ᐃᓗᓕᑐᓗᐊᖑᓂᖅᓴᒥ ᓇᓗᓇᐃᔭᐅᑎ ᖃᐅᔨᓴᕈᒪᓂᕐ ᒧᑦ ᑐᐱᖅᓵᒻ ᒧᑦ

ᓇᑦ ᑎᓐ ᓇᐃᑦ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖕᒐ ᑲᓇᖕ ᓇᖕᓂ

ᐋᓇ ᑯᕌᕙᑦ[1]*, ᑎᐅᓄᒃ ᒥᐅᓗ*[1]*, ᐱᑕ ᕚᑦ H ᐊᒻ ᔅ*[2]*, ᑭᑦ ᓂᑯ ᔅ*[3]*, ᓇᑦ ᓯᑦ ᐸᐃᑦ ᔅ*[4]*, ᐊᓗᓐ ᓯᑑᓐ*[5]

[1]ᓄᓇᖁᐊᑕᓂᔅᒃ ᑯᑦ ᐱᓕᕆᕖᖓᑲᕈᑕᓐ ᐃᓕᓐ ᓂᐊᕐ ᕖᒡ ᔪᐊᖓᐊᑐᕙ, ᐊᓐ ᑎᐅᓂᔪ
[2]ᐃᓕᓐ ᓂᐊᕐ ᕖᒡ ᔪᐊᖑᑦ ᓂᑲᒻ ᐸᓃᔾ, ᑲᒻ ᐸᓃᔾ, ᑯᐃᓐ ᓄᓇᕐᑯᑎᖕᒋ ᓂᐃᖕᒐᓐ ᒥ
[3]ᐸᑎᒃ ᓄᓇᕐ ᔪᐊᑦ ᐊᑖᓂᐅᑭᐅᖅᑕᖅᑐᓕᓂᕐ ᒧᑦ ᖃᐅᔨᓴᕐ ᓂᖅ, ᑲᒻ ᐸᓃᔾ, ᑯᐃᓐ ᓄᓇᕐᑯᑎᖕᒋ ᓂᐃᖕᒐᓐ ᒥ
[4]ᐃᓕᓐ ᓂᐊᕐ ᕖᒡ ᔪᐊᖑᑦ ᓂᓴᐃᓐᑦ ᐊᓅᔾ, ᓴᐃᓐᑦ ᐊᓅᔾ, ᐃᖕᒐᓐ ᒥ
[5]ᓂᐅ ᔪᐊᒃ ᐃᓕᓐ ᓂᐊᕐ ᕖᒡ ᔪᐊᖑᑦ ᓂ, ᓂᐅ ᔪᐊᒃ, ᓂᐅ ᔪᐊᒃ, ᐊᒥᐊᓕᑲ ᐃᑦ ᓄᓇᖑᑦ ᓂ

ᑖᓐ ᓇ ᖃᐅᔨᓴᕐ ᓂᐅᔪᖅ ᑲᑎᑦ ᑎᖕ ᒪᑦ ᓄᓇᕐ ᔪᐊᕐ ᒥ ᑭᓪ ᓕᓯ ᓂᐊᖅᑎᓪ ᒪᑎᐅᔪᓂ ᖃᐅᔨᒪᕆᐊᖕᒋ ᓇᕐᓯ ᓗᕆᑦ ᖃᐅᔨᓴᕐ ᓂᑎᔭᖕᓂ ᓵᕙᓐ ᓂᑰᔪᒥ ᐃᖕᖏ ᕿᔪᒥ, ᓯᕿᑦ ᑎᕙᓪ ᓕᐊᓂᑎᔭᖕᓂ ᐊᒻ ᒪᓗ ᖃᓄᐃᑦ ᑑᓕᕐ ᒪᖕᒎ ᐱᔭᖅᐸᓪ ᓕᐊᑎᕆᖕ ᒪᖕᒎᓗ ᓇᑦ ᑎᓐ ᓈᓗᐃᑦ (ᐊᖕᕋᐊᓗᐃᑦ ᐱᕐᑲᓗᔭᕐ ᔪᐊᕿᓗᐃᑦ ᐲᕐ ᓂᑰᑦ ᐊᐅᔪᐃᑦ ᑐᕐ ᔪᐊᖕᕚᓂᑦ) ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖕᒐ ᑲᓇᖕ ᓇᖕᓂ. ᑎᓴᒪᑦ ᑕᐃᒪᐃᑦ ᑐᑦ ᓇᑦ ᑎᓐ ᓇᐃᑦ ᖃᐅᔨᒪᔭᐅᕆᐊᕿᓯᓚᐅᕐ ᒪᑕ ᔪᓚᐃ ᑕᖅᑭᖕᒐᑦ ᐅᑐᐱᓄᑦ 2011 ᐃᓗᐊᓂ ᑕᕝ ᕗᖕᒡᓗ ᖃᐅᔨᓴᕆᐊᒃ ᑲᓐ ᓂᕈᒪᓪ ᓗᑎᒃ 2012 ᐃᓗᐊᓂ ᑭᖑᓂᐊᒍᓪ ᓗ. ᓇᑦ ᑎᓐ ᓇᐃᑦ ᐱᕐᑲᓗᔭᕐ ᔪᐊᖑᒍ ᓗᑎᒃ ᕿᑭᖅᑕᖅᑎᑰᖕᖁᑦ ᐊᖕᕋᐊᓘᓪ ᓗᑎᒃ (1 km^2 ᐱᒋᐊᖅᑐᒍ ᑎᑭᓪ ᓗᒍ 250 km^2) ᐅᒥᐊᕐ ᔪᐊᓃ ᐅᓯᑲᖅᑕᖅᑎᐅᔪᓃ ᐅᓗᓇᐊᒋᔭᐅᔪᑦ ᑕᒪᒃ ᑯᓅᖕᓗ ᓄᓇᒥᖕᒌᖅᑐᓂ ᐱᓇᓱᐊᖅᑎᐅᔪᓃ ᐱᕚᓪ ᓕᐊᑎᑦ ᑎᓇᓱᒃ ᑎᐅᔪᓃᓪ ᓗ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖕᓂ ᐊᒻ ᒪᓗ ᑕᐅᓇᓂ ᓄᓇᕐ ᔪᐊᑉ ᐊᑎᖕᒌᖕᓂ ᐅᑭᐅᖅᑕᖅᑐᖕᓂ. ᖃᐅᔨᓴᕐ ᓂᒃ ᑯᑦ ᑐᑭᓯᒃ ᑲᓐ ᓂᕈᒪᖕ ᒪᑕ ᐃᖕᖏ ᕿᕚᓪ ᓕᐊᓂᖓ ᓇᒧᖕᖂᑉᐸᓪ ᓕᐊᓲᖕᖑᖅ ᒪᖕᒌ ᓯᕿᑦ ᑎᕚᓪ ᓕᐊᑎᒋᓂᖕᒋ ᓗ. ᓇᓚᐅᑦ ᑎᑦ ᑎᐊᕈᓐ ᓇᕐ ᓂᖅᓴᐅᔪᓐ ᓇᕈᑕᐅᓂᐊᕐ ᒪᑦ ᖃᓄᑎᒋ ᐊᒃ ᑎᒋᔪᓂ ᑭᓯᑯᑦ ᑎᐊᓂᓗ ᒥᒃ ᓴᐅᓴᒍᓐ ᓇᓕᕐᑯ ᓗᑕ ᐅᓗᓇᐊᓇᕈᑎᖑᓂᓗ ᖃᐅᔨᒪᓂᖅᓴᐅᓕᕈᓐ ᓇᕐᑯ ᓗᑕ.

