

ARCTICLU SIVUNNIURUTIT UQAQTUAQ

●●● Angiyuqtuq nakuruallaktuaq inuusiq Saanganimun tapqua qiniraa

QAQSUQSIIVIK 2021

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Nunam Tamaita Qiniraa Savaktiit Canadamun (NRC) Arcticlu sivunniurutit , savaktuut atautchikun governmentmi, Nunaruqqaqtuatlu saangani inuuniarvik, savaktiilu ilisaqtuut, pimaggaa paqitaa tadjvangatchiaqtuaq ilisaqtuaq taamna sitamat qiniraa: saangani aullati; tariuq uqquqtuaq; pisuktuaq sanayuaqlu; inuuniarvik sanayaat. Pisuktuaq savaktuat ikayuqtuaq ilitaqlu mikiyumiq sanayuaq Saanganimun, angiyuq inuusiq Saanganimiut. Taigugaa ukiuq piksaq ilisaqtuut taamna nakuruallaktuaqlu taimaggaa tapqua sitamat qiniraa makpiraaq.

UQALLAUN SAVAKTII ANNE BARKER

Asiin tallimat pingasunik ukusqmik taimangga taamna NRC sivunniurutit takunaqtuq savaktuat savaggaa qiniraa. Isaktuaq taamna Atausiq sivunniurutit, NRC Arcticlu sivunniurutit 2013mi, asiin isaktuaq August 2014mi. Taamna, NRC piliunlu savaktuat qiniraalu sanayuaq asiin nakuruallaktuaq, ilitchuriniat nutaraqlu surautat-qaritaulyaq nakuruallaktuaq, iyugaa tutqiktuq taamna governmentmun, savaaklu inuuniarviklu.

Una makpiraaq qiniraa sivunniurutit taimaaga, qangma NRC Arctic qiniraa taimangga! Taigugaalutin taamna qangma 2020mi qiniraa (ii, pisuktuaq taamna anniarun), ila katitait makpiraaq qiniraa tapqua saangani igluum Cambridge Bay, Nunavutmi, qiniraalu takunaqtuq isaktuaq tapqua Umiaqpak Tadjvangatchiaqtuaq ikayuqtuaq saangani tariuq kappianaqtuatlu uqquqtuaq tuyugaa surautat savaktuat atugaa. Taamna 2020 ilisaqtuaq savaktuat qiniraa, tadjvangatchiaqtuaq qiniraa savaktiitlu ilisimayuaq nutaaq isumalu tapqua sivunniurutit nakuuyuq.

Savakuvit NRC Arctic qiniraa, apiqsilutin qanuq savak-naiktugut isaktuaq qiniraa savagaa ilisimayuaq ikayuqlutin qinigaalu makpiraat katitait kiuyuut tapqua R&D pisuktuat. Apiqsisaqtuusi ilisimayuaq atautchikun taamna sivulliqmi qiniraa qisuaqiyaa, taigugaa NRC makpiraaq katitait (NPARC) qiniraa makpiraaq tapqua asulu aglaktuaq.

Asiin, quyanainni tamaita atautchikun savaktiit tapqua inuusiq savaaku. Quvaisuktunga illisimayuaq savaaklu. Illisaktuat savaktuat taamna nutaaq taimaanga ila qiniraa Arcticmi Canada saanganilu, taimaggaa sivunmuk isumamun atautchikun. NRC savaktiit nikaittuq ungavausigaa taamna qiniraa isaktuaq. Ilisimayaa taimaktuat, tapqua isuma, qisuaqiyaa, ilisimayaa, taimaggaa savaktuat taimaanaqtuaq. Quyanainni tamaita.



