

National Marine Mammal Laboratory

2001 Beluga Tagging Study

From 10 to 20 August 2001, a cooperative tagging project (including scientists from the NMML and the NMFS Alaska Regional Office in Anchorage, as well as members of the Native Village of Tyone) attached satellite tags to seven beluga whales in Cook Inlet, Alaska. The first whale was captured in the Little Susitna River and the rest were captured in Knik Arm. A 1000-ft. net was used to encircle and entangle whales. Captured whales were quickly removed from the net and placed in a sling between rigid-hull inflatable boats; one or two tags were surgically attached to the whale's back; measurements were taken; skin, blubber, and blood samples were collected; and then the whale was released (See Table 1 Below).

All of the belugas were tagged with a small position-only tag (S). These tags are designed to stay on for 1-2 years, but they transmit positions only three to six times a month. Five of the belugas were also tagged with a dive tag (D), similar to those used in Cook Inlet beluga tagging studies in 1999 and 2000. These tags report dive data, in addition to reporting positions several times a day, but they only last for 2-4 months. The long-term data obtained from the position-only tags will allow us to follow the movements of tagged whales throughout an entire year and will help determine the distribution of belugas during winter months, when they are difficult to spot from an airplane due to ice cover and weather conditions. The dive tags give us more detailed position information, in addition to data on depth and duration of dives. These data are important in determining how belugas use the habitat in Cook Inlet.

Biopsy samples are used for various studies: skin samples provide genetic information; blubber is analyzed to determine the whale's diet and contaminant loads; and blood yields information on the general health and condition of the whale, as well as specific information on pathogens, parasite loads, and hormone levels.

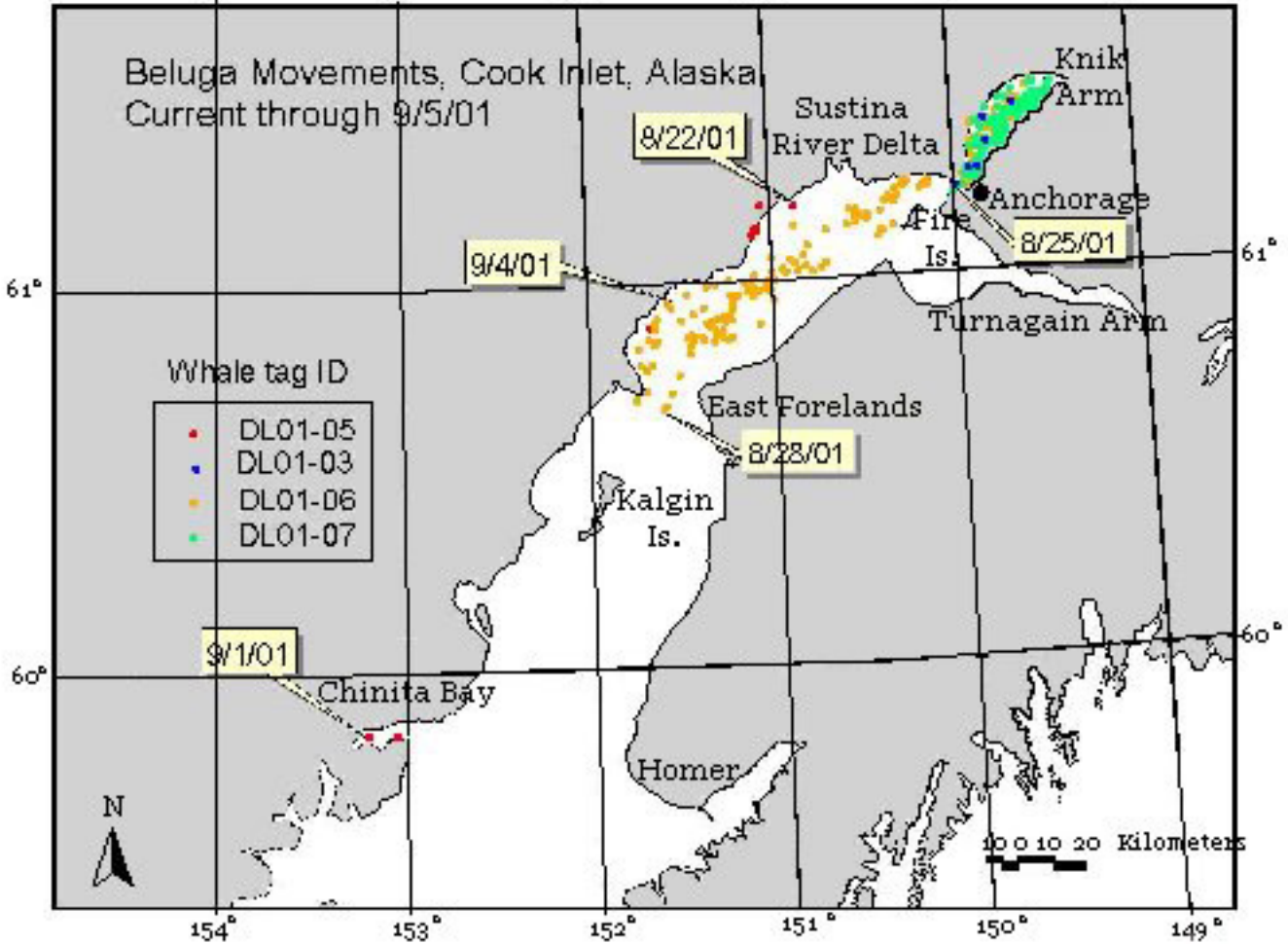
Beluga ID	Capture date	Tags	Length	Sex	Color
DL01-01	10-Aug	S	8' 5"	Female	gray
DL01-02	11-Aug	S,D	10' 7"	Male	white
DL01-03	12-Aug	S,D	10' 3"	Female	white
DL01-04	13-Aug	S,D	11' 2"	Female	white
DL01-05	13-Aug	S	11' 8"	Female	white
DL01-06	15-Aug	S,D	13' 2"	Female	white
DL01-07	20-Aug	S,D	14' 6"	Male	white

