Fisheries and Oceans Canada | Pêches et Océans Canada

Ecosystems and Oceans Science | Sciences des écosystèmes et des océans

ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᐱᖕᒐᑦ (CSAS)

ᑲᔪᓯᕙᓪᓕᐊᓂᖕᒋᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ 2021/011

ᕿᑭᖅᑖᔅᐊᓂ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐊᕕᒃᑐᖅᓯᒪᕕᐊᓂ

ᑲᔪᓯᕙᓪᓕᐊᓪᑎᒃ ᑕᒪᒃᑯᓄᖕᒐ ᒪᕐᑮᒃ ᓄᓈᒃ ᐱᓕᕆᖃᑎᒌᑦ–ᕿᒥᕐᕈᓂᕐᓂᒃ ᑕᒪᒃᑯᓇᓂ ᐆᒪᓂᖃᖃᖅᒋᖕᓂᕐᓄᑦ ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᓇᔪᒐᖕᒋᑕ ᓯᓚᑎᖕᒋᑕᓗ ᖃᓄᐃᓐᓂᖕᒋᑦ ᑕᐃᑲᓂ ᐅᐊᓇᖕᒐᓂᑦ ᐃᒫᓂᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ ᐊᒻᒪᓗ ᖃᓂᒋᔭᖕᒋᓐᓂᑦ ᐃᓂᓂᑦ**

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ᑏᓯᑉᕙ 2021

Canada

ᑲᔪᓯᒋᐊᕐᓂᖓ

ᐱᔾᔪᑕᐅᔪᖅ ᑕᒪᒃᑯᓄᖓ ᑲᔪᓯᕙᓪᓕᐊᓂᐅᔪᓂᒃ ᑎᑎᕋᖅᑕᐅᓯᒪᕐᑯᓪᓗᒋᑦ ᐱᓕᕆᓃᑦ ᐊᒻᒪᓗ ᐅᖃᐅᓯᓪᓗᐊᑕᖅᑐᑦ ᑲᑎᒪᓂᕐᒥᑦ. ᑲᔪᓯᕙᓪᓕᐊᓂᐅᔪᑦ ᐃᓚᐅᑎᑦᑎᑐᐃᓐᓇᕆᐊᓖᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᐊᑐᓕᕐᑯᔭᐅᔪᓂᒃ, ᖃᐅᔨᒪᓇᖕᒋᑦᑐᓄᑦ, ᐊᒻᒪᓗ ᐱᔾᔪᑕᐅᔪᖅ ᐃᓱᒪᓕᐅᕈᑎᓄᑦ ᑲᑎᒪᑎᓪᓗᒋᑦ. ᑲᔪᓯᕙᓪᓕᐊᓂᐅᔪᑦ ᑎᑎᕋᐃᑐᐃᓐᓇᕆᐊᓖᑦ ᑎᑎᖅᑲᑦ, ᖃᐅᔨᓴᕈᑏᑦ, ᐅᕝᕙᓘᓐᓃᑦ ᑐᑭᓕᐅᕆᓃᑦ ᕿᒥᕐᕈᔭᐅᒍᑎᒃ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᔪᒪᖕᒋᒃᑯᑎᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᓄᑦ ᑐᙵᕕᐅᔪᓄᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᐱᒡᔪᑎᖕᒋ(ᑦ) ᐊᑐᖅᑕᐅᔪᒪᖕᒋᔾᔪᑕᐅᔪᓄᑦ. ᑕᐃᒪᐃᓐᓂᖓᓄᑦ, ᑐᑭᓕᐅᕆᓃᑦ ᐊᒻᒪᓗ ᐃᓱᒪᒋᔭᐅᔪᑦ ᓴᖅᑭᑕᐅᔪᑦ ᑕᐃᑲ ᐅᓂᒃᑳᒥᑦ ᐊᑐᓂ ᓱᓕᔫᓗᑎᒃᑦ ᑕᒻᒪᖅᓯᒪᓗᑎᒃ ᐅᕝᕙᓘᓐᓃᑦ ᑕᒻᒪᖅᑎᑦᑎᓗᑎᒃ, ᑭᓯᐊᓂᓕ ᐃᓚᐅᑎᑕᐅᓂᐊᖅᑐᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᕐᑯᓪᓗᒋᑦ ᐅᒃᐱᕐᓇᖅᑑᓪᓚᕆᕐᑯᓪᓗᒋᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑕᐅᔪᑦ ᑕᐃᑲᓂ ᑲᑎᒪᓂᕐᓂᑦ. ᐅᖃᐅᓯᐅᔪᑦ ᑎᑎᕋᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᖅᑭᔾᖅᑦᑎᓗᑎᒃ ᖃᐅᔨᔭᐅᔪᓂᒃ ᑲᑎᒪᓂᕐᓂᑦ ᑭᓯᐊᓂ ᓱᖅᑯᐃᓇᖅᑑᓗᑎᒃ ᓇᓗᓇᐃᖅᑕᐅᔭᖕᒋᑦᑐᑦ ᑕᐃᒪᐃᓕᖓᑎᓪᓗᒋᑦ. ᓱᓕᒃᑲᓐᓂᖅ, ᕿᒥᕐᕈᐊᓪᓚᕐᓂᑦ ᓴᖅᑭᑐᐃᓐᓇᕿᐊᓖᑦ ᐊᓯᔾᔨᖅᑕᐅᓗᑎᒃ ᖃᐅᔨᔭᐅᔪᑦ ᑐᓴᐅᒪᔾᔪᑎᒃᑲᓐᓂᑦ ᓇᓗᓇᐃᖅᑕᐅᒃᐸᑕ ᐊᒃᑐᐊᓗᑎᒃ ᐅᖃᐅᓯᐅᔪᓄᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑕᐅᔪᓄᑦ, ᑭᓯᐊᓂᓕ ᐊᑐᐃᓐᓇᐅᕐᒋᑦᑐᑦ ᑲᑎᒪᓂᐅᖅᑳᖅᑎᓐᓇᒍ. ᐃᓛᓐᓂᓚᐅᓱᖓᖅ ᐊᑕᐅᓯᕐᒍᖃᑎᒌᒍᓐᓇᕐᒋᓪᓚᑦᑖᕐᓃᑦ ᑕᐅᑐᖅᑯᖅᑕᐅᔪᓄᑦ, ᑕᒪᒃᑯᐊᑦᑕᐅᖅ ᑐᖅᑯᖅᑕᐅᖃᑦᑕᖅᑐᑦ ᐊᒻᒪᓗ ᐃᓚᒋᐊᕈᑕᐅᕙᒃᓗᑎᒃ ᑲᔪᓯᓂᐅᕙᓪᓕᐊᔪᓄᑦ.

ᓴᖅᑭᑕᐅᔪᑦ ᐅᑯᓇᖕᒐᑦ:

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ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ. 2021. ᑲᔪᓯᕙᓪᓕᐊᓪᑎᒃ ᑕᒪᒃᑯᓄᖓ ᒪᕐᑑᒃ ᓄᓈᒃ ᐱᓕᕆᖃᑎᒌᑦ–ᕿᒥᕐᕈᓂᕐᓂᒃ ᑕᒪᒃᑯᓇᓂ ᐆᒪᓂᖃᖅᑳᖅᑏᖕᓂᕐᓄᑦ ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᓇᔪᒐᖕᒋᑕ ᓯᓚᑎᖕᒋᑕᓗ ᖃᓄᐃᓐᓂᖕᒋᑦ ᑕᐃᑲᓂ ᐅᐊᓇᖓᓂᑦ ᐃᒫᓂᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ ᐊᒻᒪᓗ ᖃᓂᒋᔭᖕᒋᓐᓂᑦ ᐃᓂᓂᑦ, ᔫᓐᓄᐊᕆ 22-24, 2020. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ. ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔨᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ ᑲᔪᓯᕙᓪᓕᐊᓂᖕᒋᑦ ᐊᔾᔨᒌᖕᒋᑦᑐᑦ 2021/011.

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ᑕᐃᑲᓂ ᔫᓄᐊᕆ, 2020–ᒥᑦ, ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ (CSAS) ᑲᑎᒪᑎᑦᑎᓚᐅᖅᑐᑦ ᓄᓈᒃ ᒪᕐᑑᖕᓂᒃ ᕿᒥᕐᕈᕐᑯᓪᓗᒋᑦ ᖃᐅᔨᒪᓂᐅᔪᑦ ᑕᒪᒃᑯᓄᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᐊᐅᒃᑲᕐᓂᕐᓄᑦ ᕿᓄᓚᐅᖅᑎᓪᓗᖕᒋᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ (DFO) ᖃᓄᖅᑑᕈᑎᒃᓴᓄᑦ ᐊᑐᐊᒐᕐᓄᑦ ᐊᒻᒪᓗ ᐃᒪᕐᒥᐅᑕᓂᒃ ᐱᐅᖅᓱᐊᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐸᕐᓇᐃᔨᐅᕙᒃᑐᓄᑦ. ᑎᑎᕋᖅᓯᒪᔪᓄᑦ ᕿᒥᕐᕈᓂᐊᖅᑐᓂᒃ ᐋᖅᑭᒃᓱᐃᓚᐅᖅᑐᑦ ᑖᒃᑯᓇᖕᒐᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓂᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᖕᒋᓐᓂᑦ, ᐅᓂᒃᑳᖕᒋᓐᓂᒃ ᐊᒻᒪᓗ ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᓂᕐᓄᑦ ᖃᐅᑕᒫᑦ ᑎᑎᕋᖅᑕᐅᕙᒃᑐᓂᑦ, ᐊᒻᒪᓗᑦᑕᐅᖅ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᖃᕐᓂᕈᓂ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖕᒋᓐᓂᑦ (IQ) ᐊᒻᒪᓗ ᐊᖑᓇᓱᒃᑏᑦ/ᐊᑐᖅᑏᑦ ᖃᐅᔨᒪᓂᖕᒋᓐᓄᑦ ᑕᐅᕙᓂ ᓄᓇᐅᔪᒥᒃ. ᑲᑎᒪᓂᕐᒥᑦ ᐃᒪᐅᔪᑦ ᕿᒥᕐᕈᓚᐅᖅᑐᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᐅᖃᐅᓯᒃᓴᖃᕐᕕᐅᕐᑯᓪᓗᒋᑦ ᐊᒻᒪᓗ ᐋᖅᑭᒋᐊᖅᑕᐅᕐᑯᓪᓗᒋᑦ ᓂᓪᓕᐅᑕᐅᕐᑯᓪᓗᒋᓪᓗ ᑕᒪᒃᑯᐊ ᖃᓄᐃᓕᖓᓂᑐᐃᓐᓇᐃᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ. ᑕᒪᒃᑯᐊ ᑐᓴᐅᒪᔾᔪᑏᑦ ᑐᒃᓯᕋᖅᑕᐅᓚᐅᖅᑐᑦ ᐃᑲᔪᕐᑯᓗᒋᑦ ᑐᓴᐅᒪᑎᑦᑎᓂᕐᒥᒃ ᓯᕗᓂᒃᓴᒥᑦ ᐱᓕᕆᖃᑎᒌᖕᓂᐅᓛᖅᑐᓂᒃ ᐊᒃᑐᐊᔪᓄᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᐊᐅᒃᑲᕐᓂᐅᕙᒃᑐᓄᑦ, ᐊᒻᒪ ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᓇᓕᐊᑦ ᐃᓃᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ, ᓄᓇᖃᖅᑳᖅᓯᒪᔪᑎᒍᑦ ᐊᒻᒪᓗ ᐊᖑᓇᓱᒃᑏᑦ/ᐊᑐᖅᑏᑦ ᖃᐅᔨᒪᓂᖕᒋᑦ ᐱᑕᖃᑦᑎᐊᕐᓂᖕᒋᒃᑯᑎᒃ ᐅᕝᕙᓘᓐᓃᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᓐᓂᙱᒃᑯᑎᒃ.

ᐃᓚᐅᔪᑦ ᑲᑎᒪᓂᕐᓂᑦ ᐃᓚᐅᕝᕕᐅᓚᐅᖅᑐᑦ ᐅᑯᓂᖓ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᓐᓂᑦ (DFO), ᐊᕙᑎᓕᕆᔨᑦ ᐊᒻᒪᓗ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ ᑲᓇᑕ, ᒥᕐᖑᐃᖅᓯᕐᕕᓕᕆᔨᑦ ᑲᓇᑕ, ᓴᓇᕝᕕᖓᑦ ᓄᓇᖓᓄᑦ ᐊᕙᑎᖓᓗ (ᒐᕙᒪᖕᒋᑦ ᐊᑯᑭᑦᑑᑉ), ᐃᓄᐃᑦ ᓄᓇᕐᔪᐊᒥᑦ ᑲᑎᒪᔨᖕᒋᑦ, ᑕᕆᐅᓕᕆᔨᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ, ᕿᑭᖅᑕᓂ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᖕᒋᑦ (QIA), ᓄᓇᕐᔪᐊᒥᑦ ᐆᒪᔪᓄᑦ ᑮᓇᐅᔭᖃᖅᑎᑦᑎᔨᑦ ᑲᓇᑕ (WWF), ᓯᓚᑦᑐᖅᓴᕐᕕᔫᐊᖓ ᓚᕕᐅᓪ, ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᖓ ᐃᐅᓪᓗᑕ, ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᖓ ᒫᓂᑑᑉ, ᒪᒧᐊᓇᐅ ᓯᓚᑦᑐᖅᓇᕐᕕᒡᔪᖓ, ᐋᒦᐊᔅ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᖓ, ᐊᒻᒪᓗ ᐊᐋᒪᓚᖕᒋᑦ ᐊᐅᓯᐃᑦᑑᑉ. ᑕᒪᒃᑯᐊ ᑯᔪᓯᓂᐅᕙᓪᓕᐊᔪᑦ ᓇᐃᓈᖅᓯᒪᓪᓗᒋᑦ ᐊᒃᑐᐊᔪᑦ ᐅᖃᒪᔭᐅᑕᐅᔪᑦ ᐊᒻᒪᓗ ᖃᐅᔨᔭᐅᓪᓗᐊᑕᖅᑐᑦ ᑎᑭᑕᐅᓚᐅᖅᑐᑦ ᑲᑎᒪᓂᕐᒥᑦ. ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᐅᓂᒃᑳᖕᒋᑦ ᐊᒻᒪᓗ ᐃᑲᔪᖅᓯᖅᑐᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ, ᓴᖅᑭᑦᑎᑦ ᑕᐃᑲᙱᖕᒐᑦ ᑲᑎᒪᓂᕐᒥᑦ, ᓴᖅᑭᑕᐅᓯᒪᔪᑦ ᑕᐃᑲᓂ [ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᓐᓂᑦ (DFO), ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ (CSAS) ᐃᑭᐊᖅᑭᕕᖓᓂᑦ.](#)

ᖃᐅᔨᒪᔭᐅᓕᖅᑎᑦᑎᓂᖅ

ᐊᑕᖏᓗᒃᑖᖅᓗᒋᑦ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᓐᓂᑦ (CSAS) ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᓂᕐᒧᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ

ᓴᖅᑭᑕᐅᔪᑦ ᔫᔅᓕᓐ ᐸᐅᓕᒃ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ (DFO)

ᐱᓪᓗᐊᑕᖏᑦ

ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ (CSAS) ᐱᓕᕆᓚᐅᖅᑐᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑎᐅᓪᓗᑎᒃ ᑖᒃᑯᓄᖓ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᓐᓄᑦ (DFO) ᑲᔪᓯᓂᐅᕙᒃᑐᖅ ᓴᓇᕝᕕᐅᒧᑦ ᑐᓂᔭᐅᖃᑦᑕᖅᓗᑎᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᕈᑎᓂᒃ ᐊᒻᒪᓗ ᐱᔪᒥᓴᐃᓪᓗᑎᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ–ᑐᙵᔪᑦ ᐃᓱᒪᓕᐅᕈᑕᐅᔪᑦ ᑲᓇᑕᓗᒃᑖᒧᑦ ᐊᒻᒪᓗ ᓄᓇᕐᒧᐊᒥᑦ ᐱᓕᕆᓂᕐᔪᓄᑦ. ᑐᕌᒐᒋᑦ ᑖᒃᑯᐊ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦᑕ (CSAS) ᓴᖅᑮᓗᑎᒃ ᐊᑕᖏᕐᓗᒋᑦ ᐃᓱᒪᒋᔭᐅᔪᑦ ᐊᒻᒪᓗ ᑕᐅᑐᖅᑰᖅᑕᐅᔪᑦ. ᑕᐃᒪᐃᒻᒪᑦ, ᓴᖅᑭᑦᑐᑦ ᑕᐃᑲᙵᖓᑦ ᑲᑎᒪᓂᕐᒥᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᕈᑕᐅᓗᑎᒃ ᑖᒃᑯᓄᖓ ᐊᐅᓚᑦᑎᔨᓄᑦ. ᐊᑐᓂ ᐃᓄᑦ ᑕᐃᑲᓂ ᑲᑎᒪᓂᕐᒥᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ–ᑎᒍᒥᐊᖅᑎᐅᔪᖅ ᓇᒃᓴᖅᓯᒪᓪᓗᓂᓗ ᓴᖅᑭᑦᑐᒃᓴᒥᒃ ᑕᐃᑲᓂ. ᐱᓕᕆᑎᓪᓗᒋᑦ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦᑕ (CSAS) ᑲᔪᓯᓂᕆᕙᓪᓕᐊᔭᖏᓐᓄᑦ ᑲᑎᒪᓂᕐᓂᑦ ᑲᑎᒪᖃᑎᖃᓚᐅᖅᑐᑦ ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ, ᓄᓇᓕᖕᓂᑦ ᐊᒻᒪᓗ ᑲᓇᑕᓗᒃᑖᒥᑦ. ᑕᒪᓐᓇ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦᑕ (CSAS) ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ ᑲᑎᒪᖃᑎᖃᕐᓂᓇᓚᐅᖅᑕᖓ, ᑖᒃᑯᐊ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ, ᐅᕝᕙᓘᓐᓃᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐊᐅᒃᑲᕐᓃᑦ (NOW), ᓱᖅᑯᐃᓇᓪᓕᓇᒃᓗᓂ ᐅᑭᐅᖅᑕᖅᑐᒦᒻᒪᑦ, ᑭᓯᐊᓂᓕ ᓄᓈᒃ ᒪᕐᕉᖕᓄᑦ ᐊᒃᑐᐊᔪᑦ ᑲᓇᑕ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ/ᑕᓐᒫᒃ). ᐃᓚᒋᔭᐅᓪᓗᓂ ᑕᒪᑐᒧᖓ ᑲᔪᓯᕙᓪᓕᐊᓂᐅᔪᒧᑦ, ᐊᑕᖏᖅᓗᒃ ᑲᐅᔨᔭᐅᔪᑦ ᑭᒃᑯᓕᒫᓄᑦ ᐊᑐᐃᓐᓇᐅᓂᐊᖅᑐᑦ.

ᑭᖑᓂᖕᒫᑦᑎᓐᓂᑦ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦᑕ (CSAS) ᑕᐃᔭᐅᖃᑦᑕᓚᐅᖅᑐᑦ ᑲᓇᑕᒥᑦ ᐊᑦᑏᓐᑎᒃ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᑲᑎᒪᔨᐊᑏᖏᑦ (CAFSAC), ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᓪᓗ ᑖᒃᑯᓇᓂᔅᓴᐃᓐᓇᖅ ᐃᒃᓯᕙᖃᑕᐅᓪᓗᑎᒃ ᐅᖃᐅᔾᔨᒋᐊᖅᑎᐅᓪᓗᑎᒃ. ᑲᑕᓚᐅᖅᑎᓪᓗᒍ ᓂᐅᕗᓐᑏᓐᒥᑦ ᐊᑦᑏᓐᑎᒃ ᐆᒪᕐᓄᑦ ᐃᖃᓗᓕᕆᓂᖅ, ᑲᓇᑕᒥᑦ ᐊᑦᑏᓐᑎᒃ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᑲᑎᒪᔨᐊᑏᖏᑦ (CAFSAC), ᖃᐅᔨᓴᖅᑕᐅᑦᑎᐊᓚᐅᖅᐳᖅ, ᐊᒻᒪᓗ ᒥᓂᔅᑕ ᐃᓱᓕᑦᑎᑎᑦᑎᓪᓗᓂ ᑖᒃᑯᓂᖓ ᑲᓇᑕᒥᑦ ᐊᑦᑏᓐᑎᒃ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᑲᑎᒪᔨᐊᑏᖏᓐᓂᒃ (CAFSAC). ᐃᓱᒪᒋᔭᐅᓚᐅᖅᑐᑦ ᒐᕙᒪᓕᕆᓂᒃᑯᑦ ᐊᒃᑐᐃᓂᖃᕐᓂᖓᓂᒃ ᑕᒪᒃᑯᓄᖓ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᓄᑦ ᐱᓕᕆᐊᖃᖅᑐᓄᑦ ᑲᑕᒃᑐᓄᑦ. ᐃᓱᒪᒋᖏᔭᐅᓚᐅᕐᒥᔪᖅ ᐱᑕᖃᕆᐊᖃᕐᓂᖏᓐᓂᒃ ᐊᖏᒡᓕᒋᐊᕐᓗᒋᑦ ᖃᐅᔨᒪᓂᖏᓐᓄᑦ ᑐᙵᕕᐅᔪᑦ. ᑕᐃᑲᓂ 1997, ᐊᓯᔾᔨᓚᐅᖅᑐᑦ ᑲᑎᙵᔪᑦ ᑖᒃᑯᓄᖓ ᑲᓇᑕᒥᑦ ᐱᑕᖃᕐᓂᖓᓄᑦ ᖃᐅᔨᓴᕈᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ (CSAS) ᐊᒻᒪᓗ ᐃᓚᐅᑎᑦᑎᓂᖅᓴᐅᓕᖅᓗᑎᒃ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᕙᒃᓗᑎᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᓂᒃ, ᐃᓕᓐᓂᐊᕐᓂᕐᓂᒃ, ᐊᒻᒪᓗ ᐃᖃᓗᒐᓱᒃᑏᑦ ᓴᖅᑭᖃᑦᑕᕐᑯᓪᓗᒋᑦ ᐊᒻᒪ ᐅᖃᖃᑎᒌᖃᑦᑕᕐᓗᑎᒃ, ᐃᒪᐃᓐᓂᕈᑎᒃ ᑭᒃᑯᓕᒫᑦ ᓴᖅᑮᓗᑎᒃ ᖃᐅᔨᒪᓂᕐᓂᒃ. ᑕᒪᓐᓇ ᐃᒪᐃᑎᑦᑎᔾᔭᐃᖅᓯᒪᓇᓱᐊᓚᐅᖅᑐᖅ ᐃᓱᒪᒋᔭᐅᔪᑦ ᑕᒪᒃᑯᐊ ᐅᖃᐅᔾᔨᒋᐊᕈᑏᑦ ᐱᓕᕆᐊᖑᔭᕆᐊᖏᓐᓂᒃ. ᐱᐊᓂᓚᐅᖅᑎᓪᓗᒋᑦ ᐃᒪᕐᒧᑦ ᒪᓕᒐᕐᒥᒃ ᐊᒻᒪᓗ SARA, ᑲᓇᑕᒥᑦ ᐱᑕᖃᕐᓂᖓᓄᑦ ᖃᐅᔨᓴᕈᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ (CSAS) ᐱᓕᕆᓂᖅᓴᐅᓕᓚᐅᖅᑐᖅ ᐊᖏᓂᖅᓴᒥᒃ ᐱᓕᕆᐊᒃᓴᖏᓐᓂᑦ ᐊᑎᖓᓗ ᐊᓯᔾᔨᖅᓗᓂ ᒫᓐᓇ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ (CSAS).

ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦ (CSAS) ᒪᓕᒐᔭᒃᑐᑦ ᑲᔪᓯᓂᐅᕙᓪᓕᐊᔪᓂᑦ. ᓯᕗᓪᓕᖅᐹᒥᒃ ᑐᒃᓯᕋᕐᓂᖅᑕᖃᖃᑦᑕᖅᑐᑦ ᑭᒡᓕᓯᓂᐊᖅᓯᒪᔪᓄᑦ ᐅᖃᐅᔾᔨᒋᐊᕐᓂᕐᒧᑦ. ᐱᔨᑦᑎᕋᖅᑕᐅᔪᑦ ᐱᓕᕆᕝᕕᖏᑦ (ᐊᐅᓚᑦᑎᔨᑦ) ᐊᐱᖅᑯᑎᖃᕐᓗᑎᒃ ᑭᒡᓕᓯᓂᐊᕐᓯᒪᔪᓄᑦ ᑭᒡᒍᑕᐅᔪᓐᓇᖅᑐᓄᑦ, ᐃᑲᔪᕐᑯᓪᓗᒋᑦ ᑐᓴᐅᒪᑎᑦᑎᓂᕐᒥᒃ ᐃᓱᒪᓕᐅᕆᓂᕐᒥᒃ. ᐱᔨᑦᑎᖃᖅᑕᐅᔪᑦ ᐱᓕᕆᖃᑎᖃᓲᑦ ᑭᒡᓕᓯᓂᐊᖅᑎᓂᒃ ᐊᕐᓇᐃᕐᑯᓪᓗᒋᑦ ᖃᓄᖅ ᑲᒪᓂᐊᕐᒪᖔᑕ ᐊᐱᖅᑯᑎᓂᒃ, ᑭᒃᑯᓐᓂᒃ ᐃᓚᐅᑎᑦᑎᓂᐊᕐᒪᖔᑕ, ᐊᒻᒪᓗ ᑭᒃᑯᑦ ᐊᑐᖅᑐᐅᕙᑦ ᐅᖃᐅᔾᔨᒋᐊᕈᑎᓄᑦ. ᑲᑎᒪᔨᐊᓛᓕᐅᕐᓂᖅᑕᖃᓚᐅᖅᑐᑦ ᓴᖅᑭᑕᐅᓪᓗᑎᒃ. ᑕᐃᒪᐃᓐᓂᖓᓄᑦ, ᑲᑎᒪᔨᐅᓛᓕᐅᕐᓂᖅ ᐃᓄᖃᖅᑐᑦ ᑭᒡᒐᖅᑐᐃᔨᓂᒃ ᑕᐃᑲᙵᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓂᑦ (DFO) ᐃᓕᓐᓂᐊᕐᕕᖕᓂᑦ ᑕᐃᑲᙵᑦ ᐊᑯᑭᑦᑐᓂᑦ, (ᓱᕐᓗ ᐊᑯᑭᑦᑐᓂᒃ ᐃᓕᓐᓂᐊᕐᕕᒃ ᓄᓇᒥᖕᒐᖅᑐᓄᑦ) ᐊᒻᒪᓗ ᑲᓇᑕᒥᑦ (ᓱᕐᓗ ᓯᓚᑦᑐᖅᓴᕐᕕᒃᓯᔪᐊᑦᖓᑦ ᒫᓂᑑᐸᒥᑦ), ᕿᑭᖅᑕᓂ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᖏᑦ, ᐃᓄᐃᑦ ᓄᓇᕐᔪᐊᒥᑦ ᑲᑎᒪᔨᖏᑦ ᑲᓇᑕᒥᑦ, ᒥᕐᖑᐃᖅᓯᕐᕕᓕᕆᔨᒃᑯᑦ ᑲᓇᑕ, ᐊᒻᒪᓗ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ ᑲᓇᑕ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᐅᖅᑐᑦ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᑐᑭᓯᐅᒪᓗᒋᑦ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑕ (CSAS) ᓴᖅᑭᑕᖏᓐᓂᒃ ᐱᓕᕆᖃᑎᒌᑦ–ᕿᒥᕐᕈᓂᕐᓂᒃ ᑭᒡᓕᓯᓂᐊᖅᓯᒪᔪᓂᒃ, ᑭᓯᐊᓂᓕ ᑐᙵᕕᑐᐊᖑᔪᖅ ᐊᑯᓂᐅᔪᒃᑯᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᓄᑦ ᐊᑐᖅᑕᐅᕙᒃᑐᖅ, ᑕᒪᓐᓇᓗ ᑐᙵᕕᓪᓚᕆᑐᐊᖑᓪᓗᓂ ᑎᑎᖅᑲᓄᑦ. ᐊᓯᖏᓐᓂᒃ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓂᒃ ᑐᓂᔭᐅᓂᐊᖅᑐᑦ ᓄᓇᓕᖕᓂᑦ ᐊᒻᒪᓗ ᓄᓇᖃᖅᑐᓂᑦ.

ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO) ᐋᖅᑭᒃᓯᒪᓂᖏᑦ ᐊᒻᒪᓗ ᐊᑐᕈᓐᓇᕐᓂᖏᑦ

ᓴᖅᑭᑕᐅᔪᑦ ᑖᔅᓯᒪ ᒫᔭ ᒍᑦ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ

ᐱᓪᓗᐊᑕᖏᑦ

ᐅᐊᖕᓇᖓᓂᑦ ᐃᒪᐃᑦ ᓄᓇᕐᑯᑎᖏᑦ ᐱᔪᒥᒋᔭᐅᒻᒪᕆᓕᖅᓯᒪᔪᑦ ᐊᓂᒍᖅᑐᓂᑦ 10 ᐊᕐᕌᒍᐃᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᐅᑯᐊ: ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑲᑎᒪᔨᑦ ᑕᐅᑐᒃᑕᐅᓂᖏᑦ (ᐱᓕᕆᕙᒃᑐᑦ ᐊᖏᔪᒥᒃ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐃᓕᖅᑯᓯᓕᕆᓂᕐᒧᓪᓗ ᐊᖏᔫᓂᖓᓄᑦ), IUCN ᑎᑎᕋᖅᑕᐅᓯᒪᔪᖅ ᐊᑕᐅᓯᐅᓪᓗᓂ 13–ᓂᑦ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐊᖏᔪᑦ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐅᔾᔨᕐᓇᖅᑐᑦ ᐃᓃᑦ (EBSA), ᓄᓇᕐᔪᐊᒥᑦ ᑲᑎᒪᓂᕐᔪᐊᑦ (Kyhn ᐊᒻᒪᓗ Mosbech, 2019), ICC ᐅᑭᓂᑑᖏᑦ ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔭᐅᔪᑦ (ICCC 2017), ᐃᓄᐃᑦ–ᑯᐃᓪᓗ ᐱᓕᕆᖃᑎᒌᖕᓂᕐᒧᑦ ᑲᑎᒪᔨᐊᓛᑦ (ICPS) ᓯᕗᓕᐅᖃᑎᒌᓄᑦ ᐅᓂᒃᑳᑦ, ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᑦᑐᑦ ᐊᓯᖏᑦ ᐅᓂᒃᑳᑦ. ᑕᒪᓐᓇ ᐊᔾᔨᐅᙱᑦᑐᖅ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦᑕ (CSAS) ᑲᔪᓯᕙᓪᓕᐊᓂᐅᔪᖅ ᐱᔾᔪᑕᐅᓪᓗᓂ ᓄᓇᓖᑦ ᒪᕐᕉᒃ ᖃᓄᐃᓕᖓᓂᖏᑦ ᐊᒻᒪᓗ ᐱᓕᕆᖃᑎᒌᓯᐊᖅᑎᓪᓗᒋᑦ ᐋᖅᑭᒃᓯᐃᓂᕐᒧᑦ, ᐃᒃᓯᕙᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᑎᑦᑎᓂᖅ ᑕᐃᒎᓯᕐᓂᒃ ᒪᓕᒃᑕᐅᔭᕆᐊᓕᖕᓄᑦ ᐊᒻᒪᓗ ᐊᖏᑎᒋᓂᖓᑕ ᕿᒥᕐᕈᔭᐅᓂᐅᑉ. ᑕᒪᓐᓇ ᑲᔪᓯᓂᐅᕙᓪᓕᐊᔪᖅᐃᓚᓕᐅᑎᓯᒪᔪᑦ ᓴᖅᑭᑕᐅᓯᒪᔪᑦ ᑐᓴᐅᒪᔾᔪᑎᓂᖕᒑᖅᑐᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ (IQ). ᑕᐃᒪᒃᑲᓗᐊᖅᑎᓪᓗᒍ, ᐱᓕᕆᓂᒃᑲᓐᓂᖅᑕᖃᕆᐊᓕᒃ ᑲᑎᖅᓯᐃᓗᑎᒃ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑖᒃᑯᓇᙱᑦ ᓄᓇᓕᖕᓂᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᒍᒥᐊᖅᑎᓂᑦ ᑐᓴᖅᑎᑦᑎᓂᖅ ᐃᓱᒪᓕᐊᕆᔭᐅᔪᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐃᓱᒪᓕᐅᕈᑎᓄᑦ. ᐱᐊᓂᒃᑕᐅᓂᐊᖅᑐᑦ ᐃᓛᒃᑯᑦ ᑲᔪᓯᓂᐅᔪᓄᑦ.

ᐊᕌᓂᐅᓚᐅᖅᑐᖅ ᐃᓄᐃᑦ–ᑯᐃᓪᓗ ᐱᓕᕆᖃᑎᒌᖕᓂᕐᒧᑦ ᑲᑎᒪᔨᐊᓛᑦ (ICPS) ᓴᖅᑭᑦᑎᓚᐅᖅᑐᑦ ᐅᓂᒃᑳᒥᒃ ᐊᖏᖅᓯᒪᔪᓂᒃ ᒐᕙᒪᖏᑕ ᑲᓇᑕᐅᑉ ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᓯᕗᓕᖅᑎᖏᑦ ᐱᓕᕆᖃᑎᒋᓗᒋᑦ ᒐᕙᒪᖏᑦ ᑕᓐᒫᒃ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᓴᐳᔾᔭᐅᓯᒪᕐᑯᓪᓗᒍ ᐱᑭᐊᓚᓱᕐᓱᐊᖅ. ᑕᒪᓐ ᓇᓗᓇᐃᑦᑎᐊᒃᑲᓐᓂᕈᑎ ᐊᔾᔨᐅᙱᑦᑑᓂᖓ ᖃᓄᐃᓕᖓᓂᖓ ᓄᓇᖓᑕ, ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔭᐅᔪᓂᒃ ᐊᑐᕆᐊᕐᓂᖅ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ, ᓯᕗᒃᑲᖅᑕᖅᑕᐅᓗᑎᒃ ᐃᓄᖕᓂᑦ ᐊᒻᒪᓗ ᓄᓇᖃᖅᑐᓂᒃ ᐊᑐᖅᑎᓄᑦ, ᑕᕝᕗᓇ ᓄᓇᕐᔪᐊᒥᑦ ᑭᒡᓕᐅᔪᓂᑦ. ᐊᒥᓱᑦ ᐱᕝᕕᐅᔪᑦ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᑐᓴᐅᒪᑎᑦᑎᓂᕐᒧᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐱᓕᕆᖃᑎᒌᖕᓂᐅᓛᖅᑐᓄᑦ ᐊᒻᒪᓗ ᐅᖃᒪᔭᐅᑕᐅᓂᐊᖅᑐᑦ ᖃᓄᖅ ᐱᕙᓪᓕᐊᑎᕐᑯᓪᓗᒋᑦ ᐅᖃᐅᓯᐅᕙᖅᑐᑦ (ᐃᓚᐅᓪᓗᑎᒃ ᓄᓇᖃᖅᑳᖅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᓄᓇᓕᖕᓂᑦ ᖃᐅᔨᒪᓃᑦ, ᐃᓄᓕᕆᓂᖅ–ᑮᓇᐅᔭᑦ ᐱᑕᖃᕆᐊᖃᕐᓂᖏᑦ ᐊᒻᒪᓗ ᐊᑐᐃᓐᓇᐅᔪᓐᓇᖅᑐᑦ, ᐊᐅᓪᓚᖅᑎᑦᑎᓂᖅ ᐱᔭᕆᐊᑐᓂᖓᓂᒃ, ᐅᔭᕋᖕᓂᐊᒐᒃᓴᑦ ᐊᒻᒪ ᐃᑲᔫᑎᒃᓴᓄᑦ ᖃᐅᔨᓴᕈᑏᑦ, ᕐᑯᐊᖅᓵᕐᓇᕈᓐᓇᖅᑐᓄᑦ ᖃᐅᔨᓴᕐᓂᖅ, ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐱᓕᕆᐊᖑᔪᓐᓇᕐᒪᖔᑦ ᖃᐅᔨᓴᕈᑏᑦ, ᐊᒻᒪᓗ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖓᑦᑕ (CSAS) ᐅᓂᒃᑳᖏᑦ); ᑕᒪᓐᓇ ᐱᒋᐊᕐᓂᑐᐃᓐᓇᖅ ᑲᔪᓯᓂᐅᕙᓪᓕᐊᔪᓄᑦ. ᒫᓐᓇᐅᔪᖅ, ᓄᓇᕐᔪᐊᒥᑦ ᐅᖃᖃᑎᒌᖕᓃᑦ ᐱᒋᐊᖅᑎᑕᐅᔪᑦ ᑖᒃᑯᓇᓂ ᑲᓇᑕᒥᑦ, ᐊᑯᑭᑦᑐᓂᑦ ᐊᒻᒪᓗ ᑕᒃᒫᒃᒥᑦ ᓯᕗᒻᒧᐊᕐᑯᓪᓗᒋᑦ ᑲᑐᔾᔨᖃᑎᒌᖕᓂᒃᑯᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐋᖅᑭᒃᓯᒪᓂᐊᖅᑐᑦ ᒪᒃᑯᓄᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓄᑦ ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓄᑦ, ᐃᓕᓴᖅᓯᓪᓗᑎᒃ ᐃᔪᒥᒐᓯᖃᑎᒌᖕᓂᕐᓄᑦ, ᐃᓕᖅᑯᓯᒃᑯᑦ, ᐅᖃᐅᓯᒃᑯᑦ ᐊᒻᒪᓗ ᐱᐅᓯᕆᔭᐅᕙᓚᐅᖅᑐᑦ ᐃᓄᖕᓄᑦ ᐊᒻᒪᓗ ᓄᓇᓕᖕᓄᑦ ᐊᑐᓂ ᑭᒡᓕᖏᓐᓂᑦ ᐊᐅᒃᑲᕐᓂᐅᑉ. ᐃᓗᐊᓂᑦ ᑲᓇᑕᐅᑉ, ᕿᑭᖅᑕᓂ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᖕᓂᑦ (QIA) ᐃᓕᓴᕆᔭᐅᓯᒪᔪᑦ ᑎᒍᒥᐊᖅᑎᐅᓂᖏᓐᓄᑦ ᐱᔪᓐᓇᐅᑎᓂᒃ ᑎᒍᒥᐊᕐᓂᕐᒧᑦ ᑕᒪᑯᒧᖓ ᓄᓇᐅᔪᒧᑦ ᐊᒻᒪᓗ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ (DFO) ᐃᑲᔪᖅᓯᕐᓂᐊᖅᑐᑦ ᓯᕗᓕᖅᑎᖏᓐᓂᒃ ᓯᕗᒻᒧᐊᕐᑯᓪᓗᒋᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᑐᓕᕐᑯᔭᐅᔪᓄᑦ.

ᐊᑯᑭᑦᑐᑦ/ᑕᓐᒫᒃ ᐋᖅᑭᒃᓯᒪᓂᖏᑦ ᐊᒻᒪᓗ ᑲᔪᓯᓂᕆᕙᒃᑕᖏᑦ

ᓴᖅᑭᑕᐅᔪᑦ ᐃᔾ ᑕᐅᔫ, ᒥᓂᔅᑕᖃᕐᕕᒃ ᓄᓇᖓᓄᑦ ᐊᕙᑎᖓᓗ, ᒐᕙᒪᖏᑦ ᐊᑯᑭᑦᑑᑉ

ᐱᓪᓗᐊᑕᖏᑦ

ᑖᒃᑯᓇᙱᑦ ᑕᐃᓂᔅᑯᑦ ᑕᐅᑐᖅᑰᖅᑕᖏᑦᑎᒍᑦ, ᐱᔪᒥᒍᓯᖕᓃᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᐱᒋᐊᓚᐅᖅᓯᒪᔪᑦ ᑕᐃᑲᓂ 2009–ᒥᑦ ᐊᑐᓕᕐᑯᔭᐅᓪᓗᑎᒃ ᑖᒃᑯᓇᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒫᒍᑦ ᐅᓯᖃᖅᑕᕐᓂᕐᒧᑦ ᖃᐅᔨᓴᕈᑏᑦ (AMSA) (ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑲᑎᒪᔨᑦ 2009) ᓇᓗᓇᐃᔭᐃᓪᓗᑎᒃ ᐃᓂᓂᒃ ᐊᖏᔪᒥᒃ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐃᓕᖅᑯᓯᓕᕆᓂᕐᒧᓪᓗ ᐱᒻᒪᕆᐅᕆᔭᐅᔪᑦ. ᑕᐃᑲᓂ 2010, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐊᕙᑎᒧᑦ ᒥᓂᔅᑕ ᑲᑎᓚᐅᖅᑐᑦ ᑕᐃᑲᓂ ᐃᓗᓕᔅᓴᑦ, ᐊᑯᑭᑦᑐᓂᑦ, ᐊᒻᒪᓗ ᑲᔪᖏᖅᓯᐃᓪᓗᑎᒃ ᐃᓚᐅᔪᓂᒃ ᓇᓗᓇᐃᔭᐃᕐᑯᓪᓗᒋᑦ

ᐃᓂᓂᒃ ᐊᒃᓱᕈᕐᓇᕐᓂᖏᓐᓄᑦ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐃᓕᖅᑯᓯᓕᕆᓂᕐᒧᓪᓗ ᐱᒻᒪᕆᐅᒋᔭᐅᔪᑦ ᓴᐳᔾᔭᐅᓯᒪᕐᑯᓪᓗᒋᑦ ᐊᒃᑐᐃᓂᕐᓂᑦ ᐅᓯᒃᑕᕐᓂᕐᓂᑦ. ᑕᒪᓐᓇ ᐱᒋᐊᖅᑎᑦᑎᓚᐅᖅᑐᑦ ᐊᑯᑭᑦᑐᓂᑦ ᑲᔪᓯᓂᐅᔪᓂᑦ ᑕᐃᑲᓂ ᑕᓐᒫᒃᒥᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᓂᑦ. ᐊᑐᖅᑐᑎᒃ ᐱᓗᐊᖅᑐᒥᑦ ᐊᒃᑐᖅᑕᐅᓴᕋᐃᑦᑐᑦ ᑕᕆᐅᕐᒥᐅᑕᑦ (PSSA) ᒪᓕᒃᑕᐅᔪᒃᓴᑦ, ᐋᕐᕼᐊᕐ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖓ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᐱᓕᕆᕝᕕᖓᑦ ᓄᓇᒥᐅᑕᓄᑦ ᐊᑐᖅᑐᒃᓴᓄᑦ ᐅᓂᒃᑳᓕᐅᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᓄᖓ ᓇᓗᓇᐃᔭᐃᓂᕐᒧᑦ ᐱᒻᒪᕆᐅᔪᓄᑦ ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᖃᓄᐃᓐᓂᖏᑦ ᐱᔭᕆᐊᑭᑦᑐᑦ ᑕᕆᐅᕐᒥᐅᑕᑦ ᐊᑯᑭᑦᑐᓂᑦ. 12 ᐃᓃᑦ ᓇᓗᓇᐃᖅᑕᐅᓚᐅᖅᑐᑦ; ᐅᐊᖕᓇᖓᓂᑦ ᐃᒪᐃᑦ ᖁᓪᑎᓛᒥᒃ ᑐᐊᕕᐊᖑᓪᓗᓂ. ᑕᒪᓐᓇ ᐱᐊᓂᒃᑎᓪᓗᒍ ᖃᐅᔨᓴᕐᓂᖅᑕᖃᓚᐅᖅᑐᑦ ᐱᖓᓱᓂᑦ ᐃᓂᓂᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᓂᖅᓴᐅᓪᓗᑎᒃ ᐊᒃᑐᐊᓪᓗᑎᒃ ᐅᓯᒃᑕᕐᓂᕐᒧᑦ (ᑕᓐᒫᒃᒥᑦᐅᑭᐅᖅᑕᖅᑐᒥ ᖃᓄᐃᓕᐅᕈᑕᐅᔪᒪᔪᑦ 2011-2020) ᐊᒻᒪᓗ ᐊᑕᖏᓗᒃᑖᖅᓯᒪᔪᑦ ᐅᓂᒃᑳᒧᑦ ᐃᓂᓄᑦ ᑕᒪᒃᑯᓄᖓ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐅᔾᔨᕐᓇᕐᓂᖏᑦ ᑕᐃᑲᓂ ᐱᓇᖕᓇᖓᓂᑦ ᓂᒋᐊᑕ ᑲᓇᖕᓇᔫᖓᑕ ᐊᑯᑭᑦᑑᑉ. ᐊᒥᓱᓚᐃᑦ ᐱᒻᒪᕆᐅᔪᑦ ᐱᓕᕆᐊᑦ ᐊᒻᒪᓗ ᐅᓂᒃᑳᑦ ᐱᒋᐊᖅᑎᑕᐅᓯᒪᓕᖅᑐᑦ ᑕᐃᒪᙱᖓᓂᑦ, ᐃᓚᐅᓪᓗᑎᒃ; NOW ᐱᓕᕆᐊᖅ ᑕᐃᑲᓂ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖓᓂᑦ ᑰᐸᓐᕼᐃᒐᓐ, ᖃᑯᖅᑕᖅ ᑎᑎᖅᑲᖅ (Kyhn ᐊᒻᒪᓗ Mosbech, 2019), ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᑎᓕᔭᐅᓯᒪᔪᑦ ᑲᑎᒪᔨᑦ ᐅᓂᒃᑳᖏᑦ (ICCC 2017), ᑯᓇᔅᑕᓐᓴᓐ ᐊᑕᖏᖅᓱᕐᓪᓗ, (2019), ᐊᒻᒪᓗ ᐊᔾᔨᐅᙱᑦᑐᖅ ᑎᑎᕋᖅᑕᐅᖃᑦᑕᖅᑐᓂᑦ ᑕᐃᑲᓂ ᖃᐅᑕᒫᖅᓯᐅᑎᖏᓐᓂᒃ ᐋᒻᐱᐅ (Hastrup et al. 2018). ᑲᓇᑕᓗᒃᑖᒥᑦ ᑲᑎᒪᔨᕋᓛᓕᐅᕐᓂᖅ ᐋᖅᑭᒃᑕᐅᓯᒪᓕᖅᑐᑦ ᐊᒻᒪᓗ ᑭᖑᓂᐊᒍᑦ ᑲᑎᖃᑎᖃᓛᖅᑐᑦ ᐱᖃᖅᑎᐅᖃᑕᐅᔪᓂᒃ ᐊᒻᒪᓗ ᐅᖃᒪᔭᐅᑕᐅᓗᑎᒃ ᐱᐅᖅᓱᐊᕐᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐱᕙᓖᔭᐅᑦ ᑐᙵᕕᖃᕐᓗᑎᒃ ᓂᓪᓕᐊᔾᔪᑕᐅᔪᓂᑦ. ᑲᑎᒪᓂᐅᓚᐅᖅᑐᓂᑦ ᑖᒃᑯᓇᓂ ᐊᖑᓇᓱᒃᑐᓕᕆᔨᒃᑯᓐᓂᑦ ᓇᓗᓇᐃᖅᓯᓯᒪᖕᒪᑕ ᐱᒻᒪᕆᐅᓂᖏᓐᓂᒃ ᑐᑭᓯᐅᒪᓗᒋᑦ ᑮᓇᐅᔭᑎᒍᑦ ᐊᑭᖏᑦ ᐃᓂᓄᑦ ᓄᓇᓕᖕᓄᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐃᓄᐃᑦ ᑕᐅᑐᖅᑰᖅᑕᖏᑦ ᐱᒻᒪᕆᐅᖕᒪᑕ ᐃᒃᐱᒍᓱᑦᑎᐊᕐᓂᖅ ᐊᖑᓇᓱᒃᑎᓂᑦ ᐊᒻᒪᓗ ᐃᖃᓗᒐᓱᒃᑎᓂᒃ. ᐃᓚᐅᔪᑦ ᓇᓗᓴᐃᖅᓯᓚᐅᕐᒥᔪᑦ ᐃᓄᐃᑦ ᓄᓇᕗᒥᑦ ᓇᖕᒥᓂᖅᓱᕐᓂᖅᓴᐅᔪᒪᓕᖅᑐᑦ ᐃᑲᔫᑎᒃᓴᖏᓂᑦ ᐊᒻᒪᓗ ᐃᓚᖏᑦ ᑭᒡᓕᐅᔪᑦ ᐱᐅᔫᔪᓐᓇᖅᑐᑦ, ᑭᓯᐊᓕ ᐃᓚᖏᑦ ᐱᐅᙱᒃᑲᓗᐊᖅᓗᑎᒃ. ᑭᒡᓕᖃᖅᑎᑕᐅᔪᑦ ᑭᒡᓕᓕᐅᖅᓯᓯᒪᓪᓗᐊᙱᑦᑐᑦ ᓄᓇᖃᖅᑐᑦ ᐊᑐᕐᓂᖏᓐᓂᒃ ᓄᓇᒥᒃ, ᐊᒻᒪᓗ ᓄᓇᓕᖕᓂᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐋᔾᔨᒌᙱᑦᑐᓂᒃ ᐱᔪᒥᒍᓱᖕᓂᖏᑦ ᐅᖃᕐᕕᖃᓪᓗᐊᖅᑐᑦ. ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᕐᒥᔪᑦ ᐱᑕᖃᓇᐊᖃᕐᓂᖓᓂᒃ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑕᐅᓗᑎᒃ ᐊᕐᕋᒍᑉ ᐃᓚᐃᓐᓇᖓᓂ ᐊᑐᖅᑕᐅᖃᑦᑕᕐᓂᖓᓄᑦ. ᐳᓚᕋᖅᑐᓕᕆᓂᕐᒧᑦ ᓴᓇᕝᕕᐅᔪᑦ ᐆᒃᑑᑎᒋᔭᐅᓚᐅᖅᑐᑦ, ᐃᒪᐃᒃᑯᓂ ᐊᒥᓱᑦ ᐳᓚᕋᖅᑐᓕᕆᓂᕐᒧᑦ ᐊᐅᔭᒃᑯᑦ ᑕᖅᑭᖏᓐᓂᒃ ᑐᒡᔭᐱᒃᐸᑕ ᑕᕆᐅᒥᐅᑕᑦ ᑎᖕᒥᐊᑦ ᐃᕙᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᑎᖕᒥᐊᖃᕐᕕᐅᔪᓄᑦ. ᓴᖅᑮᒃᐸᑕ ᓴᐳᔾᔨᓯᒪᓂᕐᓂᒃ ᑕᐅᕙᓐᓇ ᑕᑯᔭᐅᓂᖅᓴᐅᓕᕈᓐᓇᖅᑐᑦ, ᐅᓄᖅᓯᒋᐊᕐᓗᑎᒡᓗ ᐳᓚᕋᑏᑦ ᐊᒻᒪᓗ ᐸᒡᕕᓴᐃᓃᑦ ᐆᒪᔪᓂᒃ. ᐃᓚᐅᔪᑦ ᐃᓱᒫᓗᑎᒥᖕᓂᒃ ᓇᓗᓇᐃᖅᓯᓚᐅᕐᒥᔪᑦ ᐅᖅᓱᐊᓗᖕᒥᒃ ᕿᓇᔪᒐᓱᒃᑐᓄᑦ ᐊᒻᒪᓗ ᐱᑕᖃᑐᐃᓐᓇᓇᐊᖃᕐᓂᖓᓂᒃ ᐱᖃᓗᔭᕐᓄᑦ ᐱᕐᕈᓗᐊᕆᔪᓂᑦ. ᐃᓚᖓᑦ ᐃᓚᐅᔫᑉ ᐅᖃᒃᑲᓐᓂᓚᐅᖅᑐᑦ ᓯᕗᓂᒃᓴᒥ ᖃᓄᐃᓕᐅᕐᑯᔨᓂᖅ ᐃᓄᐃᑦ ᐱᔪᒥᒋᔭᖏᓐᓂᖏᓕᕆᖃᖅᑐᑦ.

ᐃᓚᐅᔪᑦ ᐃᖃᐃᓯᓚᐅᖅᑐᑦ ᑲᑎᙵᔪᓂᒃ ᑖᓐᓇ ᑕᓪᓗᕈᑎᐅᑉ ᐃᒪᖓ ᑲᓇᑕᒥ ᑕᕆᐅᕐᒥ ᐱᐅᖅᓱᐊᕐᕕᒃ ᐃᓂᖓᓄᑦ (NMCA) ᑭᒡᓕᖃᕐᒪᑦ ᑐᔾᔭᐱᒃᑐᓂᒃ ᓄᓇᕐᑯᑎᒋᔭᐅᔪᓂᒃ ᐱᑭᐊᓚᓱᕐᓱᐊᖅ, ᑕᐃᒪᐃᓐᓂᖓᓄᑦ ᐃᒪᖓ ᓴᐳᔾᔭᐅᓯᒫᓂᒃᑐᖅ. ᐃᓚᐅᔪᑦ ᐱᔪᒪᓚᐅᕐᒥᔪᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓂᖏᑦ ᑭᒡᓕᖏᑦ ᑕᐃᑲᓂ ᐱᑭᐊᓚᓱᕐᓱᐊᕐᒥᑦ ᑕᐃᒪᓐᓇᓪᓚᑦᑖᖑᙱᒻᒪᑕ, ᑭᓯᐊᓂᓕ ᒐᕙᒪᒃᑯᑦ ᑭᒡᓕᓕᕆᓯᒪᔭᖏᑦ ᑕᐃᒪᓐᓇᓪᓚᑦᑖᖑᓪᓗᑎᒃ.

ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᓴᖅᑭᑕᐅᔪᑦ ᐅᓂᒃᑳᖅᑕᐅᓯᓐᓈᑦ

ᐱᓕᕆᔾᔪᓰᑦ ᐊᒻᒪ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᑭᓕᐅ ᕼᐅᐊᓐᐱ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO)

ᐱᓪᓗᐊᑕᖏᑦ

ᐱᕙᒌᔭᐃᑎᓪᓗᒍ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ, ᑐᓴᕋᓱᐊᖅᑏᑦ (ᐅᐊᖕᓇᖓᓂᑦ ᓂᒋᐊᓂᑦ ᑐᓴᕋᓱᐊᖅᑏᑦ) ᐃᖅᑲᓇᐃᔭᓕᖅᑎᑕᐅᓚᐅᖅᑐᑦ ᑲᑎᖅᓱᐃᕐᑯᓪᓗᒋᑦ ᐋᖅᑭᒃᓱᐃᓗᑎᒃ ᑎᑎᕋᖅᓯᒪᔪᓂᒃ ᕿᒥᕐᕈᔭᐅᓂᐊᖅᑐᓂᒃ ᐊᒻᒪᓗ ᐊᔪᓇᖅᓱᔾᔨᓯᒪᓪᓗᑎᒃ ᑖᒃᑯᐊ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ (DFO). ᑕᒪᓐᓇ ᒪᓕᒃᑐᒍ, ᐱᒋᐊᕐᑯᑕᐅᔪᖅ ᕿᒥᕐᕈᔭᐅᓚᐅᖅᑐᑦ ᑕᒪᖅᑕᖅᓯᒪᔪᓄᑦ, ᐃᓚᑰᓂᕐᓄᑦ ᐊᒻᒪᓗ ᑕᒪᖅᑕᐅᓯᒪᔪᓄᓪᓗ. ᐃᓚᖏᑦ ᑐᓂᖅᓴᖅᑕᐅᓚᐅᖅᑐᑦ ᖃᐅᔨᒪᔨᑕᕐᓄᑦ ᐱᒋᐊᕈᑕᐅᓗᑎᒃ ᕿᒥᕐᕈᔭᐅᕐᑯᓪᓗᒋᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᑕᕆᐅᕐᒥᐅᑕᓕᕆᓂᖅ ᐊᒻᒪᓗ ᐃᖃᓗᓕᕆᓂᖅ ᐳᐃᔨᓕᕆᓂᕐᓄᓪᓗ ᐊᕕᒃᑐᖅᑕᐅᓯᒪᔪᑦ. ᐊᑕᖏᙱᑦᑐᑦ ᐊᑯᒃᑐᖅᑕᐅᓯᒪᔪᑦ ᕿᒥᕐᕆᔭᐅᓚᐅᖅᑐᑦ ᑲᑎᒪᖅᑲᖅᑎᓇᒋᑦ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ (CSAS). ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᐱᖅᑯᓯᒃᑯᑦ/ᓄᓇᖃᖅᑐᓂᑦ ᖃᐅᔨᒪᓃᑦ ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᓐᓄᑦ (IQ) ᐱᕝᕕᐅᓯᒪᔪᑦ ᐃᓚᐅᑎᑕᐅᓚᐅᖅᑐᑦ ᐊᑕᖏᓗᒃᑖᖅᓱᒋᑦ ᑎᑎᖅᑲᕐᑯᑎᒋᔭᐅᔪᓂᑦ, ᑭᓯᐊᓂᓕ ᐱᑕᖃᐅᒃᑲᓐᓂᕐᓂᐊᖅᑐᑦ ᐱᓕᕆᐊᖑᒃᑲᓐᓂᕆᐊᖃᖅᑐᑦ ᑕᒪᑐᒧᖓ

ᐱᓕᕆᐊᖑᔪᒧᑦ. ᕿᑭᖅᑕᓂ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᖏᑦ ᓯᕗᒃᑲᖅᑕᓚᐅᖅᑐᑦ ᑲᑎᖅᓱᐃᓂᕐᒧᑦ ᐱᑕᖃᒃᑲᓐᕆᐊᓕᖕᓄᑦ ᐱᖅᑯᓯᒃᑯᑦ/ᓄᓇᖃᖅᑐᓂᑦ ᖃᐅᔨᒪᓃᑦ ᓯᕗᓂᒃᓴᑦᑎᓐᓂᑦ ᑲᔪᓯᕙᓪᓕᐊᓂᐅᓂᐊᖅᑐᓂᑦ. ᐆᒪᔪᓄᑦ ᐱᒻᒪᕆᐅᔪᑦ ᐃᓃᑦ ᐃᓚᐅᑎᑕᐅᓚᐅᖅᑐᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᑕᐃᑲᙱᖅᓱᑎᒃ ᑯᓇᔅᑕᓐᓴᓐ ᐊᑕᖏᖅᓱᒋᓪᓗ (2019); ᑕᑯᓗᒋᑦ ᑕᐃᓂᔅ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒧᑦ ᐅᓂᒃᑳᖅ – ᐊᕐᕋᒍᑉ ᐃᓚᐃᓐᓇᖕᒐᓂ ᐱᒻᒪᕆᐅᔪᑦ ᐃᓃᑦ).

