

**DETERMINING NOCTURNAL LOCATIONS, BREEDING GROUND
LOCATIONS, AND GENETIC STRUCTURE OF LONG-TAILED
DUCKS WINTERING IN NANTUCKET SOUND**

Final Report



Determining Nocturnal Locations, Breeding Ground Locations, and Genetic Structure of
Long-Tailed Ducks Wintering in Nantucket Sound

Final Report

Authors

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EXECUTIVE SUMMARY

In late 2001, a large offshore wind energy facility (Cape Wind) was proposed for Horseshoe Shoal located in Nantucket Sound. Between 2003 and 2006, Mass Audubon conducted aerial surveys of wintering sea ducks within the Sound and in the waters immediately outside the Sound. These surveys provided detailed information on the local abundance and distribution of sea ducks that winter in the Sound as well as the possible annual variation in the spatial pattern of winter habitat use.

The Sound is the winter home of a very large proportion of the Atlantic “stocks” of Long-tailed Ducks (LTDU). LTDUs typically depart en masse (i.e., “commute”) from the Sound at dawn each day to feeding areas primarily in and around Nantucket Shoals southeast of Nantucket Island, and then return to the Sound at dusk (White et al. 2009). The location of these nocturnal roosting sites was not known; determining these locations would provide a fuller understanding of the exposure to and potential vulnerability to the Cape Wind project. In addition, delineating the breeding locations of LTDUs will provide deeper understanding of the ecological consequences of the construction and operation of Cape Wind, whether this impact is the direct effect of collision mortality or the indirect effects due to loss of habitat or decline in habitat quality.

To address these questions we conducted a multi-year study to track the diurnal and seasonal movements of wintering LTDUs in the waters around Nantucket, and as they migrate between their wintering areas and their breeding areas using satellite telemetry. Our primary objectives were to obtain data on nighttime locations of instrumented LTDUs in the Sound and to further our understanding of LTDU movements back to their breeding grounds.

We also conducted DNA analyses of tissue samples collected from instrumented ducks and a larger sample of non-instrumented ducks to learn more about the origin and genetics of this unusually large population of LTDUs. The results of the DNA analyses are presented in Chapter 2 of this report.

In the two years of this study we instrumented ducks following the same procedure each year in the following sequence: 1) capture of ducks, 2) surgical implantation of transmitters, 3) releasing ducks and activating satellite transmitters 4) downloading location fixes, and 5) mapping of locations of instrumented ducks.

A total of thirty two LTDUs (21 males and 11 females) were instrumented with satellite transmitters over the three-year duration of this project. Nineteen ducks (ten males and nine females) transmitted locations for one month or more; one additional duck transmitted for a total of 25 days. Sixteen ducks transmitted for the entire winter season and departed Nantucket Sound. Fifteen ducks transmitted long enough to depart the migratory staging area, and 13 ducks (six male and seven females) provided locations of presumed breeding areas. Transmitter batteries survived long enough to record the return of seven instrumented ducks to Nantucket Sound for all or a portion of a second winter (Table 2).

Individual ducks demonstrated a variety of diurnal behaviors: several ducks demonstrated commuting behavior leaving the Sound at dawn and returning at dusk. Other ducks showed little tendency to commute or did not commute at all. The majority of apparent breeding locations were primarily in the Canadian territory of Nunavut and province of Quebec near the coast along

Hudson Bay, but some were up to 400 km from the Hudson Bay Coast or further north on the cluster of large islands bordering the Beaufort Sea and Baffin Bay. Seven instrumented ducks continued transmitting long enough to determine that they returned to the Sound in the late fall.

Telemetry data lead us to conclude that Horsehoe Shoal does not appear to be a major nighttime roosting site for LTDUs. Further, while many long-tailed ducks demonstrate the pattern of diurnal commuting so often observed from Nantucket Island, not all ducks commute every day. And finally, LTDUs wintering in Nantucket Sound appear to breed in a relatively confined geographic area in northern Canada that includes eastern Nunavut and northwestern Quebec and in low shrub or herbaceous dominated tundra.

To determine genetic structure of the Nantucket Sound LTDUs, we used mitochondrial DNA (mtDNA) sequence data and sequence data from a panel of nine nuclear HapSTR loci to test for genetic differentiation among eastern and western long-tailed duck (*Clangula hyemalis*) populations and to assess whether the eastern wintering population (sampled in Nantucket Sound) is comprised of genetically differentiated breeding populations.

We extracted genomic DNA from 42 blood and feather samples collected in Nantucket Sound, as well as from 34 tissue samples provided by the University of Washington Burke Museum from birds collected in Russia, Alaska, Nunavut, and New York. Our preliminary analyses suggest little or no genetic structuring of long-tailed duck populations. Birds from Nantucket Sound, Russia, Alaska, and Nunavut share a high level of both mitochondrial and nuclear genetic diversity, likely reflecting historically large effective population sizes and ongoing gene flow among populations. Given this lack of structure on a continental scale, it is unlikely that birds from different breeding populations wintering together in Nantucket can be discriminated on the basis of genetic data.

CHAPTER 1 – DETERMINING PATTERNS OF WINTER DIURNAL HABITAT USE, MIGRATION STAGING AREAS, AND BREEDING LOCATIONS OF LONG-TAILED DUCKS WINTERING IN NANTUCKET SOUND, MASSACHUSETTS

1.1 INTRODUCTION

In late 2001, a large offshore wind energy facility (Cape Wind) was proposed for Horseshoe Shoal located in Nantucket Sound (Sound), and comprehensive environmental review process began almost immediately. During the scoping phase of this project, Mass Audubon and others recommended that the environmental review should include comprehensive surveys of avian use of the Sound. One of the focal areas was the use by winter waterfowl of the Sound and the proposed project area in order to gauge the risk of the project to this group of birds that is hypothesized to be vulnerable to wind energy development (e.g., Desholm 2009).

The effect of offshore wind energy facilities on waterfowl, particularly wind farms constructed offshore, is not well known. Studies of offshore wind facilities in Europe that are smaller than the proposed wind farm in the Sound have indicated little direct mortality of sea ducks, but suggest that the turbines can cause behavioral changes such as alteration of offshore habitat use (e.g., Stewart, et al. 2007; Petersen and Fox 2007; Petersen et al. 2006; Tulp et al. 1999); the European studies often had only one year of pre-construction survey data to compare with post-construction “response”.

Between 2003 and 2006, Mass Audubon conducted aerial surveys of wintering sea ducks within the Sound and in the waters immediately outside the Sound. These surveys provided detailed information on the local abundance and distribution of sea ducks that winter in the Sound as well as the possible annual variation in the spatial pattern of winter habitat use. A better understanding of the latter will improve our ability to understand the ecological significance of potential long-term, post-construction shifts in habitat use.

The Sound is the winter home of a very large proportion of the Atlantic “stocks” of Long-tailed Ducks (LTDU) (e.g., Sea Duck Joint Venture 2005). This wintering congregation may represent 30% of the total North American population of this species (White et al. 2009; total population estimate c. 1 million, Wetlands International 2006), and perhaps greater than 5% of the global population (del Hoyo et al. 1992; total population estimate c. 6.5 million, Wetlands international 2006). Land-based Christmas Bird Counts from Nantucket Island have exceeded ½ million individuals (e.g., 525,505 in 2002 - http://audubon2.org/birds/cbc/hr/count_table.html and as summarized in White et al. 2009).

LTDUs typically depart en masse (i.e., “commute”) from the Sound at dawn each day to feeding areas primarily in and around Nantucket Shoals southeast of Nantucket Island, and then return to the Sound at dusk (White et al. 2009). The location of these nocturnal roosting sites was not known; determining these locations would provide a fuller understanding of the exposure to and potential vulnerability to the Cape Wind project.

LTDUs have a circumpolar breeding distribution, but which of the possible breeding populations among arctic Alaska, Canada, Greenland, Iceland, Scandinavia, and Siberia constitute the wintering populations in the Sound is unknown. Delineating the breeding locations of LTDU will provide deeper understanding of the ecological consequences of the construction and operation of Cape Wind, whether this impact is the direct effect of collision mortality or the indirect effects due to loss of habitat or decline in habitat quality. For example, habitat quality on the wintering range may be a limiting factor for some breeding populations but not others. Furness *et al.* (2013) suggest that LTDUs in Scottish waters are at relatively low vulnerability for species level impacts due to collision with wind turbines, and that they are moderately vulnerable to disturbance or displacement by wind farms. Robinson Wilmott *et al.* (2013) ranked LTDUs 31st out of 177 species evaluated in terms of estimated collision sensitivity and 11th out of 177 species evaluated in terms of displacement sensitivity, suggesting that LTDUs are more susceptible to displacement from wind turbines than to collision.

To address these questions we conducted a multi-year study to track the diurnal and seasonal movements of wintering LTDUs in the waters around Nantucket, and as they migrate between their wintering areas and their breeding areas using satellite telemetry. In the first year of this study (Allison, et al. 2008; funded under Contract No. 0106PO39637 and modifications), we captured and instrumented ten ducks (seven males and three females), and the six surviving instrumented ducks provided considerable data on diurnal and nocturnal movements, allowing us to better understand the winter nocturnal movements and habitats used by the ducks. **Our primary objectives in the two years funded under the current contract (2008-2010) were to add to our sample size, to obtain more data on nighttime locations of instrumented LTDUs in the Sound, and to further our understanding of LTDU movements back to their breeding grounds.**

We also conducted DNA analyses of tissue samples collected from instrumented ducks and a larger sample of non-instrumented ducks to learn more about the origin and genetics of this unusually large population of LTDUs. Working in partnership with expert staff from the U. S. Geological Survey Patuxent Wildlife Research Center, and the Biology Department of Boston University our goal was to capture and attach satellite transmitters to a total of 30 LTDUs and draw blood samples from up to a total of 40 ducks for DNA analysis. The results of the DNA analyses are presented in Chapter 2 of this report.

Several questions about LTDU winter use of the Sound, migration routes, and possible breeding locations have been posed, and the results of the first season of telemetry work provided some tentative answers to those questions that we wished to answer with additional instrumented ducks. Preliminary findings were as follows:

1. Many LTDU demonstrated the pattern of diurnal movement described above as commuting, but LTDU do not appear to commute every day. Some ducks appeared not to commute but stay in one location both day and night. Other ducks apparently spent the night on Nantucket Shoals, not returning to the Sound at night.
2. Initial results suggest that instrumented LTDUs used a broad area of the Sound for nighttime roosting sites, and that the roosting locations changed, i.e., one site was not consistently used, even by individual ducks.

3. None of the instrumented ducks were recorded roosting on Horseshoe Shoal, although the ducks could have been on the Shoal, day or night, when the transmitters were in the “off” portion of the winter season duty cycle.
4. The four LTDU that continued transmitting after migration and return to breeding areas, were located in a large region north of Hudson’s Bay in an area encompassing approximately 20,000 sq. miles. Instrumented ducks followed similar paths to their putative breeding locations, spending several weeks in and around the maritime provinces of Canada.

The second and third years of the telemetry study were conducted to assess the generality of these preliminary findings. Results from all three years of the study are included in this report.

1.2 METHODS

In the two years of this study we instrumented ducks following the same procedure each year in the following sequence: 1) capture of ducks, 2) surgical implantation of transmitters, 3) releasing ducks and activating satellite transmitters 4) downloading location fixes, and 5) mapping of locations of instrumented ducks.

1.2.1 Capture of Ducks

In the winter 2007-2008 field season the field crew developed extensive experience capturing LTDUs in the Sound using a high-speed boat and night-lighting (Allison et al. 2008). Some detail is provided here on what did not work, as an aid to those contemplating similar studies in the future.

During late winter of 2006, we attempted to capture LTDUs using several capture methods described at <http://www.pwrc.usgs.gov/resshow/perry/scoters/CaptureTechniques.htm>. Methods included attempts to outrun the ducks with a high speed (50 mph) boat and shooting a net over the ducks from a “net gun”. These techniques were unsuccessful because the ducks flew much faster than the boat. We also attempted to capture the ducks by deploying floating mist nets and an array of decoys to attract the birds to the nets. This method failed because the local currents were too strong to secure the net pole anchors. Finally, we achieved success with the night-lighting method. Ducks were located from a boat with the use of powerful spotlights as the birds rested on the water at night. When a bright spotlight was trained on ducks in darkness, they became somewhat disoriented, making them easier to approach. Under these conditions, ducks were captured from the bow of the boat with large, long-handled hoop nets. The capture team consisted of at least one capture person, one assistant, and one boat driver.

1.2.2 Transmitter Implantation

We transported captured ducks to a local veterinary clinic (MSPCA Animal Care and Adoption Center, Nantucket, MA), where ducks were evaluated and selected for inclusion in the surgical treatment based on age and condition in order to improve survival following release after surgery. Dr. Glenn Olsen, USGS veterinarian, performed surgical implantation of a satellite transmitter in each of the ducks. Transmitters were encased in a nylon mesh bag and the bag was attached to the inner wall of the duck’s body cavity. External attachment was considered inappropriate for diving ducks (Perry et al 2004; see

<http://www.pwrc.usgs.gov/resshow/perry/scoters/default.htm> for more information on sea duck radio telemetry). Following surgery, to reduce stress and increase survivability, ducks were kept for observation for at least one day, kept hydrated, and then released during morning hours. Initially ducks were released in the general areas in which they were captured, but high risk of predation to ducks that came ashore to preen led us to release ducks in Nantucket Ponds that provided cover for preening ducks, thus lowering risk of predation.

1.2.3 Tracking and Downloading Location Data

Satellite tracking of instrumented ducks was performed by Argos, Inc. The number of data points (geographic fixes for each duck) was determined by a compromise between the 400-hour “life” of each battery within each of the transmitters and the desired duty cycle (the “on-off” period of the transmitter). We programmed all transmitters to optimize the number of data points collected during the two defined tracking seasons: winter (December 1 – April 15) and migration/breeding (April 15 – November 15).

During the winter tracking season we programmed each transmitter with a 52-hour duty cycle – 4 hours on and 48 hours off; transmitters would be operating and transmitting locations for a total of 253 hours during the winter. We estimated that this programming would provide us with a maximum of 61 fixes during the winter season for each instrumented duck, and provide information on whether instrumented ducks conducted the daily “commute” between Nantucket Shoals and the Sound and whether their nighttime locations included the proposed Cape Wind project area on Horsehoe Shoal.

During the spring migration, summer breeding, and fall migration seasons, each transmitter was programmed with a duty cycle of 4-hours “on” every seven days, for a total of 120 battery hours. Transmitted locations during the “on” period would provide information on the migration route of birds to breeding areas and the location of these breeding areas. The duty cycle programming for this season was estimated to provide satellite-based locations for approximately ten months.

Tracking data were downloaded from Argos, Inc., filtered based on location class (3, 2, 1, 0, A, B, Z in order of decreasing quality as defined by Argos – see <http://www.argos-system.org/manual/>) using a SAS program created by USGS to determine the best locations, and plotted on maps using Google Earth. The filtering process helped to eliminate locations that didn't logically make sense based on speed and direction filtering parameters. We used this filtered text file for all maps and resulting discussion in this report.

1.3 RESULTS AND DISCUSSION

The following presentation of results is organized by our definition of four key periods in the life history year of an LTDU: 1) presence on wintering areas; 2) migration northward to breeding areas (including possible movements to molting areas); 3) migration southward to wintering areas; and 4) arrival in wintering areas. Before this detailed discussion, we provide some summary statistics.

Key information for each of the instrumented LTDUs over the three years of this project is summarized in Tables 1, 2, 3, and 4. Table 1 contains the definitions of column headings in Tables 2 and 3. Table 2 lists the release date and last date of a satellite-transmitted location, regardless of location quality, and the fate of each instrumented duck. Table 3 lists key dates of

each instrumented LTDU relevant to the four life history stages described above. Tables 4a) and 4b) use the dates listed in the previous tables to calculate the median duration of the four life history stages described above and the median date associated with each of the above life history stages. Ranges are provided based on the “first” and “last” duck in each life history stage and medians are calculated from the location data from individual ducks.

Interpreting Satellite-based Locations – The techniques of satellite telemetry are well-described (e.g., Gottschalk et al. 2007), but it is important to review some of the limitations as they affect interpretation of the results of this study. As described earlier, the first priority of this project was to determine nocturnal locations of LTDU with respect to the proposed location of the Cape Wind wind energy facility, but we were also interested in tracking instrumented ducks to their breeding locations to help determine the breeding locations of LTDU that winter in Nantucket Sound. Thus, the duty cycle programming (when the transmitter was “on” and “off” attempted to balance these two objectives with the result that transmissions were fewer and farther apart after the first winter season. It is also apparent that toward the end of the transmitter battery life locations were fewer and often of poorer quality; many transmitted locations did not “survive” the filtering algorithm. For example, two male ducks (3608 and 3908) transmitted the last location from the staging area on May 12, 2009 and were not located again until Jul 25, 2009 at their presumed breeding locations. As a result, duration of “life history” stages or median dates for these stages must be interpreted cautiously. Specifically, instrumented ducks could have arrived at a location earlier than recorded or departed earlier from a location than recorded.

1.3.1 Summary Telemetry Statistics

Each of the instrumented ducks tells its own story influenced by differences in behavior but also seeming to result from differences in transmitter performance. Sometimes transmitters would “go quiet” other times the transmitter locations would not be of sufficient quality to “map”.

Telemetry results of the first season (2007-2008) were reported previously (see Allison et al. 2008), but results for all three seasons are summarized here to provide for a more comprehensive discussion of the data.

A total of thirty two LTDUs (21 males and 11 females) were instrumented with satellite transmitters over the three-year duration of this project. Nineteen ducks (ten males and nine females) transmitted locations for one month or more; one additional duck transmitted for a total of 25 days. Sixteen ducks transmitted for the entire winter season and departed Nantucket Sound. Fifteen ducks transmitted long enough to depart the migratory staging area, and 13 ducks (six male and seven females) provided locations of presumed breeding areas. Transmitter batteries survived long enough to record the return of seven instrumented ducks to Nantucket Sound for all or a portion of a second winter (Table 2).

Eleven ducks transmitted locations for seven days or less; ten of these ducks were males and only one duck was female. Six of the instrumented ducks were known to have died shortly after instrumentation and release (Table 3). Testing sex differences in survival following surgical instrumentation was not a purpose of this study, and therefore the large sex difference in mortality that we observed could be spurious and reflect differences in sampling from year to year.

