uri sanapiro da kl dovani mTebisagan. Qqveynis fargl ebSi maTi simaRI e 4000m aRwevs. samxreT-aRmosavl eTSi dabal i Zveli apal aCis mTebia. Kkanada mdidaria mdinareebiT da tbebiT. Sanapiro zol i Zl ier danawevrebul ia Crdil oeTiT da Ddasavl eTiT, xol o nakl ebad danawevrebul ia aRmosavl eTiT.

kl imati. Crdil oeTi nawil i miekuTvneba arqtikul da subarqtikul kl imatur zonebs, xol o samxreT nawil i- zomieri ganedebis kl imats.

wl is civi periodis ganmavl obaSi teritoriis did nawil ze gabatonebul ia Crdil o-dasavl eTis, dasavl eTis da samxreT-dasavl eTis qarebi. teritoriis didi ganfenil obis gamo haeri civdeba, amitom zamTari xasiaTdeba mdgradi yinvebiT. Crdil oeTSi ianvar-Tebervl is saSual o temperatura minus 28-30⁰-ia, xol o samxreTSi minus 18-20⁰. arqtikul i haeris SemoWrisas temperaturam

samxreT raionebSiC ki SeiZl eba daikl os minus 50⁰-ze qvmod. wynari okeanis sanapiroze ianvar-Tebervl is saSual o temperatura Crdil oeTSi 1-2⁰-ia, samxreTSi ki 3-4⁰. es gacil ebiT baRal i temperaturaa, vidre qveynis siRrmeSi, magram nakl ebia evropis Sesabamis ganedebTan SedarebiT, rac aixsneba evropis napirebTan mZl avri Tbil i Crdil oeT-atl antikuri dinebis gavl iT. aRmosavl eT sanapiroze atl antikis okeanis gavl ena sustia vidre dasavl eT sanapiroze, amitom aq ufro civa da ianvar-Tebervl is saSual o temperatura minus 2-10⁰-ia.

ivl is-agvistos saSual o temperatura qveynis Crdil oeTSi ar aRemateba 5-6⁰. samxreTSi ki zafxul i Tbil ia, temperatura 18-20⁰-ia. Crdil o-aRmosavl eTis sanapiro raionebSi civi l abradoris dinebis gavl enis gamo zafxul i civia da ivl is-agvistos saSual o temperatura Crdil oeTSi 7-10⁰, xol o samxreTSi 15-18⁰-ia.

nal eqebis rejimi da ganawil ebac Zal ze mraVal ferovania. Crdil oeTSi, arqtikul zonaSi wl is ganmavl obaSi modis 250mm-ze nakl ebi nal eqi. wynari okeanis sanapiroze teniani dasavl eTis qarebis Sedegad nal eqebi izrdeba@(2500mm). kordil ierebis aRmosavl eT ferdobebze, sadac gabatonebul ia mSral i haeri nal eqebic ikl ebs da Seadgens 500mm-s. Aatl antikis okeanis sanapiroze nal eqebi kvl av izrdeba 1000mm-mde. Tovl is safari warmoiqmneba yvel gan wynari okeanes sanapiros garda.

mcenareul i safari. Kkanadis Crdil oeTi raionebi ukavia tundrasa da tyetundras, samxreTiT vrcel deba taiga, samxreT-aRmosavl eTiT mas cvl is Sereul i tyeebi. Qveynis central ur

raionebSi, sadac Tbil i zafxul i icis, mohyavT xorbal i.

4.2. amerikis SeerTebul i Statebi

fizikur-geografiul i Taviseburebebi. qveynis mTel i dasavl eTi nawil i ukavia kordil ierebis mTaTa sistemas. sistemis aRmosavl eT nawil s kl dovani mTebi warmoadgens, mis Ddasavl eTiT mdebareobs zegani. Zegani Sedgeba 3 nawil isagan: kol umbiis pl ato, didi auzi, kol orados pl ato. dasavl eTidan kordil ierebi SemosazRvrul ia sanapiro mTebiT. kordil ierebis mTaTa sistemis aRmosavl eTiT gadaWimul ia farTo vakeebi. aRmosavl eTSi mdebareobs apal aCis mTebi, xol o Crdil o-aRmosavl eTSi didi tbebis j gufia ganl agebul i.