SAVAGAA NUTAAQ

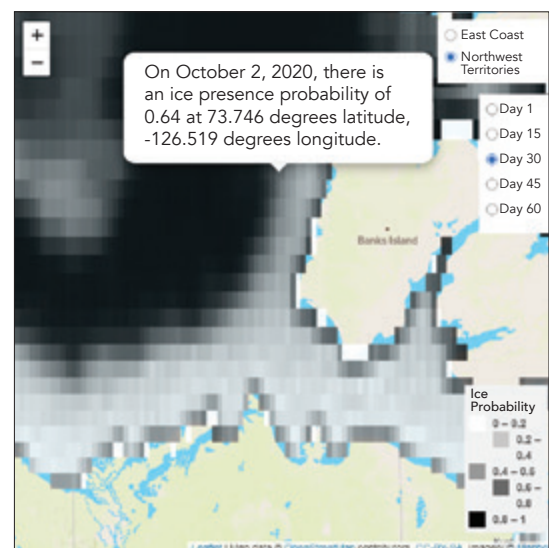


SAANGANI AULLATI

Nakuruallaktuaq Arctic tuyugaa sangiyuk CASRASmi

Taamna Canadianmi Arcticlul Tuyugaa Nangiarnaqtuq Takunaqtuq Savaktii (CASRAS) nunauyaq qaritauyaq takunaqtuqlu tutqaanaittuq Arcticlul kisitchiun makpiraaq – taamna siku – iluaqtuuaq tuyugaa savaktuatmun. Isaktuaq sanayuaq 2016mi savaak manik taamna NRC Arcticmun savaktuat, Aullati Canadami ilaksaqtuuaq CASRAS savagaa manik qaitaa taamna Nunam Tamaita Simmiqtuat Iglum Manik (NTCF) 2019mi. Savaktugut taamna tallimat-ukiuq savagaa qaitaalu suratat tapqua saangani savaktiit nakuruallaktuaq tariuq makpiraaq isaktuaq, sungiqutigiyaaalu uqqituaq uataani Arcticmun. CASRAS qaritauyaq qaitaa Government Northwest Territoriesmi (NT) sivulliq 2021mi, ilisaqtuutlu, tapqua savaat tariuqmun (ila inuuniarvik qaitaa) atugaalu savaktii taamna kainaqtuuaq Arcticmi auyaq tuyugaa ukiuq. Taamna Government Northwest Territoriesmi, allauyuat savaktiitlu Aullati Canadami, Canadian Coast Guardlu, qaitaa ilisimayaalu kisitchiun makpiraaq nakuruallaktuaq savaktii. Nutaaq aglaat makpiraaqmun CASRAS atugaa Defence Research Development Canada (DRDC) Department of National Defence, savaktiitlu Aullati Canadami Marine Safety and Security. Taamna Canadian Coast Guard atugaa CASRAS 2018mi ikayuqtuuaq taamna takunaqtuq siku

nangiarnaqtuqlu allauyuat kisitchiun makpiraaq qaritauyaq, inuuniarvik ilisimayaalu tariuq ilitaq tamaita Canadian saangani. Taamna qaritauyaq angiqtuuaq atugaa takunaqtuq tapqua siku makpiraaq, nakturusiq taamna siku ibyuyuuqlu sanayuaq, tamaan Arcticmun Siku Savaktiit Tuyugaa Savaktiilul Siku Kisitchiunlu Ubluriaq Nangiarnaqtuq Qinirautaa tapqua umiaq. Avayaittuq savaktii mikliyuaq ungavausigaa mikiyuqtuuaq qaritauyaq tamaita Saangani. Qaritauyaq atuatchikun kisaini pisuktuuaq

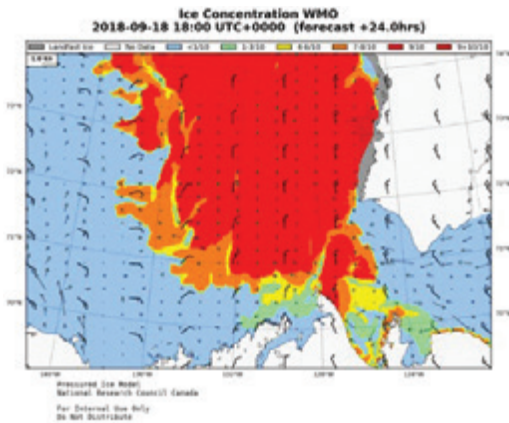


Siku tariuqmi taimaunga atugaa ilisaqtuut allauyuuaq, taimaaga Uataani Arctic nunami

kisitchiun makpiraaq qaritauyaqmun nutaaq siku makpiraaq; katitait sivulliq makpiraaq kisitchiun pimayaa qaritauyaqmun qasagiyya angmagaalu qangma nutaaq aimatqutakmun.

