

Ih mkeh\bayZe_]ZgpZyaj_b_klZ^byjhklZbg]_g_l bqekdbgu_`beuhkZ^dZhdhc ihcfueylkZjblbiZ

Z`beujZkrbjyxsbdkyjorh]jZgbpku_ahggHZeHyh

]`beukfheh^ufbkldZbbklmi_gqZ[lhdh\ufdhglZdjZfb

\`be,ue_`ZstgZ,3-0,5 f gb`]jZgbpku_ahggihhZb\Zgpryglh\

@beu_j\uo\mlb ihhlgk ydijZklmsbfhjnheh]bq\ukjZbZxikyb^_iheb]hgZeZgbdh\hj]hev_n@beulj_lv_]hbiZ gZoh^y\kyklZ^bb aZohjhgdchgyk_j\Zpbjb)ev_nijdy\eyx.lky

<lhjnygb,dZdju\Zxs bhoqlbh eg hkl\hx^hjZa^_ei yhguljZgkl\Z

III ahgmkeh\beynhjfbjh\Zgibylhjg'tbev g uov^hkZfu[eZ]hijbylg_u_(\ukhdZy^bklhkyvbadk_j^g_]h^h\ui_jZlmijuh)^lhwlhfjhZgbpZ jZkijhkljZgkbgjy_g_l bq`kabb\ZlhjnygbdkZosZ_lkZyfg h xhg_ _^h7-68 iZjZee._eb

Ihkdh evdhrkgh\gZzkkZlhjnygbdhgZ k__j_AziZ^gHkb[bjb gZdZieb\ZeZkjv h'ebfZlbq_kldih'f'hm,fZih]^Zlf_qZeZkYjZ^Zpby f_jaeubjh^hajZkdevg uov^h'g b g_fh`_[ulv^j_\g__wljh]fh_gb

Kbg]_g_l bq`kell\lhjnygb dZbj_q_gZx`ghfYfZe\,mklv_\hc qZklj OmfyoZe_\udjblhdXjb[.y A^_kv h[ju\i_j]hcl_jjZku \kdju\Z_ljkyof_ljh\kuehZ\lholhg g e hlojZ aeh`b'r_]h kryZhdjuluc bih^klbeZ_fuk dZfE_ ^ygub eukh\k_fbjbagZdZfbg]_g_l bq_kdh]h nhjfbjh\Zgib ygbau\Zx\jogbic_kqZg'ljcbahg]llhjn b mibjZxiky ih^klbeZx'sbk d k ukh'Z e[h ev r_f,rbjbgZD,2^h f,jZkklhyg_b^m gbb 4-6f. ljh^he`Zxs bckycqZkklkbg]_g_l bq_ek^byg u'oe k \Zebdh\uih'eb]hgZZoh_\jogh g Z[ex^Z_lkya b g g b pnygb gZoh\ YfZeZbjhl_Gh\h]hjlZlvvy\q_g[955].

>j_\gbkbg]_g_l bq_ek^bygub eukhkj_ ^hlhq\ gZe ex\bZevguo hleh`_gbyphclhjhclj_lv_lcjZk(0), ZIZd`oZjZdl_j'gukbevgh ev^hgZkus_g'g'g'h-e hlgub leh`_g bchgpZIZaZgp_\kdh]h - gZqZe aujygdh]hf_g(0¹⁻²). Hgbh[jZamkZfu_djmigukdhie_gibylhjgh `bevgh e h^ZZ[e

X`gZyjjZgbpZkijhkljZg^g_b\ygbkcbg]_g_l bq`kell onkdZ^hky 68°30' kr. gZi-h\YfZ e^h70° kr. \ \hklhq gchZckl-bu^Zgk dihh]hZ=jZgbpZ ahgjZa\blbjy_\gbkcbg]_g_l bq`kell)ojZkiheZ]Zijbk yjg gZ00 df x`g_lahgu