ᐃᓚᐅᔪᑦ ᐃᖅᑲᐃᑎᑕᐅᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᕿᒥᕐᕈᓂᑐᐃᓐᓇᐅᖏᓐᓂᖕᒐᓂᒃ ᑕᒪᒃᑯᓄᖕᒐ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐅᔾᔨᕐᓇᖅᑐᑦ ᐃᓃᑦ (EBSA), ᓲᖃᐃᒻᒪ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐅᔾᔨᕐᓇᖅᑐᑦ ᐃᓃᑦ (EBSA) ᑲᓇᑕᒥᑐᐊᖅ ᑕᒪᓐᓇᓗ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᖅ ᕿᒥᕐᕈᓯᒪᒋᓪᓗᓂ ᐊᑯᑭᑦᑐᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ. ᐃᓚᐅᔪᑦ ᑐᓂᔭᐅᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᒃ ᑎᑎᕋᖅᓯᒪᔪᓂᒃ ᐊᑐᐃᓐᓇᐅᔪᓂᒃ ᐱᖅᑯᓯᒃᑯᑦ/ᓄᓇᖃᖅᑐᓂᑦ ᖃᐅᔨᒪᓃᑦ/ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᓐᓂᕐᓗ ᐃᑲᔫᑎᒃᓴᑦ ᑭᖑᓂᖕᒐᑦᑎᓐᓂ ᐱᓕᕆᐊᖑᖃᑦᑕᖅᓯᒪᔪᑦ. ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᑐᓂᔭᐅᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᖅᑕᐅᕐᑯᓪᓗᒋ ᐊᔾᔨᒌᙱᕈᓗᔭᖅᑐᑦ ᓴᖅᑭᑕᐅᓯᒫᓂᒃᑐᑦ ᖃᐅᔨᒋᐊᕐᕕᒃᓴᑦ ᐅᖃᓪᓚᒍᓐᓇᖅᑐᑦ ᓄᓇᓖᑦ ᖃᐅᔨᒪᓂᖏᓐᓂᒃ ᑕᒪᑐᒧᖕᒐ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒦᑦ ᐃᓂᖏᓐᓂᑦ ᐊᒻᒪᓗ ᐃᑲᔫᑎᖃᕈᓐᖕᓄᑎᒃ ᓯᕗᓂᒃᓴᑦᑎᓐᓂᑦ ᑐᓴᕋᓯᐊᕐᓂᕐᓄᑦ ᐊᒻᒪᓗ ᖃᓄᐃᔨᓴᕐᓂᕐᓄᑦ. ᐃᒪᓐᓇᐅᕐᑯᔨᔪᖃᓚᐅᖅᐳᖅ, ᐊᓯᖏᑦ ᐃᓚᓕᐅᔾᔨᔪᓐᓇᖅᓱᑎᒃ ᑎᑎᕋᖅᓯᒪᔪᑦ. ᑐᕋᒐᓇᔭᐅᓚᐅᓯᖅᑐᖅ ᓴᖅᑮᑐᑎᒃ ᑎᑎᕋᖅᓯᒪᔪᓂᒃ ᑖᒃᑯᓇᓂ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ (DFO) ᑎᑎᕋᖃᑦᑕᖅᑕᖏᓐᓂᒃ ᐊᑕᐅᑦᑎᒃᑰᖃᑎᖃᕐᓗᑎᒃ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᐅᖃᓚᐅᖅᑐᑦ ᓄᓇᙳᐊᑉ ᐊᖏᓂᖕᒐᓂᑦ ᐃᓚᐅᑎᑕᐅᔪᓐᓇᖅᑐᑦ ᖀᖕᒐᓂᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᕿᑭᑦᑖᔫᑉ ᐊᑯᑭᑦᑑᓪᓗ ᐃᑭᖕᒐᓂᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ ᓂᕆᐅᒋᔭᐅᕗᑦ ᐅᑭᐅᖅᑕᖅᑐᒧᑦ ᓅᓐᓂᐊᕋᓱᒋᔭᐅᓪᓗᑎᒃ. ᐃᓃᑦ ᐊᒃᑐᐃᔪᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᒃ (ᓲᕐᓗ ᓕᖕᑭᓐ ᐃᒪᖕᒐ) ᐃᓚᐅᑎᑕᐅᓪᓗᐊᖅᑐᑦ. ᐊᓯᖏᑦ ᐃᓚᐅᔪᑦ ᑎᒃᑯᐊᖅᑐᐃᓚᐅᖅᑐᑦ ᐊᖏᓂᖅᓴᒥᒃ ᐱᖅᑯᓯᒃᑯᑦ ᐃᓂᖃᕐᒪᑕ ᑕᐃᑲᓂᑐᐊᖑᙱᑦᑐᖅ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ, ᐃᒪᐃᓐᓂᖕᒐᓄᖅᑲᐃ ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᑕᑯᔭᐅᓪᓗᐊᖅᑐᑦ ᐊᑐᖅᑕᐅᔪᓐᓇᕐᓗᓂ ᐱᖅᑯᓯᒃᑯᑦ ᑲᔪᓯᑎᑦᑏᓐᓇᕐᓗᓂ ᑕᐃᑰᓇᓗᒃᑕᖅ ᓄᓇᑎᒍᑦ ᑕᐃᑰᓇ ᕿᑭᑖᓗᕈᔪᖏᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕈᔪᖏᑦ. ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦᑕᐅᖅ ᑭᒡᒐᖅᑐᖅᑕᐅᓂᖅ ᑕᐅᑐᒃᑕᐅᓪᓗᐊᖅᑐᖅ ᐊᓯᔾᔨᖅᑕᐃᓐᓇᕐᓂᖕᒐᓂᒃ ᐃᒪᐃᓐᓂᖕᒐᓄᑦ ᐅᐊᒃᑲᕐᓂᖅ ᐃᖏᕋᖃᑦᑕᕐᓂᖕᒐᓄᑦ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᕆᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᐱᐅᓛᒥᒃ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ ᐅᓂᒃᑳᕐᓗᓂ ᐊᖏᓂᖅᓴᒥᒃ ᓄᓇᐃᑦ ᑲᑎᙵᔪᑦ ᐊᒃᑐᐊᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᖃᓂᒋᔭᖏᓐᓃᑦᑐᑦ ᓄᓇᓖᑦ. ᓄᓇᙳᐊᖅ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᐃᓚᐅᑎᑦᑎᓪᓗᐊᙱᑦᑐᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᒃ, ᑭᓯᐊᓂ ᐊᖏᓂᖕᒐ ᖃᐅᔨᓴᒐᒃᓴᐅᑉ ᐃᓂᓄᑦ ᑕᒪᑐᒧᖕᒐ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᐊᑏᑦ ᑎᑎᕋᕐᕕᖕᒐᑦᑕ (CSAS) ᐅᓂᒃᑳᖏᓐᓂᑦ.

ᐃᓚᐅᔪᖅ ᐊᐱᕆᓚᐅᖅᑐᑦ ᖃᓄᐃᓕᖕᒐᖕᒪᖕᒐᑕ ᑲᓇᑕᒥᑦ ᐊᒻᒪᓗ ᑕᓐᒫᒃᒥᑦ ᓄᓇᑖᕈᑎᖏᓐᓄᑦ ᐊᖏᕈᑎᖏᓐᓄᑦ ᑕᐃᑲᓂ ᓄᓇᕐᔪᐊᑉ ᑲᔾᔨᖕᒐᓄᑦ ᐅᐊᖕᓇᖕᒐᑕ ᐃᒪᖏᓐᓂᑦ. ᐅᓂᒃᑳᖅᑕᐅᓚᐅᖅᑐᑦ ᑐᙵᕕᖅᓱᑎᒃ ᓇᓗᓇᐃᔭᖅᑕᐅᓂᖏᑦ ᓄᓇᐅᑉ ᐃᓗᓕᖏᑦ ᖁᓕᓈᑦ, ᑐᒃᓯᕋᐅᑏᑦ ᑐᓂᔭᐅᖃᒃᑕᖅᑐᑦ ᓄᓇᕐᔪᐊᒥᑦ ᑲᑎᒪᔨᓄᑦ (UN), ᑭᓯᐊᓂᓕ ᑲᔪᓯᓂᐅᔪᖅ ᓱᓕ ᑲᔪᓯᕙᓪᓕᐊᔪᖅ; ᐊᔾᔨᖃᑎᒌᒍᑕᐅᓕᖅᑭᒃᓯᒪᓪᓗᓂ ᑭᒡᓕᓄᑦ, ᐊᒻᒪᓗ ᓄᑖᙳᕆᐊᕋᓱᐊᖅᓱᓂᔾᔪᒃ ᐊᖏᕈᑎ. ᐃᓚᐅᔪᖅ ᐊᓯᖕᒐᑦᑕᐅᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᓄᓇᒥᖕᒐᖅᑐᓂᒃ ᑲᓇᑕᒥᑦ (NRCan) ᐊᖏᖃᑎᒌᒍᑎᖃᓚᐅᕐᒪᑕ ᑕᒪᒃᑯᓄᖕᒐ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᑕᓐᒫᒃᑰᓪᓗᑎᒃ.

ᐃᓚᔪᖅ ᓴᖅᑮᓚᐅᕐᒥᔪᖅ ᐃᓱᒪᓪᓗᓂ ᑎᑎᖅᑲᕐᑯᑎᑦ ᐃᓚᓕᐅᔾᔨᓂᖅ ᐊᔾᔨᒌᕐᑯᓪᓗᒋᑦ, ᐱᔾᔪᑕᐅᓪᓗᑎᒃ ᐱᓕᕆᔾᔪᓲᑦ ᒪᓕᒋᐊᓖᓪᓗ. ᓇᓗᓇᐃᖅᑕᐅᓯᓚᐅᕐᒥᔪᑦ ᑕᒪᓐᓇ ᐊᒡᒍᖅᑐᐃᓂᐅᖕᒪᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᐊᒥᓱᓂᖕᒐᖅᑐᓂ ᓇᑭᑐᐃᓐᓇᖅ ᑲᑎᖅᓱᖅᑕᐅᔪᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᖅᑕᐅᓪᓗᑎᒃ ᐊᔾᔨᒌᙱᑦᑐᑎᒍᑦ. ᑕᒪᓐᓇ ᖃᐅᔨᓴᐃᓂᖅ ᖃᓄᐃᑦᑑᓂᖏᑦ ᑎᑎᖅᑲᕐᑯᑎᑦ ᐊᒻᒪᓗ ᐃᓗᓕᖏᑦ ᖃᓄᐃᓐᓂᖅᓴᐅᖕᒪᖕᒐᑕ ᐱᒻᒪᕆᐅᓇᔭᖅᑐᖅ ᓲᖃᐃᒻᒪ ᑐᑭᓯᑎᑦᑎᓇᔭᖅᑐᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐱᓕᕆᐊᒃᓴᐅᔪᓄᑦ, ᐱᓕᕆᖃᑎᒌᑦ ᐱᓕᕆᐊᕆᓇᓱᐊᖅᑎᖏᓐᓂᒃ, ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᐅᑎᓄᑦ. ᐃᓱᒪᒋᔭᐅᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᑎᑎᕋᖅᑕᐅᓗᑎ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑕᐅᓗᓂ ᐅᖃᖃᑎᒌᖕᓂᖅ ᐃᓱᒪᒋᔭᐅᔪᓂᒃ ᑲᑎᒪᓂᓕᒫᒥᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐊᒥᓱᓂᒃ ᑕᐃᒍᓯᕐᓂᒃ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᓂᒃ ᐅᖃᖃᑎᒌᒍᑎᖃᓚᐅᖅᑐᑦ ᑕᒪᑐᒧᖕᒐ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒧᑦ ᐊᒻᒪᓗ ᑐᒃᓯᕋᖅᓱᑎᒃ ᒪᕐᑮᖕᓂᒃ ᐊᑐᖅᑕᐅᖕᒐᓚᑭᓐᓇᖅᑑᖕᓂᒃ: ᐅᐊᖕᓇᖕᒐᓂᑦ ᐊᐅᒃᑲᕐᓂᖅ (ᐅᕝᕙᓘᓐᓃᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖅ ᐊᐅᒃᑲᕐᓂᖅ) ᐊᒻᒪᓗ ᐱᑭᐊᓗᓱᕐᓱᐊᖅ (ᐊᑐᖅᑕᐅᓂᐊᕐᓗᓂ ᑭᓲᓂᖕᒐᓂ). ᐃᓚᐅᔪᑦ ᖃᖃᖃᑎᒌᓚᐅᖅᑐᑦ ᐃᓚᐅᓪᓗᓂ ᑕᐃᒍᓯᖅ "ᖃᓂᒋᔭᓃᑦᑐᑦ ᐃᓃᑦ" ᐃᒪᐃᓐᓂᖕᒐᓄᑦ ᐳᐃᔾᑦ ᐊᑐᖃᑦᑕᕐᒪᑕ ᓯᒡᔭᓂᑦ ᐃᓂᓂᑦ ᐊᒻᒪᓗ ᑲᖏᖅᓱᖕᓂᒃ. ᑐᐃᒍᓯᖅ "ᐊᐅᒃᑲᕐᓂᖅ" ᓴᓂᕐᕙᒃᑕᐅᓯᒪᓗᓂ ᑕᒪᒃᑯᓄᖕᒐ ᐊᐅᒃᑲᕐᓂᐅᒫᖕᒐᑦ. ᖃᒃᑲᓐᓂᐊᒍᑦ, ᐊᑐᕐᓂᖅ "ᓯᑯᓯᒪᙱᑦᑐᖅ" ᑭᒡᓕᓕᖅᑕᐅᓗᓂ ᐱᑕᖃᕐᓂᕋᖕᒐᑦ ᓯᑯᓯᒪᙱᑦᑐᓂᒃ ᐃᒥᕐᓂᒃ. ᑭᓯᐊᓂᓕ, ᑎᒃᑯᐊᖅᑕᐅᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊᓗᒃᑖᐸᓗᐃᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᑎᑎᖃᑦ ᐅᖃᐅᓯᖃᖅᑐᖅ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐃᒪᖕᒐ ᓯᑯᓯᒪᙱᑦᑐᖅ ᐃᒥᕐᓂᒃ (NOW). ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᑐᑭᖃᕐᒪᑦ "ᐃᖅᑲᖕᒐᓂᖕᒫᖅᑐᖅ", ᑭᓯᐊᓂᓕ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᓄᓇᓖᑦ ᑐᑭᓯᐅᒪᓪᓚᙱᑦᑐᑦ ᐃᖅᑲᖕᒐᓂᖕᒫᖃᑦᑕᕐᒪᖕᒫᑦ, ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐃᒪᖕᒐ ᓯᑯᓯᒪᙱᑦᑐᖅ ᐃᒥᖅ (NOW) ᑕᐃᒍᓯᖅ ᐊᑐᖅᑕᐅᔪᖅ ᑕᐃᓂ ᐊᐅᓯᐃᑦᑐᒥᑦ. ᐃᓚᖕᒐᑦ ᐃᓚᐅᔪᖅ

ᐊᖏᖃᑎᖃᓚᐅᖅᑐᖅ ᐊᒻᒪᓗ ᑕᐃᒨᓯᖅ ᐃᒪᓐᓇᐅᕐᑯᔨᔪᖃᓚᐅᖅᐳᖅ ᐊᑐᖅᑕᐅᕙᒃᑐᖅ ᑕᐃᑲᓂ ᐊᐅᓯᐃᑦᑐᒥᑦ, "ᓯᑯᓯᐃᑦᑐᖅ" (ᐃᓂ ᓯᑯᓯᐃᑦᑐᖅ) ᑐᑭᖃᕐᓂᖅᓴᐅᓂᖓᓄᑦ. ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᐅᖃᐅᓯᖅ "ᓄᓇᐃᑦ ᑲᑎᙵᔪᑦ" ᓇᓗᓕᕈᑕᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᐊᑐᖅᑕᐅᒐᔪᒃᐸᒃᐳᖅ ᒐᕙᒪᓕᕆᓂᕐᒧᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓗᓃᑦ ᐊᐅᓚᑦᑎᕝᕕᖃᕐᓂᕐᒧᑦ ᐃᓗᓕᖏᓐᓂᒃ. ᐊᑕᐅᓯᐅᖃᑎᒌᒍᓐᓇᖅᓯᓚᐅᖅᑐᑦ ᑕᐃᒨᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐃᒪᖓ ᓯᑯᙱᑐᖅ ᐃᒥᖅ (NOW) ᐅᕝᕙᓘᓐᓃᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᖅ ᐊᒻᒪᓗ ᐱᑭᐊᓗᓯᕐᓯᐊᖅ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᓗᑎᒃ, ᐃᒪᓐᓂᕈᓂ ᑭᓯᐊᓂ ᑎᑎᖅᑲᖅ ᒪᓕᑦᑎᕈᑎᒃ, ᑭᓯᐊᓂᑦᐅᖅ ᓇᓗᓇᐃᔭᐃᓯᒪᔪᑦ ᐃᓚᐅᓪᓗᐊᖅᑐᑦ ᐊᑕᖏᖅᑕᐅᕐᑯᓪᓗᒋᑦ ᖃᓂᒋᔭᐅᔪᑦ ᐃᓃᑦ ᐊᒻᒪᓗ ᖃᓄᐃᓕᖓᓂᖓ ᐊᐅᒃᑲᕐᓂᐅᑉ. ᐃᓚᐅᔪᑦ ᐃᓚᓯᒋᐊᓚᐅᖅᑐᑦ ᑕᐃᒨᖓ ᐱᑭᐊᓚᓯᕐᓯᐊᖅ ᕿᒥᕐᕈᔭᐅᒃᑲᓐᓂᓇᐊᖃᑐᐃᓐᓇᕆᐊᓕᒃ ᓯᕗᓂᒃᓴᒥᑦ ᐃᒪᐃᓐᓂᖓᓄᑦ "ᓯᑯᓯᐃᑦᑐᖅ" ᐊᒃᑐᐊᓂᖅᓴᐅᓗᓂ ᓄᓇᓕᖕᓂᑦ ᐃᓚᒋᔭᐅᔪᓂᑦ ᑕᐃᑲᓂ ᐊᐅᓯᐃᑦᑐᒥᑦ.

ᓯᑯ, ᐃᑎᓂᖅᓯᐅᑏᑦ, ᑕᕆᐅᕐᒥᐅᑕᑦ ᐊᒻᒪ ᓯᓚᐅᑉ ᖃᓄᐃᓐᓂᓇᕙᒃᑕᖏᑦ ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᒃᓴᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᑭᓕᐅ ᐹᐅᐊᓐᐱ, ᐃᒪᕐᒥᐅᑕᓕᓇᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO)

ᐱᓪᓗᐊᑕᖏᑦ

ᐃᓚᐅᔪᑦ ᑐᓂᔭᐅᓚᐅᖅᑐᑦ ᐊᑕᖏᖅᑐᓂᒃ ᓯᑯ, ᐃᑎᓂᖅᓯᐅᑏᑦ, ᑕᕆᐅᕐᒥᐅᑕᑦ ᐊᒻᒪ ᓯᓚᐅᑉ ᖃᓄᐃᓐᓂᓇᕙᒃᑕᖏᑦ ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᒃᓴᐅᔪᓂᒃ ᑕᐃᑲᙵᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᖏᓐᓂᒃ. ᓯᕗᓪᓕᕐᒥᒃ, ᐱᓕᕆᔾᔪᓰᑦ ᐊᐅᒃᑲᕐᓂᖑᖅᐸᓪᓕᐊᑎᓪᓗᒍ, ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ, ᓴᖅᑭᑕᐅᓚᐅᖅᑐᑦ. ᑕᒪᓐᓇ ᐃᓚᐅᑎᑦᑎᓚᐅᖅᑐᑦ ᓇᐃᓈᖅᓯᒪᔪᓂᒃ ᐊᑕᖏᖅᑐᓂᒃ ᐊᓂᖅᓵᖅᐸᑦᑕᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᐅᑕᑦ ᖃᓄᐃᓕᖓᓂᖏᑦ, ᐅᖅᑰᓗᐊᖕᒋᑦᑐᑦ ᐱᐅᓯᕆᕙᒃᑕᖏᑦ, ᐅᐃᒍᐊᑦ, ᐊᓄᕆ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓃᑦ, ᐃᖅᑲᕐᒥᖕᒐᖅᑐᑦ ᖃᓂᒋᔭᖏᑦᑎᒍᑦ ᐊᑯᑭᑦᑐᑦ. ᓇᐃᓈᖅᓯᓪᓗᑎᒃ ᓇᓗᓇᐃᔭᖅᑕᐅᔪᑦ ᓯᓚᒧᑦ ᑲᑎᙵᔪᑦ ᓴᖅᑭᑕᐅᓚᐅᖅᑐᑦ ᑭᖑᓂᐊᒍᑦ. ᓯᓚᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑲᑎᖅᓯᖅᑕᐅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖓᓂᑦ ᕿᑭᑦᑕᒐᓚᖕᓄᑦ ᐊᒻᒪᓗ ᕿᑭᖅᑖᓗᖕᒧᑦ ᑕᐃᑲᙵᓂᑦ 1950, ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᓯᓚᓐᓂᐊᕐᕕᖕᑕᖅᑭᑦᑐᖅ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᖅ. ᑕᒪᑐᒧᖓᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ, 30–ᐊᕐᕌᒍᑦ ᑎᑎᖅᑲᕐᑯᑎᒋᔭᐅᔪᑦ ᐋᖅᑭᒃᓯᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᑐᖅᓗᑎᒃ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᑕᐃᑲᙵᑦ ᖃᓂᒃᓴᓛᖑᔪᒥᒃ ᓯᓚᓐᓂᐊᕐᕕᖕᓂᑦ ᑖᒃᑯᓄᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓄᑦ (ᐊᐅᓯᐃᑦᑐᖅ ᐊᒻᒪᓗ ᑑᓕ ᑎᖕᒥᓲᖃᕐᕕᒃ) ᑖᒃᑯᓄᖓ ᐊᕐᕌᒍᓄᑦ 1985-2015-ᒧᑦ. ᐊᑕᖏᖅᓯᒪᔪᑦ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐃᑎᓂᖅᓯᐅᕐᓂᕐᒧᑦ ᐃᓛᒃᑰᖅᑐᑦ ᑐᓂᔭᐅᓚᐅᕐᒥᔪᑦ. ᑕᒪᓐᓇ ᐃᓚᐅᑎᑦᑎᔪᖅ ᓯᕐᒥᓕᕆᓂᕐᒥᒃ ᐊᒻᒪ ᑮᓇᐅᔭᓕᐅᕋᓱᖕᓂᕐᒧᑦ ᓄᓇᓕᕆᓂᕐᒧᑦ. ᐃᓚᐅᔪᑦ ᐊᐱᕆᔭᐅᓚᐅᖅᑐᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕐᑯᔭᐅᓪᓗᑎᒃ ᐃᒪᐃᙱᒃᑲᓗᐊᕐᒪᖔᑦ ᑕᒪᓐᓇ ᐃᓛᒃᑰᖅᑐᑦ ᐃᓚᒋᔭᐅᓪᓗᐊᕐᒪᖔᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᑭᖑᓂᐊᒍᑦ, ᑲᑎᙵᔪᑦ ᐅᓂᒃᑲᐅᓯᐅᓪᓗᐊᑕᖅᑐᑦ ᐱᓪᓗᐊᑕᕐᓄᑦ ᐊᒃᑐᐊᓂᓕᖕᓄᑦ ᐃᒪᕐᒥᐅᑕᓄᑦ ᐊᑐᖅᑕᐅᕙᒃᑐᓄᑦ, ᐃᓚᒋᔭᐅᓪᓗᑎᒃ ᐃᒦᑦ ᐊᖏᐅᔪᑦ (ᓇᑭᖑᕐᒪᖔᑕ ᐊᒻᒪᓗ ᐃᒦᑦ ᖃᓕᓈᓕᖅᓯᖅᓯᒪᔪᑦ) ᐃᖏᕐᕋᓂᐅᒪᔪᒃᑐᑦ, ᐊᒻᒪᓗ ᐋᖅᑭᖑᐊᖅᑕᐅᓯᒪᔪᓄᑦ ᑐᕌᒐᓇᔭᐅᔪᒪᔪᑦ. ᑕᒪᓇ ᐃᓚᐅᑎᑦᑎᓚᐅᖅᑐᑦ ᑎᑎᕋᐅᔭᖅᑕᐅᓯᒪᔪᓂᒃ ᐃᖏᕐᕋᓂᐅᕙᒃᑐᑦ ᖃᓄᐃᓕᖓᓂᓇᕙᒃᑕᖏᓐᓄᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᒻᒪᓗ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᓂᑦ. ᑕᓇᐅᑉ ᓯᑯᖓ ᐅᓂᒃᑲᐅᓯᐅᓚᐅᕐᒥᔪᖅ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᖏᓐᓂᓂᑦ ᓴᖅᑭᑕᐅᓪᓗᑎᒃ. ᑕᒪᒃᑯᐊ ᐃᓚᐅᑎᑦᑎᓚᐅᖅᑐᑦ ᐅᐃᒍᐊᑦ, ᐋᖅᑭᒃᐸᓪᓕᐊᓂᐅᕙᒃᑐᑦ ᐊᒻᒪᓗ ᖃᓄᐃᑦᑑᓂᖓ ᑕᓇᐅᑉ ᓯᑯᖓ, ᐊᕐᕌᒍᑉ ᐃᓚᐃᓐᓇᖓᓂᑦ ᖃᓄᐃᑦᑑᕙᒃᑐᑦ, ᓯᑯ ᐃᖏᕐᕋᓂᖏᑦ, ᓯᕐᒦᑦ, ᐊᐅᔪᐃᑦᑐᑦ, ᓯᑯᑦ, ᐊᒻᒪᓗ ᐃᖏᕐᕋᓃᑦ ᓯᕗᓂᒃᓴᒥᓪᓗ ᖃᓄᐃᑑᓇᔭᕐᓂᖏᑦ. ᑭᖑᓪᓕᖅᐹᒥᒃ, ᐃᒪᑦᑎᐊᕙᖕᒥᖕᒐᖅᑐᑦ ᐅᖃᐅᓯᐅᓚᐅᕐᒥᔪᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᑰᒃᑐᑦ ᓯᕐᒥᓂᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᐊᐅᔪᐃᑦᑐᖓᓂᑦ (ᐃᓚᐅᓪᓗᑎᒃ ᐋᖅᑭᖑᐊᖅᑕᐅᓯᒪᔪᓄᑦ ᖃᐅᔨᔭᐅᔪᑦ), ᓯᑯ ᐊᐅᒃᐸᓪᓕᐊᓂᖓ, ᑰᑦ ᑰᖃᑦᑕᕐᓂᖏᑦ, ᐱᖃᓗᔭᑦ, ᐊᒻᒪᓗ ᒪᕐᑯᖕᓂᑦ ᖃᓐᓂᕐᓂᑦ.

ᐃᓚᐅᑎᑕᐅᓂᖏᑦ ᓄᑖᙳᕆᐊᖅᓯᒪᔪᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑕᐃᑲᙵᑦ NCEP ᐊᒻᒪᓗ NARR ᐋᖅᑭᒃᓯᖑᐊᖅᓯᒪᔭᖏᓐᓂᑦ, ᐃᓚᐅᑎᑕᐅᓂᖏᑦ ᓯᓚᐅᑉ ᖃᓄᐃᓐᓂᓇᓂᐊᕐᓯᒋᔭᐅᔪᑦ ᑖᒃᑯᓇᙵᑦ AMAP ᐊᒻᒪᓗ ᐹᓪ ᒪᐃᔪᔅ ᐱᓕᕆᓂᖏᓐᓂᑦ ᑕᐃᑲᓂ NEMO, ᐊᒻᒪᓗ ᐲᖅᑕᐅᓂᖓ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐃᓛᒃᑰᖅᑐᑦ ᑐᒃᓯᕋᖅᑕᐅᓚᐅᖅᑐᑦ ᐅᖃᐅᓯᐅᔪᓐᓇᕐᑯᓪᓗᒋᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᑕᒪᐃᑎᒍᑦ

ᑲᑎᙵᔪᑦ ᐋᖅᑭᒃᓯᐃᓕᖅᑭᖕᓂᕐᒧᑦ ᑕᒪᑐᒥᖓ ᐃᓛᒃᑰᖅᑐᒥᒃ ᑐᙵᕕᖃᖅᓗᑎᒃ ᐋᖅᑭᒋᐊᖅᑕᐅᓂᕐᓂᒃ ᑕᐃᑲᙵᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒻᔪᐊᖓᓂᑦ ᒫᓂᑑᐸᐅᑉ. ᑐᒃᓯᕋᖅᑕᐅᔪᑦ ᐋᖅᑭᒃᓯᐃᓕᖅᑭᖕᓂᕐᒧᑦ ᐃᒪᐃᑦᑑᖕᒐᓕᕋᔭᖅᑐᑦ:

1. ᓯᓚᒧᑦ ᐊᑕᖏᖅᓯᒪᔪᑦ: ᓄᑖᙳᕆᐊᖅᓯᒪᔪᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑖᒃᑯᓇᙵᑦ NCEP NARR ᐋᖅᑭᖑᐊᖅᑕᐅᓯᒪᔪᓂᑦ
2. ᑕᕆᐅᑉ ᓯᑯᖓ, ᐅᐃᒍᐊᑦ ᐊᒻᒪᓗ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᐅᕙᒃᑐᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᐅᑉ ᐊᐅᒃᑲᕐᓂᖓᓂᑦ

3. ᐊᑕᖏᖅᓯᒪᔪᑦ ᐃᒪᕐᒥᐅᑕᑦ (ᐃᖏᕐᕋᓂᐅᒐᔫᒃᑐᑦ, ᐃᒪᑦᑎᐊᕙᐃᑦ ᐃᖏᕐᕋᖃᑦᑕᕐᓂᖏᑦ, ᐅᓕᓐᓃᑦ ᑎᓂᓐᓃᑦ, ᐃᒪᑦᑎᐊᕙᐃᑦ ᑯᕕᖃᑦᑕᕐᓂᖏᑦ, ᐃᒪᐃᑦ ᐃᑎᓂᖏᑦ/ᐆᓇᕐᓂᖏᑦ ᑕᕆᐅᖑᓂᖓ, ᓂᕿᑦᑎᐊᕙᐃᑦ)

4. ᓄᓇᓕᕆᓂᖅ/ᓱᕐᒥᓕᕆᓂᖅ/ᑮᓇᐅᔭᓕᐅᕋᓱᖕᓂᕐᒧᑦ ᓄᓇᓕᕆᓂᕐᒧᑦ

5. ᓯᓚᐅᑉ ᖃᓄᐃᓐᓂᕆᓂᐊᕋᓱᒋᔭᐅᔪᑦ

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐊᔾᔨᒌᙱᓐᓂᖏᑦ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᐊᑕᖏᓗᒃᑖᖅᓱᒋᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ. ᐊᒥᓱᓂᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᐊᑑᑎᖃᕈᓐᓃᕐᓂᑯᑦ ᓴᖅᑭᑕᐅᓚᐅᖅᑐᑦ ᐱᐅᓯᒋᐊᕆᕐᑯᓪᓗᒋᑦ ᑐᓴᐅᒪᔪᑎᓂᒃ ᒫᓐᓇ ᑕᐅᑐᖅᑰᖅᑕᐅᔪᓄᑦ. ᓱᕐᓗ, ᐃᓚᖏᑦ ᑐᒃᓯᕋᖅᑕᐅᔪᑦ ᐱᓕᕆᔾᔪᑦ ᑕᒪᑐᒧᖓ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᕆᕙᒃᑕᖓᓄᑦ ᐊᐅᒃᑲᕐᓂᐅᑉ ᓄᑕᐅᓚᙱᑦᑐᑦ. ᐃᓚᐅᔪᑦ ᐅᖃᒃᑲᓐᓂᕋᓱᓚᐅᖅᑐᑦ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᐅᐃᒍᐊᑦ ᐊᒻᒪᓗ ᐊᓄᕆ (ᐱᔾᔪᑕᐅᓪᓗᓂ ᓄᓇᓕᖕᓂᑦ ᓄᓇᖓ) ᐊᑑᑎᖃᖃᑦᑕᕐᓂᖓᓄᑦ ᐋᖅᑭᒃᐸᓪᓕᐊᑎᓪᓗᒍ ᑕᒪᓐᓇ ᐅᖅᑰᓗᐊᙱᑦᑐᒧᑦ ᐊᐅᒃᑲᕐᓂᕐᒧᑦ. ᑕᒪᓐᓇ ᓱᖅᑯᐃᓇᖅᓯᑎᑕᐅᓪᓗᐊᖅᑐᑦ ᐱᒋᐊᕐᓂᖓᓂᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᖏᓐᓂᑦ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᖅᑕᐅᓗᓂ ᑐᑭᓯᓇᑦᑎᐊᖅᑐᑎᒍᑦ ᐅᖃᐅᓯᒃᑯᑦ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᐊᓯᖏᓐᓂᑦ, ᑎᑎᖅᑲᕐᑯᑏᑦ ᑲᑎᖅᓱᖅᑕᐅᔪᑦ ᐊᔾᔨᒌᙱᑦᑐᑎᒍᑦ ᖃᐅᔨᓴᕈᓯᖅᑎᒍᑦ, ᐊᑐᖅᑕᐅᓗᑎᒃ ᐊᔾᔨᒌᙱᑦᑐᑦ ᖃᖓᒃᑰᓂᖏᑦ ᓴᖅᑭᑕᐅᖓᔪᖃᑦᑕᓚᐅᖅᑐᑦ ᐊᑕᐅᑦᑎᒃᑯᑦ. ᐅᖃᐅᓯᒃᑲᓐᓂᓪᓗᐊᖅᑐᑦ ᑕᒪᒃᑯᐊ ᖃᖓᒃᑯᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑲᑎᖅᓱᖅᑕᐅᓐᓂᕐᒪᖔᑕ ᐊᒻᒪᓗ ᑭᓯᑦ ᓴᖅᑭᑕᐅᖕᒪᖔᑕ. ᑲᑎᙵᔪᑦ ᐊᖏᖅᓯᒪᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᐃᓛᒃᑯᖅᑐᓂᒃ ᑕᐃᑲᓂ ᓴᖅᑭᑕᐅᔾᓴᖅᑎᓪᓗᒍ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓄᑦ ᖃᐅᔨᓴᐃᓯᒪᔪᑦ ᐱᐅᓯᕆᔭᐅᕙᓚᐅᖅᑐᓂᑦ ᑕᐅᕙᓂ ᐃᓂᒥᑦ, ᐊᒻᒪᓗ ᑭᒡᓕᖃᕈᑕᐅᔪᑦ ᐃᒪᖏᓐᓄᑦ ᑎᑎᖅᑲᑯᑎᓄᑦ ᐋᖅᑭᒃᓱᖅᓯᒪᔪᓄᑦ. ᑕᒪᓐᓇ ᐃᑲᔪᕋᔭᖅᑐᖅ ᐊᔪᒃᓇᖅᑐᖅᓯᐅᖏᓐᓂᖅᓴᐅᓗᑎᒃ ᐊᒻᒪᓗ ᑐᑭᓯᓇᖅᓯᑎᑦᑎᐊᕐᓗᓂ ᒫᓐᓇ ᖃᓄᐃᓕᖓᖕᒪᖔᑕ ᖃᐅᒪᓂᕆᔭᐅᔪᑦ. ᐃᓱᒪᓕᐅᕈᑕᐅᓚᐅᖅᑐᖅ ᑕᒪᓐᓇ ᐃᓚᐅᑎᑕᐅᔪᓐᓇᕐᓂᖓᓂᒃ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᐃᓱᒫᓗᑕᐅᓚᐅᕐᒥᔪᑦ ᐊᑐᕐᓂᖏᓐᓂᒃ ᓱᓕᓪᓚᕆᒃᑐᓂᑦ ᐅᖃᐅᓯᐅᔪᓂᒃ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᐃᒪᐃᓐᓂᖏᓐᓂᒃ "ᑕᒪᕐᒥᑲᓴᒃ ᐆᒪᓂᖃᖅᑐᑦ ᐱᕙᓪᓕᐊᓂᖃᑦᑎᐊᖅᑐᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐊᖓᒪᓗᖅᓯᓯᒪᓂᖓᓂᑦ". ᑕᒪᓐᓇ ᓱᓕᑐᐃᓐᓇᕆᐊᓕᒃ ᐊᐅᒃᑲᕐᓂᕐᒧᑦ, ᑭᓯᐊᓂᓕ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᒋᓗᒍ ᐊᐅᒃᑲᕐᓂᖅ ᐊᐅᒃᑲᕐᓂᑐᐊᖑᓂᖓ ᑭᒡᓕᖃᖅᑎᑕᐅᖕᒪᑦ. ᖀᒃᑲᓐᓂᐊᒍᑦ, ᐊᐅᒃᑲᕐᓂᖅ ᐱᕙᓪᓕᐊᓂᖃᑦᑎᐊᖅᑑᔪᓐᓂᕐᒪᑦ ᑕᐃᑲᙱᓂᑐᑦ. ᑕᒪᓐᓇ ᐅᖃᖃᑎᒌᒍᑕᐅᓚᐅᖅᐳᖅ ᖃᓄᐃᑦᑑᓂᖓᓂᒃ ᐊᐅᒃᑲᕐᓂᖅ ᐊᒻᒪᓗ ᐃᓱᒪᓕᐅᕈᑕᐅᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᑎᑎᕋᖅᑕᐅᓯᒪᔭᕆᐊᖃᕐᓂᖓᓂᒃ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐊᑐᕐᓗᑎᒃ ᐃᓱᒪᒋᔭᐅᓂᖓᓄᑦ ᓯᑯᖃᙱᓐᓂᖅᓴᐅᓕᕐᓂᖓᓄᑦ ᐊᔾᔨᒌᔪᓐᓂᕐᓂᖓ ᐊᐅᒃᑲᕐᓂᐅᑉ ᑕᐃᑲᙱᑦ ᓯᑐᐃᑦ ᐊᑯᓐᓂᖏᓐᓂᑦ ᐃᒪᖅᑕᖃᖃᑦᑕᕐᓂᖓᓄᑦ (ᐃᓂᓂᑦ ᐊᐅᒃᑲᕐᓃᑦ ᐃᖏᕐᕋᖃᑦᑕᖅᑎᓪᓗᒋᑦ). ᑭᓯᐊᓂᓕ, ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᒪᐅᖅᑐᑦ ᐱᑕᖃᐃᓐᓇᖃᑦᑕᕐᓂᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ ᐊᐅᒃᑲᕐᓃᑦ ᐊᓯᐅᕙᓪᓕᐊᓕᕐᒪᑕ ᐊᒻᒪᓗ ᓯᑯᑦ ᐃᑳᕐᕕᑦ ᐋᖅᑭᖃᑦᑕᙱᒻᒪᑕ ᐊᕐᕌᓂᐅᓚᐅᖅᑐᑦ. ᑕᒪᓐᓇ ᐊᒃᑐᐊᔪᑦ ᑭᖑᓂᖓᑦᑎᑦᓂ ᐅᖃᖅᑕᐅᓯᒪᔪᒥᑦ (ᐅᓄᖅᓯᕙᓪᓕᐊᑦᑎᐊᕈᓐᓃᖅᐸᓪᓕᐊᔪᑦ), ᐊᒻᒪᓗ ᐃᓱᒪᓕᐅᕈᑕᐅᓚᐅᖅᓗᓂ ᑖᒃᑯᐊ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᐃᓚᓕᐅᔾᔨᕆᐊᕐᒪᑕ ᐅᖃᖅᓯᒪᔪᒥᒃ ᐊᐅᒃᑲᕐᓃᑦ ᐋᖅᑭᒃᐸᓪᓕᐊᖏᓐᓇᐅᔭᕐᒪᑕ; ᐱᕙᓪᓕᐊᓂᖃᑦᑎᐊᓚᐅᖅᑑᒐᓗᐊᑦ ᑕᐅᕙᓂ, ᑭᓯᐊᓂᓕ ᑕᐃᒪᐃᖃᑦᑕᕈᓐᓃᖅᑐᖅ ᑕᐃᔅᓱᒪᓂᑐᑦ. ᐊᓯᐊᑦᑕᐅᖅ ᐃᓚᐅᔪᖅ ᐅᔾᔨᖅᓯᕐᑯᔨᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᓇᓂ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᐱᑕᖃᑦᑎᐊᖅᑐᑦ (ᓱᕐᓗ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ), ᑲᒪᒋᔭᐅᑦᑎᐊᕆᓖᑦ ᓴᖅᑭᔭᖅᑎᑦᑎᑎᓪᓗᒋᑦ ᑕᒪᓐᓇ ᐱᕙᓪᓕᐊᓂᐅᔪᖅ ᐊᔾᔨᐅᖏᑦᑐᒃᑯᑦ ᐊᓯᔾᔨᕐᓂᐅᔪᖅ ᐊᓯᔾᔨᑐᐃᓐᓇᕆᐊᖃᖃᑦᑕᕐᓂᖏᓐᓂᒃ. ᐅᔾᔨᕐᓇᖅᑐᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᑦᑎᐊᕈᓐᓃᖅᐸᓪᓕᐊᔪᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑭᒥᐅᒪᔭᐅᙱᑦᑐᐃᓐᓇᕆᐊᓕᒃ ᐃᒪᐃᑦᑑᙱᓪᓗᓂ ᐱᕐᕈᓗᐊᕿᓂᕐᒧᑦ ᐊᓯᔾᔨᐅᑕᐅᙱᑑᓪᓗᓂ. ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᐃᑕᖃᑦᑎᐊᕐᓂᖓᓂᒃ ᖃᐅᔨᒪᓂᕐᓂᒃ ᐅᖃᕈᓐᓇᖅᓱᑎᒃ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᕐᑑᓪᓗᓂ ᐊᒃᑐᖅᑕᐅᔪᓐᓇᖅᑐᒃᑯᑦ ᐊᕙᑎ, ᑭᓯᐊᓂᓕ ᑕᐃᒪᐃᑐᐃᓐᓇᕐᓂᖏᑦ ᐊᓯᔾᔨᖅᑕᕐᓂᖏᑦ ᐊᒃᑐᐃᖃᑦᑕᕐᒪᑕ ᐊᒻᒪᓗ ᐊᑯᓂᐅᔪᒃᑯᑦ ᐊᓯᔾᔨᐅᑎᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔭᐅᙱᒻᒪᑕ ᑕᒪᓐᓇᓗ ᑲᒪᒋᔭᐅᔭᕆᐊᖃᖅᓗᓂ. ᑕᒪᓐᓇ ᐃᓚᐅᑎᑕᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᐋᖅᑭᒃᐸᓪᓕᐊᓂᖏᑦ ᐊᐅᒃᑲᕐᓃᑦ

ᑲᑎᙵᔪᑦ ᐅᖃᒃᑲᓐᓂᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᓱᖅᑯᐃᓇᑦᑎᐊᕆᐊᓖᑦ ᒪᕿᓪᓄᐊᒡᑕᒃ ᐃᕗᓂᑯᐃᑦ ᐊᓄᕆᓗ ᐊᒃᑲᕐᓂᓕᐅᖃᑦᑕᕐᒪᑕ. ᖀᒃᑲᓐᓂᐊᒍᑦ, ᐊᒥᓱᑦ ᐅᐃᒍᐊᑦ ᐋᖅᑭᒃᓱᖃᑦᑕᕐᒪᑕ ᑕᑭᓂᖓᓂᒃ ᐊᒻᒪᓗ ᐊᑐᒐᒃᓴᐅᓂᕐᓂᖓᓄᑦ ᐊᐅᒃᑲᕐᓂᖅ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᐊᐅᒃᑲᕐᓃᑦ ᐋᖅᑭᒍᓐᓇᕐᒪᑕ ᓱᓕ ᐅᐃᒍᐊᖃᖃᙱᒃᑲᓗᐊᕐᓗᑎᒃ ᑭᓯᐊᓂᓕ ᐊᖏᔫᓇᔭᙱᒃᑐᑦ ᑕᐃᒪᐃᓐᓂᕈᑎᒃ. ᐃᓚᐅᖅᔪᖅ ᑲᔪᓯᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᐱᒻᒪᕆᐅᓂᖏᓐᓂᒃ ᐊᓄᕆᑕᖃᕆᐊᖃᕐᓂᖓᓂᒃ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔭᕆᐊᖃᕐᓂᖓᓂᒃ. ᑕᒪᓐᓇ ᒪᓕᖃᑦᑕᖅᑐᑦ ᐊᓄᕐᕋᔪᐊᖅᑐᓄᑦ ᓱᖃᐃᒻᒪ ᐊᔭᐅᖅᑕᐅᓂᖏᓐᓄᑦ ᖃᓄᐃᓕᖓᓂᐅᕙᒃᑐᓄᑦ ᐊᒻᒪᓗ ᓄᓇᓕᖓᑕ ᖃᓄᐃᓕᖓᓂᖓᓄᑦ (ᐊᓄᕐᕈᓂ ᓯᒥᑦ ᓴᐅᓐᑯᑦ). ᑕᒪᓐᓇ ᓄᓇᒥᒃ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᑦᑑᑎᑦᑎᔪᖅ ᓯᓚᐅᑉ ᖃᓄᐃᑉᐸᓪᓕᐊᔭᖏᓐᓄᑦ ᐊᓯᔾᔨᐅᑎᓄᑦ ᑕᒪᒃᑯᓇᓂ

ᐊᓯᔾᔨᖅᑕᕐᓂᖏᓐᓂᒃᑦ ᐊᒃᓱᕈᕐᓇᖅᑐᑦ ᐊᑐᖅᑕᐅᕙᒃᑐᓂᑦ. ᑕᒪᑐᒧᖓ, ᓴᖅᑭᑕᐅᓚᐅᕐᑐᖅ ᓂᒋᐊᓂᑦ ᐊᓄᓈᑦ ᓱᑯᐃᔭᖅᑎᑦᑎᕙᖓᒪᑕ ᐅᐃᒍᐊᖓᓂᑦ. ᐊᓯᐊᑦᑕᐅᖅ ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᓄᓇᖓᓂᒃ ᖃᐅᔨᔭᐅᖃᑦᑕᖅᑐᓂᒃ ᑕᐃᑲᓂ ᐊᐅᓱᐃᑦᑐᒥᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᓯᖃᓚᐅᖅᑐᑦ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᓱᑯᑉ ᐃᔾᔪᓂᖓ ᐊᒻᒪᓗ ᐊᖏᔫᑏᑦ ᓱᑯᑦ ᖃᓄᐃᓕᖓᓂᖏᑦ ᑕᒪᒃᑯᓇᓂ. ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᕐᒥᔪᖅ ᐊᖏᔪᑦ ᓱᑯᑦ ᖃᓄᐃᓕᖓᓂᐅᔪᑦ (ᐱᓗᐊᖅᑐᒥᑦ ᑐᕙᐃᑦ) ᓱᒃᑲᐃᓪᓕᑎᑦᑎᔪᓐᓇᕐᓂᖏᓐᓂᒃ ᓱᓈᒥᒃ, ᑭᓯᐊᓂᓕ ᑭᒡᓕᖃᖅᑐᑦ ᑕᒪᒃᑯᐊ ᑐᑭᓯᐅᒪᔭᐅᔪᑦ ᖃᓄᖅ ᑕᒪᓐᓇ ᑕᐃᒪᐃᖃᑦᑕᕐᒪᖔᑦ. ᖃᓄᐃᓕᖓᓂᖏᑦ ᓱᑯᑦ ᐃᖏᕐᕋᖃᑦᑕᕐᓂᖏᑦ ᑕᐃᑲᙵᑦ ᓕᓐᑭᓐ ᐃᒪᖓᓂᑦ ᐊᒃᑐᐃᓂᖃᑐᐃᓐᓇᕆᐊᓕᒃ ᐊᖅᑭᒃᐸᓪᓕᐊᓂᖓᓄᑦ, ᑭᓯᐊᓂᓕ ᑕᒪᓐᓇ ᖃᓅᖃᑦᑕᕐᒪᖔᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᒻᒥᔪᖅ.

ᑲᑎᙵᔪᑦ ᐅᖃᒪᔭᐅᑎᖃᓚᐅᖅᑐᑦ ᐃᖅᑲᕐᒥᖔᖅᑐᓂᑦ ᐃᓛᒃᑰᖅᑐᓂᑦ ᑕᐃᑲᓂ ᑎᑎᖅᑲᓂᑦ. ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᑐᓴᐅᒪᓪᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐃᖅᑲᕐᒥᖔᖅᑐᓄᑦ ᐆᓇᔪᖕᓂᖅᓴᑦ ᐃᒥᑦ ᓄᑕᐅᙱᑦᑑᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐊᑑᑎᖃᙱᑦᑐᑦ ᐃᓚᐅᑎᑕᐅᔭᓇᐊᖃᑎᑦᑐᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᑕᒪᓐᓇ ᑐᓴᐅᒪᔾᔪᑎ ᑕᐃᑲᙵᖅᓯᒪᔪᑦ ᐱᒋᐊᖅᑕᐅᖃᑦᑕᓕᓴᖅᑎᓪᓗᒍ ᐆᓇᕐᓂᖓᓂᒃ ᐅᖓᓯᒃᑐᒦᓪᓗᓂ ᖃᐅᔨᓴᓇᓱᖕᓂᖅ ᑕᒪᒃᑯᓇᖕᒥᕐᓗᓂ ᖃᖓᑕᓱᓂᑦ ᐊᒻᒪᓗ ᐱᔾᔪᑕᐅᔪᒃᓴᐅᓪᓗᓂ ᑕᒃᓱᕐᓂᖅ. ᐱᑕᖃᐅᑦᑎᐊᖅᑐᑦ ᖃᖓᑦᑕᖅᑎᑕᐅᓯᒪᔪᑎᒍᑦ ᐊᔾᔨᖑᐊᓂᒃ ᐃᑲᔪᖅᓯᙱᑦᑐᓂᒃ ᑕᒪᒃᑯᓂᖓ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ.

ᓯᓚ

ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᓯᓚᐅᖅᑐᖅ ᑕᒪᒃᑯᐊ ᐅᔾᔨᒌᙱᔾᔪᑏᑦ ᑖᒃᑯᓇᓂ ᓄᓇᓖᑦ ᓯᓚᓐᓂᐊᕐᕕᖏᓐᓂᑦ ᐊᔾᔨᒌᙱᕐᔪᐊᕐᕈᓐᓇᕐᒪᑕ, ᑕᒪᐃᓐᓂᖓᓄᑦ ᓯᓚᓐᓂᐊᕈᑏᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐊᒥᓱᓂᑦ ᓯᓚᓐᓂᐊᕐᕕᖕᓂᑦ ᐊᑐᖅᑕᐅᕙᒃᑐᑦ ᑖᒃᑯᓇᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᐊᒃᑐᐊᙱᑐᐃᓐᓇᕆᐊᓖᑦ ᑖᒃᑯᓄᖓ ᐅᐊᖓᓂᑦ ᐃᒥᕐᓂᑦ (ᑖᒃᑯᐊᓘᓐᓂᑦ ᑑᓕ ᓯᓚᓐᓂᐊᕐᕕᒃ ᐊᑑᑎᖃᙱᑦᑐᒃᓴᐅᔪᖅ). ᐅᖃᒃᑲᓐᓂᕐᒧᒍ, ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᐅᒃᑲᕐᓃᑦ ᐋᖅᑭᒃᓯᖃᑦᑕᕐᒪᑕ ᓇᖕᒥᓂᖅ ᓯᓚᒥᖕᓂᒃ ᐊᒻᒪᓗ ᓯᓚᐅᑉ ᖃᓄᐃᓕᖓᓂᓇᕙᒃᑕᖓ ᑕᐃᑲᓂ ᖃᐅᔨᒪᓂᒃᑯᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ. ᒪᕐᑯᖃᑦᑕᕐᓂᖅ ᖃᓐᓂᖃᑦᑕᕐᓂᖅ ᐊᔪᕐᓇᖅᑐᒻᒪᕆᐅᖕᒪᑦ ᓇᓗᓇᐃᔭᑦᑎᐊᕆᐊᒃᓴᖅ ᑕᒻᒪᙱᓪᓗᓂ. ᐋᖅᑭᙵᐊᖅᑕᐅᓯᒪᔪᑦ ᓴᖅᑮᔪᓐᓇᖅᑐᑦ ᐊᓄᕆᐅᑉ ᓯᓚᖓᓂᑦ, ᑭᓯᐊᓂᓕ ᑕᒪᓐᓇ ᐊᑐᐃᓐᓇᐅᙱᑦᑐᖅ ᖃᕆᑕᐅᔭᒃᑯᑦ ᐊᒻᒪᓗ ᐋᖅᑭᒃᓯᖅᑕᐅᔭᕆᐊᖃᕋᔭᖅᓱᓂ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐲᖅᓯᓗᑎᒃ ᓯᓚᖓᓄᑦ ᐃᓛᒃᑰᖅᑐᓂᒃ ᐊᑕᖏᕐᓗᒋᑦ ᐊᒻᒪᓗ ᐃᓚᓕᐅᑎᓗᒋᑦ ᐊᑑᑎᖃᖅᑐᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑖᒃᑯᓄᖓ ᐊᓯᖏᓐᓄᑦ ᐃᓛᒃᑰᖅᑐᓄᑦ. ᑭᓯᐊᓂᓕ, ᐃᓱᒪᓕᐅᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᖏᔫᔪᑦ ᐆᓇᕐᓂᖓᓄᑦ ᓂᒡᓕᓇᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐊᓄᓇᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᓴᖅᑭᑕᐅᓗᑎᒃ ᑭᓯᐊᓂᓕ ᐊᒥᓱᓂᒃ ᐅᔾᔨᖅᓱᑎᖃᓇᐊᓖᑦ ᓱᖅᑯᐃᓇᖅᓯᑎᑦᑎᑦᑎᐊᕋᓱᖕᓂᐊᕈᑎᒃ. ᖃᓐᓂᖃᑦᑕᕐᓃᑦ ᒪᕐᑯᖃᑦᑕᕐᓃᑦ, ᓄᓇᔭᓃᑦ, ᐊᒻᒪᓗ ᓄᓇᓕᖕᓂᑦ ᓯᓚᖓ ᑎᑎᕋᖅᑕᐅᓯᒪᓪᓗᐊᖅᑐᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔭᐅᙱᑦᑐᓄᑦ. ᐃᓚᐅᔪᑦ ᓴᖅᑮᓚᐅᖅᑐᑦ ᐅᔾᔨᖅᑐᕐᓂᕐᓂᒃ ᑕᐃᑲᙵᑦ ᐊᐅᓱᐃᑦᑐᒥᑦ: ᐊᓄᓇ ᐊᒻᒪᓗ ᒪᕐᑯᖕᓂᑦ ᐱᒋᐊᓪᓚᒃᐸᓪᓕᐊᓯᒪᓕᖅᑐᑦ ᐊᒻᒪᓗ ᐅᑭᐊᒃᓵᒃᑯᑦ ᐅᐱᕐᖓᒃᓵᒃᑯᓪᓗ ᓯᓚᓗᖕᓂᑦ ᐊᖏᒡᓕᕙᓪᓕᐊᓕᕐᒪᑕ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᐃᓚᐅᑎᑦᑎᓗᑎᒃ ᓇᓗᓇᐃᖅᓯᒪᔪᒥᒃ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᐅᕝᕙᓘᓐᓂᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᒪᒃᑯᓄᖓ ᐊᔪᙱᓐᓂᖏᓐᓂᒃ ᓄᓇᓖᑦ ᐊᒃᑯᐊᔪᑦ ᓯᓚᒥᒃ ᐅᔾᔨᖅᑐᕐᓂᕐᓂᒃ ᓇᓗᓇᐃᔭᖅᑕᐅᕐᑯᓪᓗᒋᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᔪᓐᓇᖅᓯᓗᑎᒃ.

ᓄᓇᓕᕆᓂᖅ ᐊᒻᒪᓗ ᐃᑎᓂᖅᓯᐅᕐᓂᖅ

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᖅ ᑮᓇᐅᔭᓕᐅᕋᓱᖕᓂᕐᒧᑦ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐃᓚᐅᑎᑕᐅᓪᓗᐊᙱᑦᑐᖅ ᒥᑭᑦᑐᑎᒍ; ᐊᖏᔫᓂᖅᓴᐅᓗᓂ ᐅᖃᐅᓯᐅᓪᓗᐊᖅᑐᖅ ᐃᓚᐅᑎᑦᑎᓗᓂ ᓄᓇᒥᖕᒐᖅᑐᓕᕆᔨᑦ ᑲᓇᑕᒥᒃᑯᓐᓂᑦ ᐅᕝᕙᓘᓐᓂᑦ ᐲᖅᑕᐅᓐᓈᓗᒋᓗᒋᑦ. ᐊᓯᖏᑦ ᐃᓚᐅᔪᑦ ᐊᖏᓚᐅᖅᑐᑦ, ᑭᓯᐊᓂᓕ ᐃᒃᐱᒍᓯᓚᐅᖅᑐᑦ ᑲᒪᒋᔭᐅᓪᓗᐊᖅᑐᑦ ᐊᒃᓱᕈᑎᐅᓗᑎᒃ (ᐅᔭᕋᖕᓂᐊᒐᒃᓴᖅᑕᖃᑐᐃᓐᓇᕆᐊᓕᒃ).

ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᓄᓇᓕᕆᓂᓪᓗᐊᑕᖅ ᐊᒻᒪᓗ ᓄᓇᙳᐊᓕᕆᓂᓪᓗᐊᑕᖅ ᐱᑕᖃᕆᐊᖃᕐᒪᑦ, ᑭᓯᐊᓂᓕ ᐃᓚᑎᑕᐅᔪᓐᓇᑐᐃᓐᓇᕆᐊᓕᒃ ᓴᖅᑭᑕᐅᓵᓕᖅᑎᓪᓗᒍ. ᐃᓚᐅᔪᑦ ᐅᖃᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᓯᕐᒥᓕᕆᓂᖅ ᐃᓛᒃᑰᖅᑐᑦ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᐊᒻᒪᓗ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓂᖏᓐᓇᕆᐊᓕᒃ, ᑭᓯᐊᓂᓕ ᓯᕐᒥᑐᖃᐃᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒪᔭᕆᐊᓖᑦ ᒫᓐᓇᒥᑦ ᓯᕐᒥᒧᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᓄᑦ. ᒫᓐᓇ ᓯᕐᒥᒧᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ ᐱᒻᒪᕆᐅᖓᑕ ᑖᒃᑯᓄᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᐅᒃᑲᕐᓂᕐᓄᑦ ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᐃᓛᒃᑰᖅᑐᑦ ᐊᖏᒡᓕᕆᐊᖅᑕᐅᔭᕆᐊᓕᒃ ᐃᓚᐅᑎᑦᑎᓗᓂ ᓯᒡᔭᓂᒃ ᐊᒻᒪᓗ ᑲᖏᖅᓗᐃᑦ ᑲᔪᓯᓂᕆᕙᒃᑕᖏᓐᓂᒃ. ᑭᖑᓂᐊᒍᓪᓗ, ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᐲᖅᑕᐅᓗᑎᒃ ᓄᓇᓕᕆᓂᖅ ᐊᒻᒪᓗ ᓯᕐᒥᑐᖃᐃᑦ ᐃᓛᒃᑰᖅᑕᖏᑦ; ᐃᓚᐅᑎᑦᑎᓗᑎᒃ ᐅᖃᐅᓯᒃᓴᐅᔪᓂᒃ ᑕᒪᒃᑯᓄᖓ ᓄᓇᓕᕆᓂᓪᓗᐊᑕᕐᓂᒃ ᐊᒻᒪᓗ ᓄᓇᙳᐊᓕᐅᕈᑎᓪᓗᐊᑕᓂᒃ ᑕᐃᑲᓂ ᓴᖅᑭᑕᐅᓵᓕᖅᑎᓪᓗᒍ; ᓅᓪᓗᒋᓪᓗ ᐃᑎᓂᖅᐅᕐᓂᕐᒧᑦ ᐃᓛᒃᑰᖅᑐᑦ ᑕᐃᑯᖓ ᑕᕆᐅᓕᕆᓂᕐᒧᑦ; ᐊᒻᒪᓗ ᐃᓚᓗᒋᑦ ᒫᓐᓇ ᓯᕐᒥᓕᕆᓂᕐᒧᑦ ᑖᒃᑯᓄᖓ ᓯᑯᕐᔪᐊᑦ ᐃᓛᒃᑰᖅᑐᖏᓐᓄᑦ. ᐱᕝᕙᐅᓯᒪᔪᑦ ᓇᑭᙵᕐᓂᖏᑦ ᐃᓗᓕᖏᑦ ᐊᒃᑐᐃᔪᑦ ᐆᒪᔪᕋᓛᓂᒃ ᐱᒻᒪᕆᐅᓚᐅᖅᑐᑦ ᐅᖃᐅᓯᓪᓗᓂ ᐃᓗᐊᓂᑦ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐃᓛᒃᑰᖅᑐᓂᑦ ᐱᑕᖃᖅᑎᑕᐅᙱᓐᓇᓪᓗᐊᖅᓗᓂᓗ ᓇᒥᖕᒐᑦ.

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐃᒪᑦᑎᐊᕙᐃᑦ–ᐃᒪᐃᑦ ᑲᑎᑦᑕᕐᕕᖏᑦ ᐊᒻᒪᓗ ᓂᕿᑦᑎᐊᕙᐃᑦ ᐃᖅᑲᕐᒥᖕᒫᖃᑦᑕᖅᑐᑦ ᐱᒻᒪᕆᐅᓂᖏᓐᓂᒃ. ᑕᒪᓇ ᖃᐅᔨᓴᖅᑕᐅᑦᑎᐊᒃᑲᓐᓂᖅᓯᒪᔪᖅ ᑕᐃᑲᓂ ᐊᑯᑭᑦᑐᓂᑦ ᐊᒻᒪᓗ ᖃᐃᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐃᙱᓐᓇᖅᓱᓂ ᑲᓇᑕᒥᑦ. ᐃᓱᒪᕆᔭᐅᓕᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᐃᒪᑦᑎᐊᕙᐃᑦ–ᐃᒪᐃᑦ ᑲᑎᑦᑕᕐᕕᖏᑦ ᐃᓛᒃᑰᖅᑐᑦ ᐃᓚᓕᐅᔾᔭᐅᓗᓂ ᐃᒥᑦᑎᐊᕙᖕᓄᑦ ᑯᕕᖕᕕᐅᔪᓄᑦ ᐊᒻᒪᓗ ᓯᐊᒻᒪᒡᕕᐅᕙᒃᑐᓄᑦ ᐃᓛᒃᑰᖅᑐᓄᑦ.

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐃᑎᓂᖅᓯᐅᕐᓂᖅ ᓄᓇᙳᐊᓕᐅᑦᑎᐊᖅᑕᐅᓯᒪᙱᒻᒪᑦ ᑲᓇᑕᒥᑦ ᐊᒻᒪᓗ ᐃᓚᓕᐅᔾᔭᐅᓗᓂ ᑖᒃᑯᓄᖓ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔭᐅᙱᑦᑐᓄᑦ.