kl imati. aSS teritoriis didi nawil ze, Crdil oeT zol isa da samxreT-aRmosavl eT raionebis gamokl ebiT, subtropikul i havaa. Crdil oeT zol is hava somieria, xol o samxreT-aRmosavl eTSi fl oridis hava- tropikul i. Aam zonal uri dayofis garda, fizikur-geografiul i pirobebis mraval feroznebis gamo, gasaxvaveben sam kl imatur raions: dasavl eT sanapiros, central ur ol qebs da aRmosavl eT sanapiros.

dasavl eT sanapiroze subtropikul i da zomieri sartyl ebis wynarokeanuri kl imaturi ol qia.

wl is civi periodis ganmavl obaSi gabatonebul ia qarebi wynari okeanedan, amitom zamTari gansakuTrebul ad rbil ia. ianvar- Teberval Si saSual o temperatura Crdil oeTSi 5⁰. ia, xol o samxreTSi-10⁰. Crdil oeTSi ufro moRrubl ul i da wimiani amindia vidre samxreTSi.

Crdil oeTSi xSiria Tovl i, samxreTSi iSviaTia da ara yovel wl iurad.

zafxul Si agreTve samxreTi ufro Tbil ia (20⁰), vidre Crdil oeTi (10⁰). SedarebiT dabal i temperaturebi aixsneba civi kal iforniis dinebis gavl eniT.

aSS central uri ol qebi subtropikul i sartyl is kontinentur da atl antikur-kontinentur kl imatur ol qebs da zomieri sartyl is kontinentur ol qs miekuTvneba. Crdil oeT da samxreT raionebs Soris temperaturaTa sxvaoba didia. ianvarSi Crdil oeTSi temperatura minus 10⁰-ia, xol o samxreTSi 10-12⁰. anal ogiurad ivl isSi Crdil oeTSi temperatura daaxl oebiT 20⁰-ia, xol o samxreTSi 27-30⁰. samxreT kal iforniaSi sikvdil is vel ze dafiqsirebul ia 57⁰. yvel aze gval viani adgil i kordil ierebis aRmosavl eTidaa. magal iTad arizonas StatSi wl is ganmavl obaSi 100mm nal eqic ar modis. wvimebi iSviaTia, SeiZl eba wl ebi gavides unal eqod. iseTi simSral ea, rom SefardebiTi sinotive zafxul Si ar aRemateba 20-30%-s.

aRmosavl eTis mimarTul ebiT nal eqebi izrdeba 800-1500mm-mde, rac atl antikis okeanedan notio haeris masebis SemoWrebs ukavSirdeba. xSiria el Weqi.

aRmosavl eT sanapiros hava (fl oridis naxevarkunZul is gamokl ebiT) zomieri da subtropikul i sartyl ebis atl antikur-musonuria.

Aaq zamTari SedarebiT Tbil ia, ianvris saSual o temperatura 10-12⁰-ia.

wl is Tbil i periodis ganmavl obaSi aRmosavl eT sanapiroze gabatonebul ia qarebi

okeani dan, maT moaqvT bevri siTbo da teni. ivl isis saSual o temperatura Crdil oeTSi daaxl oebiT 20⁰-ia, xol o samxreTSi, meqsikis yuris sanapiroze, 28⁰. wl is ganmavl obaSi modis 1000-1500mm nal eqi.

gansakuTrebul i kl imaturi pirobebia fl oridis naxevarKunZul ze. is imyofeba tropikul i kl imatis zonaSi, risi niSnebic gansakuTrebIT mkafiod gamoxatul ia naxevarKunZul is samxreT nawil Si. Aamitom naxevarKunZul is Crdil oeTi da samxreTi nawil ebis temperaturul i reJimebi mniSvnel ovnad gansxvavdeba: ianvris saSual o temperatura Crdil oeTSi 12⁰, samxreTSi ki 20⁰-ia. samxreTSi Tovl i ar modis.

zafxul Si fl oridis naxevarKunZul ze gabatonebul ia tropikul i haeri, amitom temperaturul i reJimi mTel teritoriaze erTgvarovani xdeba. ivl isis saSual o temperatura 28-30⁰-ia. nal eqebis wl iuri jami Seadgens daaxl oebiT 1500mm-s. wvima modis mTel i wl is ganmavl obaSi, gansakuTrebIT bevri ivnis-seqtemberSi. Am dros SeiZl eba TveSi movides 200mm nal eqi, rac ukavSirdeba notio atl antikuri haeris Semosvl is gaaqtiurebas.