<hlebbqbljZklms b'p_\gbkbg]_g_l bq`kell)jbgZ^e_dZl b kem j_ebdih\wgZih_\joghkdZdjZ\belg_ijhy\eyx.lky_jomgbihdjulu iZqdijbjbahglZ eeg b-kluloZ^dfm'sghklv* f be`_ZdgZqbl_g'g'h]jZgbpku_ahggih]hlZb\ZgByk dexq_g'k'klZ\eylxlevdihb[jh\hgg_u_mqZklldbjZk]^_gZf_kl_\ulZb\Zxs b o^hh[jZamx]kym[hdbh]hldb_h\jZ]b [Zc^`ZjZk e m`ZsgZ^`_guf_rbnjh\hqqgi'bagZdgZebqby `bev g uov^hV_e_l_jjZk

Ih khklZ\rb kljh_gbxj_ebdih\ukbg]_g_l bq_kdbu__jog_ie_cklhp h'gh'uogbyeyl gZe ^yge v^hjmglh\ukf_rZgg_u_@beu_j\h]hbiZ- wlh[ugguih\lhjg'tbev g uev^u\ ebl_jZlmm]__g_h^ghdjZilghZg g'eyZagujZchgKKKJE_ ^h]jmgih h'eu]_g_l bq_kdb ij^_klZ\eyxhl[hc`_ih\lhjg'tbev g u[h]Zah\Zg'k,l_fhlebbqbgf h fhjhah[hcbj_u_sbg a^_kaZihegyxglkybklh b^hZjZa`b`_gg'p'rhglhf ljb_]haZf_jaZg b pfbjmxlkygdhg_kdhek vZg lbf_]j b_\^ygeubedb, iZjZee_e vkg ugdZj_sbgp ev^bklj jmg l@beukhklhy sbae_ ^h]mg lZ \klj_qZx]k'gdh lhev'dih_kqZghul e h`_gbyol_jjZk.

Kf_rZggùbeujZa\blu
rbj_ < [hevrbgklk_emqZ_\
_jogybo qZklkhklhbba
qbklh^Zijbmjhq_hgZqgh
d ev^hgZkus_gkgrf_kyb
km]ebgdZkcf_gghαZpbb.
Gb`gyqZklve_^h]jmgthbZy
jZkiheh`_gZ_] ^Z\ [he__
]jm[h^bki_jkguojZaghklyo
Zeex\h\ibkZg`b_eijb_ ^_gh
\IZ[ebp_

KZfu_ fhsgu_
kbg]_g_l bq`kæub_lf_q_gu
km]ebgdZokmi_kyblhjhc
l_jjZku j. GmjfZoz
(p_gljZevgufZe <ukhlZbe
12 f, rbjbgZuoh^Z_jo3m f,
bgh]^Z f; jZkklhygfb`^m
gbfb 5-6 (jb.k2). JZaf_j`be
]_g_jZp`be_\ukhdhi]hjy^dZ
agZqbl_ fvgvr_\ukhlZ0-
1,5 f, rbjbgZ5-1,0 f. E_^ygu_
`beuidjulukeh_f (1,5-3,0)
g_gZjmr_kæuzh`_e_ag_gguo
km]ebgd`hh`le h`_gdjolv_c
l_jjZkuiZjZf_ljue_^yguo
e_^h]jmg`oh`bef_gylky\
ijhkljZgkl\Zd\ukhlZbe
khklZ\egZx]_YfZeZkj_^g_f
3-4 f (ahgZ) b^h10-12 f gZ
k_j_ahgZ

OZjZdg_hj qlh_gZ
=u^Zgkfi-h\kbg]_g_lq_kdb_
`beu\ Zeex\bbk_ol_jjZk
jZa\blueZ[q_fgZYfZeWlh
h[klhyl_evkk\hazgkdhj__
\k_]h, k [he__h^ghjh^guf
i_kqZg`kklbklZ\Zeex\lyZ
=u^Zgkdh`b,ke_^h\ZI_evg h
kf_gvr_`ceZ`ghklivxjh^h
\j_fyjhf_jaZgby.