Transmitters contained temperature sensors and a radio transmitter. When the temperature sensor dropped below a certain level the satellite transmitter and a radio transmitter were activated enabling us to locate the duck and retrieve the transmitter. Retrieved transmitters were reconditioned by Microwave Telemetry and re-used in newly captured ducks (as described in Table 2). Cause of death could not be determined, but we hypothesized that predation of ducks by gulls was a factor. In winter 2008 we began releasing ducks in ponds on Nantucket that provided cover for instrumented LTDUs; we also increased our observation of these ducks. This effectively reduced post-surgical predation losses to zero. Six ducks stopped transmitting within three to seven days following release. Temperature sensors readings suggest that the birds died, but PTTS were not recovered and thus fate could not be confirmed. One duck stopped transmitting 26 days after release and was apparently healthy at the time transmission ceased.

1.3.2 Winter Diurnal Movements in Nantucket Sound

The 19 ducks transmitting for one month or more provided 1,234 filtered satellite-based locations from Nantucket Sound between mid-November (2009-2010 season only; mid-December in 2007-2008 and 2009-2010) and mid-April. Filtered locations were mapped as daytime and nighttime locations for all three years combined (Figure 1); individual duck locations are plotted separately and displayed in Appendix A. As Figure 1 clearly shows, none of the instrumented ducks transmitted a location from within the proposed Cape Wind Project area.

Individual ducks demonstrated a variety of diurnal behaviors: several ducks demonstrated commuting behavior leaving the Sound at dawn and returning at dusk. Other ducks showed little tendency to commute or did not commute at all. One duck (#3707) showed strikingly different behavior in each of the two years. Many ducks spent the night on Nantucket Shoals, i.e., they commuted to the Shoals, but did not return at dusk according to the assumed “stereotypical” behavior (e.g., White et al. 2009).

Although the results are not presented here, 19 additional LTDUs were captured in the vicinity of Cape Cod and Monomoy Island in March 2010 using the techniques described above (Matthew Perry and Alicia Berlin, USGS, unpublished data). Eleven of these ducks transmitted signals for one month or more. Six of these ducks demonstrated the diurnal commuting pattern, and none of these ducks provided satellite fixes in or near Horseshoe Shoal. Because the transmitters were not in the ‘on’ position constantly, behaviors and locations could easily have been missed. For example, ducks may have roosted on Horseshoe Shoal during periods when the transmitters were in the “off” portion of the winter season duty cycle.

Alternatively, we do not know if our preferred capture locations introduced a bias, i.e., we didn’t capture ducks from Horseshoe Shoal and they might have had a preference for roosting on the Shoal. Roosting preference is hinted at by the observation that ducks captured from near Monomoy and Cape Cod tended to be located near there after instrumentation, even as many of those ducks commuted. Potential capture location bias was one reason ducks were captured from a different location in the USGS study. Ducks captured off the southern shore of Nantucket Island in this study did show wide-ranging distribution in the Sound, although the vast majority of location reports were clustered around the Island (Figure 1)

Aerial survey data from Nantucket Sound during daylight hours over three winters (2003-2006) demonstrated that LTDUs are present in Horseshoe Shoal, but generally fewer were

observed than expected for this relatively extensive area (Figure 2; Allison et al. 2006). The number of ducks is low; typically 20-30 ducks per survey. Although the possibility of sampling bias remains, all of the available results suggest that Horseshoe Shoal is not a major night-time roosting location for LTDUs.

1.3.3 Migration Routes and Stopovers

Ducks tended to depart Nantucket Sound in the second to third week of April, and spend up to six weeks in their “stopover” locations in the Gulf of St. Lawrence (Figure 3 and Figure 4) and the mouth of the St. Lawrence River (Table 4).

Some ducks traveled from Nantucket Sound to their migratory staging areas (Figure 3 and Table 4), a distance of approximately 520 miles in a maximum of 56 hours, i.e., given the limitations of the duty cycles described above, the time of the trip could have been shorter. Other ducks seemed to take longer, but it is possible that this could have been due to the ducks leaving Nantucket Sound after their transmitter shifted to the breeding season duty cycle, e.g., after April 15th and during a less precise monitoring period.

The journey from the spring staging area took place relatively rapidly. For example, Duck 9509 (F) traveled more than 1500 miles in two weeks, and more than 1000 miles in a week + five hours on its journey from the staging area to its presumed breeding location. Male Duck 3609 had its last location on the staging area on 5/12 and by 5/19 was at 60.3 degrees N latitude a journey of more than 1300 miles. It stayed at this location until it was recorded at 63.67 degrees N latitude at its last transmission on 7/15.

Several ducks transmitted long enough to be observed during fall migration, which seemed to occur at a more rapid pace than the spring trip. Instrumented ducks spent approximately one month on their spring staging area, but only 1-2 weeks on their fall staging area (definition in Table 1a). Ducks took approximately ten weeks to travel from wintering locations to breeding locations, but the return trip was completed in approximately six weeks (Table 4b).

1.3.4 Location of Breeding Areas

The majority of apparent breeding locations were primarily in the Canadian territory of Nunavut and province of Quebec near the coast along Hudson Bay, but some were up to 400 km from the Hudson Bay Coast or further north on the cluster of large islands bordering the Beaufort Sea and Baffin Bay (Figure 4). No detailed analysis of habitat use or gender differences in location has been attempted, yet, but generalized vegetation in the breeding areas is a mix of “heather and herbs” and “wetland shrub type” (e.g., <http://atlas.nrcan.gc.ca/site/english/maps/environment/land/landcover>). The ten surviving ducks instrumented in March 2010 by USGS staff as described above had a similar distribution. Given the size of the potential breeding area of LTDUs the relatively tight clustering of Nantucket Sound ducks is remarkable.

Seven instrumented ducks continued transmitting long enough to determine that they returned to the Sound in the late fall. Duck 3409 instrumented in November 2009 transmitted long enough to return to its breeding area twice, and the locations suggest that it returned to the same place to breed. In its first year, it moved further north approximately one month later suggesting nest failure and moving north to molting areas (Matt Perry, USGS, personal communication) (Figure 5). Based on the seven ducks with surviving transmitters, LTDUs

depart from their breeding grounds in late September and arrive at their Nantucket Sound wintering locations in November.

1.4 CONCLUSION

While many long-tailed ducks demonstrated the pattern of diurnal commuting so often observed from Nantucket Island, whereby large numbers of individual ducks fly from Nantucket Sound to the feeding areas primarily in and around Nantucket Shoals southeast of Nantucket, not all ducks commute every day. Some ducks appeared not to commute out of Nantucket Sound at all, instead remaining in one location both day and night. Other ducks occasionally did not return to the Sound at the end of the day, appearing to spend the night on Nantucket Shoals.

Horsehoe Shoal does not appear to be a major nighttime roosting site for LTDUs. Instrumented LTDUs used a large area of the Sound for nighttime roosting sites; yet while the roosting locations varied, no instrumented ducks were observed on the Shoal – day or night. This finding aligns with data from daytime aerial surveys (Allison et al. 2006) in which only small numbers of LTDU were observed on the Shoal.

LTDUs wintering in Nantucket Sound appear to breed in a relatively confined geographic area in northern Canada that includes eastern Nunavut and northwestern Quebec and in low shrub or herbaceous dominated tundra.

LTDUs arrive on their winter range by mid-November, depart for their breeding areas by mid-April, and reach breeding areas by the end of June. They subsequently depart their breeding areas for their winter range by early October. LTDUs take about two months to travel from the winter range to their summer range, including a stopover at staging areas in the mouth of the St. Lawrence River. Instrumented LTDUs consistently used the same spring staging area locations. The fall migration to wintering areas appears to occur over about one month. The same stopover areas appear to be used during the fall migration, but perhaps not consistently and not for as long as during spring migration.

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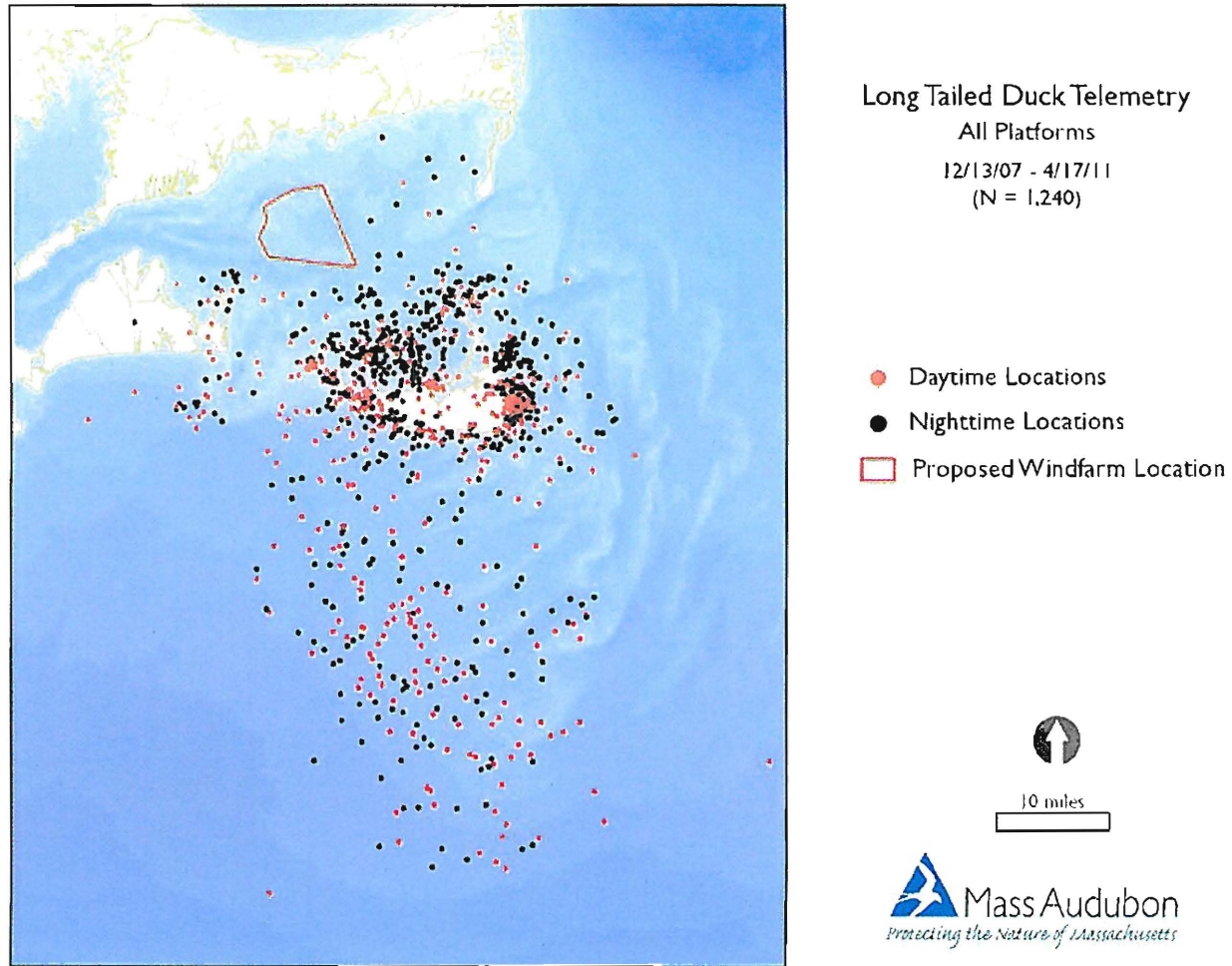


Figure 1. All daytime (red dot) and nighttime (black dot) filtered locations (as described in the text) between mid-December and mid-April for 19 LTDUs instrumented over three winters as interpreted from satellite-determined locations. Daytime and nighttime were based on solar time. The proposed Cape Wind project area (aka Horseshoe Shoal) is outlined in red. Figures for individual ducks are available in Appendix A. "N" is the total number of locations graphed in the figure.

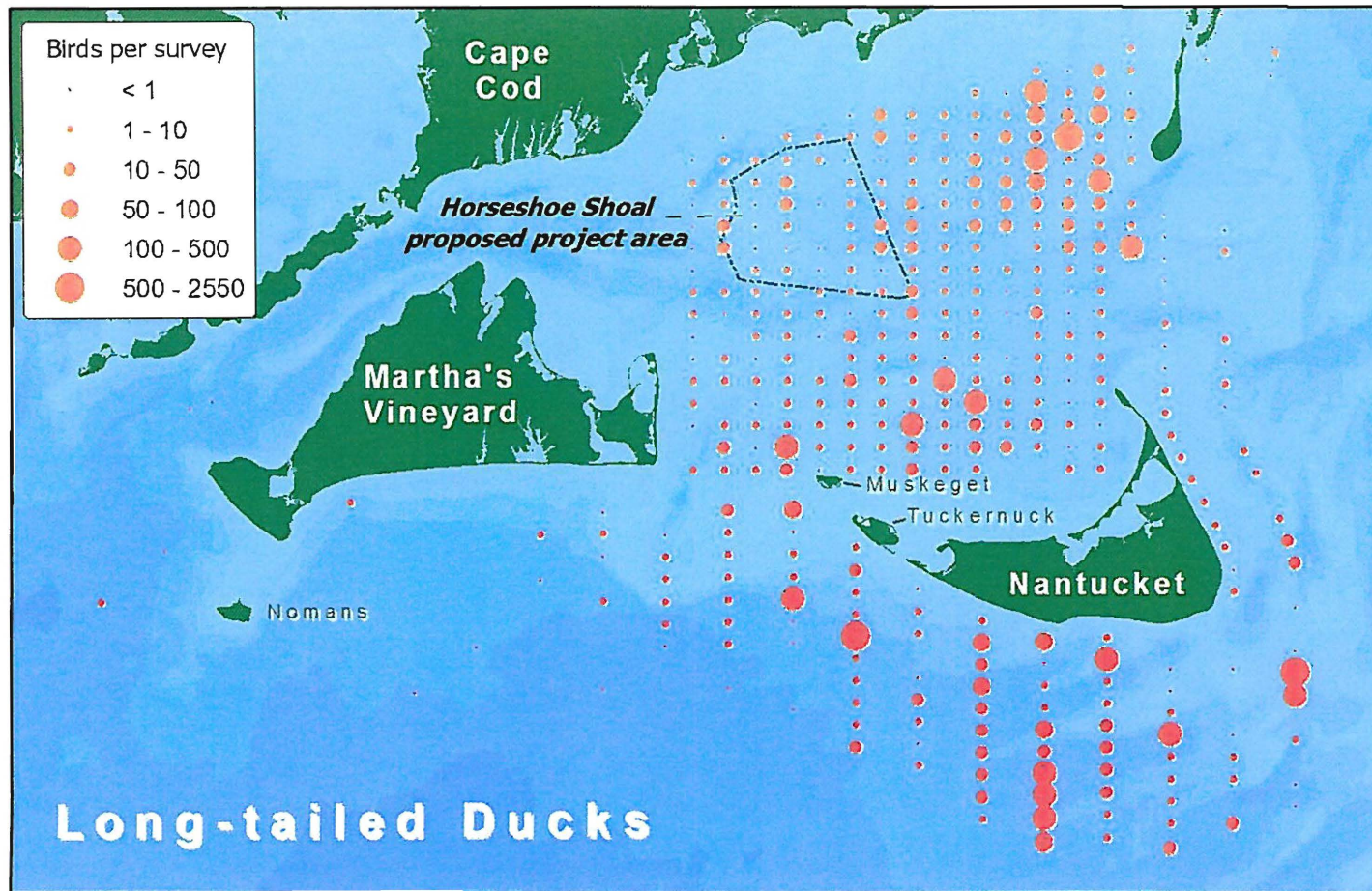
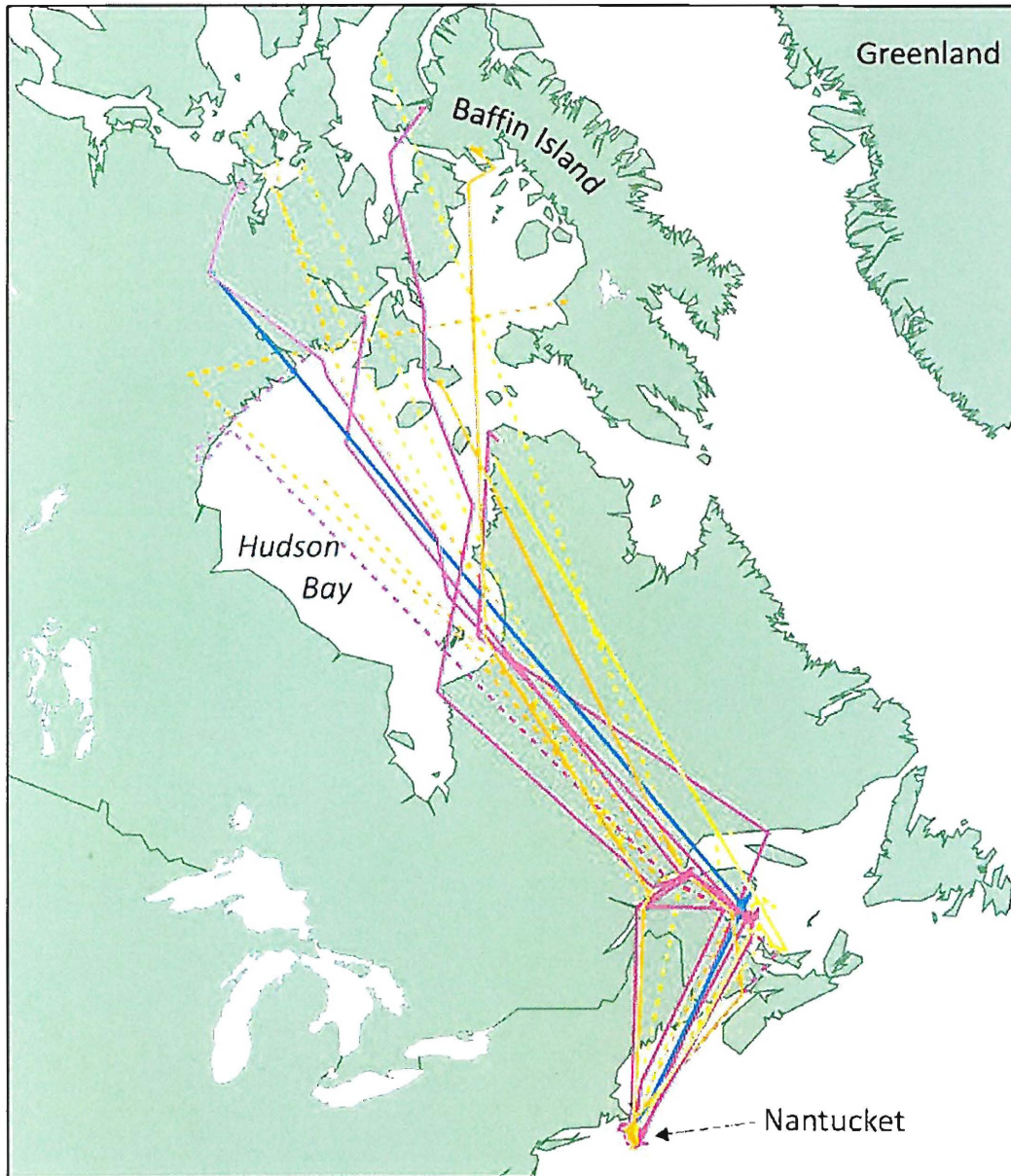


Figure 2: Distribution of LTDUs in Nantucket Sound and areas south of Nantucket Island and Martha's Vineyard determined from aerial surveys along a transect grid (see Allison et al. 2006 for details). The size of the circle is keyed to abundance in transect cells as indicated in the figure legend.