Nutaaq sanayuaq CASRAS qaritauyaq tamaan nutaaq tadjvangatchiaqtuaq takunaqtuq siku taimaunga. Taamna NRC Tariuq, Sallirq, Kuuk Ingniqiyi (OCRE) Qiniraa Savaktuat siku taimaunga savaktii atugaa malrunnik-ublumi, piksaq takunaqtuq siku taimaunga tapqua atautchikun CASRASmun. Angiqtuq tapqua atugaa takunaqtuq sikum ibyuyuaq, tariuqmunlu ivvuit taamna uqqituaq immakuaqtuaq. Taimaunga ukiuqmi, OCRE isaktuaq atautchikun sivityumik (aglaan sitamakipi-aq-qulit ublumi) siku taimaunga. Tapqua sila taimaunga angiqtuq tadjvangatchiaqtuaq takunaqtuq ila taamna unga-vausigaa sila allayuaq taimaunga qanuq sanayuaq siku. Taamna NTCF savagaa, OCRE nakuruallaktuaq tarium ilisimayuaq katitait kisitchiun, atautchikunlu ikayuqtuaq "paluktinaq katitai kisitchiun" illisaktiit savaktuat tariuqmun allayuaq ulapittuaq. Savaktuat Aullati Canadalu, uqqidjvikmun (umiat uqqidjviknaiktuat nangiarnaqtuq) katitait kisitchiun CASRAS nakuruallaktuaq, nutqiuqtuaq mikliyuaq tadjvangatchiaqtuaq isuma nangiarnaqtuq Arctic tariuqmun. CASRAS angalatchiyi tapqua atugaa takunaqtuq tuyugaa surautat annairguvit Arcticmilu tapqua qiqumayuat nunaam, asiin nakuruallaktuaq uqqituaq isaktuaq taamna tariuq savaktuatlu taimagaa.

Lisaqluutin kiilu: nrc.canada.ca/en/research-development/products-services/technical-advisory-services/canadian-arctic-shipping-risk-assessment-system-casras



Takunaqtuq nunayuaq tapqua siku katitait kisitchiun taimaunga.





PISUKTUAQ SANAYUAQLU

Igliqtuaq Sikukpak Tiksiqtuaq Sanayaa tapqua nunaam savaktiit inuuniarvik

Sikukpak isuma nangiarnaqtuq aulayuaqlu tibliq-sina atuatchikun inugiaktut imaqmi Canadian imaqlu, sila-allayuaq, takunaqtuq angiyuq asiin kiilu sikukpat aulayuaq kiluani sukun Arctic imaqmi. Takunaqtuq, isuma taimaunga tiksiqtuaq apqusiniq tapqua sikukpak nakuruallaktuaq uqgituaq tuyugaalu tibliq-sina niuqtugaa savaktitt.

Aglagaa **taamna 2018 makpiraaq**, taamna Sikukpak Tiksiqtuaq Sanayaa uqallautiyaa nunaam savaktiit taimagaa sikukpak sivulliqmi ilisimayuaq Canadami (Canadianlu Siku Savaktii), Nunaam Statesmi (Nunaam Siku Munarilutin, Nunaam Siku Savaktiilu US Tariuq Qiniraa Savaktiit), Norwaymi (Norwegianmun Sila Ilisarvikpak), Denmark (Danish Sila Ilisarvikpak) Argentinami (Sistema de Información Glaciológica). Taamna nunaam inuuniarvik pisuktuq atautchikun qisuaqiyaa tapqua atugaalu nakuruallaktuaq Sikukpak Tiksiqtuaq Sanayaa ikayuqtuaq aulayuaqlu tibliq-sina savaktuat tamaita tariuqmun imaq sikukpak taimagaa. NRC savaktuat isuma qangma Sikukpak Tiksiqtuaq Sanayaa. Qangma nutaaq savaktii sivulliqmi ilisimayuaq auqituyuaq atugaa malirutaksaq physics ilisaqtuaqlu nutaaq inumun sanayaa savaktiit sanayuat. Atautchikun tapqua University Ottawalu Carleton Universitylu, qangma savaktii ikayuqtuat allayuaq taamna sila tariuq sivulliqmi ilisimayuaq sanayuaqlu qaitaa ilurriyaa sanayuaq atdjigiiktuk savaktii takunaqtuq tamaita nunaam atautchikun.