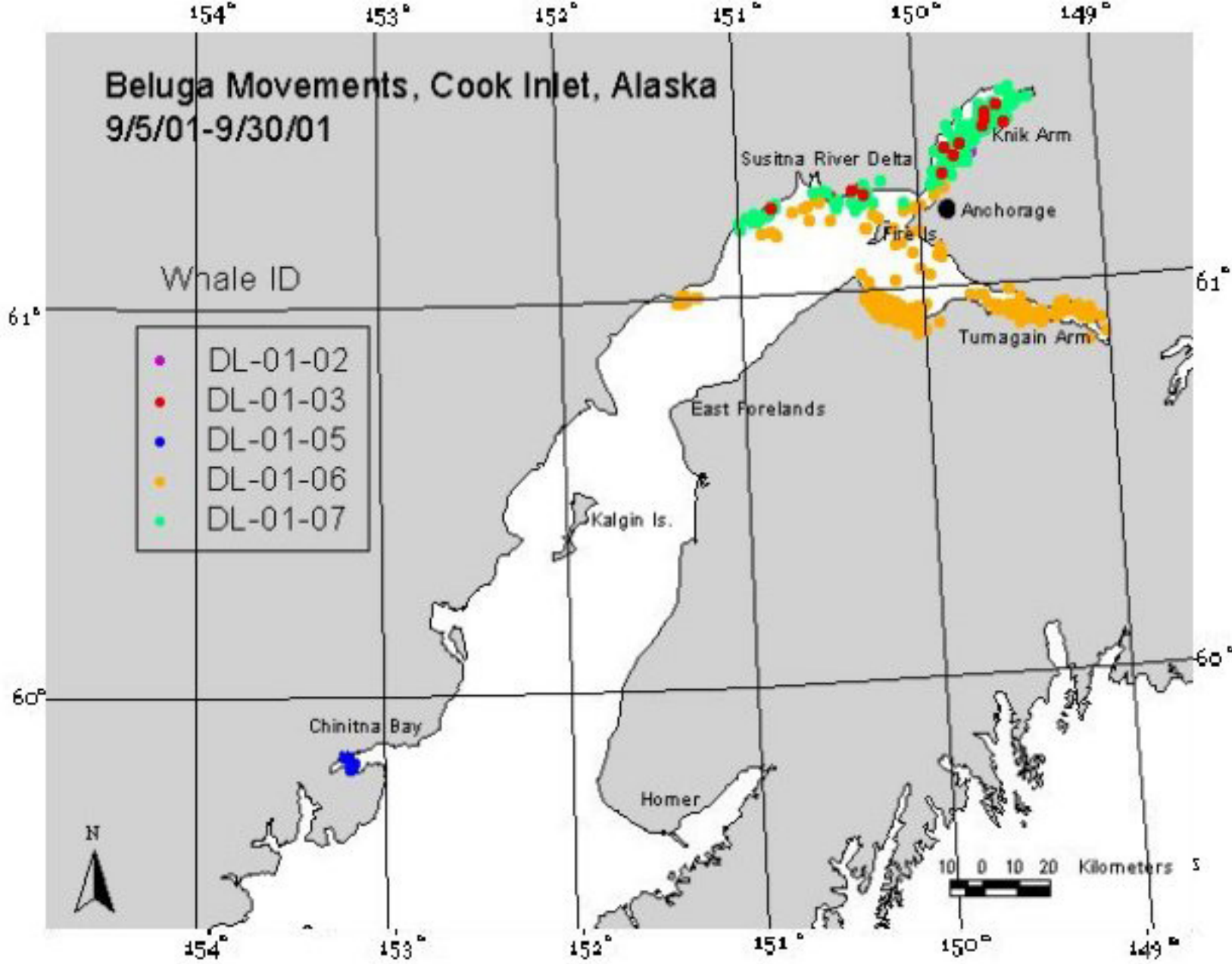
Table 1. Beluga whales tagged in Cook Inlet, Alaska, in August 2001.