Long-tailed Duck Spring Migratory Movements -- 2008 - 2011

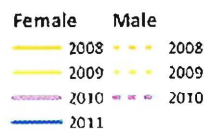
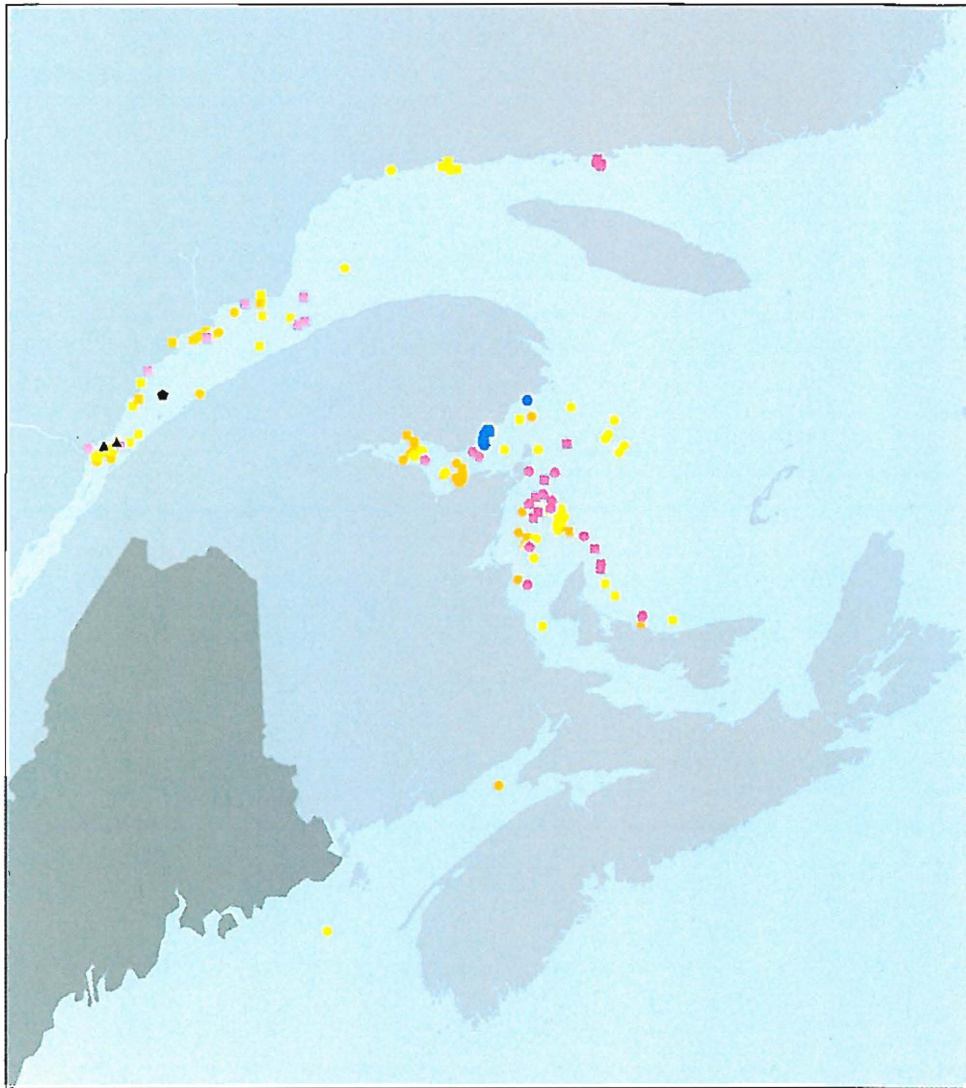


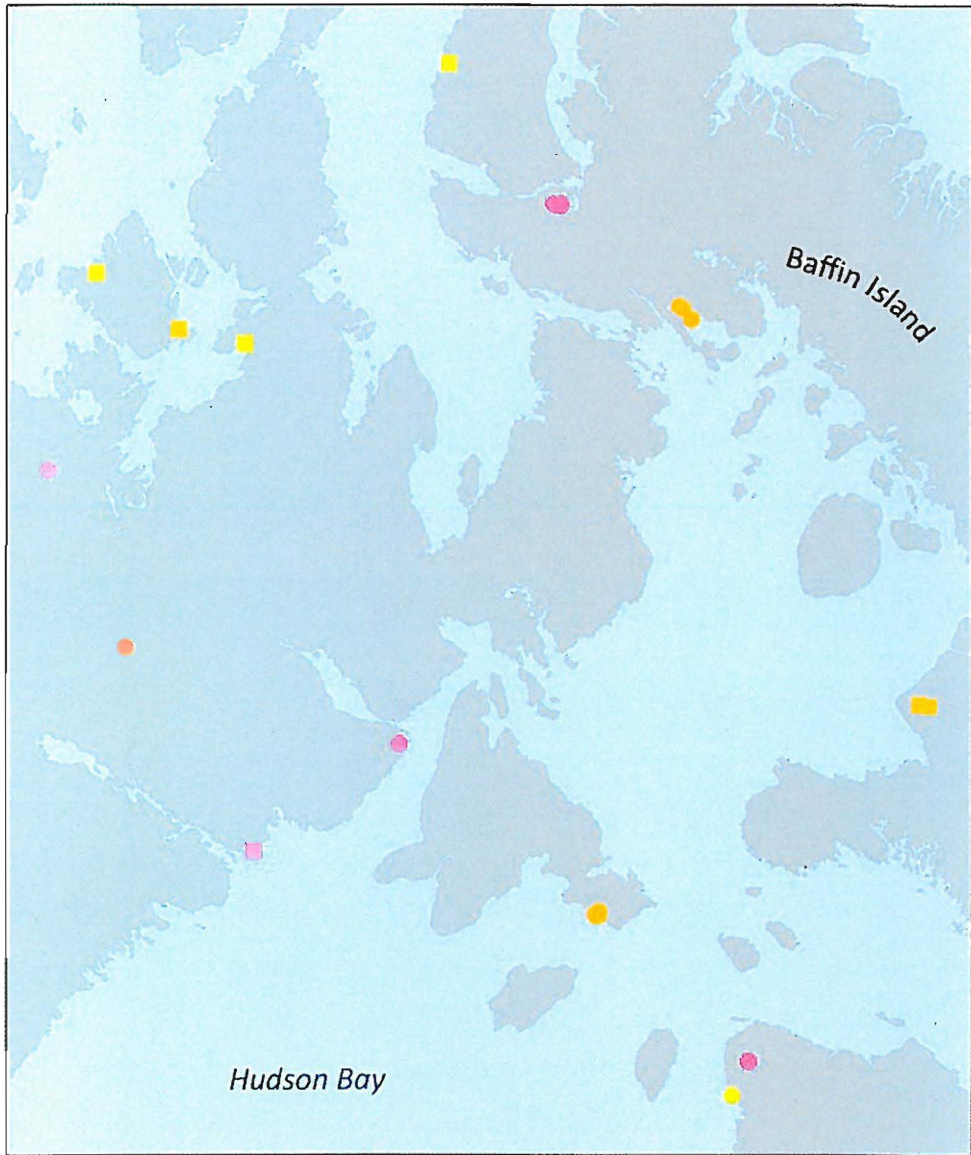
Figure 3: Spring migratory movements of 14 instrumented LTDUs from Nantucket Sound to Arctic breeding grounds estimated from satellite-determined locations compiled over four monitoring seasons. Straight-line paths are inferred by connecting consecutive fixes, but do not necessarily reflect true flight paths.



Long-tailed Duck Staging Areas -- 2008 - 2011



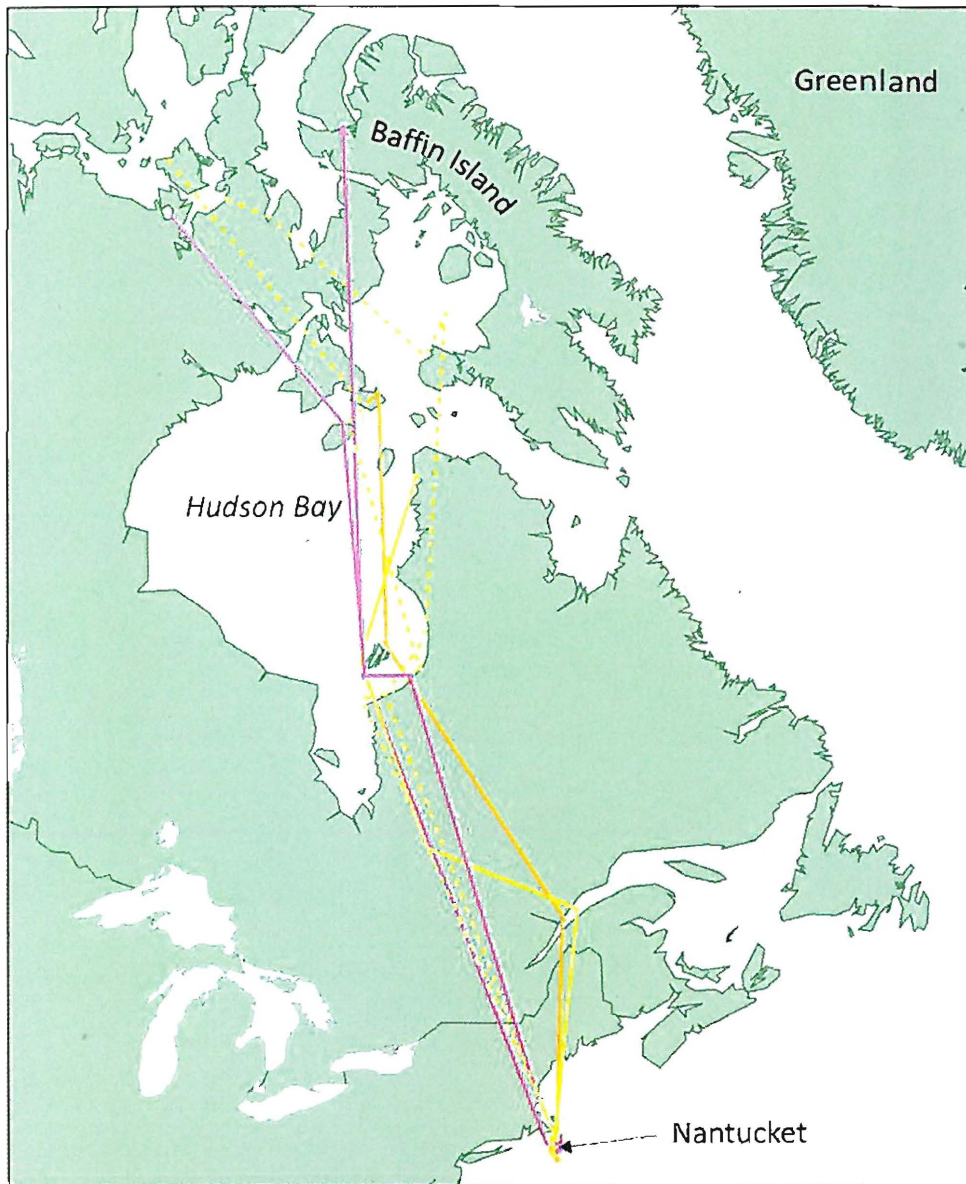
Figure 4: April and May migratory stopover locations for the instrumented LTDUs that departed Nantucket Sound for Arctic breeding grounds in mid April estimated from all filtered satellite-determined locations (fixes) compiled over four monitoring seasons. Inferred paths are shown in Figure 2. Fixes are plot for all three years and included one instrumented duck who transmitted for two migratory seasons (2010 and 2011).



Long-tailed Duck Breeding Territories (July Locations)

- F, 2008 ■ M, 2008
- F, 2009 ■ M, 2009
- F, 2010 ■ M, 2010
- F, 2011

Figure 5: Apparent locations of breeding areas for instrumented LTDUs based on satellite-determined locations (aka "fixes"). Breeding locations were based on stable fixes during the month of July. The year ducks were instrumented are color-coded as indicated in the figure legend. "F" is a female duck; "M" is a male duck.



Long-tailed Duck Fall Migratory Movements -- 2008 - 2010

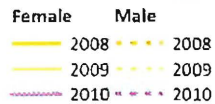


Figure 6: Fall migratory movements of five instrumented LTDUs returning to Nantucket Sound from Arctic breeding grounds as estimated from satellite-determined locations compiled over three monitoring seasons. Straight-line paths are inferred by connecting consecutive fixes, but do not necessarily reflect true flight paths.

Table 1

Definition of terms used in Table 2 and Table 3 to describe key dates and fates of instrumented Long-tailed Ducks in Nantucket Sound over three winter periods from 2007 to 2010: a) Terms used in Table 2 and also used in Table 3 when repeated; b) Terms used in Table 3 only.

a) Table 2 Terms

Column Title	Description
Year	Describes the winter study period in which ducks were instrumented
PTT	The transmitter number provided by Microwave Telemetry
#	The transmitter number provided by the Argos tracking function. The last two digits correspond to the year the transmitter was surgically implanted in the duck. When a transmitter is reused, the first two digits remain the same and the second two digits are changed, e.g., 79636 was installed in duck 3607 in 2007. The transmitter was reused in 2008 and installed in duck 3608.
Sex	Denotes whether the instrumented duck was male or female.
Date Released	Date on which the instrumented duck was released and began transmitting locations from satellite fixes
Date Last Location	Date of last satellite fix from instrumented duck. May be due to duck mortality or failure of transmitter.
Temp Sensor (H, L)	Denotes whether the temperature sensor was reading at the temperature of a living (H) or dead (L) duck when the transmitter sent its last location
Transmitter Failure (Y, N, or “?”)	Denotes our best estimate as to whether the failure to receive additional locations or “fixes” was due to transmitter failure, e.g., end of battery life or not. If “N” this could be due to a mortality event. A “?” indicates unknown outcome.
Comments	Provides further details on transmitter and/or duck fate.

Terms used in Table 3 only

Column Title	Description
Last Nantucket Sound	Date of last signal received while duck was still located in Nantucket Sound before presumed departure to migratory staging area en route to breeding areas
Staging Area Arrival	Date of first signal received from a duck on its presumed migratory staging area on the duck’s journey to (Spring) or from (Fall) its breeding area
Staging Area Departure	Date of last signal received from a duck on its presumed migratory staging area on the duck’s journey to (Spring) or from (Fall) its breeding area
First Breeding Location	Date of first signal from an instrumented duck’s presumed breeding location; location was determined after repeated signals were recorded from the same area during the month of July
Last Breeding Location	Date of last signal from the Arctic; duck typically had moved from its breeding location prior to this date, but the duck had not begun its southward migration toward its wintering area
Nantucket Sound II	First satellite-based location from Nantucket Sound in the duck’s second winter

Table 2.

Ultimate fate of each of 32 instrumented LTDU described in text. Dates in parentheses in "Date Last Location" represents unfiltered date if later than filtered last location.

Year	PTT	#	Sex	Date Released	Date Last Location	Temp sensor (H, L)	Transmitter Failure (Y, N, or "?")	Transmitter Life (Days)	Comments
2007-08	79633	3307	M	12/14/07	05/20/08	H	Y	159	Last location from Hudson Bay
	79634	3407	M	12/14/07	12/19/07	L	N	-	PTT not recovered
	79635	3507	M	12/13/07	11/12/08	H	Y	336	Last filtered location 11/12/08 at 51.67 lat; low quality location from Nantucket Sound 11/20/08
	79636	3607	M	12/14/07	12/31/07	H	?	-	Died; PTT recovered and reused in 2008-2009
	79637	3707	F	12/14/07	04/25/09	H	Y	499	Wintered in Nantucket Sound for 2nd year; ceased transmitting prior to departure date
	79638	3807	F	12/13/07	09/21/08	H	Y	307	Had departed breeding grounds and headed south
	79639	3907	M	12/13/07	12/19/07	L	N	-	Died; PTT recovered and reused in 2008-2009
	79640	4007	F	12/14/07	12/20/07	L	N	-	Died; PTT recovered and reused in 2008-2009
	79641	4107	M	12/13/07	07/03/08 (7/14/08)	H	Y	215 (226)	On breeding grounds
2008-09	79636	3608	M	12/18/08	08/24/09	H	Y	250	Recovered transmitter from 2007-2008 inserted in new bird

	79639	3908	M	12/18/08	12/15/09	H	Y	363	Recovered transmitter from 2007-2008 inserted in new bird
	79640	4008	M	12/12/08	01/15/09	L	N	-	Recovered transmitter from 2008-2008 and inserted in new bird; PTT not recovered
	79643	4308	M	12/12/08	12/15/08	L	N	-	PTT not recovered
	79644	4408	M	12/13/08	05/07/09 (5/29/09)	H	Y	146 (168)	May not have reached breeding grounds
	89594	9408	F	12/13/08	12/14/08	L	N	-	PTT not found
	89595 A	9508 A	M	12/12/08	12/15/08	L	N	-	Died; PTT recovered and re-used immediately (89595B)
	89595 B	9508 B	M	12/18/08	1/1/09	L	N	-	Recovered transmitter from 89595A; inserted in new bird; died and PTT recovered
	89597	9708	M	12/18/08	02/25/10	H	Y	435	Last transmission from Nantucket Sound
	89598	9808	F	12/18/08	05/13/10	H	Y	512	Left the Sound and last signal from Gulf of St. Lawrence
	89599	9908	M	12/18/08	01/12/09	H	?	-	Possible PTT failure; duck apparently healthy
2009 -10	89595	9509	F	11/22/09	07/20/10	H	Y	241	Recovered transmitter from 2008-2009 inserted in new bird
	89596	9609	F	11/22/09	11/14/10	H	Y	358	Last transmission from Nantucket Sound
	98732	3209	F	11/22/09	07/06/10	H	Y	227	Last transmission from breeding grounds
	98733	3309	F	11/22/09	04/15/10	H	Y	145	Arrived in migratory staging area; no further signal

98734	3409	F	11/22/09	07/11/11 (8/16/11)	H	Y	596 (633)	Transmitted for 20+ months including two full winter seasons and the beginning of the 2nd breeding season
98735	3509	M	11/22/09	11/29/09	L	N	-	Died; PTT recovered and reused in 98735a
98735 a	3510	M	03/07/10	03/14/10 (3/29/10)	L	?	-	Recovered transmitter inserted in new duck near Cape Cod; PTT not recovered
98736	3609	M	11/24/09	07/15/10	H	Y	234	Possible PTT battery failure
98737	3709	M	11/24/09	11/28/09	L	N	-	Died; PTT recovered and reused in 98737a
98737 a	3710	M	03/07/10	03/11/10	H	?	-	Recovered transmitter inserted in new duck near Cape Cod; PTT not recovered
98738	3809	M	11/24/09	01/18/10	H	?	-	Possible PTT failure
98739	3909	F	11/24/09	01/17/10	L	?	-	Fate unknown; PTT not recovered
		21				Median	279	

Table 3.