Asiin, NRC qiniraa taimangga atautchikunlu qangma pingasut sivituyumiklu nakuuyuq qaritauyaqmun: sikukpak takuya, isumaliuqtuaqlu sanayuaqlu. Taamna qaritaauyaq piksagaa inuuniarvikmun. Apiqsilutin anmagaa kisitchiun makpiraaq qaitaa tapqua qaritauyaqmun. Uvagut taimangga qiniqtuaq nutaaq kisitchiun makpiraaq katitait qaritauyaqmun!

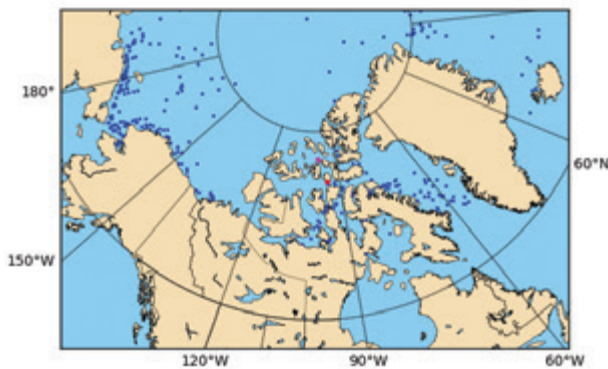
Lisaqluutin kiilu: nrc.canada.ca/en/research-development/research-collaboration/programs/project-refining-iceberg-drift-model



**TARIUQ MUNARI
SURAUTAT-QARITAUFAQ**

**Atautchikun umiat
tadjvangatchiaqtuaq
suquiqtuaq sivituyumik**

Qangma angiyuq umiat aulayuaq Ubluriaq nunami taamna mikliyuaq tairuq siku, nangiarnaqtuq agliligaa. Umiat nangiarnaqtuq uumayuaq Ubluriaq nunami avayaittuq nunami, utaqqiya ublumi annautiyaa paqitaalu. Taamna Nunaam Tariuq Tutqiktuq (IMO) Nunaam Pitquyaq Umiat Savaktuat Ubluriaq Imaq (Ubluriaq Pitquyaq) piksagaa "annautiyaa qangma qiqauyuaq nuna inukittut tallimat ublumi," sivuani taamna NRC qiniraa isuma sivituyumik (Kennedy et al., 2013mi). Ikayuqtuaq tapqua Ubluriaq nunaam suquiqtuaq sivituyumik



Taamna nakataq takkuani umiat tadjvangatchiaqtuaq Arctic imaqmi, August 2020mi

inuum utaqqiya annautiyaa Ubluriaq Nunami, taamna NRC savaktuat tapqua Aullati Canadami (TC) sanayuaq ilisaqtuaq nikaittuq taamna kisitchiunmik (Piercey et al., 2019mi). Una ilisaqtuaq qaitaa tapqua IMO tallimat-malruk katitait savaktiit Tuyugaa Savaktilu Surautat, pimagaa nakuuyuq kiuyuaq isumalu umiat tadjvangatchiaqtuaq ungavausigaa suquiqtuaq sivituyumik inukittut qaitaa ikayuqti sivuani qiniqtuaqlu annautiyaa qaiyuatlu, mikliyuaq tamaita annautiyaa. Umiat tadjvangatchiaqtuaq tapqua umiat nunami nangiarnaqtuq. Tapqu allayuaq umiaq, mikliyuaq iqalungnaiqtuaq umiaqmi umiaqpakmun.