Djmigu_ b qZklh
\klj_Zqsb_ky ^j_\gb_
kbg]_g_l bq_kdbu (IZ[.e
mklZgh\egba_jg[h`ehlguo
hle h`_gbyoZ k_j_ahZiZ^_
=u^Zgkdh]hi-h\Z A^_kv
fZdkbfZevgZlZe_^yguòe

^hklb]Z2lf bijbf_jgkhhil_lkl\fm_sghklev^hgZkus_gkgruo_kbc
km]ebgd`Rb\jbgZbe\ _jog_qZklh3 f. GZi-h_YfZæ_^yguòeu\

hleh`_gbyl\]h ajZklZdjulhev d h^hebg_Xjb[_d phd h e l h j h o
lj_lv_lc_jjZklZdbfi[jZahfkg h\gfZyk kZj_\gklobg]_g_lbq`k e l b o u o
ev^h\hleh`_gbyjoo g_i]h_cklhpi_h gZulZe h b k l u k r i _k y f k m] e b g . d Z f b
GbdZdb e _^k h \j_f_gg e y h h h [jZah\gZ_g] ex^Z,_ZkyZih_joghklb
^j_\gbbeuujZ`_ghuq_gv^dh

< jZkijhkljZg_g b \g b o h \l h j g `b e v g u & b g] _g _l b q _k d b o \
mklZgZ\eb\z_l d z y Z d h g h f _j g k k i l v j \u , o b k d h i Z _f k u b g] _g _l b q _k d b _
`beujZa\bluk__jg q z k l o b a f _g g h k h b u b II). <III ahg\hahf`gu
_ ^ b g b q g g u z o h ^ d z d h] j h ^ Z q Z k l b q u h l Z y \r b `o b e g Z [h e v r h e m [b g _
[Rf_e_\1965]. <h\lhjuok ijh^b`_gb_gfZ\hklhd]^_debfZ[he__
dhglbg_g,l d e e g q _k l b o] _g _l b q e k d y o b e v ^ h] j m g l h b e b Z e e x \ b b
l_jjZk f _g v r Z , z k j z g b p z j Z k i j h k l j Z g i _g j b y \ b] Z d k k y _ (j r b k l) . <
lj_lv b o g Z k _ \ _j = u ^ Z g k d h h h Z h k h [_g g h j h d h j Z a \ b l a a _j g h e h l g u _
hleh`_gbyzd h i e _g b l h j u b h i j h \ h ^ Z e h k g h \ j _f _g g j u h f f _j a Z g b b _f
`bevgufev^hh[jZah\ZgZ_i-fh\ _YfZei h ^ h [g u h l e h ` _g b y l j _ q Z x l k y
wibah^bq_pk_dgljZevgZklb

Wib]_g_lbq_ek d y g u e _ ^ h] j m g l h ` b u e u \ f b g _ j Z e v g j u r o g l Z o
(jZklms b i h] j _ [_g g u I , I I b I I I a h g z z j Z d l _ j g e u k _ o w e _ f _ g j h e v _ n Z
(j b k l) . H k g h \ g f Z y k k i z] j _ [_g g l u b j h ^ h e ` Z x s j h c k l w i b] _g _l b q _k e d b o
jZaf_s\gZn]ebgbk h i j k o d b o h a _j g h e h l g u b e h ` _g b l y d a h g .