ᐃᒪᖅᑯᖅᑐᔪᑦ ᐊᒻᒪᓗ ᓇᒧᙱᒃᐅᓂᓪᓗᐊᑕᕐᓂᖏᑦ

ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᒫᓐᓇᓕᓴᑦ ᐅᔾᔨᖅᓯᖅᑕᐅᔪᑦ ᐃᖏᕐᕋᓃᑦ ᐅᔾᔨᙱᓐᓂᖏᓐᓂᒃ ᑖᒃᑯᓇᙱᑦ ᓴᖅᑭᑕᐅᔪᓂᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᐊᒻᒪᓗ ᓄᑖᙳᕆᐊᖅᑕᐅᓪᓗᐊᖅᑐᑦ. ᐊᓯᐊ ᐃᓚᐅᔪᖅ ᐃᓚᓯᒋᐊᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᑎᒃᑯᐊᖅᓯᓂᖅ ᑕᐃᒎᓯᕐᓂᒃ ᐊᑐᖅᑕᐅᔪᓂᒃ ᓇᓗᓇᐃᔭᕐᑯᓪᓗᒋᑦ ᐃᒪᐃᑦ ᐃᒪᖅᑯᖅᑐᓂᖏᑦ ᐃᓕᓴᕆᔭᐅᑦᑎᐊᖅᓯᒪᙱᒻᒪᑕ. ᑕᒪᓐᓇ ᐱᒻᒪᕆᐅᔪᖅ ᖃᓄᐃᓕᐅᖃᑎᒌᖃᑦᑕᖅᑎᓪᓗᒋᑦ ᐃᒪᐃᑦ ᐃᒪᖅᑯᑐᓂᖏᑦ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᓐᓄᓪᓗ ᐊᒃᑐᐊᓂᖏᓐᓄᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐱᑕᖃᕐᓂᖓᓂᒃ ᓄᑖᓂᒃ ᖃᐅᔨᒪᓂᕐᓂᒃ ᓴᖅᑭᑕᐅᕋᓂᒃᓯᒪᙱᑦᑐᓂᒃ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᐋᖅᑭᙳᐊᖅᓯᒪᔭᒥᖕᓂᒃ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᒥᒃ ᓄᑖᙳᕆᐊᕐᑯᓪᓗᒋᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑐᙵᕕᐅᔪᑦ, ᑭᓯᐊᓂᓕ ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᔭᐅᓯᒫᓂᙱᑦᑐᑦ. ᐃᓚᐅᔪᑦ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓚᐅᖅᑐᑦ ᑎᑎᕋᖅᓯᓗᑎᒃ ᐃᓛᒃᑰᖅᑐᓄᑦ ᐊᓪᓕᐅᓂᐊᖅᑐᓂᒃ ᓇᓗᓇᐃᔭᐃᓂᐊᖅᑐᓂᒃ ᐋᖅᑭᙳᐊᖅᑕᐅᓯᒪᔪᑦ ᐃᖏᕐᕋᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᐊᑐᐃᓐᓇᐅᔪᓂᒃ ᑕᐃᑲᓂ ᐅᖃᓕᒫᒐᓕᐊᓂᑦ ᐊᒻᒪᓗ ᓴᖅᑭᔭᖅᑎᑦᑎᓪᓗᑎᒃ ᓴᙱᓂᐅᔪᓂᒃ ᓴᙱᕆᓐᓂᐅᔪᓂᒡᓗ ᐋᖅᑭᙳᐊᖅᓯᒪᓂᖏᑕ. ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ.

ᑕᕆᐅᑉ ᓯᑯᐊ

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᖅ ᐊᖏᒡᓕᒋᐊᕐᓗᒋᑦ ᐃᓛᒃᑰᖅᑐᑦ ᑕᒪᒃᑯᓄᖓ ᐱᖃᓗᔭᓂᑦ ᐆᔭᖃᑦᑕᕐᓂᖏᓐᓄᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᖅ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᒫᓐᑎᒥᑦ (Mundy 2000) ᓇᓗᓇᐃᔭᔪᑦ ᑕᕆᐅᑉ ᓯᑯᖓᓂᓪᓗᐊᑕᖅ ᑭᖑᕝᕕᖅᑕᐅᓪᓗᐊᕐᒪᑕ ᐃᓕᓐᓂᐊᕐᕕᐊᕈᓯᕐᒥᑦ ᑕᕆᐅᒥᑦ–ᓯᑯᒥᑦ ᐅᖃᓕᒫᒐᕐᒧᑦ. ᐃᓚᐅᔪᖅ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓛᕐᓂᐊᕐᓂᕋᖅᑐᑦ ᓈᒻᒪᒃᑐᓂᒃ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑲᑎᒫᓂᒃᑯᑎᒃ.

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐊᑐᖅᑕᐅᔪᕕᓂᕐᓂᒃ ᑕᐃᑲᓂ 1965-ᒥᑦ ᐱᑕᖃᓚᐅᕐᓂᕐᒪᑦ ᓯᑯᕐᔪᐊᒥᒃ ᐱᖃᓗᔭᙳᖅᑐᑦ ᑕᐃᑲᙱᑦ ᐋᑕᒫᓐ ᑲᖏᖅᓱᐊᓂᒃ ᓴᐱᓯᓯᒪᔪᖅ ᑕᐃᑯᖓ ᐃᑭᕐᒧᑦ ᐊᒻᒪᓗ ᓴᖅᑮᓪᓗᓂ ᐊᐅᒃᑲᕐᓂᕐᒥᒃ. ᑕᒪᓐᓇ ᐅᖃᐅᓯᒃᓴᖃᕐᕕᐅᕐᔪᐊᓕᓚᐅᖅᑐᖅ ᐊᔾᔨᒌᖃᑦᑕᖏᓐᓂᖏᓐᓂᒃ ᐅᐃᒍᐊᑦ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᐅᐃᒍᐊᑦ ᐊᔾᔨᒌᙱᕐᔪᐊᖃᑦᑕᓕᕐᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᐃᓛᓐᓂᒃᑯᑦ ᐅᐃᒍᐊᖃᙱᑦᑎᐊᒻᒪᕆᒃᐸᓕᖅᓱᓂ. ᐊᓯᐊ ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᐃᓚᐅᖅᑐᑦ ᐱᑕᖃᕐᓂᖓᓂᒃ 15 ᐊᕐᕌᒍᓄᑐᐊᖅ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ, ᐊᒻᒪᓗ ᖃᓄᐃᙱᓗᓂ ᐅᖃᓇᐊᒃᓴᖅ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᓇᕙᒃᑕᖏᑦ ᐅᐃᒍᐊᑦ ᐊᔾᔨᒌᖃᑦᑕᙱᓐᓂᖏᓐᓂᒃ, ᐊᐅᓚᑐᐃᓐᓇᓇᐊᓕᒃ, ᐊᒻᒪᓗ ᐱᑕᖃᑯᑖᖃᑦᑕᕐᓂᖓ ᕿᓚᒻᒥᐅᓂᖅᓴᐅᓕᑐᐃᓐᓇᓇᐊᓕᒃ. ᐃᓚᖏᑦ ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐊᒃᑐᐃᓯᒪᖕᒪᑦ ᑕᒪᒃᑯᓂᖓ ᐊᒻᒪᓗ ᐱᒻᒪᕆᐅᓪᓗᓂ ᑕᒪᓐᓇ ᐃᓕᓴᕆᔭᐅᓯᒪᓗᓂ. ᐃᓚᐅᔪᖅ ᐃᓚᓯᒋᐊᓚᐅᖅᑐᑦ ᐃᓄᐃᑦ ᖃᓈᕐᒥᐅᑦ ᐃᖏᕐᕋᖃᑦᑕᕈᓐᓃᕐᒪᑕ ᓯᑯᒃᑯᑦ ᐊᑭᐅᓄᑦ ᐅᐃᒍᐊᒃᑯᑦ ᓲᖃᐃᒻᒪ ᑕᑎᒃᓴᐅᔪᓐᓃᕐᒪᑦ ᐊᒻᒪᓗ ᐊᑦᑕᕐᓇᖅᓱᓂ. ᑲᑎᙵᔪᑦ ᐃᓯᒪᓕᐅᕆᓕᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᑕᐃᒎᒌᑦ ᐊᑐᖅᑕᐅᔪᑦ ᓇᓗᓇᐃᔭᐃᓪᓗᑎᒃ ᐅᐃᒍᐊᑦ ᐊᔾᔨᒌᖃᑦᑕᙱᓐᓂᖏᓐᓂᒃ ᐅᑎᕐᕕᐅᓂᐊᖅᑐᑦ ᑎᑎᕋᓯᒋᐊᖅᐸᑕ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᐃᓛᒃᑰᖅᑐᒥᒃ ᑕᒪᒃᑯᓂᖓ ᑐᕙᕐᓄᑦ ᑕᐃᑯᖓ ᑎᑎᖅᑲᓄᑦ, ᐃᒪᐃᓐᓂᖓᓄᑦ ᐱᒻᒪᕆᐅᖕᒪᑦ ᑕᕆᐅᒥᑦ ᐆᒪᔪᓄᑦ (ᓲᕐᓗ ᓇᑦᑎᕐᓄᑦ ᓄᓇᕐᔭᐅᕙᒃᑐᑦ ᓇᔪᖓᐅᓂᖓᓄᑦ). ᐊᑕᖏᐸᓗᒃᓱᒋᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᑐᕙᕐᓄᑦ ᑲᑎᙵᓚᐅᖅᑐᑦ ᑎᑎᖅᑲᓂᑦ ᑭᓯᐊᓂᓕ ᐊᖏᒡᓕᒋᐊᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑕᐃᑲᙱᑦ ᑲᓇᑕᒥᑦ ᓯᑯᓕᕆᓂᕐᒧᑦ ᐱᔾᑦᑎᕋᖅᑎᓂᑦ. ᓄᑖᖅ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂ ᖃᓄᐃᓕᖓᓂᐅᕙᒃᑐᓄᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᓗᑎᒃ ᐃᒪᐃᓐᓇᐅᙱᖕᒫᕐᓗᑎᒃ ᐅᐃᒍᐊᑦ ᐊᖅᑭᒃᐸᓪᓕᐊᕙᓐᓂᖏᓐᓄᑦ ᐃᓛᒃᑰᖅᑐᑦ. ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᑐᓴᐅᒪᔾᔪᑏᓂᒃ ᑕᐃᑲᙱᑦ ᖃᓈᕐᒥᐅᑦ ᑕᐅᑐᖅᑰᖅᑕᖏᓐᓂᒃ ᑕᒪᒃᑯᓄᖓ ᐱᒻᒪᕆᐅᓂᖏᓐᓄᑦ ᓯᑯ ᑕᐃᑲᓂ ᐃᓛᒃᑰᖅᑐᓂᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᓯᕐᒥᓂᒃ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓂᕆᕙᒃᑕᖏᑦ ᐱᒻᒪᕆᐅᓂᖏᓪᓗ ᐱᖃᓗᔭᑦ ᑕᐃᑲᓂ ᐃᓂᒥᑦ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᓄᑖᓂᒃ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑐᓐᓂᖅᓴᖅᑕᐅᔪᑦ (Dalton et al. 2019) ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓪᓗᑎᒃ ᐱᒻᒪᕆᐅᓂᖏᑦ ᐃᒪᑦᑎᐊᕙᖕᓂᖕᒫᖅᐸᒃᑐᑦ ᑖᒃᑯᓇᖓ ᐱᖃᓗᔭᕐᓂᑦ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᐃᓱᒪᓚᐅᖅᑐᑦ ᐊᖏᔪᑦ ᓯᑯᑦ ᖃᓄᐃᓕᖓᓂᖏᑦ ᐃᓛᒃᑰᖅᑐᑦ ᐊᔾᔨᒋᔭᐅᙱᓐᓂᖓᓄᑦ ᐅᖃᐅᓯᐅᓂᖅᓴᐅᓪᓗᑎᒃ ᑐᕋᖓᓂᖅᓴᐅᓪᓗᑎᒃ ᐊᑯᑭᑦᑐᒥᐅᕗᑦ; ᑖᒃᑯᐊ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᐃᓚᐅᑎᑦᑎᓪᓗᐊᕐᒪᑕ ᐊᑕᖏᓗᒃᑖᖅᓯᒪᔪᓂᒃ ᐅᓂᒃᑳᓂᒃ ᐊᓂᒃᑳᖅᑐᓂᒃ ᐊᑕᖏᑦᑎᐊᕐᓗᒍ ᑕᐅᕙᓐᓇ. ᐃᓚᐅᔪᑦ ᐊᐃᕙᔾᔪᑎᖃᓚᐅᖅᑐᑦ ᐃᓚᐅᓪᓗᑎᒃ ᖃᓂᐃᕐᔪᐊᓃᑦ (ᓲᕐᓗ ᓯᑯ ᕿᑭᖅᑕᙱᖅᑐᑦ ᑕᐃᑲᓂ

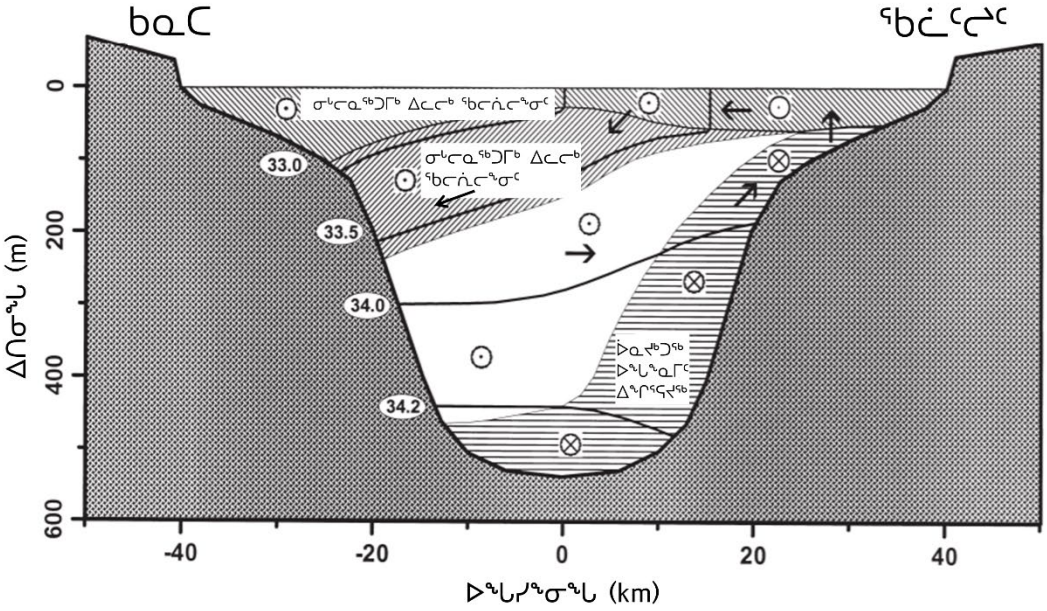
1965-ᒥᑦ) ᑖᒃᑯᓇᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᐃᓱᒪᓚᐅᖅᑐᑦ ᓯᑯ ᕿᑭᖅᑕᙳᖅᓯᒪᔪᑦ ᑕᐃᒪᓐᓇᑎᒋ ᐊᖏᑎᒋᔪᖅ ᑕᐃᒪᐃᑦᑐᓐᓇᕐᒪᑦ ᐅᓪᓗᒥᐅᔪᖅ, ᐊᓯᐊ ᐅᖃᓚᐅᕆᓪᓗᓂ ᐲᑕᒪᓐ ᓯᕐᒥᒃ ᐲᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᐊᖏᓗᐊᒧᑦ ᓯᒥᒃᓯᔪᓐᓇᖅᓱᓂ ᐃᑭᖓᓂᒃ ᐊᒻᒪᓗ ᐱᑕᖃᖅᑐᑦ ᐊᖏᔪᓂᒃ ᐱᖃᓗᔭᕐᓂᒃ ᑕᐃᑲᓂ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᓂᑦ.

ᐊᐃᕙᒃᔪᑕᐅᓚᐅᖅᑐᑦ ᑕᔅᓱᒧᖓ ᑕᐃᒎᓯᕐᒧᑦ "ᖃᓄᐃᓕᕙᓪᓕᐊᓂᕆᔭᐅᔪᑦ". ᐃᓚᐅᔪᖅ ᐊᐃᕙᓚᐅᖅᑐᖅ ᑕᒪᒃᑯᐊ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᕆᔭᐅᔪᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᕐᓂᑯ, ᑭᓯᐊᓂᓕ ᐊᕕᒃᑐᕐᓗᒋᑦ ᑕᒪᒃᑯᐊ ᖃᓄᐃᓐᓂᐅᕙᒃᑐᑦ ᓯᕗᓂᒃᓴᒧᑦ ᑕᐃᒎᓯᕐᒧᑦ "ᖃᓅᓂᐊᕋᓱᒋᔭᐅᔪᑦ" ᐊᑐᖅᑕᐅᓪᓗᐊᖅᑐᑦ. ᐊᓯᐊ ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐊᔾᔨᒌᙱᓐᓂᖏᓐᓂᒃ ᑖᒃᑯᐊ ᐊᒡᒍᖅᑐᐃᓃᑦ ᐱᐅᓯᕆᔭᐅᕙᓚᐅᖅᑐᓄᑦ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᕆᔭᐅᔪᑦ ᓯᕗᓂᒃᓴᒧᑦ ᐊᒻᒪᓗ ᐊᑐᕐᓗᑎᒃ ᐋᖅᑭᒃᓱᖅᑕᐅᙳᐊᖅᓯᒪᔪᓂᒃ ᖃᓅᓂᐊᕋᓱᒋᔭᐅᔪᕐᓄᑦ. ᐃᓱᒪᓕᐅᕈᑕᐅᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᐅᖃᐅᓯᖅᑕᖏᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᕿᒥᕐᕈᔭᐅᑦᑎᐊᖃᑦᑕᓪᓗᐊᖅᑐᑦ ᐊᒻᒪᓗ ᑲᒪᒋᔭᐅᑦᑎᐊᕐᓗᑎᒃ ᓇᓗᓇᐃᔭᐃᓇᓱᐊᖅᑎᓪᓗᒋᑦ ᑭᓯᑦ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᕆᔭᐅᔫᖓᒪᖔᑕ, ᐊᕕᒃᑐᕐᓗᒋᑦ ᑕᒪᒃᑯᐊ ᖃᓄᐃᓐᓂᐅᕙᒃᑐᑦ ᓯᕗᓂᒃᓴᒥᑦ, ᐅᕝᕙᓘᓐᓃᑦ ᐋᖅᑭᒃᓱᖅᑕᐅᙳᐊᖅᓯᒪᔪᓄᑦ ᖃᓅᓂᐊᕋᓱᒋᔭᐅᔪᓄᑦ. ᑕᒪᓐᓇ ᓇᓗᓇᐃᔭᐃᓂᖅ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᑐᑭᓯᐅᒪᑦᑎᐊᕐᓗᑎᒃ ᐊᔾᔨᒋᙱᓐᓂᖏᓐᓂᒃ ᑖᒃᑯᐊ ᐊᓯᔾᔨᖅᑕᖅᐸᖕᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᕆᔭᐅᔪᑦ ᑕᐃᑲᓂ ᐃᓂᒥᑦ ᑎᑎᖅᑲᕐᑯᑎᖃᑦᑎᐊᒋᓗᑎᒃ. ᐃᓱᒪᓕᐅᖅᑕᐅᓚᐅᖅᑐᖅ ᐱᑕᖃᑦᑎᐊᙱᓐᓂᖓᓄᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᑎᑎᕋᖅᓯᒪᔪᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᑯᐃᑦ ᑭᙳᓪᓕᖅᐹᓯᐅᑎᓕᐅᕐᓂᕐᒧᑦ ᑕᒪᒃᑯᓄᖓ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᐅᔪᓄᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᓪᓗᐊᖅᑐᑦ ᖃᐅᒪᔭᐅᓂᕐᒧᑦ ᑎᑭᐅᒪᔭᐅᙱᓐᓂᖏᓐᓂᒃ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᐊᐱᕆᓚᐅᖅᑐᑦ ᐱᒻᒪᕆᐅᖓᖕᒪᖔᑦ ᐃᓚᐅᑎᓪᓗᒋᑦ ᖃᓅᓂᐊᕋᓱᒋᔭᐅᔪᓄᑦ ᖃᐅᔨᓴᕈᑏᑦ ᑕᐃᑲᓂ ᐅᓂᒃᑳᒥᑦ. ᐊᓯᖓ ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᖅ ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᒥᒃᓴᐅᓴᐃᓃᑦ ᐅᖃᐅᓯᒃᓴᑐᐃᓐᓇᐅᓂᖏᓐᓂᒃ ᑕᒪᒃᑯᓄᖓ ᑭᒡᓕᓯᓂᐊᖅᑕᐅᓯᒪᔪᓄᑦ ᖃᐅᔨᔭᐅᔪᓄᑦ, ᑕᒪᒃᑯᐊ ᐅᖃᐅᓯᐅᔪᑦ ᐊᓯᔾᔨᕐᓃᑦ ᐱᔪᒥᓇᕐᒪᑕ ᑲᒪᔨᓄᑦ ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖃᕋᔭᖅᓱᑎᒃ ᑖᒃᑯᓄᖓ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᓄᑦ (SAR). ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᒫᓐᓇ ᐊᒻᒪᓗ ᐱᐅᓯᕆᔭᐅᕙᓚᐅᖅᑐᓄᑦ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᕆᔭᐅᔪᑦ ᓴᖅᑭᔾᔭᓪᓗᐊᖅᑐᑦ ᐅᓗᐊᓂᑦ ᐊᑐᓂ ᐃᓛᒃᑰᖅᑐᓂᑦ ᐊᔪᕐᓇᙱᒃᑳᖓᑦ (ᓲᕐᓗ ᑕᕆᐅᑉ ᓯᑯᖓ ᑕᐃᑲᓂ ᑕᕆᐅᑉ ᓯᑯᖓᓄᑦ ᐃᓛᒃᑰᖅᑐᒥᑦ) ᐊᒻᒪᓗ ᑕᒪᒃᑯᐊ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᐅᔪᑦ ᐅᖃᐅᓯᐅᓗᑎᒃ ᑐᑭᓯᐅᒪᓂᖏᑦ ᐊᓯᔾᔨᖅᑕᕐᓂᖅᐸᑕ. ᐋᖅᑭᒃᓱᖅᑕᐅᙳᐊᖅᓯᒪᔪᓄᑦ ᖃᓅᓂᐊᕋᓱᒋᔭᐅᔪᓄᑦ (ᑖᒃᑯᓄᖓ ᐊᒃᑐᐊᔪᓄᑦ ᐃᓛᒃᑰᖅᑐᓄᑦ, ᑕᕆᐅᑉ ᓯᑯᖓᓄᑐᐊᖑᙱᑦᑐᖅ) ᐅᖃᐅᓯᐅᓇᔭᖅᑐᑦ ᑕᐃᑲᓂ ᓇᐃᓈᖅᓯᒪᔪᓂᑦ/ᓯᕗᓂᒃᓴᒥᑦ ᑕᐅᑦᑐᖓᓄᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓄᑦ ᐃᓱᐊᓂᑦ ᐊᑐᓂ ᐃᓛᒃᑰᖅᑐᑦ. ᓄᑖᖅ ᐃᓛᒃᑰᖅᑐᑦ ᐅᖃᐅᓯᖃᕋᔭᖅᑐᑦ ᓄᑖᑦ ᖃᓅᓂᐊᕋᓱᒋᔭᐅᔪᑦ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᖓᒪᑕ ᑖᒃᑯᓇᙱᑦ ᓄᑕᐅᙱᑦᑐᓂᑦ ᖃᓅᓂᐊᕋᓱᒋᔭᐅᔪᓂᑦ.

ᐃᒥᑦᑎᐊᕙᖕᓄᑦ ᑯᕕᖕᕕᐅᔪᓄᑦ ᐊᒻᒪᓗ ᓯᐊᒻᒪᒡᕕᐅᕙᒃᑐᓄᑦ

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᑕᒪᒃᓂᖓ ᐅᖃᐅᓯᖃᒃᑲᓐᓂᕐᓗᑎᒃ ᐃᒪᑦᑎᐊᕙᐃᑦ–ᑕᕆᐅᕐᒧᑦ ᑰᖃᑦᑕᕐᓂᖏᑦ ᐃᓚᓕᐅᔾᔭᐅᓯᒪᓗᑎᒃ ᑕᕝᕙᓂ ᐃᓛᒃᑰᖅᑐᒥᑦ. ᐃᓗᓕᖏᑦ ᐃᒪᓕᐅᔾᔭᐅᓪᓗᐊᖅᑐᑦ ᐅᓂᒃᑳᑦᑎᐊᒃᑲᓐᓂᕐᑯᓪᓗᒋᑦ ᐱᒻᒪᕆᐅᓂᖏᓐᓄᑦ ᐃᒪᑦᑎᐊᕙᐃᑦ ᐊᒻᒪᓗ ᐃᒪᐃᑦ ᐊᒥᓲᓂᖏᑦ ᑕᒪᒃᑯᓄᖓ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ.

ᑕᒪᓐᓇ ᑎᑭᐅᑎᓚᐅᖅᑐᑦ ᐅᖃᐅᓯᖃᓕᖅᓱᑎᒃ ᓇᐃᓈᖅᓯᒪᔪᓂᒃ ᐅᖃᖅᑕᐅᔪᓂᒃ ᑖᒃᑯᓄᖓ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᑎᑎᕋᖅᓯᓯᒪᓇᔭᖅᑐᑦ ᐱᒻᒪᕆᐅᓂᖓ ᐋᖅᑭᒃᓱᖅᑕᐅᓯᒪᓂᖏᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ. ᐱᒻᒪᕆᐅᔪᑦ ᐅᖃᐅᓯᐅᔪᑦ ᐃᓚᐅᑎᑦᑎᔪᑦ: ᐃᖏᕐᕋᓂᖏᑦ ᐃᒥᐅᑉ ᑕᐅᕗᙵᖅᑎᑦᑎᖃᑦᑕᕐᓂᖓᓄᑦ ᐆᓇᔪᒃᑐᒥᒃ ᐃᒥᕐᒥᒃ ᐊᑯᑭᑦᑐᓄᑦ, ᐅᓄᖅᓯᒋᐊᕐᓗᒋᑦ ᐋᖅᑭᒃᓱᖅᑕᐅᓯᒪᓂᖏᑦ ᑕᑯᙳᐊᕐᓗᒍ ᐃᒡᓗᐊᖅ ᐊᒻᒪᓗ ᑕᐅᕙᓐᓇ, ᐊᒻᒪᓗ ᑰᒃᑐᑦ ᐃᒪᑦᑎᐊᕙᐃᑦ ᑕᐃᑯᖓ ᓂᐅᔾ ᐃᑭᖓᓄᑦ ᐅᕝᕙᓘᓐᓃᑦ ᑕᐃᑰᓇ ᑕᓪᓗᕈᑎᐅᑉ ᐃᒪᖓᓄᑦ. ᑕᒪᒃᑯᐊ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ ᓄᒃᑎᖅᑎᓇᑐᐃᓐᓇᙱᒻᒪᑕ ᓂᕿᑦᑎᐊᕙᖕᓂᒃ ᖀᖓᓂᑦ, ᑭᓯᐊᓂᓗᑦᑕᐅᖅ ᓄᒃᑎᖅᑎᓇᖓᑕ ᐆᒪᔪᕋᓛᓂᑦ ᑕᑉᐸᐅᖓ ᐊᒻᒪᓗ ᑕᐅᓄᖓ. ᐱᒻᒪᕆᐅᔪᖅ ᑕᒪᒃᑯᐊ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᓇᓗᓇᔭᐃᓗᑎᒃ ᖃᓄᐃᒻᒪᑦ ᐆᓐᓇᕐᓂᖓ ᓂᒡᓕᓇᕐᓂᖓ ᐊᒻᒪᓗ ᑕᐅᙳᓂᖓ ᐱᒻᒪᕆᐅᖕᒪᖔᑦ. ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐊᑐᕐᓗᑎᒃ ᐊᔾᔨᙳᐊᖅ 1 ᐃᑲᔪᕐᑯᓪᓗᒍ ᓇᒡᓕᑎᓇᓗᑎᒃ ᑕᒪᑐᒥᖓ.



ᐊᔾᔨᖑᐊᖅ 1. ᐊᕕᒃᑐᖅᓯᒪᓂᖏᑦ ᑕᕆᐅᑉ ᐃᖏᕐᕋᓂᖏᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᖅᕕᐅᔪᓂᑦ (ᐱᕝᕕᐅᔪᖅ: Melling et al. 2001).

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᓇᓗᓕᕈᑕᐅᒐᔪᖕᓂᐊᓂᒃ ᑕᕆᐅᓕᕆᔨᓄᑦ ᐊᒻᒪᓗ ᐃᒪᓕᕆᔨᓄᑦ ᐅᖃᐅᓯᖃᖅᑎᓪᓗᒋᑦ ᐃᒪᑦᑎᐊᕙᖕᒥᒃ; ᑕᕆᐅᓕᕆᔨᑦ ᐅᖃᓪᓚᖃᑦᑕᖅᑐᑦ ᐃᒪᑦᑎᐊᕙᐃᑦ ᐃᖏᕐᕋᕙᖕᓂᖏᓐᓂᒃ ᐃᓱᒪᒋᔭᖃᖕᒋᓗᑎᒃ ᐃᒪᖅ ᓇᑭᖕᒐᒪᖕᒐᑦ; ᐅᖃᐅᓯᐅᓪᓗᐊᖅᑐ ᐅᔾᔨᕐᓇᖅᓯᑎᑕᐅᓗᓂ ᑖᒃᑯᓇᓂ ᒪᕐᕉᖕᓂᒃ ᑎᑎᕋᖅᑕᐅᓯᒪᔫᖕᓂᒃ. ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᕐᒥᔪᖅ ᐊᓯᖏᑦ ᐃᒪᑦᑎᐊᕙᖕᒥᒃ ᑰᖃᑦᑕᖅᑐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᖕᒋᑦᑐᑦ ᑕᐃᑲᓂ ᐅᓂᒃᑳᒥᑦ, ᓱᕐᓗ, ᐱᓕᕆᖃᑦᑕᕐᒥᖕᒪᑕ ᖃᓐᓃᑦ ᒪᕐᑯᐃᑦ ᐊᒻᒪᓗ ᓂᒡᓕᓇᖅᓯᑎᑦᑎᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐆᓇᖅᓯᑎᑦᑎᖃᑦᑕᕐᓂᖏᓐᓄᑦ (ᐊᐅᒃᑲᕐᓂᖅ ᐃᒪᑦᑎᐊᕙᖕᓄᑦ ᐃᓂᐅᔪᖅ). ᑰᖕᓃᑦ ᐊᔪᕐᓇᕐᒪᑕ ᑐᓴᐅᒪᔾᔪᑎᑖᕐᕕᒋᔭᕆᐊᒃᓴᖅ, ᑭᓯᐊᓂᓕ ᐅᖃᐅᓯᐅᓪᓗᐊᖅᑐᑦ ᑕᐅᑐᒃᑕᐅᓂᖓᒍᑦ ᓱᖃᐃᒻᒪ ᓄᓇᐅᑉ ᖃᓄᐃᓕᖓᓂᖓ ᐃᒻᒪᕆᐅᖕᒪᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᖅ ᐃᓚᖏᓐᓂᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᖕᒋᑦ ᐱᓯᒪᖕᒪᑕ ᑎᑎᕋᖅᑕᐅᓯᒪᓪᓚᕆᒃᑐᓂᒃ, ᓇᐃᓴᐅᑎᖕᒋᑦ ᑕᒪᐃᓐᓇᓪᓚᑦᑖᖑᐃᓐᓇᖕᒋᒃᑲᓗᐊᖅᑎᓪᓗᒋᑦ. ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᑭᐳᒡᓗᒋᑦ ᑕᒪᒃᑯᐊ ᑭᓯᒧᒃᑭᐊᖅ ᐅᖃᓚᒫᖅᑎᓄᑦ ᑐᑭᓯᔭᐅᔪᓐᓇᖅᑐᓄᑦ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᐃᓱᒪᒋᔭᐅᕐᑯᓪᓗᒍ ᑕᒪᓐᓇ ᐊᑐᓃᕐᓗᑎᒃ ᒪᓕᒃᑕᐅᓗᓂ.

ᓂᕿᑦᑎᐊᕙᐃᑦ ᐊᒻᒪᓗ ᐊᑦᑎᖕᓂᖅᓴᑦ ᓇᓃᓐᓂᖏᓐᓄᑦ ᕐᑯᕝᕙᓯᓕᓈᓄᑦ ᐅᖃᐅᓯᐅᔪᑦ (ᒥᑭᔫᑎᕈᓗᐃᑦ, ᐅᓄᖅᓯᕙᓪᓕᐊᓂᖏᑦ, ᐆᒪᔪᕋᓛᑦ, ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ ᐊᒻᒪᓗ ᐃᖅᑲᕐᒥᐅᑕᑦ)

ᓴᖅᑭᑕᐅᔪᖅ ᑭᓕᐅ ᐯᐅᐊᓐᐱ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO)

ᐱᓪᓗᐊᑕᖏᑦ

ᐃᓚᐅᔪᑦ ᑕᑯᑎᑕᐅᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᒃ ᓂᕿᑦᑎᐊᕙᖕᓂᒃ ᐊᒻᒪᓗ ᐊᑦᑎᖕᓂᖅᓴᑦ ᓇᓃᓐᓂᖏᓐᓄᑦ ᕐᑯᕝᕙᓯᓕᓈᓄᑦ ᐅᖃᐅᓯᐅᔪᓂᒃ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᓇᓗᓇᐃᔭᐃᓚᐅᖅᑐᑦ ᑭᒥᔫᑎᕈᓗᐃᑦ ᐱᑕᖃᕐᓂᖏᓐᓂᒃ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ (ᐃᓚᐅᓪᓗᑎᒃ ᐱᑕᖃᖅᑐᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖏᓐᓂᑦ), ᐊᒻᒪᓗᑦᑕᐅᖅ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂ ᖃᖓᒃᑰᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᓇᓃᓕᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᖃᓄᐃᓕᖓᓂᐅᕙᒃᑯᒃ, ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑕᐃᑲᖓᖅᓱᑎᒃ 2000–ᖏᓐᓂᑦ. ᑐᓴᐅᒪᔾᔪᑏᑦ ᑕᒪᑐᒧᖓ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ–ᐊᒃᑐᐊᔪᓄᑦ ᕿᒃᑯᐊᑦ ᑕᐃᑲᓂ ᓱᓕ ᐅᓄᓗᐊᖏᑦᑐᑦ. ᑐᓴᐅᒪᔾᔪᑏᑦ ᑐᓂᔭᐅᔪᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᑕᒪᒃᑯᓄᖓ ᑯᒪᕈᕐᓄᑦ ᐅᓄᖅᓯᖃᑦᑕᕐᓂᖏᓐᓄᑦ, ᓄᓇᓖᑦ ᐊᒻᒪᓗ ᐊᖏᓂᖏᑕ ᖃᓄᐃᓕᖓᓂᖏᓐᓄᑦ, ᓯᑯᒥᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ ᑐᙵᕕᖃᖅᓱᑎᒃ ᓄᓇᕐᔪᐊᒥᑦ ᐅᐊᕐᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᕐᓄᑦ ᖃᐅᔨᓴᕈᑎᓂᑦ ᑕᐃᑲᓂ 1997-1999-ᒧᑦ. ᐊᔾᔨᐸᓗᑦᑎᐊᖓ, ᑐᓴᐅᒪᔾᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐅᓄᕐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᐅᔾᔨᒌᙱᑦᑐᑦ ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᓯᐊᓄᑦ ᐊᒃᑐᐊᔪᑦ ᕿᒥᕐᓗᖅᙱᑦᑐᑦ ᐅᓄᙱᒻᒪᑕ, ᐊᒻᒪᓗ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐱᓯᒪᕐᔪᐊᖅᑐᑦ ᑕᐃᑲᙱᑦ 1997-1999-ᒧᑦ ᖃᐅᔨᓴᕈᑎᓂᑦ. ᑎᑎᖅᑲᑦ ᐃᓗᓕᖃᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᒃ ᐅᓄᖅᓯᖃᑦᑕᕐᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᑭᒡᓕᐅᔪᑦ ᐱᔾᔪᑕᐅᔪᓄᑦ (ᓱᕐᓗ ᖃᐅᒪᓂᖓ ᐊᒻᒪᓗ

ᓂᕿᑦᑎᐊᕙᐃᑦ). ᑎᑎᖅᑲᕐᑯᑎᑐᖃᕕᓃᑦ ᓴᖅᑭᑕᐅᔪᑦ ᑕᐃᑲᓂ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᓴᖅᑭᔾᖅᑎᑦᑎᖕᒪᑕ ᑲᑎᓗᒃᑖᖅᓱᒋᑦ ᐊᕐᕌᒍᑕᒫᑦ ᐱᑕᖃᓕᖃᑦᑕᕐᓂᖏᑦ ᖁᕝᕙᓯᒃᑑᔪᖅ, ᑭᓯᐊᓂᓕ ᖃᐅᔨᔭᐅᓯᒪᔪᑦ ᐊᒃᐸᖅᐸᓪᓕᐊᓂᖏᑦ ᐱᑕᖃᖃᑦᑕᕐᓂᖏᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ (Marchese et al. 2017), ᐃᓱᒪᒋᔭᐅᔪᖅ ᑕᒫᖕᒐᕋᓱᒋᔭᐅᓪᓗᓂ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓕᐊᓂᖕᒐᓂᑦ ᖃᓄᐃᓕᖕᒐᓂᐅᔪᓂᑦ ᓴᖅᑭᓯᒪᔪᑦ ᓯᑯᐃᑦ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖏᑦ ᐊᕙᑎᒥᑦ (ᓱᕐᓗ ᐅᓄᖅᓱᒋᐊᖅᑐᑦ ᐋᖅᑭᒃᓱᖅᑕᐅᓯᒪᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐃᓄᐃᓴᒃᑯᓯᒪᓪᓗᑎᒃ ᖃᑎᖅᓱᕐᓂᖏᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓃᑦ ᐃᖅᑲᕐᖕᒐᖃᑦᑕᖅᑐᑦ). ᑭᖑᓪᓕᖅᐹᒥᒃ, ᑎᑎᖅᑲᕐᑯᑏᑦ ᓴᖅᑮᓚᐅᖅᑐᑦ ᐊᑕᖏᓗᒃᑖᖅᓯᒪᔪᓂᒃ ᐃᖅᑲᕐᒥᐅᑕᐅᕙᒃᑐᓂᒃ. ᑕᒪᓐᓇ ᐃᓚᐅᑎᑦᑎᓚᐅᖅᑐᑦ ᖃᓄᐃᓕᖕᒐᖃᑦᑕᒪᖕᒐᑕ, ᓇᓃᓕᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᔾᔨᒌᖃᑦᑕᖏᓐᓂᖏᓐᓄᑦ ᐃᓂᓂᒃ ᒪᓕᒃᓗᑎᒃ, ᖁᐊᖅᓵᕐᓇᖅᑐᑦ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᐅᑏᑦ ᐊᓯᔾᔨᕐᓂᕐᓄᑦ, ᐊᒻᒪ ᓇᐃᓈᖅᓱᒋᑦ ᐅᖃᐅᓯᐅᓚᐅᖅᑐᑎᑦ ᐃᖅᑲᖕᒐᓂᖕᒐᖅᑲᖅᑕᖅᑐᑦ ᐱᐅᓯᕆᕙᒃᑕᖏᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᒥᑭᔫᑎᕈᓗᐃᑦ

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᓄᑖᓂᒃ ᑎᑎᖅᑲᕐᑯᑎᖃᕐᓂᖏᓐᓂᒃ ᐅᓄᖅᑐᓕᐅᖅᑕᐅᓕᓵᖅᑐᓂᒃ ᐊᒻᒪᓗ ᐊᑐᐃᓐᓇᐅᑎᑕᐅᓪᓗᑎᒃ ᑐᓐᓂᖅᓴᐅᑕᐅᓛᖅᑐᑦ ᑎᑎᕋᖅᓯᒪᓪᓗᑎᒃ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ ᑕᒪᒃᑯᓄᖕᒐ ᐆᒪᓂᖃᖅᑐᑦ ᐊᔾᔨᒌᙱᓐᓂᖏᑦ. ᐊᓯᐊ ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᐃᓚᐅᖅᑐᑦ ᒫᓐᓇᓕᓴᑦ ᐱᓕᕆᐊᖑᓯᒪᔪᑦ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᓕᒫᒥᑦ ᐱᑕᖃᕐᓂᖏᑦ ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᓇᐃᓈᖅᓱᒋᓪᓗᓂ ᐅᓂᒃᑳᖅ ᑕᒪᒃᑯᓄᖕᒐ ᐱᓕᕆᐊᓄᑦ ᑭᓯᑦ ᐃᓚᐅᓪᓗᐊᕐᒪᖕᒐᑕ. ᐃᓚᐅᔪᖅ ᐃᓚᓕᐅᔾᔨᔪᓐᓇᕐᓂᕋᓚᐅᖅᑐᑦ ᑕᐃᑯᖕᒐ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓄᑦ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᕿᒥᕐᕈᒃᑲᓐᓂᕐᓗᒋᑦ ᑕᐃᔭᐅᓂᖏᑦ ᐊᓪᓛᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓄᑦ ᐃᒪᐃᓐᓂᖓᓄᑦ ᒥᑭᔫᑎᕈᓗᐃᑦ ᐅᖃᐅᓯᖃᕐᓂᖏᓐᓄᑦ ᐱᔾᔪᑎᖃᖅᑐᑦ ᑭᓯᑐᐃᓐᓇᓄᑦ ᐊᑕᐅᓯᕐᒧᑦ ᐃᔭᕈᕙᐅᔭᕐᒧᑦ (ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᖃᖅᓯᒪᔪᑦ ᑯᒪᕈᕐᓂᒃ ᐊᑐᕐᓗᒋᑦ ᑭᒥᔫᑎᕈᓗᖕᓄᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᒃ, ᐊᒻᒪᓗ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ ᓇᖕᒥᓂᖅ ᐊᒡᒍᖅᑐᓯᒪᖕᒥᓗᑎᒃ). ᓄᑖᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᐃᒪᐃᑦᑑᓪᓗᐊᖅᑐᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ ᐊᒻᒪ ᒥᑭᔫᑎᕈᓗᐃᑦ ᓂᒪᑦᑐᓐᓇᙱᑦᑐᑦ ᓴᓗᒻᒪᖅᓴᐃᓲᑦ ᐊᒻᒪᓗ ᐊᓯᖏᑦ ᓴᓗᒻᒪᖅᑕᐃᓲᑦᑕᐅᖅ (ᐅᕝᕙᓘᓐᓂᑦ ᐊᔾᔨᐸᓗᖕᒐᓂᒃ). ᐅᖃᐅᓯᖃᓪᓗᐊᖅᑐᑦ ᑕᐃᑯᓂᖕᒐᓗᒃᑖᖅ ᒪᒃᑯᓄᖕᒐᑐᐊᖑᙱᑦᑐᖅ ᐃᔭᕈᕙᐅᔭᓂᑐᐊᖑᙱᑦᑐᖅ. ᖀᒃᑲᓂᐊᒍᑦ, ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖕᒐᓐᓂᑦ (SAR) ᐃᒪᐃᓕᐅᓪᓗᐊᖅᑐᑦ ᓇᓗᓇᐃᔭᑦᑎᐊᒃᑲᓐᓂᕐᓗᒋᑦ ᐊᔾᔨᐅᙱᓐᓂᖏᑦ ᒥᑭᔫᑎᕈᓗᐃᑦ ᐊᒻᒪᓗ ᓇᑭᖕᒐᕐᒪᖕᒐᑕ, ᐃᒪᐃᙱᖕᒐᕐᓗᑎᒃ ᐊᔾᔨᒌᙱᕈᓘᔭᖅᑐᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᑦᑐᓪᓗᑦ. ᑕᒪᓐᓇ ᐊᔾᔨᐅᙱᓐᓂᖓ ᐊᑑᑎᖃᕐᒪᑦ ᐅᑭᐅᖅᑕᖅᑐᓕᒫᒧᑦ, ᑭᓯᐊᓂᓕ ᐊᔾᔨᒋᔭᐅᙱᑦᑐᑦ ᐊᕙᑏᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᖃᐅᔨᓇᓱᒃᑕᐅᕋᓂᒃᓯᒪᙱᒻᒪᑕ. ᑕᒪᒃᑯᐊ ᐃᓗᓕᖃᖅᑐᒃᓴᐅᔪᑦ ᐊᔾᔨᐅᙱᑦᑐᓂᒃ ᒥᑭᔫᑎᕈᓗᖕᓂᒃ ᐆᒻᒪᓪᓗᐅᓗᑎᒃᑕᐅᖅ, ᑭᓯᐊᓂᓕ ᑕᒪᓐᓇ ᓱᓕ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᖅ. ᖃᐅᔨᒪᔨᕐᔪᐊᑦ ᐃᓚᐅᔪᑦ ᐃᑲᔪᕈᒪᓚᐅᖅᑐᑦ ᐋᖅᑭᒋᐊᕐᓗᒋᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ.

ᓯᑯᓄᑦ ᐊᒃᑐᐊᔪᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ ᐊᒻᒪᓗ ᑯᒪᕈᐃᑦ

ᐃᓚᐅᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐊᒃᑐᐊᓚᓇᖕᓃᑦ ᐅᓄᖅᓱᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᑯᒪᕈᐊᓛᑦ. ᑕᒪᓐᓇ ᐊᒃᑐᐊᓚᓇᖕᓃᑦ ᑐᙵᕕᐅᔪᖅ ᐃᑲᔪᖅᓱᕐᓗᓂᓗ ᖁᕝᕙᓯᖕᓂᖅᓴᐅᔪᓂᑦ ᐃᑎᓕᓈᓂᑦ ᖁᕝᕙᓯᓕᓈᓄᑦ, ᑭᓯᐊᓂᓕ, ᑕᒪᓐᓇ ᖃᓄᖅ ᐊᓯᔾᔨᕐᓂᐊᕐᒪᖕᒐᑦ ᓯᕗᓂᒃᓴᒥᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᖅ. ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᑕ ᐃᓗᐊᓂ ᐱᑕᖃᖃᑦᑕᕐᓂᖏᑦ ᐊᓯᔾᔨᖅᑎᓪᓗᒋᑦ, ᖃᐅᔨᒪᙱᑦᑐᒧᑦ ᑯᒪᕈᐃᑦ ᐊᖅᑭᒋᐊᕐᓂᐊᒪᖕᒐᑕ ᖃᖕᒐᒃᑰᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖏᑦ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐊᑦᑎᖕᓂᖅᓴᐅᓕᖅᑎᓪᓗᒋᑦ ᓂᑭᒃᓴᕐᓄᑦ ᐱᑕᖃᕐᔪᐊᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᓱᓕ ᑕᐃᒪᐃᑦᑐᖅ. ᖃᖕᒐᒃᑰᓂᖏᑦ ᐊᒻᒪᓗ ᐊᔾᔨᙱᓐᓂᖏᑦ ᐳᒃᑕᓛᓲᑦ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᑕ ᐃᓗᐊᓃᑦᑐᑑᙱᒻᒪᑕ, ᑭᓯᐊᓂᓕ ᐊᒃᑐᐊᖕᒐᑕ ᑕᒪᒃᑯᓄᖕᒐ ᖃᖕᒐᒃᑯᑦ ᑕᕆᐅᑉ ᐃᖏᕐᕋᓂᖕᒐ ᐊᒻᒪᓗ ᐊᐅᒃᑲᕐᓂᖅᑕᖃᑦᑕᕐᓂᖏᑦ. ᒪᕐᕈᒃᑲᓐᓂᒃ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑕᒪᑐᒧᖕᒐ ᐃᒪᑦᑎᐊᕙᙱᕐᕕᐅᕙᒃᑐᓂᑦ ᖃᐅᔨᑎᑦᑎᑐᐃᓐᓇᕆᐊᓕᒃ, ᑭᓯᐊᓂᓕ ᑕᒪᓐᓇ ᐱᒻᒪᕆᓪᓕᕆᐅᓪᓗᓂ ᖃᐅᔨᒪᓂᐅᔪᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᖅ. ᐆᒪᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᐃᖏᕐᕋᓂᐅᕙᒃᑐᑦ ᐱᒻᒪᕆᐅᖕᒥᔪᖅ ᐊᒻᒪᓗ ᐅᖃᐅᓯᒃᓴᒃᑲᓐᓂᐅᓪᓗᐊᖅᑐᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᐃᓚᐅᔪᖅ ᐃᑲᔪᕈᒪᓚᐅᖅᑐᖅ ᐋᖅᑭᒋᐊᖅᓯᓂᕐᒥᒃ ᑕᐃᑲᓂ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ ᑖᒃᑯᓇᓂ ᖃᐃᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᑖᒃᑯᓄᖕᒐ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖕᒐᓐᓂᑦ (SAR), ᐱᒻᒪᕆᐅᔪᖅ ᑎᑎᕋᖅᑕᐅᓗᑎᒃ ᖃᖕᒐᒃᑯᑦ ᐱᑕᖃᓪᓗᐊᑕᖃᑦᑕᕐᓂᖏᑦ ᐊᒃᑐᖅᑕᐅᓇᔭᕐᒪᖕᒐᑕ ᑕᒪᑐᒧᖕᒐ ᓯᓚᐅᑉ ᐊᔾᔨᖅᐸᓪᓕᐊᓂᖕᒐᓄᑦ ᐊᒻᒪᓗ ᐊᒃᑐᐃᓇᔭᖅᓱᓂ ᑕᒪᓐᓇ ᐃᑎᓕᓈᓄᑦ ᖁᕝᕙᓯᓕᓈᓄᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᑐᑭᖕᒐᓂᒃ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᑕ ᐃᓗᐊᓂ ᐊᒻᒪ ᐊᕐᕌᒍᑉ ᐃᓚᐃᓐᓇᖕᒐᓃᑦᑐᓕᕆᓂᕐᒧᑦ ᐃᓗᐊᓂᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᑕᒪᓐᓇ ᓇᓗᓇᖅᑑᔪᓐᓇᖅᑐᑦ ᐊᕐᕌᒍᑉ ᐃᓚᐃᓐᓇᖕᒐᓂᑦ ᑐᑭᓯᐅᖅᓯᒪᓂᖕᒐᓄᑦ ᐊᔾᔨᙱᑕᖕᒐᓂᒃ ᑖᒃᑯᓇᓂ ᐆᒪᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᐋᖅᑭᒃᓯᒪᓂᐅᔪᓂᒃ (ᐊᒻᒪᓗ ᒪᓕᒃᓱᓂ ᑕᒪᒃᑯᓄᖕᒐ ᑯᒪᕐᑯᕐᓄᑦ ᐊᐱᖅᑯᑕᐅᔪᓄᑦ), ᓇᔪᖅᑕᖕᒐᑕ ᐋᖅᑭᒃᓯᒪᓂᖕᒐᓄᑦ, ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᖃᓄᐃᓕᖕᒐᓂᖏᓐᓄᑦ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᐅᓪᓗᓂ ᐅᖃᐅᓯᖅᑲᓱᑎᒃ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᑕ ᐊᒻᒪᓗ ᐊᒥᓱᑦ ᑐᑭᖏᑦ ᑕᐃᑲᓂ ᓴᖅᑭᑕᐅᓕᓵᖅᑎᓪᓗᒍ. ᑕᒪᓐᓇ ᐅᖃᐅᓯᐅᓂᖕᒐ ᐃᓚᐅᑎᑦᑎᓇᔭᖅᑐᑦ ᐃᓄᐃᑦ

ᖃᐅᔨᓴᐃᔾᔪᓯᕐᓗᓄᑦ ᐊᒻᒪᓗ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓ ᑖᒃᑯᓄᖓ ᐃᓄᖕᓄᑦ. ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓ ᓇᓗᓇᐃᔭᖅᑕᐅᓇᔭᖅᑐᑦ ᐊᔾᔨᒌᙱᑦᑐᑎᒍᑦ ᐊᑐᓂ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᒃ ᒪᓕᒃᑕᐅᓗᑎᒃ ᐱᑕᖃᕆᐊᖃᕐᓂᖏᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ, ᓱᓂᒐᓗᐊᖅᑎᓪᓗᒍ ᐱᑕᖃᑦᑎᐊᖏᓐᓂᖓᓂᒃ ᑕᒪᑐᒧᖓ ᓯᑯᒥᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ, ᒪᕐᕉᖕᓂᒃ ᖃᐅᔨᓴᕐᓂᕐᓂᒃ ᖃᐅᔨᒋᐊᕐᕕᒃᓴᓪᓗᐊᖅᑐᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑯᒃ ᐃᒪᐃᙱᒃᑲᓗᐊᕐᒪᖔᑦ ᑕᒪᓐᓇ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐊᑕᖏᖅᑐᒥᒃ ᑎᑎᕋᐃᓯᒪᒐᓗᐊᕐᒪᖔᑕ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᕿᒥᕐᕈᓃᑦ ᒥᑭᑦᑐᓄᑦ ᐊᐅᑦ ᐊᖑᓇᓱᖃᑦᑕᕐᓂᖏᑦ ᖃᐅᔨᓴᐅᓚᐅᖅᑐᑦ ᐊᖑᓇᓱᖃᑦᑕᖅᑐᑦ 40 ᒦᑕᑦ ᐃᑎᓂᕐᒥᑦ; ᑕᒪᓐᓇ ᑎᑎᖅᑲᕐᑯᑎ ᑎᑎᕋᖅᑕᐅᓯᒪᙱᑦᑐᖅ ᖃᖓᑦᑕᖅᑎᑕᐅᓯᒪᔪᑎᒍᑦ ᐊᔾᔨᙳᐊᓂᑦ ᐊᑐᖅᑕᐅᔪᓂᑦ ᑕᐃᑲᓂ ᑎᑎᖅᑲᓂᑦ. ᑕᒪᓐᓇ ᑲᔪᓰᓐᓇᖕᓂ ᐃᓱᒪᒍᑕᐅᔪᖅ ᐃᒪᐃᓐᓂᖓᓄᑦ ᖃᖓᑦᑕᖅᑎᑕᐅᓯᒪᔪᑦ ᐊᔾᔨᙳᐊᑦ ᐱᐅᔫᔪᑦ ᖃᐅᔨᓴᓱᒃᑎᓪᓗᒋᑦ ᐊᖏᓛᖑᔪᓂᒃ ᐆᔭᕐᔭᕐᓂᑦ ᐱᕈᖅᑐᓂᑦ ᐱᑕᖃᕐᓂᖓᓂᒃ ᖄᖓᓂᑦ ᑭᓯᐊᓂᓕ ᓴᓂᖅᑯᐃᓪᓗᓂ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ ᐱᑕᖃᖃᑦᑕᖅᑐᓄᑦ ᐊᑖᓂᑦ. ᐃᒪᐃᑦᑐᓐᓇᖅᑐᑦ, ᑭᓯᐊᓂᓕ, ᐊᕌᒍᑦ ᐊᔾᔨᒌᖃᑦᑕᖏᓐᓂᖏᓐᓂᒃ ᖃᐅᔨᑎᑦᑎᓗᓂ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎ ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᑦ (SAR) ᓱᖅᑯᐃᓇᖅᓯᑎᑦᑎᓪᓗᐊᖅᑐᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᒥᐅᒪᔭᐅᙱᓐᓂᖅᑕᖃᕐᒪᑕ ᑕᒪᒃᑯᓂᖓ ᐱᔾᔪᑎᖃᖅᑐᓂᒃ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ. ᐊᖏᓛᖑᔪᖅ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᖅ ᐃᒪᐃᑦᑑᔪᖅ ᓇᓃᓕᖃᑦᑕᕐᓂᖏᑦ ᐊᒻᒪᓗ ᖁᕙᓯᓕᓈᓃᖃᑦᑕᕐᓂᖏᑦ ᖁᒪᕈᐃᑦ ᐊᒃᑐᐊᕙᒪᑕ ᐃᒪᐅᑉ ᐃᓗᐊᓃᑦᑐᓄᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᑐᖅᑐᓃᑐᓄᑦ. ᑕᒪᓐᓇ ᐱᒻᒪᕆᐅᔪᖅ ᓲᖃᐃᒻᒪ ᐋᖅᑭᒃᓯᖅᑕᐅᓯᒪᓂᖏᑦ ᐊᑯᑭᑦᑐᓂᑦ ᐊᔾᔨᙱᑦᑎᐊᕐᒪᒍ ᑲᓇᑕᒥᑦ. ᓯᒡᔭᖓᓂᑦ ᐱᑕᖃᖃᑦᑕᕐᓂᖏᑦ ᐱᑕᖃᖅᑎᑦᑎᔨᓪᓗᐊᑕᑎ ᐱᒻᒪᕆᐅᓪᓗᓂᑦᑕᐅᖅ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᖅ. ᐃᓚᐅᔪᖅ ᓱᖅᑭᓇᖅᓯᑎᑦᑎᑎᐊᓚᐅᖅᑐᖅ ᑕᒪᒃᑯᐊ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔭᐅᙱᑦᑐᑦ ᐱᒻᒪᕆᐅᖓᑕ ᐅᖃᐅᓯᖅᑲᑎᓪᓗᒋᑦ ᐊᒃᑐᐃᓂᑐᐃᓐᓇᕆᐊᓕᖕᓂᒃ, ᐊᒻᒪᓗ ᐱᑕᖃᓕᖅᑎᑕᐅᓗᑎᒃ ᐱᒻᒪᕆᐅᓂᖏᓐᓄᑦ ᑐᓴᐅᒪᑦᑎᐊᕐᓗᑎᒃ ᐊᑐᐊᒐᓄᑦ ᐃᓱᒪᓕᐅᕆᓂᖕᓂᑦ.

ᑲᑎᙵᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᖀᒃᑲᓐᓂᐊᒍᑦ ᐱᓇᐃᓗᑖᕐᔪᖕᓂᒃ ᑕᐃᑲᓂ ᐊᒎᖅᑐᖅᓯᒪᔪᒥᒃ. ᐆᒃᑑᑎᒋᓗᒍ, ᑲᑎᓗᒃᑖᖅᓱᒋᑦ ᐊᖏᓂᖏᑦ ᐱᑕᖃᕐᓂᐅᓪᓗᐊᑕᖅᑐᑦ ᑐᖓᐅᑕᐅᓯᒪᔪᒃᓴᐅᔪᑦ ᐊᔾᔨᙳᐊᖅ 16–ᒥᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᐊᓚᓯᒋᐊᕈᒪᓪᓗᑎᒃ "ᓴᖅᑭᔭᖅᑎᑦᑎᙱᑦᑐᖅ ᐃᒪᐅᑉ ᐃᓗᐊᓃᑦᑐᓂᒃ ᐆᔭᐅᔭᓂᒃ ᐱᕈᕐᓂᖅᐸᓇᕙᒃᑕᖏᓐᓄᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓯᑯᒧᑦ ᐊᒃᑐᐊᔪᑦ ᐱᑕᖃᕐᕕᐅᔪᑦ" ᑕᐃᑯᖓ ᐊᔾᔨᙳᐊᒧᑦ ᐊᔾᔨᓕᐅᖅᑕᐅᓯᒪᔪᓄᑦ. ᑎᑎᕋᖅᓯᒪᔪᖅ 2 ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᓄᑕᐅᔪᓐᓃᖅᓯᒪᖕᒪᑦ ᐊᒻᒪᓗ ᖃᓄᐃᓐᓂᖅᓴᐅᓕᕐᓂᖓᓄᑦ ᖃᐅᔨᒋᐊᖅᑕᐅᓪᓗᐊᖅᑐᑦ ᓄᑖᙳᓂᖅᓴᓄᑦ ᖃᐅᔨᔭᐅᔪᓄᑦ, ᐊᒻᒪᓗ ᓇᓃᓐᓂᖓ ᓇᓗᓇᐃᖅᑕᐅᑦᑎᐊᒃᑲᓐᓂᕐᓗᓂ ᓇᓗᓇᐃᖅᑕᐅᓗᓂᓗ ᖃᖓᒃᑰᓚᐅᕐᓂᖓ.

ᐅᓄᖅᓯᕙᓪᓕᐊᓂᖏᑦ ᐊᒻᒪᓗ ᑭᒡᓕᐅᔪᑦ

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐲᖅᓯᓗᑎᒃ ᐊᑕᖏᖅᑐᓂᒃ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᓂᒃ ᑖᒃᑯᓄᖓ ᑕᕆᐅᑦ ᐃᓚᓯᒪᔪᑦ ᑭᒡᓕᐅᔾᔪᑕᐅᑐᐃᓐᓇᕆᐊᖃᕐᓂᖓᓄᑦ ᓂᕿᒃᑎᐊᕙᓐᓄᑦ. ᖃᐅᔨᒪᔭᐅᓕᖅᑐᖅ ᒫᓐᓇ ᑕᒪᓐᓇ ᐳᔪᕐᓗᒃ ᓂᑭᑦᑎᐊᕙᖃᕈᓐᓃᖅᑎᑦᑎᕙᓪᓕᐊᖕᒪᑕ, ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᑐᕌᒐᐅᓪᓗᐊᖅᑐᖅ.

ᑲᑎᙵᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᓇᓃᓕᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᒃᑯᐊᓂᖏᑦ ᓂᕿᑦᑎᐊᕙᖕᓄᑦ ᐱᒻᒪᕈᐅᔫᓪᓗᓂ ᐃᓚᒋᔭᐅᔪᖅ ᐃᓚᐅᑎᑕᐅᙱᑦᑐᖅ ᑕᐃᑲᓂ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᒥᑦ, ᐱᓗᐊᖅᑐᒥᒃ ᐱᔾᔪᑎᖃᖅᓱᑎᒃ ᓂᓇᐅᒋᔭᐅᔪᓄᑦ ᐊᓯᔾᔨᐅᑎᓄᑦ ᓯᓚᒧᑦ. ᓲᕐᓗ, ᐃᒪᖅ ᑕᐃᑲᖕᒑᖃᑦᑕᕐᒪᑦ ᑕᓇᐅᑉ ᐊᑭᐊᑕ ᐃᑭᖓᓂᑦ ᓂᕿᑦᑎᐊᕋᖃᖅᑑᓪᓗᓂᓗ, ᑭᓯᐊᓂᓕ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᑐᐃᓐᓇᕆᐊᓖᑦ ᐃᒪᐃᓐᓂᖓᓄᑦ ᐃᒥᑦ ᑕᐃᑲᙵᑦ ᐱᓇᖕᓇᖓᓂᑦ ᐊᑯᑭᑦᑑᑉ ᐃᖏᕐᕋᓂᖏᕐᒋᑦ ᓄᑉᐸᓪᓕᐊᓂᖅᓴᐅᓕᕐᒪᑕ ᐅᐊᖕᓇᖓᓄᑦ ᐊᒻᒪᓗ ᐊᖏᒡᓕᕙᓪᓕᐊᑐᐃᓐᓇᖅᓱᑎᒃ ᐃᑎᒡᓕᕙᓪᓕᐊᑐᐃᓐᓇᖅᓱᑎᒡᓗ. ᐊᑕᖏᓱᒃᑖᖅᓱᑎᑦ ᐱᒻᒪᕆᐅᓂᖏᑦ ᓂᕿᑦᑎᐊᕙᐃᑦ ᐃᓱᖅᐸᓪᓕᐊᔪᑦ ᐅᐊᖕᓇᖓᓄᑦ ᐃᒥᕐᓄᑦ ᑖᑯᑎᖕᒑᓇᖅ ᐃᒥᑦ ᐃᖏᕐᕋᓂᖏᑦᑎᒍᑦ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓂᖅᑎᒍᑦ ᐃᓚᓕᐅᔾᔭᐅᓪᓗᐊᖅᑐᑦ ᑖᒃᑯᓄᖓ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓄᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐊᑐᕐᓗᑎᒃ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᑕᐃᑲᙵᑦ 1998 ᖃᐅᔨᓴᕐᓂᐅᓚᐅᖅᑐᒥᒃ ᓇᓗᓇᐃᔭᖅᑕᐅᕐᑯᓪᓗᒍ ᐅᓄᖅᓯᕙᓕᐊᓂᕐᓄᑦ. 1998 ᐊᔾᔨᐅᙱᑦᑑᓪᓗᓂ, ᐅᓄᖅᓯᕙᓪᓕᐊᕐᕕᐅᕐᔪᐊᕐᓂᑯ ᐊᕐᕌᒍᖓ; ᑕᒪᒃᑯᐊ ᐅᓄᖅᓯᕙᓪᓕᐊᓂᕐᓄᑦ ᕐᑯᕝᕙᓯᓕᓈᑦ ᑕᑯᔭᐅᓯᒪᙱᑦᑐᑦ ᑕᐃᑲᙵᓂᑦ (ᐊᑐᖅᑐᒃ ᖃᖓᑦᑕᖅᑎᑕᐅᓯᒪᔪᑦ ᑎᑎᖅᑲᕐᑯᑎᖏᑦ ᓴᖅᑭᔭᖅᑎᑦᑎᔪᑦ ᕐᑯᕝᕙᖅᐸᓪᓕᐊᒃᑲᓐᓂᖅᑰᓕᖅᑐᖅ). ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐱᔾᔪᑕᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᖃᓄᐃᓕᖓᓂᖓ ᐊᒡᓚᒃᑲ ᐊᒻᒪᓗ ᕋᓴᐅᑉ ᐃᑭᐊ; ᐳᔪᕐᓗᒃ ᓇᐃᑐᓇᑦ ᐊᑐᐃᓐᓇᐅᓕᕐᓂᖅᓴᐅᓯᒪᓂᖓᓄ. ᑕᒪᓐᓇ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᖓ ᐅᕝᕙᓘᓐᓃᑦ ᐃᓚᒋᔭᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᑕᐃᒪᐃᑐᐃᓐᓇᖅᑐᑦ ᐊᔾᔨᒌᖃᑦᑕᖏᓐᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᓱᖅᑯᐃᓇᖅᓯᑎᑕᐅᑦᑎᐊᕆᐊᓕᒃ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ.

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᖅ ᐃᓚᓯᓗᑎᒃ ᓄᓇᔭᖃᑦᑕᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᖃᖓᑦᑕᖃᑦᑕᖅᑐᑦ/ᑲᑕᖃᑦᑕᖅᑐᑦ ᑭᓯᑐᐃᓐᓇᑦ ᓯᒡᔭᕆᔭᐅᔪᐃᑦ ᐊᕙᑎᖏᓐᓄᑦ ᐃᒪᐃᑦᑑᕐᑯᓪᓗᓂᐅᒃ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔭᐅᙱᑦᑐᖅ. ᑖᒃᑯᐊ ᐱᔾᔪᑕᐅᔪᑦ ᐊᒃᑐᐃᔾᔪᑕᐅᔪᑦ ᖃᐅᒪᓂᕐᒥᒃ, ᑕᐃᒪᐃᓐᓂᖓᓄᓪᓗ, ᐱᑕᖃᕐᓂᐅᓪᓗᐊᑕᖅᑐᑦ ᐊᒃᑐᖅᑕᐅᕐᔪᐊᖅᓯᒪᔪᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᒫᓐᓇᕋᑖᖅ ᑐᓂᓯᓚᐅᕐᓂᕐᒥᖕᓂᒃ ᑎᑎᕋᖅᓯᒪᔪᓂᒃ ᓴᖅᑭᔭᖅᑎᑦᑎᔪᒥᒃ ᐅᓄᖅᑐᑦ ᐊᒻᒪᓗ ᐅᓄᕐᓂᖅᓴᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ (ᑯᒪᕈᐃᑦ) ᑎᑭᑉᐸᓪᓕᐊᖕᓚᑕ ᐃᖅᑲᖓᓄᑦ (ᑐᙵᕕᖃᖅᓗᑎᒃ ᐅᖅᓱᕈᔫᓂᖏᑦ ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᑦ ᐃᓗᓕᖏᑦ ᑕᒪᒃᑯᓇᓂ ᐅᖅᑲᕐᒥᐅᑕᓂᑦ). ᑕᒪᓐᓇ ᐅᓄᖅᓯᕙᓪᓕᐊᖏᓐᓇᖅᑐᑦ ᑕᐃᑲᖓᓂᑦ 1990-ᓂᑦ ᐊᒻᒪᓗ ᓇᓚᐅᑦᑖᖅᑕᐅᓯᒪᔪᖅ ᐋᖅᑭᑦᑎᐊᖅᓯᒪᙱᓐᓂᖅᑕᖃᖅᑐᒃᓴᐅᖕᒪᑦ ᑯᒪᕈᕐᓄᑦ.

ᑯᒪᕈᐃᑦ ᖃᓄᐃᓕᖓᓂᖏᑦ ᐋᖅᑭᒃᓱᖅᓯᒪᓂᖏᑦ

ᖃᐅᔨᓴᕈᑏᑦ ᐱᐊᓂᒃᑕᐅᓚᐅᖅᑐᑦ 1998−ᒥᑦ ᐃᓚᐅᑎᑦᑎᑎᙱᒻᒪᑕ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᒥᑭᓐᓂᖅᓴᐅᔪᓂᒃ 2 ᐃᔭᕈᕙᐅᔭᑦ. ᓄᑖᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐊᑐᐃᓐᓇᐅᓕᖅᑐᑦ ᐅᑖᙳᕆᐊᓇᔪᓐᓇᖅᑐᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᐊᑦᑕᑕᖅᑎᓯᒪᔪᓂᑦ. ᑕᒪᓐᓇ ᓇᓗᓇᐃᖅᓯᔪᖅ ᐅᓄᖅᓯᒋᐊᕐᓂᖏᓐᓂᒃ ᐅᔾᔨᒌᙱᕈᓘᔭᕐᓂᖏᓐᓂᒃ ᑕᕝᕙᓂ ᐃᓛᒃᑰᖅᑐᓂᑦ ᒫᓐᓇᕈᓗᒃ ᐱᔾᔪᑕᐅᓪᓗᓂ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᖏᑦ ᖃᐅᔨᒪᓃᑦ ᐅᓄᖅᓯᒋᐊᕆᓯᒪᙱᓐᓂᖏᓐᓄᑦ ᐅᔾᔨᒌᙱᕈᓘᔭᖅᑐᓂᑦ ᐊᐅᓚᔾᔪᓯᕐᓂᑦ.

ᑲᑎᙵᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐊᔾᔨᒌᖃᑦᑕᙱᓐᓂᖏᓐᓄᑦ ᕐᑯᕝᕙᓯᓕᕆᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᐱᑕᖃᖅᑎᑕᐅᙱᑦᑐᑦ ᐃᓗᓕᖏᑦ ᑕᐃᑲᓂᓗᒃᑖᖅ ᐃᓛᒃᑰᖅᑐᒥᑦ. ᓲᕐᓗ, ᐅᖃᐅᓯᐅᔪᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᓴᖅᑭᔭᖅᑎᑦᑎᖅᑯᔨᓚᐅᕐᒪᑕ ᐃᓚᖏᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖏᓐᓄᑦ, ᑕᒪᓐᓇᓗ ᓱᓕᙱᑦᑐᒃᓴᐅᓪᓗᓂ ᐊᑕᖏᖅᓱᒍ ᐊᕐᕋᒍᓕᒫᖅ. ᑕᒪᓐᓇ ᐃᓗᓕᖓ ᐱᓗᐊᖅᑐᒥᒃ ᐱᒻᒪᕆᐅᔪᖅ ᖃᓄᐃᓐᓂᖅᓴᐅᓂᖓᓂᒃ ᖃᐅᔨᓇᓱᒃᑎᓪᓗᒋᑦ ᐊᑯᑭᑦᑐᑦ ᑲᓇᑕᒥᓗ ᐃᒪᐃᓐᓂᖓᓄᑦ ᐊᔾᔨᒌᙱᔾᔪᑎᑕᖃᐅᕐᓂᖓᓂᒃ ᑲᓇᑕᒥᑦ. ᖃᐅᔨᒪᔨᑕᑦ ᐃᓚᐅᔪᑦ ᐱᓕᕆᔪᒪᓚᐅᖅᑐᑦ ᑕᒪᑐᒥᖓ ᐃᓛᒃᑰᖅᑐᒥᒃ.

ᓯᑯᒥᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓄᒃᑎᕐᓗᒍ ᑭᖑᓪᓕᖅᐹᖅ ᑎᑎᕋᖅᓯᒪᔪᖅ ᑕᒪᑐᒧᖓ ᐳᓪᓚᖅ (dimethyl sulfide) ᑕᒪᒃᑯᓄᖓ ᐅᖅᓱᐊᓗᐃᑦ ᐱᑕᖃᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐃᓛᒃᑰᖅᑐᓄᑦ. ᐃᓚᐅᔪᖅ ᑐᓂᓯᒃᑲᓐᓂᕈᒪᓚᐅᖅᑐᑦ ᑎᑎᕋᖅᓯᒪᒃᑲᓐᓂᖅᑐᓂᒃ ᐃᓚᒋᔭᐅᓪᓗᐊᖅᑐᓂᒃ ᐃᓗᓪᓕᕐᑯᓪᓗᒍ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᑕᐃᑲᓂ ᐃᓛᒃᑰᖅᑐᒥᑦ.

ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᐅᖃᐅᓯᐅᔪᑦ ᓯᑯᒥᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ ᐊᖏᔫᙱᒻᒪᑕ ᑐᓂᓯᖃᑦᑕᕐᓗᑎᒃ ᐱᕙᓪᓕᐊᓂᖏᓐᓄᑦ ᑯᒪᕈᐃᑦ ᐅᓄᖅᓯᑲᓪᓚᖕᓂᖏᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ (Tremblay et al. 2006) ᐊᒻᒪᓗ ᐲᖅᑕᐅᓪᓗᐊᖅᓱᓂ ᑕᐃᑲᙵᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒥᑦ. ᐅᖃᖅᑕᐅᒃᑲᓐᓂᓚᐅᖅᑐᑦ ᐅᖃᐅᓯᖃᖅᑎᓪᓗᒋᑦ ᓯᑯᒥᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᑲᒃᑐᑦ ᑕᐃᑲᓂ ᑕᓯᐅᔭᕐᔪᐊᒥᑦ (Michel 1993) ᐲᖅᑕᐅᓪᓗᐊᕐᓂᖓᓂᒃ.

ᑕᕆᐅᒥᑦ ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᐃᖅᑲᖓᓂᑦ ᐃᔭᕈᕙᐅᔭᖅᑑᖅᑐᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ

ᑲᑎᙵᔪᑦ ᐅᖃᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᐊᑕᖏᓗᒃᑖᐸᓗᒃᓱᑎᒃ ᑕᐃᑲᓂ ᓯᒡᔭᓂᑦ ᐃᓂᓂᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔭᐅᙱᑦᑑᖓᑕ. ᐊᑯᑭᑦᑐᓂᑦ ᑐᓴᐅᒪᔾᔪᑎᑕᖃᒐᓛᒃᑐᖅ ᑕᒪᒃᑯᓄᖓ ᕿᖅᑯᐊᓄᑦ (ᐃᓚᐅᔪᖅ ᑐᓂᓯᔪᓐᓇᕐᓂᕋᓚᐅᖅᑐᑦ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᒥᒃ), ᑭᓯᐊᓂᓕ ᑐᓴᐅᒪᔾᔪᑎᑕᖃᙱᑦᑐᖅ ᑕᓇᑕᒥᖕᒐᖅᑐᒥᒃ. ᑭᓯᐊᓂᓕ, ᐊᐱᖅᑯᑏᑦ ᐊᓯᔾᔨᕐᓂᕐᓄᑦ ᑕᐅᓄᖓᖕᒐᖅ ᐱᑕᖃᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᖃᖓᒃᑯᑦ ᖃᐅᔨᓴᐅᔪᓐᓇᖅᑐᑦ ᐊᓯᖏᓐᓂᑦ ᓄᓇᓕᐅᔪᓂᑦ. ᐃᒪᐃᑦᑑᑐᐃᓐᓇᕆᐊᓕᒃ ᖃᔨᐅᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᓂ ᑕᒫᓂ, ᑭᓯᐊᓂᓕ ᐱᔾᔪᑎᑕᖃᙱᑦᑐᑦ ᐃᓱᒪᒋᓗᒋᑦ ᑕᒪᒃᑯᐊ ᐅᔾᔨᒋᔭᐅᖏᒋᐊ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᓲᕐᓗ, ᐊᓯᖏᓐᓂᑦ ᓯᑯᖃᖅᑐᓂᑦ ᓄᓇᒋᔭᐅᔪᓂᑦ ᓄᑖᓂᒃ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᖃᓕᖅᑐᑦ ᑕᐅᕗᖓᖕᒐᖅ ᒥᑭᓐᓂᖅᓴᓄᑦ ᑯᒪᕈᕐᓄᑦ. ᖃᐅᔨᒪᓇᙱᑦᑐᖃᐅᕋᓗᐊᖅᑎᓪᓗᒍ ᐱᔾᔪᑎᒋᔭᐅᓪᓗᑎᒃ ᐱᓕᕆᔾᔪᒥᑦ, ᐊᖏᔪᒥᒃ ᐊᒃᑐᐊᓂᖃᖅᓯᒪᔪᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ ᐊᒻᒪᓗ ᑕᐃᒪᐃᑦᑐᓐᓇᕆᓪᓗᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᑕᒪᓐᓇ ᐊᖏᔪᒥᒃ ᐊᒃᑐᐃᓂᐅᓇᔭᖅᑐᖅ ᐅᓄᖅᓯᕙᓪᓕᐊᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᓂᕿᖃᕐᓂᕐᒧᑦ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓄᑖᙳᕆᐊᓇᓗᑎᒃ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑕᐃᑲᓂ ᐃᓛᒃᑰᖅᑐᒥᑦ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᑐᓂᓯᔪᒪᓚᐅᖅᑐᑦ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᓂ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᒥᒃ ᑕᐃᑲᙵᑦ ᑎᔅᑯ ᑲᖏᖅᓱᐊᓂᑦ.

ᐃᓚᐅᔪᖅ ᐃᒪᓐᓇᐅᕐᑯᔨᔪᖃᓚᐅᖅᐳᖅ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐅᖃᑦᑎᐊᒃᑲᓐᓂᖅᓯᒪᓗᑎᒃ ᑕᐃᑲᓂ ᐃᖅᑲᕐᒥᐅᑕᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖏᓐᓂᒃ ᐱᓇᖕᓇᖓᓂᑦ ᑕᑯᓗᒋᑦ ᖃᓄᐃᓐᓂᖅᓴᐅᓂᖏᓐᓂᒃ ᑲᓇᖕᓇᖓᓂᑦ ᑕᕝᕙᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᖃᒃᑲᓐᓂᐊᒍᑦ, ᐊᑐᖅᑐᑦ ᐊᔾᔨᒌᙱᕈᓘᔭᖅᑐᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᓇᓗᓇᐃᖅᑕᐅᓗᓂ. ᐊᑐᖅᑐᑦ ᐊᔾᔨᒌᙱᕈᓘᔭᖅᑐᑦ ᐃᓚᒋᔭᐅᔪᖅ ᐆᒪᓂᖅᑐᑦ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᑲᒪᓪᓗᑎᒃ ᐊᖏᔫᙱᓂᖓᓂᒃ ᐃᓂᑦᑎᐊᕙᐅᒋᔭᐅᔪᑦ ᐃᓗᐊᓂᑦ ᐆᒪᓂᖅᑲᕐᕕᐅᔪᑦ. ᑕᒪᓐᓇ ᐃᒪᐃᑎᑦᑎᑐᐃᓐᓇᕆᐊᓕᒃ ᐊᔪᙱᑦᑑᓗᑎᒃ ᐃᓗᐊᓂᑦ ᐱᓕᕆᔾᔪᓯᐅᑉ. ᒫᓐᓇᓕᔭᐅᓂᖅᓴᑦ ᖃᐅᔨᓴᕈᑏᑦ ᓴᖅᑭᔭᖅᑎᑦᑎᖓᒪᑕ ᐊᑐᖅᑐᑦ ᐅᔾᔨᒌᙱᕈᓘᔭᖅᑐᑦ ᐃᓗᐊᓂᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᐅᕝᕙᓯᖕᓂᖅᓴᐅᖕᒪᑦ ᑕᐃᑲᓂ ᑲᐃᑉ ᐹᑐᕐᒥᑦ (Cape Bathurst). ᓇᓗᓇᐃᒃᑲᓐᓂᕐᓗᒍ, ᐊᑕᐅᓯᖅ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖏᓐᓄᑦ, ᓇᓂᔭᐅᒐᔪᒃᑐᖅ ᓂᒋᖅᐸᓯᐊᓂᑦ ᓄᓇᒋᔭᐅᔪᑦ ᓇᓂᓯᓚᐅᖅᓯᒪᔪᑦ ᓯᕗᓪᓕᖅᐹᑦᑎᐊᒥᒃ ᑕᐃᑲᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᐃᑲᓃᓗᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ.

ᐃᓚᐅᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᖁᐊᖅᓵᕐᓇᕈᑎᓂᒃ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᐅᑎᓂᒃ ᐊᓯᔾᔨᕐᓂᕐᒧᑦ ᐱᔾᔪᑕᐅᓪᓗᑎᒃ ᐃᖅᑲᕐᒥᐅᑕᑦ ᐆᒪᔪᕋᓛᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᒫᓐᓇ ᐱᑕᖃᙱᑦᑐᖅ ᓂᐅᕐᕈᑎᒃᓴᓂᒃ ᒪᑦᑎᑦᑕᐅᑎᓂᒃ ᑲᑎᓪᓗᑎᒃ ᑕᐃᑰᓇ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ, ᑭᓯᐊᓂᓕ ᐱᔪᒥᒍᓱᒡᕕᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᓯᕗᓂᒃᓴᑦᑎᓐᓂᑦ ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᓴᖅᑭᔾᖅᑎᑦᑎᔪᖅ ᖁᐊᖅᓵᕐᕈᓐᓇᕐᓂᖓᓂᒃ. ᐃᒪᓐᓇᐅᕐᑯᔾᔪᖃᓚᐅᖅᐳᖅ ᑖᓐᓇ ᐊᖏᒡᓕᒋᐊᖅᑕᐅᓗᑎ ᑐᖑᔪᖅᑐᑦ ᐅᕕᓗᑦ ᓴᖅᑭᔾᖅᑎᑦᑎᑐᐃᓐᓇᕆᐊᖃᕐᓂᖏᓐᓂᒃ ᓇᓗᓇᐃᒃᑯᑕᓂᒃ ᐊᓯᔾᔨᕐᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᓗᑎᒃ ᐊᖏᒡᓕᒋᐊᕆᓃᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᐃᓄᑑᓪᓗᓂ ᓴᖅᑭᔾᖅᑎᑦᑎᙱᒻᒪᑦ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᖃᓄᐃᓐᓂᖏᓐᓄᑦ ᖁᐊᖅᓵᕐᓇᕈᓐᓇᖅᑐᓂᒃ. ᑐᓴᐅᒪᔾᔪᑎᑕᖃᕐᔪᒃᑐᖅ (ᐱᓗᐊᖅᑐᒥᒃ ᓯᒡᔭᕐᓄᑦ ᐃᓂᓄᑦ) ᑕᒪᒃᑯᓄᖓ ᐃᖅᑲᖓᓂᖓᖅᑲᖅᑕᖅᑐᑦ ᐱᐅᓯᕆᓇᕝᑕᖏᓐᓄᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ, ᑭᓯᐊᓂᓕ ᐅᓄᖅᓯᕆᐊᕐᓂᖏᑦ ᐱᐅᔪᒥᒃ ᐊᒃᑐᐃᓂᖃᖅᑐᑦ ᑕᒪᒃᑯᓄᖓ ᕿᑐᕐᖏᐅᕐᓂᖏᓐᓄᑦ ᐊᒻᒪ ᐱᕈᖅᐸᓪᓕᐊᓂᖏᑦ ᐃᓚᖏᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ (ᓂᕿᖃᕐᓂᖅᓴᐅᓗᑎᒃ ᐃᖅᑲᕐᒥᐅᑕᑦ). ᐃᓚᐅᔪᖅ ᐃᑲᔪᕈᒪᓚᐅᖅᑐᖅ ᐃᓚᓗᒋᑦ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᐊᒻᒪᓗ ᐋᖅᑭᒃᓱᑦᑎᐊᒃᑲᓐᓂᕐᓗᒍ ᐃᖅᑲᕐᒥᐅᑕᓄᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ.

ᑲᑎᙵᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᑖᓐᓇ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎ ᐃᓚᑰᖕᒪᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᒥᒃ ᑕᒪᒃᑯᓄᖓ ᐃᓗᐃᑦᑑᓕᖓᔪᑎᒍᑦ ᐆᒪᓂᖃᖃᑎᒌᒃᑐᓂᒃ ᖃᐅᔨᓴᕐᓂᕐᓄᑦ. ᐊᑕᐅᓲᓐᓇᓕᖁᓇᒋᑦ ᐊᒻᒪᓗ ᓄᑖᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ, ᐊᑐᓕᔾᔨᓚᐅᖅᑐᑦ ᐃᓚᐳᑎᑦᑎᓗᑎᒃ ᐊᔪᕐᓇᙱᑦᑐᑯᓗᖏᒃ ᓂᕿᓄᑦ ᓇᓃᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᔾᔨᙳᐊᒥᒃ ᓴᖅᑭᔾᖅᑎᑦᑎᓗᓂ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑦᑕ ᖃᓄᐃᓕᐅᕈᔾᔨᓂᓇᕙᒃᑕᖏᓐᓂᒃ. ᑎᒃᑯᐊᖅᑐᐃᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᐃᔪᓂᒃ ᐆᒪᔪᑦ ᓇᔪᖓᖏᓐᓄᑦ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᐊᒻᒪᓗ ᐊᒃᑐᐊᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᓪᓗᐊᖅᑐᑦ ᑕᐃᑲᓂ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᒥᒃ ᒪᒃᑯᓄᖓ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔭᐅᙱᑦᑐᓄᑦ ᐊᒻᒪᓗ ᓇᓗᓇᕈᑎᓄᑦ.

ᑕᕆᐅᒥᑦ ᐃᖃᓗᐃᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᑭᓕᐅ ᐺᐅᐊᓐᐱ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO)

ᐱᓪᓗᐊᑕᖏᑦ

ᒫᓐᓇᐅᔪᖅ ᐱᑕᖃᑦᑎᐊᙱᑦᑐᖅ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᐊᑐᐃᓐᓇᐅᔪᓂᒃ ᑕᒪᒃᑯᓄᖓ ᐃᖃᓗᖕᓄᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᒻᒪᓗ ᖃᓂᒋᔭᖏᓐᓂᑦ ᐃᒪᖃᕐᕕᐅᔪᓂᑦ. ᖃᓇᔪᑦ, ᐆᒐᑦ ᐊᒻᒪᓗ ᐃᖃᓗᑯᑖᑦ ᑕᑯᔭᐅᒐᔪᖕᓂᖅᓴᐅᔪᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎ ᑐᕋᖃᓗᐊᖅᑐᑦ ᑎᓴᒪᓂᒃ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ: ᑕᕆᐅᕐᒥᐅᑕᑦ ᐃᖃᓗᐃᑦ (*Salvelinus alpinus*), ᐆᒐᕐᔪᐊᑦ (*Arctogadus glacialis*), ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒐᐃᑦ (*Boreogadus saida*), ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᖃᓕᕋᓕᖏᑦ (*Reinhardtius hippoglossoides*). ᐃᖃᓗᕋᓛᑦ ᑕᑯᔭᐅᒐᔪᒃᐸᓪᓕᐊᓕᕐᒥᔪᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᑭᓯᐊᓂᓕ ᐅᖃᐅᓯᐅᓚᐅᙱᑦᑐᑦ ᐃᓛᒃᑰᖅᓗᑎᒃ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒥᑦ. ᑖᓐᓇ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᑕᕝᕙᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒥᑦ ᕿᒥᕐᕈᔭᐅᓚᐅᖅᑐᖅ ᐃᓗᐊᒍᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ (DFO) ᑭᒡᓕᓯᓂᐊᖅᑎᖏᓐᓂᒃ ᑲᑎᒪᖅᑳᖅᑎᓐᓇᒋᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔾᔨᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᐃᓗᑎᒃ ᑕᒪᒃᑯᓂᖓ ᐱᓪᓗᐊᑕᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᓂᕈᐊᖅᑕᐅᔪᓂᒃ ᓲᖃᐃᒻᒪᓗ ᓄᓇᓕᕆᓂᕐᒧᑦ ᐊᒻᒪ ᑮᓇᐅᔭᑎᒍᑦ ᐊᖏᔫᓂᖏᓐᓄᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᑕᑯᒃᑲᓐᓂᕈᒪᓂᕋᖅᓱᓂ ᑐᓴᐅᒪᔾᔪᑎᒃᑲᓐᓂᕐᓂᒃ ᓴᖅᑭᑕᐅᔪᓂᒃ ᑕᒪᒃᑯᓄᖓ ᐊᑯᑭᑦᑐᓂᑦ ᐃᖃᓗᒃᔪᐊᓄᑦ ᐊᒻᒪᓗ ᐱᑕᖃᑦᑎᐊᙱᒃᑲᓗᐊᕈᑎᒃ ᐃᖃᓗᕋᓛᑦ ᓱᕐᑯᑕᐅᙱᓱᓂ. ᑕᑭᔪᓂᒃ ᑲᓕᖃᑦᑕᖅᑐᑦ ᐃᖃᓗᓕᕆᔨᑦ ᕐᑯᕝᕙᓯᒃᑐᒻᒪᕆᖕᓂᒃ ᐱᔭᐅᔪᒪᙱᑦᑐᓂᒃ ᑕᒪᒃᑯᓄᖓ ᐊᑯᑭᑦᑐᑦ ᐃᖃᓗᒃᔪᐊᙱᓐᓂᒃ, ᓴᖅᑭᔾᖅᑎᑦᑎᓪᓗᓂ ᐱᒻᒪᕆᐅᔪᒥᒃ ᐃᓱᒪᓗᑕᐅᔪᒥᒃ ᓂᐅᕈᓯᖅᐸᒃᑐᑦ ᐃᖃᓗᓕᕆᓃᑦ ᓈᓐᓂᖅᓴᐅᒃᐸᑕ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᒫᓐᓇ ᐱᑕᖃᑦᑎᐊᙱᓗᐊᕐᒪᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᐃᓚᐅᑎᑕᐅᔭᕆᐊᒃᓴᖅ ᐃᖃᓗᖃᓛᑦ, ᑭᐊᓂᓕ ᐊᔪᕐᓇᙱᑦᑐᖅ ᐊᓯᔾᔨᐅᑏᑦ ᐅᖃᐅᓯᐅᔪᑦ ᐅᓄᖅᓯᕆᐊᕐᓗᕆᑦ ᐅᑭᐅᑦᑕᖅᑑᑉ ᐆᒪᔪᖏᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ (ᓲᕐᓗ ᐃᖃᓗᕋᓛᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐊᓛᑦ ᓯᐅᕋᕐᒥᐅᑕᑦ) ᐅᖃᖅᓯᒪᓪᓗᐊᖅᑐᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᕆᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐅᓂᒃᑳᑦ ᓯᑯᓄᑦ ᐊᒃᑐᐊᔪᑦ ᒥᒃᓵᓄᑦ ᑕᐃᑲᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒐᕐᓄᑦ ᓱᓕᑦᑎᐊᙱᓐᓂᖏᓐᓂᒃ. ᐃᓅᓵᕕᓃᑦ ᐊᕐᕌᒍᖃᑐᐃᓐᓇᖅᑐᑦ ᐆᒐᑦ ᓯᑯᓄᑦ ᐊᒃᑐᐊᔪᑦ, ᐃᓐᓇᐅᙱᑦᑐᑦ. ᐊᔾᔨᐸᓗᖏᑦ, ᐅᓂᒃᑳᖅ ᐱᒻᒪᕆᐅᓂᖏᑦᑕ ᐆᒐᕐᔪᐊᑦ ᒥᒃᓵᓄᑦ ᑕᒪᒃᑯᓄᖓ ᓇᑦᑎᕐᓄᑦ ᓱᓕᙱᑐᐃᓐᓇᕆᐊᓕᒃ. ᓇᑦᑏᑦ ᓂᕿᖃᓪᓗᐊᑕᕐᒪᑕ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒐᕐᓂᒃ, ᑭᓯᐊᓂᓕ ᓂᕿᖃᑦᑕᕐᒥᔪᑦ ᐆᒐᕐᔪᐊᓂᒃ ᐅᓄᕐᓂᖅᓴᐅᓇᔭᕐᓂᖅᐸᑕ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᖅ ᐃᒪᐃᒻᒪᑦ ᐊᓯᔾᔨᕐᓂᖏᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓇᒦᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐆᒪᐃᑦ ᐊᒃᑐᐃᓂᖃᐅᒐᓚᒐᔭᖅᑐᖅ, ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᐃᓚᓂᐅᔾᔪᐅᓪᓗᐊᖅᑐᖅ ᑕᐃᑯᖓ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓄᑦ (SAR).

ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᑐᓴᐅᒪᔾᔪᑎᒃᑲᓐᓃᑦ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᐋᖅᑭᒃᓯᒪᓂᐅᔪᑦ ᐊᑑᑎᓇᔭᕐᓂᖏᓐᓄᑦ ᑖᒃᑯᓄᖓ ᐊᐅᓚᑦᑎᔨᑦ ᑕᐅᑐᖅᑰᖅᑕᖏᓐᓄᑦ. ᐅᓄᙱᑦᑐᑦ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᑑᑎᖃᕐᓂᕋᖅᑕᐅᓪᓗᑎᒃ ᐃᓚᒋᐊᕈᑕᐅᒃᑲᓐᓂᐅᓪᓗᑎᒃ ᑖᒃᑯᓄᖓ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒧᑦ (ᓲᕐᓗ Hussey et al. 2016), ᑭᓯᐊᓂᓕ ᓱᓕ ᐊᒥᓱᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᑕᒪᒃᑯᓄᖓ ᐊᒃᑐᐊᓂᖏᓐᓄᑦ ᐃᖃᓗᐃᑦ ᐃᖏᕐᕋᖃᑦᑕᕐᓂᖏᓐᓄᑦ. ᐊᑯᑭᑦᑐᑦ ᖃᓕᕋᓕᖏᑦ ᓇᓗᓇᐃᖅᑕᐅᓚᐅᖅᑐᑦ ᐱᓪᓗᐊᑕᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᑕᒪᑐᒧᖓ ᐅᖃᐅᓯᐅᔪᒧᑦ. ᐱᑕᖃᕐᒪᑕ ᒫᓐᓇ ᐊᖏᔪᓂᒃ ᓂᐅᕐᕈᓯᕐᓂᕐᒧᑦ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᑕᒪᒃᑯᓄᖓ ᐊᑯᑭᑦᑐᑦ ᖃᓕᕋᓕᖏᓐᓄᑦ ᑕᐃᑲᓂ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᓂᑦ ᑭᓯᐊᓂᓕ ᐱᑕᖃᕐᓂᖏᑦ ᓇᓗᓇᐃᔭᐃᓂᖅ ᐊᒻᒪᓗ ᐊᒃᑐᐊᖃᑕᐅᓂᖏᓐᓄᑦ ᐊᑯᓐᓂᖏᓐᓂᑦ ᓯᒡᔭᑦ ᐊᒻᒪᓗ ᐃᒪᕕᖏᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᖏᔪᒥᒃ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᖅ ᑕᒪᓐᓇᓗ ᓇᓗᓇᐃᖅᑕᐅᓪᓗᐊᖅᑐᖅ. ᓄᑖᑦ ᐃᖃᓗᓕᕆᓃᑦ ᐅᒃᑯᐃᖅᑕᐅᓇᔭᖅᐸᑕ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ, ᖃᐅᔨᒪᔭᐅᙱᑦᑐᖅ ᐃᖃᓗᒐᓱᒐᔭᕐᒪᖔᑕ ᓄᑖᓂᒃ ᐃᖃᓗᖕᓂᒃ, ᐅᕝᕙᓘᓐᓃᑦ ᑖᒃᑯᓂᖓᓴᐃᓐᓇᖅ ᐃᖃᓗᖕᓂᒃ. ᓂᒋᕐᒥᑦ ᐃᖃᓗᐃᑦ ᓃᐸᑕ ᐅᐊᖕᓇᖓᓄᑦ, ᐊᑐᐃᓐᓇᕈᐃᓇᔭᖅᑐᑦ ᐱᐅᔪᒥᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ; ᑭᓯᐊᓂᓕ, ᑕᒪᓐᓇ ᐱᐅᔪᖅ ᐃᓄᐃᓴᒃᑯᒋᐊᖅᑕᐅᓇᔭᖅᑐᑦ ᐃᒪᐃᓐᓂᕈᓂ ᓂᒋᐊᓂᑦ ᓂᐅᕐᕈᑎᒃᓴᓄᑦ ᐃᖃᓗᒐᓱᒃᓂᖅ ᓄᒃᑎᕋᔭᕐᒪᑦ ᐅᐊᖕᓇᒧᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑕᖅ ᑖᓐᓇ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎ ᐃᓚᐅᑎᑦᑎᒃᑲᓐᓂᓪᓗᐊᕐᒪᑦ ᑐᓴᐅᒪᔾᔪᑎᒃᑲᓐᓂᕐᓂᒃ ᑖᒃᑯᓇᖕᒑᖅᑐᓂᒃ ᐊᒻᒪᓗ ᓄᓇᓕᖕᓂᑦ ᐃᖃᓗᓕᕆᓂᐅᑉ ᒥᒃᓵᓄᑦ. ᓱᕐᓗ, ᐊᑯᑭᑦᑐᑦ ᖃᓕᕋᓕᖏᓐᓄᑦ ᐃᖃᓗᓴᓯᐊᖅᑏᑦ ᑕᐃᑲᓂ ᖀᓇᕐᒥᑦ ᑎᑎᕋᐃᓯᒪᕐᔪᐊᖃᑦᑕᕐᒪᑕ ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᓪᓗᐊᖅᑐᖅ. ᐅᓂᒃᑳᑦ ᐆᒪᕐᔪᐊᑦ ᒥᒃᓵᓄᑦ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒪᕐᓄᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᓱᖅᑯᐃᓇᖅᓱᑎᑦᑎᓪᓗᐊᖅᑐᑦ ᑖᒃᑯᐊ ᐃᖃᓗᓕᕆᓃᑦ ᒥᑭᓐᓂᖅᓴᓪᓚᕆᐅᖕᒪᑕ ᑖᒃᑯᓇᙵᑦ ᐊᑯᑭᑦᑐᑦ ᖃᓕᕋᓕᕐᑯᑎᖏᓐᓄᑦ ᐃᖃᓗᓴᓯᖃᑦᑕᖅᑐᓂᑦ.

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᐅᓂᒃᑳᖅ ᐅᖃᐅᓯᖃᖅᑐᑦ "ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᑦ ᐅᐊᖕᓇᖓᓄᑦ ᓄᒃᑎᕐᓃᑦ ᐃᖃᓗᐃᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ ᐱᑕᖃᕐᕕᐅᔪᑦ ᓱᒃᑲᓕᓂᖃᖅᓗᑎᒃ 40 ᑭᓛᒥᑲᑦ ᐊᕐᕌᒍᑕᒫᑦ" ᑕᐃᒪᓐᓇᓪᓚᑦᑖᖑᓗᐊᕐᒪᑦ ᐊᒻᒪᓗ ᐲᖅᑕᐅᓪᓗᐊᖅᑐᖅ.

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑖᓐᓇ CAFF (2017) ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓪᓗᐊᖅᑐᑦ ᑕᐃᑲᓂᓗᒃᑖᖅ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᒥᑦ.

ᐃᓚᐅᔪᖅ ᐃᓚᓱᒋᐊᓚᐅᖅᑐᖅ ᑖᒃᑯᐊ ᐃᓚᖏᑦ ᓄᓇᙳᐊᑦ ᑰᒃᖕᓄᑦ ᑕᐃᑲᙵᑦ ᐊᑯᑭᑦᑐᓂᑦ ᓴᖅᑲᒃᑯᖅᑎᑦᑎᖕᒪ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᐃᖃᓗᖃᕕᐅᓂᕋᐃᓪᓗᑎᒃ ᐃᓚᔭᐅᓪᓗᐊᖅᑐᑦ ᑖᒃᑯᓄᖓ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓄᑦ.

ᑕᕆᐅᕐᒥᐅᑕᑦ ᓂᕐᔪᑎᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᑭᓕᐅ ᐯᐅᐊᓐᐱ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO)

ᐱᓪᓗᐊᑕᖏᑦ

ᕐᑯᕝᕙᓱᒃᑐᑦ ᐆᒪᔪᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᓂᖏᓐᓄᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐅᐸᒃᑕᐅᖃᑦᑕᕐᐸᓪᓕᐊᖕᒪᑦ ᐳᐃᔨᓂᒃ, ᐃᒪᐃᑎᓪᓗᒍ ᑲᖏᖅᓱᑦ/ᓯᒡᔭᐃᑦ ᐃᓃᑦ ᐊᑐᖅᑕᐅᓪᓗᑎᒃ ᓴᐳᔾᔨᓯᒪᓂᕐᒧᑦ, ᐃᕐᓂᐅᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᑎᓯᖃᕐᕕᐅᓂᕐᓄᑦ. ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᖕᒪᑕ ᐱᒻᒪᕆᐅᔪᒥᒃ ᐅᑮᓂᕐᒧᑦ ᓇᔪᒐᐅᓪᓗᑎᒃ ᑕᒪᒃᑯᓄᖓ ᖃᑯᖅᑕᓄᑦ ᕿᓚᓗᒐᕐᓄᑦ, ᑑᒐᓕᖕᓄᑦ ᕿᓚᓗᒐᕐᓄᑦ ᐊᒻᒪᓗ ᐊᕐᕕᕐᓄᑦ. ᓇᓄᐃᑦ ᐊᑐᖃᑦᑕᕐᒥᔪᑦ ᐊᒥᓱᓂᒃ ᐃᓂᓂᑦ ᐃᓗᐊᓂᑦ ᐊᒻᒪᓗ ᖃᓂᒋᔭᖏᓐᓂᒃ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎ ᓇᓗᓇᔭᐃᔪᖅ ᖃᑯᖅᑕᑦ ᕿᓚᓗᒐᑦ, ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ, ᐊᕐᕕᑦ, ᐅᒡᔪᐃᑦ, ᖃᐃᕈᓖᑦ, ᓇᑦᑎᕙᐃᑦ, ᓇᑦᑏᑦ, ᐊᐃᕕᑦ, ᐊᒻᒪᓗ ᓇᓄᐃᑦ. ᐃᓛᓐᓂᒃᑯᑦ ᐳᓛᖅᑏᑦ ᑕᕝᕙᖓ ᐅᐊᖕᓇᖓᓄᑦ ᐃᒥᕐᓄᑦ (ᓲᕐᓗ ᐊᕐᓗᐃᑦ) ᐅᖃᐅᓯᐅᓯᒪᙱᒻᒪᑕ. ᑕᒪᕐᒥᑲᓴᒃ ᑎᑎᖅᑲᕐᑯᑏᑦ ᓴᖅᑭᑕᐅᔪᑦ ᑕᐃᑲᙵᑦ ᑲᓇᑕᒥᖑᖓᖅᑐᑦ ᑖᒃᑯᓇᖑᖅᑐᑦ ᖃᓂᒋᔭᖏᓐᓂᑦ ᐃᒥᕐᓂᑦ. ᓴᖅᑭᔭᖅᑎᑦᑎᓃᑦ ᐊᑐᓂ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᐃᓗᐊᓂᑦ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐅᖃᐅᓯᖅᑲᖅᓯᒪᖕᒪᑕ ᐊᔾᔨᐸᓗᒋᓐᓂᒃ ᐅᖃᐅᓯᐅᔪᑦ ᐃᓚᐅᓪᓗᑎᒃ:

- ᐊᑐᖅᑕᐅᑐᐃᓐᓇᕐᓂᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᖅ ᐊᒻᒪᓗ ᖃᓂᒋᔭᖏᓐᓂᑦ ᐃᓂᓂᑦ
- ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᓇᓗᓇᐃᔭᐃᓂᖅ ᐊᒻᒪᓗ ᖃᐃᓄᑦᑑᓂᖏᓐᓄᑦ ᖃᐅᔨᓴᕈᑏᑦ
- ᓇᓗᓇᐃᔭᐃᓂᖅ ᐊᑐᐃᓐᓇᐅᔪᓂᒃ ᓇᔪᒐᕐᓄᑦ ᐊᑐᖅᑕᐅᕙᒃᑐᓂᒃ ᐊᒻᒪᓗ ᓄᑉᐸᖕᓂᖏᓐᓄᑦ ᖃᐅᔨᓴᕈᑏᑦ (ᐅᖓᓯᒃᑑᓪᓗᑎᒃ ᖃᐅᔨᓴᕈᑏᑦ/ᖃᐅᔨᓴᐃᓃᑦ)

- ᐊᑐᐃᓐᓇᐅᔪᑦ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ (IQ) ᐅᕝᕙᓘᓐᓃᑦ ᓄᓇᓕᖕᓂᑦ ᖃᐅᔨᒪᓂᐅᔪᑦ ᑕᒪᒃᑯᓄᖓ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ
- ᐊᑐᐃᓐᓇᐅᔪᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐅᓄᕐᓂᖏᓐᓄᑦ ᐊᖏᓂᖏᑦ ᐊᒻᒪᓗ ᑎᑎᖅᑲᕐᑯᑎᓄᑦ ᓈᒻᒪᙱᓪᓕᐅᕈᑎᑦ
- ᓂᕿᒃᓴᖅᓯᐅᕐᓂᕐᒧᑦ ᐆᒪᔪᑦ ᓇᔪᖏᖏᓂᑦ ᓯᓚᑎᖏᓐᓂᓪᓗ
- ᖃᓄᐃᓕᖓᓂᖏᑦ (IUCN ᐊᒻᒪᓗ COSEWIC ᑎᑎᕋᖅᑕᐅᓯᒪᓂᖏᑦ)
- ᓯᓚᐅᑉ ᐊᒃᑐᐃᓂᖏᑦ

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᐅᖃᐅᓯᒃᓴᑐᐃᓐᓇᐃᑦ

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ NAMMCO (2018a) ᐃᓕᓐᓂᐊᖅᓯᓐᓈᕐᓗᑎᒃ ᑲᑎᒪᑎᓪᓗᒋᑦ ᐅᓂᒃᑳᖏᑦ ᑕᒪᒃᑯᓄᖓ ᒥᑭᓐᓂᖅᓴᓄᑦ ᕿᓚᓗᒐᐃᑦ ᐊᒡᒍᖅᑐᓯᒪᓂᖏᓐᓄᑦ. ᐃᓚᖏᑦ ᐃᓚᐅᔪᑦ ᖃᐅᔨᒪᑦᑎᐊᓚᐅᙱᑦᑐᑦ ᐅᓂᒃᑳᖅ ᓇᓗᓇᐃᔭᑦᑎᐊᖅᓯᒪᒐᓗᐊᕐᒪᖔᑦ ᑕᕝᕙᖓ ᐅᐊᖕᓇᖓᓄᑦ ᐃᒥᕐᓄᑦ. CAFF ᐅᓂᒃᑳᖅ (2017) ᐃᒪᓐᓇᐅᕐᑯᔨᔪᖃᓚᐅᖅᐳᖅ, ᑭᓯᐊᓂᓕ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᖕᒪᑦ ᑖᒃᑯᓂᖓᓴᓴᐃᓐᓇᖅ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑕᐃᑲᓃᑦᑐᓂᒃ NAMMCO. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑲᑎᑎᓪᓗᓂᔾᔪᒃ ᑕᐃᑲᓂ NAMMCO ᐅᓂᒃᑳᓂᑦ ᑕᐃᒪᐃᑦᑐᓐᓇᕋᖓᑕ.

ᐃᓚᐅᔪᑦ ᐅᖃᒃᑲᓐᓂᕋᓱᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᐃᓚᑰᔪᑦ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑕᒪᒃᑯᓄᖓ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ, ᓇᓃᓐᓂᖏᓐᓄᑦ, ᐊᐅᓚᓂᖏᓐᓄᑦ, ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᓇᔪᖏᖏᓂᑦ ᓯᓚᑎᖏᓐᓂᓪᓗ ᐳᐃᔨᑦ ᓇᓗᓇᔭᖅᓯᒪᑦᑎᐊᕆᐊᓖᑦ ᐃᒪᐃᓐᓂᖓᓄᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑑᓗᑎᒃ, ᐃᒪᐃᙱᖕᒐᕐᓗᓂ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᑕᐃᑲᓂ ᐅᓂᒃᑳᒥᑦ. ᑕᒪᒃᑯᐊᑦᑕᐅᖅ ᓱᓕ ᓇᓗᓇᐃᔭᖅᑕᐅᓪᓗᐊᖅᑐᑦ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᖀᒃᑲᓐᓂᐊᒍᑦ, ᐃᓚᖏᑦ ᓄᑖᑦ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᐃᓚᓕᐅᔾᔭᐅᓪᓗᐊᖅᑐᑦ ᐃᓗᓕᖃᕐᑯᓪᓗᒋᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᐅᓂᒃᑳᒥᑦ. ᓱᕐᓗ, ᐊᐃᕕᑦ ᐊᖅᑲᐅᒪᖃᑦᑕᕐᒪᑕ ᐊᒻᒪᓗ ᓂᕿᒃᓴᖅᓯᐅᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐃᒃᑲᑦᑐᓂᑦ ᐃᓂᓂᑦ ᐱᑕᖃᕐᒪᑕ ᑕᒪᑐᒧᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ (Garde et al. 2018).

ᐊᑕᖏᓗᒃᑖᕐᓗᒋᑦ ᐅᖃᐅᓯᐅᑎᓪᓗᒋᑦ ᑕᒪᒃᑯᐊ ᐳᐅᔨᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᓂᖓᓂᑦ, ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐱᐅᓂᖅᓴᓂᒃ ᓄᓇᙳᐊᓂᒃ. ᐃᒪᓐᓇᐅᕐᑯᔨᔪᑦ ᐃᓚᐅᓪᓗᑎᒃ ᐃᓚᓗᒋᑦ:

- ᑕᒻᒪᖅᓯᒪᙱᑦᑎᐊᕐᓂᖅᓴᓂᒃ ᓄᓇᙳᐊᓂᒃ ᖃᑯᖅᑕᑦ ᕿᓚᓗᒐᑦ ᓇᓃᖃᑦᑕᕐᓂᖏᑦ (ᓴᖅᑭᔾᔭᖅᑎᑦᑎᓗᑎᒃ ᐅᑭᐅᒃᑯᑦ ᓇᔪᖏᖏᓐᓂᒃ ᖃᓂᒋᔾᔭᓂᑦ ᑰᐅᒃ ᕿᑭᖅᑕᖓᓂᑦ)
- ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂ ᓄᓇᙳᐊᑦ ᑕᒪᒃᑯᓄᖓ ᑑᒫᓕᖕᓄᑦ ᕿᓚᓗᒐᕐᓄᑦ ᐊᒻᒪᓗ ᐊᕐᕕᕐᓄᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᐊᐅᔭᒃᑯᑦ ᐊᒻᒪᓗ ᐅᑭᐅᒃᑯᑦ ᓇᓃᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᓄᓇᙳᐊᑦ ᑑᒫᓕᖕᓄᑦ ᕿᓚᓗᒐᕐᓄᑦ
- ᑕᒻᒪᖅᓯᒪᙱᑦᑎᐊᕐᓂᖅᓴᓂᒃ ᓄᓇᙳᐊᓂᒃ ᑕᒪᒃᑯᓄᖓ ᐊᕐᕕᑦ ᓇᓃᖃᑦᑕᕐᓂᖏᓐᓄᑦ (ᐊᕐᑰᑦ ᑕᑯᔭᐅᖃᑦᑕᖅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᐊᐊᐳ ᑲᖏᖅᓱᐊᓂᑦ, ᐱᓇᖕᓈᕐᔪᐊᓂᑦ ᖃᐅᓯᐃᑑᑉ)
- ᓄᓇᙳᐊᑦᑎᐊᕙᐅᓂᖅᓴᐃᑦ ᑕᒪᒃᑯᓄᖓ ᓇᑦᑏᑦ ᐊᓪᓕᐅᓂᖅᓴᐃᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖏᓐᓂᑦ
- ᓄᑖᙳᕆᐊᖅᓯᒪᔪᑦ ᓇᓄᕐᓄᑦ ᓄᓇᙳᐊᑦ.

ᐃᓚᐅᔪᑦ ᐃᒪᓐᓇᐅᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᖃᐅᔨᓴᕈᑎᓄᑦ ᐱᓕᕆᐊᖑᓇᓱᒃᑐᓄᑦ ᑕᒪᒃᑯᓄᖓ ᓄᓇᙳᐊᓄᑦ ᐃᓚᖏᓐᓄᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ (ᓱᕐᓗ, ᑑᒫᓖᑦ ᕿᓚᓗᒐᐃᑦ) ᓱᖅᑯᐃᓇᖅᓯᕐᑯᓪᓗᒍ ᓇᓂ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐱᑕᖃᓚᐅᙱᒻᒪᖔᑕ ᐃᒪᐃᓐᓇᔭᖅᐸᑕ ᓂᕐᔪᑏᑦ ᐱᑕᖃᕐᓂᙱᒃᑯᑎᒃ. ᓇᓗᓇᐃᔭᖅᑕᐅᓚᐅᖅᑐᖅ ᐊᒥᓱᑦ ᓄᓇᙳᐊᓂᑦ ᓇᓗᓇᐃᒃᑯᑕᑦ ᐊᒻᒪᓗ ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᓄᓇᙳᐊᓗᒃᑖᐸᓗᐃᑦ ᑭᙳᕝᕕᖅᑕᐅᓪᓗᐊᖅᑐᑦ ᐋᖅᑭᐊᖅᑕᐅᓚᐅᙱᓐᖏᓐᓂᒃ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑐᓐᓂᖅᓴᖅᑕᐅᓂᖏᑦ. ᐊᒥᓱᒐᓚᐃᑦ ᐃᓚᐅᔪᑦ ᐊᑐᐃᓐᓇᕈᐃᔪᓐᓇᕐᓂᕋᓚᐅᖅᑐᑦ ᓄᑖᓂᒃ ᓄᓇᙳᐊᓂᒃ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᐊᑐᓂ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᐊᓪᓕᐅᓂᖅᓴᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ ᐃᒋᐊᕈᑎᖃᕐᓗᑎᒃ ᓇᐃᑦᑐᓂᒃ ᓇᓗᓇᐃᔭᐃᓗᑎᒃ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ, ᐊᔾᔨᒌᒃᔪᒥᔪᓂᒃ ᐱᔾᔪᑎᖃᕐᓗᑎᒃ.

ᖃᑯᖅᑕᑦ ᕿᓚᓗᒐᑦ

ᓇᓗᓇᐃᖅᑕᐅᓚᐅᖅᑐᖅ ᑕᐃᑲᓂ ᐊᐅᔭᖓᓂᑦ 2019 ᓄᓇᖃᖅᑐᑦ ᖃᐅᔨᐃᑦᑐᒥᑦ ᑕᑯᓚᐅᕐᒪᑕ ᐅᓄᕐᓂᖅᓴᓂᒃ ᖃᑯᖅᑕᓂᒃ ᕿᓚᓗᒐᕐᓂᒃ ᓄᓇᖏᑕ ᖃᓂᒋᔭᓂᑦ.

ᐃᓚᐅᔪᑦ ᐅᒃᐱᕈᓯᓚᐅᙱᑦᑐᑦ ᑕᒪᓐᓇ 70-85% ᑕᐃᑲᓂ EHA-BB ᐃᓛᒃᑰᖅᑐᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ ᖃᑯᖅᑕᑦ ᕿᓚᓗᒐᑦ ᐅᑮᖃᑦᑕᕐᓂᖏᓐᓂᒃ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔭᐅᓚᐅᖅᓱᓂ ᑎᑎᕋᖅᑐᑦ ᓯᓕᖕᒪᖔᑕ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᒥᒃ ᖃᐅᔨᒋᐊᕐᓗᑎᒃ.

ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᖅ ᑖᒃᑯᐊ ᐅᓄᕐᓂᖏᑦ ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᓂᖏᑦ ᐃᓚᐅᑎᑦᑎᙱᒻᒪᑕ ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᓂᒃ ᑕᐃᑲᙱᑦ ᐃᖕᒍᕕᐅᑦᒥᑦ. ᐃᓚᐅᔪᖅ ᐊᑐᐃᓐᓇᕈᐃᔪᒪᓚᐅᖅᑐ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᒥᒃ.

ᐃᓚᐅᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐊᐱᖅᑯᑎᓂᒃ ᐊᒻᒪᓗ ᐃᓱᒪᓗᑎᓂᒃ ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ ᐸᒡᕕᓴᒃᑕᐅᖃᑦᑕᕐᓂᖏᓐᓄᑦ. ᐃᖅᑲᕐᓂᒃ ᖃᐅᔨᓇᓱᖕᓃᑦ ᐃᓱᒪᓗᑕᐅᓚᐅᖅᑐᑦ ᐊᒥᓱᓂᑦ ᓄᓇᓕᖕᓂᑦ, ᑭᓯᐊᓂᓕ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑕᒪᑐᒥᖓ ᑲᒪᓚᐅᙱᑦᑐᑦ ᐱᓇᐃᓗᑕᕆᔭᐅᔪᒥᒃ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᐃᓗᑎᒃ ᖃᐅᔨᓴᕈᑎᓂᒃ ᓇᓗᓇᐃᔭᐃᓯᒪᔪᓂᒃ ᖃᓄᐃᖃᑦᑕᕐᒪᖔᑕ ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ ᑕᒪᒃᑯᓄᖓ ᐃᖅᑲᕐᓂᒃ ᖃᐅᔨᓇᓱᒍᑎᓄᑦ ᑲᒪᒋᔭᐅᕐᑯᓪᓗᒍ ᑕᒪᓐᓇ ᐃᓱᒪᓗᑎ. ᐊᕐᓗᐃᑦ ᐱᑕᖃᖃᑦᑕᕐᓂᖏᑦ ᐊᓯᐊᖑᓪᓗᓂ ᐸᒡᕕᓴᕆᓂᐅᑐᐃᓐᓇᕆᐊᓕᒃᑕᐅᖅ. ᑕᑯᔭᐅᖃᑦᑕᖅᓯᒪᖕᒪᑕ ᑑᒐᓖᖕᓂᒃ ᕿᓚᓗᒐᕐᓂᒃ ᓇᔪᒐᕐᓂᒃ ᐊᑐᕐᓂᖏᑦ ᐊᓯᐊᑰᓪᓗᖅᓯᒪᖕᒪᑕ ᐱᔾᔪᑕᐅᓪᓗᑎᒃ ᐋᕐᓗᐃᑦ ᐱᑕᖃᕐᓂᖏᑦ, ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᐱᑕᖃᙱᑦᑐᖅ ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐅᓂᒃᑳᑦ ᑕᒪᑐᒧᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᓄᓇᕐᑯᑎᖏᓐᓄᑦ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᐃᓗᑎᒃ ᑎᑎᖅᑲᕐᓂᒃ ᑖᒃᑯᓇᙵᑦ ᐊᓯᖏᓐᓂᒃ ᐃᓂᓂᑦ ᐅᓄᖅᓯᒋᐊᕆᓯᒪᔪᓂᒃ ᐊᒃᑐᐃᓂᕐᓄᑦ ᑖᒃᑯᓇᖕᒐᖅᑐᓂᒃ ᐋᕐᓗᖕᓂᒃ ᑖᒃᑯᓄᖓ ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ ᖃᓄᐃᖃᑦᑕᕐᓂᖏᓐᓄᑦ. ᑕᒪᓐᓇ ᐃᓚᐅᓪᓗᐊᖅᑐᑦ ᐊᒃᑐᐃᓂᓪᓚᑦᑖᖑᙱᓪᓗᓂ; ᐋᕐᓗᐃᑦ ᐊᒃᑐᐃᔪᑦ ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ ᖃᓄᐃᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᑕᐃᑲᓃᑐᐃᓐᓇᖅᓱᑎᒃ. ᐊᔾᔨᐸᓗᖏᑦ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐱᑕᖃᖅᑐᑦ ᑕᒪᒃᑯᓄᖓ ᐊᕐᕕᕐᓄᑦ.

ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓗᓂᔾᔪᒃ ᑭᖑᒃᐸᐃᑦ ᑖᒃᑯᓄᖓ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓄᑦ ᐊᖑᓇᓱᒃᑕᐅᕙᒃᑐᓄᑦ ᑕᐃᑲᓂ ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ ᓂᕿᕐᑯᑎᖏᓐᓄᑦ. ᑭᖑᒃᐸᐃᑦ ᐱᑕᖃᙱᒻᒪᑕ ᐊᑕᖏᓗᒃᑖᖅᓱᒍ ᑖᒃᑯᓇᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᒥᑦ; ᐃᓚᐅᔪᖅ ᐊᑐᐃᓐᓇᕈᐃᔪᒪᓚᐅᖅᑐᑦ ᐱᕙᒋᔭᖅᓯᒪᔭᒥᓂᒃ ᐃᓛᒃᑰᖅᑐᓄᑦ ᓇᓗᓇᐃᔭᐃᔪᒥᒃ ᑭᖑᒃᐸᖕᓂᒃ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐲᖅᓯᓗᑎᒃ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᖅᑐᒥᒃ ᑖᕝᕗᖓ ᓂᐅᓴᓐ (Nielsen 2009) ᐱᔾᔪᑕᐅᓪᓗᓂ ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐃᒪᐃᓐᓂᖓᓄᑦ ᐅᖓᑖᓅᖅᓯᒪᖕᒪᑦ ᐊᖏᓂᖓᑕ ᑎᑎᕋᖅᑕᐅᓯᒪᔫᑉ.

ᐊᕐᕕᑦ

ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᐃᓗᓕᒃᑲᓐᓂᖏᓐᓂᒃ ᐅᖃᐅᓯᖃᕐᑯᓪᓗᒋᑦ ᐊᖑᓇᓱᖕᓂᕐᒧᑦ ᑲᔪᓰᓐᓇᕈᓐᓇᕐᓂᕐᒧᑦ ᒥᒃᓵᓄᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᒫᓐᓇ 3-5 ᐊᖑᓂᒃᑕᐅᕙᒃᑐᑦ/ᐊᕐᕋᒍᑕᒫᑦ ᑲᓇᑕᒥᑦ, ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᐊᑯᑭᑦᑐᒥᐅᑦ ᐊᑐᖃᑦᑕᖅᓯᒪᙱᑦᑐᑦ ᑰᑕᒥᖕᓂᒃ ᑕᐃᑲᓂ ᖀᖏᖅᑐᓂᑦ 5 ᐊᕐᕋᒍᓂᑦ.

ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎ ᐅᖃᖅᓯᒪᖕᒪᑦ ᑖᒃᑯᐊ ᐊᕐᕕᑦ ᕿᒪᐃᖃᑦᑕᖅᑐᒃᓴᐅᔪᑦ ᑎᔅᑰ ᑲᖏᖅᓱᐊᓂᑦ ᐃᑯᖃᕈᓐᓃᕋᖓᑦ ᐋᕐᓗᒃᑕᐅᑦᑕᐃᓕᒪᓪᓗᑎᒃ. ᑭᓯᐊᓂᓕ, ᐊᕐᓗᐃᑦ ᐱᑕᖃᒐᔪᙱᒻᒪᑕ ᑕᐃᑲᓂ ᑎᔅᑰ ᑲᖏᖅᓱᐊᓂᑦ, ᑕᒪᐃᓐᓂᖓᓄᑦ ᑕᐃᒪᐃᑦᑐᒃᓴᐅᙱᑦᑐᖅ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐲᖅᓯᓗᑎᒃ ᑖᔅᓯᒥᖓ ᐅᓂᒃᑳᒥᒃ.

ᖃᐃᕈᓖᑦ

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐲᖅᓯᓗᑎᒃ ᐅᕝᕙᓘᓐᓃᑦ ᓱᖅᑯᐃᓇᖅᓯᑎᒋᐊᕐᓗᒍ ᐅᓂᒃᑳᖅ ᑕᒪᓐᓇ "ᓯᐅᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐊᒃᑐᐃᑐᐃᓐᓇᕈᐊᓕᒃ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᒃᑐᓂᒃ ᖃᐅᔨᒪᖅᑕᐅᓯᒪᔪᓂᑦ ᑭᖑᓂᖕᒑᑦᑎᓐᓂᑦ ᖃᐅᔨᓴᕈᑎᓄᑦ" ᐅᖃᐅᓯᖃᕐᓂᖓᓄᑦ ᑕᕆᐅᒥᑦ ᓯᑯ ᐊᓯᔾᔨᖅᓯᒪᓕᕐᓂᖓᓂᒃ ᑕᐃᑲᓂ ᓂᐅᕗᓐᓀᓐᒥᑦ, ᐅᖓᓯᒃᓱᓂᓗ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ. ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᓄᓇᖃᖅᑐᑦ ᖃᐅᓯᐃᑦᑐᒥᑦ ᐅᔾᔨᕈᓯᒃᓯᒪᓕᕐᒪᑦ ᑕᒪᒃᑯᐊ ᓂᐅᕗᓐᓀᓐᑯᑦ ᐊᖑᓂᑦᑎᑦᐊᖃᑦᑕᕐᓂᕋᖓᑕ, ᐅᓄᕐᓂᖏᑦ ᑕᐃᑲᓂ ᖃᐅᓯᐃᑦᑐᒥᑦ ᐊᑦᑎᖕᓂᖅᓴᐅᓕᓱᖑᖕᒪᑕ ᐊᒻᒪᓗ ᑭᒡᓗᒧᖓᖅ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᓄᓇᖃᖅᑐᑦ ᖃᐅᓯᐃᑦᑐᒥᑦ ᑕᑯᓯᒪᓕᕐᒪᑦ ᐅᓄᙱᓂᖅᓴᓂᒃ ᖃᐅᕈᓕᖕᓂᒃ ᖀᖏᖅᑐᓂᑦ 5 ᐊᕐᕋᒍᓂᑦ ᐊᒻᒪᓗ ᐊᐱᕆᓯᒪᓪᓗᑎᒃ ᓂᕿᒃᓴᖏᑦ ᓄᖑᕈᔪᒃᓯᒪᓕᕐᒪᖔᑕ. ᐊᓯᖏᑦ ᐃᓚᐅᔪᑦ ᐅᓂᒃᑳᓚᐅᖅᑐᑦ ᑐᙵᕕᖃᖅᓱᑎᒃ ᑯᒪᕈᕐᓄᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᒃ ᑕᐃᑲᙱᑦ 2006-ᒥᒃ 2016–ᒧᑦ ᖃᓄᐃᓐᓂᖅᓴᐅᔪᖃᖅᓯᒪᙱᑦᑐᖅ, ᑭᓯᐊᓂᓕ ᐊᕐᕋᒍᑕᒫᑦ ᐅᔾᔨᒌᖃᑦᑕᙱᒻᒪᑕ ᐱᔾᔪᑕᐅᓪᓗᓂ ᓯᑯᖃᕐᓂᖓ. ᒪᕐᕉᒃ ᐊᕐᕋᒍᒃ ᓯᑯᖃᕐᓂᖅᓴᐅᓯᒪᓕᖅᑐᑦ ᐊᒻᒪᓗ ᐅᓄᙱᓂᖅᓴᐅᓪᓗᑎᒃ ᐃᓐᓇᕈᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒪᑦ. ᑕᒪᓐᓇ ᐊᕐᕋᒍᑕᒫᑦ ᐅᔾᔨᒌᖃᑦᑕᙱᓂᖓ ᐱᔾᔪᑕᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᒫᓐᓇ ᓇᐃᓴᐅᑎᖏᓐᓄᑦ ᖃᐃᕈᓖᑦ.

ᓇᑦᑎᐸᑦ

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐊᑲᐅᙱᓕᐅᕈᑎᑕᖃᑐᐃᓐᓇᕆᐊᓕᒃ ᐅᖃᐅᓯᐅᔪᓄᑦ ᑕᒪᒃᑯᓄᖓ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᓇᑦᑎᐸᐃᑦ ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔨᓪᓗᓂ ᑎᑎᕋᖅᑐᑦ ᕿᒥᕐᕈᓗᑎᒃ ᓱᖅᑯᐃᓇᖅᓯᒋᐊᕐᑯᓪᓗᒍ.

ᓇᑦᑏᑦ

ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐅᓂᒃᑳᖅ ᓇᑦᑏᑦ ᐊᖑᓇᓱᖃᑦᑕᐅᖃᑦᑕᕐᓂᖏᓐᓄᑦ "ᓄᓇᒥᐅᑕᓂᒃ ᐆᒪᔪᓂᒃ" ᐅᖃᐅᓯᖃᑐᐃᓐᓇᖅᑐᑦ ᑐᕐᑯᖓᔪᖅᓯᐅᖅᑐᓂᒃ ᑎᕆᒐᓂᐊᓂᒃ, ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔭᐅᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᐋᖅᑭᒋᐊᕐᓗᒍ ᑕᐃᒪᐃᓕᖓᕐᑯᓪᓗᒍ.

ᐊᐃᕖᑦ

ᐃᓚᐅᔪᑦ ᐅᖃᒃᑲᓐᓂᓚᐅᖅᑐᑦ ᐱᒻᒪᕆᐅᓂᖓᓂᒃ ᓱᖅᑯᐃᓇᖅᓯᑎᑦᑎᒋᐊᕆᓂᖅ ᑭᓱᑐᐃᓐᓇᐃᑦ ᓇᓗᓇᖅᑎᓪᓗᒋᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᐊᒥᓱᑦ ᕐᑯᐊᖅᓵᕐᓇᑐᐃᓐᓇᕆᐊᓖᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒥᑦ ᐱᔭᐅᓯᒪᖕᒪᑕ ᑖᒃᑯᓇᙱᑦ COSEWIC–ᑯᓐᓂᑦ ᐊᒻᒪᓗ ᐊᑑᑎᖃᖅᓱᑎᒃ ᐅᑭᐅᖅᑕᖅᑐᓕᒫᑐᐃᓐᓇᒧᑦ. ᓇᓗᓇᐃᖅᑕᐅᔪᑦ ᕐᑯᐊᖅᓵᕐᓇᕈᓐᓇᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓪᓗᐊᖅᑐᑦ ᑕᒪᑐᒧᖓᓪᓚᓇᒃ ᐅᐊᖅᓇᖓᓂᑦ ᐃᒥᕐᒧᑦ. ᑕᒪᓐᓇ ᓇᓗᓇᐃᖅᓯᓪᓗᐊᖅᑐᑦ ᐊᒥᓱᒃᑲᓐᓂᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᓂᒃ ᑭᓱᐊᓂᓕ ᐊᑑᑎᖃᕐᑯᓐᓇᖅᑐᖅ ᑕᒪᒃᑯᓄᖓ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒧᑦ ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓄᑦ (SAR).

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᓇᓗᓇᐃᔭᐃᓂᕐᒥᒃ. ᐅᓄᕐᓂᖏᓐᓄᑦ ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᑦ ᐱᔭᐅᓯᒪᔪᑦ ᐊᒥᓱᓂᑦ ᐅᔾᔨᒌᙱᑦᑐᓂᒃ ᓄᓇᓂᑦ ᐊᒻᒪᓗ ᓴᖅᑭᔭᖅᑎᑦᑎᓪᓗᑎᒃ ᓇᓃᓐᓂᖏᓐᓂᒃ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒥᑦ. ᑕᒪᒃᑯᐊ ᑎᑎᕋᖅᓯᒪᔪᑦ ᓄᑕᐃᙱᑦᑐᓂᒃ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ, ᑭᓱᐊᓂᓕ ᓇᓗᓇᐃᔭᑦᑎᐊᒃᑲᓐᓂᖅᓯᒪᔪᓂᒃ ᒥᒃᓴᐅᓴᐃᓃᑦ ᐊᑐᐃᓐᓇᐅᔪᑦ. ᐃᓚᐅᔪᖅ ᐊᑐᐃᓐᓇᕈᐃᔪᒪᓚᐅᖅᑐᖅ ᑕᒪᒃᑯᓂᖓ. ᒫᓐᓇᓕᓴᕐᒥᒃ NAMMCO (2018b) ᑲᑎᒪᓂᕐᓂᑦ, ᓱᖅᑯᐃᓇᖅᓯᑎᑕᐅᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᐅᑭᐅᖅᑕᖅᑑᑉ ᕐᑯᑦᑎᖕᓂᖓᓂᑦ ᐊᐃᕖᑦ ᐅᓄᕐᓂᖏᑦ ᐊᕕᒃᑐᖅᑕᐅᓯᒪᖕᒪᑕ ᐱᖓᓱᓄᑦ ᐱᑕᖃᕐᕕᐅᔪᓄᑦ, ᑭᓱᐊᓂᓕ, ᐊᑯᑭᑦᑐᑦ ᑲᒪᖃᑦᑕᖅᑐᑦ ᐃᓄᕐᓂᖏᓐᓂᒃ ᐊᑕᐅᓯᐅᔪᒥᑦ. ᑕᒪᓐᓇ ᓇᓗᓇᐃᖅᑕᐅᓪᓗᐊᖅᑐᖅ ᖃᐅᔨᒋᐊᕐᕕᐅᔪᓐᓇᓪᓗᐊᖅᑐᕐᒧᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒥᑦ.

ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᐅᔾᔨᖅᓱᕐᑯᔨᓚᐅᖅᑐᑦ ᓄᓇᙳᐊᓂᒃ ᐊᑐᕐᓂᖏᓐᓂᒃ ᓇᓗᓇᐃᔭᐃᔪᓂᒃ ᐊᐃᕖᑦ ᐅᓪᓕᕕᖏᓐᓂᒃ ᐃᓂᓂᒃ ᑕᒪᓐᓇ ᑎᑭᑎᑦᑎᑐᐃᓐᓇᕆᐊᖃᕐᒪᑦ ᐳᓚᕋᑎᓂᒃ ᐊᒻᒪᓗ ᐊᐃᕖᑦ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᑦᑑᓪᓗᑎᒃ ᐳᒡᕕᓴᕆᓂᕐᓄᑦ. ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᑕᒪᑐᒥᖓ ᐅᖃᐅᓯᐅᔪᒥᒃ. ᐃᓛᓐᓂᒃᑯᑦ, ᐅᓪᓕᕕᑦ ᐃᓃᑦ ᓴᖅᑭᑕᐅᕋᓂᒃᓯᒪᓂᖏᓐᓄᑦ ᐱᔾᔪᑕᐅᓪᓗᑎᒃ ᐋᖅᑭᒃᓯᓂᕐᒧᑦ ᖃᓄᐃᓕᐅᖅᑕᐅᔭᕆᖅᙱᕕᑦ ᐊᒻᒍᖅᑐᖅᓯᒪᔪᑦ. ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᓄᑖᑦ ᓄᓇᙳᐊᑦ ᓴᓇᔭᐅᓂᐊᕐᓂᖏᓐᓄᑦ ᓇᓗᓇᐃᔭᐃᓯᒪᓗᑎᒃ ᐅᓪᓕᕕᖏᓐᓂᒃ ᐃᓂᓂᒃ, ᑭᓱᐊᓂᓕ ᑭᖑᓂᖓᑦᑎᓐᓂᑦ ᓴᖅᑭᑕᐅᓯᒪᔪᑦ ᓄᓇᙳᐊᑦ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᑎᒃ ᑕᐃᒪᐃᑦᑕᕆᐊᖃᕋᖓᑦ. ᓄᓇᙳᐊᑦ ᓴᖅᑭᔭᖅᑎᑦᑎᔪᑦ ᐅᓪᓕᕕᖏᓐᓂᒃ ᐃᓂᓂᒃ ᑕᐃᑲᓂ ᐊᑯᑭᑦᑐᓂᑦ ᓄᑕᐅᔪᓐᓃᖅᓯᒪᖕᒪᑕ (ᐱᑕᖃᕈᓐᓃᖅᓯᒪᔪᖅ ᓄᓇᒥᒃ ᐅᓪᓕᕕᐅᔪᒥᒃ ᐊᑯᑭᑦᑐᓂᑦ) ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᐲᖅᑕᐅᔭᕆᐊᓕᒃ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᒥᑦ. ᐅᖃᐅᓯᖃᕐᓃᑦ ᓇᓗᓇᐃᔭᐃᓚᐅᖅᑐᑦ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᑑᓂᖏᓐᓂᒃ ᐊᐃᕖᑦ ᑕᒪᒃᑯᓄᖓ ᐸᒡᕕᓴᕆᓂᕐᓄᑦ ᐊᒻᒪᓗ ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐅᖃᐅᓯᒃᑲᓐᓂᕐᓗᓂ ᑕᒪᓐᓇ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᐅᒥᐊᕋᒡᓚᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᓂᐅᕐᕈᓯᐅᖅᐸᒃᑐᑦ ᐅᒥᐊᑦ ᑭᒡᓕᖃᖅᑐᑦ ᑕᓐᓯᓂᒃ ᑭᒡᓕᓂᒃ, ᐱᑕᖃᙱᑎᓪᓗᒍ AIS, ᓇᓗᓇᐃᖅᑕᐅᓚᐅᖅᑐᑦ ᐃᓱᒪᓗᑕᐅᓪᓗᑎᒃ. ᑭᒡᓕᐅᔪᑦ ᐊᒻᒪᓗ ᐅᐸᒃᑕᐅᔭᕆᖅᙱᑦᑐᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ ᐋᖅᑭᒃᑕᐅᔪᓐᓇᖅᑐᑦ, ᑭᓱᐊᓂᓕ ᐊᑐᖅᑕᐅᑎᑦᑎᓕᕐᓂᖅ ᑕᒪᒃᑯᓄᖓ ᐅᒥᐊᕋᓛᓄᑦ ᐊᔪᕐᓇᕋᔭᖅᑐᖅ. ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓕᐅᔾᔨᓗᑎᒃ ᑕᒪᑐᒥᖓ ᐱᒻᒪᕆᐅᓪᓗᓂ ᐃᓱᒪᓗᓕᖅᑎᕆᔾᔪᑕᐅᖕᒪᑦ.

ᓇᓄᐃᑦ

ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᒋᐊᕐᓗᑎᒃ ᐅᓄᕈᓐᓃᖅᐸᓪᓕᐊᓂᖏᓐᓂᒃ ᑎᒦᑦ ᖃᓄᐃᓕᖓᓂᖏᑦ ᑕᐃᑲᓂ ᐃᓂᓂᑦ ᐊᒃᑐᐊᔪᓂᑦ ᐊᑯᓂᐅᔪᒃᑯᑦ ᐃᓄᐃᓴᒃᓵᕙᓪᓕᐊᑎᓪᓗᒋᑦ ᐊᑐᐃᓐᓇᐅᔪᑦ ᑕᓇᐅᒥᑦ ᓯᑯᑦ ᐊᑯᓂᐅᔪᒃᑯᑦ (ᐃᓚᐅᓪᓗᑎᒃ ᓯᑯᐃᖅᓴᓕᖃᑦᑕᓕᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᑭᖑᕙᖅᓯᒪᓪᓗᓂ ᓯᑯᖃᑦᑕᓕᕐᓂᖓᓄᑦ). ᖃᒃᑲᓐᓂᐊᒍᑦ, ᐅᓄᖅᑐᒻᒪᕆᐅᓕᕐᓂᖏᓐᓄᑦ ᓇᓄᐃᑦ ᐊᒻᒪᓗ ᓇᑦᑏᑦ ᑕᑯᔭᐅᖃᑦᑕᖅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᑲᐃᓐ ᐃᑭᖓᓂᕈᔪᒃ; ᑕᒪᓐᓇ ᐊᒃᑐᐊᑐᐃᓐᓇᕆᐊᓕᒃ ᕐᑯᕝᕙᓯᒃᑐᒻᒪᕆᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ ᐱᔾᔪᑕᐅᓪᓗᑎᒃ ᓯᕐᒥᓂᑦ ᑰᒃᑲᐅᖃᑦᑕᕐᓂᖏᓐᓄᑦ (ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᑐᓴᐅᒪᔾᔪᑎᒃᑲᓐᓂᑦ ᐱᑕᖃᕆᐊᓖᑦ). ᐃᓚᐅᔪᖅ ᐃᓚᓯᔪᒪᓚᐅᖅᑐᑦ ᕐᑯᓛᓐᓂᑦᑐᓂᒃ ᐅᖃᐅᓯᐅᔪᓂᒃ ᑕᕝᕗᖓ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᖏᓐᓄᑦ. ᑕᐃᑲᓂ ᑭᒡᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR), ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᓪᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᑖᒃᑯᐊ ᐊᒥᓱᑦ ᐊᒃᑐᐊᓂᕆᔭᐅᔪᑦ ᓇᓗᓇᐃᖅᑕᐅᔪᑦ ᖀᖏᖅᑐᓂᑦ ᐊᒃᑐᐊᖕᒥᖓᑕ ᓇᓄᕐᓄᑦ (ᕐᑯᑦᑎᓛᒥᒃ ᐊᖑᓇᓱᒃᑎᐅᑎᓪᓗᒋᑦ).

ᑎᖕᒥᐊᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᑭᓕᐅ ᐺᐅᐊᓐᐱ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO)

ᐱᓪᓗᐊᑕᖕᒋᑦ

14 ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᒃᑐᑦ ᐃᕐᓂᐅᖃᑦᑕᖅᑐᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᐃᓂᒥᑦ. ᕿᑭᖅᑕᕈᓗᒃ ᐱᓗᐊᖅᑐᒥᒃ ᐱᒻᒪᕆᐅᔪᖅ ᐃᕙᓂᕐᒧᑦ ᓇᔪᒐᐅᖃᑦᑕᖅᑐᖅ, ᐊᒻᒪᓗ ᐊᑕᐅᓯᐅᓪᓗᓂ ᖃᐅᔨᒪᔭᐅᔪᓂᑦ ᐃᕐᓂᐅᕐᕕᐅᓪᓗᓂ ᐃᓂᐅᔪᖅ ᑕᒪᒃᑯᓄᖕᒐ ᐊᐅᒃᓄᑦ ᑕᐃᑲᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ. ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᑦ ᐱᒻᒪᕆᐅᓪᓗᑎᒃ ᓂᕿᕐᑯᑎᒋᔭᐅᔪᑦ ᓄᓇᖃᖅᑳᖅᓯᒪᔪᓄᑦ ᐃᓄᖕᓄᑦ ᓄᓇᖃᖅᑐᓄᑦ ᖃᓂᒋᔭᖕᒐᓂᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᕼᐋᓐᓇᓚᓄᑦ ᐅᑭᐅᒐᓴᖕᓄᑦ. ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎ ᑐᕋᒐᖃᖅᓯᒪᔪᖅ ᐱᖕᒐᓯᓪᓗᐊᑕᕐᓂᒃ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖕᒋᓐᓄᑦ: ᓇᐅᔭᑦ (*Pagophila eburnea*), ᐊᐅᒃ (ᐅᕝᕙᓘᓐᓃᑦ ᒥᑭᑦᑐᑦ ᐊᐅᒃ; *Alle alle*), ᐊᒻᒪᓗ ᐊᑉᐸ (*Uria lomvia*). ᓇᐅᔭᑦ ᓯᑯᖃᙱᒐᓛᒃᑐᒥᑦ ᓇᔪᒐᖃᕆᐊᓖᑦ ᓄᙳᐊᓂᑦ ᒪᐃ ᐊᒻᒪᓗ ᔫᓂᙳᓕᓵᖅᑎᓪᓗᒍ, ᐊᒻᒪᓗ ᐃᕙᕝᕕᖕᒋᑦ ᑕᐃᑲᓂ ᑕᓪᓕᒪᐅᔪᑦ ᐃᓃᑦ ᑲᓇᑕᒥᑦ: ᐊᐅᓯᐃᑦᑑᓪᓗᓂ ᕿᑭᖅᑕᖅ (ᐃᖅᓱᒃᑯᑦ), ᑕᓪᓗᕈᑦ, ᑯᐊᓐᓗᐊᓕ ᕿᑭᖅᑕᖅ, ᓯᒥᐅᓐ ᕿᑭᖅᑕᖅ, ᐊᒻᒪ ᐳᕈᑦ ᐱᓐᓯᓚᓐ ᐅᐊᖕᓇᖅᐸᓯᐊᓂ ᕿᑭᖅᑖᓗᖕᒥ. ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ "ᕐᑯᐊᓴᕐᓇᖅᑐᒦᑦᑐᑦ" ᑲᓇᑕᒥᑦ (COSEWIC 2006). ᐊᐅᒃ ᐱᕙᖃᑦᑕᖅᑐᑦ ᐃᓗᑐᓂᕐᓂᑦ ᓯᕕᖕᒐᓂᕐᓂᑦ, ᑐᐊᐸᖕᓂᑦ ᐃᓐᓈᕈᐃᑦ ᐊᑎᑦᑎᐊᖕᒋᓐᓂᑦ ᓯᒡᔭᐃᑦ ᖃᖅᑲᖕᒋᓐᓂᑦ, ᓴᓂᖕᒋᓐᓂᑦ ᑲᖕᒋᖅᓱᐃᑦ, ᐊᒻᒪᓗ ᖃᐃᓱᒐᓂᑦ ᐊᕙᓗᔭᐅᓯᒪᔪᓂᑦ ᓯᕐᒥᓂᑦ. ᑎᑭᖃᑦᑕᖅᑐᑦ ᐅᐊᖕᓇᖕᒐᓄᑦ ᐃᒥᕐᒧᑦ ᒪᐃᒥᑦ. ᐅᐊᖕᓇᓵᖕᒐᓂᑦ ᐱᓇᖕᓇᖕᒐᓂᑦ ᐱᑕᖃᕐᕕᐅᔪᖅ ᐅᓄᕐᓂᖅᐹᓂᒃ ᑕᒪᒃᑯᓂᖕᒐ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖕᒋᓐᓄᑦ (ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᑦ 80% ᓄᓇᕐᔪᐊᒥᑦ ᐅᓄᕐᓂᖕᒋᑦ). ᐅᖕᒐᑖᓂᑦ 350,000 ᐊᐸᐃᑦ ᐃᕙᖃᑦᑕᖅᑐᑦ ᖃᓂᒋᔭᖕᒋᓐᓂᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ. ᓂᕆᓇᓱᒃᕕᖕᒋᑦᑲ ᖃᓄᐃᓕᖕᒐᓂᖕᒋᑦ ᐅᔾᔨᒌᖃᑦᑕᙱᑦᑐᑦ ᐊᑐᓂ ᐊᕙᓗᓂᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒥᑦ; ᐱᐊᕋᖕᒋᑦ ᑕᐃᑲᓂ ᕿᑭᖅᑕᕈᓗᖕᒥᑦ ᓂᕆᓂᖅᓴᐅᕙᒃᑐᑦ ᐃᒪᕐᒥᐅᑕᓂᒃ ᑖᒃᑯᐊᓕ ᐱᐊᕋᖕᒋᓐᓂᑦ ᑕᐃᑲᙱᑦ ᐺᐊᒃᓗᐃᑦ ᕿᑭᖅᑕᖕᒋᓐᓂᑦ. ᖁᐊᖅᓵᕐᓇᕈᑏᑦ ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᓄᑦ ᐃᓚᐅᓪᓗᑎᒃ ᐊᖑᓇᓱᖕᓃᑦ, ᐱᒡᕕᓴᒃᑕᐅᓂᖕᒋᑦ ᓄᓕᐅᕐᕕᖕᒋᓐᓂᑦ ᐃᓂᓂᑦ, ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖕᒐ, ᐊᒻᒪᓗ ᓱᕈᕐᓇᖅᑐᐃᑦ ᓂᕿᖕᒋᓐᓂᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᐅᖃᐅᓯᒃᓴᑐᐃᓐᓇᐃᑦ

ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓗᑎᒃ ᑭᐅᕆ ᕿᑭᖅᑕᖕᒋᑦ ᐱᒻᒪᕆᐅᕐᔪᐊᕐᓂᖕᒋᓐᓄᑦ ᐊᐅᒃᓄᑦ (ᐊᖕᒋᓛᖑᔪᑦ ᐅᓄᕐᓂᖕᒋᑦ ᑕᐃᑲᓂ ᓄᓇᓂᑦ) ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓄᑖᙳᕆᐊᕆᓗᑎᒃ ᓄᓇᙳᐊᓂᒃ. ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᐅᑎᑦᑎᓗᑎ ᕿᑭᖅᑕᕈᓗᖕᒥᒃ ᐊᒻᒪᓗ ᐃᓯᕆᐊᒥᑦ ᔫᓐᓯ ᐃᑭᐊᓂᑦ ᓄᓇᙳᐊᒥᑦ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᑕ ᐃᓗᐊᓂ ᐱᒻᒪᕆᐅᓂᖕᒐᓄᑦ ᐃᓃᑦ ᐃᒪᐃᓐᓂᖕᒐᓄᑦ ᑕᒪᒃᑯᐊ ᐱᒻᒪᕆᐅᔪᑦ ᐃᓃᑦ ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᓄᑦ ᓴᐳᔾᔭᐅᓯᒪᔭᕆᐊᖃᓛᕐᓂᖕᒋᓐᓄᑦ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᐃᓗᓕᖕᒋᓐᓂᒃ ᑕᒪᒃᑯᓄᐊ ᖃᕐᑯᓪᓗᕐᓄᑦ ᐊᒻᒪᓗ ᑎᒥᕐᓄᑦ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᐃᓚᓯᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᓇᐅᔭᑦ ᐅᑮᖃᑦᑕᕐᒪᑕ ᕿᑭᖅᑕᕈᓗᖕᒥᑦ ᐊᒻᒪᓗ ᖃᕐᑯᓪᓗᖕᒋᑦ ᕐᑯᓚᐅᖃᑦᑕᖅᓱᑎᒃ ᐄᐃᔅ ᑭᒡᓕᖕᒋᓐᓂᒃ.

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᕐᓗᒋᑦ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖕᒋᓐᓂᑦ (SAR) ᑕᒪᒃᑯᐊ ᓄᓇᐃᑦ ᐱᔪᒥᒋᔭᐅᔪᑦ ᓇᑦᑎᕐᓄᑦ, ᕿᓚᓗᒐᕐᓄᑦ, ᓇᓄᕐᓄᑦ, ᐊᓯᖕᒋᓐᓄᓪᓗ ᐱᒻᒪᕆᐅᖃᑕᐅᔪᑦ ᑎᖕᒥᐊᓄᑦ.

ᓇᐃᔭᑦ

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᓇᐅᔭᑦ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᑑᓂᖕᒋᓐᓂᒃ ᓱᕈᕐᓇᖅᑐᓄᑦ (ᕐᑯᓛᓐᓂᑦᑑᓂᖕᒋᓐᓄᑦ ᖃᓄᐃᓪᓕᔪᖃᖅᑳᖅᑎᓐᓇᒍ ᑭᒡᓕᐅᔪᓂᑦ ᑕᒪᒃᑯᓄᖕᒐ ᐊᒃᑐᐃᓂᕐᓄᑦ) ᓱᖃᐃᒻᒪ ᑐᕐᑯᖕᒐᔪᖅᓯᐅᖅᑎᐅᖕᒪᑕ.

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᓇᓃᖃᑦᑕᕐᓂᖕᒋᑦ ᑎᑭᓯᒪᓕᕐᒪᑕ ᐅᐊᖕᓇᒧᓂᖅᓴᖅ; ᐃᕙᕝᕕᑐᐊᖕᒋᑦ ᐊᐅᓯᐃᑦᑐᖅ ᕿᑭᖅᑕᖕᒐ, ᖃᓂᒋᔭᐅᔪᖅ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ. ᐅᓄᕈᓐᓃᖅᐸᓪᓕᐊᓂᖕᒋᑦ ᓇᐃᔭᐃᑦ ᐅᔾᔨᕆᔭᐅᕐᖕᒐᓚᐅᖅᑐᑦ ᓄᓇᓕᖕᓂᑦ ᐃᓚᒋᔭᐅᔪᓂᑦ, ᐱᒋᐊᕐᑯᔨᓕᖅᓱᑎᒃ ᓄᑖᓂᒃ ᖃᐅᔨᓴᕐᓂᕐᓂᒃ ᑎᑎᕋᐃᔪᓐᓇᖅᑐᓂᒃ ᐅᓄᕈᓐᓃᖅᐸᓪᓕᐊᓂᕐᓂᖕᒋᓐᓄᑦ. ᐱᑕᖃᖃᑦᑕᕐᑯᓐᓃᖅᑐᑦ ᕿᑭᑦᑖᓗᖕᒥᑦ ᐊᒻᒪᓗ ᕿᑭᖅᑕᕈᓗᖕᒥᑦ.

ᐃᓚᐅᔪᖅ ᐊᐱᕆᓚᐅᖅᑐᑦ ᐊᖑᓇᓱᒃᑕᐅᓗᐊᕐᓂᕐᒧᑦ ᐃᓄᖕᓂᑦ ᐅᕝᕙᓘᓐᓃᑦ ᑎᕆᒐᓂᐊᓂᑦ. ᓇᐅᔭᑦ ᐊᖑᓇᓱᒃᑕᐅᕙᖕᒋᑦᑐᑦ ᖃᐅᓯᐃᑦᑐᒥᑦ.

ᐊᐅᒃ (ᐊᐅᕋᓛᑦ)

ᑲᑎᙵᔪᑦ ᐅᖃᒃᑲᓐᓂᓚᐅᖅᑐᑦ ᐊᐅᒃ ᐱᑕᖃᕈᓐᓃᕐᓂᖏᓐᓂᒃ ᐃᕐᓂᐅᖅᑎᐅᓪᓗᑎᒃ ᑲᓇᑕᒥᑦ (ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᒥᓕᐊᓐᖏᓐᓃᑦᑐᑦ ᐊᑯᑭᑦᑐᓂᑦ). ᐊᐅᒃ ᓇᐃᓴᐅᑎᖏᑦ ᐊᒻᒪᓗ ᐱᑕᖃᕐᓂᖏᑦ ᖁᕝᕙᓐᓂᖅᓴᐅᔪᑦ ᐊᑯᑭᑦᑐᑦ ᓄᓇᕐᑯᑎᖏᓐᓂᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ. ᑕᒪᓐᓇ ᐅᖃᐅᓯᖃᖅᑐᑦ ᐆᒪᓂᖃᖅᑐᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᐊᒻᒪᓗ ᓄᓇᖕᒐᓂᒃ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᑦ ᐃᒥᕐᓂᑦ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᖅᑕᐅᓪᓗᐊᖅᑐᑦ ᓯᕗᓪᓕᖅᐸᐅᔾᔭᐅᓗᓂ. ᑕᒡᔪᐊᕐᓂᕐᒧᑦ ᓄᖅᑲᕐᕕᕐᕕᖅᑐᑦ ᑕᓪᓗᕈᑎᐅᑉ ᐃᒪᖕᒐᓂᑦ, ᑭᓯᐊᓂᓕ ᑎᑎᖅᑲᕐᑯᑏᑦ ᓴᖅᑭᑕᐅᓯᒪᙱᑦᑐᑦ. ᐊᐅᒃ ᐱᒻᒪᕆᐅᔪᑦ ᓇᒃᓴᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᓂᕿᑦᑎᐊᕙᖕᓂᒃ ᐊᐅᓚᓂᐅᔪᓄᑦ.

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐅᖃᑦᑎᐊᓕᖅᑭᒡᓗᒋᑦ ᓇᐃᓴᐅᑏᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ ᐅᖃᖅᓯᒪᓗᑎᒃ "ᓂᕿᒃᓴᖅᓯᐅᕐᓃᑦ ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᑦ 22,599 ᐊᐅᒃ, [ᐃᓗᓕᖅᖅᓱᑎᒃ] 81% ᑲᑎᓗᒃᑖᖅᓱᒋᑦ ᓂᕿᓄᑦ ᓂᕿᒃᓴᖅᓯᐅᕐᓂᕐᒧᑦ (Dietz et al. 2018)". 81% ᐅᖃᐅᓯᖃᖅᑐᑦ ᓇᐃᓴᐅᑏᑦ ᐊᐅᒃ ᓂᕿᒃᓴᖅᓯᐊᖑᖃᑦᑕᕐᒪᑕ ᐳᓴᓐᖑᓪᓗᓂ ᑲᑎᓗᒃᑖᖅᓱᒋᑦ ᓂᕐᔪᑎᓂᒃ ᓂᕿᒃᓴᖅᓯᐅᕐᓃᑦ, ᑕᒪᓐᓇᐅᙱᑦᑐᖅ ᐅᕐᑯᒪᐃᓐᓂᖓ ᓂᕿᑦ ᓂᓇᔭᐅᖃᑦᑕᕐᓂᖏᑦ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᐱᓱᒪᐃᓐᓇᕐᓗᒍ ᓈᓴᐅᑎᖓ ᐊᐅᒃ ᓂᕿᒃᓴᓇᔭᐅᓕᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᑯᑭᑦᑐᓂᑦ ᑭᓯᐊᓂᓕ ᐲᕐᓗᑦ ᐅᕝᕙᓘᓐᓃᑦ ᐋᖅᑭᒃᓯᒪᓂᖓ 81%–ᒥᒃ ᓈᓴᐅᓯᓇᓂᖅ.

ᐊᐸ

ᐃᓚᐅᔪᖅ ᐊᑲᐅᙱᓕᐅᕈᑎᖃᕐᔪᓚᐅᖅᑐᖅ ᑖᔅᓱᒥᖓ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᐅᑉ ᒥᒃᓴᐅᓴᒃᓯᒪᔭᖏᓐᓂᒃ ᐊᐸᓂᒃ ᐊᑐᖅᓱᑎᒃ ᐅᐊᖕᓇᒥᑦ ᐃᒥᕐᓂᑦ ᐊᑯᑭᑐᓂᖕᒑᖓᔪᓂᒃ, ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔨᓪᓗᑎᒃ ᑭᓯᐊᓂ ᓄᑖᙳᓛᓂᑦ ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᓂᒃ (362,000 ᑎᖏᐊᑦ; Merkel et al. 2014). ᖃᒃᑲᓂᐊᒍᑦ, ᐱᒻᒪᕆᐅᔪᖅ ᓇᓗᓇᐃᕐᓗᒍ ᑕᒪᓐᓇ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᓄᓇᑐᐊᖑᖕᒪᑦ ᐊᑯᑭᑦᑐᓂᑦ ᓇᐃᓴᐅᑎᖏᑦ ᐊᒃᐸᖅᐸᓪᓕᐊᙱᑦᑐᑦ.

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᖅ ᑕᐃᔭᐅᓗᑎᒃ ᐊᐸᐃᑦ ᐊᖅᑲᐅᒪᖃᑦᑕᕐᒪᑕ ᓂᕆᓇᓱᒃᓗᑎᒃ ᑕᒪᒃᑯᓂᖓ ᐃᑎᔪᕐᒥᐅᑕᓂᒃ ᐃᖃᓗᖕᓂᒃ, ᑕᐃᒪᐃᒻᒪᑦ ᕿᓂᙱᑐᐃᓐᓇᕆᐊᖃᖅᐳᑦ ᑕᐃᒫᔅᓴᐃᓐᓇᖅ ᑎᒻᒥᐊᓂᒃ ᐊᓯᖏᑎᑐᑦ.

ᑕᐃᓂᔅ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖏᓐᓄᑦ ᐅᓂᒃᑳᖅ – ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᑕ ᐃᓗᐊᓃᑦᑐᓄᑦ ᐱᒻᒪᕆᐅᔪᐃᑦ ᐃᓃᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᐋᓐᑐᔅ ᒫᓐᓴᐸᒃ ᐊᒻᒪᓗ ᑖᒻ ᑯᕆᔅᑕᓐᓴᓐ, ᐋᕐᕼᐊᔅ ᓯᓚᑦᑐᖅᓴᕐᕕᖕᒐᑦ

ᐱᓪᓗᐊᑕᖏᑦ

ᐱᒋᐊᖅᑎᑦᑎᕐᑯᓪᓗᒋᑦ ᐅᖃᖃᑎᒌᖕᓂᕐᒥᒃ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᓂᑦ ᐃᓗᐊᓃᑐᓄᑦ ᐱᒻᒪᕆᐅᔪᓄᑦ ᐃᓂᓄᑦ, ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑏᑦ ᑐᓴᕆᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᐃᓂᓪᓗᐊᑕᕐᓂᑦ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᓂᑦ ᑕᐃᑲᓂ ᑯᕆᔅᑕᓐᓴᓐ ᐊᑕᖏᖅᓱᒋᓪᓗ (Christensen et al., 2019), ᐅᖃᐅᓯᐅᔪᖅ ᑕᕝᕙᓂ "ᑕᐃᓂᔅ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖏᓐᓄᑦ ᐅᓂᒃᑳᖅ". ᐃᓚᐅᔪᑦ ᑐᓴᖅᑎᑕᐅᓚᐅᖅᑐᑦ ᐊᑕᖏᓱᒃᑖᖅᓯᒪᔪᒥᒃ ᐅᓂᒃᑳᒥᑦ. ᑖᓐᓇ ᐅᓂᒃᑳᖅ ᐃᓂᓪᓗᐊᑕᐃᑦ ᐆᒪᓂᖃᖅᑐᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ, ᑖᒃᑯᓄᖓᓪᓚᑎᒃ ᓇᓗᓇᐃᔭᐃᔪᑦ ᐃᒃᐱᖕᓂᖅᓴᕋᐅᑦᑑᔪᖃᑐᐃᓐᓇᕆᐊᖃᖅᒪᑦ ᐃᓂᓂᑦ ᐃᓗᐊᓂᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒦᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐃᓂᒧᑦ. ᑕᒪᓐᓇ ᐱᓕᕆᓇᓱᐊᕐᓗᒍ, ᑎᑎᕋᖅᑐᑦ ᐱᕙᓪᓕᐊᑎᑦᑎᓯᒪᔪᑦ ᓴᓇᕐᕈᑎᒥᒃ ᑕᐅᑐᙵᐊᖅᑕᐅᔪᓐᓇᕐᑯᓪᓗᒋᑦ ᐊᒻᒪᓗ ᐃᓚᓕᐅᑎᓗᒋᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᐆᒪᓂᖃᖅᑐᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ. 24 ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᑦᑐᔪᓐᓂᖏᑦ ᐊᒻᒪᓗ 57 ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖕᒐᓂᑦ ᐃᓗᐊᓃᑦᑐᓄᑦ ᐊᑐᖅᑕᐅᕙᒃᑐᑦ ᓴᓇᓇᓱᐊᖅᑎᓪᓗᒋᑦ ᑭᖑᓪᓕᖅᐸᒥᒃ ᓄᓇᙳᐊᓂᒃ. ᓄᓇᙳᐊᑦ ᐃᓚᐅᑎᑦᑎᔪᑦ ᐆᔭᐅᔭᑦ ᐱᕈᖅᑐᑦ ᐊᒻᒪᓗ ᓯᑯᑦ ᓯᓇᕐᔭᖏᓐᓂᑦ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐱᒻᒪᕆᐅᔪᑦ ᖃᓄᐃᓐᓂᖏᓐᓄᑦ. ᓄᓇᙳᐊᑦ ᐊᑐᖅᑕᐅᓪᓗᐊᑕᓚᐅᖅᑐᑦ ᑐᙵᕕᖃᕐᓗᑎᒃ ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᖏᓐᓂᒃ ᐆᒪᔪᓄᑦ ᐱᒻᒪᕆᐅᔪᑦ ᑖᒃᑯᓄᖓ ᑕᕆᐅᒥᑦ ᑎᖏᐊᓄᑦ ᐊᒻᒪᓗ ᐳᐃᔨᓄᑦ (ᐊᐃᕖᑦ, ᖃᑯᖅᑕᑦ ᕿᓚᓗᒐᑦ, ᑑᒐᓪᑦ ᕿᓚᓗᖓᑦ) ᐊᒻᒪᓗ ᐊᖏᔪᒥᒃ ᐃᓚᐅᑎᑦᑎᓯᒪᙱᑦᑐᑦ ᓇᑦᑎᕐᓂᒃ, ᐃᖃᓗᖕᓂᒃ, ᐊᓯᖏᓐᓂᓪᓗ ᐱᒻᒪᕆᐅᔪᓂᑦ ᑕᑯᒃᓴᐅᔪᑦ ᐅᔾᔨᕐᓇᕐᓂᐅᔪᓄᑦ ᐊᒻᒪᓗ ᑕᕆᐅᓕᕆᓂᖅ ᐅᕝᕙᓘᓐᓃᑦ ᑕᕆᐅᒥᑦ ᓯᑯᓕᕆᓂᕐᒧᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ ᐅᓗᐊᓂᑦ ᐊᐅᒃᑲᕐᓂᐅᑉ.

ᐊᑐᓂ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᑐᓂᔭᐅᓯᒪᔪᖅ ᐱᒻᒪᕆᐅᔪᒥᒃ ᓇᐃᓴᐅᓯᖅᑕᐅᓪᓗᓂ 1-4 ᑐᙵᕕᖃᖅᓱᑎᒃ EBSA-ᑯᑦ ᒪᓕᒃᑕᐅᔪᒃᓴᕐᑯᑎᖏᑦ, ᐊᒻᒪᓗ ᓇᐃᓴᐅᓯᖅᑕᐅᓗᓂ 1-4 ᑐᙵᑯᖃᕐᓗᑎᒃ ᐱᒻᒪᕆᐅᓂᖏᓐᓄᑦ ᐱᓕᕆᓂᖏᓐᓂᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖓᓂᑦ (ᑐᓂᔭᐅᓗᓂ ᐊᖏᓛᖑᔪᓐᓇᖅᓗᓂ ᓇᐃᓴᐅᑎ 16-ᒥᒃ). ᓱᕐᓗ, ᐊᐃᕖᑦ ᑐᓂᐅᔭᓯᒪᔪᑦ ᓇᐃᓴᐅᑎᒥᒃ 16-ᒥᒃ ᓱᖃᐃᒻᒪ ᑕᑎᖃᕐᔪᐊᕐᓂᖏᓐᓄᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒥᑦ ᐊᒻᒪᓗ ᓄᓇᕐᔪᐊᒥᑦ ᐱᒻᒪᕆᐅᓂᖏᓐᓄᑦ. ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᑦᑐᔪᓐᓂᖏᓐᓄᑦ ᓄᓇᙳᐊᑦ ᑲᑎᖅᓱᖅᑕᐅᔪᑦ ᐱᓕᕆᑎᓪᓗᒋᑦ ᖃᐅᔨᒪᔨᑕᑦ ᐃᓕᓐᓂᐊᖅᓱᓐᓈᖅᓗᑎᒃ ᑲᑎᒪᓂᕐᓂᑦ, ᐋᖅᑭᒃᑕᐅᓚᐅᖅᑐᑦ ᐊᔾᔨᙳᐊᑦ (ᕌᕐᑐ) ᐋᖅᑭᒃᓯᒪᓂᖓ ᐊᒻᒪᓗ ᖃᖏᐅᑎᓯᒪᔪᖅ ᐱᔭᒃᓴᖅᑖᖅᑎᑦᑎᓂᐊᕐᓗᓂ ᐱᒻᒪᕆᐊᓘᓂᖓᓂᒃ ᐊᑐᓂ ᑎᑎᕋᑯᓗᒃ (ᐃᒃᓱᓪ). ᐱᒻᒪᕆᐅᓂᖏᑦ ᐊᔾᔨᒌᓕᖅᑎᑕᐅᓪᓗᑎᒃ ᓯᐊᒻᒪᒃᑎᑕᐅᓚᐅᖅᑐᑦ ᐃᓂᓂᑦ ᖃᐅᔨᒪᓂᕐᓂᒃ ᐱᑕᖃᙱᑦᑐᒥᑦ. ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᓇᓃᓐᓂᖏᑦ ᑕᒪᒃᑯᓄᖓ ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᓄᑦ ᐋᖅᑭᒃᓯᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᑐᖅᓱᑎᒃ ᓂᕿᒃᓴᖅᓯᐅᕐᓂᕐᒧᑦ ᐅᖓᓯᒌᖕᓂᖏᑦ

ᖃᓂᑦᓐᓂᖏᑦ ᒥᒃᓴᐅᓴᐃᕐᑯᓪᓗᒋᑦ ᓱᒃᑲᓕᓂᖏᑕ ᓄᖑᐸᓪᓕᐊᓂᕐᓄᒃ ᑖᒃᑯᓇᓂ ᑎᖕᒥᐊᖃᕐᕕᐅᔪᓂᑦ. ᑕᒪᓐᓇ ᑲᔪᓯᓂᖅ ᐊᑐᖅᑕᐅᒃᑲᓐᓂᓚᐅᖅᑐᑦ ᑖᒃᑯᓄᖓᓪᓚᑎᒃ ᖃᖓᒃᑰᓂᖏᓐᓄᑦ ᐊᑐᓂ ᖃᓕᓈᓄᑦ, ᑎᑎᕋᖅᑐᓂᒃ ᑲᑎᑦᑎᓪᓗᓂ ᐊᑕᖏᕐᓗᖏᑦ ᕐᑯᓕᓈᓂᒃ ᓇᓕᐊᖕᓂᑐᐃᓐᓇᖅ ᐅᓪᓗᕐᓄᑦ ᐊᕐᕋᒍᒥᑦ. ᓴᓇᕐᕈᑎ ᑐᑭᖃᖅᑎᑕᐅᓚᐅᖅᑐᑦ ᓴᖅᑭᖅᑎᑦᑎᓗᓂ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᐊᒃᑐᐊᔪᑦ ᐃᑲᔪᕐᑯᓪᓗᒋᑦ ᐸᕐᓇᐃᑎᓪᓗᒋᑦ ᓴᐳᔾᔨᓂᕐᒧᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᑐᓴᐅᒪᔾᔪᑎᒃᑲᓐᓂᕐᓂᒃ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᓂᒃ ᓇᓗᓇᐃᔭᐃᑎᓪᓗᒋᑦ ᐱᒻᒪᕆᐅᔪᓂᑦ ᐃᓂᓂᑦ. ᑕᒪᓐᓇ ᐃᓚᐅᑎᑦᑎᔪᖅ ᖃᒃᑲᓐᓂᐊᒍᑦ ᓯᑯᒧᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐊᒻᒪᓗ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐃᖃᓗᖕᓄᑦ ᐊᒻᒪᓗ ᑯᒪᕈᕐᓄᑦ. ᑕᒪᒃᑯᓄᖓ ᓯᑯᓄᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ, ᑭᓯᐊᓂᓕ ᓯᑯᐃᑦ ᓯᓇᕐᔪᖏᑦ ᐊᑐᖅᑕᐅᓚᐅᖅᑐᑦ (ᑕᖅᑭᑕᒫᑦ ᐊᑐᖅᑕᐅᒐᔪᒃᑐᑦ), ᑭᓯᐊᓂᓕ ᓯᑯ ᖃᐃᑦᑑᓂᖓ ᐊᑑᑎᖃᕐᓂᐊᓗᓂ ᐃᓚᓕᐅᔾᔭᐅᓇᔭᖅᑐᑦ. ᐊᖏᖃᑎᒌᒍᑕᐅᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᐃᓚᖏᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ (ᓲᕐᓗ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐃᖃᓗᖕᓄᑦ) ᐊᑑᑎᖃᕋᔭᖅᑐᑦ ᑭᓯᐊᓂᓕ ᐱᑕᖃᑦᑎᐊᖕᒋᑦᑐᐃᓐᓇᐅᖕᒪᑕ. ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᐃᓪᓗᑎᒃ ᓇᓕᐊᒃ ᐃᓚᓕᖏᑦ ᐱᑕᖃᖕᒋᒻᒪᖔᑕ ᐊᒻᒪᓗ ᓱᖅᑯᐃᓇᖅᓯᑎᑦᑎᐊᕐᓗᖏᑦ ᐊᑐᓂ ᓄᓇᖕᒍᐊᖅ ᓴᖅᑭᖅᑎᑦᑎᖕᒪᖔᑦ. ᐃᒪᖏᑦ ᑕᕝᕙᓂ ᑐᓴᐅᒪᔾᔪᑏᑦ ᐃᓚᓕᐅᔾᔭᐅᓂᐊᖅᑐᑦ ᑕᐃᒃᑯᓄᖓ ᓄᓇᖕᒍᐊᓄᑦ ᐅᓂᒃᑳᖏᓐᓄᑦ ᐊᒻᒪᓗ ᑎᑎᕋᐅᔭᖅᓯᒪᔪᑦ ᐅᓂᒃᑳᖏᓐᓄᑦ.

ᐃᓚᐅᔪᖅ ᐊᐱᕆᓚᐅᖅᑐᑦ ᐱᑎᑕᐅᓂᖅᓴᐅᖕᒪᖔᑕ ᐃᓚᖏᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ. ᐅᓂᒃᑳᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᑐᓂ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᐱᑎᑕᐅᓂᖅᓴᐅᖕᒪᖔᑦ ᐊᒃᑐᐊᓪᓗᑎᒃ ᐊᑕᖏᖅᓱᑦ ᐊᓯᖏᓐᓄᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ. ᐱᑎᑕᐅᓂᖅᓴᓄᑦ ᐱᓕᕆᔾᔪᓯᖏᓐᓂᑦ ᐊᔾᔨᒌᒃᑎᑦᑎᔫᔪᖅ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒪᓪᓗᓂ ᐅᓂᒃᑳᓕᐅᕐᖓᐅᑎᖏᓐᓂᑦ. ᑕᐃᑲᖕᒐᓂᑦ ᓴᓇᕐᕈᑎ ᐊᑐᖅᑕᐅᖃᑦᑕᕆᐊᓕᒃ, ᐱᑎᑕᐅᓂᖅᓴᐅᔪᓄᑦ ᐱᓕᕆᔾᔪᓯᕐᓄᑦ ᐅᖃᐅᓯᐅᔭᐅᔪᓐᓇᖅᑐᑦ ᐊᒻᒪᓗ ᐋᖅᑭᒋᐊᖅᑕᐅᔪᓐᓇᖅᓗᓂ ᑕᐃᒪᐃᑦᑕᕆᐊᖃᕈᓂ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐱᑕᖃᑐᐃᓐᓇᕆᐊᖃᕐᓂᖓᓂᒃ ᐊᑐᕐᓂᕐᓂᒃ ᓄᓇᖕᒍᐊᓂᒃ, ᐊᒻᒪᓗ ᖃᐅᔨᐅᔭᐅᔪᑦ ᐱᔭᐅᔪᓐᓇᖅᑐᑦ ᑕᐃᒃᑯᓇᖕᒐᑦ. ᓲᕐᓗ, ᐊᑑᑎᖃᑐᐃᓐᓇᕆᐊᓖᑦ ᐃᓱᒪᒋᓗᒋᑦ ᐊᒃᑐᐃᓗᐊᖅᑎᑦᑎᔾᔭᐃᑯᑏᑦ ᐊᒻᒪᓗ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ ᐃᓄᐃᓪᓗ ᐱᓕᕆᓂᖏᑦ. ᒫᓇ ᓴᖅᑭᔾᔭᖅᑎᑦᑎᖕᒋᑦᑐᑦ ᑖᒃᑯᓄᖕᒐᓪᓚᑎᒃ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᔾᔪᑎᓄᑦ ᑭᓯᐊᓂᓕ ᐊᑐᖅᑕᐅᔪᓐᓴᖅᑐᑦ ᖃᐅᓕᕝᕕᐅᒫᖓᑕ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᓐᓂᕐᒧᑦ ᐃᒪᖏᓐᓄᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᓄᑦ. ᓲᕐᓗ, ᓂᐲᑦ ᐱᒻᒪᕆᐅᓪᓗᑎᒃ ᐃᓱᒫᓗᒃᓴᐅᑕᐅᖕᒪᑕ ᐱᓕᕆᑎᓪᓗᒋᑦ ᖃᑯᑦᑕᑦ ᕿᓚᓗᒐᑦ ᐃᓚᓕᐅᑎᑦᑎᓪᓗᒋᑦ ᐱᒻᒪᕆᐅᔪᓄᑦ ᐃᓂᓄᑦ, ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᐊᒃᑐᐃᓃᑦ ᐅᖅᓱᐊᓗᖕᒥᒃ ᑯᑯᓂᕐᒧᑦ ᕐᑯᕝᕙᓯᓛᖕᒍᔪᑦ ᒥᑏᑦ ᐅᓪᓗᐃᔭᓕᖅᑎᓪᓗᒋᑦ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᓴᓇᕐᕈᑎ ᓴᓇᒃᐅᕙᓪᓕᐊᔪᖅ ᐊᒻᒪᓗ ᓱᖅᑯᐃᓇᖕᒋᑐᐃᓐᓇᕆᐊᓕᒃ ᐃᓚᒋᔭᐅᓗᓂ ᑖᒃᑯᓄᖓ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᐊᓯᖓ ᐃᓚᐅᔪᖅ ᑭᐅᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᓄᓇᖕᒍᐊᑦ ᑲᑎᖅᓱᖅᑕᐅᓯᒪᑐᐃᓐᓇᕐᒪᑕ ᐱᒻᒪᕆᐅᔪᓄᑦ ᐃᓗᓕᕆᔭᐅᔪᓄᑦ ᐃᓂᒥᑦ ᑖᒃᑯᓇᖕᒐᑦ ᓄᓇᐃᑦ ᐆᒪᔪᓪᓗᑦ ᑕᐅᑐᖅᑰᖅᑕᐅᓂᖏᓐᓄᑦ, ᐊᒻᒪᓗ ᐅᓂᒃᑳᒃᑲᓐᓂᖅᓯᒪᖕᒋᒪᑕ ᑐᑭᓯᐅᒪᓂᑦᑎᓐᓄᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᐃᓱᒪᓕᐅᕆᓂᕐᒧᑦ ᑕᐅᑐᖅᑰᖅᑕᐅᔪᓄᑦ ᑕᒪᒃᑯᐊ ᖃᓄᐃᑦᑑᓂᖏᑦ ᖃᐅᔨᓴᕈᑏᑦ ᐊᑑᑎᖃᓪᓚᕆᒍᓐᓇᖅᑐᑦ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᓯᒪᔪᑦ ᐃᓚᐅᓪᓗᑎᒃ ᐅᓂᒃᑳᖅᓯᒪᔪᓂᒃ ᐊᑕᖏᕐᓗᒍ ᐅᓂᒃᑳᒥᑦ ᐊᒃᑐᐊᔪᓄᑦ ᑕᒪᒃᑯᓄᖓ ᓄᓇᖕᒍᐊᓄᑦ, ᑕᐃᒪᐃᓐᓂᖓᓄᑦ ᓴᖅᑭᑕᐅᓯᒪᖕᒋᑦᑐᑦ ᐃᓄᑑᓗᑎᒃ ᐊᓛᒃᑰᕐᓗᑎᒃ. ᑖᓐᓇ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᐱᔭᐅᓯᒪᔪᖅ ᑕᐃᑲᖕᒐᑦ ᑕᐃᓂᔅ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓄᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ ᑭᓯᐊᓂᓕ ᒪᓕᑦᑎᐊᓪᓚᕆᖕᒋᑦᑐᖅ ᓴᖅᑭᑕᐅᔪᓂᑦ ᑕᐃᑲᒃᑲᓐᓂᖅ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᒪᓕᑦᑎᐊᕐᓃᑦ ᐃᒪᐃᑦᑎᑦᑎᓇᔭᖅᑐᑦ ᓄᓇᖕᒍᐊᓂᒃ ᑐᑭᖃᑦᑎᐊᑐᓂᒃ ᓇᓗᓇᐃᒃᑯᑕᖃᕐᓗᑎᒃ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᑕᒪᑯᐊ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ ᐊᕐᕋᒍ ᐃᓚᐃᓐᓇᖕᒐᑕ ᐃᓗᐊᓂ ᐅᔾᔨᕐᓇᖅᑐᑦ; ᐱᓕᕆᑎᓪᓗᒋᑦ ᐃᓚᖏᓂᑦ ᐊᕐᕋᒎᑉ ᐊᔾᔨᐅᖕᒋᑦᑑᓪᓚᕆᖕᓂᖓᓂᒃ, ᑭᓯᐊᓂᓕ ᕿᑎᕋᓕᖅᑎᓪᓗᒍ–ᐊᐅᔭᖅ ᐊᔾᔨᐸᓗᒋᒻᒪᒍ ᖃᓂᒋᔭᖓᓂᑦ ᐃᓂᓂᑦ. ᑕᒪᓐᓇ ᐃᓚᐅᔪᖅ ᑕᐃᑲᓂ ᑎᑎᕋᖅᓯᒪᔪᒥᑦ ᐋᖅᑕᐅᓪᓗᐊᖅᑐᓂᑦ ᐊᒻᒪᓗ ᐃᓚᓕᐅᔭᐅᓗᑎᒃ ᑕᐃᑯᖓ ᓄᓇᖕᒍᐊᓄᑦ ᐊᔪᕐᓇᖕᒋᒃᑯᓂ.

ᓄᓇᖕᒍᐊᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᓴᕐᓃᑦ – ᐊᖕᒍᓇᓱᒃᑏᑦ ᖀᓈᕐᒥᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᐋᓐᑐᔅ ᒫᔅᐸᒃ, ᐋᕐᕼᐊᔅ ᓯᓚᑦᑐᖅᓴᕐᕕᖓᑦ

ᐱᓪᓗᐊᑕᖏᑦ

ᐃᓚᐅᔪᑦ ᓴᖅᑭᑦᑎᕕᐅᓚᐅᖅᑐᑦ ᓄᓇᖕᒍᐊᓄᑦ ᖃᐅᔨᓴᕐᓂᕐᓂᒃ ᐱᓕᕆᖃᑎᖃᖅᓗᑎᒃ ᐊᖑᓇᓱᒃᑎᓂᒃ ᖀᓈᕐᒥᐅᓂᑦ. ᖃᐅᔨᓴᕐᓂᖅ ᓴᖅᑭᑕᐅᓯᒪᓕᖅᑐᑦ ᐊᒻᒪᓗ ᐊᑐᐃᓐᓇᕈᐃᓯᒪᓪᓗᓂ ᓄᑖᓂᒃ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑐᓴᕆᓇᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᐊᓯᖓ ᐃᓚᐅᔪᖅ ᑭᐅᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᓄᓇᖕᒍᐊᑦ ᑲᑎᖅᓱᖅᑕᐅᓯᒪᑐᐃᓐᓇᕐᒪᑕ ᐱᒻᒪᕆᐅᔪᓄᑦ ᐃᓗᓕᕆᔭᐅᔪᓄᑦ ᐃᓂᒥᑦ ᑖᒃᑯᓇᖕᒐᑦ ᓄᓇᐃᑦ ᐆᒪᔪᓪᓗᑦ ᑕᐅᑐᖅᑰᖅᑕᐅᓂᖏᓐᓄᑦ, ᐊᒻᒪᓗ ᐅᓂᒃᑳᒃᑲᓐᓂᖅᓯᒪᖕᒋᒪᑕ ᑐᑭᓯᐅᒪᓂᑦᑎᓐᓄᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ. ᐃᓱᒪᓕᐅᕆᓂᕐᒧᑦ ᑕᐅᑐᖅᑰᖅᑕᐅᔪᓄᑦ ᑕᒪᒃᑯᐊ ᖃᓄᐃᑦᑑᓂᖏᑦ ᖃᐅᔨᓴᕈᑏᑦ ᐊᑑᑎᖃᓪᓚᕆᒍᓐᓇᖅᑐᑦ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᓯᒪᔪᑦ ᐃᓚᐅᓪᓗᑎᒃ ᐅᓂᒃᑳᖅᓯᒪᔪᓂᒃ ᐊᑕᖏᕐᓗᒍ ᐅᓂᒃᑳᒥᑦ ᐊᒃᑐᐊᔪᓄᑦ ᑕᒪᒃᑯᓄᖓ ᓄᓇᖕᒍᐊᓄᑦ, ᑕᐃᒪᐃᓐᓂᖓᓄᑦ ᓴᖅᑭᑕᐅᓯᒪᖕᒋᑦᑐᑦ ᐃᓄᑑᓗᑎᒃ ᐊᓛᒃᑰᕐᓗᑎᒃ. ᑖᓐᓇ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᐱᔭᐅᓯᒪᔪᖅ ᑕᐃᑲᖕᒐᑦ ᑕᐃᓂᔅ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓄᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ ᑭᓯᐊᓂᓕ ᒪᓕᑦᑎᐊᓪᓚᕆᖕᒋᑦᑐᖅ ᓴᖅᑭᑕᐅᔪᓂᑦ ᑕᐃᑲᒃᑲᓐᓂᖅ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓂᑦ. ᒪᓕᑦᑎᐊᕐᓃᑦ ᐃᒪᐃᑦᑎᑦᑎᓇᔭᖅᑐᑦ ᓄᓇᖕᒍᐊᓂᒃ ᑐᑭᖃᑦᑎᐊᑐᓂᒃ ᓇᓗᓇᐃᒃᑯᑕᖃᕐᓗᑎᒃ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᐱᓪᓗᐊᑕᖏᑦ

ᐃᓚᐅᔪᑦ ᓴᖅᑭᑦᑎᕕᐅᓚᐅᖅᑐᑦ ᓄᓇᖕᒍᐊᓄᑦ ᖃᐅᔨᓴᕐᓂᕐᓂᒃ ᐱᓕᕆᖃᑎᖃᖅᓗᑎᒃ ᐊᖑᓇᓱᒃᑎᓂᒃ ᖀᓈᕐᒥᐅᓂᑦ. ᖃᐅᔨᓴᕐᓂᖅ ᓴᖅᑭᑕᐅᓯᒪᓕᖅᑐᑦ ᐊᒻᒪᓗ ᐊᑐᐃᓐᓇᕈᐃᓯᒪᓪᓗᓂ ᓄᑖᓂᒃ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑐᓴᕆᓇᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ

ᑎᑎᑦᑲᕐᑯᑎᓂᑦ. ᖃᐅᔨᓴᕐᓂᖅ ᐱᓕᕆᖃᑎᒌᖕᓂᐅᓚᐳᖅᑐᖅ ᑖᒃᑯᓂᖓ ᐊᖑᓇᓱᒃᑎᓂᑦ ᖃᓈᕐᒥᐅᓂᑦ ᐊᒻᒪᓗ ᓴᕕᔅᓯᕕᒃ ᐊᖑᓇᓱᒃᑎᑦ ᑐᓂᓯᓪᓗᑎᒃ ᑕᒻᒪᓈᒃᑯᑎᓄᑦ ᐊᒻᒪᓗ ᐅᓂᒃᑳᓂᒃ ᑕᒪᑐᒧᖓ ᐃᖏᕐᕋᔭᖕᓂᕐᒨᓕᖓᔪᓂᒃ, ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᑦ ᓂᕿᒃᓴᖅᓯᐊᖑᕙᒃᑐᑦ, ᐊᖅᒪᓗ ᐊᓯᖏᓐᓄᑦ ᑕᑯᔭᐅᓯᒪᔪᓄᑦ. 15 ᐊᖑᓇᓱᒃᑏᑦ ᖃᓈᕐᒥᑦ ᐊᒻᒪᓗ 2 ᐊᖑᓇᓱᒃᑏᑦ ᓴᕕᔅᓯᕕᒃᒥᑦ ᐃᑲᔪᓚᐅᖅᑐᐃᑦ ᑕᒪᑐᒧᖓ ᐱᓕᕆᐊᒧᑦ. ᑲᑎᖕᒃᑖᖅᓱᒋᑦ ᐃᒪᓐᓇᐸᓗᒃ 20,000 ᑭᓛᒥᑕᑦ ᐊᖑᓇᓱᖕᓂᕐᒧᑦ ᐃᖏᕐᕋᔭᒃᑕᐅᔪᑦ ᓇᐃᒡᓕᑎᖅᑕᐅᓚᐅᖅᑐᑦ ᑕᐅᕙᖕᓇᒧᑦ. ᑭᖑᓪᓕᖅᐹᖅᓯᐅᑎ ᐋᖅᑭᒃᑕᐅᔪᖅ ᐃᓚᐅᑎᑦᑎᔪᖅ ᓄᓇᖑᐊᓂᒃ "ᐅᐸᒃᑕᐅᒐᔪᒃᑐᑦ" (ᐊᖑᓇᓱᒃᑏᑦ ᐅᒪᔪᕐᕕᒋᓛᕆᖃᑦᑕᖅᑕᖏᑦ) ᐊᒻᒪᓗ ᖃᐅᔨᔭᐅᔪᑦ ᓴᖅᑭᑕᐅᓚᐳᖅᑐᑦ ᑕᐃᑲᓂ ᓈᒃᒥ 2017-ᒥᑦ.

ᐊᕙᑎᒧᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ

ᓴᖅᑭᑕᐅᔪᖅ ᑭᓕᐅ ᕼᐅᐊᓐᐱ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ ᑲᓇᑕᒥ (DFO)

ᐱᓪᓗᐊᑕᖏᑦ

ᓯᓚ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐊᖏᓛᖑᖅᑰᔨᔪᖅ ᐊᒃᑐᐃᓂᕐᓄᑦ ᑕᐅᕗᖓ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᒐᖏᓐᓄᑦ. ᐊᒥᓱᑦ ᐳᐃᔨᑦ ᐊᑐᖅᑐᑦ ᐃᓂᒥᒃ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᑦ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᑦᑑᓂᕋᖅᑕᐅᓪᓗᑎᒃ ᑕᒪᒃᑯᓄᖓ ᐊᓯᔾᔨᐅᑎᓄᑦ ᓇᔪᒐᕐᓄᑦ ᐊᒻᒪᓗ ᓯᓚ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ (Laidre et al. 2008), ᐱᓗᐊᖅᑐᒥᒃ ᓇᓄᐃᑦ ᐊᒻᒪᓗ ᓇᑦᑏᑦ. ᓂᕆᐅᒋᔭᐅᔪᖅᖅᐳᖅ ᓄᑖᓂᒃ ᐊᒻᒪᓗ ᐆᓇᖅᓯᕙᓪᓕᐊᓂᖓ ᑕᐃᑲᓂ ᓴᓂᓂᕈᑎᐅᑉ ᐃᒪᖓᑕ ᖃᖓᓂᑦ ᖃᓪᓕᖅᐸᒥᑦ ᐊᑐᖅᑐᑎᒃ ᕐᑯᕝᕙᓯᒃᑐᓂᒃ ᐳᔪᕐᓂᒃ ᐊᓂᐊᑦᑎᑦᓂᕐᓄᑦ ᐋᖅᑭᖑᐊᖅᑕᐅᓯᒪᔪᓂᒃ (Hamilton ᐊᒻᒪᓗ Wu 2013, Zweng ᐊᒻᒪᓗ Munchow 2006). ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑏᑦ ᓇᐃᒡᓕᑎᓇᓯᒪᔪᑦ ᓂᕈᐊᖅᑕᐅᓯᒪᔪᓂᒃ ᖃᐅᔨᒪᓇᖕᒋᑦᑐᓂᒃ, ᑕᑯᔭᐅᓯᒪᔪᓂᒃ ᐊᒻᒪᓗ ᓯᓚ ᐱᔾᔪᑕᐅᓪᓗᓂ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ, ᑭᓯᐊᓂᓕ ᐊᑕᖏᖕᒋᑦᑎᐊᖅᑐᓂᑦ ᑎᑎᕋᖅᓯᒪᔫᖕᒋᑦᑐᖅ.

ᐊᑕᖏᐸᓗᒃᑯᒋᑦ ᑐᑭᓯᐅᒪᓃᑦ ᐅᖅᓱᐊᓗᐃᑦ ᐊᓂᐊᑎᑕᐅᔪᑦ ᐊᒻᒪᓗ ᐸᐅᒃᓴᑦ ᐊᓂᐊᔪᓄᑦ ᖃᓄᐃᓕᖓᓂᐅᕙᒃᑐᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᒪᑯᓇᖕᒑᖃᑦᑕᖅᑐᑦ ᓄᓇᕐᒧᐊᒥᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᐊᐅᒃᑲᕐᓂᐅᔪᒥᑦ ᖃᐅᔨᓴᕈᑎᓂᑦ (Barber et al. 2001). ᒫᓐᓇ ᖃᐅᔨᒪᓂᕆᔭᕗᑦ ᐊᖏᔪᒥᒃ ᑐᙵᕕᖃᖅᑐᑦ ᑯᔭᐅᖃᑦᑕᖅᑐᓂᒃ ᑕᐃᑲᓂᓗᒃᑖᖅ ᓯᑯᖃᙱᑎᓪᓗᒍ ᐊᕐᕌᒍᑉ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂᑦ ᐊᒻᒪᓗ ᐃᓱᒪᒋᔭᐅᑐᐃᓐᓇᖅᑐᑦ ᐅᑭᐅᒃᑯᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ. ᓇᓗᓇᐃᔭᐃᓂᖅ ᐸᐅᒃᓴᖅ (CO_2) ᑕᐅᖅᓱᖃᑦᑕᕐᓂᕐᓄᑦ ᑐᙵᔪᑦ ᖃᐅᔨᒪᓂᕐᓂᒃ ᑕᐃᑲᙵᖓᑦ ᐊᓯᖏᓐᓂᑦ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᑦ ᐊᒻᒪᓗ ᐃᓂᓂᑦ. ᑕᐃᒪᐃᓐᓂᖓᓄᑦ, ᐱᑕᖃᖅᑐᖃᓇᐊᓕᒃ ᑐᑭᓯᒃᑲᓐᓂᕐᓗᓂᑦ ᐅᖅᓱᐊᓗᐃᑦ ᐊᓂᐊᑎᑕᐅᖃᑦᑕᕐᓂᖏᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ (ᐊᒻᒪᓗ ᖃᓄᖅ ᑕᒪᓐᓇ ᐊᒃᑐᐊᖕᒪᖔᑦ ᓇᑭᖔᕐᓂᖏᓐᓂᑦ ᐱᕕᐅᖃᑦᑕᕐᒪᖔᓪᓗ), ᐊᒻᒪᓗᑦᑕᐅᖅ ᖃᓄᐃᓕᐅᕐᓂᖓ ᑖᓐᓇ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖅ ᐊᑕᖏᓗᒃᑖᖅᑐᓂᑦ ᑕᖕᓇᐅᑉ ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᖅᑖᖃᑦᑕᕐᓂᖓᓄᑦ.

ᑕᒪᓐᓇ ᐅᖃᐅᓯᓇᓗᒍ ᐸᐅᒃᓴᖅ ᖃᓅᖃᑦᑕᕐᒪᖔᑦ, ᐱᓗᐊᖅᑐᒥᒃ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᖏᓐᓂᕐᓄᑦ ᐃᓚᐅᓪᓗᑎᒃ: ᐊᖏᓂᖓ ᐸᐅᒃᓴᐅᑉ (CO_2) ᑕᐃᑲᓂ ᐃᒪᖓᑕ ᖃᖓᓂᑦ ᐅᑭᐅᓗᒃᑖᖅ; ᐊᒃᑐᐃᓐᑦ ᐊᓯᔾᔨᐅᑎᓄᑦ ᓯᕐᒥᓂᑦ ᐊᐅᒃᐸᓪᓕᐊᔪᓄᑦ ᐃᒥᕐᓄᑦ ᑰᒃᑐᓄᑦ; ᐊᒃᑐᐊᔪᑦ ᐃᓚᓕᐅᑎᕙᓪᓕᐊᔪᑦ ᓄᓇᐃᓄᑦ ᐆᒪᔪᓄᓪᓗᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᓐᓂᑦ ᐊᒻᒪᓗ ᐃᒪᖅᑯᖅᑐᓂᖓ ᑰᖃᑦᑕᖅᑐᖅ ᑕᕆᐅᕐᒧᑦ ᐸᐅᒃᓴᖅ (CO_2) ᐅᓄᕈᓐᓃᕐᓂᖅᓴᐅᖃᑦᑕᕐᓂᖓᓄᑦ ᐊᐅᔭᒃᑯᑦ.

ᓱᕋᒃᓴᕋᐃᖏᑦᑐᑦ ᓱᕈᔪᐃᑦ (POP) ᐊᒻᒪᓗ ᓴᕕᕋᔭᐃᑦ ᓱᕈᕐᓇᖅᑐᑦ ᓴᖅᑭᔾᖅᑐᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ ᐃᖏᕐᕋᑎᑕᐅᕙᖕᒪᑕ (ᐃᖏᕐᕋᓪᓗᑎᒃ ᖃᖓᒍᑦ ᐃᒪᐅᑉ, ᐊᓂᖅᓵᖅᐸᒃᑕᑦᑎᒍᑦ, ᓯᕐᒥᓂᑦ, ᑕᑎᐅᑉ ᓯᑯᖓᒍᑦ, ᐊᓯᖏᓪᓗ) ᑕᐃᑲᙵᖓᑦ ᐱᕝᕕᐅᔪᓂᑦ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᑦ ᖁᑦᑎᐸᓗᒃᑐᒃᑯᑦ ᐊᒻᒪᓗ ᐊᑦᑎᓈᖅᑐᒃᑯᑦ. ᐃᓱᖅᓯᒪᓕᕋᖓᑕ ᐃᒥᐅᑉ ᐊᐅᓚᔾᔪᓯᖓᓄᑦ, ᐊᒥᓱᑦ ᓱᕈᔪᐃᑦ ᐊᑐᖃᑦᑕᖅᑐᑦ ᓂᕆᔭᐅᓪᓗᑎᒃ ᑲᑎᑉᐸᓪᓕᐊᖃᑦᑕᖅᑐᑦ (ᑲᔪᓯᓂᐅᔪᖅ ᐃᒪᐃᑦᑐᑦ ᓱᕈᕐᓇᖅᑐᑦ ᐅᓄᖅᓯᒋᐊᖅᓱᑎᒃ ᓂᕐᔪᑎᓂᒃ ᖁᕝᕙᓯᖕᓂᖅᓴᐅᔪᓂᑦ ᓂᕆᔭᐅᕙᒃᑐᑦ ᖁᕝᕙᓯᓪᓕᓈᓄᑦ ᓂᕿᓂᑦ). ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᕿᒥᕐᓗᖃᙱᑦᑐᑦ ᐱᒻᒪᕆᐅᑐᐃᓐᓇᕆᐊᓖᑦ ᐃᑲᔪᖅᓯᕐᓗᑎᒃ ᓱᕈᔪᐃᑦ ᐃᖏᕐᕋᓂᕆᕙᒃᑕᖏᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᓂᕿᖏᓐᓄᑦ. ᐊᒥᔫᔪᑦ ᖃᐅᔨᓴᕈᑏᑦ ᐃᓚᓕᐅᑎᔪᑦ ᖃᐅᔨᒪᓂᑦᑎᓐᓄᑦ ᑕᒪᒃᑯᐊ ᓴᕕᕋᔭᐃᑦ ᐃᒥᐅᓪᓗᑎᒃ ᐊᒻᒪᓗ ᓱᕈᔪᐃᑦ ᓇᓄᕐᓂᑦ, ᓇᑦᑎᕐᓂᑦ, ᐊᕐᕕᕐᓂᑦ, ᓇᐅᔭᓂᑦ ᐊᒻᒪᓗ ᐊᓯᖏᓐᓂᑦ ᑕᕆᐅᕐᒥᐅᑕᑦ ᑎᖕᒥᐊᓄᑦ. ᓇᐅᔭᑦ, ᓲᕐᓗ, ᐱᖃᖅᑐᑦ ᖁᕝᕙᓯᒃᑐᒥᒃ ᑯᕝᕙᓯᓕᓈᓄᑦ ᓱᕈᕐᓇᖅᑐᓂᒃ, ᐃᓚᐅᓪᓗᑎᒃ ᑐᕐᑯᓴᐃᔾᔪᑏᑦ ᑎᖕᒥᑲᖅᑎᑕᐅᕙᒃᑐ ᐊᒻᒪᓗ ᓱᕈᕐᓇᖅᑐᑦ (PCB).

ᒫᓐᓇ ᐅᕝᕙᓘᓐᓃᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᐃᓚᐅᓪᓗᑎᒃ ᑕᐃᒃᑯᐊ ᓴᖅᑭᑕᐅᕙᒃᑐᑦ ᓴᓇᕝᕕᐅᔪᓂᑦ ᐱᓕᕆᓂᕆᔭᐅᔪᓂᑦ, ᐅᓯᑲᖅᑕᕐᓂᕐᓂᑦ, ᐸᒃᕕᓴᐃᖏᓐᓂᖅᓴᐃᑦ ᐳᓚᕋᖅᑐᓕᕆᓂᕐᓂᑦ, ᓱᕈᔪᖕᓂᑦ, ᐊᒥᓱᑦ ᐅᓄᖅᓯᒋᐊᑐᐃᓐᓇᕆᐊᓖᑦ ᓯᓚ ᐱᔾᔪᑕᐅᓪᓗᓂ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᔪᓂᑦ. ᐊᑕᖏᐸᓗᒃᑯᑦ ᑕᒪᒃᑯᐊ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ ᐊᒃᐸᓯᒃᑐᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᓂᑦ ᑕᑯᖕᒑᕋᔭᕐᓂᕈᑦᑎᒍᑦ ᐊᓯᖏᓐᓂᑦ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᑦ (ᓲᕐᓗ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓ), ᑭᓯᐊᓂᓕ ᐅᓄᖅᓯᒋᐊᑐᐃᓐᓇᕆᐊᓖᑦ ᐊᒻᒪᓗ ᐊᖏᓐᓂᑦ ᐊᒃᑐᐃᓂᖃᑐᐃᓐᓇᕆᐊᓖᑦ. ᐃᔭᕈᕙᐅᔭᑦ ᐊᐅᒃᑕᔫᑦ ᐃᓱᒫᓗᑕᐅᖏᔪᑦ, ᓴᖅᑭᔾᖅᑎᑦᑎᓪᓗᑎᒃ ᖁᐊᖅᓴᕐᓇᕈᓐᓇᖅᑐᓂᒃ ᑖᒃᑯᓂᖓ ᐃᖃᓗᖕᓄᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᓄᑦ. ᖁᕝᕙᓯᓕᓈᖕᓂᖏᑦ ᐃᔭᕈᕙᐅᔭᑦ ᐊᐅᒃᑕᔫᑦ ᐅᑭᐅᖅᑕᑑᑉ ᐃᒥᖏᓐᓂᑦ ᐃᖃᓗᕐᑯᑎᖏᓐᓂᑦ ᒫᓐᓇ ᐊᒃᐸᓯᒃᑐᑦ ᑕᑯᖕᒑᕋᔭᕐᓂᕈᑦᑎᒍᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᓇᐅᒥᑦ ᑎᖕᒥᐊᑦ, ᑭᓯᐊᓂᓕ

ᓯᕈᐃᑦ ᐱᓪᓗᐊᑕᐅᔪᑦ ᓂᕆᔭᐅᕙᒃᑐᑦ ᐊᒃᑐᐊᓂᖏᓐᓄᑦ ᓱᕐᓗ ᐆᒐᕐᔪᐊᑦ ᑕᐃᒪᐃᑐᐃᓐᓇᕆᐊᓕᒃ ᐊᒻᒪᓗ ᑲᐅᔨᓴᐃᓐᓇᖅᑕᐅᒃᑲᓐᓂᕆᐊᖃᖅᑑᑎᑕᐅᔪᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᓯᒪᐅᑉ ᐊᓯᔾᔨᕐᓂᖓ

ᐃᓚᐅᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᑐᓴᕆᐊᕐᕕᐅᔪᓐᓇᕐᓗᑎᒃ ᓴᑏᓄ ᐊᑕᖏᖅᓱᑎᒃ (Steiner et al. 2015). ᑎᑎᕋᖅᓯᒪᔪᖅ ᓇᓗᓇᐃᔭᐃᔪᖅ ᓂᕆᐅᒋᔭᐅᔪᓂᒃ ᑕᐃᒪᐃᓐᓂᐊᕋᓱᒋᔭᐅᔪᓂᑦ ᑕᐃᑲᓂ ᑭᒡᓕᖏᓐᓂᑦ ᑕᕆᐅᓂᑦ (ᐃᓚᐅᓪᓗᓂ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓ) ᐊᒻᒪᓗ ᐱᐅᔫᔪᖅ ᖃᓄᐃᓂᐅᓇᔭᖅᑐᖅ.

ᐃᓚᐅᔪᖅ ᐅᖃᒃᑲᓐᓂᓚᐅᖅᑐᑦ ᐱᓪᓗᐊᑕᖅ ᑕᐃᑲᓂ ᐊᐅᒃᑲᕐᓂᖅ ᐋᖅᑭᒃᐸᓪᓕᐊᓕᖅᑎᓪᓗᒍ ᐊᓄᓂᐅᔪᖅ ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔨᓪᓗᓂ ᐃᓇᐅᔭᓗᑎᒃ ᑐᕋᖅᑕᐅᔪᑦ ᓯᓚᒧᑦ ᐋᖅᑭᒃᐸᓪᓕᐊᕙᒃᑐᑦ ᐊᓯᔾᔨᑏᑦ ᑕᒪᒃᑯᓇᓂ ᐊᓄᓇᒧᑦ ᐊᑐᖅᑕᐅᕙᒃᑐᓄᑦ.

ᑲᑎᙵᔪᑦ ᐅᔾᔨᖅᓱᕐᑯᔨᓚᐅᖅᑐᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᐊᓄᑦ ᐱᓇᐃᓗᑕᐃᑦ ᑕᑯᔭᐅᒪᑕ ᐊᖏᓂᖅᓴᒃᑯᑦ ᐊᒻᒪᓗ ᑕᒪᓐᓇ ᐃᓄᖕᓂᑦ ᐊᑐᖅᑕᐅᓯᒋᐊᖅᐸᒃᓱᓂ ᖃᓄᐃᑦᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᓗᒃᑖᒥᑦ ᐊᑐᓕᖅᑎᑕᐅᓪᓗᑎᒃ ᒥᑭᓐᓂᖅᓴᓄᑦ–ᐃᓂᓄᑦ; ᑕᒪᓐᓇ ᑕᐃᒪᐃᙱᓐᓇᖃᑦᑕᙱᑦᑐᖅ. ᐆᒃᑑᑎᒋᓗᒍ, ᖃᓄᐃᓕᖓᓃᑦ ᑕᐃᑲᓂ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᓂᑦ ᐊᔾᔨᒋᙱᕐᔪᐊᕐᒪᒋᑦ ᑕᐃᑲᓂ ᕿᑎᐊᑕ ᐅᑭᐅᖅᑕᖅᑑᑉ. ᐱᓕᕆᓇᓱᐊᓪᓗᐊᖅᑐᑦ ᓇᓗᓇᐃᕐᓗᒋᑦ ᐱᔾᔪᑕᐅᔪᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ ᐊᔾᔨᙱᑦᑐᑦ ᐅᐊᖕᓇᖓᓄᑦ ᐃᒥᕐᓄᑦ ᐊᒻᒪᓗ ᐅᖃᐅᓯᑐᐃᓐᓇᐃᑦ ᐊᑐᖅᑕᐃᓕᒪᕙᒃᓗᒋᑦ ᓴᖅᖅᑮᓂᐊᓕᕋᖓᑕ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᓇᓗᓇᐃᒃᑯᑕᕐᓂᒃ. ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐊᑐᕐᓗᑎᒃ ᖁᕝᕙᓯᒃᑐᓂᒃ ᐋᖅᑭᑦᑎᐊᖅᓯᒪᓪᓚᕆᒃᑐᓂᒃ ᓯᓚᒧᑦ ᐋᖅᑭᙳᐊᖅᑕᐅᓯᒪᔪᓂᒃ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᓂᑦ ᓇᓗᓇᐃᔭᐃᓇᓱᐊᖅᑎᓪᓗᒋᑦ ᓄᓇᓕᖕᓂᑦ ᐊᓯᔾᔨᐅᑎᓂᒃ; ᑭᓯᐊᓂᓕ, ᐊᐃᕙᔾᔪᑕᐅᓚᐅᖅᑐᖅ ᑖᓐᓇ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎ ᐱᓯᒪᔭᕆᐊᖃᕐᒪᑦ ᖃᐅᔨᔭᐅᕋᓂᒃᓯᒪᔪᓂᒃ ᐊᒻᒪᓗ ᐊᑐᕋᓱᓪᓗᐊᙱᒻᒪᑕ ᓄᑖᓂᒃ ᐋᖅᑭᙳᐊᖅᐅᓯᒪᔪᓂᒃ ᐱᓕᕆᓂᕐᓂᒃ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑎᑎᖅᑲᕐᑯᑎ ᓇᓗᓇᐃᖅᓯᓯᒪᖕᒪᑕᑦ ᓴᙱᓐᓂᕐᓂᒃ ᒫᓐᓇ ᐋᖅᑭᙳᐊᖅᑕᐅᓯᒪᔪᓂᑦ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᐃᓯᒪᓪᓗᓂ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᕐᓄᑦ ᐊᑐᐃᓐᓇᐅᔪᓂᒡᓗ ᓯᕗᓂᒃᓴᒥᑦ ᖃᐅᔨᓴᕐᓂᕐᓄᑦ. ᐊᑕᐅᓯᖅ ᐃᓚᐅᔪᖅ ᑎᑎᕋᕈᒪᓚᐅᖅᑐᑦ ᒥᑭᑦᑐᒥᒃ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ ᒪᒃᑯᓄᖓ ᖃᐅᔨᔭᐅᔪᓄᑦ ᒫᓐᓇᓕᓵᖅ ᓴᖅᑭᑕᐅᔪᓂᑦ ᑕᐃᑲᓂ ᐋᑎᒃᓇᑦᑯᓐᓂᑦ ᑕᐃᑲᓂ 2019-ᒥᑦ. ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ.

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᔪᑦ ᐃᓚᓯᒋᐊᕐᓗᑎᒃ ᑎᑎᕋᖅᓯᒪᔪᒥᒃ ᑕᒪᒃᑯᓄᖓ ᑕᑯᖃᑦᑕᐅᑎᖃᑦᑕᕐᓂᕐᓄᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᓂᒃ ᐊᒻᒪᓗ ᑲᑎᑉᐸᓪᓕᐊᔪᓄᑦ ᐊᒃᑐᐃᓂᕐᓄᑦ. ᐃᒪᐃᓚᔭᒃᑐᖅ ᐊᑕᖏᖅᓯᒪᓪᓗᒋᑦ ᐊᒃᑐᐃᓃᑦ ᖃᐅᔨᒪᔭᐅᙱᒻᒪᑕ, ᑭᓯᐊᓂᓕ ᓇᓗᓇᐃᖅᑕᐅᓂᐊᖅᑐᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᖏᓐᓄᑦ.

ᐃᓚᐅᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐅᖃᐅᓲᑦ ᑕᐃᑲᓂ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᒥᑦ ᑲᖏᓱᒃᓯᒪᖕᒪᑕ, ᐊᔪᕐᓇᕐᓂᐊᖅᓱᓂᓗ ᑎᑎᕋᕆᐊᒃᓴᖅ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᐱᓪᓗᐊᑕᐅᔪᖅ ᖃᐅᔨᒪᓇᖅᑐᖃᙱᒻᒪᑦ ᓯᕗᓂᒃᓴᒥᑦ ᓯᓚ ᑕᐃᑲᓂ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᑦ ᖃᓄᐃᓕᖓᓂᐊᕐᒪᖔᑦ ᐱᓗᐊᖅᑐᒥᒃ ᐊᒃᑐᐊᓂᖏᓐᓄᑦ ᑕᒪᒃᑯᓄᖓ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᓄᑦ. ᑕᒪᓐᓇ ᑐᓴᒐᒃᓴᖅ ᐊᓯᐅᔪᓐᓇᕐᒪᑦ ᑕᐃᑲᓂ ᑕᑭᔪᓂᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓂᑦ ᓇᓗᓇᐃᒃᑯᑕᓂᑦ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᓄᒃᑎᕐᓗᒍ ᐅᖃᐅᓯᐅᔪᖅ ᑕᒪᒃᑯᓄᖓ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ ᑕᐃᑲᖓ ᓯᓚᒧᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓄᑦ ᑎᑎᕋᖅᓯᒪᔪᓄᑦ. ᑕᒪᓐᓇ ᐅᖃᐅᓯᖃᖅᑎᑦᑎᒥᐊᓪᓕᓕᓚᐅᖅᑐ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᓄᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓄᑐᐃᓐᓇᖅ. ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᓇᐃᓈᖅᓯᒪᔪᓂᒃ ᐃᓱᐊᓂᑦ ᐊᑐᓂ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᐊᑐᕐᓗᓂᔾᔪᒃ ᑕᒪᓐᓇ ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᕐᒧᑦ ᑕᐃᑲᓂ ᐊᒃᑐᐊᔪᓂᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ. ᐱᒻᒪᕆᐅᓂᖅᐹᑦ ᐃᓱᒪᒋᔭᐅᓪᓗᑎᒃ ᑕᐃᒪᐃᓐᓇᓱᒋᔭᐅᔪᑦ ᐅᓂᒃᑳᖅᑕᐅᓗᑎ ᐃᓱᐊᓂᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑏᑦ ᐊᒻᒪᓗ ᑲᑎᖅᓱᖅᑕᐅᓗᑎᒃ ᑲᑎᙵᓗᑎᒃ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᐅᖅᓱᐊᓗᐃᑦ ᐊᓂᐊᑎᑕᐅᔪᑦ ᐊᒻᒪᓗ ᐸᐅᒃᓴᑦ ᐃᖏᕐᕋᕙᖕᓂᖏᑦ

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᐅᖅᓱᐊᓗᐃᑦ ᐊᓂᐊᑎᑕᐅᔪᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᙱᒻᒪᑕ (ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᙳᓲᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᖕᒫᖅᑐᑦ), ᐊᒻᒪᓗ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᓅᑕᐅᓪᓗᐊᖅᑐᑦ ᖃᓂᕆᓂᖅᓴᖓᓄᑦ ᓯᕗᓪᓕᖅᐹᖅᓯᐅᑎᓄᑦ. ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᑖᓐᓇ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᐊᖏᔪᒥᒃ ᐋᖅᑭᒃᓯᑦᑎᐊᒃᑲᓐᓂᕐᓇᐊᖃᕐᒪᑦ ᐊᒻᒪᓗ ᑎᑎᕋᕐᓗᕆᑦ ᐊᒥᓱᒐᓚᐃᑦ ᐱᓇᐅᓗᑕᐅᔪᑦ ᐊᒻᒪᓗ ᐊᑐᓕᕐᑯᔨᓂᕐᓄᑦ, ᐃᓚᐅᓪᓗᑎᒃ:

- ᑖᓐᓇ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᑎᑎᕋᖅᓯᒪᓪᓗᓂ ᐅᖃᒃᑲᓐᓂᑲᑕᒃᓯᒪᓪᓗᓂ
- ᑖᓐᓇ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᐱᑕᖃᖅᑎᑦᑎᑦᑎᐊᑎᒻᒪᑦ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑕᒪᒃᑯᓄᖓ ᓄᓇᒧᐊᖃᑦᑕᖅᑐᓄᑦ ᐸᐅᒃᓴᓄᑦ

- ᑕᐃᔭᐅᓂᖓ ᑐᓴᓇᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑕᒪᒃᑯᓄᖓ ᓯᓚᒥᑦ ᐱᑕᖃᖅᑐᑦ ᐅᖅᓱᐊᓗᐃᑦ ᐊᓂᐊᑎᑕᐅᔪᑦ (ᐅᖅᓱᓗᐃᑦ ᐊᓂᐊᑎᑕᐅᔪᑦ ᐊᒃᑐᐃᔪᑦ ᓯᓚᒥᒃ)
- ᒫᓐᓇᓕᓴᑦ ᖃᐅᔨᓴᕈᑏᑦ ᑐᓴᓇᐊᕐᕕᐅᔪᓐᓇᓪᓗᐊᖅᑐᑦ ᐃᑲᔪᖅᓱᖅᑐᑦ ᑕᒪᒃᑯᓂᖓ ᑕᓐᓇ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᖅ ᐃᓱᕐᕕᐅᖃᑦᑕᕐᓂᖓᓄᑦ ᐸᐅᒃᓴᖅ (CO_2)
- ᐅᔾᔨᒌᙱᔭᓐᓂᖏᑦ ᓇᓗᓇᐃᖅᑕᐅᓪᓗᐊᖅᑐᑦ, ᐃᓚᐅᓪᓗᓂ ᑭᒡᒍᑏᑦ ᐊᓯᔾᔨᕐᓂᕐᓄᑦ ᑖᒃᑯᓇᓂ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐊᐅᓚᔾᔪᓯᖏᓐᓄᑦ
- ᐊᒃᑐᐊᓂᖏᑦ ᑖᒃᑯᓇᓂ ᑕᕆᐅᑉ ᐃᒪᖓᓂᑦ ᐸᐅᒃᓴᖅ (CO_2) ᐊᒻᒪ ᓯᑯᖃᕐᓂᐅᔪᓂᑦ ᐋᖅᑎᑦᑎᐊᖅᑕᐅᒃᑲᓐᓂᓇᐊᓖᑦ
- ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓪᓗᐊᖅᑐᖅ ᑕᒪᓐᓇ ᑐᓴᐅᒪᔾᔪᑎ ᑐᙵᕕᖃᕐᒪᑦ ᑕᑯᔭᐅᕋᕐᔪᒃᓯᒪᔪᓂᒃ ᑲᔪᓯᓂᐅᕙᒃᑐᓂᒃ ᑕᐃᑲᓂ ᐊᐅᔭᒃᑯᑦ ᐊᒻᒪᓗ ᐅᑭᐊᒃᓵᒃᑯᑦ, ᑲᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᓐᙱᒻᒪᑦ ᑕᒪᑐᒧᖓ ᐅᑭᐅᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓄᑦ
- ᓇᓗᓇᐃᖅᑕᐅᓪᓗᐊᖅᑐᑦ ᑕᒪᓐᓇ ᐆᒃᑐᕋᖅᑕᐅᓯᒪᔪᑦ ᑕᐃᑲᙱᑦ ᓂᒋᐊᓂᑦ ᐅᐊᖕᓇᒥᑦ ᐅᒥᕐᒥᑦ
- ᓇᐃᓈᖅᓯᒪᔪᖅ ᑎᑎᕋᖅᓯᒪᔪᖅ ᑎᑎᕋᖅᓯᒪᓪᓗᐊᕐᒪᑦ ᐅᓄᕈᓐᓃᖅᐸᓪᓕᐊᓂᖏᑦ ᖃᓄᐃᓕᕙᓪᓕᐊᓂᐅᔪᑦ ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᙳᖅᐸᓪᓕᐊᖃᑦᑕᕐᓂᖏᓐᓄᑦ (Steiner et al. 2014)
- ᑎᑎᖅᑲᑦ ᑐᓴᓇᐊᕐᕕᐅᔪᓐᓇᖅᑎᑎᔪᑦ ᑎᒻᑐᓪ ᓵᕙᐃᑦ (dimethyl sulfide), ᐳᓪᓚᖅ N_2O ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓪᓗᐊᕐᑐᖅ
- ᑲᑎᙵᔪᑦ ᑕᐃᑲᙱᑦ ᓚᕕᐊᓪᒥᑦ ᐃᓚᔭᐅᓪᓗᐊᖅᑐᑦ ᑐᓴᓇᐊᕐᕕᐅᔪᓐᓇᕐᕕᐅᔪᓄᑦ

ᐃᓚᐅᔪᖅ ᐋᖅᑭᒃᓱᑦᑎᐊᒃᑲᓐᓂᕐᓯᔪᓐᓇᕐᓂᕋᖅᓱᓂ ᐊᒻᒪᓗ ᐋᖅᑭᒋᐊᖅᓱᒃᑲᓐᓂᕈᓐᓇᕐᓂᕋᖅᓱᓂᒋᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᒪᓕᒃᓗᒋᑦ ᕐᑯᓛᓂᑦ ᐊᑐᓕᕐᑯᔭᐅᔪᑦ. ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᑕᓇᐅᒥᑦ ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᖅᑖᕐᓇᖅᑐᑦ (ᒫᓐᓇ ᖃᓄᐃᓕᓂᐅᔪᑦ ᒪᓕᒃᓱᒋᑦ) ᐅᖃᐅᓯᐅᔪᓐᓇᖅᑐᑦ ᑕᒪᒃᑯᓄᖓ ᐸᐅᒃᓴᑦ ᐃᖏᕐᕋᕙᖕᓂᖏᓐᓂᑦ. ᐊᒃᑐᐃᓃᑦ ᑕᓇᐅᒥᑦ ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᖅᑖᕐᓇᖅᑐᑦ ᓇᓗᓇᐃᖅᐅᓗᑎᒃ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᓄᑦ ᐊᒻᒪᓗ ᐊᓯᖏᓐᓄᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᒃᑲᓐᓂᕐᓄᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᕐᒧᓪᓗ.

ᓱᕈᔪᐃᑦ

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᑖᓐᓇ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᑲᑎᑦᑎᐊᕐᓗᒋᑦ ᐊᑕᐅᓯᙳᖅᑎᓪᓗᒋᑦ ᑐᓴᐅᒪᔾᔪᑎᓄᑦ ᐊᒃᑐᐊᔪᓄᑦ ᑕᐃᑯᖓ ᐅᐊᖕᓇᖓᓄᑦ ᐃᒥᕐᓄᑦ, ᐊᒻᒪᓗ ᓄᑖᙳᕆᐊᖅᓯᒪᔪᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᖃᓄᐃᓕᖓᓂᐅᔪᓄᑦ ᑕᐃᒃᑯᓇᓂ ᖃᓂᒋᔭᖏᓐᓂᑦ ᐃᓂᓂᑦ ᓴᖅᑭᑕᐅᓪᓗᐊᕐᒥᔪᑦ. ᓄᑖᙳᓛᖅ AMAP (2018) ᖃᐅᔨᓴᕈᑎᓄᑦ ᑕᒻᒪᒃᑯᓄᖓ ᓄᓇᐃᑦ ᐆᒪᔪᓄᓪᓗ ᐊᒃᑐᖅᑕᐅᓂᖏᓐᓄᑦ ᓱᕈᔪᖕᓄᑦ ᑐᓴᓇᐊᕐᕕᐅᔪᓐᓇᖅᑐᖃᓪᓗᐊᖅᑐᑦ.

ᐃᓚᐅᔪᖅ ᐊᐱᕆᓚᐅᖅᑐᑦ ᒪᑯᐊ ᒥᒃᓵᓄᑦ ᐊᕙᑎᒧᑦ ᐊᒃᑐᐃᓃᑦ ᑕᒪᒃᑯᓇᙱᑦ ᖃᖓᑕᓲᕐᔪᐊᓄᑦ ᐅᖅᓱᐊᓗᒃ ᐊᑐᖅᑕᐅᕙᒃᑐᑦ ᕋᓴᒃᑯᑦ ᖃᖓᑕᓲᕐᔪᐊᖏᑦ ᖃᖓᑦᑕᖅᑎᑕᐅᓂᐊᓕᕋᖓᑕ ᐱᒃᓯᒐᖃᑦᑕᖅᓱᑎᒡᓗ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᓄᑦ ᐊᒻᒪᓗ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓄᑦ. ᐊᓯᐊ ᐃᓚᐅᔪᖅ ᐅᓂᒃᑳᓚᐅᖅᑐᑦ ᓴᓇᖃᑎᖓ ᐊᐱᓴᔭᐅᓚᐅᕐᒪᑦ ᖃᐅᔨᓴᕐᑯᔭᐅᓪᓗᓂ ᑕᒪᑐᒥᖓ ᐊᕋᒍᒃ ᒪᕐᕉᒃ ᐊᓂᒍᖅᑐᓂᑦ. ᓴᓇᖃᑎᖓ ᐃᓱᒪᓗᑎᖃᓚᐅᙱᒻᒪᑦ ᖁᐊᖅᓵᕐᓇᕈᓐᓇᖅᑐᓂᒃ ᓱᖃᐃᒻᒪ ᖃᖓᑕᓲᕐᔪᐊᓄᑦ ᐅᖅᓱᐊᓗᒃ ᑎᔭᐅᖅᓴᕋᐃᓐᓂᖓᓄᑦ, ᑭᓯᐊᓂᓕ ᖃᐅᔨᓴᕐᓂᖅ ᕿᒥᕐᕈᓚᐅᖅᑐᑦ ᖃᓄᖅ ᓂᒡᓚᓱᒃᑐᒥᑦ ᑎᒡᔭᐅᕈᓐᓇᕐᒪᖔᑦ ᓂᒡᓕᓇᖅᑐᒥᑦ ᐃᒥᒥᑦ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᓗᓂ ᐃᓱᒫᓗᑕᐅᓂᖓᓂᒃ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᑑᓗᓂ.

ᐊᓯᖏᑦ ᐃᓄᐃᑦ ᐱᓕᕆᓂᖏᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ

ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐊᑕᖏᕐᓗᒍ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᖅ ᑕᐃᒡᒍᓯᖃᖓᓕᕐᓗᓂ ᐃᓄᐃᑦ ᐱᓕᕆᓂᖏᑦ ᐃᓱᒡᒪᓗᒃᓴᐅᑎᐅᔪᑦ ᐃᒪᐃᓐᓂᖓᓄᑦ ᐊᑕᖏᖅᓱᓗᑦ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᑦ ᐅᖃᐅᓯᐅᔪᑦ ᐃᓄᐃᑦ ᐱᓕᕆᓂᖏᓐᓂᖕᒫᖅᓯᒪᖕᒪᑕ. ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᕐᒧᓪᓗ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ ᒪᓕᖕᓂᐊᖅᑐᑦ. ᐸᐅᒃᓴᑦ ᐃᖏᕐᕋᕙᖕᓂᖏᑦ ᐊᒻᒪᓗ ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᖅᑖᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ ᓄᒃᑎᖅᑕᐅᓗᓂ ᐱᒋᐊᓕᓴᕐᓂᖓᓂᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᒥᑦ ᑭᖑᓂᖕᒫᑦᑎᓐᓂᑦ ᐅᖃᐅᓯᐅᓚᕐᒪᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐱᑕᖃᕐᓂᖓᓂᒃ ᓇᓕᒧᕌᙱᓐᓂᕐᓂᒃ ᖃᔅᓯᐅᓂᖏᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᓴᖅᑭᑕᐅᔪᓂᑦ; ᐃᓚᖏᑦ ᐅᖃᐅᓯᐅᔪᑦ ᐅᓂᒃᑳᖅᑕᐅᑦᑎᐊᖅᓯᒪᓪᓗᑎᒃ (ᓱᕐᓗᐃᔭᕈᕙᐅᔭᑦ ᐊᐅᒃᑕᔫᑦ), ᐃᒪᖏᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᑐᐃᓐᓇᖅᓗᑎᒃ (ᓱᕐᓗ ᐅᓯᖃᖅᑕᕐᓃᑦ). ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐋᖅᑭᒃᓯᒪᐃᓐᓇᕐᓗᒋᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᒧᑦ ᑕᒪᒃᑯᓄᖓ ᐊᐅᒃᑕᔫᓄᑦ, ᐊᒻᒪᓗ

ᐃᓚᓕᐅᔾᔨᓗᑎᒃ ᑎᑎᕋᖅᑕᐅᓯᒪᒃᑲᓐᓂᖅᑐᓂᒃ ᑕᒪᒃᑯᓄᖓ ᓂᐅᕐᕈᑎᒃᓴᓕᐅᖅᐸᒃᑐᑦ ᐅᓯᑲᖅᑕᕐᓃᑦ, ᑕᕆᐅᒥᑦ ᐳᓚᕋᖅᑐᓕᕆᓂᖅ, ᓴᓇᕝᕕᐅᔪᓂᑦ ᐱᓕᕆᓂᐅᔪᑦ, ᐊᒻᒪᓗ ᑲᑎᑉᐸᓪᓕᐊᔪᑦ ᐊᒃᑐᐃᓐᓃᑦ. ᑎᑭᑉᐸᒃᑐᑦ ᐆᒪᔪᐊᓛᑦ ᐃᓂᖃᖅᑎᑕᐅᕋᕐᔪᒍᓐᓇᕐᒥᔪᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ. ᖃᓄᐃᑦᑑᓂᖓ ᐃᓱᒪᓗᒃᓴᐅᑎᐅᔪᑦ ᓇᓗᓇᐃᖅᑕᐅᑦᑎᐊᓪᓗᐊᖅᑐᑦ ᐊᑐᓂ ᐅᖃᐅᓯᐅᔪᓂᑦ (ᓱᕐᓗ ᓂᐲᑦ, ᓯᑯ ᓯᖅᑐᑦᑎᖅᑕᐅᓂᖓ, ᐊᒻᒪᓗ ᐅᖅᓱᐊᓗᐃᑦ ᑯᑯᓂᖏᑦ ᐃᓗᐊᓂᑦ ᐅᓯᑲᖅᑕᕐᓂᕐᒧᑦ ᐊᓪᓕᒃᑲᓐᓂᐅᔪᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ).

ᐃᓚᐅᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᓚᐅᑎᓪᓗᒋᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᒪᑯᓄᖓ ᑲᔪᓰᓐᓇᕈᓐᓇᖅᑐᑦ ᑲᔪᓰᓐᓇᕈᓐᓇᙱᑦᑐᓄᓪᓗ ᑐᕌᕆᔭᐅᔪᑦ ᐊᖑᓇᓱᖕᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐃᖃᓗᓴᓱᖕᓂᕐᒧᑦ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑕᒪᑐᒥᖓ ᑐᓴᐅᒪᔾᔪᑎᒥᒃ ᑎᑎᕋᐃᓱᒪᓪᓗᐊᖅᑐᑦ ᑕᐃᑲᓂ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᓐᓂᖏᑦ ᑕᐃᑲᓂ ᐊᓪᓕᒃᑲᓐᓂᐅᔪᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ. ᐊᓯᐊ ᐃᓚᐅᔪᖅ ᑐᒃᓯᕋᓚᐅᖅᑐᑦ ᐃᓚᒋᐊᕐᓗᒋᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᑦ ᐅᓂᒃᑳᑦᑎᐊᖅᓯᒪᔪᑦ ᑕᒪᒃᑯᓄᖓ ᐊᔾᔨᒌᙱᔾᔪᑎᖏᓐᓄᑦ ᓄᓇᓕᖕᓂ ᐊᓐᓇᐅᒪᔪᓐᓇᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓂᐅᕐᕈᑎᒃᓴᓂᒃ ᐃᖃᓗᓴᓱᖕᓂᕐᓄᑦ.

ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᑦ

ᑭᖑᓂᖕᒫᑦᑎᓐᓂᑦ ᐅᖃᐅᓯᐅᓚᖅᑐᓂᑦ, ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᐋᖅᑭᒃᓱᐃᓗᑎᒃ ᖃᐅᔨᓪᓗᐊᑕᖅᑕᕐᓂᒃ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᐊᑐᓂ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᓂᑦ, ᐃᒪᐃᙱᖕᒫᕐᓗᒋᑦ ᐊᖏᔫᓗᑎᒃ ᑎᑎᕋᕐᓗᒋᑦ ᐃᓱᐊᓂᑦ ᑭᓯᐊᓂ. ᑖᒃᑯᐊ ᓇᓗᓇᐃᒃᑯᑕᑦ ᑐᙵᕕᓕᐅᕋᔭᖅᑐᑦ ᑖᒃᑯᓇᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᓇᓗᓇᐃᔭᕐᑯᓪᓗᒋᑦ ᐊᒻᒪᓗ ᓴᖅᑭᔭᖅᑎᑕᐅᕐᑯᓪᓗᒋᑦ ᐱᖓᓱᑦ ᐊᕝᕙᓘᓐᓃᑦ ᑎᓴᒪᑦ ᖃᐅᔨᔭᐅᔪᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ ᑲᑎᙵᔪᑦ ᐊᕕᓚᐅᖅᑐᑦ ᐊᕕᒃᑐᖅᓱᑎᒃ 45 ᒪᓇᑦᓂᒃ ᐅᖃᖃᑎᒌᒍᑕᐅᕐᑯᓪᓗᒋᑦ. ᑲᑎᙵᔪᑦ ᐊᕕᒃᑕᐅᓚᐅᖅᑐᑦ ᒪᓕᒃᓱᑎᒃ 5 ᐅᖃᐅᓯᐅᓪᓗᐊᑕᖅᑐᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᓂᑦ ᑕᐃᑲᓃᓐᑐᓂᒃ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᒥᑦ: ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᑕᐅᑐᖅᑰᖅᑕᖏᑦ; ᑕᕆᐅᖅ, ᓯᑯ ᐊᒻᒪᓗ ᐊᓂᖅᓴᖅᐸᒃᑕᕗᑦ; ᐅᓄᖅᓯᕙᓪᓕᐊᕙᓐᓂᖏ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖃᑎᒌᓐᓂᖅ, ᐃᖅᑲᕐᒥᐅᑕᑦ, ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ; ᐳᐃᔾᔨᑦ, ᓇᓄᐃᑦ ᐊᒻᒪᓗ ᑎᖏᐊᑦ. ᐊᒡᒍᖅᑐᐃᓂᖅ ᐱᓇᐃᓗᑕᕐᓂᒃ ᓴᖅᑭᑕᐅᓇᔭᖅᑐᑦ ᐃᓱᒪᒋᔭᐅᔫᓗᑎᒃ ᐃᓱᐊᓂᑦ ᑎᑎᖅᑲᕐᑯᑎᐅᑉ.

ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᑕᐅᑐᖅᑰᖅᑕᖏᑦ

ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᑕᐅᑐᖅᑰᖅᑕᖏᑦ ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᑦ ᓴᖅᑮᓚᐅᖅᑐᑦ ᑐᓴᖅᑕᐅᔪᒃᓴᓪᓗᐊᑕᕐᓂᒃ ᐃᒃᐱᒋᔭᒥᖕᓂᒃ ᐃᓱᒪᒋᔭᐅᖃᓯᐅᔾᔭᐅᕐᑯᔭᐅᔪᑦ ᑕᕝᕗᖓ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᓂᑦ.

ᐱᓪᒪᕆᐅᔪᑦ ᐅᖃᐅᓯᒃᓴᐃᑦ

- ᐱᒻᒪᕆᐅᔪᖅ ᐃᓕᓴᕆᓗᒋᑦ ᐃᓄᐃᑦ ᐃᓚᒋᔭᐅᖕᒪᑕ ᑕᐃᑯᖓ ᐃᓂᒧᑦ 4,000–ᓄᑦ ᐅᑭᐅᓄᑦ ᐃᓚᒋᔭᐅᓪᓗᑎᒡᓗ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᒐᖏᓐᓂᑦ.
- CAFF ᓂᕿᓄᑦ ᐊᔾᔨᙳᐊᖅ ᓴᖅᑭᔭᖅᑎᑦᑎᔪᖅ ᐊᖑᓇᓱᒃᑏᑦ ᐃᓚᒋᔭᐅᓪᓗᑎᒃ ᓂᕿᓄᑦ ᐃᓚᐅᑎᑕᐅᓪᓗᐊᖅᑐᖅ.
- ᓂᑭᒃᓴᖅᓯᐅᕐᓂᖅ ᐆᒪᔪᓂᒫᖅᑐᓂᒃ ᐃᒪᐃᒃᑑᖕᒪᑦ ᐊᒻᒪᓗ ᐃᓚᒋᔭᐅᓪᓗᓂ ᐃᓂᒥᑦ ᐊᑯᓂᐊᓗᒃ ᐃᓂ ᓇᓗᓇᐃᔭᖅᑕᐅᓚᐅᖅᑳᖅᑎᓐᓇᒍᖅ ᖃᓪᓗᓈᓂᑦ ᑭᒡᓕᓯᓂᐊᕈᑎᓄᑦ. ᓂᑭᒃᓴᖅᓯᐅᕐᓂᖅ ᑲᒪᒋᔭᐅᕋᓂᖕᒪᑦ, ᓂᕿᕐᓴᖅᓯᐅᕐᓂᖅ ᐱᐊᓂᒃᓯᒪᔪᖅ ᐃᓚᒋᔭᐅᓪᓗᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᕐᓂᕐᒥᑦ (ᓱᕐᓗ ᐊᑯᑭᑦᑐᓂᑦ, ᐃᒪᐃᙱᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᑕᐃᑲᓂ ᐃᓂᒦᓪᓚᕆᙱᑦᑐᖅ).
- ᓄᓇᓕᖕᓂᑦ, ᐱᔪᓐᓇᐅᑎᓂᒃ–ᑐᙵᕕᖃᖅᓱᑎᒃ ᐊᖑᓇᓱᖕᓂᖅ/ᓂᑭᒃᓴᖅᓯᐅᕐᓂᖅ ᐃᓱᒪᒋᔭᐅᓪᓗᐊᙱᑦᑐᖅ "ᐃᓱᒪᓗᒃᓴᐅᑎᐅᔪᑦ"; ᓄᓇᓕᖕᓂᑦ ᓂᕿᒃᓴᖅᓯᐅᕐᓃᑦ ᒪᓕᒐᖃᑦᑎᐊᕐᒪᑕ ᓄᓇᓕᖕᓂᑦ ᖁᕝᕙᓯᓕᓈᓂᑦ ᐊᒻᒪᓗ ᐊᑐᖅᓱᑎᒃ ᒪᕿᐃᓕᖕᒪᔪᑎᒍᑦ ᐱᓕᕆᖃᑎᒌᖕᓂᕐᒥᒃ ᑕᒪᐃᓐᓂᒃ ᓴᓂᓕᓈᖕᓂᒃ (ᓱᕐᓗ ᒪᕿᐃᓕᖕᒪᔪᑦ ᐊᖏᖃᑎᒌᒍᑏᒃ ᓇᓄᕐᓄᑦ, ᑑᒫᓕᖕᓄᑦ ᕿᓚᓗᒐᕐᓄᑦ ᐊᒻᒪᓗ ᖃᑯᖅᑕᓄᑦ ᕿᓚᓗᒐᕐᓄᑦ)
- ᐃᓚᐅᑎᑕᐅᒍᓂ ᐃᒪᐃᑦᑑᓗᓂ ᐃᓱᒪᓗᒃᓴᐅᑎᐅᔪᖅ ᑎᑎᕋᖅᓯᒪᓪᓗᐊᖅᑐᑦ ᐃᓱᒪᓗᒃᓴᐅᑎᒃᓴᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᑭᓯᐊᓂ ᑲᒪᒋᔭᐅᑦᑎᐊᙱᒃᑯᓂ ᐅᕝᕙᓘᓐᓃᑦ ᒪᓕᒐᖃᑦᑎᖓᙱᒃᑯᓂ.
- ᓂᐅᕐᕈᑎᒃᓴᓄᑦ ᐃᖃᓗᓴᓱᖕᓂᖅ/ᓂᑭᒃᓴᖅᓯᐅᕐᓂᖅ ᐃᓱᒪᓗᒃᓴᐅᑎᒃᓴᐅᑐᐃᓐᓇᕆᐊᓕᒃ, ᐊᒻᒪᓗ ᐊᒃᑐᐅᓂᙱᑦ ᓂᐅᕐᕈᑎᒃᓴᓄᑦ ᓂᕿᒃᓴᖅᓯᐅᕐᓂᕐᒧᑦ ᓄᓇᖓᓂᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓄᓇᓕᖕᓂᑦ ᑐᙵᕕᖃᖅᓱᑎᒃ ᓂᕿᒃᓴᖅᓯᐅᕐᓃᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᒻᒪᑕᑦ.

- ᑕᐃᒎᓯᖓ ᓄᓇᓕᖕᓂᑦ ᐃᖃᓗᒐᓱᖕᓂᖅ (ᐃᓚᐅᓪᓗᑎᒃ ᓂᐅᕐᕈᑎᒃᓴᓄᑦ ᐅᕝᕙᓘᓐᓃᑦ ᑮᓇᐅᔭᖅᑖᕋᓱᐊᕐᓂᒃᑯᑦ) ᒥᑭᑦᑑᔪᖅ ᐅᕝᕙᓘᓐᓃᑦ ᐱᖅᑯᓯᖅᑎᒍᑦ – ᑕᒪᓐᓇ ᐃᓱᒪᒋᔭᐅᓪᓗᐊᙱᑦᑐᖅ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᓂᖓᓂᒃ ᑐᓴᕋᓱᐊᖅᑕᐅᑎᓪᓗᒍ ᓂᐅᕐᕈᑎᒃᓴᓄᑦ ᐃᖃᓗᒐᓱᖕᓂᖅ.

- ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᖕᓂᕐᒧᑦ ᐃᓗᓪᓕᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᐃᓄᐃᑦ ᖃᔨᒪᔭᑐᖃᙱᖕᓂᑦ (IQ)

- ᓄᓇᓖᑦ ᑕᐅᕙᓂ, ᖃᐅᔨᒪᓂᖃᕐᔪᐊᕐᒪᑕ ᐃᓂᒥᑦ ᐊᒻᒪᓗ ᑲᒪᔪᓐᓇᖅᓗᑎᒃ ᑲᑎᖅᓱᐃᓂᕐᒥᒃ ᖃᐅᔨᒪᓂᕐᒥᒃ ᖃᓄᑐᐃᓐᓇᑦᑎᐊᑎᒍᑦ. ᐱᓗᐊᖅᑐᒥᒃ ᓄᓇᓖᑦ ᑲᒪᔪᓐᓇᕐᒪᑕ ᐱᑕᕆᐊᖃᖅᑕᖕᒋᓐᓂᑦ ᐊᕐᕌᒍᓗᒃᑖᒧᑦ, ᐊᑯᓂᐅᔪᒃᑯᒃ ᖃᐅᔨᓴᐃᓐᓇᕐᓂᒃᑯᑦ. ᑕᒪᓐᓇ ᑲᔪᓰᓐᓇᕐᓂᕐᒧᑦ, ᓴᖑᓴᕋᐃᓐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓄᓇᓖᑦ ᐃᓚᐅᓂᖕᒋᓐᓄᑦ ᖃᓄᑐᖅᑐᖃᑐᑐᐃᓐᓇᕐᓄᑦ.

- ᐱᑕᖃᕆᐊᓕᒃ ᓄᑖᑎᒍᑦ ᓱᖃᐃᒻᒪ ᐃᓄᖕᓂᑦ ᓯᕗᒃᑲᖅᑕᖅᑕᐅᓪᓗᓂ ᑲᒪᒋᔭᐅᓂᒃᑯᑦ ᐊᑐᖅᑕᐅᔪᖅ ᑐᙵᕕᐅᓂᐊᖅᑐᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐊᐅᓚᑦᑎᓂᕐᒥᒃ ᑕᐅᕙᓂ.

- ᐱᓕᕆᓂᕆᔭᐅᑐᐃᓐᓇᕆᐊᓖᑦ ᑕᐃᒪᐃᑦᑐᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒫᓂᒃᑐᑦ ᑕᐃᑲᓂ PAME MPA ᐃᓕᓐᓂᐊᖅᓯᓐᓈᖅᓗᑎᒃ ᑲᑎᒪᑎᓪᓗᒋᑦ ᐅᓂᒃᑳᖕᒋᓐᓂᑦ (PAME 2019) ᐊᒻᒪᓗᑦᑕᐅᖅ ᕿᑭᖅᑕᓂ ᔭᒐᐃᑦᑕᐃᓕᒪᓂᕐᒧᑦ ᑮᓇᐅᔭᓕᐅᕋᓱᑎᓄᑦ ᑕᐃᑯᖓ ᑕᓪᓗᕈᑎᐅᑉ ᐃᒪᖓᓄᑦ.

- ᐊᔾᔨᒌᙱᓐᓂᖓ ᑭᖑᕚᓈᑦ ᖃᐅᔨᒪᔭᖕᒋᑦ ᑖᒃᑯᓄᖓᖕᒑᕐᓗ ᐱᕙᓪᓕᐊᑎᑦᑎᖃᑎᒌᖕᓂᖅ ᑐᓴᓇᐊᕐᕕᐅᔪᓐᓇᓪᓗᐊᖅᑐᖅ (ᓱᕐᓗ, NISR).

- ᐱᕙᓪᓕᐊᓂᑐᐃᓐᓇᐅᑐᐃᓐᓇᕆᐊᓖᑦ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐊᔾᔨᒌᙱᓐᓂᖕᒋᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓗᑎᒃ ᑖᒃᑯᓇᓂ ᓯᒡᔭᕐᒥᑦ ᐊᒻᒪᓗ ᐃᒪᕕᖕᒥᑦ ᐃᖃᓗᓕᕆᓂᖅ, ᑕᐃᒪᐃᕋᓂᖕᒪᑦ ᐊᑯᑭᑦᑐᑦ ᒪᓕᒐᕐᔪᐊᖕᒋᓐᓂᑦ.