Key dates for satellite-based locations for 32 instrumented LTDUs including the last satellite-transmitted location and several other dates relevant to the instrumented ducks "life history" using filtered data as described in the text. These dates and other column headings are defined in Table 1. Please note that the dates should not be viewed as precise departure or arrival dates as instrumented ducks were not transmitting continuously.

Year	PTT	Date Released	Last Nantucket Sound	Spring		First Breeding Location	Last Breeding Location	Fall		Nantucket Sound II	Date Last Location
				First Staging Area	Last Staging Area			First Staging Area	Last Staging Area		
2007-08	79633	12/14/07	04/08/08	04/10/08	05/14/08	-	-	-	-	-	05/20/08
	79634	12/14/07	-	-	-	-	-	-	-	-	12/19/07
	79635	12/13/07	04/17/08	04/23/08	05/19/08	07/17/08	08/15/08	10/06/08	11/12/08	-	11/12/08
	79636	12/14/07	-	-	-	-	-	-	-	-	12/31/07
	79637	12/14/07	04/22/08	04/27/08	05/24/08	05/31/08	09/28/08	10/21/08	10/29/08	11/05/08	04/25/09
			04/25/09	-	-	-	-	-	-	-	-
	79638	12/13/07	04/22/08	04/27/08	05/08/08	06/23/08	09/13/08	-	-	-	09/21/08
	79639	12/13/07	-	-	-	-	-	-	-	-	12/19/07
	79640	12/14/07	-	-	-	-	-	-	-	-	12/20/07
79641	12/13/07	04/08/08	04/10/08	05/13/08	07/03/08	-	-	-	-	07/03/08	
2008-09	79636	12/18/08	04/29/09	05/01/09	05/12/09	07/25/09	-	-	-	-	08/24/09
	79639	12/18/08	04/12/09	04/15/09	05/12/09	07/25/09	09/23/09	10/15/09	11/22/09	11/29/09	12/15/09
	79640	12/12/08	-	-	-	-	-	-	-	-	01/15/09
	79643	12/12/08	-	-	-	-	-	-	-	-	12/15/08

Year	PTT	Date Released	Last Nantucket Sound	Spring		First Breeding Location	Last Breeding Location	Fall		Nantucket Sound II	Date Last Location
				First Staging Area	Last Staging Area			First Staging Area	Last Staging Area		
	79644	12/13/08	04/03/09	04/05/09	-	-	-	-	-	-	05/07/09
	89594	12/13/08	-	-	-	-	-	-	-	-	12/14/08
	89595A	12/12/08	-	-	-	-	-	-	-	-	12/15/08
	89595B	12/18/08	-	-	-	-	-	-	-	-	12/22/08
	89597	12/18/08	04/21/09	04/25/09	05/11/09	07/27/09	09/21/09	10/19/09	10/26/09	11/02/09	02/25/10
	89598	12/18/08	04/12/09 04/22/10	04/17/09 04/27/10	05/11/09	07/26/09	09/28/09	10/26/09	11/02/09	11/09/09	05/13/10
	89599	12/18/08	-	-	-	-	-	-	-	-	01/12/09
2009-10	89595	11/22/09	04/09/10	04/11/10	05/24/10	06/08/10	-	-	-	-	07/20/10
	89596	11/22/09	04/16/10	04/23/10	05/15/10	07/03/10	10/03/10	10/24/10	10/31/10	11/07/10	11/14/10
	98732	11/22/09	04/18/10	04/26/10	05/17/10	05/31/10	-	-	-	-	07/06/10
	98733	11/22/09	04/06/10	04/15/10	-	-	-	-	-	-	04/15/10
	98734	11/22/09	04/10/10 04/17/11	04/18/10 04/20/11	05/16/10 05/25/11	06/21/10 07/03/11	09/28/10	10/13/09	10/27/09	11/03/10	09/07/10 07/11/11
	98735	11/22/09	-	-	-	-	-	-	-	-	11/29/09
	98735a	03/07/10	-	-	-	-	-	-	-	-	03/14/10
	98736	11/24/09	04/04/09	04/07/10	05/12/09	07/15/10	-	-	-	-	07/15/10
	98737	11/24/09	-	-	-	-	-	-	-	-	11/28/09
	98737a	03/07/10	-	-	-	-	-	-	-	-	03/11/10

Year	PTT	Date Released	Last Nantucket Sound	Spring		First Breeding Location	Last Breeding Location	Fall		Nantucket Sound II	Date Last Location
				First Staging Area	Last Staging Area			First Staging Area	Last Staging Area		
98738		11/24/09	-	-	-	-	-	-	-	-	01/18/10
98739		11/24/09	-	-	-	-	-	-	-	-	01/17/10

Table 4

Estimated median duration in days of instrumented ducks on migratory staging, breeding, and wintering locations based on date of earliest and latest satellite-based location from individual instrumented ducks as defined in Table 1 and presented in Table 3; b) Summary of earliest, latest, and median dates for LTDU life history events estimated from satellite-based locations (fixes) as defined in Table 1 and presented in Table 3. For both a) and b) N equals the number of "duck years" included in the determination of date ranges and median date or duration; the term duck year is used instead of duck because some ducks survived to transmit for all or part of two years. Median duration or date in parentheses are based on inclusion of unfiltered dates (Appendix B) when those dates change the result. Caveats on interpretation of dates are discussed in the text.

Location	N	Earliest Date	Latest Date	Median Duration
On Staging Area (Spring)	16	5-Apr	24-May	28 (33)
On Breeding Grounds	8	31-May	3-Oct	74 (89)
On Staging Area (Fall)	7	6-Oct	22-Nov	9
On Wintering Grounds	3	2-Nov	25-Apr	165

Event	N	Earliest Date	Latest Date	Median Date
Last Nantucket Sound (departure date)	19	3-Apr	29-Apr	16-April
Staging Area (arrival date)	18	4-April	1-May	22-April
Staging Area (departure date)	16	7-May	25-May	14-May (17-May)
Breeding Grounds (arrival date)	14	31-May	29-June	1-July (21-June)
Fall Migration (departure date)	8	21-Sept	24-Oct	29-Sept
Nantucket Sound (arrival date)	7	2-Nov	29-Nov	9-Nov

CHAPTER 2 – PRELIMINARY REPORT ON LONG-TAILED DUCK GENETICS

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2.1 INTRODUCTION

Wintering populations of birds may comprise a mixture of individuals from different breeding populations. Thus, changes in wintering populations may result from differential impacts on their constituent breeding populations. Thus, it is important to know the breeding origin of birds in wintering populations. One approach to the problem is to use molecular genetic markers to test for a signature of genetic structuring within a given wintering populations. In the extreme case of two highly divergent breeding populations using the same wintering area, it might be possible to identify diagnostic molecular markers that could assign individuals to breeding populations. More likely, however, genetic differentiation between breeding populations will take the form of slight to moderate differences in allele frequencies. In this case, a panel of multiple genetic loci can often be used to assign individuals to populations even when there are no diagnostic differences.

In most northern hemisphere ducks, females are philopatric to natal and previous breeding locations, whereas males often follow females back to their natal areas following pair formation during the non-breeding season when birds from different breeding areas are mixed together. Despite the likelihood of male-mediated gene flow resulting from this social system, genetic structure may still be observed in the maternally inherited mitochondrial DNA (mtDNA) due to female site fidelity. Thus, it is of particular interest to examine mtDNA sequences for evidence of such structure.

We used mtDNA sequence data and sequence data from a panel of nine nuclear HapSTR loci to test for genetic differentiation among eastern and western long-tailed duck (*Clangula hyemalis*) populations and to assess whether the eastern wintering population (sampled in Nantucket Sound) is comprised of genetically differentiated breeding populations.

2.2 METHODS

We extracted genomic DNA from 42 blood and feather samples collected in Nantucket Sound, as well as from 34 tissue samples provided by the University of Washington Burke Museum from birds collected in Russia, Alaska, Nunavut, and New York. We amplified a portion of the mitochondrial control region using primers L81 and H768 (Munoz-Fuentes *et al.* 2005), and 9 HapSTR loci using primers that we designed based on previously published microsatellite sequences from Barrow's Goldeneye (*Bucephala islandica*) (Jaari *et al.* 2009). HapSTR loci comprise both a microsatellite or simple tandem repeat (STR) and a portion of the flanking, single copy DNA sequence. HapSTRs provide the advantage of a fast STR mutation rate but with reduced effects of length homoplasy, as single nucleotide polymorphisms (SNPs) in the flanking sequence are used to separate STR alleles into one or more historically independent lineages (Sorenson & DaCosta 2011). More generally, HapSTR loci offer improved resolution of population structure and historical relationships than is possible with STRs (or microsatellites)

alone. Methods for sequencing and scoring HapSTR loci are described by Sorenson & DaCosta (2011).

A preliminary tree depicting relationships among mitochondrial control region haplotypes was constructed in PAUP* (Swofford 1998) using the neighbor-joining method. We used the program STRUCTURE (Pritchard *et al.* 2000) to examine genetic structure in the HapSTR dataset. Four separate analyses of 100,000 Markov-chain Monte Carlo iterations were run with a burn-in period of 10,000 steps. We ran these analyses under a model of no admixture, with allele frequencies correlated among populations, and k (number of populations) equal to 2, 3, 4, or 5.

2.3 RESULTS

Mitochondrial control region sequences were obtained for 77 individuals, including 41 from Nantucket Sound. There were 68 unique haplotypes, only seven of which were shared by more than one individual bird. Of these, only one haplotype was shared by more than two birds, and this one was found in only three individuals. Of the shared haplotypes, three were found in more than one geographic location, shared between birds from Russia and Alaska, Russia and Nunavut, and Alaska and Nantucket Sound. More importantly, the mitochondrial tree reveals little or no phylogeographic structure (Figure 1). Birds from different regions are thoroughly mixed together in the tree and identical or closely related haplotypes are found in different regions.

We obtained sequence data for five of the HapSTR loci from all samples. The remaining four, BUIS12, BUIS14, BUIS18, and BUIS20, had missing data for two, four, one and five individuals, respectively. The nine HapSTR loci produced 155 SNPs, 92 of which were found in more than one individual and large number of alleles at each locus. The program STRUCTURE revealed no evidence of genetic structure among geographic regions, and did not group geographically clustered samples as genetic populations under any value of k (Figure 2).

2.4 CONCLUSIONS

Our preliminary analyses suggest little or no genetic structuring of long-tailed duck populations. Birds from Nantucket Sound, Russia, Alaska, and Nunavut share a high level of both mitochondrial and nuclear genetic diversity, likely reflecting historically large effective population sizes and ongoing gene flow among populations. Given this lack of structure on a continental scale, it is unlikely that birds from different breeding populations wintering together in Nantucket can be discriminated on the basis of genetic data.

2.5 LITERATURE CITED

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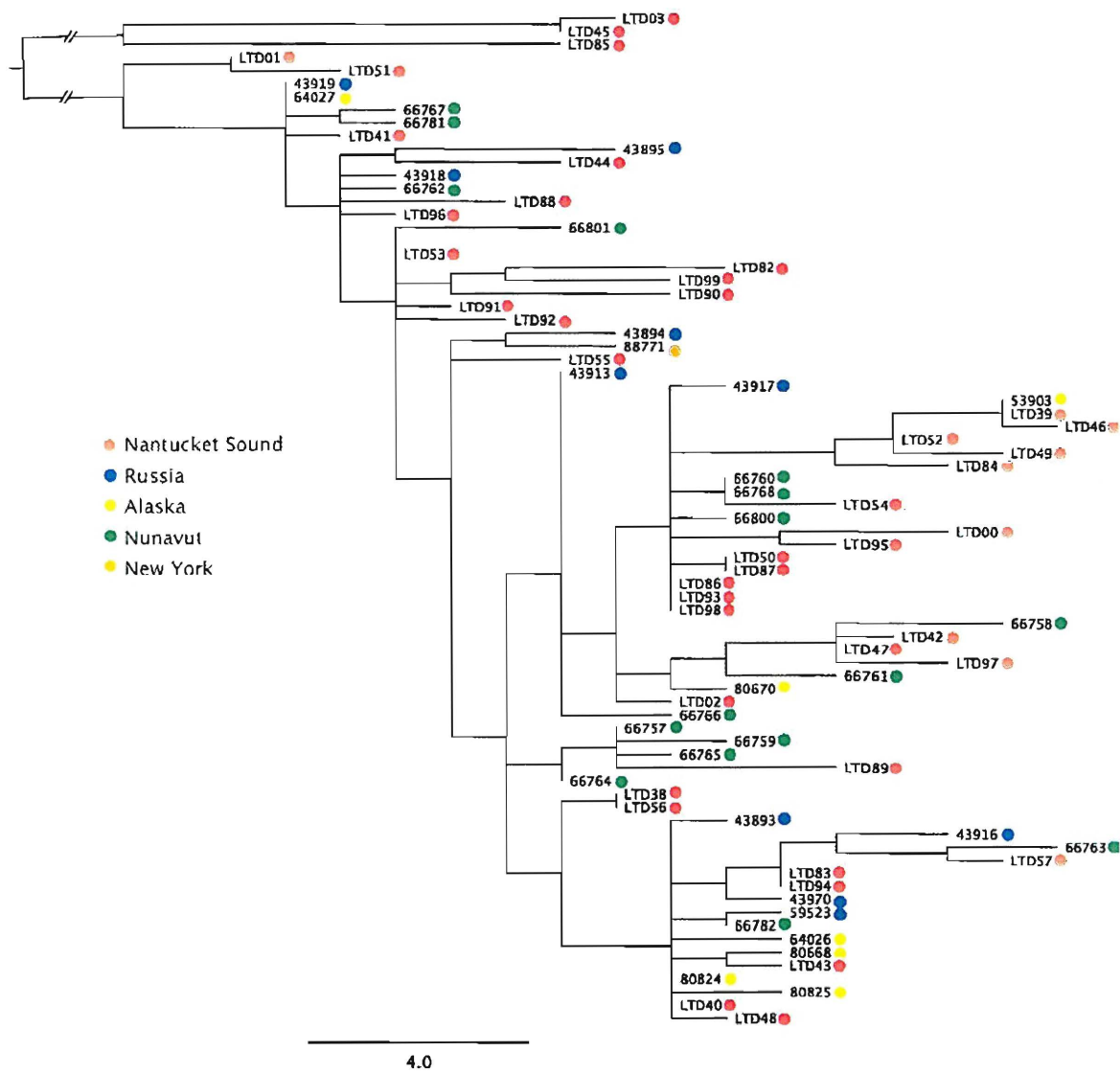


Figure 7. A neighbor-joining tree illustrating the relationships among mitochondrial control region haplotypes in the Long-tailed Ducks. Colored circles indicate the geographic origin of each sample.

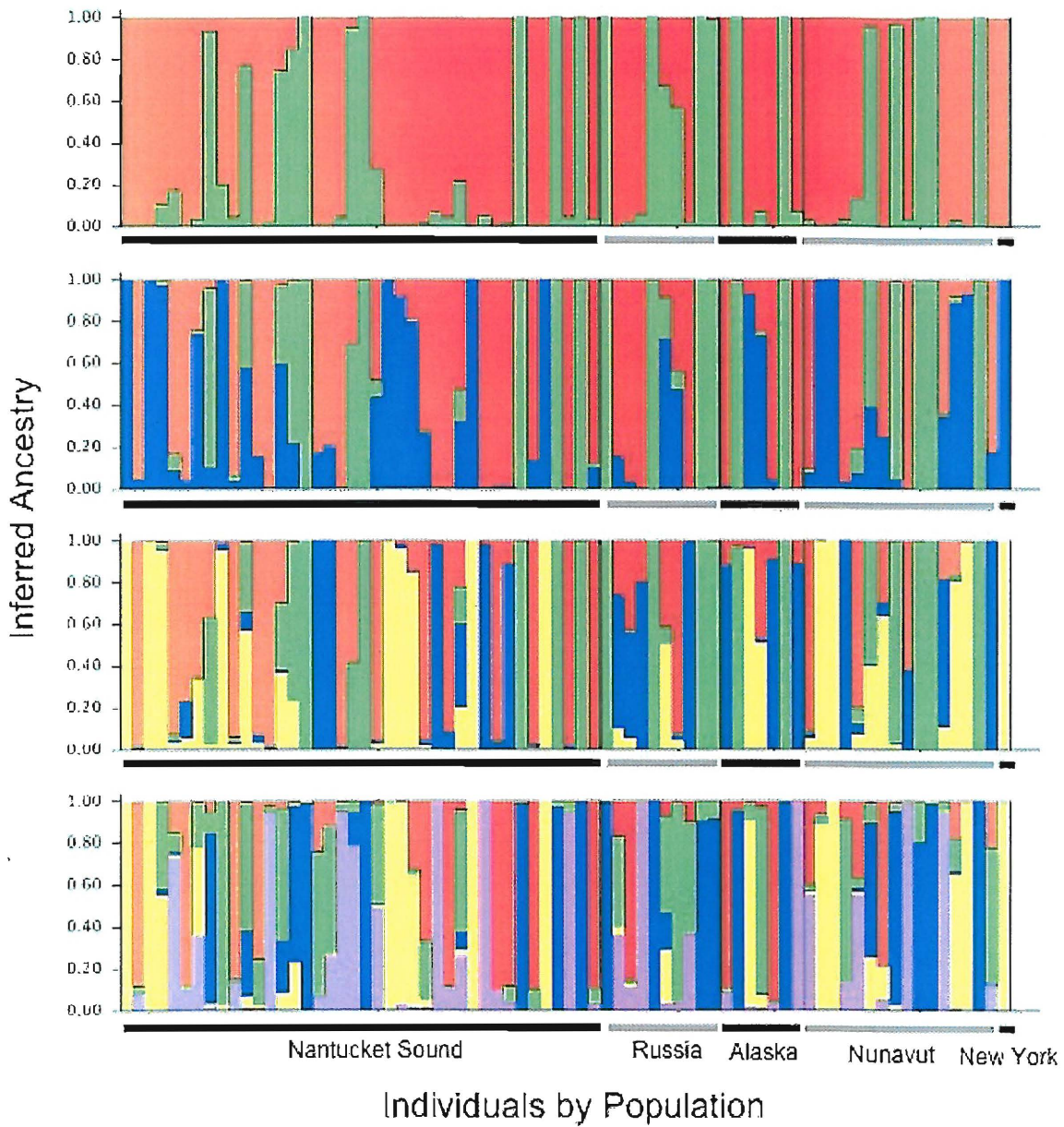


Figure 8. Bar graphs depicting the results of the Structure Analyses. Each vertical bar represents an individual bird's multilocus genotype, and the color of that bar shows that individual's inferred genetic makeup assuming (from top to bottom) 2, 3, 4, and 5 populations. Black and grey bars on the x-axis identify geographic populations.