JZklmsbwib]_g_lbq`kdebu\ fhjkdbdkm]ebgbk h u e h ` _g b y o
gZ[ex^ZegZf b k _ \ _j g q z k l i b h \ Z y f Z (- I I a h g . u M n Z d l h j b b j ^ u y q Z
^hebg_K-YoZ\jZchgaG_c h e _ ^ y g u b e u \ b ^ m a d d e b g v u k h l h c
2,5-4 f i j b r b j b g \ \ _j o g q z k 0,5-1,5 f \ k d j u \ Z x l i k y k _ a h g g h l Z e b f o f Z
] e m [b 0,4-0,5 f . G Z] e Z \ g h y f Z e v k d v h ^ h j Z a ^ w e b] _g _l b q _k e b \
f h j k d b o l e h ` _g b y d l b] Z x l f - 5 h \ u k h l b 1-2 f i h r b j b g \ \ _j o g q z k l b
D j m i g u w i b] _g _l b q _k e d b e v ^ Z k _ \ _j g q z k l b u ^ Z g k d i h h j Z a \ b l u
k \ _j o l n k e _] d Z l h j n h \ Z g j u k o d b o h a _j g h e h l g u e] e b g e z o a h \ v j o
X j b [_ g Z f i j b o h ^ b e h k v _ l e v _ ^ y g u b e u k h l h 4-6 f b r b j b g h \ c \ _j o g _ c
q Z k l b h 0,5-1,0 f . > e y l k _ o w i b] _g _l b q _k e d b o h j k d b] e b g z o k m] e b g d Z o
o Z j Z d l : j g j u \ b e v g z e b g h \ b ^ g z j f , Z q _ l d b b ` _ e _ a g _ g d h u g l Z d l
f _ s Z x s _ i h j h ^ h e j Z \ g h f _ j g j z k i j _ ^ _ e i j b f _ k _ i c k q Z g b h j n y g u o
q Z k l b p .

< lj_lv_ahgjZklmsbwib]_g_lbq_ek d y g u b e u i j b m j h q _ d u
l h j n y g b . d Z Z d \ ^ h e b g z _ o d S m q v l y E h g] h l] Z g \ l h j n y g b d z o u k h d h c
i h c f _ b i _ j \ h c g Z ^ i h c f _ g d h j z k m k l Z g h \ e k h l j _ f _ g g h [j Z a h \ Z g b _
w i b] _g _l b q _k e l u c k h l d h l h j u k h k l Z \ e y f l i j b r b j b g \ u o h ^ z i , 0-1,5
f . < j Z c h g _ K Z e _ q Z j e h i m , 1963] b i h k E Z [u l g Z g] z g b e h \ Z , 1962] _
L Z a h \ k d i h] h Z K h e h f Z , 1963 \ l h j n y g b d Z d ` h [g Z j m ` _ [e b a d b h
j Z a f _ j Z w i b] _g _l b q _k e d y g u b e u G Z j h k l w i b] _g _l b q _k e b e v ^ Z
l h j n y g b d z o z h a . K h \ _ l k d h d Z a u \ ; Z B l < l x j b g m k l g k h h [s _ g l h e v d h
: . B l h i h \ b L B K f b j g h [1964] i h j _ e b d l h \ u b e Z l l h j n y g b d Z f u k _
K Z e _ f Z e b a h \ h [b ^ _ e Z x i j _ ^ i h e h ` _ g d l h « ... ` b e v g e v ^ h h [j Z a h \ Z g b _
i j h b k o h ^ b e h k b g] l h j r b g g z d h i e _ g b x

J_ebdlh w i b] _g _l b q _k e l u b e _ ^ y g l u e _ ^ h] j m g l h b j h d h j Z a \ b l u
\ Z e e x \ b b j j Z g Z i - h \ _ Y f Z e a h g u II). Q Z k l h g b k l j _ q Z x l k y [g Z ` _g b y o
f _ k l k k b g] _g _l b q _k e d e z b b i _ k q Z g z e e x \ b z a f _ j u b e g _ [h e v r b _
\ u k h l Z 5-3 f , r b j b g Z \ _j o g _ q z k l 0,5-1,0 f . < l h j n y g b d j z e b d l h \ u _
w i b] _g _l b q _k e d b h [g Z j m ` _ x g _ l h e y j g h p l j m] Z q _ l \ _j l b q a h g _
[; _ e h i m , 1963] . F h ` g h i j _ ^ i h e Z , Z l l h x ` g Z y j Z g b p z j Z k i j h k l j Z g _ g b y

ijhoh^b_l`^m64-65° kr. Kh\j_f_ggfujaehlgmkeh\by ahg\ukhdb_ kj_^g_]h^hl\ufi_jZlmjthjh^b_g_[hevrb_fi_jZlmjg]ujz^b_glg_ [eZ]hijbylkl\mbe A^_krbjhdhjZa\blbhemqblejfhhdZjklh\u_ ijhp_kkih`bevguév^Zfh[jZah\ZgklZlhqge-b]hgZevjghe]h_rbz ik_\^hfjhjghZa_kl\ulZy\rb`bevguéov^h\lhih,\1958; ;Zmeb@f_e_\, 1962: > m[b,d062; ;_ehim,d063Z