Ffl oridis hava Zal ze keTil sasurvel ia zamTarSi rbil i, Tbil i da mziანი amindebis gamo. amitom aq mraVal i zamTris kurortia. zafxul i, didi sicxeebisa da maRal i sinotivis gamo, Znel ad asatania.

mcenareul i safari. AaSS central ur da aRmosavl eT raionebsi mcenareul i safaris gavrcel eba ZiriTadad ganisazRvreba datenianebis pirobebiT. Aamitom bunebrivi mcenareul obis

monacvl eoba xdeba aRmosavl eTidan dasavl eTis mimarTul ebiT. Aatl antikis okeanis sanapiroze izrdeba Sereuli da farTofoTl ovani tyeebi. dasavl eTIT gadaadgil ebisas isini gadadian stepebSi da preriebSi. Ppreriebi warmatebiT gamoiyeneba sasofi o-sameurneo kul turebisaTvis da saZovrebad.

gansakuTrebiT mdidari da mraVal feroVani mCenareul obaa fl oridis naxeVarkunZul ze. didi farTobeBi ukavia tyeEbs (fiWvi, kiparisi, pal ma). mohyavT citrusebi, Saqris l erwami, Tambaqo, bostneuli da sxv.

bunebrivi mCenareul oba SedarebiT ganadgurebul ia wynari okeanes sanapiroze da kordil ierebis dasavl eT ferdobebze. Aaq odesRac arsebul i tyis didi masivebi gaCexilia. sanapiros samxreT nawil Si ganvitarebul ia mebaReoba, mevanaxeoba, mohyavT citrusebi.

4.3. meqsika

fizikur- geografiuli Taviseburebebi. Mmeqsika xasiaTdeba mTagoriani l andSaftiT. Ddidi nawil i ukavia meqsikis zegans, romelic samxreTsi maRl deba da aRwevs 2300m simaRl es. umaRl esi mwverval ia vul kani orisaba (5550m).

kl imati. Mmeqsikis kl imati tropikulia, magram SeiZl eba ganvasxvavoT 3 kl imaturi ol qi: wynari okeanes sanapiro, aRmosavl eT sanapiro da meqsikis zegani.

wl is civi periodis ganmavl obaSi wynari okeanes sanapiro ol qSi gabatonebul ia Crdil o- aRmosavl eTis qarebi. isini gaiVl ian mTis qedebs da sanapiroze modian gamomSral ni. Nnal eqebi am dros TiTqmis ar modis. Yyvel aze civi Tvis

saSual o temperatura 15-20⁰-ia, magram RamiT icis yinvebi. RamiT xSirad warmoiqmneba nisl i.

wl is Tbil i periodis ganmavl obaSi wynari okeanes sanapiro ol qSi aqtiurdeba samxreT-dasavl eTis qarebi, anu okeanedan. isini Seicaven bevr tens, amitom moaqvT nal eqi. Nnal eqebi xSirad atereben Tavsxma xasiaTs da maT Tan axl avs el Weqi. zafxul i Zal ian cxel ia, ivl isis saSual o temperatura 27-30⁰-ia, zogj er 400-ze maRI ac iwevs.