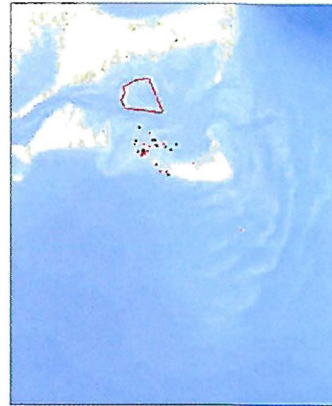
Appendix A

Plots of individual instrumented LTDUs that provide satellite-based locations for at least one month. All plots are based on filtered points. Plots are presented in order of transmitter number and not by year. Locations of ducks transmitting more than one winter are plotted separately by year.



Long Tailed Duck Telemetry
Platform 29632
12-14-07 - 4:8:02
(N = 31)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



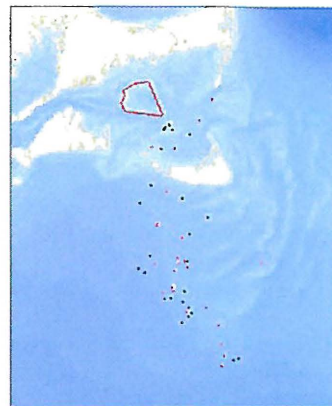
Long Tailed Duck Telemetry
Platform 29637
12-14-07 - 4:23:01
(N = 33)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



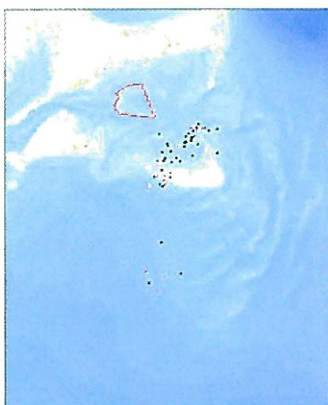
Long Tailed Duck Telemetry
Platform 29635
12-13-07 - 4:12:02
(N = 37)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



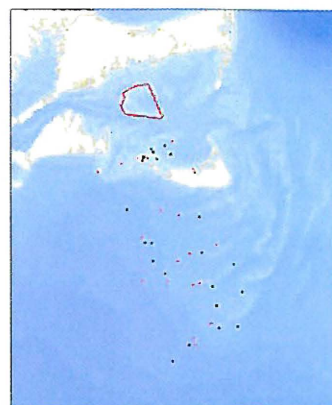
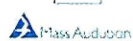
Long Tailed Duck Telemetry
Platform 29637
11-15-06 - 4:25:09
(N = 49)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



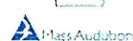
Long Tailed Duck Telemetry
Platform 29636
12-18-06 - 4:23:09
(N = 34)

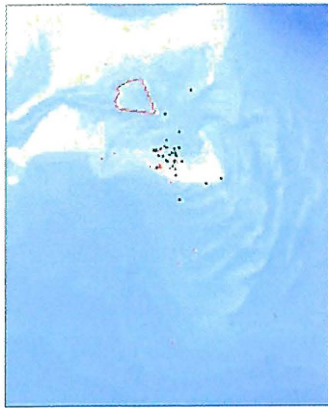
- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 29638
12-13-07 - 4:22:04
(N = 44)

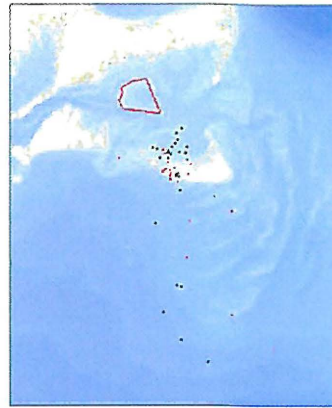
- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location





Long Tailed Duck Telemetry
Platform 79635
1218.06 - 411.09
(N = 46)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



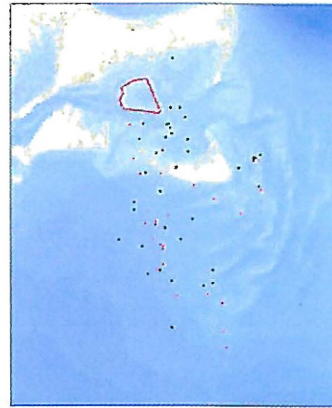
Long Tailed Duck Telemetry
Platform 79614
1213.06 - 417.09
(N = 90)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 79642
1211.06 - 411.09
(N = 14)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



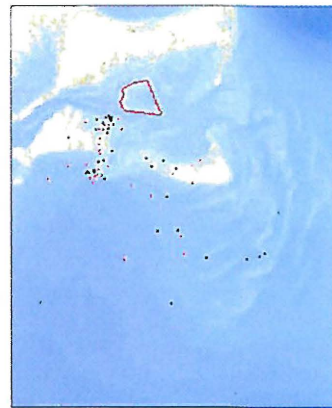
Long Tailed Duck Telemetry
Platform 89535
1212.06 - 414.10
(N = 61)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 79641
1213.07 - 416.04
(N = 37)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 89536
1122.01 - 414.10
(N = 47)

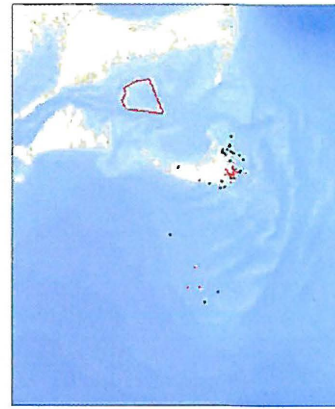
- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location





Long Tailed Duck Telemetry
Platform 89596
117°10' - 117°18'
42° - 52'

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



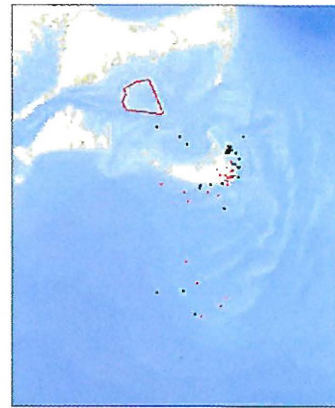
Long Tailed Duck Telemetry
Platform 89558
118°04' - 118°09'
02' - 54'

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 89597
117°08' - 117°09'
42° - 56'

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



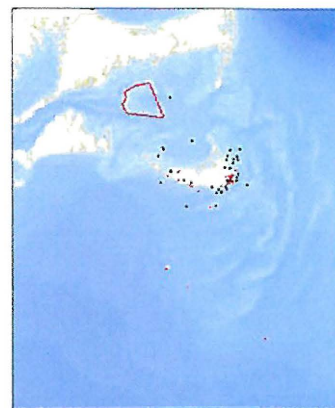
Long Tailed Duck Telemetry
Platform 89558
117°09' - 117°10'
02' - 57'

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 89597
117°09' - 117°10'
42° - 56'

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 89732
117°20' - 117°30'
42° - 47'

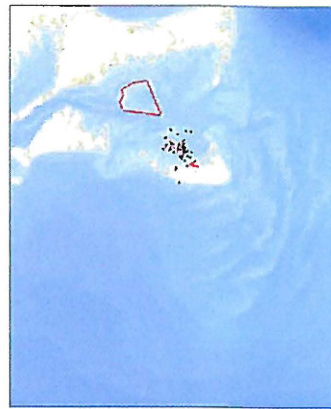
- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location





Long Tailed Duck Telemetry
Platform 98733
11 02 09 - 11 14 10
(N = 85)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 98736
11 04 09 - 11 10 10
(N = 42)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 98734
11 02 09 - 11 10 10
(N = 84)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



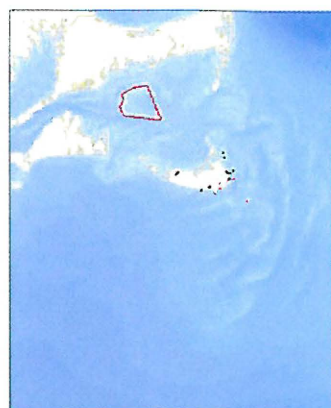
Long Tailed Duck Telemetry
Platform 98738
11 21 09 - 11 27 10
(N = 23)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 98734
11 11 09 - 11 17 10
(N = 81)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Long Tailed Duck Telemetry
Platform 98739
11 24 09 - 11 27 10
(N = 24)

- Daytime Locations
- Nighttime Locations
- Proposed Windfarm Location



Appendix B

Key dates from satellite-based locations for 32 instrumented LTDUs including the last satellite-transmitted location and several other dates relevant to the instrumented ducks “life history” using unfiltered data as described in the text. Unfiltered dates are provided to depict earlier departures or arrivals, or later departures or arrivals than available after filtering as relevant. Filtered dates are presented in Table 3. Column heading definitions are as defined in Table 1.

Year	PTT	Date Released	Last Nantucket Sound	Spring		First Breeding Location	Last Breeding Location	Fall		Nantucket Sound II	Date Last Location	
				Staging Area Arrival	Staging Area Departure			Staging Area Arrival	Staging Area Departure			
2007-08	79633	12/14/07	04/08/08	04/10/08	05/14/08	-	-	-	-	-	05/20/08	
	79634	12/14/07	-	-	-	-	-	-	-	-	12/19/07	
	79635	12/13/07	04/17/08	04/23/08	05/19/08	06/18/08	08/15/08	10/06/08	-	11/20/08	11/20/08	
	79636	12/14/07	-	-	-	-	-	-	-	-	12/31/07	
	79637	12/14/07	04/22/08	04/25/08	05/24/08	05/31/08	09/28/08	10/21/08	10/29/08	11/05/08	04/25/09	
			-	04/25/09	-	-	-	-	-	-	-	
	79638	12/13/07	04/22/08	04/27/08	05/16/08	06/23/08	09/13/08		-	-	10/14/08	
	79639	12/13/07	-		-	-	-	-	-	-	12/19/07	
	79640	12/14/07	-		-	-	-	-	-	-	12/20/07	
	79641	12/13/07	04/08/08	04/10/08	05/13/08	07/03/08	-	-	-	-	07/03/08	
2008-09	79636	12/18/08	04/29/09	05/01/09	05/12/09	06/18/09	-	-	-	-	08/24/09	
	79639	12/18/08	04/12/09	04/15/09	05/27/09	07/17/09	09/23/09	10/15/09	11/22/09	11/29/09	12/15/09	
	79640	12/12/08	-	-	-	-	-	-	-	-	01/15/09	
	79643	12/12/08	-	-	-	-	-	-	-	-	12/15/08	
	79644	12/13/08	04/03/09	04/05/09	05/14/09	-	-	-	-	-	05/29/09	
	89594	12/13/08	-	-	-	-	-	-	-	-	12/14/08	
	89595A	12/12/08	-	-	-	-	-	-	-	-	12/16/08	

	89595B	12/18/08	-	-	-	-	-	-	-	-	-	01/01/09
	89597	12/18/08	04/21/09	04/25/09	05/25/09	06/29/09	09/21/09	10/19/09	10/26/09	11/02/09		02/25/10
	89598	12/18/08	04/12/09	04/17/09	05/25/09	06/22/09	09/28/09	10/26/09	11/02/09	11/09/09		05/13/10
			04/22/10	04/27/10								
	89599	12/18/08	-	-	-	-	-	-	-	-	-	01/12/09
2009- 10	89595	11/22/09	04/09/10	04/11/10	05/24/10	06/08/10	-	-	-	-	-	07/20/10
	89596	11/22/09	04/16/10	04/23/10	05/15/10	07/03/10	10/03/10	10/24/10	10/31/10	11/07/10		11/14/10
	98732	11/22/09	04/18/10	04/26/10	05/17/10	05/31/10	-	-	-	-	-	07/20/10
	98733	11/22/09	04/06/10	04/15/10	-	-	-	-	-	-	-	04/15/10
	98734	11/22/09	04/10/10	04/18/10	05/16/10	06/21/10	09/28/10	10/13/09	10/27/09	11/03/10		08/16/11
	98734		04/17/11	04/20/11	05/31/11	07/03/11	-					
	98735	11/22/09	-	-	-	-	-	-	-	-	-	11/29/09
	98735a	03/07/10	-	-	-	-	-	-	-	-	-	03/29/10
	98736	11/24/09	04/04/09	04/07/10	05/12/09	07/15/10	-	-	-	-	-	07/15/10
	98737	11/24/09	-	-	-	-	-	-	-	-	-	11/28/09
	98737a	03/07/10	-	-	-	-	-	-	-	-	-	03/11/10
	98738	11/24/09	-	-	-	-	-	-	-	-	-	01/18/10
	98739	11/24/09	-	-	-	-	-	-	-	-	-	01/17/10

ptt	date	time	latitude	longitud	gmt_hour	gmt_min	gmt_sec	sen1	sen2	sen3	sen4	sex	solarhr	solarmn	solarda	solarmo	solaryr	Day/Night
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79633	12/18/2007	5:03:50	41.24	-70.096	5	3	50	2	2	0	0	2 M	0	23	18	12	2007	TRUE
79633	12/20/2007	10:46:18	41.308	-70.277	10	46	18	2	3	1	1	2 M	6	5	20	12	2007	TRUE
79633	12/22/2007	15:42:21	41.306	-70.284	15	42	21	2	4	0	0	2 M	11	1	22	12	2007	FALSE
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79633	12/31/2007	15:53:50	41.31	-70.282	15	53	50	193	204	2	2	49 M	11	12	31	12	2007	FALSE
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79633	1/9/2008	10:13:42	41.311	-70.277	10	13	42	191	212	1	1	56 M	5	32	9	1	2008	TRUE
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79633	3/30/2008	2:34:14	40.68	-70.111	2	34	14	191	212	1	47 M	21	53	29	3	2008	TRUE
79633	4/1/2008	11:32:17	40.649	-70.388	11	32	17	3	49	0	2 M	6	50	1	4	2008	TRUE
79633	4/3/2008	14:20:28	40.845	-69.906	14	20	28	1	50	0	2 M	9	40	3	4	2008	FALSE
79633	4/6/2008	0:09:38	40.927	-70.052	0	9	38	190	204	1	21 M	19	29	5	4	2008	TRUE
79633	4/8/2008	3:30:13	41.345	-70.159	3	30	13	2	52	0	2 M	22	49	7	4	2008	TRUE
79633	4/10/2008	8:54:58	47.796	-65.39	8	54	58	191	212	1	21 M	4	33	10	4	2008	TRUE
79633	4/12/2008	15:20:38	47.963	-65.998	15	20	38	2	54	0	2 M	10	56	12	4	2008	FALSE
79633	4/14/2008	22:46:22	48.014	-65.91	22	46	22	193	204	3	3 M	18	22	14	4	2008	TRUE
79633	4/17/2008	5:51:12	48.054	-65.85	5	51	12	4	56	0	2 M	1	27	17	4	2008	TRUE
79633	4/19/2008	8:50:06	47.993	-65.805	8	50	6	2	57	0	2 M	4	26	19	4	2008	TRUE
79633	4/21/2008	14:01:28	49.051	-68.116	14	1	28	1	58	0	2 M	9	29	21	4	2008	FALSE
79633	4/23/2008	19:32:07	49.209	-67.917	19	32	7	192	212	2	29 M	15	0	23	4	2008	FALSE
79633	4/26/2008	1:36:59	48.234	-64.433	1	36	59	190	212	3	39 M	21	19	25	4	2008	TRUE
79633	4/28/2008	9:06:59	47.501	-64.444	9	6	59	190	204	3	49 M	4	49	28	4	2008	TRUE
79633	4/30/2008	13:52:24	47.222	-64.642	13	52	24	1	62	0	2 M	9	33	30	4	2008	FALSE
79633	5/2/2008	18:55:57	46.521	-63.375	18	55	57	191	212	3	13 M	14	42	2	5	2008	FALSE
79633	5/5/2008	3:05:30	47.297	-64.104	3	5	30	3	64	0	2 M	22	49	4	5	2008	TRUE
79633	5/7/2008	8:40:28	47.282	-64.601	8	40	28	191	204	2	45 M	4	22	7	5	2008	TRUE
79633	5/14/2008	20:49:03	48.156	-65.93	20	49	3	192	200	3	54 M	16	25	14	5	2008	FALSE
79633	5/20/2008	9:24:44	60.399	-88.02	9	24	44	192	4	3	2 M	3	32	20	5	2008	TRUE
79635	12/13/2007	14:50:00	41.297	-70.102	14	50	0	0	0	0	0 M	10	9	13	12	2007	FALSE
79635	12/15/2007	0:49:10	41.321	-69.987	0	49	10	193	208	2	14 M	20	9	14	12	2007	TRUE
79635	12/17/2007	5:15:21	41.309	-70.132	5	15	21	192	208	2	17 M	0	34	17	12	2007	TRUE
79635	12/19/2007	8:15:54	41.251	-70.116	8	15	54	190	208	1	16 M	3	35	19	12	2007	TRUE
79635	12/21/2007	12:07:48	41.207	-69.958	12	7	48	191	212	1	17 M	7	27	21	12	2007	FALSE
79635	12/23/2007	19:58:17	41.255	-70.15	19	58	17	192	204	3	60 M	15	17	23	12	2007	FALSE
79635	12/25/2007	21:51:57	41.088	-70.121	21	51	57	194	212	3	62 M	17	11	25	12	2007	FALSE
79635	12/28/2007	1:18:53	41.278	-70.189	1	18	53	193	216	3	11 M	20	38	27	12	2007	TRUE
79635	12/30/2007	8:03:32	41.24	-70.073	8	3	32	2	24	0	2 M	3	23	30	12	2007	TRUE
79635	1/1/2008	13:53:31	41.248	-70.033	13	53	31	192	208	2	34 M	9	13	1	1	2008	FALSE
79635	1/3/2008	19:31:10	40.947	-70.206	19	31	10	193	204	1	57 M	14	50	3	1	2008	FALSE
79635	1/6/2008	1:01:42	41.592	-70.038	1	1	42	192	204	2	22 M	20	21	5	1	2008	TRUE
79635	1/8/2008	6:30:12	41.253	-70.126	6	30	12	190	204	1	32 M	1	49	8	1	2008	TRUE
79635	1/10/2008	8:21:45	41.346	-70.076	8	21	45	190	212	2	32 M	3	41	10	1	2008	TRUE
79635	1/12/2008	17:15:15	41.264	-70.087	17	15	15	194	204	1	57 M	12	34	12	1	2008	FALSE
79635	1/14/2008	22:18:14	41.195	-70.214	22	18	14	192	204	3	25 M	17	37	14	1	2008	FALSE
79635	1/17/2008	1:47:12	41.211	-70.18	1	47	12	191	208	1	25 M	21	6	16	1	2008	TRUE
79635	1/19/2008	6:15:33	41.235	-70.169	6	15	33	254	210	2	10 M	1	34	19	1	2008	TRUE
79635	1/21/2008	13:40:28	41.181	-70.125	13	40	28	194	204	2	51 M	8	59	21	1	2008	FALSE
79635	1/26/2008	1:17:14	41.224	-70.123	1	17	14	190	204	3	20 M	20	36	25	1	2008	TRUE
79635	1/28/2008	2:17:12	41.261	-70.092	2	17	12	1	21	0	2 M	21	36	27	1	2008	TRUE
79635	1/30/2008	7:43:29	41.443	-70.076	7	43	29	192	212	2	26 M	3	3	30	1	2008	TRUE
79635	2/3/2008	20:04:37	41.52	-70.098	20	4	37	192	208	2	25 M	15	24	3	2	2008	FALSE
79635	2/6/2008	2:24:16	41.574	-70.017	2	24	16	190	204	2	44 M	21	44	5	2	2008	TRUE
79635	2/8/2008	6:08:32	41.204	-70.052	6	8	32	2	26	0	2 M	1	28	8	2	2008	TRUE
79635	2/10/2008	10:40:26	41.244	-70.155	10	40	26	191	208	3	44 M	5	59	10	2	2008	TRUE
79635	2/12/2008	15:41:31	41.014	-70.017	15	41	31	1	28	0	2 M	11	1	12	2	2008	FALSE
79635	2/17/2008	1:29:21	41.276	-70.278	1	29	21	192	212	3	0 M	20	48	16	2	2008	TRUE
79635	2/21/2008	14:39:07	41.321	-70.277	14	39	7	192	204	2	36 M	9	58	21	2	2008	FALSE