Beluga Movements, Cook Inlet, Alaska
Current through 9/5/01

- Whale tag ID
- DL01-05
 - DL01-03
 - DL01-06
 - DL01-07



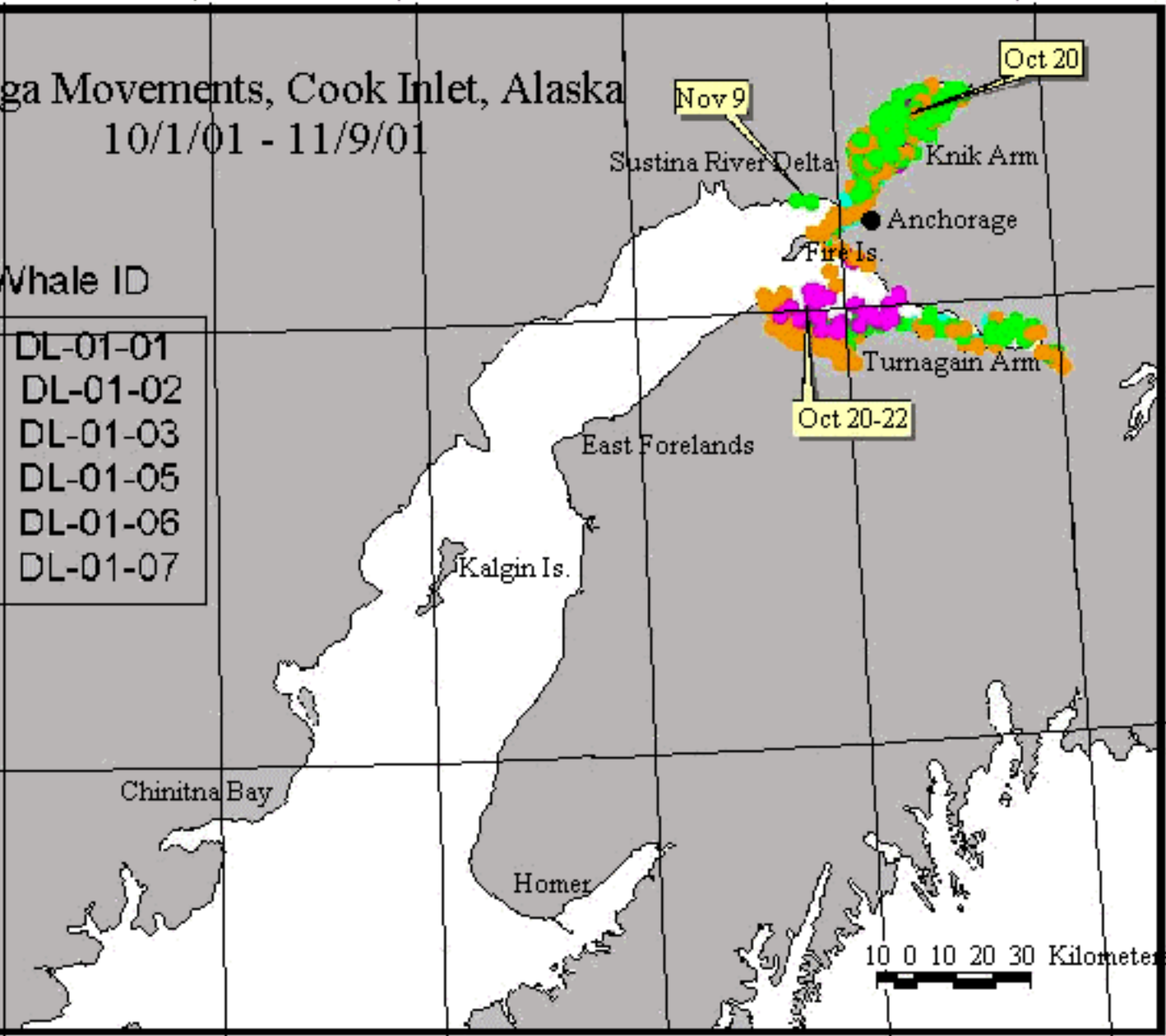


Beluga Movements, Cook Inlet, Alaska