Mmeqsikis aRmosavl eT sanapiroze wl is civi periodis ganmavl obaSi gabatonebul ia Crdil o-aRmosavl eTis qarebi, anu xmel eTidan. Aamitom zamTarSi nal eqebi cota modis. ianvris saSual o temperatura 18-22⁰-ia. wl is Tbil i periodis ganmavl obaSi aqtiurdeba aRmosavl eTis notio qarebi, romel Tac bevri nal eqebi moaqvs. zafxul i cxel ia, ivl isis saSual o temperatura 27-29⁰-ia. maRal temperaturebs axl avs maRal i tenianoba, rac daxuTvis SegrZnebas qmnis.

meqsikis zeganze wl is civi periodis ganmavl obaSi gabatonebul ia mSral i, kontinenturi Crdil o-aRmosavl eTis qarebi. amitom zeganze myardeba uRrubl o mSral i amindi, nal eqebi iSviaTia. temperatura damokidebul ia adgil is simaRI eze. zRvis donedan 2000-2500m simaRI eze ianvar-Tebevrl is saSual o temperatura 10-12⁰-ia.

wl is Tbil i periodis ganmavl obaSi meqsikis zeganze gabatonebul ia aRmosavl eTis tropikul i qarebi. Aamitom mkveTrad matul obs Rrubl ianoba da nal eqebi. ivl isidan seqtembris CaTvl iT yovel Tviurad 150mm-ze nakl ebi nal eqi ar modis. gansakuTrebiT maRal i temperaturebi april i-

ivnisis ganmavl obaSi, rodesac dgas mSral i periodi.

mćenareul i safari. meqsikis sanapiroze mćenareul oba warmodgenil ia tropikul i tyeebis da buCqnaris saxiT. mTebSi tropikul tyeebs cvl is zomieri zonis tyeebi. 4000m simaRI idan al puri mćenareul obaa.

Mmeqsikis zeganze mćenareul oba Raribia, mas umTavresad stepuri xasiaTi aqvs. sasofl o-sameurneo kul turebidan mohyavT xorbal i, simindi, Saqris Warxal i. Bevria yavis da bananis pl antaciebi.

Tavi 5. samxreT amerikis qveynebis kl imatebi

5.1. kol umbia

fizikur - geografiul i Taviseburebebi. kol umbias kveTs ekvatori. qveynis dasavl eT nawil Si gadis andebi, roml is cal keul i qedebis simaRI e aRemateba 5000m-s. kol umbiis aRmosavl eT nawil i vakea.

kl imati. Qqveynis udidesi nawil i ekvatorul i kl imatis sartyel Sia, xol o Crdil oeTi raionebi-Crdil oeT naxevarsferos ekvatorul i musonebis kl imatis ol qSia. dabl obebSi saerTod cxel i da notio amindebi icis. xSiria ZI ieri Tavsxmebi. sezonuri cval ebadoba ar aris, mTel i wl is ganmavl obaSi temperatura ucvl el ia da Seadgens 28-30⁰-s. mTebSi am Ddros ufro keTil sasurvel i pirobebia, temperatura Seadgens 13-15⁰-s.

nal egebis ganawil ebaSi didi mniSvnel oba aqvs qedebis ganfenil obis mimarTul ebas. magal iTad andebis dasavl eT ferdobebze, roml ebic mimarTul ia notio haeris moZraobis sawinaaRmdegod, wel iwadSi modis 7000mm nal eqi, maSin rodesac aRmosavl eTis ferdobebze, sadac mSral i haeris nakadebi Warbobs, nal egebi sul 750mm-s Seadgens.

mcenareul i safari. aRmosavl eT kol umbiasa da wynari okeanis sanapiroze gavrcel ebul ia notio maradmwvane tropikul i tyeebi, Crdil oeTSi tropikul i tyeebi gadadis savanebSi.

5.2. peru

fizikur - geografiul i Taviseburebebi. peru mTagoriani qveyanaa. teritoriis didi nawil i maRal i qedebiT aris dakavebul i. Qqedebis Soris Rrma xeobebia saidanac saTaves iRebs mdinare amazonkis mraval i Senakadi. mTebSi xSiria miwisZvrebi. bol iviis sazRvarze mdebareobs maRal mTiani tba titikaka. Ddabl obebi umTavresad qveynis Crdil o-aRmosavl eTSi da wynari okeanes sanapirozea.

kl imati. Kkl imaturi pirobebi mraval ferovania, rac ganpirobebul ia qveynis orografiul i agebul ebiT da wynari okeanis gavleniT. gamoiyofa sami msxvil i kl imaturi ol qi: dasavl eT sanapiro, maRal mTiani ol qi da Crdil o-aRmosavl eTi nawil i.