- ᐃᓕᓴᕆᔭᐅᔭᕆᐊᓕᒃ ᑕᒪᓐᓇ, ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᒫᓐᓇ ᐃᒪᖕᒋᑦ ᑲᑎᖅᓱᖅᑕᐅᓂᖕᒋᑦ ᑎᑎᖅᑲᕐᑯᑏᑦ ᐃᑲᔪᖅᓯᖅᑐᑦ ᓂᕿᒃᓴᖅᓯᐅᕐᓂᕐᒧᑦ ᐃᓱᒪᓕᐅᕈᑕᐅᔪᓄᑦ, ᐱᑕᖃᕐᒪᑦ ᐱᑕᖃᒃᑲᓐᓂᕆᐊᖃᕐᓂᕐᓄᑦ, ᐊᒻᒪᓗ ᐱᑕᖃᕆᐊᓖᑦ ᐊᖏᓂᖅᓴᒥᒃ ᑐᑭᓯᐅᒪᔭᐅᓗᑎᒃ ᐱᓕᕆᔾᔪᓯᕐᓄᑦ ᐊᓯᔾᔨᖅᑐᑦ.

- ᐱᑕᖃᕆᐊᖃᖅᑐᑦ ᐃᓚᐅᑎᑦᑎᓗᑎᒃ ᐃᓱᒪᒋᔭᐅᔪᑦ ᔭᒐᐃᑦᑕᐃᓕᕐᓂᕐᒧᑦ ᑮᓇᐅᔭᑎᒍᑦ ᐃᑲᔪᖅᓯᖅᑐᓂᒃ ᐊᖑᓇᓱᖕᓂᕐᒥᒃ ᐃᓕᖅᑯᓯᕐᒥᒃ.

- ᐱᑕᖃᕆᐊᖃᖅᑐᑦ ᐃᓛᒃᑰᖅᑐᒥᒃ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖕᒋᓐᓂᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᒥᒃ ᑐᙵᕕᒋᔭᐅᓗᓂ ᖃᐅᔨᒪᓂᕐᓄᑦ.

- ᐊᒃᑐᐊᖃᑎᒌᖕᓂᖕᒋᑦ ᕐᑯᑦᑎᒃᑐᒥᑦ ᐅᑭᐅᑦᑕᖅᑐᒥᑦ ᐃᒪᖕᒐᓂᑦ, ᑕᓪᓗᕈᑎᐅᑉ ᐃᒪᖕᒐ ᐊᒻᒪᓗ ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓪᓗᐊᖅᑐᑦ.

ᐅᖃᒪᔭᐅᑎᐅᔪᖅ

ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᐊᒥᓱᑦ ᐅᖃᐅᓯᐅᔪᑦ ᐃᓚᓕᐅᔾᔭᐅᓪᓗᐊᑐᑦ ᑕᐃᑲᓂ ᐱᒋᐊᕐᓂᖓᓂᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᒥᑦ. ᑐᓴᒐᒃᓴᓪᓗᐊᑕᑦ ᐊᒃᑐᐊᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐃᑲᔪᕐᓂᕐᒧᑦ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖕᒋᑦ (IQ) ᑖᒃᑯᓄᖓ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑐᙵᕕᐅᔪᓄᑦ ᐃᓚᓕᐅᔾᔭᐅᓯᒪᓪᓗᐊᖅᑐᑦ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖕᒋᓐᓂᑦ (SAR). ᐊᕕᑦᑐᖅᓗᑎᒃ ᑲᑎᙵᔪᑦ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᑦ ᐃᒪᖕᒋᓐᓂᒃ ᐃᓱᒪᒋᔭᐅᔪᓂᒃ ᑎᑎᕋᖅᑕᐃᔪᓐᓇᕋᓱᒋᓪᓗᓂᔾᔪᒃ ᐊᑕᖕᒋᓗᒃᑖᖅᓯᒪᔪᒥᑦ ᑕᐃᑲᓂ ᐱᒋᐊᕐᓂᖓᓂᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖕᒋᓐᓂᑦ (SAR).

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐃᓚᓕᐅᔾᔨᓯᒪᔾᔪᑕᐅᔪᓐᓇᖅᑐᓂᒃ ᐆᒪᔪᑦ ᓇᔪᖓᖕᒋᑕ ᓯᓚᑎᖕᒋᓐᓄᓪᓗ ᐋᖅᑭᙳᐊᖅᑕᐅᓯᒪᔪᓄ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᒥᑦ, ᓄᓇᙳᐊᖑᐅᐃᓐᓇᕆᐊᓖᑦ. ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐ ᐃᓚᓯᓗᑎᒃ ᓄᓇᙳᐊᒥᒃ ᓴᖅᑭᔾᔭᖅᑎᑦᑎᔪᒥᒃ ᐊᓯᖕᒋᓐᓂᒃ ᐊᐅᓚᑕᐅᔪᓂᒃ ᐃᒥᕐᓄᑦ ᐱᓕᕆᔾᔪᓯᐅᔪᓄᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐱᑭᐊᓕᓱᕐᓱᐊᕐᒧᑦ. ᐊᓯᐊ ᐃᓚᐅᔪᖅ ᐃᓚᓯᒋᐊᓚᐅᖅᑐᖅ ᐱᐅᔫᓪᓗᓂ ᐊᑐᖅᑕᐅᕙᒃᑐᖅ ᓴᖅᑭᔾᔭᕐᓗᑎᒃ ᓄᓇᓖᑦ ᓄᓇᙳᐊᓂᑦ ᐊᔪᕐᓇᙱᑐᐊᕋᖓᑦ.

ᐃᓚᐅᔪᖅ ᐊᑐᓕᕐᑯᔨᓚᐅᖅᑐᖅ ᓴᙱᓂᖅᓴᓂᒃ ᐊᒃᑐᐊᓂᖃᓕᖅᑎᓪᓗᒋᑦ ᑖᒃᑯᐊ ᓂᓇᐅᒋᔭᐅᔪᑦ ᐆᒪᔪᑦ ᓇᔪᖓᖕᒋᑕ ᓯᓚᑎᖕᒋᑕᓗ ᖃᓄᐃᓐᓂᖕᒋᓐᓄᑦ ᐊᓯᔾᔨᖅᑐᑦ ᐊᒻᒪᓗ ᑐᓴᐅᒪᔾᔪᑎᒃ ᐱᑕᖃᕆᐊᓖᑦ ᑕᒪᒃᑯᓄᖓ ᐊᐅᓚᑕᐅᕙᒃᑐᓄᑦ ᓂᕿᒃᓴᖅᓯᐅᕐᓂᕐᓄᑦ. ᓱᖅᑯᐃᓇᑦᑎᐊᓪᓗᐊᖅᑐᑦ ᑖᒪᒃᑯᐊ ᑐᓴᐅᒪᔾᔪᑎᒃᑲᓐᓂᑦ ᐱᑕᖃᕆᐊᖃᕐᒪᑕ ᖃᓄᖅ ᐊᐅᓚᑕᐅᔪᓐᓇᕐᒪᖔᑕ ᐱᑕᖃᕐᕕᐅᔪᑦ ᓇᓗᓇᓗᐊᖅᑎᓪᓗᒍ.

ᑕᕆᐅᖅ, ᓯᑯ, ᐊᓂᖅᓵᖅᐸᒃᑕᕗᑦ

ᑕᕆᐅᖅ, ᓯᑯ ᐊᒻᒪᓗ ᐊᓂᖅᓵᖅᐸᒃᑕᕗᑦ ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᑦ ᓴᖅᑮᓚᐅᖅᑐᑦ ᑐᓴᒐᒃᓴᓪᓗᐊᑕᕐᓂᒃ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᓄᑦ, ᑕᒪᒃᑯᐊ ᐋᖅᑭᒋᐊᖅᑕᐅᓯᒪᔪᑦ ᐅᑯᓄᖓ ᐊᒻᒪᓗ ᐊᖏᖃᑎᒌᒍᑕᐅᓯᒪᓪᓗᑎᒃ ᐊᓯᖏᓐᓄᑦ ᐃᓚᐅᔪᓄᑦ (ᐋᖅᑭᒋᐊᕋᕐᔪᒃᑕᔭᕆᐊᓖᑦ ᑲᑎᒫᓂᒃᑯᑎᒃ):

ᐱᓪᓚᕆᐅᔪᑦ ᐅᖃᐅᓯᒃᓴᐃᑦ

- ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᖅ ᐊᔾᔨᐅᙱᑦᑑᓪᓗᓂ ᑕᕆᐅᓂᕆᓂᕐᒧᑦ ᐅᔾᔨᕐᓇᕈᑎᖃᕐᒪᑕ ᑕᐅᕙᓂ ᐅᐊᖕᓇᖅᐸᓯᐊᓂᑦ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᑕ ᖃᓄᐃᑦᑑᓂᖓ ᑕᕆᐅᖓ ᓯᑯᖃᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐃᔾᔪᓂᖓ ᓵᓐᓂᖅᓴᐅᓪᓗᓂ ᖃᓂᒋᔭᖏᓐᓂᑦ ᐃᓂᓂᑦ.
- ᐱᑕᖃᕐᓂᖓ ᐊᒻᒪᓗ ᓄᓇᐃᑦ ᐆᒪᔪᓄᑦ ᐱᒻᒪᕆᐅᓂᖏᑦ ᐱᔾᔪᑎᒃᓴᖃᖅᑎᑕᐅᔪᑦ ᐅᑯᓄᖓ:
  - ᖃᓄᐃᓕᖓᓂᖓ ᐊᓂᖅᓵᖅᐸᒃᑕᑦᑕ ᐃᖏᕐᕋᓂᖓ ᓴᖅᑮᓲᖑᖓᒪᑦ ᐊᓄᕆᕐᔪᐊᒥᒃ ᑕᐃᑲᙱᒪᑦ ᐅᐊᖕᓇᖓᓂᑦ ᓱᒃᑲᓕᐸᓪᓕᐊᓪᓗᓂ ᓂᐅᔅ ᐃᑭᕋᓴᖓᒍᑦ ᐊᔭᐅᖅᓱᓪᓗᓂ ᓯᑯᓂᑦ ᓂᒋᐊᓄᑦ ᑕᐃᑰᓇ BB
  - ᓄᓇᖓ ᐱᔭᕆᐊᑭᑎᑦᑎᖓᒪᑦ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᕆᕙᒃᑕᖏᓐᓄᑦ ᐅᐃᒍᐊᑦ ᑕᐃᑲᓂ ᓂᐅᔅ ᐃᑭᕋᓴᖓᓂᑦ ᓂᒋᐊᓄᑦ ᐃᖏᕐᕋᔪᓐᓇᐃᓪᓕᕙᒃᓗᑎᒃ ᑕᕆᐅᒥᑦ ᓯᑯᑦ ᐃᖏᕐᕋᕙᒃᑐᑦ ᑕᕆᐅᒥᑦ ᓯᑯᑦ ᑎᑯᖃᑦᑎᐊᕈᓐᓃᕐᑯᓪᓗᒍ ᓯᒥᑦ ᐃᑭᖓ
  - ᐱᑕᖃᖅᑐᑦ ᓂᕿᑦᑎᐊᕙᐃᑦ ᑕᐅᓄᙱᐅᕙᒃᐳᑦ ᐅᐊᖕᓇᖓᓂᑦ, ᐱᒋᐊᖅᓗᑎᒃ ᐆᕐᓕᖕ ᑕᕆᐅᖓᓂᑦ, ᐊᒻᒪᓗ ᐃᖏᕐᕋᓪᓗᑎᒃ ᓂᒋᐊᓂᑦ, ᐱᒋᐊᖃᑦᑕᖅᑐᑦ ᐅᐊᓇᖓᑦ ᐊᑦᑏᓐᑎᒃ
  - ᐋᖅᑭᒃᓱᖅᑕᐅᓯᒪᓂᖏᑦ ᐃᒪᐅᑉ ᐊᑖᓂᑦ ᓇᓇᐃᖅᑕᐅᓯᒪᔪᑦ ᑕᕆᐅᖑᑦᑎᐊᖏᓐᓂᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᖕᒫᖅᐸᒃᑐᖅ ᐊᒻᒪᓗ ᐃᒪᑦᑎᐊᕙᐃᑦ ᑰᖃᑦᑕᖅᑐᑦ ᑖᒃᑯᓇᖕᒪᑦ ᓯᕐᒥᓂᑦ ᐊᐅᒃᐸᓪᓕᐊᔪᓂᑦ
  - ᑕᕆᐅᓕᕆᓂᕐᒥᑦ ᐃᖏᕐᕋᓐᓂᑦ ᐃᖅᑲᖓᓂᖕᒫᖅᑎᑦᑎᐸᒃᑐᑦ ᓂᕿᑦᑦᐊᕙᖕᓂᑦ ᐱᓯᒪᔪᓂᑦ ᐃᑎᔪᓂᑦ ᑕᐅᕗᓇ ᐊᑯᑭᑦᑐᐃᑦ ᓯᖕᔭᖓᒍᑦ ᐊᒻᒪᓗ ᐃᖏᕐᕋᒃᑲᓐᓂᖃᑦᑕᖅᓱᑎᒃ ᓯᒥᑦ ᐃᑭᖓᒍᑦ

ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓃᑦ

- ᐊᕐᕌᒍᓕᒫᒧᑦ ᖃᐅᔨᓴᐃᓐᓇᕐᓃᑦ (ᓄᓇᖃᕐᕕᖓᓂᑦ) ᑕᕆᐅᒥᑦ, ᑕᕆᐅᑉ–ᓯᑯᖓ ᐊᒻᒪᓗ ᐊᓂᖅᓵᖅᐸᒃᑕᑦᑕ ᐃᓗᓕᖏᑦ ᐃᒻᒪᕆᐅᔪᑦ ᑐᑭᓯᓗᒋᑦ ᑕᐃᑲᖕᒫᖅᑐᓂᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐊᓯᔾᔨᖅᑕᕐᓂᖏᑦ ᐊᒻᒪᓗ ᐊᓯᔾᔨᕐᓂᖏᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ
- ᓯᒡᔭᒥᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ (ᑕᕆᐅᒥᑦ ᐊᒻᒪᓗ ᓄᓇᒥᑦ) ᖃᐅᔨᒪᔭᐅᓗᐊᙱᒻᒪᑕ ᐊᒻᒪᓗ ᖃᐅᔨᓴᖅᑕᐅᓗᐊᖅᓯᒪᓇᑎᒃ ᑖᒃᑯᓄᙱᓪᓚᑎᒃ ᐊᐅᒃᐸᓪᓕᐊᔪᑦ ᑰᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᑖᒃᑯᓇᖕᒪᑦ ᖃᓂᒋᔭᖏᓐᓂᑦ ᓯᕐᒥᓂᑦ ᓄᓇᐅᑉ ᖄᖓᓂᑦ ᐊᒻᒪᓗ ᐃᑎᖏᑦ, ᑲᑎᓕᖅᓱᑎᒃ ᐃᒪᖅ ᑕᐃᑲᓂ ᑲᖏᖅᓱᖕᓂᑦ ᐊᒻᒪᓗ ᑲᔪᓯᓂᕙᒃᑕᖓ ᐱᒻᒪᕆᐅᔪᖅ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ/ᐆᒪᓂᖃᖅᑎᑮᖕᓂᖅ ᐃᒪᑦᑎᐊᕙᙳᕐᕕᐅᕙᒃᑐᓂᑦ.
- ᐊᕐᕌᒍᐃᑦ ᐊᑯᓐᓂᖏᓐᓂᑦ ᐊᔾᔨᑮᙱᓐᓂᐅᕙᒃᑐᑦ ᐊᒻᒪᓗ ᑕᒻᒪᙱᑦᑎᐊᕐᓗᑎᒃ ᐋᖅᑭᙱᐊᖅᓯᓐᑦ ᓄᓇᖓᓄᑦ ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᑎᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ ᐊᒻᒪ ᐊᒃᑐᐊᖃᑦᑕᐅᑎᓂᖏᑦ ᑕᕆᐅᖅ, ᑕᕆᐅᒥᑦ ᓯᑯ ᐊᒻᒪᓗ ᐊᓂᖅᓵᖅᐸᒃᑕᕗᑦ ᐊᑐᐃᓐᓇᕈᐅᕐᑯᓪᓗᒋᑦ ᓯᕗᓂᒃᓴᑦᑎᓐᓂᑦ ᓇᓚᐅᑦᑖᖅᑕᐅᔾᔪᑎᖏᓐᓄᑦ
- ᐊᒃᑐᐊᓕᖅᑎᓪᓗᒋᑦ ᓄᓇᕐᔪᐊᑉ ᓇᑉᐸᖓᓂᑦ ᐊᓯᔾᔨᐅᑏᑦ ᐊᓂᖅᓵᖅᐸᒃᑕᑦᑕ ᐃᖏᕐᕋᕙᖕᓂᐊ ᐊᒻᒪᓗ ᐃᒪᐅᑉ ᐃᖏᕐᕋᓂᖏᑦ ᐊᔾᔨᑏᖃᑦᑕᙱᓐᓂᖏᓐᓄᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ – ᓄᓇᕐᔪᐊᒥᑦ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐊᒻᒪᓗ ᐊᒃᑐᐃᓂᖓᓄ ᓄᓇᓕᖕᓂᑦ ᓯᓚᖓᓂᑦ ᑕᐃᑲᓂ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ
- ᖃᓄᖅ ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖏᑦ ᑰᑦᑐᑦ ᑕᐃᑲᙱᑦ ᐊᑯᑭᑦᑐᓂᑦ ᐊᒻᒪᓗ ᑲᓇᑕᒥᑦ ᐊᐅᔪᐃᑦᑐᓂᒃ ᐊᓯᔾᔨᓂᐊᖅᑐᖅ ᐅᒪᔪᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖏᓂᒃ ᐱᕙᓪᓕᐊᑎᑕᐅᙱᓪᓗᓂ ᑕᕆᐅᕐᒥᑦ ᑲᑎᖅᓱᖃᑦᑕᕐᓂᖏᓐᓄᑦ
- ᐃᓱᒪᒋᔭᐅᔪᑦ ᑐᑭᓯᐅᒪᔭᐅᓂᖏᓐᓄᑦ ᐋᖅᑭᒃᐸᓪᓕᐊᖃᑦᑕᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᓯᑯᐃᔭᖃᑦᑕᕐᓂᖓᓄᑦ ᐅᐃᒍᖅ ᑭᓯᐊᓂᓕ ᐊᑑᑎᖃᙱᑦᑐᑦ ᐋᖅᑭᒃᓱᙳᐊᕐᓗᒍ ᐊᒻᒪᓗ ᓇᓚᐅᑦᑖᕐᓗᒍ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᖏᑦ ᐊᒻᒪ ᓯᑯᐃᔭᖃᑦᑕᕐᓂᖏᑦ
- ᐱᑕᖃᑦᑎᐊᖏᓐᓂᖏᓐᓄᑦ ᒪᕐᑯᖕᒧᑦ ᖃᓐᓂᕐᒧᓪᓗ ᑎᑎᖅᑲᕐᑯᑏᑦ (ᓱᕐᓗ ᑭᓯᑦ ᑲᑕᒐᖅᐸᑦ, ᑲᑎᐸᐸᓪᓕᐊᔪᑦ ᖃᓐᓂᖅᑕᐅᔪᑦ ᑕᒪᒃᑯᓇᓂ ᓯᕐᒥᓂᑦ, ᓯᑯ ᖃᓄᐃᑦᑑᖃᑦᑕᕐᓂᖓ ᑎᔭᐅᖅᑎᓪᓗᒍ, ᑰᒃᑎᓪᓗᒍ)

ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖕᒋ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖃᑎᒌᖕᓂᖅ

ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖕᒋ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖃᑎᒌᖕᓂᕐᒧᑦ ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᑦ ᓴᖅᑮᓚᐅᖅᑐᑦ ᑐᓴᒐᒃᓴᓪᓗᐊᑕᕐᓂᒃ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᓂᒃ, ᑕᒪᒃᑯᐊ ᐋᖅᑭᒋᐊᖅᑕᐅᓚᐅᖅᑐᑦ ᒪᓕᕐᑯᓪᓗᒋᑦ ᐊᒻᒪᓗ ᐊᖏᖃᑎᒌᒍᑕᐅᓪᓗᑎᒃ ᐊᓯᖏᓐᓂᑦ ᐃᓚᐅᔪᓂᑦ (ᐋᖅᑭᒋᐊᕋᕐᔪᒃᑕᔭᕆᐊᓖᑦ ᑲᑎᒫᓂᒃᑯᑎᒃ):

ᐱᓪᓚᕆᐅᔪᑦ ᐅᖃᐅᓯᒃᓴᐃᑦ

- ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒦᑦ ᐱᑕᖃᕐᓂᖅᐸᕝᕙᓪᓗᑎᒃ ᓄᓇᐃᑦ ᐆᒪᔪᓄᑦ ᐅᓄᖅᓯᕙᓪᓕᕝᕕᐅᔪᑦ ᐃᓃᑦ ᑕᐃᑲᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐊᖏᓂᖃᖅᓱᑎᒃ ᐊᒻᒪᓗ ᖃᖕᒐᒃᑯᑦ ᐅᓄᖅᓯᕙᓪᓕᓂᕐᒧᑦ ᒪᓕᖃᑦᑕᖅᑐᑦ ᐱᔭᕆᑐᔪᒃᑯᒃ ᓄᓇᖕᒐᓄᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖃᑎᒌᖕᓂᕐᓄᑦ ᐊᐅᓚᑦᑎᔪᓂᒃ
- ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖕᒋ ᓇᓗᓇᐃᔭᐅᑏᑦ ᑕᒪᓐᓇ ᖃᖕᒐᓃᑦᑐᖅ ᐃᒥᕐᓄᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᓂᐅᔪᖅ ᑕᐃᑲᙱᑦ 1998–ᒥᑦ 2015-ᒧᑦ ᐊᒻᒪᓗ ᐊᖏᓂᖕᒐ ᓅᐸᐸᓪᓕᐊᓪᓗᓂ ᐅᐊᖕᓇᒧᖕᒑᖅ.
- ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ, ᑲᓇᖕᓇᖕᒐᓂᑦ–ᐱᓇᖕᓇᖕᒐᓄᑦ, ᐅᐊᖕᓇᖕᒐᓂᑦ–ᓂᒋᐊᓄᑦ, ᐊᐅᒃᑲᕐᓂᖅ ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖕᒋᓐᓄᑦ ᐱᔾᔪᑎᓕᒃ ᐊᔾᔨᒋᙱᑦᑎᐊᖅᑐᓂᒃ ᐊᑯᓐᓂᖅᓱᖅᓂᒃ ᐊᐅᓚᑦᑎᔾᔪᑎᓄᑦ ᓱᕐᓗ ᓂᕿᑦᑎᐊᕙᐃᑦ ᐱᑕᖃᕐᓂᖕᒋᓐᓄᑦ, ᐃᖕᒋᕐᕋᓂᖕᒐᓄᑦ ᖃᓄᐃᓕᖕᒐᓂᐅᕙᒃᑐᖅ, ᓴᙱᓂᖕᒐ ᐋᖅᑭᒃᓯᖅᑕᐅᓯᒪᓂᖕᒋᓐᓄᑦ.
- ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖅ ᓱᓕ ᑭᕕᕝᕕᐅᕙᒃᑐᖅ ᐃᓄᐃᑦ ᐱᓕᕆᓂᖕᒋᓐᓂᑦ CO_2; ᑕᑯᔭᐊᖃᑦᑕᖅᑐᑦ ᓴᖅᑭᔫᖅᑎᑦᑎᔪᑦ ᑕᒪᓐᓇ ᐸᐅᒃᓴᖅ (CO_2) ᐃᓂᖕᒋᑦ ᐊᒃᑐᐃᕐᔪᐊᖅᓯᒪᖕᒪᑦ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ ᑕᐃᒪᐃᓐᓂᕐᓄᑦ ᐃᓚᐅᓪᓗᑎᒃ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᖕᒐ ᑕᕆᐅᒥᑦ ᐃᒥᖅ, ᓄᓇᐃᑦ ᐆᒪᔪᓄᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ, ᐃᒪᐅᑉ ᓂᒡᓕᓇᕐᓂᖕᒐ, ᑕᕆᐅᒥᑦ ᓯᑯ ᐊᒻᒪᓗ ᐃᒪᐃᑦ ᑲᑎᖃᑦᑕᕐᓂᖕᒋᑦ.
- ᓇᓗᓇᐃᒃᑯᑕᑦ ᐅᕕᓂᖕᒧᑦ ᐆᓐᓇᖅᑐᓄᑦ ᑕᑯᔭᐅᓯᒪᔪᖅ ᑕᐃᑲᓂ ᓄᓇᒥᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᒥᑦ, ᑭᓯᐊᓂᓕ ᐊᒃᑐᐃᓂᖕᒋᑦ ᐆᒪᔪᑦ ᓇᔪᒐᖕᒋᓐᓄᑦ ᓱᓕ ᖃᐅᔨᒪᓇᖕᒋᑦᑐᑦ.
- ᐆᒪᓂᖃᖅᑐᑦ ᐊᔾᔨᒌᖕᒋᑦᑐᑦ ᑕᐃᑲᓂ ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ–ᓇᖕᒥᓂᖅ ᐅᖃᐅᓯᐅᔪᖅ

ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓃᑦ

- ᓱᓕ ᖃᐅᔨᒪᓇᖕᒋᑦᑐᖅ ᒫᓐᓇᓕᔫᖅ ᓄᖑᕐᐸᓪᓕᐊᓂᖕᒋᑦ ᐃᒪᐅᑉ ᖃᖕᒐᓂᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖕᒋ ᐊᒻᒪᓗ ᐅᐊᖕᓇᒧᖕᒐᐅᓕᕐᓂᖕᒐ ᐊᑯᓂᐅᔪᒃᑯᑦ ᖃᓄᐃᓕᖕᒐᕙᖕᓂᖕᒐᓄᑦ ᐋᖅᑭᒃᓯᒪᔪᖅ ᐅᕝᕙᓘᓐᓃᑦ ᒫᓐᓇᓚᐅᑲᒃ ᑲᒪᓇᖅᑑᔪᖅ, ᐊᒻᒪᓗ ᑭᓯᑦ ᐊᐅᓚᑦᑎᕙᑦ ᑕᒪᑐᒥᖕᒐ (ᐊᓯᔾᔨᖅᑕᖃᑦᑕᕐᓂᖕᒐᓄᑦ ᐅᐃᒍᕐᒥᑦ ᖃᓄᐃᓕᖕᒐᓂᐅᕙᒃᑐᖅ)
- ᐱᐅᓂᖅᓴᑦ ᐱᑕᖃᕐᓂᖕᒋᓐᓄᑦ ᐊᒻᒪᓗ ᑎᑎᖅᑲᕐᑯᑏᑦ ᑲᑎᖅᓱᖅᑕᐅᑎᓪᓗᒋᑦ ᐊᐅᓚᔾᔪᓯᕐᓄᑦ ᖃᐅᔨᔭᐅᔪᓄᑦ ᐱᑕᖃᕆᐊᓕᒃ ᐋᖅᑭᑦᑎᐊᕐᑯᓪᓗᒋᑦ ᐊᑯᓂᐅᔪᒃᑯᑦ ᖃᓄᐃᓕᖕᒐᓂᐅᕙᒃᑐᑦ, ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᐱᑕᖃᕐᓂᖕᒋᓐᓄᑦ ᐊᔾᔨᒌᒋᖃᑦᑕᖅᑐᑦ ᐊᐅᓚᑦᑎᔪᓪᓗ.
- ᑐᑭᓯᐅᒪᑦᑎᐊᕐᓂᖅᓴᐅᓕᕐᓗᒋᑦ ᐱᑕᖃᕐᓂᖕᒋᓐᓄᑦ ᐊᒻᒪᓗ ᖃᓯᔾᔨᖃᑦᑕᕐᓂᖕᒋᓐᓄᑦ ᐊᐅᓚᑦᑎᔪᑦ ᑕᐃᑲᓂ OA ᐊᒻᒪᓗ OA ᐊᒃᑐᐃᓂᖕᒋᑦ ᑕᐃᑲᓂ ᐆᒪᔪᑦ ᓇᔪᒐᖕᒋᓐᓂᑦ ᑕᐃᒪᐃᑦᑕᕆᐊᖃᕈᓂ.
- ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖕᒋᐊᕐᔪᓐᓂᖕᒋᓐᓄᑦ ᐊᔾᔨᒌᖕᒋᓐᓂᖕᒋᑦ ᖃᐅᔭᖅᑕᐅᓗᐊᖅᓯᒪᖕᒋᒻᒥᔪᖅ

ᐅᖃᐅᓯᒃᓴᐃᑦ

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᑕᐃᒍᓯᖕᒐ "ᓄᓇᐃᑦ ᐆᒪᔪᓄᓪᓗ ᑲᔪᓯᕙᓪᓕᐊᓂᕆᕙᒃᑕᖕᒋᑦ" ᐊᖏᔫᔪᖅ ᐊᒻᒪᓗ ᑐᒃᓯᕋᖅᓯᒪᓪᓗᓂ ᐅᖃᐅᓯᑦ ᑕᒻᒪᖅᓯᒪᖕᒋᒋᐊᓪᓚᖃᑦᑕᕐᓗᑎᒃ. ᐃᓚᐅᒧᖅ ᑐᒃᓯᕋᓚᐅᕐᒥᔪᖅ ᑕᐃᒍᓯᖕᒐ ᐃᒪᑦᑎᐊᕙᒃ ᓱᖅᑯᐃᓇᖅᓯᑎᑕᐅᒃᑲᓐᓂᕐᓗᓂ. ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᖅᓱᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᐱᓕᕆᓂᐊᕐᓂᖕᒋᓐᓂᒃ ᐅᖃᐅᓯᖅᑕᖕᒋᓐᓂᒃ.

ᐃᓚᐅᔪᖅ ᐃᓱᒪᔫᑎᖃᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᑭᖑᓪᓖᑦ ᑐᓴᒐᒃᓴᓪᓗᐊᑕᑦ ᑐᑭᓯᐅᕆᒃᑲᓐᓂᕐᓂᐅᔭᒪᑕ; ᖃᐅᔨᓴᕈᑎᖕᒋᑦ ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖕᒋᓐᓄᑦ ᐋᖅᑭᒃᑕᐅᓯᒪᖕᑕ ᒪᕐᕉᒃ ᐊᕐᕋᒍᓄᑦ ᑕᐃᒪᐃᒻᒪᑦ "ᐅᓄᕈᓐᓃᖅᐸᓪᓕᐊᔪᑦ" ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖕᒋ ᐱᔾᔪᑕᐅᑐᐃᓐᓇᕆᐊᓕᒃ ᐊᓯᔾᔨᖃᑦᑕᕐᓂᖕᒋᓐᓄᑦ. ᐃᓚᐅᔪᖅ ᑕᐃᑲᙱᑦ ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᓂᑦ ᐊᐃᕙᓚᐅᖅᑐᖅ ᓇᓗᓇᐃᒃᑯᑕᕐᒥᒃ, ᐅᖃᖅᓱᓂ ᐅᖃᐅᓯᐅᔪᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᒥᑦ ᐱᐊᓂᒃᓯᒪᙱᒻᒪᑕ; ᖃᐅᔨᓴᕐᑯᑏᑦ ᐊᒻᒪᓗ ᖃᖕᒐᑦᑕᖅᑎᑕᐅᓯᒪᔪᑦ ᑎᑎᖅᑲᕐᑯᑎᖕᒋᑦ ᐅᒃᐱᖅᓇᖅᑑᖕᒪᑕ (ᐃᓚᖕᒋᑦ ᐅᔾᔨᖅᓱᕆᐊᓖᑦ ᐃᓚᔭᐅᔭᕆᐊᖃᖅᑐᑦ). ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑏᑦ ᐋᖅᑭᒋᐊᖅᑕᐅᓪᓗᐊᖅᑐᑦ ᓴᖅᑭᔫᖅᑎᑦᑎᓗᑎᒃ ᑕᒪᑐᒥᖕᒐ.

ᐃᖅᑲᕐᒥᐅᑕᑦ, ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ

ᐃᖅᑲᕐᒥᐅᑕᑦ, ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᐃᖃᓗᖕᓄᑦ ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᑦ ᓴᖅᑮᓚᐅᖅᑐᑦ ᑐᓴᒐᒃᓴᓪᓗᐊᑕᕐᓂᒃ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ, ᑕᒪᒃᑯᐊ ᐋᖅᑭᒋᐊᖅᑕᐅᓚᐅᖅᑐᑦ ᐅᑯᓄᖓ ᐊᒻᒪᓗ ᐊᖏᖃᑎᒌᒍᑕᐅᓪᓗᑎᒃ ᐊᓯᖏᓐᓄᑦ ᐃᓚᐅᔪᓄᑦ (ᐋᖅᑭᒋᐊᑖᕐᔪᒃᑕᔭᕆᐊᓖᑦ ᑲᑎᒫᓂᒃᑯᑎᒃ):

ᐱᓪᓚᕆᐅᔪᑦ ᐅᖃᐅᓯᒃᓴᐃᑦ

- ᐊᓯᔾᔨᕐᓃᑦ ᑕᕆᐅᓕᕆᓂᕐᒧᑦ ᖃᓄᐃᓕᖓᓂᐅᔪᓄᑦ ᓴᖅᑮᑐᐃᓐᓇᕆᐊᖃᕐᒪᑦ ᓃᓪᓗᑎᒃ ᑭᒥᓐᓂᖅᓴᓄᑦ ᑯᒪᕈᐃᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᐱᖃᑦᑎᐊᖏᓐᓂᖅᓴᐅᔪᑦ ᐃᒥᕐᒧᑦ ᐃᓚᓕᐅᑎᑐᐃᓐᓇᕈᓐᓇᕐᓂᖅᓴᐅᔪᑦ ᑖᒃᑯᓇᖓᑦ ᐅᑭᐅᖅᑕᑑᑉ ᕐᑯᑦᑎᖕᓂᖓᓂᑦ ᐆᒪᔪᕐᑯᑎᖏᑕ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ. ᓃᓐᓂᑦ ᑕᑯᔭᐅᔪᑦ ᐊᓯᖏᓐᓂᑦ ᐊᕐᕋᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂ ᓯᑯᖃᖅᑎᓪᓗᒍ ᐃᓂᓂᑦ (ᓲᕐᓗ ᓛᐸᑐᐊ ᑕᕆᐅᖓᓂᑦ ᐊᒻᒪᓗ ᑎᑦᑯ ᑲᖏᖅᓱᖓᓂᑦ) ᐊᕗᖓᑲᓪᓛᓗᒃ ᐊᒃᑐᐃᓂᖃᕋᔭᕐᒪᑕ ᑕᒪᒃᑯᓄᖓ ᐆᒪᕆᓇᖕᓂᖏᓐᓄᑦ ᓂᕆᔭᐅᕙᒃᑐᑦ ᖁᕝᕙᓯᓕᓈᓄᑦ.
- ᐃᔭᕈᕙᐅᔭᑐᑦ ᐊᖏᑎᒋᔪᑦ ᐆᔭᐅᔭᑦ ᐱᕈᓲᑦ ᓂᕿᐅᕙᖕᒪᑕ ᑖᒃᓄᖓ ᓂᕆᔭᐅᕙᒃᑐᑦ ᖁᕝᕙᓯᓕᓈᓄᑦ ᐊᒻᒪᓗ ᐋᖅᑭᒃᕙᒃᓱᑎᒃ ᓇᔪᒐᕐᒥᒃ ᐅᖅᑯᐃᓯᒪᕝᕕᖕᓂᒃ ᐊᖑᓇᓱᒃᑎᓂᑦ, ᒪᓕᖕᓂᑦ, ᐃᖏᕐᕋᓂᕐᓂᑦ ᑭᓯᐊᓂᓕ ᑐᓴᐅᒪᔾᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᓇᓃᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᑭᒡᓕᖃᕐᒪᑦ.
- ᑯᒪᕈᐃᑦ ᐱᑕᖃᕐᓂᖏᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᔾᔨᐸᓗᒋᖕᒪᒍ ᓂᒋᖅᐸᓯᐊᓂᑦ ᐊᓛᔅᑲᐅᑉ ᑕᕆᐅᖓᓂᑦ ᐊᒻᒪᓗ ᖁᕝᕙᓯᖕᓂᖅᓴᐅᓪᓗᑎᒃ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᓗᒃᑖᖓᓂᑦ.
- ᐃᖅᑲᕐᒥᐅᑕᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᓐᓂᖏᓐᓄᑦ ᐊᔾᔨᒌᙱᓐᓂᖏᑦ ᑕᐃᑲᓂ ᐱᓇᖕᓇᖓᓂᑦ ᐅᐊᖕᓇᒥᑦ ᐃᒥᕐᒥᑦ ᖁᕝᕙᓯᖕᓂᖅᓴᐅᓪᓗᑎᒃ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᓗᒃᑖᖓᓂᑦ.
- ᐃᖅᑲᕐᒥᐅᑕᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᖏᐊᕐᔪᖅᑲᑦᑕᕐᓂᖏᓐᓄᑦ ᖃᐅᔨᒪᔭᐅᙱᑦᑐᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᖃᐅᔨᓯᒪᔪᑦ ᐊᒻᒪᓗ ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ.
- ᐅᓄᖅᓯᕙᓪᓕᐊᔪᑦ (ᐅᓄᖅᓯᕙᓪᓕᐊᓚᐅᑲᒃᑐᑦ) ᑕᐃᑲᓂ ᐃᒪᐅᑉ ᖀᖓᓃᖃᑦᑕᖅᑐᑦ–ᐃᖅᑲᕐᒥᐅᑕᑦ ᐃᒪᑦᑎᐊᕙᙳᕐᕕᐅᕙᒃᑐᓂᑦ (ᓲᕐᓗ ᑐᓂᔭᐅᓂᖏᑦ ᐆᒪᕆᓇᖕᓂᕐᒥᒃ ᓂᕿᑎᒍᑦ) ᐱᔾᔪᑕᐅᓪᓗᑎᒃ ᐊᓯᓕᕐᓃᑦ ᑕᐃᑲᓂ ᐆᒪᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᖃᓄᐃᓕᖓᓂᐅᔪᑦ, ᓲᕐᓗ ᑕᕆᐅᑉ–ᓯᑯᖓᑕ ᖃᓄᐃᓕᖓᓂᖏᑦ ᐊᒻᒪᓗ ᖃᖓᒃᑯᑦ ᐆᔭᐅᔭᑦ ᐃᕈᖅᓱᖅ ᐊᑦᑕᑕᖃᑦᑕᕐᒪᖔᑕ.
- ᐆᒪᕐᔪᐊᑦ (*Boreogadus saida*) ᐆᒪᔪᑦ ᐅᔾᔨᒌᙱᐊᕐᔪᓪᓗᐊᑕᖅᑐᓄᑦ ᓂᕿᓗᒃᑖᓄᑦ ᐊᒻᒪᓗ ᐊᓯᔾᔨᐅᑕᐅᑐᐃᓐᓇᕆᐊᓕᖕᓄᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ ᓇᓃᖃᑦᑕᕐᓂᖏᓐᓄᓪᓘᓐᓃᑦ ᓴᖅᑮᔪᓐᓇᖅᑐᑦ ᐊᕗᖓᑲᓪᓛᓗᒃ ᐊᒃᑐᐃᓂᕐᒥᒃ ᑕᒪᒃᑯᓄᖓ ᐆᒪᕆᓇᖅᑐᓄᑦ ᑖᒃᑯᓇᓂ ᓂᕆᔭᐅᕙᒃᑐᑦ ᖁᕝᕙᓯᓕᓈᓂᑦ.
- ᑕᕆᐅᕐᒥᐅᑕᑦ ᐃᖃᓗᐃᑦ ᐱᒻᒪᕆᐅᔪᑦ ᐊᓐᓇᐅᒪᔪᓐᓇᕐᓂᕐᒧᑦ ᓄᓇᓕᖕᓄᑦ. ᐱᑕᖃᑦᑎᐊᕐᒪᖔᑕ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᖃᐅᔨᒪᔭᐅᙱᑦᑐᑦ.
- ᐅᐊᖕᓇᒧᑦ ᐊᖏᒡᓕᕙᓪᓕᐊᑎᓪᓗᒍ ᓂᐅᕐᕈᑎᒃᓴᓄᑦ ᐃᖃᓗᒐᓱᖕᓂᖅ ᑕᒪᒃᑯᓄᖓ ᐊᑯᑭᑦᑐᑦ ᖃᓕᕋᓕᖏᓐᓄᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᓴᖅᑮᓯᒪᔪᖅ ᑕᒪᕐᒦᖕᓄᑦ ᐱᕕᒥᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᓄᓇᓕᖕᓄᑦ ᐊᒻᒪᓗ ᖁᐊᖅᓵᕐᓇᑐᐃᓐᓇᕆᐊᖃᕐᓗᓂ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᒐᖏᓐᓂᑦ. ᐊᖏᒡᓕᒋᐊᖅᑳᖅᑎᓐᓇᒋᑦ ᑕᒪᑐᒧᖓ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᒪᓂᒃᑲᓐᓂᑦ ᑕᒪᒃᑯᓄᖓ ᐱᑕᖃᕐᓂᖓᓄᑦ ᐊᒃᑐᐊᔪᑦ ᐊᑐᓕᕐᑯᔭᐅᔪᑦ.

ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓃᑦ

- ᖃᐅᔨᒪᔭᐅᙱᑦᑐᑦ ᓯᒡᔭᖓᓃᖃᑦᑕᕐᒪᖔᑕ ᐊᒻᒪᓗ ᐱᑕᖃᕐᒪᖔᑕ ᑯᒪᕈᐃᑦ, ᐃᖅᑲᕐᒥᐅᑕᑦ, ᐃᖃᓗᐃᑦ ᐊᒻᒪᓗ ᑯᒪᕈᐃᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ.
- ᐱᑕᖃᑦᑎᐊᙱᓐᓂᖓᓄᑦ ᐃᓅᓯᖏᓐᓄᑦ ᐅᓂᒃᑳᑦ ᑕᒪᒃᑯᓄᖓ ᐃᖅᑲᕐᒥᐅᑕᑦ, ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ ᑖᒃᑯᓇᓂ ᐊᕋᒍᓂᑦ ᖃᓅᖃᑦᑕᕐᒪᖔᑕ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ.

- ᑭᒡᓕᖅᑐᑦ ᖃᐅᔨᒪᓃᑦ ᑕᒪᒃᑯᓄᖓ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ, ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂ ᐅᖓᓯᖕᓂᖏᑦ ᐊᒻᒪᓗ ᐃᖅᑲᖓᓂ ᐃᒪᐅᓪᓗ ᖃᖓᒍᑦ ᐃᖏᕐᕋᖃᑦᑕᕐᒪᖔᑕ ᑯᒪᕈᐃᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐅᒃᑭᐅᖅᑕᖅᑐᒥᓗ.
- ᑭᒡᓕᖅᑐᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᐃᖏᕐᕋᓂᖏᑦ ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖏᑦ ᑖᒃᑯᓇᓂ ᓯᒡᔭᖓᓂᑦ ᐊᒻᒪᓗ ᐃᒪᐃᓐᓇᕐᒥᑦ ᐅᓄᕐᓂᖏᑦ ᐊᑯᑭᑦᑐᑦ ᖃᓕᕋᓕᖏᑦ ᑲᓇᑕᒥᑦ ᐊᑯᑭᑦᑐᓂᓪᓗ.
- ᐅᓄᖅᓯᒋᐊᕐᓗᒋᑦ ᐊᕗᖓᑲᓪᓛᓗᒃ ᐊᒃᑐᐃᓂᕐᓄᑦ ᐊᓯᔾᔨᐅᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐆᒪᔪᑦ ᓇᔪᖓᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐊᐅᓚᔾᔪᓯᖏᓐᓄᑦ ᖃᓄᐃᓕᖓᓃᑦ ᑕᒪᒃᑯᓄᖓ ᐊᑦᑎᖕᓂᖅᓴᐃᑦ ᓂᕆᔭᐅᕙᒃᑐᑦ ᕐᑯᕝᕙᓯᓕᕆᓄᑦ ᑎᑭᓪᓗᒍ ᕐᑯᕝᕙᓯᖕᓂᖅᓴᓄᑦ ᓂᕆᔭᐅᕙᒃᑐᑦ ᕐᑯᕝᕙᓯᓕᕆᓄᑦ.
- ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᐱᔾᔪᑕᐅᔪᑦ ᐊᒻᒪᓗ ᖃᖏᓂᖓ ᐅᓯᔾᔨᐅᑎᐅᑉ ᑖᒃᑯᓇᓂ ᖃᖓᓃᖃᑦᑕᖅᑐᑦ–ᐃᖅᑲᕐᒥᐅᑕᑦ ᐃᒪᑦᑎᐊᕙᖕᒍᕐᕕᐅᕙᒃᑐᓂᑦ ᓴᖅᑮᒪᓪᓗᑎᓪᓗ ᐊᒃᑐᐃᓂᕐᓂᒃ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐆᒪᔪᑦ ᓇᔪᖓᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᖓᖏᓐᓂᑦ.
- ᐱᑕᖃᑎᑦᑎᐊᖏᓪᓚᓇᒃᑐᑦ ᑐᓴᐅᔾᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐆᒪᔪᑦ ᓇᔪᖓᖏᑦᑕ ᓯᓚᑎᖏᓐᓄᑦ ᐊᒻᒪᓗ ᓇᓃᓐᓂᖏᑦ ᐅᑭᐅᑦᑕᖅᑐᒥᑦ ᑭᖑᒃᐸᐃᑦ (*Pandalus borealis*) ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᕿᒥᕐᒥᑦ ᐊᑐᖅᑎᑦᑎᖏᑦᑐᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ–ᑐᖕᒐᕙᓪᓕᑦ ᐊᐅᓚᑦᑎᓃᑦ ᓯᕗᓂᒃᓴᑦᑎᓐᓂᑦ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᑕᐅᕙᓂ.

ᐅᖃᐅᓯᒃᓴᐃᑦ

ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᖕᒐᔪᑦ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᑭᖑᒃᐸᐃᑦ ᐃᓚᐅᑎᑕᐅᔭᕆᐊᖃᕐᒪᑕ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᓂᑦ.

ᑲᑎᖕᒐᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐊᑐᕐᓂᖏᑦ ᑕᐃᒨᓯᕐᒥᒃ "ᓂᐅᕐᕈᑎᒃᓴᓂᒃ ᐃᖃᓗᒐᓯᖕᓂᖅ" ᑕᐃᑲᓂ ᑭᖑᓪᓕᖅᐹᓂᑦ ᑐᓴᒐᒃᓴᓪᓗᐊᑕᑦ ᓇᓗᓇᐃᒃᑯᑕᖏᓐᓂᑦ. ᐃᓚᖏᑦ ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᐱᑕᖃᕆᐊᖃᕐᓂᖓᓂᒃ ᐅᔾᔨᒌᙱᓂᕋᐅᔪᓂᒃ ᒥᑭᑦᑐᑎᒍᑦ ᐊᒻᒪᓗ ᐊᖏᔪᑎᒍᑦ ᐃᖃᓗᓕᕆᓃᑦ. ᐊᑐᓕᕐᑯᔭᓚᐅᖅᑐᖅ ᐊᖏᒡᓕᒋᐊᕐᓗᒍ ᐃᓚᓕᐅᑎᓗᒋᑦ ᓄᓇᓖᑦ, ᒥᑭᑦᑐᑎᒍᑦ, ᐊᖏᔪᑎᒍᑦ ᐅᕐᑰᑕᖅᒍᐊᒥᑦ. ᐊᓯᖏᑦ ᐃᓚᐅᔪᑦ ᐃᖅᑲᐃᓯᒋᐊᓚᐅᖅᑐᑦ ᑲᑎᖕᒐᔪᓂᒃ ᐃᓱᒪᑦᑎᐊᕐᑯᓪᓗᒋᑦ ᐅᖃᐅᓯᖃᖅᑎᓪᓗᒋᑦ ᕐᑯᐊᖅᓵᕐᓇᕈᓐᓇᕐᓂᖏᓐᓂᒃ ᓂᐅᕐᕈᑎᒃᓴᓂᒃ ᐃᖃᓗᒐᓯᖕᓂᑦ. ᐅᖃᐅᓯᖅ ᑖᒃᑯᓄᖕᒐᓪᓚᑎᒃ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᓂᕐᔪᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᑭᓯᐊᓂ ᓄᓗᓇᐃᔭᐅᑏᑦ ᐊᑐᐃᓐᓇᐅᒍᑎᒃ. ᐱᐅᓗᐊᖏᑦᑐᑦ ᐅᖃᐅᓯᑦ ᕐᑯᐊᖅᓵᕐᓇᖅᑐᑦ ᓈᒻᒪᖏᓕᐅᕈᑕᐅᑐᐃᓐᓇᕆᐊᓖᑦ ᐊᑕᖏᓗᒃᑖᕐᓗᒍ ᓴᓇᕝᕕᖕᒧᑦ ᐊᑐᖅᑕᐅᓪᓗᐊᖏᑦᑐᑦ ᐃᒪᐃᓐᓂᖓᓄᑦ ᒪᓕᑦᑎᐊᖏᑦᑐᑦ ᐃᓄᐃᑦ ᐱᔪᓐᓇᐅᑎᖏᓐᓂᒃ ᐊᑯᓂᐅᔪᒃᑯᑦ ᑮᓇᐅᔭᑎᒍᑦ ᐱᓕᕆᓂᕐᒧᑦ ᐃᓗᐊᓂᑦ ᔭᒐᐃᑦᑕᐃᓕᒪᓂᕐᒥᒃ ᑮᓇᐅᔭᓂᒃ. ᐅᖃᒃᑲᓐᓂᕐᓗᒍ, ᐱᓕᕆᐊᖑᔪᖅ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᓂᒃᑳᑦ ᐃᒪᐃᑦᑕᐃᓕᓗᑎᒃ ᐅᕝᕙᓘᓐᓃᑦ ᐊᐅᓚᑦᑎᑦᑕᐃᓕᓗᑎᒃ ᓂᐅᕐᕈᑎᒃᓴᓂᒃ ᐃᖃᓗᒐᓯᖕᓂᕐᒧᑦ, ᑭᓯᐊᓂᓕ ᓇᓗᓇᐃᔭᐃᓗᑎᒃ ᑖᒃᑯᓇᖕᒐᓪᓚᑎᒃ ᓱᕋᐃᔪᓐᓇᑐᐃᓐᓇᕆᐊᖃᕐᓂᖏᓐᓄᑦ. ᐱᑕᖃᖅᑐᖅ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ–ᑐᖕᒐᕙᖃᖅᑐᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐊᑯᓂᐅᔪᒃᑯᑦ ᓂᕿᒃᓴᖅᓯᐅᕐᓂᕐᒧᑦ ᐊᖏᔫᓗᐊᕈᓂ ᒥᑭᑦᑑᓗᐊᕈᓂ ᐃᖃᓗᓕᕆᓂᖅ. ᑲᑎᖕᒐᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᐱᑕᖃᑦᑎᐊᕐᓂᖓᓂᒃ ᓇᓗᓇᐃᒃᑯᑕᓂᒃ ᑕᒪᓐᓇ ᓱᕋᐃᔭᐃᓂᖅ ᓇᔪᖓᕐᓂᒃ ᑖᒃᑯᓇᖕᒐᑦ ᐃᖅᑲᖓᓂᑦ ᒪᑦᑎᑦᑕᐅᑎᓂᒃ ᑲᓕᖃᑦᑕᖅᑐᑦ, ᐊᒻᒪᓗ ᐊᖏᔪᒥᒃ ᐱᔭᐅᔪᒪᖕᒋᑦᑐᓂᒃ ᐱᑕᖃᖃᑦᑕᖅᓱᓂ ᐊᑯᑭᑦᑐᑦ ᐃᖃᓗᒃᔪᐊᖏᓐᓂᒃ ᑕᑭᔪᑦ ᒪᑦᑎᑦᑕᐅᑏᑦ ᐃᓱᒪᓗᒃᓴᐅᑕᐅᓂᖏᓐᓄᑦ, ᐊᒻᒪᓗ ᑕᒪᒃᑯᐊ ᑎᑎᕋᖅᑕᐅᓯᒪᓪᓗᐊᖅᑐᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᒥᑦ ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR).

ᐃᓚᐅᔪᖅ ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᖅ ᐃᓚᖏᑦ ᐱᒻᒪᕆᐅᔪᑦ ᑎᒃᑯᐊᖅᑐᖅᑕᐅᔪᑦ ᐱᑕᖃᖅᑎᑦᑎᑦᑎᐊᖏᒻᒪᑕ ᑖᒃᑯᓇᖕᒐᓪᓚᑎᐅᒐᓗᐊᕐᒪᖔᑕ (ᓲᕐᓗ ᐅᖃᐅᓯᖃᖅᑐᑦ ᑕᕆᐅᓕᕆᓂᕐᒥᒃ ᖃᓄᐃᓕᖓᓂᖓᓂᒃ, ᑕᕆᐅᒥᑦ ᓯᑰᑉ ᖃᓄᐃᓕᖓᓂᖏᑦ, ᐊᓯᖏᓪᓗ). ᑲᑎᖕᒐᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑲᒪᒋᓗᒋᑦ ᐃᓱᒪᓘᑕᐅᔪᑦ ᐃᒪᓯᓗᑎᒃ ᐊᔾᔨᐅᔪᓂᒃ ᓱᖅᑯᐃᓇᖅᓯᕐᑯᓪᓗᒋᑦ. ᑕᒪᒃᑯᐊ ᐃᓚᓕᐅᔾᔭᐅᓂᐊᖅᑐᑦ ᑲᑎᒫᓂᒃᑯᑎᒃ.

ᐳᐃᔨᑦ, ᓇᓄᐃᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᑦ

ᐳᐃᔨᑦ, ᓇᓄᐃᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᓄᑦ ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᖕᒐᔪᑦ ᓴᖅᑮᓚᐅᖅᑐᑦ ᑐᓴᒐᒃᓴᓪᓗᐊᑕᕐᓂᒃ, ᐊᒻᒪᓗ ᑕᒪᒃᑯᐊ ᐋᖅᑭᒋᐊᖅᑕᐅᓚᐅᖅᑐᑦ ᐅᑯᓂᖓ ᐊᑭᖃᑎᒌᒍᑕᐅᓚᐅᖅᑎᓪᓗᒋᑦ ᐊᓯᖏᓐᓄᑦ ᐃᓚᐅᔪᓄᑦ (ᐋᖅᑭᒋᐊᕋᕐᔪᒃᑕᐅᓗᑎᒃ ᐅᖃᐅᓯᖏᓪᓗ ᐋᖅᑭᒋᐊᖅᑕᐅᓗᑎᒃ ᑲᑎᒫᓂᒃᓯᒪᓕᕈᑎᒃ):

ᐱᓪᓚᕆᐅᔪᑦ ᐅᖃᐅᓯᒃᓴᐃᑦ

- ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᖅ ᐱᒻᒪᕆᐅᔪᖅ ᓇᔪᒐᐅᓪᓗᓂ ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᓄᑦ ᐊᒻᒪᓗ ᐳᐃᔨᓄᑦ ᓱᖃᐃᒻᒪ ᓂᕐᒪᔪᒡᕕᐅᖃᑦᑕᕈᓐᓇᕐᒪᑦ. ᐊᕐᕋᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂ ᐱᒻᒪᕆᐅᔪᑦ ᐊᒥᓱᒐᓚᖕᓄᑦ ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᓄᑦ ᐊᒻᒪᓗ ᐳᐃᒡᓄᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᖃᑦᑕᖅᑐᑦ ᑕᐃᑲᓂᓗᒃᑖᖅ ᐊᖏᓂᖅᓴᑎᒍᑦ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ. ᐊᒥᓱᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᖃᑦᑕᖅᑐᑦ ᐱᖅᑯᓯᒃᑯᑦ ᐊᒻᒪᓗ ᑮᓇᐅᔭᑎᒍᑦ ᐱᒻᒪᕆᐅᔪᑦ ᑕᐅᕙᓂᓗᒃᑖᖅ.

- ᐱᒻᒪᕆᐅᓪᓗᓂ ᐅᑮᕝᕕᐅᓲᖅ ᐳᐃᒡᓄᑦ (ᖃᑯᖅᑕᑦ ᕿᓚᓗᒐᑦ, ᑑᒐᓖᑦ ᕿᓚᓗᒐᑦ, ᐊᐃᕕᑦ, ᓇᑦᑏᑦ) ᐱᓗᐊᖅᑐᒥᒃ ᓱᖃᐃᒻᒪ ᐊᐅᒃᑲᕐᓂᖅ ᓯᑯᓯᒪᙱᓐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᓂᕐᒪᕝᕕᐅᔪᓐᓇᖅᑐᓄᑦ ᐅᐸᒍᓐᓇᖅᑎᑦᑎᖕᒪᑕ.

- ᖃᓂᒋᔭᓃᑦᑐᑦ ᓯᒡᔭᐃᑦ ᐊᒻᒪᓗ ᑲᖏᖅᓱᐃᑦ ᐱᒻᒪᕆᐅᔪᑦ ᑑᒐᓕᖕᓄᑦ ᕿᓚᓗᒐᕐᓄᑦ ᐊᒻᒪ ᐊᐃᑯᕐᓄᑦ, ᓇᓄᕐᓄᓪᓗ ᐊᐅᔭᒃᑯᑦ. ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᑦ ᐊᒥᓱᐊᓘᖃᑦᑕᖅᑐᑦ ᑕᐃᑲᓂᓗᒃᑖᖅ ᐃᓂᒥᑦ ᐊᐅᔭᐃᑦ ᑕᖅᑭᖏᓐᓂᑦ, ᐊᒻᒪᓗ ᐊᖏᔫᔪᑦ ᐃᕙᕝᕕᐅᕙᒃᑐᑦ ᓄᓇᕐᑯᑎᖏᑦ ᓯᒡᔭᖏᓐᓂᑦ ᓄᓇᐃᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᖏᓐᓂᑦ.

- ᑭᒡᓕᓕᕐᓂᒃ ᖃᐅᔨᒪᓂᖅᑕᖃᖅᑐᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ ᐋᖅᑭᒃᓯᒪᓂᖏᓐᓄᑦ, ᓇᓃᓐᓂᖏᓐᓄᑦ, ᓇᐃᓴᐅᑎᖏᑦ, ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑦ ᓯᓚᑎᖏᓐᓄᓪᓗ ᓇᐃᓴᐅᑎᖏᑦ ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᓄᑦ ᐊᒻᒪᓗ ᐳᐃᔨᓄᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᖃᑦᑕᖅᑐᑦ ᑕᐃᑲᓃᖃᑦᑕᖅᑐᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ. ᑐᓴᐅᒪᔾᔪᑎᖃᓇᐊᓖᑦ ᐃᑲᔪᖅᓯᕐᑯᓪᓗᒋᑦ ᔭᒐᐃᑦᑕᐃᓕᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐊᑯᓂᐅᔪᒃᑯᑦ ᐊᑐᖅᑕᐅᔪᓐᓇᕐᑯᓪᓗᒋᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᖃᑦᑕᖅᑐᑦ/ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᒐᖏᓐᓂᑦ.

- ᑎᖕᒥᐊᑦ ᐊᒻᒪᓗ ᐳᐃᓖᑦ ᓇᓗᓇᐃᒃᑯᑕᐅᒧᑦ ᑕᒪᑐᒧᖓ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᒐᖏᓐᓂᑦ ᐊᓯᔾᔨᐅᑎᓄᑦ; ᑲᑎᖃᑦᑕᕐᒪᑕ ᐃᓂᓂᑦ ᐅᓄᕐᓂᖅᓴᐅᓪᓗᑎᒃ ᐅᓄᖅᓯᕙᓪᓕᐊᕙᖕᓂᖏᓐᓄᑦ ᑕᐃᒪᐃᓐᓂᖓᓄᑦ ᐊᑐᖅᑕᐅᔪᓐᓴᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᕐᑯᓪᓗᒋᑦ ᐅᑐᖅᑕᐅᕐᔪᐊᖅᐸᒃᑐᑦ.

ᐅᖃᐅᓯᒃᓴᐃᑦ

ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᑦ ᐅᖃᒃᑲᓐᓂᕋᓱᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᑎᒃᑯᐊᖅᑐᖅᑕᐅᒧᑦ ᑕᕝᕗᖓᑐᐊᖑᙱᒻᒪᑕ ᐅᐊᒃᑲᕐᓂᕐᒧᑦ, ᑖᑯᓄᖓᐅᖕᒥᔪᖅ ᖃᓂᒋᔭᖏᓐᓄᑦ ᓱᓪᓗᖏᓐᓄᑦ ᐊᒻᒪᓗ ᑲᖏᖅᓱᖕᓄᑦ. ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᑕᒪᒃᑯᐊ ᓱᓪᓗᒋᑦ ᐱᒻᒪᕆᐅᖕᒪᑕ ᐅᑭᐅᒃᑯᑦ ᓇᔪᒐᐅᓪᓗᑎᒃ ᓇᑦᑎᕐᓄᑦ ᐊᒻᒪᓗ, ᑕᐃᒪᐃᓐᓂᖓᓄᑦ, ᐱᒻᒪᕆᐅᖕᒥᔪᑦ ᓇᓄᕐᓄᑦ. ᐊᕕᒃᑐᖅᓱᑎᒃ ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᑕᒪᑐᒧᖓ.

ᐃᓚᐅᔪᑦ ᐊᐃᕙᓚᐅᖅᑐᑦ ᖁᕝᕙᓯᓕᓈᖕᓂᕐᒧᑦ ᑖᒃᑯᓄᖓᓪᓚᓇᒃ ᐊᑐᖅᑕᐅᓪᓗᐊᕐᒪᑦ ᓇᓗᓇᐃᔭᐃᑎᓪᓗᒋᑦ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑐᓄᑦ ᑕᐃᑲᓂ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR). ᐃᓱᒪᓕᐅᖅᑕᐅᓚᐅᖅᑐᑦ ᑖᒃᑯᓄᖓᓗᐊᕈᓂ ᓴᖅᑮᓂᐊᕐᓂᖓᓂᒃ ᐅᖃᒃᑲᓐᓂᖅᓯᒪᔪᓂᒃ, ᑭᓯᐊᓂᓕ ᐃᒪᖏᑦ ᐆᒪᔪᓪᓗᐊᑕᑦ ᐅᔾᔨᒌᙱᐊᕐᔪᖃᑦᑕᕐᓂᖏᓐᓄᑦ, ᓱᕐᓗ ᓇᐅᔭᑦ ᐊᒻᒪᓗ ᐊᐅᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓪᓗᐊᖅᑐᑦ.

ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᖃᓚᐅᖅᑐᑦ ᐱᑕᖃᕆᐊᖃᕐᓂᖓᓂᒃ ᖃᐅᔨᓴᐃᓐᓇᕐᓂᕐᒧᑦ ᐊᑯᓚᐃᓕᓈᓂᒃ. ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᓚᐅᖅᑐᑦ ᑖᒃᑯᐊ ᐱᑕᖃᕆᐊᖃᕐᓂᖓᓂᒃ ᑲᔪᓰᓐᓇᖅᑐᒥᒃ ᐊᑯᓂᐅᔪᒃᑯᑦ ᑲᐅᔨᓴᐃᓐᓇᕐᓂᕐᒥᒃ ᐊᑐᖅᑕᐅᓚᔪᒃᑑᓪᓗᓂ ᑖᒃᑯᓇᓂ ᐊᑕᖏᓗᒃᑖᕐᓗᒋᑦ ᐅᖃᐅᓯᐅᔪᓄᑦ ᐊᒻᒪᓗ ᐱᑕᖃᕆᐊᖃᕐᒪᑦ ᑲᒪᓂᕐᒧᑦ ᖃᐅᔨᓴᐃᓐᓇᕈᑎᓄᑦ ᖃᐅᔨᓴᕈᓯᑦ ᑖᒃᑯᓇᓂ ᑲᓇᑕᒥᑦ ᐊᑯᑭᑦᑐᓂᓪᓗ. ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᓇᓗᓇᐃᒃᑯᑕᓂᒃ ᐱᑕᖃᕆᐊᖃᕐᓂᖓᓄᑦ ᖃᐅᔨᓴᐃᓐᓇᕐᓂᕐᒧᑦ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᐊᒻᒪᓗ ᐱᓕᕆᐊᖑᓗᑎᒃ ᐱᓕᕆᓇᓱᐊᕐᓂᖏᑦ.

ᑲᑎᙵᔪᑦ ᐊᖏᖃᑎᒌᓚᐅᖅᑐᑦ ᐃᓚᓯᓗᑎᒃ ᓇᓗᓇᐃᒃᑯᑕᕐᒥᒃ ᑕᒪᒃᑯᓄᖓ ᐃᓱᒫᓗᒃᓴᐅᑎᐅᔪᓄᑦ.

ᐃᓚᐅᔪᖅ ᐅᖃᓚᐅᖅᑐᑦ ᑖᐃᒃᑯᐊ ᓄᓇᖃᖅᑐᑦ ᖃᐅᓱᐃᑦᑐᒥᑦ ᑕᑯᓯᒪᖕᒪᑕ ᐅᓄᖅᓯᑲᓪᓚᕐᔪᐊᖅᓯᒪᓂᖏᑦ ᑐᓗᒐᐃᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ. ᑕᒪᒃᑯᐊ ᑎᖕᒥᐊᑦ ᖃᐅᔨᒪᔭᐅᔪᑦ ᐊᖑᓇᓱᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᕿᒡᒋᕐᓂᒃ ᐊᒻᒪᓗ ᑭᒡᒐᕕᐊᕐᔪᖕᓂᒃ, ᐊᒃᑐᐃᕐᔪᐊᕈᓐᓇᕐᒪᑕ ᑕᕆᐅᒥᑦ ᑎᖕᒥᐊᑦ ᐅᓄᕐᓂᖏᓐᓄᑦ. ᑕᒪᓐᓇ ᐅᓄᕐᓂᖏᓐᓄᑦ ᐅᓄᖅᓯᒋᐊᕐᓂᖅ ᐱᔾᔪᑕᐅᔪᒃᓴᐅᔪᖅ ᑲᑎᙵᔪᓂᒃ ᑕᐃᒪᓐᓇᑐᐃᓐᓇᖅ ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᐱᓕᕆᓂᖏᓐᓂᑦ ᐊᒃᑐᐃᓂᕐᓂᒃ. ᐃᓚᐅᔪᖅ ᑐᒃᓯᕋᓚᐅᖅᑐᑦ ᖃᐅᔨᓴᖅᑎᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓗᓂ ᑕᒪᓐᓇ.

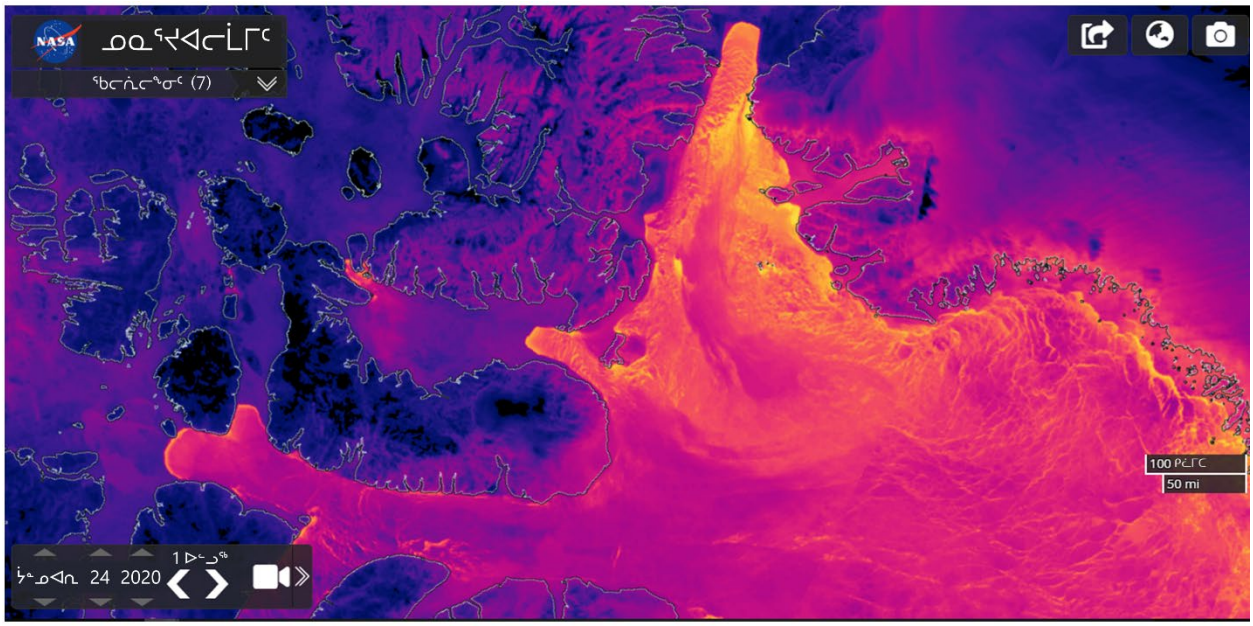
ᑭᖕᒍᓪᓕᖅᐹᑦ ᐅᖃᐅᓯᒃᓴᑦ

ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᓚᐅᖅᑐᖅ ᑖᒃᑯᐊ ᐊᒃᑐᐊᓂᖏᑦ ᓄᓇᒥᐅᑕᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᐅᑕᑦ ᐊᕙᑎᖏᑦ ᐊᑕᖏᖅᑕᐅᓯᒪᙱᒻᒪᑕ ᑕᐃᑲᓂ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎᒥᑦ (ᓱᕐᓗ ᒪᔪᖅᐸᒃᑐᑦ ᐃᖃᓗᐃᑦ, ᑲᓐᓂᖅᑕᐅᖃᑦᑕᕐᓂᖏᑦ ᓂᕐᒪᕙᒃᑕᖏᑦ ᑐᒃᑐᑦ, ᐊᓯᖏᓪᓗ). ᐊᔾᔨᐸᓗᐊ, ᑮᓇᐅᔭᑎᒍᑦ ᐱᔭᐅᔪᓐᓇᑐᐃᓐᓇᕆᐊᓖᑦ ᑕᐃᑲᖓᑦ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᒐᖏᓐᓂᑦ (ᐃᑲᔪᖅᓯᖅᓯᒪᔪᖅ

ᑮᓇᐅᔭᖏᓐᓂᒃ ᐊᑯᑭᑦᑐᑦ ᐊᒻᒪᓗ ᓄᓇᕗᑉ) ᐅᖃᐅᓯᐅᓚᐅᙱᑦᑐᖅ. ᑲᑎᙵᔪᑦ ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑖᓐᓇ ᒥᑭᑦᑐᖅ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐃᓚᐅᑎᑕᐅᓂᐊᕐᓗᓂ ᓇᓗᓇᐃᔭᐃᓕᕈᑎᒃ ᑖᒃᑯᓂᖓ ᑎᒃᑯᐊᖅᑐᖅᑕᐅᓯᒪᔪᓂᒃ ᐅᖃᐅᓯᐅᓚᐅᙱᓐᓂᖏᓐᓂᑦ.

ᑕᒪᓐᓇ ᐊᔾᔨᐅᙱᑦᑑᓪᓗᓂ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᑐᖅᑲᖅᑕᕐᕕᖓᑦᑕ (CSAS) ᑲᔪᓯᕙᓪᓕᐊᓂᖓ ᓱᖃᐃᒻᒪ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᐃᓂᖃᕐᒪᑦ ᒪᕐᕉᖕᓂᒃ ᓄᓇᓕᕐᔪᐊᖑᔪᓂᑦ ᓄᓇᕐᔪᐊᒥᑦ. ᑕᒪᐃᓐᓂᖓᓄᑦ, ᐊᖏᖃᑎᒌᒍᑕᐅᓚᐅᖅᑐᖅ ᑭᖑᓂᐊᒍᑦ ᑲᑎᒪᓂᕐᒥᑦ ᑭᖑᓪᓕᖅᐹᑎᒍᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᒃᑯᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᑦ (SAR) ᐋᖅᑭᒃᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐃᒪᓕᐅᑎᓗᒋᑦ ᐅᖃᐅᓯᐅᔪᑦ ᑕᐃᑲᖓᖅᑐᑦ ᐊᑯᑭᑦᑐᓂᑦ. ᑲᑎᒫᓂᒃᑎᓪᓗᒋᑦ ᑲᑎᒪᓂᖅ ᓴᖅᑮᔭᖅᑎᑦᑐᖅ ᓄᑖᓂᒃ ᑎᑎᖅᑲᓂᒃ, ᐃᒪᐃᑎᑦᑎᓪᓚᓇᓪᓗᐊᑕᕐᓂᐊᖅᑐᑦ ᐃᓗᓕᖏᑦ ᓴᖅᑭᑕᐅᔪᑦ ᑲᑎᙵᓪᓗᑎᒃ ᐊᑕᖏᑦᑎᐊᖅᓯᒪᓗᑎᒃ.

ᐃᓱᓕᓪᓗᒍ, ᐃᓚᐅᔪᖅ ᑕᑯᖃᑎᖃᓚᐅᖅᑐᑦ ᖃᖓᑦᑕᖅᑎᑕᐅᓯᒪᔪᓂᑦ ᐊᔾᔨᙳᐊᕐᒥᒃ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᒻᒪᓗ ᐅᐃᒍᐊᓂᒃ ᑕᐃᑲᓂ ᓯᒥᑦ ᐃᑭᖓᓂᑦ ᓵᓄᐊᕆ 24, 2020-ᒥᑦ (ᑭᖑᓪᓕᖅᐹᖅ ᑲᑎᒪᓂᕐᒥᑦ; ᐊᔾᔨᙳᐊᖅ 2). ᐃᓚᐅᔪᖅ ᑎᒃᑯᐊᖅᑐᐃᓚᐅᖅᑐᑦ ᑕᒪᓐᓇ ᓯᑯᖃᙱᑐᖅ ᐊᒻᒪᓗ ᓵᑦᑐᖅ ᓯᑯᓄᑦ ᐃᓃᑦ ᑲᑎᙵᒐᓛᒃᑐᑦ ᑕᐅᕗᓇ ᐅᐊᖕᓇᔭᒐᒍᑦ ᑲᓇᖕᓇᔭᖓᒍᑦ (NE) ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᓂᑦ ᑕᐃᑲᓂᐅᙱᑦᑐᖅ ᓯᒥᑦ ᐃᑭᖓᓂᑦ. ᐊᔾᔨᙱᐊᖅ ᓴᖅᑭᔭᖅᑎᑦᑎᔪᖅ ᐅᐃᒍᐊᓄᑦ ᑕᐃᑲᓂ ᓯᒥᑦ ᐃᑭᖓᓂᑦ, ᑭᓯᐊᓂᓕ ᓯᑯᖃᙱᑎᓪᓗᒍ. ᑕᒪᓐᓇ ᓴᖅᑭᔭᖅᑎᑦᑎᔪᖅ ᑕᐃᔅᓯᒪᓂ, ᐊᐃᒍᐊᖅ ᑕᐃᑲᓂ ᓯᒥᑦ ᐃᑭᖓᓂᑦ ᐊᑑᑎᖃᓚᐅᙱᒻᒪᑦ ᐆᔭᐅᓪᓗᓂ ᑕᕆᐅᑉ ᓯᑯᐊᓂᑦ, ᐃᒪᐃᒃᑲᓗᐊᖅᑎᓪᓗᒍ ᑕᐃᒪᐃᖃᑦᑕᖅᑐᑦ ᐊᓯᖏᓐᓂᑦ ᓯᓚᐅᑉ ᖃᓄᐃᓕᖓᓂᖓᓄᑦ. ᐃᓚᐅᓐᓇᖓ ᖃᖓᓃᑦᑐᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᑦ ᖃᐅᒪᓛᑦ ᖁᖅᓱᖅᑐᑦ ᒥᑭᑦᑐᑯᓗᔪᖅ; ᐊᑯᓐᓂᖅᓱᖅᑐᑦ ᑕᖅᓴᐃᑦ ᓇᓗᓇᐃᒃᑯᑕᐅᔪᑦ ᐱᑕᖃᕐᓂᖓᓂᒃ ᓄᑖᓂᒃ ᐊᒻᒪᓗ ᓴᑦᑐᓂᒃ ᓯᑯᓕᓵᖅᑐᓂᒃ. ᐅᐃᒍᐊᑦ ᐊᒻᒪᓗ ᓇᒡᒍᑏᑦ ᑕᑯᔭᐅᔪᓐᓇᖅᑐᑦ ᐊᓯᖏᓐᓂᑦ ᐃᓂᓂᑦ, ᐃᓚᐅᓪᓗᑎᒃ: ᐄᐃᐅᓪ ᐃᑭᖓ, ᓚᐃᑎ ᐋᓐ ᐃᑭᖓ, ᑕᓪᓗᕈᑎᐅᑉ ᐃᒪᖓ ᐊᒻᒪᓗ ᕗᐃᓕᖕᑕᓐ ᑲᖏᖅᓱᐊ.



ᐊᔾᔨᙳᐊᖅ 2. MODIS ᓂᒡᓕᓇᕐᓂᕐᓄᑦ ᐊᔾᔨᙳᐊᖅ ᓴᖅᑮᔭᖅᑎᑦᑎᔪᖅ ᖃᖓᓂᑦ ᓂᒡᓕᓇᕐᓃᑦ ᐊᑯᓐᓂᖓᓂᑦ ~ -2°C (ᑕᖅᓴᐅᑦᑎᐊᙱᑦᑐᖅ) ᐊᒻᒪᓗ -30°C (ᑕᖅᓴᐅᓪᓚᓇᒃᑐᖅ) ᓵᓄᐊᓇ 24, 2020-ᖑᑎᓪᓗᒍ. ᓯᑯᖃᙱᑎᓪᓗᒍ ᐊᒻᒪᓗ ᓵᑦᑐᑦ ᓯᑯᑦ ᐃᓃᑦ ᑕᐃᑲᓂ ᖃᐅᒪᓛᖅ ᖁᖅᓱᖅᑐᖅ.

ᑐᓴᓇᐊᕐᕕᐅᔪᓐᓇᖅᑐᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ

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ᐃᓚᓕᐅᔾᔭᐅᓯᒪᔪᖅ 1. ᒪᓕᑦᑕᐅᔭᕆᐊᓖᑦ ᓇᓗᓇᐃᔭᐅᑎᖏᑦ

ᐆᒪᔪᑦ ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᓐᓄᓪᓗ ᐊᑕᖏᓗᒃᑖᖅᓯᒪᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ ᐊᓂᒋᔭᖏᓐᓂᓪᓗ ᐃᓂᓂᑦ

ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᓂᖅ – ᕿᑭᖅᑖᔫᐊᓂ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐊᕕᒃᑐᖅᓯᒪᕕᐊᓂ

ᔫᓄᐊᕆ 22-24, 2020
ᓗᐃᓂᐲᒡ, ᒫᓂᑑᐸ

ᐃᒃᓯᕙᐅᑕᐅᖃᑕᐅᔪᑦ: Jason Stow ᐊᒻᒪᓗ Tom Christensen

ᖃᓄᐃᓕᖕᒐᓂᖕᒐ

ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖅ ᐊᐅᒃᑲᕐᓂᖅ (ᐱᑭᐊᓚᓱᕐᓱᐊᖅ) ᐃᓂᖃᖅᑐᑦ ᐊᑯᓐᓂᖕᒐᓂᑦ ᑲᓇᑕᐅᑉ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᐋᖅᑭᖃᑦᑕᖅᑐᑦ ᐃᖏᕐᕋᓂᕐᓄᑦ ᐊᓄᑎᐅᓪᓗ ᖃᓄᐃᑉᐸᓪᓕᐊᓂᖕᒐᓄᑦ (ᑕᑯᓗᒍ ᓄᓇᙱᐊᖅ). ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᑐᑭᖃᖅᑐᑦ "ᐃᖅᑲᕐᒥᖕᒑᖃᑦᑕᕐᔪᐊᑦ", ᐊᒻᒪ ᑲᓛᓐᓱᑦ (ᐱᓇᖕᓇᖕᒐᓂᑦ ᐊᑯᑭᑦᑐᑦ) ᐊᑎᖕᒐ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒧᑦ. ᑖᓐᓇ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᑦ ᐊᖏᓛᑦᑎᐊᖅ ᐊᑐᓂ ᐊᕕᒃᑐᖅᓯᒪᓂᖕᒋᓐᓂᓄᑦ ᓄᓇᐃᑦ ᐆᒪᔪᓄᑦ ᐱᑕᖃᕐᕕᐅᕙᒃᑐᑦ ᐃᒫᓂᑐᐃᓐᓇᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐊᒻᒪᓗ ᕐᑯᑦᑎᓛᖅ ᐅᓄᖅᓯᕙᓪᓕᐊᓪᓗᐊᑕᕐᓂᕐᓄᑦ ᑕᐃᑲᓂ ᐅᑭᐅᖅᑕᖅᑑᑉ ᑕᕆᐅᖕᒐᓂᑦ. ᐃᓱᒪᒋᔭᐅᓪᓗᓂ ᐊᖏᓛᖑᓂᖕᒐᓂᒃ ᐊᐅᒃᑲᕐᓂᖅ ᐃᓗᐊᓂᑦ ᐅᑭᐅᖅᑕᖅᑑᑉ, ᒥᒃᓴᐅᓴᒃᑕᐅᓯᒪᔪᖅ ᐅᖕᒐᑖᓂᑦ 60 ᒥᓕᐊᓐ ᑎᖕᒥᐊᑦ ᑕᐅᕙᓃᖃᑦᑕᖅᑐᑦ ᓄᓇᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ, ᐃᓚᐅᓪᓗᑎᒃ ᐅᓄᓛᑦ ᑖᒃᑯᐊᑐᐊᖅ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᖃᑦᑕᕐᓂᖕᒋᓐᓄᑦ ᑲᑎᙵᔪᑦ ᓄᓇᕐᔪᐊᒥᑦ ᐊᐅᒃ/ᐊᐅᒃᕋᓛᑦ. ᐊᐅᒃᑲᕐᓂᖅ ᐱᒻᒪᕆᐅᓪᓗᓂ ᓇᔪᒐᐅᔪᖅ ᐊᒥᓱᓄᑦ ᐳᐃᔨᓄᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᐊᕐᔪᖃᑦᑕᖅᑐᓄᑦ ᓱᕐᓗ ᐊᑦᓛᓐᑎᒃ ᐊᐃᕕᖏᑦ (*Odobenus rosmarus*), ᖃᑯᖅᑕᑦ ᕿᓚᓗᒐᑦ (*Delphinapterus leucas*), ᑑᒫᓖᑦ ᕿᓚᓗᒐᑦ (*Monodon Monoceros*), ᐊᕐᕕᑦ (*Balaena mysticetus*), ᓇᑦᑏᑦ (*Pusa hispida*), ᐅᒡᔪᐃᑦ (*Erignathus barbatus*), ᐊᒻᒪᓗ ᓇᓄᐃᑦ (*Ursus maritimus*).

ᐱᔾᔪᑕᐅᓪᓗᓂ ᓄᓇᐃᑦ ᐆᒪᔪᓄᑦ, ᐃᓄᓕᓇᓂᖅ–ᑮᓇᐅᔭᑦ, ᐊᒻᒪᓗ ᐱᖅᑯᓯᒃᑯᑦ ᐱᒻᒪᓇᐅᔪᑦ, ᑖᓐᓇ ᐃᓂ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᓕᖅᑐᑦ ᐊᑐᖅᑐᑎᒃ ᐊᒥᓱᒐᓚᖕᓂᒃ ᓄᓇᕐᔪᐊᒥᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᓂᒃ. ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖅ ᐊᐅᒃᑲᕐᓂᖅ ᓇᓗᓇᐃᖅᑕᐅᓚᐅᖅᑐᖅ ᐆᒪᓂᖃᖅᑎᒌᑦ ᐊᒻᒪ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᓐᓄᓪᓗ ᐃᓂ (EBSA) ᑖᒃᑯᓇᙱᑦ ᐃᒪᕐᒥᐅᑕᓕᓇᔨᕐᔪᐊᒃᑯᓐᓂᑦ ᑕᐃᑲᓂ 2011 (ᐃᒪᕐᒥᐅᑕᓕᓇᔨᕐᔪᐊᒃᑯᑦ 2011). ᐊᓱᐊᓂᑦ ᑲᔪᓯᓂᐅᔪᒥᑦ ᑕᐃᑲᓂ 2011, ᐋᖅᑭᒃᑕᐅᓪᓗᓂ ᐋᕿᐊᔅ ᓯᓚᑦᑐᖅᓴᕕᖕᒐᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᐃᓕᓐᓂᐊᕐᕕᖕᒐᑦ ᓄᓇᒥᖕᒐᖅᑐᓄᑦ, ᐃᓂ ᕐᑯᕝᕙᓱᓛᖑᓚᐅᖅᑐᑦ ᐊᑕᖏᖅᓱᒍ ᐊᑯᑭᑦᑐᑦ ᑕᓇᐅᖏᓐᓄᑦ ᐃᓂᓄᑦ, ᐊᑐᖅᓱᑎᒃ IMO ᐱᓗᐊᖅᑐᒥᑦ ᐊᒃᑐᖅᑕᐅᓴᕋᐃᑦᑐᑦ ᑕᓇᐅᕐᒥᐅᑕᑦ ᒪᓕᒃᑕᐅᔪᒃᓴᓄᑦ. ᑕᐃᑲᓂ 2017-ᒥᑦ ᓄᓇᕐᔪᐊᒥᑦ ᔫᓂᐊᖏᑦ ᔭᒐᐃᑦᑕᐅᓕᒪᓂᕐᒧᑦ ᑕᒪᒃᑯᓄᖕᒐ ᓄᓇᒧᑦ ᓄᓇᒥᖕᒐᖅᑐᓪᓗ ᐊᑐᖅᑐᒃᓴᓄᑦ (IUCN) ᐊᒻᒪᓗ ᑖᒃᑯᐊ UNESCO-ᑯᑦ ᓄᓇᕐᔪᐊᕐᒥ ᐃᑦᑕᕐᓂᓴᖃᕐᕕᒃ ᓇᓗᓇᐃᖅᓯᓚᐅᕐᒪᑕ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᖅ ᐊᐅᒃᑲᕐᓂᖅ ᐊᒻᒪᓗ ᖃᓂᒋᔭᖏᑦ ᐃᓃᑦ ᒪᕐᕉᖕᓂᒃ ᐊᕐᕕᓂᓕᐅᔪᑦ ᓂᕈᐊᒐᒃᓴᐅᑐᐃᓐᓇᕆᐊᓖᑦ ᐃᓂᓄᑦ ᑕᐅᕙᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐃᑦᑑᓗᓂ ᐱᐅᓛᖅ ᓄᓇᕐᔪᐊᓕᒫᒥᑦ ᐱᒻᒪᕆᐅᔪᓄᑦ (OVA). ᓱᓕᒃᑲᓐᓂᖅ, ᑕᐃᑲᙱᑦ 2016-ᒥᑦ 2018–ᒧᑦ, ᑖᒃᑯᐊ ᐃᓄᐃᑦ ᓄᓇᕐᔪᐊᒥᑦ ᑲᑎᒪᔨᖏᑦ (ICC) ᐋᖅᑭᒃᓯᓚᐅᖅᑐᑦ ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᑲᒥᓴᓐᑯᓐᓂᑦ ᑲᑎᖅᓱᐃᕐᑯᓪᓗᒋᑦ ᑐᓴᐅᒪᔾᔪᑎᓂᒃ ᑖᓐᓇᙱᑦ ᓄᓇᓕᖕᓂᑦ ᖃᓂᒃᓴᖅᑐᓂᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᐅᔪᒥᑦ, ᐃᑲᔪᖅᓯᓗᓪᓗᒋᑦ ᐃᓄᐃᑦ ᐊᑐᐃᓐᓇᕈᐃᓗᑎᒃ ᓯᕗᓂᒃᓴᑦᑎᓐᓂᑦ ᐊᑐᓕᕆᔭᐅᔪᓄᑦ ᑕᐃᑯᖕᒐ ᓄᓇᓂᒃ ᐊᕕᒃᑐᖅᓯᒪᓂᖕᒋᓐᓄᑦ (ᓱᕐᓗ Kyhn ᐊᒻᒪᓗ Mosbech 2019).

ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᑏᑦ ᑎᑎᕋᕐᕕᖕᒐᑦ (CSAS) ᑲᑎᒪᑎᑦᑎᓛᖅᑐᑦ ᓄᓇᕐᔪᐊᒥᐅᓂᒃ ᕿᒥᕐᕈᕐᑯᓪᓗᒋᑦ ᖃᓄᐃᓕᖕᒐᓂᐅᔪᑦ ᖃᐅᔨᒪᓂᕐᒧᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᕐᒧᑦ. ᒫᓐᓇ ᑎᑎᕋᖅᓯᒪᔪᓂᒃ ᕿᒥᕐᕈᓂᖅ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒧᑦ ᐋᖅᑭᒃᓱᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᖅᑭᑕᐅᓯᒪᔪᓂᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑎᓂᑦ, ᐅᓂᒃᑳᓂᑦ ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᓂᖅ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒧᑦ ᐋᖅᑭᒃᓱᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᖅᑭᑕᐅᓯᒪᔪᓂᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᑎᓂᑦ ᐅᓂᒃᑳᓂᑦ ᐱᓕᕆᔨᐅᖃᑎᒥᓂᒃ ᕿᒥᕐᕈᓂᖅ ᐅᑕᒫᖅᓯᐅᑎᖏᓐᓂᒃ, ᐊᒻᒪᓗᑦᑕᐅᖅ ᐱᑕᖃᕈᓂ ᑎᑎᕋᖅᓯᒪᔪᓂᒃ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᙱᓐᓄᑦ[1] (IQ) ᐊᒻᒪᓗ ᐊᖑᓇᓱᒃᑏᑦ/ᐊᑐᖅᑏᑦ ᖃᐅᔨᒪᓂᖏᑦ ᑕᐃᕗᖓ ᓄᓇᒧᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᕐᒧᑦ. ᑕᒪᓐᓇ ᑐᓴᐅᒪᔾᔪᑎ ᑐᒃᓯᕋᖅᑕᐅᓯᒪᔪᑦ ᐃᑲᔪᕐᑯᓪᓗᒍ ᑐᓴᐅᒪᑎᑦᑎᓂᕐᒥᒃ ᓯᕗᓂᒃᓴᑦ ᐱᓕᕆᖃᑎᑏᖕᓂᐅᓛᖅᑐᓂᒃ ᐊᒃᑐᐊᔪᓂᒃ ᑕᐃᑯᖓ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐃᒥᕐᒧᑦ, ᐊᒻᒪᓗ ᐱᓕᕆᓇᓱᐊᕐᓂᐊᖅᑐᑦ ᓇᓗᓇᐃᔭᕐᓗᒍ ᐃᓂ ᑕᒪᕐᒥᖕᓄᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ, ᓄᓇᖃᖅᑳᖅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᐊᖑᓇᓱᒃᑏᑦ/ᓄᓇᓕᖕᓂᑦ ᖃᐅᔨᒪᖕᒋᑦ ᐱᑕᖃᑦᑎᐊᖕᒋᓐᓂᕈᑎᒃ, ᐱᓕᕆᒃᑲᓐᓂᕐᓃᑦ ᐱᑕᖃᕆᐊᖃᖅᐸᑕ ᑐᑭᓯᔭᐅᕐᑯᓪᓗᒍ ᑕᒪᓐᓇ ᐃᒃᐱᖕᓂᖅᓴᕋᐃᑦᑐᖅ ᐆᒪᔪᑦ ᓇᔪᒐᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᒐᖏᓂᑦ. ᓱᓕᒃᑲᓐᓂᖅ, ᐋᖅᑭᒃᓴᕐᑎᓐᓂᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᐃᓕᓐᓂᐊᕐᕕᖕᒐᑦ ᓄᓇᒥᖕᒐᖅᑐᓄᑦ

[1] ᓇᓗᓇᐃᔭᐃᓗᑎᒃ ᐃᓄᐃᑦ ᐱᓕᕆᐅᓯᖏᓐᓂᒃ, ᐃᓚᐅᓪᓗᑎᒃ ᑭᖑᓂᖕᒐᑦᑎᓐᓂᑦ, ᒫᓐᓇ ᐊᒻᒪᓗ ᓱᕗᓂᒃᓴᑦᑎᓐᓂᑦ ᖃᐅᔨᒪᓂᕐᓂᒃ, ᐊᑐᖅᑕᐅᓯᒪᔪᓂᒃ ᐱᒻᒪᕆᐅᕆᔭᐅᔪᓂᒡᓗ ᐃᓄᖕᓂᑦ.

ᑐᓂᓯᓯᒪᔪᑦ ᐱᓕᕆᐊᖑᓯᒪᔪᑦ ᑎᑎᖅᑲᑦ ᓇᐃᓈᖅᓯᒪᓪᓗᑎᒃ ᓴᖅᑭᑕᐅᓯᒪᔪᑦ ᐅᓂᒃᑳᖏᑦ ᐊᒻᒪᓗ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᑕᒪᒃᑯᓄᖓ ᐱᒻᒪᕆᐅᓛᓄᑦ ᐆᒪᔪᖃᕐᕕᖕᓄᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ (Christensen et al. 2017). ᑕᒪᓐᓇ ᑲᑎᒪᓂᖅ ᐃᓚᐅᕝᕕᐅᓂᐊᖅᑐᑦ ᓄᓇᕐᔪᐊᒥᑦ ᖃᐅᔨᓴᖅᑎᓄᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᒍᒥᐊᖅᑎᓄᑦ, ᓄᓇᓕᖕᓂᑦ ᑕᒪᑐᒧᖓ ᖃᐅᔨᒪᔨᑕᐅᔪᓄᓪᓗ.

ᑐᕌᖓᖏᑦ

ᐱᓂᐊᖑᐅᔪᒪᔪᖅ ᑲᑎᒪᓂᕐᒧᑦ ᐱᓕᕆᓗᑎᒃ ᐱᓕᕆᖃᑎᒌᓄᑦ–ᕿᒥᕐᕈᓂᕐᓂᒃ ᐆᒪᔪᑦ ᓇᔪᖓᖏᑕ ᓯᓚᑎᖏᑕᓗ ᖃᓄᐃᓐᓂᖏᓐᓄᑦ ᐊᑕᖏᓗᒃᑖᖅᓯᒪᔪᑦ ᐅᓂᒃᑳᑦ ᑕᒪᑐᒧᖓ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓂᕐᒧᑦ, ᑐᙵᕕᖃᕐᓂᐊᖅᑐᖅ ᓄᑖᖑᓛᖑᔪᓂᒃ ᐊᒃᑐᐊᔪᓄᑦ ᐊᑐᐃᓐᓇᐅᔪᑦ ᑐᓴᐅᒪᔾᔪᑏᑦ ᐊᒻᒪᓗ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᖃᐅᔨᓴᕈᑏᑦ ᑕᐅᕗᖓ. ᐱᓕᕆᐊᖑᓂᑯᐃᑦ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐋᖅᑭᒃᓯᒪᓪᓗᑎᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐊᑕᖏᓗᒃᑖᕐᑐᒧᑦ ᑎᑎᖅᑲᕐᑯᑎᓄᑦ ᑐᓂᔭᐅᔪᑦ ᐱᓕᕆᖃᑎᒋᔭᐅᔪᒪᔪᓂᑦ ᐊᒻᒪᓗ ᐃᑲᔪᖅᓯᒪᔪᓂᑦ ᐃᓚᐅᑎᑕᐅᓂᐊᖅᑐᑦ, ᐊᒻᒪᓗ ᐊᑐᐃᓐᓇᖃᕐᓂᐊᖅᑐᑦ ᐱᔾᔪᑕᐅᔪᓂᒃ ᐅᖃᐅᓯᐅᔪᓄᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᓂᕐᒥᒃ ᑕᒪᒃᑯᓄᖓᓪᓕᕆᒃ ᑐᕌᖅᑕᐅᔪᓄᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓯᒪᔪᓂᑦ ᐊᑖᓂᑦ:

1. ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᓄᓇᙳᐊᑦ, ᐊᔪᕐᓇᙱᒃᑯᓂ, ᐱᓪᓗᐊᑕᑦ ᐆᒪᓂᖃᖃᑎᒌᑦ ᐊᒻᒪ ᐆᒪᔪᑦ ᓇᔪᖓᖏᑕ ᓯᓚᑎᖏᑕᓗ ᐅᔾᔨᕐᓇᕈᑎᖏᑦ, ᑭᖓᖅᑐᐃᔪᑦ ᓯᒡᔭᓂᑦ ᐊᒻᒪᓗ ᑕᕆᐅᒥᑦ ᐆᒪᔪᑦ ᓇᔪᖓᖏᑕ ᓯᓚᑎᖏᑕᓗ ᓇᔪᖓᖏᑦ, ᐊᓯᖏᓪᓗᒍ ᐱᓪᓗᐊᑕᑦ ᑕᐃᑲᖓᖅᑐᑦ ᑕᕆᐅᓕᕆᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓇᔪᖓᕐᓄᑦ ᐅᔾᔨᕐᓇᕈᑎᒌᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒦᑦ ᐊᐅᒃᑲᕐᓂᖓᓂᑦ ᖃᓂᒋᔭᖏᓐᓂᓪᓗ ᐃᓂᓂᑦ;
2. ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᖃᐅᔨᒪᓇᙱᑦᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᓐᓂᕐᒧᑦ ᐅᓗᐊᓂᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᒥᑦ ᐊᐅᒃᑲᕐᓃᑦ,
3. ᓇᓗᓇᐃᔭᕐᓗᒋᑦ ᐱᓕᕆᓃᑦ ᐊᒻᒪᓗ ᑕᐃᒪᐃᓐᓇᔭᖅᑐᑦ/ᖃᐅᔨᒪᔭᐅᔪᑦ ᐃᓱᒪᓗᒃᓴᐅᑎᐅᔪᓄᑦ ᐊᒃᑐᐃᑐᐃᓐᓇᕆᐊᓕᖕᓄᑦ ᐱᓪᓗᐊᑕᑦ ᐆᒪᔪᑦ ᓇᔪᖓᖏᑕ ᓯᓚᑎᖏᑕᓗ ᖃᓄᐃᓐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᓄᓇᐃᑦ ᐆᒪᔪᓪᓗ ᐅᔾᔨᕐᓇᕐᓂᖏᑦ ᑕᐃᑲᓂ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᕐᓂᑦ ᐊᐅᒃᑲᕐᓂᕐᒥᑦ.

ᓂᕆᐅᒋᔭᐅᔪᑦ ᓴᖅᑭᑕᐅᓯᒪᔪᑦ

- ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᑦ
- ᖃᔪᓯᕙᓪᓕᐊᓃᑦ
- ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑎᑎᑦᑲᕐᑯᑎ(ᑦ)

ᓂᕆᐅᒋᔭᐅᔪᑦ ᐃᓚᐅᓂᐊᖅᑐᑦ:

ᐃᓚᐅᔪᑦ ᖃᐅᕐᑯᔭᐅᓯᒪᔪᑦ ᐊᔾᔨᒌᙱᑦᑐᓂᑦ ᑎᒥᐅᔪᓂᑦ ᖃᐅᔨᒪᓂᖃᓪᓚᕆᒃᑐᑦ ᑕᒪᒃᑯᓄᖓ ᐊᒃᑐᐊᔪᓂᒃ ᐃᓕᓐᓂᐊᖅᓯᒪᓪᓗᑎᒡᓗ,

ᑎᑎᕋᖅᑕᐅᔪᓐᓇᐅᕐᑯᓪᓗᒋᑦ ᐊᑕᖏᕐᓗᒋᑦ ᐊᔾᔨᒌᙱᕈᓘᔭᖅᑐᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐃᓕᓐᓂᐊᕕᑦ ᐃᓱᒪᒋᔭᐅᔪᑦ ᐊᒻᒪᓗ ᐃᒥᒻᒥᙱᖅᑐᑦ ᐃᓱᒪᒋᔭᐅᔪᓄᑦ. ᐃᓚᐅᔪᑦ ᓂᕆᐅᒋᔭᐅᔪᑦ ᐃᑲᔫᑎᖃᕐᓂᐊᕐᓂᖏᓐᓂᒃ ᑲᐅᔨᒪᓂᕐᒥᓄᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᖃᓪᓚᕆᖕᓂᕐᒥᖕᓄᑦ ᑲᑎᒪᓂᕐᒧᑦ ᓇᖕᒥᓂᖅᓱᕐᓗᑎᒃ ᓇᓕᐊᖕᓂᑐᐃᓐᓇᖅ ᑎᒥᐅᔪᑦ ᑎᓕᓯᔾᔪᑕᐅᓯᒪᔪᓐᓂᓄᑦ ᐅᕝᔫᓐᓃᑦ ᑲᑎᒪᔾᔪᑎᒃᓴᓄᓪᔫᓐᓃᑦ

- ᒐᕙᒪᐅᔪᑦ ᑎᒥᐅᔪᑦ (ᓲᕐᓗ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ, ᒥᕐᖑᐃᖅᓯᕕᓕᕆᔨᑦ ᑲᓇᑕ, ᐊᒃᑐᐊᔪᑦ ᒥᓂᔅᑕᑦ ᑕᐃᑲᙱᑦ ᒐᕙᒪᖏᓐᓂᑦ ᐊᑯᑭᑦᑐᑦ)
- ᓄᓇᖃᖅᑐᓂᑦ ᖃᐅᔨᒪᓂᖃᓪᓚᕆᒃᑐᑦ ᑲᓇᑕᒥᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᓄᓇᓕᖏᓐᓂᑦ (ᓲᕐᓗ ᖃᐅᓯᐃᑦᑐᖅ, ᖃᓈᖅ)
- ᐃᓄᐃᑦ ᑎᒥᖏᑦ, ᐊᖑᓇᓱᖅᑐᓕᕆᔨᒃᑯᑦ ᒥᑭᒋᐊᕐᓂᐊᖅᑏᑦ ᑎᒥᕐᑯᑎᖏᑦ (ᓲᕐᓗ ᐃᓄᐃᑦ ᓄᓇᕐᔪᐊᒥᑦ ᑲᑎᒪᔨᖏᑦ ᑲᓇᑕ, ᑲᓛᓐᑦ ᓄᓈᓂ ᐋᓕᓴᕐᑐᑦ ᐱᓂᐊᖅᑐᓪᓗ ᑲᑦᑐᕙᐃᑦ [KNAPK])
- ᐃᓕᓐᓂᐊᕕᑦ (ᓲᕐᓗᓯᓚᑦᑐᖅᓴᕐᕕᒃᔪᐊᖓ ᒫᓂᑑᐸ, ᐋᕐᕼᐊᔅ ᓯᓚᑦᑐᖅᓴᕐᕕᖓᑦ, ᐊᑯᑭᑦᑐᑦ ᐃᓕᓐᓂᐊᕐᕕᖓᑦ ᓄᓇᒥᖕᒫᖅᑐᓄᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᑦ ᓯᓚᒥᒃ ᖃᐅᔨᓴᕐᕕᖓᑦ)
- ᒐᕙᒪᐅᙱᑦᑐᑦ ᑎᒥᐅᔪᑦ (ᓲᕐᓗᓄᓇᕐᔪᐊᒥᑦ ᓂᕐᔪᑎᑦ ᑮᓇᐅᔭᖏᓐᓄᑦ ᑲᓇᑕ, ᑕᕆᐅᕐᔪᐊᓕᕆᔨᒃᑯᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ)

ᖃᐅᔨᒋᐊᕐᕕᐅᓯᒪᔪᑦ

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ᐃᓚᓕᐅᔾᔭᐅᓯᒪᔪᖅ 2. ᑎᑎᕋᖅᓯᒪᔪᑦ ᑲᑎᒪᓂᕐᒥᑦ ᐃᓚᐅᔪᑦ

ᐊᑎᖓ	ᐱᓕᕆᖃᑎᒌᑦ/ᐱᔾᔪᔾᔨᔪᖅ
Jason Stow (ᐃᒃᓯᕙᐅᑕᐅᖃᑕᐅᔪᖅ)	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ
Tom Christensen (ᐃᒃᓯᕙᐅᑕᐅᖃᑕᐅᔪᖅ)	ᐋᕐᕼᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᑦ
Claire Hornby (ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᓯᕗᓕᐅᖅᑎ)	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ
Kevin Scharffenberg (ᐅᓂᐸᒃᑲᓂᒃ ᑲᑎᖅᓱᐃᔨ)	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ
Elizabeth Worden (ᐅᓂᐸᒃᑲᓂᒃ ᑲᑎᖅᓱᐃᔨ)	ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Bethany Schroeder	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᑕᕆᐅᕐᒥᑦ ᐸᕐᓇᐃᓂᖅ ᐊᒻᒪᓗ ᐊᓯᐅᔨᑦᑕᐃᓕᓂᖅ, ᐅᑭᐅᖅᑕᖅᑐᖅ
Glenn Benoy	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᑲᓇᑕᒥᑦ ᐱᕐᑯᑎᕐᔪᐊᓄᑦ
Steve Ferguson	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ
Cory Matthews	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆᓂᑦ
Humfrey Melling	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐸᓯᕕᒃ (Pacific)
Maya Gold	ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᓄᓇᕐᔪᐊᕐᒥᑦ ᑕᕆᐅᕐᓄᑦ ᐊᑐᐊᒐᖅ, ᑲᓇᑕᒥᑦ ᐱᕐᑯᑎᕐᔪᐊᓄᑦ
Garry Stenson (ᐃᑲᔪᐃᔪᖅ)	ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᓂᐅᕙᓐᓛᓐ ᐊᒻᒪᓗ ᓛᐳᕋᑐᐊ
Christine Michel	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ
Monika Pućko	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ
David Murray	ᑲᓇᑕᒥᑦ ᒥᕐᖑᐃᖅᓯᕝᕕᓕᕆᓂᕐᒧᑦ ᐱᔾᔪᔾᔨᔨᒃᑯᑦ
Grant Gilchrist	ᑲᓇᑕᒥᑦ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ
Evan Richardson	ᑲᓇᑕᒥᑦ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ
Bjarne Lyberth	ᓄᓇᒥᑦ ᐊᒻᒪᓗ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ, ᐊᑯᑭᑦᑐᕐᒥᑦ ᒐᕙᒪᒃᑯᑦ
Inge Thaulow	ᓄᓇᒥᑦ ᐊᒻᒪᓗ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ, ᐊᑯᑭᑦᑐᕐᒥᑦ ᒐᕙᒪᒃᑯᑦ
Andres Mosbech	ᐋᕐᕼᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᑦ
Søren Rysgaard	ᐋᕐᕼᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᑦ
Paul Myers	ᐃᐊᐳᑕᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Andrew Hamilton	ᐃᐊᐳᑕᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Luke Copland	ᐋᑐᕙᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Lauren Candlish	ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
David Barber	ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Tim Papakyriakou	ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ

Dorthe Dahl-Jensen	ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ/ᑰᐱᓐᐸᐃᒐᓐᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᒃ
Connie Lovejoy	ᓚᕝᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Philippe Archambault	ᓚᕝᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Jean-Éric Tremblay	ᓚᕝᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Maxime Geoffroy	ᒥᒧᑎᐅᓪ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ
Larry Audlaluk	ᐊᐅᓯᐃᑦᑐᖅ, ᑲᓇᑕ
Stephanie Meakin	ᐃᓄᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᓗᒃᑖᒥᑦ ᑲᑎᒪᔨᑦ, ᑲᓇᑕ
Chris Debicki	ᑲᓇᑕᒥᑦ ᑕᑎᐅᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ
Annie Eastwood	ᑲᓇᑕᒥᑦ ᑕᑎᐅᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ
Erin Keenan	ᓄᓇᕐᔪᐊᕐᒥᑦ ᓂᕐᔪᑎᓕᕆᓂᕐᒧᑦ ᑮᓇᐅᔭᖃᖅᑎᑦᑎᔨᒃᑯᑦ, ᑲᓇᑕ
Nynne Hjort Nielsen	ᐊᑯᑭᑦᑐᕐᒥᑦ ᓄᓇᒥᑦ ᐱᕝᕕᐅᔪᑦ, ᐊᑯᑭᑦᑐᖅ
Fernando Ugarte	ᐊᑯᑭᑦᑐᕐᒥᑦ ᓄᓇᒥᑦ ᐱᕝᕕᐅᔪᑦ, ᐊᑯᑭᑦᑐᖅ
Andrew Randall	ᕿᑭᖅᑕᓂᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ, ᑲᓇᑕ
Andrew Bresnahan	ᕿᑭᖅᑕᓂᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ, ᑲᓇᑕ

ᐃᓚᓕᐅᔾᔭᐅᓯᒪᔪᖅ 3. ᑲᑎᒪᔾᔪᑎᒃᓴᑦ

ᐅᓪᓗᖅ 1 – ᐱᖓᔪᐊᑦ, ᔫᓄᐊᕆ 22, 2020

9:00 ᐅᓪᓿᒃᑯᑦ ᑐᙵᓴᐃᓂᖅ ᐊᒻᒪᓗ ᑲᑎᒪᓂᕐᒥᑦ ᑭᓇᐅᓂᕐᒥᓂᒃ ᐅᓂᒃᑳᖅᑐᑦ (ᐃᒃᓯᕙᐅᑕᑦ)

- ᐃᓚᐅᔪᑦ ᑭᓇᐅᓂᕐᒥᓂᒃ ᐅᓂᒃᑳᖅᑐᑦ (ᐊᑏᑏ ᐱᕙᓱᔭᐃᒋᔅᓯ ᓇᐃᑦᑐᓂᒃ ᐅᓂᒃᑳᒐᒃᓴᓂᒃ ᖃᓄᐃᓕᐅᖃᑦᑕᕐᓂᕕᓂᔅᓯᓐᓄᑦ, ᖃᐅᔨᒪᓂᓯ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᖃᕐᕕᓯ ᑕᕝᕙᓂ ᑲᑎᒪᓂᕐᒥᑦ)

9:30 ᐅᓪᓿᒃᑯᑦ ᐊᑕᖏᓗᒃᑖᖅᓯᒪᔪᑦ ᑖᒃᑯᓄᖓ ᑲᓇᑕᒥᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᑐᖅᑲᖅᑕᕐᕕᖓᑦᑕ (CSAS) ᐱᓕᕆᖃᑎᒌᑦ ᕿᒥᕐᕈᔭᐅᓂᖏᓐᓄᑦ ᑲᔪᓯᕙᓪᓕᐊᓖᑦ (Joclyn Paulic)

- ᕿᒥᕐᕈᓗᒋᑦ ᒪᓕᑦᑕᐅᔭᕆᐊᓖᑦ ᓇᓗᓇᐃᔭᐅᑎᖏᑦ
- ᕿᒥᕐᕈᓗᒋᑦ ᑲᑎᓂᕐᒧᑦ ᑲᑎᒪᔾᔪᑎᒃᓴᑦ

10:15 ᐅᓪᓿᒃᑯᑦ ᓄᖅᑲᖓᓚᐅᑲᒡᓗᑎᒃ (ᓂᐅᖅᑲᖓᑦ ᐊᑐᐃᓐᓇᐅᓗᑎᒃ)

10:30 ᐅᓪᓿᒃᑯᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᕐᔪᐊᒃᑯᑦ (DFO) ᐃᓗᓕᖏᑦ ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖏᑦ (B. Shroeder)

10:45 ᐅᓪᓿᒃᑯᑦ ᐊᑯᑦᑐᑦ/ᑕᓐᒫᒃ ᐃᓗᓕᖏᑦ ᐊᒻᒪᓗ ᐊᔾᔨᐸᓗᖏᑦ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ (ᐅᓪᓗᓕᖅᑕᐅᓿᖅᑐᖅ)

11:00 ᐅᓪᓿᒃᑯᑦ ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ – ᐱᓕᕆᔾᔪᓲᑦ ᐊᒻᒪ ᑲᔪᓯᓂᐅᕙᒃᑐᑦ (C. Hornby)

11:45 ᐅᓪᓿᒃᑯᑦ ᓂᕆᓐᓇᖅ (ᑐᓂᔭᐅᙱᑦᑐᖅ)

12:45 ᐅᓐᓄᒃᓴᖅ ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓗᓂ – ᓯᑯ, ᐃᑎᓂᖅᓯᐅᑏᑦ, ᑕᕆᐅᕐᒥᐅᑕᑦ ᐊᒻᒪ ᓯᓚᐅᑉ ᖃᓄᐃᓐᓂᕆᕙᒃᑕᖏᑦ ᑲᑎᙵᔪᑦ ᐅᖃᐅᓯᒃᓴᑦ (C. Hornby)

2:00 ᐅᓐᓄᒃᓴᖅ ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓗᓂ – ᓂᕿᑦᑎᐊᕙᐃᑦ ᐊᒻᒪᓗ ᐊᑦᑎᖕᓂᖅᓴᑦ ᓇᓃᓐᓂᖏᓐᓄᑦ ᕐᑯᕝᕙᓯᓕᓅᓄᑦ ᐅᖃᐅᓯᐅᔪᑦ (ᒥᑭᔫᑎᕈᓗᐃᑦ, ᐅᓄᖅᓯᕙᓪᓕᐊᓂᖏᑦ, ᐆᒪᔪᕋᓛᑦ, ᐆᔭᐅᔭᑦ ᐱᕈᖅᐸᒃᑐᑦ ᐊᒻᒪᓗ ᐃᖅᑲᕐᒥᐅᑕᑦ) (C. Hornby)

2:30 ᐅᓐᓄᒃᓴᖅ ᖃᓄᐃᑕᐃᓕᒪᓗᓂ ᓄᖅᑲᖓᑲᐃᓐᓇᕐᓂᖅ

2:45 ᐅᓐᓄᒃᓴᖅ ᑲᔪᓯᓗᑎᒃ ᐅᖃᐅᓯᕆᓗᓂᔾᔪᒃ

3:30 ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓗᓂ – ᑕᕆᐅᒥᑦ ᐃᖃᓗᐃᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ (C. Hornby)

4:25 ᐅᓐᓄᒃᓴᖅ ᓇᐃᓈᖅᓯᒪᔪᑦ ᐅᓪᓗᖅ 1 ᐊᒻᒪᓗ ᕿᒥᕐᕈᓗᒋᑦ ᐅᓪᓗᖅ 2 ᑲᑎᒪᔾᔪᑎᒃᓴᑦ

4:30 ᐅᓐᓄᒃᓴᖅ ᐅᓪᓗᖅ 1 ᑲᑎᒪᓂᐅᑉ ᒪᑐᔭᐅᓂᖓ

ᐅᓪᓗᖅ 2 – ᕿᑎᖅᑰᑦ, ᔫᓄᐊᕆ 23, 2020

9:00 ᐅᓪᓿᒃᑯᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᐅᓪᓗᖅ 1 ᐊᒻᒪᓗ ᕿᒥᕐᕈᓗᒋᑦ ᐅᓪᓗᖅ 2 ᑲᑎᒪᔾᔪᑎᒃᓴᑦ (ᐃᒃᓯᕙᐅᑕᑦ)

9:10 ᐅᓪᓿᒃᑯᑦ ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓗᓂ – ᐳᐃᓐᑦ ᐊᒻᒪᓗ ᑎᕐᒥᐊᑦ ᐊᒡᒍᖅᑐᖅᓯᒪᔪᑦ (C. Hornby)

10:30 ᐅᓪᓿᒃᑯᑦ ᓄᖅᑲᖓᓚᐅᑲᒡᓗᑎᒃ (ᓂᐅᖅᑲᖓᑦ ᐊᑐᐃᓐᓇᐅᓗᑎᒃ)

10:45 ᐅᓪᓿᒃᑯᑦ ᑲᔪᓯᓗᑎᒃ ᐅᖃᐅᓯᕆᓗᓂᔾᔪᒃ

11:30 ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓗᓂ – ᑕᐃᓂᔅ ᐅᐊᖕᓇᖓᓂᑦ ᐃᒥᖏᓐᓄᑦ ᐅᓂᒃᑳᖅ – ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓖᑦᑐᓄᑦ ᐱᒻᒪᕆᐅᔪᐃᑦ ᐃᓖᑦ (A. Mosbech/ T. Christensen)

12:00 ᐅᓐᓄᒃᓴᖅ ᓂᕆᓐᓇᖅ (ᑐᓂᔭᐅᙱᑦᑐᖅ)

1:00 ᐅᓐᓄᒃᓴᖅ ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔭᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓗᓂ – ᓄᓇᐅᑉ ᖃᓄᐃᓕᖓᓂᖓᓄᑦ ᐱᕐᔪᐊᑦ ᐅᔾᔨᕐᓇᖅᑐᑦ ᐊᒻᒪᓗ ᐊᕐᕌᒍ ᐃᓚᐃᓐᓇᖓᑕ ᐃᓗᐊᓂ ᐱᒻᒪᕆᐅᔪᑦ ᐃᓖᑦ (C. Hornby)

2:30 ᐅᓐᓄᒃᓴᖅ	**ᖃᓄᐃᑕᐃᓕᒪᓗᓂ ᓄᖃᖓᒐᐃᓐᓇᕐᓂᖅ**
2:45 ᐅᓐᓄᒃᓴᖅ	ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ ᓴᖅᑭᔾᖅᑎᑕᐅᓗᓂ ᐅᓂᒃᑳᖅᑕᐅᓗᓂ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᓗᓂ – ᐃᓄᐃᑦ ᐱᓕᕆᓂᖏᓐᓄᑦ ᐱᓕᕆᓃᑦ, ᐊᕙᑎᒧᑦ ᐃᓱᒪᓗᒃᓴᐅᑎᐅᔪᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᓄᑦ ᑎᑭᐅᒪᔾᔪᑕᐅᙱᑦᑐᑦ (C. Hornby)
3:35 ᐅᓐᓄᒃᓴᖅ	ᓈᒻᒪᒋᔭᐅᓂᖓ ᐋᖅᑭᒃᓱᖅᑕᐅᕙᓪᓕᐊᔪᖅ ᑎᑎᕋᖅᑕᐅᔪᖅ
4:00 ᐅᓐᓄᒃᓴᖅ	ᓴᖅᑭᔾᖅᑎᕐᑎᓪᓗᑎᒃ ᐅᓂᒃᑳᖅᑐᑦ ᐊᒻᒪᓗ ᐅᖃᐅᓯᖃᕐᓂᖅ ᑎᑎᕋᖅᐅᑕᓯᒋᐊᕐᖓᖅᑐᓂᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᖏᓐᓂᒃ (ᐃᒃᓯᐅᕙᐅᑕᑦ)
4:25 ᐅᓐᓄᒃᓴᖅ	ᓇᐃᓈᖅᓯᒪᔪᑦ ᐅᓪᓗᖅ 2 ᐊᒻᒪᓗ ᕿᒥᕐᕈᓗᒋᑦ ᐅᓪᓗᖅ 3 ᑲᑎᒪᔾᔪᑎᒃᓴᑦ
4:30 ᐅᓐᓄᒃᓴᖅ	ᐅᓪᓗᖅ 2 ᑲᑎᒪᓂᐅᑉ ᒪᑐᔭᐅᓂᖓ

ᐅᓪᓗᖅ 3 – ᐅᓪᓗᑐᐃᓐᓇᖅ, ᔫᓄᐊᓇ 24, 2020

9:00 ᐅᓪᓛᒃᑯᑦ	ᓇᐃᓈᖅᓯᒪᔪᑦ ᐅᓪᓗᖅ 2 ᐊᒻᒪᓗ ᕿᒥᕐᕈᓗᒋᑦ ᐅᓪᓗᖅ 3 ᑲᑎᒪᔾᔪᑎᒃᓴᑦ (ᐃᒃᓯᕙᐅᑕᑦ)
9:10 ᐅᓪᓛᒃᑯᑦ	ᑲᔪᓯᓗᑎᒃ ᑎᑎᕋᖅᓯᕙᓪᓕᐊᓗᑎᒃ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᒥᒃ (ᐃᒃᓯᕙᐅᑕᑦ)
10:15 ᐅᓪᓛᒃᑯᑦ	**ᓄᖅᑲᖓᓚᐅᑲᒡᓗᑎᒃ (ᓂᐅᖅᑲᖓᑦ ᐊᑐᐃᓐᓇᐅᓗᑎᒃ)**
10:30 ᐅᓪᓛᒃᑯᑦ	ᑭᙵᓪᓕᖅᐹᖅᓯᐅᑎᓄᑦ ᐋᖅᑭᒡᓗᒋᑦ ᓇᐃᓇᖅᓯᒪᔪᑦ ᓇᓗᓇᐃᒃᑯᑕᑦ (ᐃᒃᓯᕙᐅᑕᑦ)
12:00 ᐅᓐᓄᒃᓴᖅ	**ᓂᕆᓐᓇᖅ (ᑐᓂᔭᐅᙱᑦᑐᖅ)**
1:00 ᐅᓐᓄᒃᓴᖅ	ᑕᐃᒪᐃᑦᑕᕆᐊᖃᕈᑎᒃ–ᑯᔪᓯᓗᑎᒃ ᑭᙵᓪᓕᖅᐹᖅᓯᐅᑏᑦ ᑭᒡᓕᓯᓂᐊᕐᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᒋᐊᖅᑏᑦ ᐅᓂᒃᑳᒥᒃ (ᐃᒃᓯᕙᐅᑕᑦ)
1:45 ᐅᓐᓄᒃᓴᖅ	ᓇᐃᓈᖅᓯᒪᔪᑦ ᑲᑎᒪᓃᑦ ᐊᒻᒪᓗ ᖃᐅᔨᔭᐅᔪᑦ/ᑭᙵᓪᓕᕐᒥᑦ ᖃᓄᐃᓕᐅᒐᒃᓴᑦ (ᐃᒃᓯᕙᐅᑕᑦ)
2:00 ᐅᓐᓄᒃᓴᖅ	ᑲᑎᒪᓂᖅ ᐱᐊᓂᒃᑐᖅ – ᕐᑯᔭᓐᓇᒦᒃ!