10/1/01 - 11/9/01

Whale ID

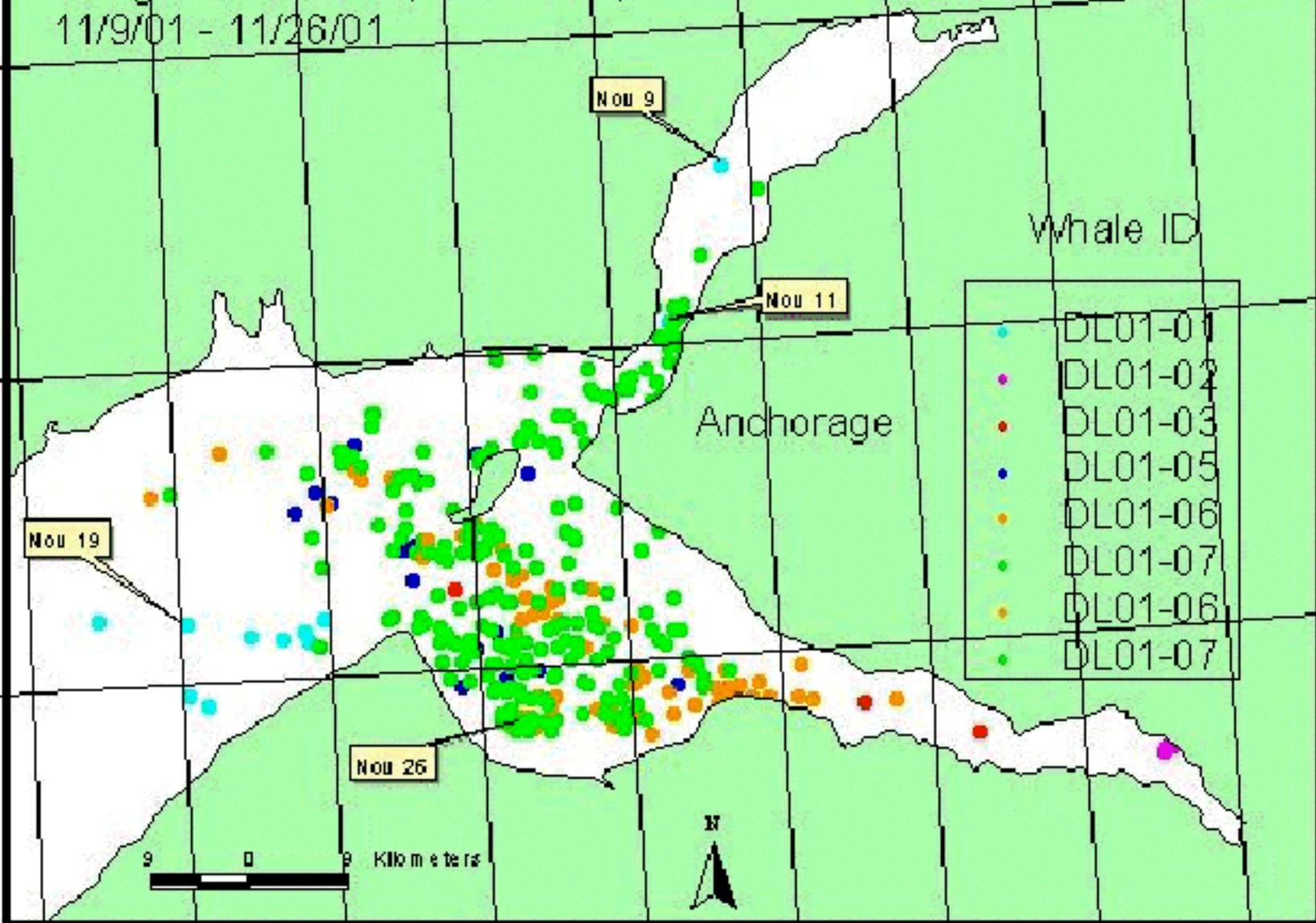
- | | |
|---|----------|
| ● | DL-01-01 |
| ● | DL-01-02 |
| ● | DL-01-03 |
| ● | DL-01-05 |
| ● | DL-01-06 |
| ● | DL-01-07 |