:gZeblajh_gbyZkijhkljZg]gbylbq_klithdi h\lhjgh-bevguo ev^h\AZiZ^gkbc[bjcha\heoZfgZko_fZlbq_dkZjh\cu^_ebdvlujahgu kgZb[hooZjZdl_jguelgbbdbiZfbbevguéov^h\Z[.ed). H^gZdijZgbpu ahg_bf_xbzjZdlk]zh]hecbg.bBogm`gilmgbfZdZdhkl_i_gguj_oh^u hlh^gachgd^ajm].hlcZcbkdhiZ_kbg]_g_lbq_bkedubII ahgg_dhlhjuo kemqZk bj_qZx\klyI ahg_ZjZklms_kbg]_g_lbq`kedub\ihcf_gghf Zeex\blbibqgu^eY ahgufh`ghh[gZjm`bl\hII ahg_Wlkh\yaZgh g_h^ghjh^g[h_khveh]]hh]jZnbq_hk[dkhZgh\db^_e_g@uhg,ZdhlhjZy h[mkeh\eb\Zehg_gfyaehlguo mka hgbyo

BajZkkfhlj_gbzylub lZ[ebpyukghqih\ jZkijhkljZg_i_gblthjgh `bevguéov^hgZl_jjblihbAbZiZ^gkbc[bjksms_kl\m_lldZdZdhghf_jghklv Kh\j_f_ggbu^j_gbkbg]_g_lbq`kedubjZa\blu kZfhk__jgkqZklb gbaf_gghklb(j08-70° kr.). X`g_wlhrbjihiu_i_jbh^_jZ^Zp_bjtaeuo ihjh^h\j_fydebfbZlbq_khdh]fmfZ__gkbg]_g_lbq`kedub ulZykb h[jZah\ZgkgZfbof_kl_ik_\^hfjhjgha.ke_ah\Z\raZ]_fihohéh^Zgb_ h[mkeh\befbjh\Zgbevguév^h\ lhjnygb,dZdhib\rb aZyj_fy ihl_ie_gbzdbh[jZahvI bII ahgZbevguév^ujZaf_s_guév^bkluo fbg_jZevbjumogI,ZoIII bIV - \hkggh\ghfv^bkl]uoe hp_gghujnygb.dkZ o ijh^b`_gbgZ hklh\dh[eZk[lhve_dhglbg_gIzedvedhfZ]jZgbrk_a hg kf_sZx\kyZk__j_klhjhjg[m_e_gbadb]ohbah,l_kf_e^m_yh[s_faZ jZklbl_evgafbgZfbZdh`_kf_s_gbjjZgbpZkijhkljZg_i_gblthjgh `bevguéov^hihdZau\ZyZk\h_cZjl].: Rmfkdabc;. B <lxbjgHkgh\ u]_hdjbehe]bb, 1959].

HkZ^dhgZdhkelhgppZaZgp_\kjdh]hgh]hehp_khZjh\h`^Zehkv h^gh\j_f_gguhff_jaZgbb_jhklhkbkg]_g_lbqi_k\dbpg`bevguév^h\ gh[eZ]h^ZjybfZlbq_kedbf_g_gbyáfh`ghk hbojZg_bgdjZaguchgZo gbaf_gghklbg[ure`bbgZdh\.

ljhba\h^kl_ggZmcbgk_ah\ZI_evkdbc
bgklblmhbg`_g_jgudukdZgbyf
\kljhbl_evk#hkklijKKKJ

EBL?J:LMJ:

:g^j_<AG H[ke_ah\Zm^jhb_e_gviZkl[bkihfhsvkZfhe._IZ Lj BglZiheyjg. a_fe_au_eibYK_jbyhe_g__h93&l\Z ;Zmeb@, Rf_e_ EF. H ke_^Zq__gbdjbh]_ggijbp_kkZ\ _jog_ie_cklhp_hgehüogbyòg_]h_q_gpbY[b.K[<hijhkdbheh]bb ijbbamq_gbbq__hjlh]gucb.c.BFa^h: G K K K 1963.