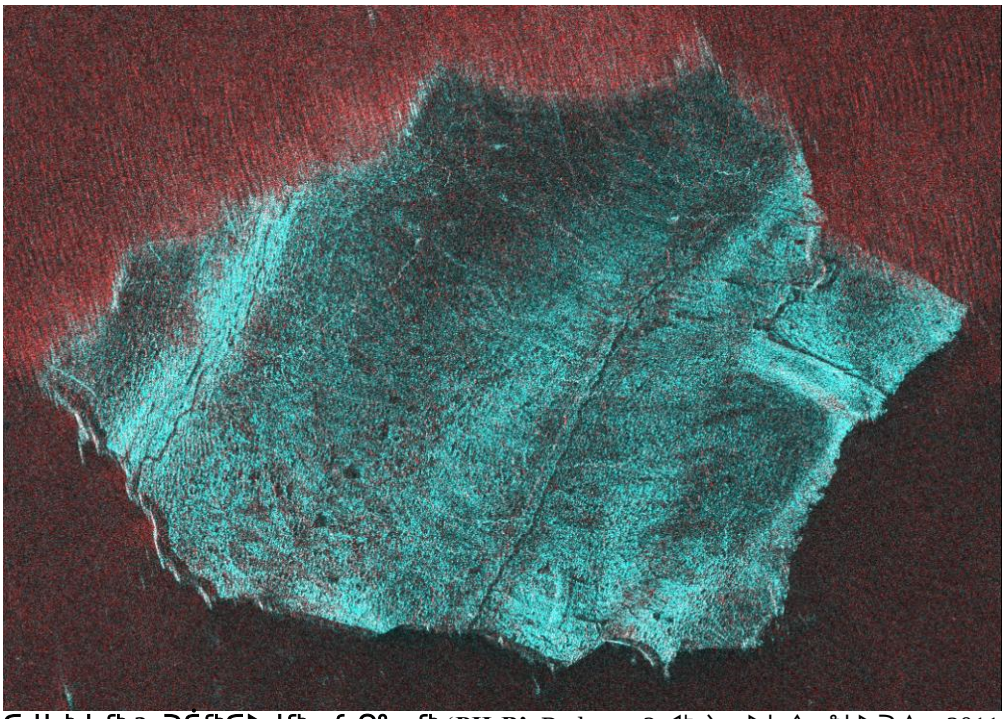
ᑲᓚᓪᔅ (ᐊᑯᑭᑦ ᑐᑦ) ᓄᓇᖓ ᑲᓇᑕᐅᑉ ᒥᒃ ᓯᖕᖔᖕᓂᖕᖏᖅᑐᒡ ᒍᑎᐅᕚᖕ ᒪᑕ ᓇᑦ ᑎᓇᕐ ᔪᐊᓃᑦ ᐱᕐᑲᓗᔭᕐ ᓃᑦ ᐊᖅᑯᓵᕐ ᕕᐅᓂᖅᐹᖕᖑᔩᖕᖑᒪᑦ ᑲᓇᑕᐅᑉ ᑲᓇᖕ ᓇᓕᒫᖕᒪᓃᑦ ᐃᒪᕐᑯᑎᖕᖒᓪ ᓗ. ᐱᑕᒪᓐ ᓇᑦ ᑎᓇᖕᖏ ᖃᐅᔨᓴᖅᑕᐅᓚᐅᖅᑐᑦ ᔪᓚᐃ 2011ᒥ ᐊᒻ ᒪᓗ 2012 ᑕᐃᑲᖕᖔ ᓂᑰᖕ ᒪᑕ (ᐱᑕᒪᓐ ᐊᐅᔪᐃᑦ ᑐᕐ ᔪᐊᖕᖓᐊᑯᑭᑦ ᑐᓂ), ᐊᓯᖕᖏ ᓂᖕᖏᖅᑐᑦ ᐱᕐᑲᓗᔭᐃᑦ ᐱᕐᑲᓗᔭᕐ ᔪᐊᓪ ᓗ ᖃᐅᔨᓴᖅᑕᐅᓛᖅᑐᒃ ᓴᐅᖕᒥᔪᑦ. ᑖᓐ ᓇ ᐲᓇᐊᕐ ᖕᒐᐅᖅᑐᖅ ᐱᑕᒪᓐ ᓇᑦ ᑎᓇᖕᓂᒫᓐ ᓇᑲᖕᖒᖅᑑᐱᐅᑉ ᖃᓂᒋᔭᖕᓂ ᐃᑲᕐ ᓇᓯᒪᔪᖅ ᐊᒻ ᒪ ᓯᓚ ᖃᐅᔨᓴᕐ ᕕᐅᒃ ᑲᓐ ᓂᓖᖅᑐᖅ 2012ᒥ (ᔪᓚᐃ 25 - ᐊᒡ ᒌᓯ 1ᒧᑦ). ᖃᐅᔨᓴᖅᑎᑦ ᐅᒥᐊᕐ ᔪᐊᕐ ᒥ ᑎᓕᓯ ᓯᒪᓂᐊᖅᑐᑦ ᖁᓕᒥ ᒎᓕᖕ ᓂᓗ ᐊᑐᖅᓯ ᑕᕐ ᓗᑎᒃ ᑕᕝ ᕘᖓ ᐅᒥᐊᕐ ᔪᐊᕐ ᒥᑦ ᖃᐅᔨᓴᓇᐊᖅᓯ ᑕᕐ ᓂᐊᕐ ᓗᑎᒃ.