0 10 20 30 Kilometers







Beluga Movements, Cook Inlet, Alaska

11/9/01 - 11/26/01



Beluga Movements, Cook Inlet, Alaska 11/27/01-12/14/01

Whale ID

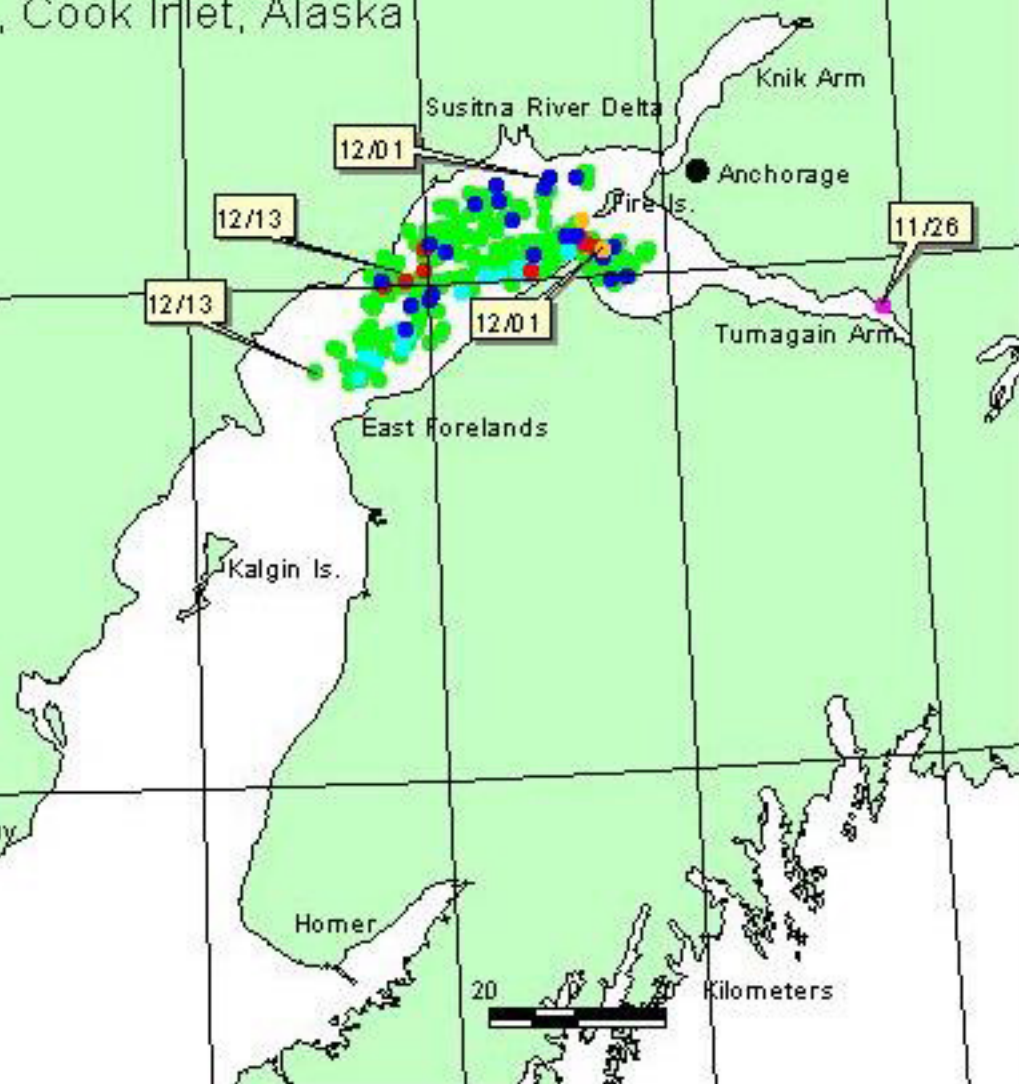
	DL-01-01
	DL-01-02
	DL-01-03
	DL-01-05
	DL-01-06
	DL-01-07