79635	2/26/2008	2:16:20	41.592	-70.097	2	16	20	191	200	3	12 M	21	35	25	2	2008	TRUE
79635	2/28/2008	7:42:49	41.388	-70.188	7	42	49	191	200	3	13 M	3	2	28	2	2008	TRUE
79635	3/3/2008	16:45:59	41.561	-70.141	16	45	59	191	204	3	61 M	12	5	3	3	2008	FALSE
79635	3/8/2008	1:49:13	41.568	-70.087	1	49	13	192	208	1	3 M	21	8	7	3	2008	TRUE
79635	3/12/2008	14:32:52	41.276	-70.356	14	32	52	4	41	0	2 M	9	51	12	3	2008	FALSE
79635	3/25/2008	20:41:17	41.206	-70.251	20	41	17	192	204	2	14 M	16	0	25	3	2008	FALSE
79635	4/1/2008	10:46:36	41.27	-70.312	10	46	36	195	212	3	8 M	6	5	1	4	2008	TRUE
79635	4/10/2008	11:16:05	41.258	-70.244	11	16	5	192	204	3	4 M	6	35	10	4	2008	TRUE
79635	4/14/2008	21:01:02	40.714	-69.929	21	1	2	191	208	1	43 M	16	21	14	4	2008	FALSE
79635	4/17/2008	1:39:12	40.704	-70.094	1	39	12	192	208	3	26 M	20	58	16	4	2008	TRUE
79635	4/23/2008	19:11:53	48.079	-69.452	19	11	53	195	204	2	21 M	14	34	23	4	2008	FALSE
79635	4/25/2008	23:57:21	48.056	-69.613	23	57	21	191	208	1	10 M	19	18	25	4	2008	TRUE
79635	4/30/2008	9:58:03	48.574	-68.369	9	58	3	1	63	0	2 M	5	24	30	4	2008	TRUE
79635	5/19/2008	15:52:04	48.99	-68.676	15	52	4	192	212	3	53 M	11	17	19	5	2008	FALSE
79635	5/27/2008	3:00:05	56.616	-79.547	3	0	5	192	204	2	56 M	21	41	26	5	2008	TRUE
79635	6/18/2008	2:49:35	62.294	-97.221	2	49	35	192	204	3	62 M	20	20	17	6	2008	TRUE
79635	7/17/2008	8:48:15	66.113	-73.819	8	48	15	192	204	2	9 M	3	52	17	7	2008	TRUE
79635	7/24/2008	16:27:34	66.102	-73.56	16	27	34	4	12	0	2 M	11	33	24	7	2008	FALSE
79635	8/15/2008	15:30:55	66.112	-73.562	15	30	55	192	192	2	34 M	10	36	15	8	2008	FALSE
79635	10/6/2008	7:43:07	56.775	-79.776	7	43	7	191	212	3	36 M	2	24	6	10	2008	TRUE
79635	10/13/2008	20:18:32	56.782	-79.898	20	18	32	3	22	0	35 M	14	58	13	10	2008	FALSE
79635	11/5/2008	1:49:16	56.851	-79.824	1	49	16	2	24	0	3 M	20	29	4	11	2008	TRUE
79635	11/12/2008	14:54:41	51.671	-73.416	14	54	41	196	192	1	46 M	10	1	12	11	2008	FALSE
79636	12/18/2008	15:00:00	41.284	-70.17	15	0	0	0	0	0	0 M	10	19	18	12	2008	FALSE
79636	12/20/2008	8:25:42	41.27	-70.169	8	25	42	191	204	3	6 M	3	45	20	12	2008	TRUE
79636	12/22/2008	12:18:17	41.249	-70.191	12	18	17	192	208	2	10 M	7	37	22	12	2008	FALSE
79636	12/24/2008	15:16:49	41.274	-70.218	15	16	49	1	3	0	2 M	10	35	24	12	2008	FALSE
79636	12/27/2008	0:27:19	41.321	-70.196	0	27	19	4	4	0	2 M	19	46	26	12	2008	TRUE
79636	12/29/2008	2:46:44	41.329	-70.144	2	46	44	1	5	0	2 M	22	6	28	12	2008	TRUE
79636	12/31/2008	9:01:36	41.273	-70.233	9	1	36	191	208	1	17 M	4	20	31	12	2008	TRUE
79636	1/2/2009	15:41:19	41.262	-70.194	15	41	19	192	204	1	20 M	11	0	2	1	2009	FALSE
79636	1/4/2009	22:56:06	41.293	-70.204	22	56	6	191	204	2	49 M	18	15	4	1	2009	TRUE
79636	1/7/2009	0:55:45	41.348	-70.2	0	55	45	1	9	0	2 M	20	14	6	1	2009	TRUE
79636	1/9/2009	10:26:26	41.317	-70.163	10	26	26	190	204	2	49 M	5	45	9	1	2009	TRUE
79636	1/11/2009	13:19:14	41.322	-70.22	13	19	14	190	208	1	50 M	8	38	11	1	2009	FALSE
79636	1/13/2009	21:11:06	41.421	-70.079	21	11	6	191	204	2	60 M	16	30	13	1	2009	FALSE
79636	1/16/2009	0:47:14	41.343	-69.979	0	47	14	2	13	0	2 M	20	7	15	1	2009	TRUE
79636	1/18/2009	6:22:36	41.373	-70.18	6	22	36	189	208	1	17 M	1	41	18	1	2009	TRUE
79636	1/20/2009	11:38:33	41.367	-70.14	11	38	33	190	212	2	17 M	6	57	20	1	2009	TRUE
79636	1/22/2009	17:07:36	41.307	-70.214	17	7	36	191	212	1	26 M	12	26	22	1	2009	FALSE
79636	1/25/2009	0:39:53	41.243	-70.2	0	39	53	190	204	2	37 M	19	59	24	1	2009	TRUE
79636	1/27/2009	8:15:54	41.32	-70.13	8	15	54	190	204	1	42 M	3	35	27	1	2009	TRUE
79636	1/29/2009	11:34:06	41.392	-70.079	11	34	6	188	208	3	42 M	6	53	29	1	2009	TRUE
79636	2/3/2009	0:28:54	41.249	-70.213	0	28	54	191	204	1	6 M	19	48	2	2	2009	TRUE
79636	2/7/2009	11:26:48	41.421	-70.059	11	26	48	2	23	0	2 M	6	46	7	2	2009	TRUE
79636	2/9/2009	19:26:22	41.255	-70.184	19	26	22	4	24	0	2 M	14	45	9	2	2009	FALSE
79636	2/12/2009	0:20:42	41.364	-70.11	0	20	42	190	204	2	28 M	19	40	11	2	2009	TRUE
79636	2/14/2009	6:39:46	41.335	-70.078	6	39	46	190	204	1	30 M	1	59	14	2	2009	TRUE
79636	2/16/2009	9:41:44	41.378	-70.104	9	41	44	189	212	2	30 M	5	1	16	2	2009	TRUE

79636	2/18/2009	19:05:57	41.413	-70.056	19	5	57	192	204	1	2 M	14	25	18	2	2009	FALSE
79636	2/21/2009	1:10:52	41.42	-70.029	1	10	52	4	29	0	2 M	20	30	20	2	2009	TRUE
79636	2/23/2009	5:03:20	41.432	-70.053	5	3	20	2	30	0	2 M	0	23	23	2	2009	TRUE
79636	2/25/2009	9:36:46	41.403	-70.212	9	36	46	188	212	1	10 M	4	55	25	2	2009	TRUE
79636	3/2/2009	0:03:51	41.329	-70.189	0	3	51	191	204	2	25 M	19	23	1	3	2009	TRUE
79636	3/4/2009	2:35:56	41.366	-70.177	2	35	56	191	212	3	26 M	21	55	3	3	2009	TRUE
79636	3/6/2009	9:47:47	41.395	-70.104	9	47	47	189	204	1	26 M	5	7	6	3	2009	TRUE
79636	3/8/2009	14:55:31	41.246	-70.26	14	55	31	192	208	2	37 M	10	14	8	3	2009	FALSE
79636	3/10/2009	21:53:41	41.372	-70.513	21	53	41	3	37	0	2 M	17	11	10	3	2009	FALSE
79636	3/13/2009	2:26:42	41.412	-70.011	2	26	42	189	208	2	59 M	21	46	12	3	2009	TRUE
79636	3/15/2009	8:17:26	41.404	-70.093	8	17	26	189	208	2	59 M	3	37	15	3	2009	TRUE
79636	3/19/2009	20:57:08	41.419	-70.033	20	57	8	3	41	0	2 M	16	17	19	3	2009	FALSE
79636	3/22/2009	2:50:11	41.391	-70.08	2	50	11	189	204	2	26 M	22	9	21	3	2009	TRUE
79636	3/24/2009	6:42:42	41.376	-70.109	6	42	42	188	208	3	27 M	2	2	24	3	2009	TRUE
79636	3/26/2009	10:40:45	41.382	-70.083	10	40	45	190	216	2	27 M	6	0	26	3	2009	TRUE
79636	3/28/2009	19:02:48	41.276	-70.185	19	2	48	3	45	0	2 M	14	22	28	3	2009	FALSE
79636	3/31/2009	0:28:08	41.35	-70.166	0	28	8	3	46	0	2 M	19	47	30	3	2009	TRUE
79636	4/2/2009	6:49:18	41.416	-69.977	6	49	18	189	204	3	42 M	2	9	2	4	2009	TRUE
79636	4/4/2009	9:52:56	41.421	-70.06	9	52	56	189	212	3	42 M	5	12	4	4	2009	TRUE
79636	4/6/2009	14:55:01	41.395	-70.07	14	55	1	192	212	1	53 M	10	14	6	4	2009	FALSE
79636	4/11/2009	2:53:56	41.412	-70.073	2	53	56	1	51	0	2 M	22	13	10	4	2009	TRUE
79636	4/13/2009	8:13:52	41.37	-70.057	8	13	52	189	212	3	18 M	3	33	13	4	2009	TRUE
79636	4/15/2009	16:52:36	40.967	-70.197	16	52	36	192	204	2	40 M	12	11	15	4	2009	FALSE
79636	4/18/2009	0:06:41	40.984	-70.272	0	6	41	191	200	3	52 M	19	25	17	4	2009	TRUE
79636	4/20/2009	2:45:03	40.948	-70.262	2	45	3	189	208	3	53 M	22	4	19	4	2009	TRUE
79636	4/22/2009	10:20:23	40.977	-70.134	10	20	23	189	204	1	52 M	5	39	22	4	2009	TRUE
79636	4/26/2009	20:46:56	40.922	-70.226	20	46	56	193	208	1	1 M	16	6	26	4	2009	FALSE
79636	4/29/2009	2:33:54	41.072	-70.209	2	33	54	1	59	0	2 M	21	53	28	4	2009	TRUE
79636	5/1/2009	8:23:50	48.932	-67.634	8	23	50	190	208	3	6 M	3	53	1	5	2009	TRUE
79636	5/3/2009	15:35:20	49.166	-67.587	15	35	20	192	204	1	28 M	11	4	3	5	2009	FALSE
79636	5/5/2009	22:11:33	48.491	-69.176	22	11	33	4	62	0	2 M	17	34	5	5	2009	FALSE
79636	5/8/2009	2:25:44	48.678	-69.07	2	25	44	2	63	0	2 M	21	49	7	5	2009	TRUE
79636	5/10/2009	8:45:57	49.332	-67.593	8	45	57	3	64	0	2 M	4	15	10	5	2009	TRUE
79636	5/12/2009	15:49:35	49.284	-67.586	15	49	35	4	1	0	2 M	11	19	12	5	2009	FALSE
79636	7/25/2009	18:19:25	72.171	-89.665	18	19	25	1	11	0	3 M	12	20	25	7	2009	FALSE
79636	8/2/2009	7:00:10	72.137	-89.857	7	0	10	190	204	1	9 M	1	0	2	8	2009	TRUE
79636	8/9/2009	17:18:19	72.183	-89.697	17	18	19	191	208	1	9 M	11	19	9	8	2009	FALSE
79636	8/17/2009	5:19:12	72.171	-89.67	5	19	12	191	204	1	8 M	23	20	16	8	2009	TRUE
79636	8/24/2009	14:47:23	72.165	-89.702	14	47	23	1	15	0	2 M	8	48	24	8	2009	FALSE
79637	12/14/2007	13:30:00	41.297	-70.102	13	30	0	0	0	0	0 F	8	49	14	12	2007	FALSE
79637	12/16/2007	2:09:43	41.336	-70.303	2	9	43	1	1	0	2 F	21	28	15	12	2007	TRUE
79637	12/18/2007	9:29:50	41.293	-70.256	9	29	50	3	2	0	2 F	4	48	18	12	2007	TRUE
79637	12/20/2007	16:21:15	41.27	-70.213	16	21	15	4	3	0	2 F	11	40	20	12	2007	FALSE
79637	12/22/2007	23:06:53	41.261	-70.207	23	6	53	192	204	2	29 F	18	26	22	12	2007	TRUE
79637	12/25/2007	2:22:16	41.335	-70.309	2	22	16	191	208	1	28 F	21	41	24	12	2007	TRUE
79637	12/27/2007	9:46:26	41.335	-70.305	9	46	26	190	204	3	34 F	5	5	27	12	2007	TRUE
79637	12/29/2007	16:34:23	41.272	-70.236	16	34	23	4	7	0	2 F	11	53	29	12	2007	FALSE
79637	12/31/2007	22:50:40	41.336	-70.305	22	50	40	193	204	1	4 F	18	9	31	12	2007	TRUE
79637	1/3/2008	2:36:09	41.336	-70.304	2	36	9	190	208	2	5 F	21	54	2	1	2008	TRUE