ᖃᐅᔨᓴᕈᑕᐅᔪᓕᒫᑦ ᐱᕐᑲᓗᔭᖕ ᒥ ᓯᕐ ᕿᒃ ᑎᑦ ᓯᑕᐃᓕᒪᓇᓯᐊᑦ ᑎᐊᕐ ᓂᐊᖅᐳᑦ ᐊᕙᑎᓕᒫᖕᖓᓐ ᓗ. ᖃᓄᐃᓕᖕᖓᓇᓕᖅᑕᖕᖓᓗ ᖃᐅᔨᒪᓇᓯᐊᕐ ᓂᖕᒪᓃᑦ ᓴᓂᕌᒍᑦ ᐆᒃ ᑐᐃᓯᒥ ᐊᑐᖅᓯ ᑕᕐ ᓂᐊᖅᐳᑦ ᕿᒥᕐ ᕈᔾ ᔪᑎᒥ ᐊᑭᐅᖅᑕᕐ ᓂᕿᖅᑕᐅᓯᓂ ᐃᖅᑲᖅᓯᐅᕈᑎᓂᒡ ᓗ. ᒪᓕᖕ ᓃᓪ ᓗ ᐊᒃ ᑐᖅᑕᐅᕙᓪ ᓕᐊᓂᖕᒪᓃᑦ ᐊᐅᓚᓂᖕᒐᓐ ᖃᐅᔨᓴᖅᑕᐅᕐ ᑕᕐ ᓂᐊᓇᕗᖅ ᖃᓄᐃᑦ ᐊᒃ ᑐᖅᑕᖅᑕᐅᓂᖓ ᓯᕿᒃ ᐸᓪ ᓕᐊᔾ ᔪᑕᐅᖕ ᒪᖕᒌ ᐲᔭᖅᐸᓪ ᓕᐊᑎᑦ ᑎᔾ ᔪᑕᐅᖕ ᒪᖕᒌ ᓘᓐ ᓅᑦ ᐊᒻ ᒪᓗ ᐅᕕᖅᐸᓪ ᓕᐊᖕ ᒪᖕᒌ ᐆᒃ ᑐᐃᖅᓯ ᑕᕐ ᓂᐊᓇᕗᑦ ᐅᒥᐊᕐ ᒥᓗ ᐳᓪ ᓚᖓᒥ ᒪᓚᒃ ᓯᐆᒻ ᒥ ᐊᑐᖅᓯ ᑕᕐ ᓗᑎᒃ. ᓂᓪ ᓚᓇᕐ ᓂᖅᓯᐅᖅᑕᐅᖅᓯ ᑕᕐ ᓂᐊᓇᕗᖅ ᐱᕐᑲᓗᔭᒃ ᐊᒻ ᒪ ᐃᒪᖅ ᑕᐃᒫᒃ ᑕᐅᖅ ᖃᐅᔨᓴᖅᑕᐅᖅᓯ ᑕᕐ ᓗᓂ. ᑕᓇᐅᖑᓂᖓᐃᒪᐅᓪ ᓗ ᓂᓪ ᓚᓇᕐ ᓂᖕᖔ ᑕᐅᖅ ᖃᐅᔨᒋᐊᖅᑕᐅᖅᓯ ᑕᕐ ᓂᐊᓇᓪ ᓗᓂ. ᖃᓄᐃᓕᖅᑎᒥ ᐅᐃᑕᐅᔪᖅ ᐊᒃ ᐸᓪ ᓕᐊᑎᒋᖕ ᒪᖕᒌ ᓘᓐ ᓅᑦ ᓇᒧᖕᖂᑉᐸᓪ ᓕᐊᖕ ᓂᖓ ᒪᓪ ᓗᒍ. ᐆᓇᔪᒃ ᑐᒥ ᐃᑰᑕᕈᑎᒥ ᓂᐅᖅᑐᐃᖅᓯ ᑕᕐ ᓂᐊᖅᐳᑦ ᓯᑰᑉ ᐊᑖ ᐃᒪᖅ ᖃᐅᔨᓴᖅᑕᐅᔭᓇᕐ ᓗᒍ. ᐃᒪᐅᓪ ᓚ ᖄᖓ ᖃᐅᔨᒋᐊᖅᑕᐅᖅᓯ ᑕᕐ ᓂᐊᓇᕗᑦ ᑕᐃᒪᓐ ᑎᒋᑦ ᑕᐅᖅ (ᐊᐅᒃ ᑕᔩᒥ ᖃᐅᔨᓴᐅᒻ ᒥ ᐊᑐᕐ ᓗᑎᒃ) ᓯᑯᖕᒪᖕᒌ ᐋᖅᑭᒃ ᑕᐅᓯᒪᔪᒧᑦ. ᖃᖕᖓ ᑕᐅᖅᑎᑕᐅᓯᒪᔪᖅᑎᒍᑦ ᓄᓇᖕᖁᐊᖅᑎᒍᑦ ᓇᓗᓇᐃᖅᓯᔾ ᔪᑎᓂ (GPS) ᓇᓗᓇᐃᒃ ᑯᑦ ᑎᖅᓯᖅᓯ ᑕᕐ ᓂᐊᖅᐳᒍᑦ. ᑖᓐ ᓇ ᓇᑦ ᑎᓐ ᓈᓗᒃ ᓇᒎᓕᕐ ᒪᖕᒌ ᖃᐅᔨᒪᔾ ᔪᑎᒃ ᓴᑦ ᑎᓐ ᓂ. ᑖᓐ ᓇᓗ ᓇᓗᓇᐃᒃ ᑯᑦ ᑎᖅᑕᐅᔭᕐᖒᖕᒌ ᖃᖕᖓ ᑕᖅᑎᑕᐅᓯᒪᔪᖅᑎᒍᑦ ᐊᔾ ᔨᓕᐅᖅᑕᐅᖅᓯ ᑕᕐ ᓂᐊᓇᕗᖅ ᐊᑐᕐ ᓗᒍ Radarsat-2 satellite imagery ᓇᐅᒃ ᑰᕐ ᓂᖕᒐ ᑎᑎᖅᑕᐅᓯᒪᑦ ᑎᐊᖅᓯ ᑕᕐ ᓂᐊᕐ ᒪᑦ. ᑖᒃ ᑯᐊᓗ ᓇᓗᓇᐃᒃ ᑯᑕᐃᑦ ᐆᒃ ᑐᖅᓯᔾ ᔨᑏᓪ ᓗ ᐊᒥᒃ ᑰᑑᓚᔭᖅᑐᑦ ᕿᓐ ᒪᑰᑑᓚᕚᖅᓗᑎᒃ ᓗ. 2010-ᒥᓂᑦ ᖃᓄᐃᑉ ᐸᓪ ᓕᐊᓯᒪᖕ ᒪᖕᒌ ᑕᑯᒋᐊᕐ ᕕᒃ ᓴᐅᔪᖅ ᐱᑕᒪᓐ ᓇᑦ ᑎᓐ ᓇᕐ ᔪᐊᕐᑯᑎᖕᖑᐅᕚᓂᖅᓴᐅᔭᒃ ᑯᑦ ᑐᕌᕈᑎᒃ ᑯᑦ :

http://www.ec.gc.ca/glaces-ice/default.asp?lang=En&n=0417829C-1&wsdoc=1B226706-42BF-4B94-A481-E9524C81C436

ᑖᓐ ᓇ ᖃᐅᔨᓴᕐ ᓂᖅ ᐃᑲᔫᑎᑦ ᑎᐊᕐ ᓂᐊᕐ ᒪᑦ ᓯᑯᐃᑦ ᓇᑦ ᑎᓇᐃᑦ ᐱᕐᑲᓗᔭᕐ ᔪᐊᓪ ᓗ ᖃᐅᔨᓴᖅᑕᐅᓂᕆᔭᖕᖑᓂᑦ ᑲᓇᑕᒥ ᓯᑯᓕᕆᓂᕐ ᒧᑦ ᐱᕚᑦ ᓯᖅᑎᐅᔪᓃᑦ (CIS) – ᐊᕙᑎᓕᕆᓃᒃ ᑯᑦ ᑲᓇᑕᒥ ᐊᒻ ᒪ ᐊᒃ ᑎᒃ ᓂᐊᑦ. ᑭᓪ ᓕᓯ ᓂᐊᕈᑎᕗᑦ ᑎᑎᕋᖅᐸᓪ ᓕᐊᖕᖑ ᓇᕐ ᓂᐊᖅᑕᕗᑦ ᖃᓄᐃᑦ ᓗ ᓯᑯᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐊᓯᔾ ᔨᐸᓪ ᓕᐊᑎᒋᓯᒪᓕᕐ ᒪᖕᒐ ᐃᖕᒐᓐ ᒥ ᑕᑯᓐ ᓇᐅᑉ ᓴᓕᑎᕐᒃ ᑯᑎᒍᑦ ᐊᔾ ᔨᓕᐅᖅᑕᐅᕚᓪ ᓕᐊᓂᐊᖅᓱᑎᒃ ᑕᐅᖅ (BBC). ᐊᐅᓚᔩᓕᐊᑎᔭᐅᓯᒪᔪᓂ ᖃᕿᖅᑖᓗᖕᒥ ᓄᓇᓕᐅᔪᑦ ᑐᓐ ᓂᑎᔭᐅᒐᔭᖅᑐᑦ ᑕᐅᑐᒃ ᑕᐅᔪᓐ ᓇᓖᕐ ᒪᑕ. ᓄᓇᓕᖕ ᓃᓪ ᓗ ᐅᓂᒃ ᑳᑎᐊᖅᑐᕐ ᕕᐅᕙᔭᖅᐳᑦ (ᓰᕐ ᓗ ᐃᖅᑲᓗᖕ ᓃᑦ). ᑎᑎᕋᕈᑕᐅᓯᒪᔭᕐ ᑕᕐ ᓂᐊᖅᑕᐅᔪᖅ ᓴᖅᑭᑎᑕᐅᔪᒃ ᓴᓂ (ᓰᕐ ᓗ ᖃᐅᔨᓴᖅᑎᑦ ᐅᖅᑲᓖᒪᖓ Polar Research) ᐊᔾ ᔨᖕᒋ ᓂᓗ ᑐᓂᓯᔭᐅᕐ ᑕᕐ ᓂᐊᖅᐳᑦ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑐᓕᕆᕖᖓ

ᑕᑯᔭᒃ ᓴᖅ 1: ᑐᑭᓕᐅᕈᑎ ᐱᑕᒪᓐ ᐊᐅᔪᐃᑦ ᑐᖕᒐᖕᒋᒃ ᓂᑯ ᓇᑦ ᑎᓐ ᓇᖅ (PII) ᐲᕐ ᓂᑯ. ᐊᔾ ᔨᓕᐅᖅᑕᐅᖕᒪᑦ (‘PII-Ba’) ᑖᓐ ᓇᐊᖕᒥᕐᑲᓚᐅᖅᑐᖅ ᑕᒫᓂᕈᔪᒃ 11.5 km^2 (6.0 km x 2.0 km) ᑕᑦ ᓗᕈᑎᑦ ᓗ ᐃᒪᖕᒐᑎᑦ ᓗᒍ ᐊᔾ ᔨᓕᐅᖅᑕᐅᑦ ᓗᓂ.



ᑕᑯᔭᒃ ᓴᖅ 2: ᑐᕋᖅᑕᐅᔪᖅ ᓇᑦ ᑎᓐ ᓇᖅ ‘PII-B’. Radarsat-2 ᐊᔾ ᔨᓕᐅᒐᕕᓂᖕᒐᐅᑐᐱᕆ 2011. ᐊᔾ ᔨᓕᐅᖅᑕᐅᒐᒥ, ᐊᖕᒥᕐᑲᓗᓚᐅᖅᑐᖅ 60.9 km^2 (11.5 km x 7.9 km). ᐃᓚᖕᒫᑎᖅᓱ ᒪᓕᖅᑐᖅ ᑕᐃᒪᖕᒐᒥ ᐊᖕᒥᕐᑲᓗᐊᓕᖅᐳᕐ ᓗ 40.0 km^2 (9.5 km x 5.1 km). ᒫᓐ ᓇᑖᓐ ᓇᕐᑭᑲᖅᑐᖅ ᕐᑭᑭᖅᑖᓗᑉ ᐃᑭᖕᒐᒥ (ᕐᑲᖕᒥᖅᓱᒫᐃᐅᑉ ᕐᑲᓂᑎᔭᖕᒐᒥ).