Pperus dasavl eT sanapiros kl imats bevri saerTo aqvs afrikis dasavl eT sanapiroebis tropikul i sartylis kl imatTan. wl is civi periodis ganmavl obaSi sanapiroze Warbobs dasavl eTis da samxreT-dasavl eTis qarebi, ris

gamoc aq aRiniSneba mocemul i ganedebisaTvis SedarebiT dabal i temperaturebi. Yvel aze civi Tveebis, ivl is-agvistos, saSual o temperatura perus dasavl eTSi 15-18⁰-ia, maSin rodesac brazil iaSi igive ganedebSi temperatura aRemateba 22⁰-s.

wl is Tbil i periodis ganmavl obaSi Pperus dasavl eT sanapiroze okeane, perus civi dinebis zemoqmedebiT, gamagril ebel gavlenas axdens. haeris temperatura ianvridan martis CaTvl iT (rodesac yvel aze metad Tbil a) mxol od 20-22⁰-ia, maSin rodesac brazil iaSi igive ganedebSi temperatura aRwevs 25-28⁰-s. rogorc damaxasiaTebel ia tropikul i sartyl is dasavl eT sanapiroebisaTvis, wvima iSviaTia, nal eqebis wl iuri j ami ar aRemateba 100mm-s.

perus maRal mTian ol qSi temperaturis ganwil eba adgil is simaRI eze da reliefis xasiaTzea damokidebul i. 4000m simaRI eze mTel i wl is ganmavl obaSi saSual o temperatura 5-7⁰-s ar aRemateba.

Pperus Crdil o-aRmosavl eT nawil Si, anu amazonis dabl obze, mTel i wl is ganmavl obaSi cxeli notio amindi dgas. saSual o Tviuri temperaturebi mTel i wl is ganmavl obaSi 24-26⁰-ia. nal eqebi mTel i wl is ganmavl obaSi modis da maTi wl iuri j ami Seadgens daaxl oebiT 2500mm-s.

mcenareul i safari. wynari okeanis sanapiroze, mcire nal eqebis gamo, gavrcelebul ia naxevradudabnos mcenareul oba. Mmdinare amazonis dabl obi dafarul ia tropikul i tyeebiT.

mTebSi miwaTmoqmedeba SesaZI ebel ia 3500m-simaRI emde. miwaTmoqmedebis zonis maRI a, mSral da mkacr pirobebSi ganl agebul ia saZovrebi.

5.3. brazil ia

fizikur - geografiul i Taviseburebebi.

Crdil oeT nawil Si mdebareobs mdinare amazonkis dabl obi., samxreT-aRmosavl eTSi farTo brazil iis mTianeTia, roml is cal keul i qedebic 2000-2700m-s aRwevs. Kontinentis siRmeSi mTianeTi dabl deba.

kl imati. Ggamoiyofa sami msxvili kl imaturi ol qi: brazil iis Crdil oeTi nawil i, central uri nawil i da brazil iis mTianeTi.

brazil iis Crdil oeTi nawil i ekvatorul kl imatur sartyel Si mdebareobs. Mmas ukavia mdinare amazonkis dabl obi. mTel i wl is ganmavl obaSi wynari, cxel i amindebia. Haeris temperatura 25-28⁰-ia, RamiTac ki temperatura iSviaTad ecema 20⁰-ze dabl a. dRis meore naxevarSi xSiria wvima, wl is ganmavl obaSi modis 1500-2000mm nal eqi. xSiri wvimebi iwvevs amazonis gadmosvl as kal apotidan da mimdebare teritoriebis datborvas.

Bbrazil iis central ur raionebSi ekvatorul i musonebis havaa. Ggansxvaveba wl is Tbil da civ periodebs Soris ramdenadme SesamCnevia. SedarebiT gril i periodi gval viania.

brazil iis mTianeTSi da aRmosavl eT brazil iis sanapiro zol Si mTel i wl is ganmavl obaSi gabatonebul ia samxreT-aRmosavl eTis pasaturi qarebi. Aam qarebis Semxvedrad ganl agebul ferdobebze nal eqebi bevri modis, 1500mm-ze meti wel iwadSi. maqsimal uri nal eqebi wl is Tbil periodSi modis. temperaturul i reJimi mniSvel ovan wil ad damokidebul ia adgil is simaRI eze da rel iefis

xasiaTze. sanapiro zol Si mTel i wl is ganmavl obaSi cxeli notio amindia. Ppl atoze, daaxl oebiT 800m simaRI eze, kl imaturi pirobebi ufro keTil sasurvel ia- zafxuli zomierad Tbil ia, ianvar-Tebevli saSual o temperatura 20-22⁰-ia, xolo civ periodSi (ivlisi) temperatura 15-17⁰-ia. uaryofiti temperatura brazil iis mTianeTSi mxol od zRvis donedan 1500-2000m simaRI eebis maRI a aRiniSneba.

mcenareuli safari. amazonis dabl obi dafarul ia xSiri tropikuli maradmwane tyeebiT. tropikuli tyeebi gadaWimul ia agreTve qveynis aRmosavl eT sanapiros gaswriv.

samxreTis mimarTul ebiT kl imati ufro mSrali xdeba da Sesabamisad tye iSviaTdeba. brazil iis central ur nawil Si tropikuli tyeebi da savanebi monacvleoben.

ZiriTadi sasofl o-sameurneo kul turebia yava, Saqris l erwami da brinji. Bbrazil ia samSobl oa ananasis, kakaos, vanil is.

5.4. argentina

fizikur - geografiuli Taviseburebebi. qveynis aRmosavl eT nawili vakea (l apl atis dabl obi), sadac miedineba mdinare parana Tavisi SenakadiT paragvaiT. dasavl eT nawil Si andebis mTebia, sadac kontinentis umaRlesi mwverval ia- akonkagua (7040m). Aandebi aRmosavl eTSi gadadian paTagoniis pl atoSi.

kl imati. Mmeridianis gaswriv didi ganfenil obis gamo kl imaturi pirobebi icvleba. Crdil o- aRmosavl eTSi subtropikuli sartylis atl antikuri kl imaturi ol qia. Crdil o- dasavl eTSi - kontinenturi tropikuli da

subtropikul i. samxreTSi – zomieri ganedebis wynarokeanuri havaa.

wl is civi periodis ganmavl obaSi tropikul da subtropikul sartyel ebSi, sanapiro zol Sic ki yvel aze civi Tveebis (ivnisi da ivl isi) temperatura ar eSveba 10^0 -ze dabl a, xol o central ur raionebSi Seadgens 14-16⁰. samxreTis mimarTul ebiT zamTari ufro civi xdeba da cecxl ovan miwaze temperatura 1-3⁰-ia.

zafxul i Crdil o-aRmosavl eTSi da sanapiro zol Si cxelia, ianvar-Tebervl is saSual o temperatura 20-22⁰-ia, xol o okeanedan daSorebul raionebSi 25-28⁰. am ganedebSi 3500m simaRI eze yvel aze Tbil i Tvis temperatura daaxl oebiT 12⁰-ia. yvel aze civi zafxul Si kunZul i cecxl ovani miwaa (9-10⁰).

Nnal eqebis ganawil ebasac rTul i xasiaTi aqvs. Crdil o-aRmosavl eTSi daaxl oebiT 1000mm nal eqi modis. Qqveynis siRrmeSi nal eqebi kl ebul obs. Yyvel aze mcire nal eqebi modis argentinis samxreTSi da paTagoniaSi (150mm wel iwadSi). wl is civi periodis ganmavl obaSi SesaZl ebel ia Tova, umTavresad samxreTSi, magram Tovl is safari mxol od mTebSi yal ibdeba.

mcenareul i safari. argentinis teritoriis didi nawil i ukavia pampas, anu stepebs nayofieri niadagebiT. amJamad pampebis mniSvnel ovani nawil i gadaxnul ia, an dakavebul ia saZovrebad. dabl obebSi subtropikul i tyeebia, paTagoniaSi – buCqnari.

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