79637	1/5/2008	9:32:08	41.333	-70.304	9	32	8	193	204	3	17 F	4	50	5	1	2008	TRUE
79637	1/7/2008	16:12:06	41.326	-70.305	16	12	6	192	204	3	26 F	11	30	7	1	2008	FALSE
79637	1/9/2008	19:58:23	41.326	-70.298	19	58	23	3	12	0	2 F	15	17	9	1	2008	FALSE
79637	1/12/2008	1:08:52	41.335	-70.306	1	8	52	2	13	0	2 F	20	27	11	1	2008	TRUE
79637	1/14/2008	9:15:29	41.335	-70.307	9	15	29	191	204	1	45 F	4	34	14	1	2008	TRUE
79637	1/16/2008	11:47:00	41.326	-70.301	11	47	0	192	212	3	45 F	7	5	16	1	2008	FALSE
79637	1/18/2008	19:54:27	41.33	-70.299	19	54	27	3	16	0	2 F	15	13	18	1	2008	FALSE
79637	1/21/2008	1:21:28	41.335	-70.31	1	21	28	3	17	0	2 F	20	40	20	1	2008	TRUE
79637	1/23/2008	7:15:04	41.334	-70.305	7	15	4	190	204	1	6 F	2	33	23	1	2008	TRUE
79637	1/25/2008	13:57:53	41.329	-70.307	13	57	53	3	19	0	2 F	9	16	25	1	2008	FALSE
79637	1/27/2008	21:28:41	41.336	-70.302	21	28	41	4	20	0	2 F	16	47	27	1	2008	FALSE
79637	1/30/2008	1:46:32	41.337	-70.306	1	46	32	191	204	3	34 F	21	5	29	1	2008	TRUE
79637	2/1/2008	7:22:07	41.335	-70.304	7	22	7	2	22	0	2 F	2	40	1	2	2008	TRUE
79637	2/3/2008	14:10:25	41.333	-70.31	14	10	25	193	204	1	40 F	9	29	3	2	2008	FALSE
79637	2/5/2008	21:23:19	41.335	-70.306	21	23	19	4	24	0	2 F	16	42	5	2	2008	FALSE
79637	2/8/2008	1:35:18	41.335	-70.305	1	35	18	191	204	1	54 F	20	54	7	2	2008	TRUE
79637	2/10/2008	10:11:17	41.335	-70.308	10	11	17	4	26	0	2 F	5	30	10	2	2008	TRUE
79637	2/12/2008	16:02:36	41.33	-70.297	16	2	36	4	27	0	2 F	11	21	12	2	2008	FALSE
79637	2/14/2008	19:41:10	41.336	-70.286	19	41	10	192	208	2	0 F	15	0	14	2	2008	FALSE
79637	2/17/2008	2:03:12	41.336	-70.303	2	3	12	2	29	0	2 F	21	21	16	2	2008	TRUE
79637	2/19/2008	9:55:44	41.335	-70.31	9	55	44	190	204	2	12 F	5	14	19	2	2008	TRUE
79637	2/21/2008	15:32:20	41.09	-69.925	15	32	20	192	204	1	38 F	10	52	21	2	2008	FALSE
79637	2/23/2008	21:13:53	41.323	-70.313	21	13	53	3	32	0	2 F	16	32	23	2	2008	FALSE
79637	2/26/2008	2:16:56	41.334	-70.306	2	16	56	2	33	0	2 F	21	35	25	2	2008	TRUE
79637	2/28/2008	9:41:36	41.367	-70.268	9	41	36	190	204	3	54 F	5	0	28	2	2008	TRUE
79637	3/1/2008	15:24:43	41.349	-70.28	15	24	43	193	208	1	2 F	10	43	1	3	2008	FALSE
79637	3/3/2008	21:07:55	41.354	-70.253	21	7	55	192	208	2	21 F	16	26	3	3	2008	FALSE
79637	3/6/2008	6:29:39	41.35	-70.25	6	29	39	190	200	1	24 F	1	48	6	3	2008	TRUE
79637	3/8/2008	10:23:43	41.367	-70.259	10	23	43	1	38	0	2 F	5	42	8	3	2008	TRUE
79637	3/10/2008	19:58:41	41.326	-70.301	19	58	41	191	200	3	41 F	15	17	10	3	2008	FALSE
79637	3/12/2008	22:32:52	41.357	-70.34	22	32	52	192	208	3	42 F	17	51	12	3	2008	FALSE
79637	3/15/2008	6:35:36	41.408	-70.322	6	35	36	190	204	1	46 F	1	54	15	3	2008	TRUE
79637	3/17/2008	14:24:03	41.324	-70.311	14	24	3	4	42	0	2 F	9	42	17	3	2008	FALSE
79637	3/19/2008	19:40:59	41.357	-70.301	19	40	59	3	43	0	2 F	14	59	19	3	2008	FALSE
79637	3/22/2008	3:22:46	41.355	-70.173	3	22	46	191	200	2	10 F	22	42	21	3	2008	TRUE
79637	3/24/2008	9:44:07	41.347	-70.217	9	44	7	4	45	0	2 F	5	3	24	3	2008	TRUE
79637	3/26/2008	14:05:26	41.322	-70.309	14	5	26	191	204	2	11 F	9	24	26	3	2008	FALSE
79637	3/28/2008	19:37:00	41.325	-70.308	19	37	0	1	47	0	2 F	14	55	28	3	2008	FALSE
79637	3/31/2008	1:34:27	41.367	-70.336	1	34	27	1	48	0	2 F	20	53	30	3	2008	TRUE
79637	4/2/2008	10:32:41	41.325	-70.312	10	32	41	3	49	0	2 F	5	51	2	4	2008	TRUE
79637	4/4/2008	14:45:19	41.325	-70.31	14	45	19	1	50	0	2 F	10	4	4	4	2008	FALSE
79637	4/6/2008	21:11:19	41.325	-70.309	21	11	19	1	51	0	2 F	16	30	6	4	2008	FALSE
79637	4/9/2008	7:17:28	41.337	-70.194	7	17	28	190	200	2	57 F	2	36	9	4	2008	TRUE
79637	4/11/2008	14:35:36	41.324	-70.313	14	35	36	4	53	0	2 F	9	54	11	4	2008	FALSE
79637	4/13/2008	19:49:54	41.325	-70.302	19	49	54	191	204	2	7 F	15	8	13	4	2008	FALSE
79637	4/16/2008	0:02:32	41.357	-70.221	0	2	32	191	212	2	6 F	19	21	15	4	2008	TRUE
79637	4/18/2008	7:24:06	41.333	-70.328	7	24	6	190	208	1	14 F	2	42	18	4	2008	TRUE
79637	4/20/2008	14:26:57	41.326	-70.298	14	26	57	192	208	1	21 F	9	45	20	4	2008	FALSE
79637	4/22/2008	22:53:13	41.39	-70.277	22	53	13	192	204	2	37 F	18	12	22	4	2008	TRUE

79637	4/25/2008	3:37:31	45.336	-65.155	3	37	31	190	208	2	37 F	23	16	24	4	2008	TRUE
79637	4/27/2008	13:22:16	47.909	-65.37	13	22	16	192	200	1	0 F	9	0	27	4	2008	FALSE
79637	4/29/2008	15:55:45	47.759	-65.359	15	55	45	192	212	3	1 F	11	34	29	4	2008	FALSE
79637	5/2/2008	0:55:26	47.78	-65.321	0	55	26	190	204	3	21 F	20	34	1	5	2008	TRUE
79637	5/4/2008	6:15:42	47.867	-65.307	6	15	42	1	63	0	2 F	1	54	4	5	2008	TRUE
79637	5/6/2008	13:43:10	47.757	-65.353	13	43	10	2	64	0	2 F	9	21	6	5	2008	FALSE
79637	5/8/2008	21:32:25	47.758	-65.355	21	32	25	192	204	3	53 F	17	10	8	5	2008	FALSE
79637	5/16/2008	8:36:31	47.813	-65.3	8	36	31	1	2	0	2 F	4	15	16	5	2008	TRUE
79637	5/24/2008	1:58:09	49.27	-67.605	1	58	9	191	200	1	63 F	21	27	23	5	2008	TRUE
79637	5/31/2008	14:50:01	63.504	-81.322	14	50	1	2	4	0	2 F	9	24	31	5	2008	FALSE
79637	6/8/2008	1:44:22	63.583	-81.555	1	44	22	1	5	0	2 F	20	18	7	6	2008	TRUE
79637	6/15/2008	17:44:22	63.62	-81.544	17	44	22	4	6	0	2 F	12	18	15	6	2008	FALSE
79637	6/22/2008	23:42:13	63.623	-81.555	23	42	13	1	7	0	2 F	18	15	22	6	2008	TRUE
79637	6/30/2008	10:39:15	63.613	-81.557	10	39	15	2	8	0	2 F	5	13	30	6	2008	TRUE
79637	7/7/2008	21:42:31	63.578	-81.544	21	42	31	3	9	0	2 F	16	16	7	7	2008	FALSE
79637	7/15/2008	7:04:51	63.61	-81.549	7	4	51	193	208	1	41 F	1	38	15	7	2008	TRUE
79637	7/22/2008	20:06:35	63.576	-81.543	20	6	35	193	200	2	47 F	14	40	22	7	2008	FALSE
79637	7/30/2008	7:47:07	63.57	-81.643	7	47	7	3	12	0	2 F	2	20	30	7	2008	TRUE
79637	8/6/2008	16:34:40	63.567	-81.639	16	34	40	193	208	3	46 F	11	8	6	8	2008	FALSE
79637	8/14/2008	2:08:00	63.569	-81.651	2	8	0	193	208	1	48 F	20	41	13	8	2008	TRUE
79637	8/21/2008	12:56:47	63.566	-81.639	12	56	47	192	208	1	53 F	7	30	21	8	2008	FALSE
79637	8/29/2008	3:23:35	63.567	-81.634	3	23	35	3	16	0	3 F	21	57	28	8	2008	TRUE
79637	9/5/2008	18:17:55	63.564	-81.626	18	17	55	192	196	1	1 F	12	51	5	9	2008	FALSE
79637	9/13/2008	9:03:08	63.509	-81.5	9	3	8	190	196	1	1 F	3	37	13	9	2008	TRUE
79637	9/21/2008	0:41:44	63.527	-81.598	0	41	44	190	196	3	4 F	19	15	20	9	2008	TRUE
79637	9/28/2008	13:06:24	64.014	-80.673	13	6	24	190	208	1	13 F	7	43	28	9	2008	FALSE
79637	10/6/2008	3:51:34	56.633	-78.828	3	51	34	1	21	0	3 F	22	36	5	10	2008	TRUE
79637	10/13/2008	21:59:34	56.656	-78.97	21	59	34	191	196	3	48 F	16	43	13	10	2008	FALSE
79637	10/21/2008	10:37:05	48.209	-69.371	10	37	5	1	23	0	3 F	5	59	21	10	2008	TRUE
79637	10/29/2008	1:21:54	48.182	-69.531	1	21	54	190	208	2	60 F	20	43	28	10	2008	TRUE
79637	11/5/2008	17:22:34	41.501	-70.021	17	22	34	192	212	3	60 F	12	42	5	11	2008	FALSE
79637	11/13/2008	9:51:29	41.409	-70.188	9	51	29	1	26	0	2 F	5	10	13	11	2008	TRUE
79637	11/21/2008	2:26:53	41.411	-70.223	2	26	53	2	27	0	2 F	21	45	20	11	2008	TRUE
79637	11/28/2008	18:22:34	41.219	-70.213	18	22	34	2	28	0	2 F	13	41	28	11	2008	FALSE
79637	12/6/2008	10:40:26	41.394	-70.117	10	40	26	188	204	3	50 F	5	59	6	12	2008	TRUE
79637	12/14/2008	3:19:43	41.138	-70.051	3	19	43	3	30	0	3 F	22	39	13	12	2008	TRUE
79637	12/21/2008	20:37:51	41.357	-70.271	20	37	51	4	31	0	3 F	15	56	21	12	2008	FALSE
79637	12/29/2008	11:30:10	41.435	-70.077	11	30	10	188	204	1	15 F	6	49	29	12	2008	TRUE
79637	1/6/2009	2:58:51	41.007	-70.136	2	58	51	190	208	2	37 F	22	18	5	1	2009	TRUE
79637	1/13/2009	21:53:01	41.351	-70.234	21	53	1	3	34	0	3 F	17	12	13	1	2009	FALSE
79637	1/21/2009	14:08:36	41.016	-70.17	14	8	36	3	35	0	3 F	9	27	21	1	2009	FALSE
79637	1/29/2009	7:49:10	41.089	-70.124	7	49	10	4	1	0	4 F	3	8	29	1	2009	TRUE
79637	1/31/2009	11:40:27	41.006	-70.143	11	40	27	1	2	0	4 F	6	59	31	1	2009	TRUE
79637	2/2/2009	22:14:27	40.749	-70.003	22	14	27	3	3	0	4 F	17	34	2	2	2009	FALSE
79637	2/5/2009	3:01:30	40.701	-69.959	3	1	30	190	208	3	55 F	22	21	4	2	2009	TRUE
79637	2/7/2009	10:33:19	41.239	-70.277	10	33	19	189	208	2	62 F	5	52	7	2	2009	TRUE
79637	2/9/2009	19:27:22	41.121	-70.254	19	27	22	190	204	3	38 F	14	46	9	2	2009	FALSE
79637	2/12/2009	2:37:47	41.184	-70.323	2	37	47	189	204	2	0 F	21	56	11	2	2009	TRUE
79637	2/14/2009	11:06:13	41.115	-70.254	11	6	13	3	8	0	4 F	6	25	14	2	2009	TRUE

79637	2/16/2009	17:45:48	41.079	-70.152	17	45	48	2	9	0	4 F	13	5	16	2	2009	FALSE
79637	2/19/2009	0:56:45	41.417	-70.215	0	56	45	189	204	2	45 F	20	15	18	2	2009	TRUE
79637	2/21/2009	9:58:15	41.424	-70.201	9	58	15	189	196	1	48 F	5	17	21	2	2009	TRUE
79637	2/23/2009	18:13:41	41	-69.842	18	13	41	192	196	3	20 F	13	34	23	2	2009	FALSE
79637	2/26/2009	1:06:45	40.985	-70.332	1	6	45	189	196	2	38 F	20	25	25	2	2009	TRUE
79637	2/28/2009	7:35:38	41.198	-70.151	7	35	38	189	204	3	38 F	2	55	28	2	2009	TRUE
79637	3/2/2009	16:58:53	40.716	-69.992	16	58	53	193	192	2	5 F	12	18	2	3	2009	FALSE
79637	3/5/2009	0:31:23	40.706	-69.94	0	31	23	4	16	0	4 F	19	51	4	3	2009	TRUE
79637	3/7/2009	8:02:01	40.818	-70.16	8	2	1	4	17	0	4 F	3	21	7	3	2009	TRUE
79637	3/9/2009	12:17:45	40.808	-70.012	12	17	45	190	208	1	29 F	7	37	9	3	2009	FALSE
79637	3/11/2009	22:27:24	41.351	-70.178	22	27	24	4	19	0	4 F	17	46	11	3	2009	FALSE
79637	3/14/2009	2:16:01	40.972	-70.306	2	16	1	189	212	1	56 F	21	34	13	3	2009	TRUE
79637	3/16/2009	10:47:12	40.891	-70.23	10	47	12	1	21	0	4 F	6	6	16	3	2009	TRUE
79637	3/18/2009	19:13:41	40.999	-70.169	19	13	41	209	204	2	27 F	14	33	18	3	2009	FALSE
79637	3/21/2009	3:11:21	40.835	-70.135	3	11	21	190	200	2	46 F	22	30	20	3	2009	TRUE
79637	3/23/2009	11:13:13	40.913	-70.149	11	13	13	3	24	0	4 F	6	32	23	3	2009	TRUE
79637	3/25/2009	20:36:23	40.989	-70.132	20	36	23	189	172	2	33 F	15	55	25	3	2009	FALSE
79637	3/28/2009	6:01:37	40.846	-70.121	6	1	37	189	100	1	38 F	1	21	28	3	2009	TRUE
79637	3/30/2009	11:30:54	40.684	-70.003	11	30	54	1	27	0	4 F	6	50	30	3	2009	TRUE
79637	4/1/2009	22:24:41	40.915	-70.191	22	24	41	3	28	0	4 F	17	43	1	4	2009	FALSE
79637	4/4/2009	6:28:17	40.88	-70.156	6	28	17	2	29	0	4 F	1	47	4	4	2009	TRUE
79637	4/6/2009	13:43:13	40.851	-70.139	13	43	13	1	30	0	4 F	9	2	6	4	2009	FALSE
79637	4/8/2009	22:52:25	40.862	-70.062	22	52	25	191	144	3	49 F	18	12	8	4	2009	TRUE
79637	4/11/2009	8:45:01	40.893	-70.203	8	45	1	2	32	0	4 F	4	4	11	4	2009	TRUE
79637	4/13/2009	18:00:38	40.911	-70.231	18	0	38	192	124	1	5 F	13	19	13	4	2009	FALSE
79637	4/16/2009	2:35:47	41.024	-70.285	2	35	47	2	34	0	4 F	21	54	15	4	2009	TRUE
79637	4/18/2009	14:10:23	40.926	-70.196	14	10	23	191	92	2	35 F	9	29	18	4	2009	FALSE
79637	4/20/2009	21:32:20	40.998	-70.263	21	32	20	192	88	2	44 F	16	51	20	4	2009	FALSE
79637	4/23/2009	8:09:21	40.863	-70.133	8	9	21	190	60	3	48 F	3	28	23	4	2009	TRUE
79637	4/25/2009	15:06:16	40.978	-70.186	15	6	16	191	84	2	53 F	10	25	25	4	2009	FALSE
79638	12/13/2007	14:50:00	41.297	-70.102	14	50	0	0	0	0	0 F	10	9	13	12	2007	FALSE
79638	12/15/2007	0:46:30	41.336	-70.303	0	46	30	193	212	1	3 F	20	5	14	12	2007	TRUE
79638	12/17/2007	6:57:48	41.334	-70.306	6	57	48	191	208	1	3 F	2	16	17	12	2007	TRUE
79638	12/19/2007	11:15:25	41.329	-70.252	11	15	25	191	208	2	3 F	6	34	19	12	2007	TRUE
79638	12/21/2007	17:43:08	41.292	-70.487	17	43	8	192	208	1	29 F	13	1	21	12	2007	FALSE
79638	12/23/2007	21:01:28	41.325	-70.31	21	1	28	192	212	3	32 F	16	20	23	12	2007	FALSE
79638	12/26/2007	7:06:42	41.344	-70.194	7	6	42	191	204	1	55 F	2	25	26	12	2007	TRUE
79638	12/28/2007	9:21:58	41.341	-70.198	9	21	58	190	212	3	54 F	4	41	28	12	2007	TRUE
79638	12/30/2007	17:51:10	41.316	-70.393	17	51	10	192	204	2	14 F	13	9	30	12	2007	FALSE
79638	1/1/2008	22:28:36	41.35	-70.266	22	28	36	192	141	2	19 F	17	47	1	1	2008	FALSE
79638	1/4/2008	3:27:49	41.36	-70.273	3	27	49	193	208	1	21 F	22	46	3	1	2008	TRUE
79638	1/6/2008	10:48:41	41.37	-70.218	10	48	41	190	204	3	41 F	6	7	6	1	2008	TRUE
79638	1/8/2008	14:09:02	41.172	-70.235	14	9	2	1	12	0	2 F	9	28	8	1	2008	FALSE
79638	1/10/2008	21:27:41	41.287	-70.1	21	27	41	193	208	1	33 F	16	47	10	1	2008	FALSE
79638	1/17/2008	15:40:33	41.038	-70.12	15	40	33	192	212	2	22 F	11	0	17	1	2008	FALSE
79638	1/19/2008	21:23:26	41.383	-70.184	21	23	26	1	17	0	2 F	16	42	19	1	2008	FALSE
79638	1/24/2008	14:18:55	41.156	-70.165	14	18	55	189	204	2	46 F	9	38	24	1	2008	FALSE
79638	1/26/2008	18:10:24	41.09	-70.311	18	10	24	191	208	3	58 F	13	29	26	1	2008	FALSE
79638	1/29/2008	1:56:32	40.978	-70.225	1	56	32	2	21	0	2 F	21	15	28	1	2008	TRUE