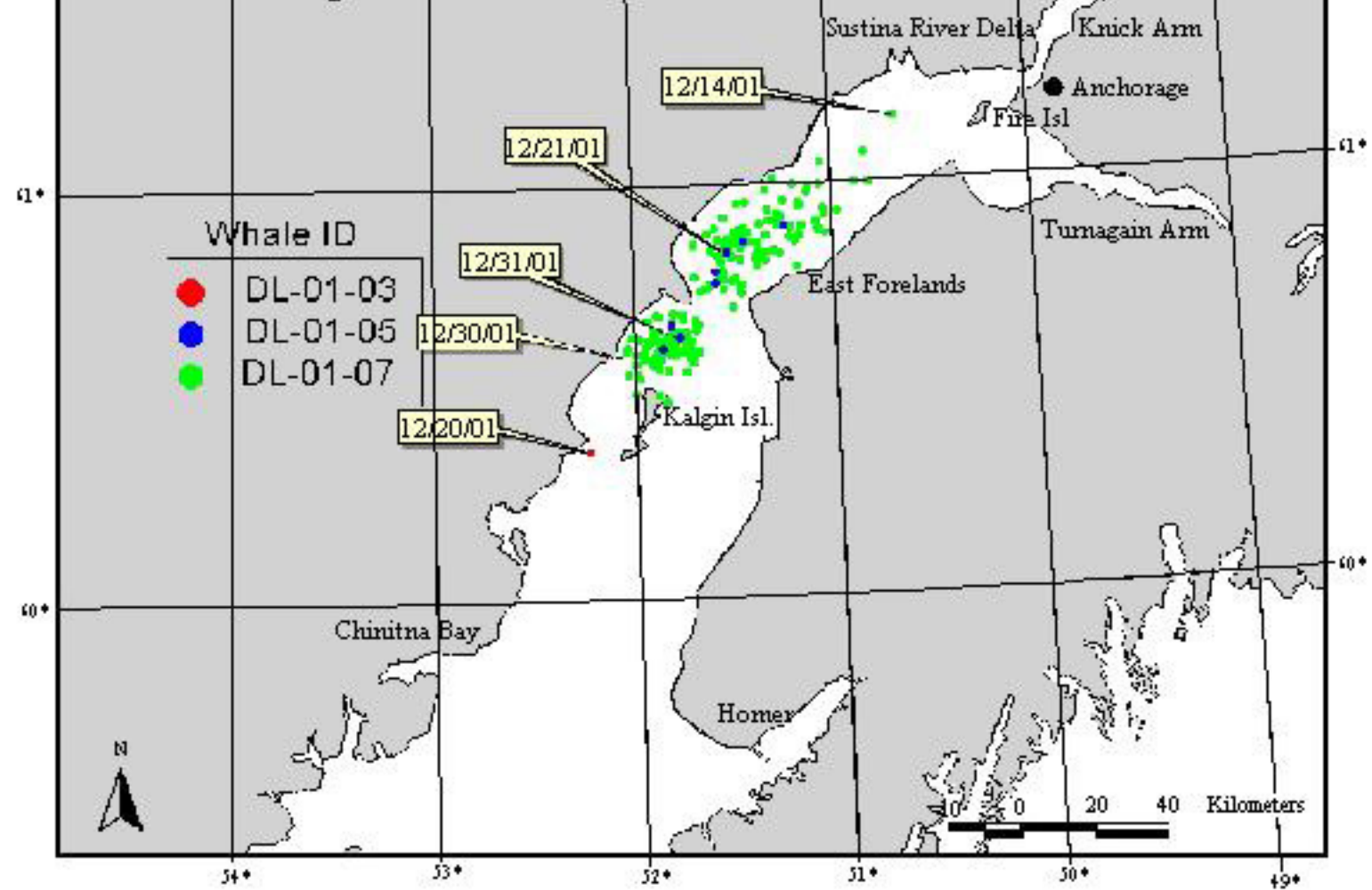
20



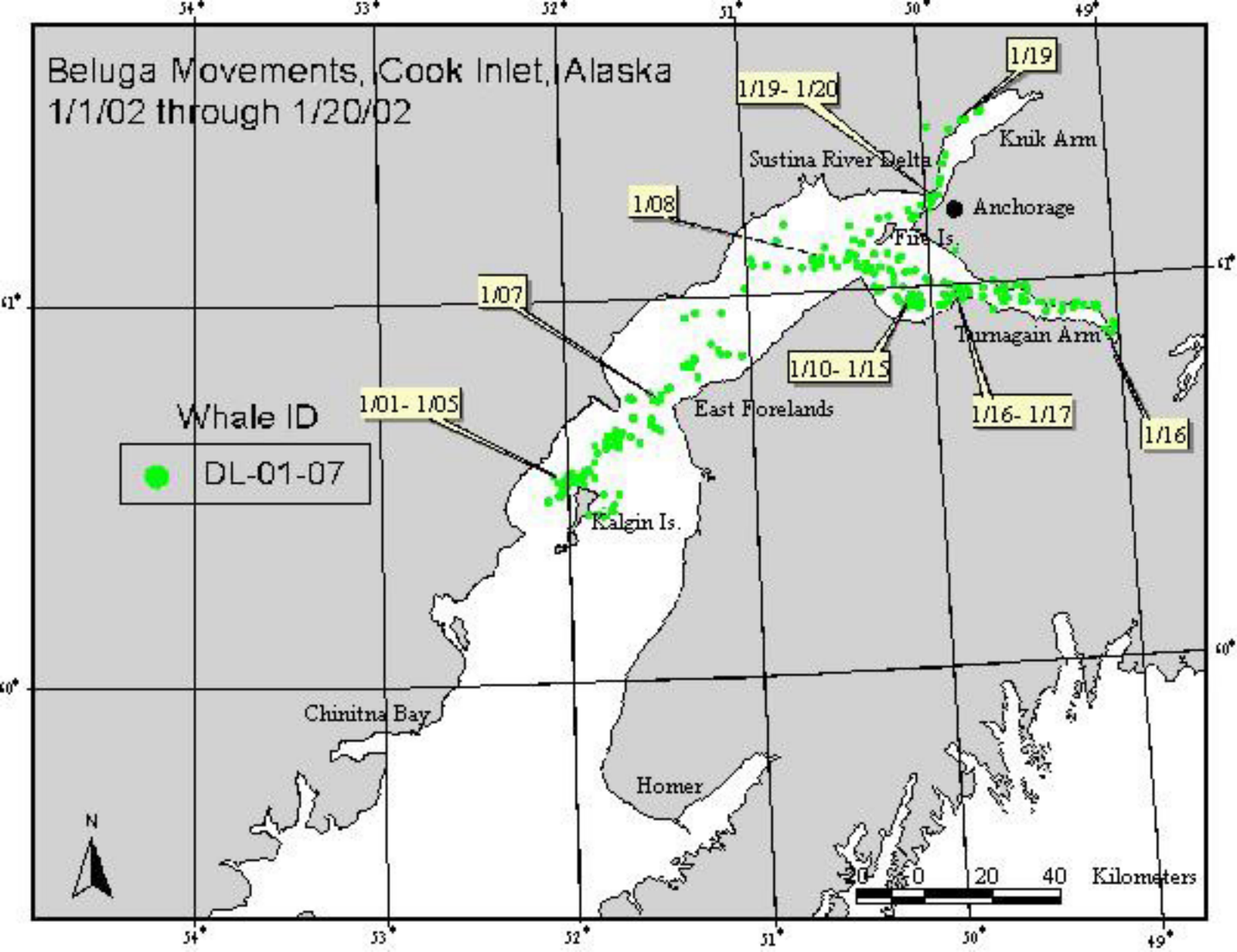
Kilometers



Beluga Movements, Cook Inlet, Alaska
12/14/01 through 12/31/01



Beluga Movements, Cook Inlet, Alaska 1/1/02 through 1/20/02



Beluga Movements, Cook Inlet, Alaska
1/21/02 through 2/4/02

61°

60°

34° 33° 32° 31° 30° 29°

34° 33° 32° 31° 30° 29°

Susitna River Delta

Knik Arm

● Anchorage

Fire Isl.

Tumagain Arm

East Forelands

Kalgin Isl.

Chinitna Bay

Homer

Whale ID



DL-01-07

1/23

1/25-26

1/29

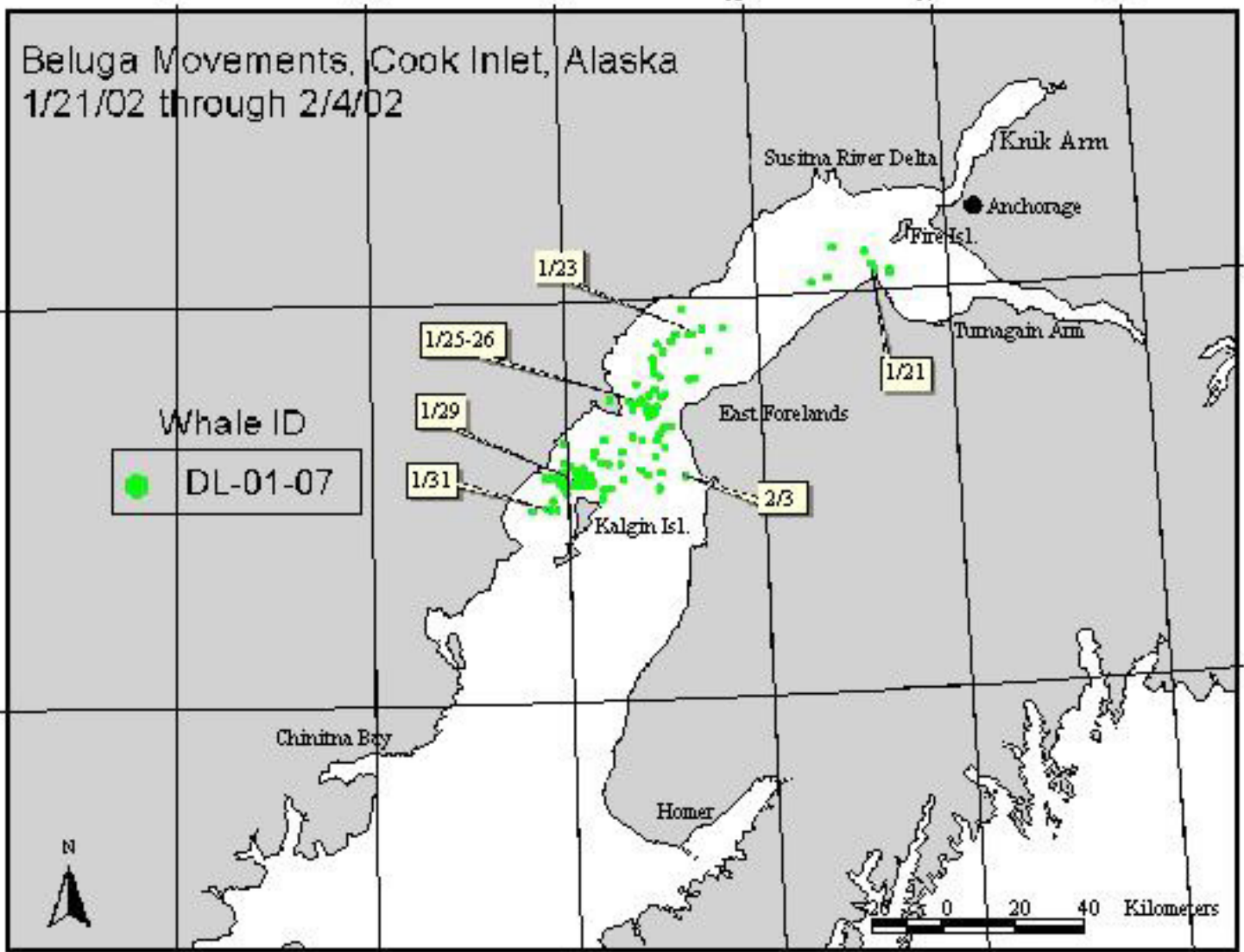
1/31

1/21

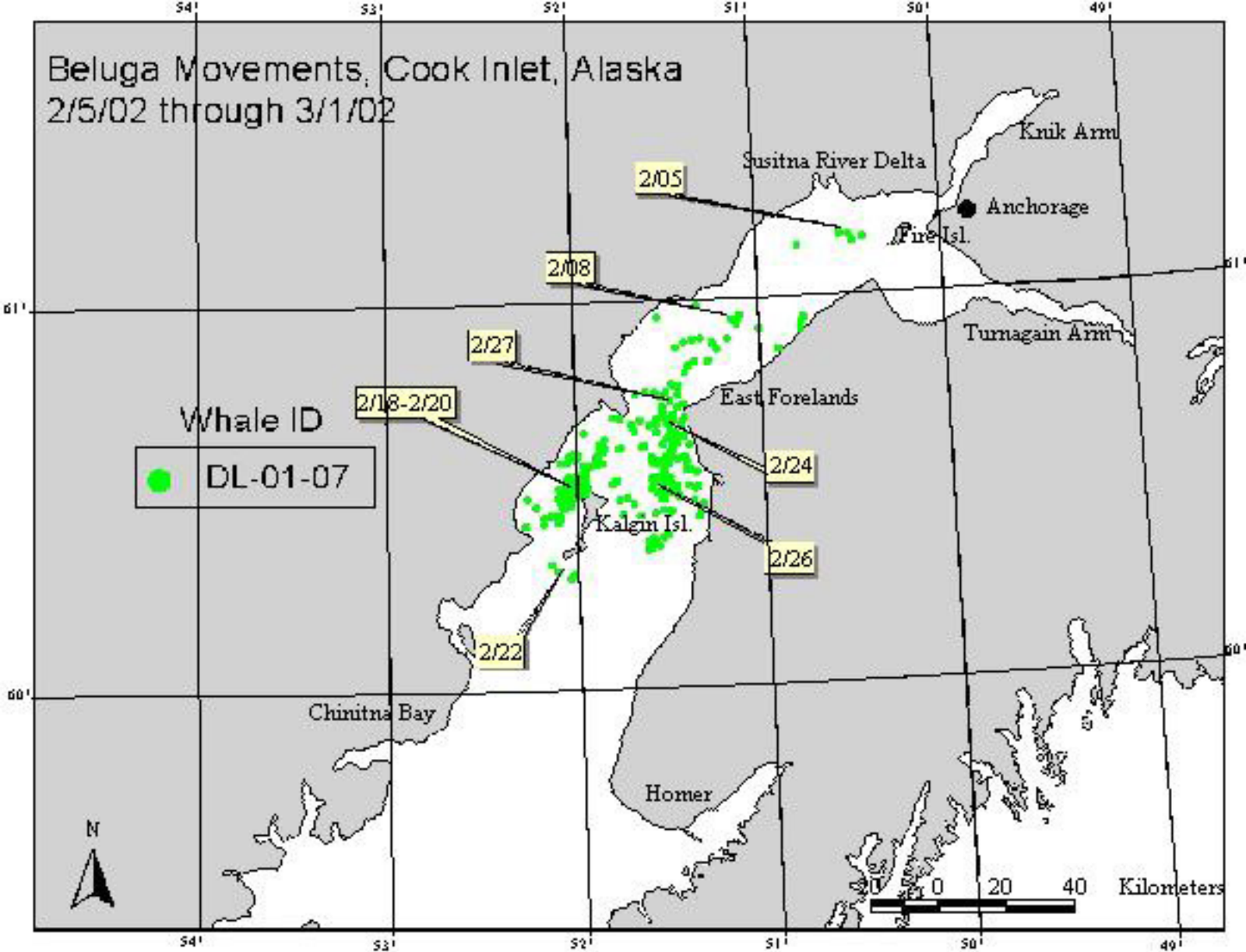
2/3



0 20 40 Kilometers



Beluga Movements, Cook Inlet, Alaska 2/5/02 through 3/1/02



Beluga Movements, Cook Inlet, Alaska
3/1/02 through 3/9/02

Whale ID
● DL-01-07

3/1

3/5

3/7