;_ehim0h;\Z\hijhklm[hkh[_gghjZg`bblg/h]he_lg_f_ja_phu^o gZk__jahZiZ^AZiZ^gKb[bjbiha^g]fhehp._g[Fgh]he_lg_f_jaeu_]hjgui_hjh^jZaebqgZohgK K K K F., Ba^h: G K K K 1963.

;_ehimo0h\ZHkh[_gghjZg`bblb`bevgilm eb]hgZevjghe]h_rgZ k__j_ AZiZ^ghc Kb[lg]K.KBak_jb]y_h]j., 1965, 4,

=hjh^d;hG lhq\ u=u^Zgkdmg^j\j =_hDhf:G KKKJui 37,
1932.

>Zgbe @bevgeu^b[m]jbklhjnymbjZchg.ZKZe_oZi\Z
BglZf_jaehh_^_gby b[jmq_IX. Ba^h:G KKKJF., 1962.

>m[bdbB G_dhlhj^ZgguhdebZlmjog i\ cklhpgZ\j_
AZiZ^ghc Kb[a]:G KKKJ_jby]_h962, < 6.

EhiZibG: >g_g\gdhjmogZgwdk^bpbbl18AZibkd bHI. 28,
\ui2, 1897.

Hkgh\uhdjbheh]pae hih_^_gZk]vF., Ba^h:G KKKJ1959.

Ihih\.:B ;ehqguc ev_gnZk__jAZiZ^ghc[bjb\;hevr_a_f_evkdhc
lmg^j<hijhknub.a]_h]j. iheyjg.k\jZg F=MF., 1958.

Ihih\.:B DZjIZf_jaehh]ghfhjnheh]bq_(kdbb]eypbZ)evguo
h[jZah\ZgZlc_jjb]hjbK KJK[<hijhknub.a]_h]jheyjgukdjZgF=M
1959, \ui2.

Ihih\.:B DZjIZh^a_fg h]h_^_g_gbyg(hfc_jaeh]gZl_jjb]hjb
k__j?Zjhi_ckd]ZckIKKKJ Kb[bjbK[<hijhknub.a]_h]jZfn_jaehh_^_gby
i_jb]eypb.Z h]ghheh]bb, FF=, 1962.

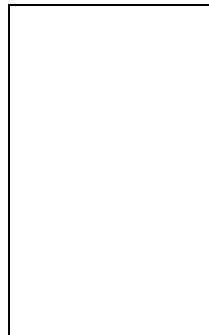
Ihih\.:B, KfbjghLZB Ih^a_fg ec^ha_jg h ehlg hdeh`_gbyZo
k__j_ AZiZ^ghc Kb[bjb. <]hkhggZk jby\h]jZn1964, < 2.

Ivy\q_gdB;Gn]jbklu_ lhjnyGgBab^h:G KKKJ1955.

KhehfZibG Ih^a_fg ev^u lhjnygbdZoi heyjg jZchgh\kdh-
LZah\kdfh]m_j_qKy.Fgh]he_lg_f_]h eguihjh^jZaebqgZohgh\
KKKJBa^h:G KKKJF., 1963.

Rf_e_EF. Ke_^djbh]_ggye_gbc__jlbqg uoh`_gbyZiZ^ghc
Kb[bjbb boize_h]_h]jZnba_gZch.gbj_ <k_kkh_.sih bamq_gbx
q__jlbqgh]h.i.GbhhZb[b]p63

Ссылка на статью:



>m[bdbB Hh\lhjghbevgeu^u \ AZiZ^ghc[bjbBa_klbyK KJk_j
]_h]j.Z1966, < 5, k73-80.