Savaktuat TC, tapqua NRC atautchikun ungavausigaa umiat tadjvangatchiaqtuaq sivituyumik atuatchikun ilisaqtuaq. Taamna savaak atautchikun qisuaqiya isuma inugiaktut allayuaq piliun ila Canadianmi Sallirq Ilitaa, USmi Sallirq Ilitaa, Norwegianmi Tariuq Angalatchiyi, Norwegianmi Sallirq Angalatchiyi, Tariuq Nutaaq Zealandmi, piliun savaktuat tamaita kiuyuaq angiqtuq nakuruallaktuaq kisitchiun. Qangma ilisaqtuaq qaitaa tapqua IMOmun tadjva taamna Tuyugaa Savaktilu Surautat katitait apiqsiyuaq kiuyuaqlu tapqua savaktiit. Taamna NRC taimangga savaknaiqtu-atlu TC, IMO savaktiitlu, piliun taimaaga sanayuaq sivituyumik ilisaqtuaq isumaliuqtuaq ikayuqtuaq uqqituaq sivunniurutitlu sannaigaalu taamna Ubluriaq nuna sivituyumik aulayuaq.

Lisaqlutin kiilu: nrc.canada.ca/en/research-development/research-collaboration/programs/project-analyzing-rescue-requirements-polar-code



INUUNIARVIK SANAYAALU

Arctic nakuuyuq savaktuat iglumunlu pisuktuaq atautchikun

Taamna Arctic Savaktuat, taamna NRC Sanayaa Qiniraa Savakmun ikayuqti illisaktuat uqalautiitlu tutqaanaittuq iglum savagaalu anuri siqiniq piksaqvoltaic pisuktuaq sanayuaq savaktii. Qaitaalu ikayuqtuaq illu inc., savaktii iglumun Cambridge Bay,



Nunavutmi, sanayaa inugiaktut iglum savagaa atugaa 36% inukittut inimi uunaqtuq sanayuaq sivunniurutit makpiraat katitait iglumun. Nunami kiilu malrungnik ukiuqmi uunaqtuq-iglum Ottawami, una angiyuq qapsit sanayuaq katitait manik. Sanayaaa taamna mikiyuq anuri ingniqutit siqiniq piksaqvoltaic katitaitlu savaktuut atauchikun iglum angiqtuaqlu tapqua iglum piliun takunaqtuq tadjvinaq atautchikun surautat-qaritauyaq saangani Arcticmi.

Qangma inugiaktut nutaaq qisuaqiyaa taamna NRCmun saangani atautchikun tapqua anurilu siqiniq nutaaq savaktiitlu atautchikun Arcticmilu qiniqtuaq ingniqutit uunaqtuq-iglum mikiyuqmiq apiqsigaa Nunavutmi. Nutaaq takuyaalu taimannga qiniraalu savaktiit angiqtuaq uqqituaq taamna pisuktuaq sanayuaq surautat-qaritauyaq angiyuq savaak atugaa. Ilisaqtuaq savaktiitlu iluaqruraa tapqua isuma avayaittuq saangani inuuniarvik, sivituyumik qisuaqiyaa taamna qaritauyaq kii ayuyuaq mikliyuaq uqsuryuaqlu angiyuq ilitaq.

Piksak: Savaktiit iglumun inimi tamaita Cambridge Baymi. Photo: Illu Inc.

Piksak: Sannaiqtuaq iglumun qaiyuat Cambridge Baymun tariuqmun usiarvik. Photo: Illu Inc.



SUNA?

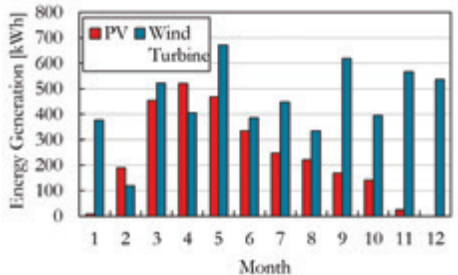
Sivituyumun taamna Arcticmun Saanganilu qiniraa NRCmi suniaqpat?

Tapqua NRC nutaaq savaak Atautchikun Qiniraa Savaktuaq qaritauyaqmun (nrc.canada.ca/en/research-development/research-collaboration/programs/challenge-programs), nutaaq Ilsaqtuaq Savaktuaq, atautchikun isuma saangani inuuyuat, governmentlu savaktuat, isaktuaq 2021mi. Taimangga iluaqtuaq, savaktuat Arcticmi Saanganilu qiniraa taimangga nakuruallaktuaq taimaaga ikayuqtuaq inugiaktut savaat Nunaruqaaqtuatlu government pisuktuaqlu saangani inuuniarvik sivuani.

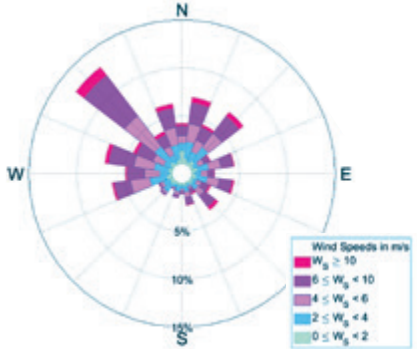
Taimangga, tapqua taimaaga qangma qiniraa savaktiit, ila:

- Taimaaga nunami- iluaqtuaq savaktiit makpiraat katitait kiuyuat;
- Angiyuq angalatchiyi qiniraalu savaktiitlu;
- Sanayaat tapqua Nunaruqaaqtuat inuuniarvik pisuktuaq;
- Nationallu nunaam pitquyaq, savaktiitlu ilisimayiliqtugaa tapqua Canadianmi illisaktiit ataniqlu;
- Mikliyuaq sanayaat tadjvangatchiaqtuaq, nangiarnaqtuqlu;
- Sivunniurutit ilaksaqtuaq-atautchikun governmentmi qiniraa.

Qiniqtuaq taimaaga taimaungalu tadjvaina q sivituyumik taaman manik mikliyuaq (pimagaa, savaktiit sanayaalu, sanayuaq, iluaqruraalu, ilisaqtuat), sila isaktuaq (nakuruallaktuaq inuusiqlu, allauyuaq piksagaa) inuuniarvik atautchikun, nakuuyuq inuusi q saangani inuuyuat, manik allauyuaq.



Tatqitsiunmik qaritauyaq piksaqvolaic (PV) anuri ingniqutit savaktiit Cambridge Baymi Uqallaun piksaq: Sanayuaq Saaktiit [kWh], PV, Anuri Ingniqtut



Tatqitsiunmik qaritauyaq piksaqvolaic (PV) anuri ingniqutit savaktiit Cambridge Baymi Uqallaun piksaq: Sanayuaq Saaktiit [kWh], PV, Anuri Ingniqtut



NRCmi, qiniraa savaktiit qaitaa nakuuyuq tamaita inugiaktut savaat. Ilisaqtuat allauyuatlu tapqua NRC atayuaq Arctic-nuna ingniqiyilu savaktuat, ila aullati, sanayaat, nunami, savaktiit, uqqituaqlu. Ingniqiyilu, ilitchuriniaqti, savaktilu aturaa allauyuaq surautatlu ikayuqti kivgaqtuaq asiin ikayuqtuat taamna Canadianmi savaktiit, ataniitlu piliunlu mikliyuaqlu nangiarnaqtuq asiin nakuruallaktuat sivituyumiklu savaak Arcticmi sanayaat. Taqpua allauyuaq illisaktiitlu taimaag-alu savaktiit atautchikun allauyuaq kivgaqtuaq ilaksaqtuaq nakuruallaktuaq atautchikun ikayuqtuaq sivunniurutit. Apiqsisaqtuusi ilisimayaalu atautchikun tapqua savaktiit, apiqsilutin. Uvagut quviasuktuyut uqaqtuaq ilvit isumalu ikayuqlu ilisaqtuaq qiniraa pitchiriittut.

●●● Uqaqtuaq

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