79638	2/2/2008	14:30:08	41.331	-70.324	14	30	8	2	23	0	2 F	9	48	2	2	2008	FALSE
79638	2/4/2008	22:15:57	41.015	-70.171	22	15	57	191	204	3	62 F	17	35	4	2	2008	FALSE
79638	2/7/2008	6:17:28	41.15	-70.083	6	17	28	189	204	2	62 F	1	37	7	2	2008	TRUE
79638	2/16/2008	9:29:07	40.813	-69.938	9	29	7	189	200	2	8 F	4	49	16	2	2008	TRUE
79638	2/18/2008	13:58:42	41.065	-70.014	13	58	42	2	30	0	2 F	9	18	18	2	2008	FALSE
79638	2/20/2008	22:34:32	41.04	-70.076	22	34	32	4	31	0	2 F	17	54	20	2	2008	FALSE
79638	2/23/2008	2:32:14	40.936	-70.036	2	32	14	1	32	0	2 F	21	52	22	2	2008	TRUE
79638	2/27/2008	15:54:39	40.946	-70.085	15	54	39	188	208	1	52 F	11	14	27	2	2008	FALSE
79638	3/1/2008	1:28:18	41.073	-70.303	1	28	18	190	200	2	53 F	20	47	29	2	2008	TRUE
79638	3/3/2008	7:00:51	40.919	-69.919	7	0	51	189	204	3	58 F	2	21	3	3	2008	TRUE
79638	3/10/2008	3:00:31	41.004	-69.949	3	0	31	189	204	3	18 F	22	20	9	3	2008	TRUE
79638	3/12/2008	11:14:47	40.876	-70.021	11	14	47	190	204	2	32 F	6	34	12	3	2008	TRUE
79638	3/14/2008	15:22:11	40.954	-70.21	15	22	11	191	212	3	37 F	10	41	14	3	2008	FALSE
79638	3/19/2008	7:33:53	41.017	-70.273	7	33	53	188	204	1	35 F	2	52	19	3	2008	TRUE
79638	3/23/2008	20:35:52	41.332	-70.286	20	35	52	4	45	0	2 F	15	54	23	3	2008	FALSE
79638	3/26/2008	0:37:01	41.175	-70.375	0	37	1	190	208	1	27 F	19	55	25	3	2008	TRUE
79638	3/28/2008	9:51:10	41.072	-70.277	9	51	10	3	47	0	2 F	5	10	28	3	2008	TRUE
79638	3/30/2008	17:09:05	40.957	-70.31	17	9	5	191	200	3	17 F	12	27	30	3	2008	FALSE
79638	4/4/2008	6:26:37	40.808	-70.012	6	26	37	3	50	0	2 F	1	46	4	4	2008	TRUE
79638	4/6/2008	14:05:32	40.759	-70.106	14	5	32	193	215	2	33 F	9	25	6	4	2008	FALSE
79638	4/8/2008	21:48:19	40.778	-70.112	21	48	19	191	200	3	21 F	17	7	8	4	2008	FALSE
79638	4/11/2008	1:44:32	40.708	-70.2	1	44	32	191	208	3	20 F	21	3	10	4	2008	TRUE
79638	4/13/2008	10:01:44	40.757	-70.133	10	1	44	3	54	0	2 F	5	21	13	4	2008	TRUE
79638	4/15/2008	14:44:30	40.823	-70.043	14	44	30	191	212	1	27 F	10	4	15	4	2008	FALSE
79638	4/22/2008	13:37:06	40.943	-70.111	13	37	6	189	204	3	18 F	8	56	22	4	2008	FALSE
79638	4/27/2008	1:12:18	48.116	-69.461	1	12	18	188	208	2	42 F	20	34	26	4	2008	TRUE
79638	4/29/2008	7:07:56	48.132	-69.441	7	7	56	190	212	1	45 F	2	30	29	4	2008	TRUE
79638	5/6/2008	2:43:58	48.544	-69.094	2	43	58	1	64	0	2 F	22	7	5	5	2008	TRUE
79638	5/8/2008	11:48:17	48.546	-69.102	11	48	17	190	204	1	49 F	7	11	8	5	2008	FALSE
79638	5/23/2008	16:11:19	56.253	-77.523	16	11	19	2	3	0	3 F	11	1	23	5	2008	FALSE
79638	6/7/2008	23:03:33	69.182	-81.144	23	3	33	3	5	0	2 F	17	38	7	6	2008	FALSE
79638	6/15/2008	12:42:13	69.661	-79.327	12	42	13	191	208	2	57 F	7	24	15	6	2008	FALSE
79638	6/23/2008	0:56:38	70.136	-81.164	0	56	38	1	7	0	2 F	19	31	22	6	2008	TRUE
79638	6/30/2008	13:56:05	70.124	-81.247	13	56	5	192	208	3	7 F	8	31	30	6	2008	FALSE
79638	7/8/2008	3:29:17	70.119	-81.245	3	29	17	192	196	1	14 F	22	4	7	7	2008	TRUE
79638	7/15/2008	11:49:32	70.114	-81.2	11	49	32	191	212	3	14 F	6	24	15	7	2008	TRUE
79638	7/23/2008	1:02:02	70.121	-81.283	1	2	2	3	11	0	3 F	19	36	22	7	2008	TRUE
79638	7/30/2008	11:08:21	70.005	-80.856	11	8	21	1	12	0	2 F	5	44	30	7	2008	TRUE
79638	8/6/2008	22:28:30	70.064	-80.925	22	28	30	192	212	3	20 F	17	4	6	8	2008	FALSE
79638	8/22/2008	1:03:10	70.099	-80.907	1	3	10	193	208	2	30 F	19	39	21	8	2008	TRUE
79638	8/29/2008	18:42:19	70.084	-80.961	18	42	19	4	16	0	3 F	13	18	29	8	2008	FALSE
79638	9/6/2008	9:37:11	70.022	-81.045	9	37	11	189	192	2	22 F	4	13	6	9	2008	TRUE
79638	9/13/2008	23:49:22	70.121	-80.45	23	49	22	191	200	1	13 F	18	27	13	9	2008	TRUE
79638	9/21/2008	13:36:10	67.857	-78.183	13	36	10	3	19	0	2 F	8	23	21	9	2008	FALSE
79639	12/18/2008	20:00:00	41.284	-70.17	20	0	0	0	0	0	0 M	15	19	18	12	2008	FALSE
79639	12/20/2008	6:22:11	41.289	-70.16	6	22	11	4	1	0	2 M	1	41	20	12	2008	TRUE
79639	12/22/2008	10:58:10	41.249	-69.962	10	58	10	190	208	1	6 M	6	18	22	12	2008	TRUE
79639	12/24/2008	17:10:25	41.243	-70.164	17	10	25	192	204	1	43 M	12	29	24	12	2008	FALSE
79639	12/26/2008	22:22:44	41.235	-70.023	22	22	44	193	204	1	56 M	17	42	26	12	2008	FALSE

79639	12/29/2008	1:03:55	41.262	-70.146	1	3	55	192	208	1	59 M	20	23	28	12	2008	TRUE
79639	12/31/2008	9:01:08	41.281	-70.149	9	1	8	192	204	3	1 M	4	20	31	12	2008	TRUE
79639	1/2/2009	11:34:56	41.308	-70.149	11	34	56	191	208	3	1 M	6	54	2	1	2009	TRUE
79639	1/4/2009	16:56:33	41.292	-70.246	16	56	33	1	8	0	2 M	12	15	4	1	2009	FALSE
79639	1/7/2009	0:02:29	41.322	-70.144	0	2	29	193	204	3	41 M	19	21	6	1	2009	TRUE
79639	1/9/2009	6:18:22	41.321	-70.199	6	18	22	4	10	0	2 M	1	37	9	1	2009	TRUE
79639	1/11/2009	9:38:14	41.305	-70.179	9	38	14	190	208	2	49 M	4	57	11	1	2009	TRUE
79639	1/13/2009	17:00:40	41.318	-70.45	17	0	40	3	12	0	2 M	12	18	13	1	2009	FALSE
79639	1/15/2009	19:25:38	41.29	-70.202	19	25	38	192	212	2	1 M	14	44	15	1	2009	FALSE
79639	1/18/2009	1:13:17	41.308	-70.186	1	13	17	191	212	1	7 M	20	32	17	1	2009	TRUE
79639	1/20/2009	9:23:42	41.331	-70.161	9	23	42	189	204	3	19 M	4	43	20	1	2009	TRUE
79639	1/22/2009	14:02:47	41.29	-70.211	14	2	47	194	204	1	20 M	9	21	22	1	2009	FALSE
79639	1/24/2009	20:38:34	41.29	-70.208	20	38	34	4	17	0	2 M	15	57	24	1	2009	FALSE
79639	1/27/2009	1:30:44	41.342	-70.152	1	30	44	3	18	0	2 M	20	50	26	1	2009	TRUE
79639	1/29/2009	6:06:25	41.304	-70.121	6	6	25	191	204	2	38 M	1	25	29	1	2009	TRUE
79639	1/31/2009	11:11:52	41.302	-70.152	11	11	52	190	208	2	38 M	6	31	31	1	2009	TRUE
79639	2/2/2009	16:53:22	41.288	-70.21	16	53	22	192	204	2	45 M	12	12	2	2	2009	FALSE
79639	2/4/2009	21:26:55	41.296	-70.208	21	26	55	2	22	0	2 M	16	46	4	2	2009	FALSE
79639	2/7/2009	2:14:32	41.326	-70.148	2	14	32	190	212	1	58 M	21	33	6	2	2009	TRUE
79639	2/9/2009	11:06:07	41.304	-70.14	11	6	7	4	24	0	2 M	6	25	9	2	2009	TRUE
79639	2/11/2009	16:17:09	41.285	-70.204	16	17	9	190	200	2	1 M	11	36	11	2	2009	FALSE
79639	2/13/2009	21:45:17	41.289	-70.206	21	45	17	192	200	3	13 M	17	4	13	2	2009	FALSE
79639	2/16/2009	2:53:51	41.339	-70.228	2	53	51	190	200	1	15 M	22	12	15	2	2009	TRUE
79639	2/18/2009	7:38:43	41.347	-70.181	7	38	43	2	28	0	2 M	2	57	18	2	2009	TRUE
79639	2/20/2009	13:47:57	41.287	-70.212	13	47	57	3	29	0	2 M	9	7	20	2	2009	FALSE
79639	2/22/2009	20:00:21	41.333	-70.397	20	0	21	190	200	3	24 M	15	18	22	2	2009	FALSE
79639	2/25/2009	0:17:55	41.325	-70.171	0	17	55	191	204	3	26 M	19	37	24	2	2009	TRUE
79639	2/27/2009	7:43:35	41.451	-70.188	7	43	35	4	32	0	2 M	3	2	27	2	2009	TRUE
79639	3/1/2009	10:30:56	41.287	-70.225	10	30	56	2	33	0	2 M	5	50	1	3	2009	TRUE
79639	3/3/2009	18:32:49	41.29	-70.207	18	32	49	4	34	0	2 M	13	51	3	3	2009	FALSE
79639	3/5/2009	21:12:33	41.291	-70.211	21	12	33	191	208	3	48 M	16	31	5	3	2009	FALSE
79639	3/8/2009	2:40:36	41.323	-70.216	2	40	36	190	212	1	53 M	21	59	7	3	2009	TRUE
79639	3/10/2009	10:25:00	41.306	-70.151	10	25	0	190	204	3	58 M	5	44	10	3	2009	TRUE
79639	3/12/2009	16:53:29	41.29	-70.212	16	53	29	4	38	0	2 M	12	12	12	3	2009	FALSE
79639	3/14/2009	22:45:46	41.336	-70.213	22	45	46	191	200	1	0 M	18	4	14	3	2009	TRUE
79639	3/17/2009	1:14:42	41.34	-70.236	1	14	52	191	208	1	0 M	20	33	16	3	2009	TRUE
79639	3/19/2009	9:35:39	41.395	-70.131	9	35	39	189	200	2	0 M	4	55	19	3	2009	TRUE
79639	3/21/2009	15:29:15	40.75	-70.171	15	29	15	4	42	0	2 M	10	48	21	3	2009	FALSE
79639	3/23/2009	20:59:49	40.993	-70.141	20	59	49	3	43	0	2 M	16	19	23	3	2009	FALSE
79639	3/26/2009	1:27:44	41.331	-70.147	1	27	44	2	44	0	2 M	20	47	25	3	2009	TRUE
79639	3/28/2009	7:42:52	41.351	-70.191	7	42	52	189	204	3	37 M	3	2	28	3	2009	TRUE
79639	3/30/2009	11:31:12	41.294	-70.212	11	31	12	1	46	0	2 M	6	50	30	3	2009	TRUE
79639	4/1/2009	20:52:40	41.032	-70.079	20	52	40	191	200	2	10 M	16	12	1	4	2009	FALSE
79639	4/4/2009	0:34:27	41.34	-70.224	0	34	27	3	48	0	2 M	19	53	3	4	2009	TRUE
79639	4/6/2009	7:45:47	41.344	-70.207	7	46	47	189	200	3	13 M	3	5	6	4	2009	TRUE
79639	4/8/2009	9:46:49	41.346	-70.132	9	46	49	188	212	1	12 M	5	6	8	4	2009	TRUE
79639	4/10/2009	15:30:31	41.283	-70.22	15	30	31	1	51	0	2 M	10	49	10	4	2009	FALSE
79639	4/12/2009	21:22:41	41.34	-70.203	21	22	41	191	208	2	38 M	16	41	12	4	2009	FALSE
79639	4/15/2009	2:59:57	46.567	-64.512	2	59	57	190	208	2	42 M	22	41	14	4	2009	TRUE

79639	4/17/2009	11:17:57	47.262	-64.498	11	17	57	4	54	0	2 M	6	59	17	4	2009	TRUE
79639	4/19/2009	16:58:02	47.371	-64.242	16	58	2	4	55	0	2 M	12	41	19	4	2009	FALSE
79639	4/21/2009	20:18:58	47.477	-64.178	20	18	58	191	208	1	10 M	16	2	21	4	2009	FALSE
79639	4/24/2009	2:50:34	47.49	-64.359	2	50	34	2	57	0	2 M	22	33	23	4	2009	TRUE
79639	4/26/2009	7:36:02	49.513	-66.55	7	36	2	1	58	0	2 M	3	9	26	4	2009	TRUE
79639	4/28/2009	15:39:27	48.129	-69.631	15	39	27	3	59	0	2 M	11	0	28	4	2009	FALSE
79639	4/30/2009	20:16:34	48.116	-69.581	20	16	34	191	204	2	6 M	15	38	30	4	2009	FALSE
79639	5/3/2009	1:00:37	48.208	-69.352	1	0	37	1	61	0	2 M	20	23	2	5	2009	TRUE
79639	5/5/2009	7:41:32	48.2	-69.224	7	41	32	189	208	3	6 M	3	4	5	5	2009	TRUE
79639	5/7/2009	11:39:51	48.111	-69.642	11	39	51	191	212	2	14 M	7	1	7	5	2009	FALSE
79639	5/9/2009	18:58:26	48.147	-69.416	18	58	26	192	204	3	45 M	14	20	9	5	2009	FALSE
79639	5/12/2009	1:55:49	48.176	-69.453	1	55	49	190	200	1	52 M	21	18	11	5	2009	TRUE
79639	7/25/2009	10:02:58	69.168	-98.461	10	2	58	3	11	0	3 M	3	29	25	7	2009	TRUE
79639	8/1/2009	19:30:13	69.17	-98.452	19	30	13	192	204	2	55 M	12	56	1	8	2009	FALSE
79639	8/9/2009	9:12:22	69.17	-98.465	9	12	22	4	13	0	2 M	2	38	9	8	2009	TRUE
79639	8/16/2009	17:49:54	69.179	-98.461	17	49	54	190	204	2	54 M	11	16	16	8	2009	FALSE
79639	8/24/2009	8:13:51	69.175	-98.483	8	13	51	3	15	0	2 M	1	39	24	8	2009	TRUE
79639	8/31/2009	19:36:39	69.186	-98.514	19	36	39	192	204	1	58 M	13	2	31	8	2009	FALSE
79639	9/8/2009	10:35:34	69.326	-98.684	10	35	34	4	17	0	2 M	4	0	8	9	2009	TRUE
79639	9/15/2009	22:17:33	69.347	-98.662	22	17	33	190	196	2	4 M	15	42	15	9	2009	FALSE
79639	9/23/2009	8:01:11	69.204	-98.8	8	1	11	190	204	1	5 M	1	25	23	9	2009	TRUE
79639	9/30/2009	20:23:54	63.536	-81.507	20	23	54	190	204	1	9 M	14	57	30	9	2009	FALSE
79639	10/8/2009	10:06:21	63.042	-82.417	10	6	21	3	21	0	2 M	4	36	8	10	2009	TRUE
79639	10/15/2009	20:25:43	55.91	-76.923	20	25	43	191	204	2	20 M	15	18	15	10	2009	FALSE
79639	10/23/2009	9:25:02	56.073	-76.851	9	25	2	190	200	2	37 M	4	17	23	10	2009	TRUE
79639	10/30/2009	21:07:53	55.881	-76.974	21	7	53	191	204	2	45 M	15	59	30	10	2009	FALSE
79639	11/7/2009	9:49:21	55.928	-76.948	9	49	21	189	200	1	50 M	4	41	7	11	2009	TRUE
79639	11/14/2009	23:12:49	55.132	-78.407	23	12	49	191	192	3	17 M	17	59	14	11	2009	FALSE
79639	11/22/2009	7:30:35	54.867	-79.872	7	30	35	1	27	0	2 M	2	11	22	11	2009	TRUE
79639	11/29/2009	21:50:59	41.523	-70.08	21	50	59	3	28	0	2 M	17	10	29	11	2009	FALSE
79639	12/7/2009	11:11:28	41.187	-70.134	11	11	28	189	196	1	18 M	6	30	7	12	2009	TRUE
79639	12/15/2009	0:24:51	41.37	-70.183	0	24	51	190	168	1	29 M	19	44	14	12	2009	TRUE
79640	12/12/2008	14:00:00	41.297	-70.102	14	0	0	0	0	0	0 M	9	19	12	12	2008	FALSE
79640	12/13/2008	23:58:32	41.302	-70.131	23	58	32	193	208	1	5 M	19	18	13	12	2008	TRUE
79640	12/16/2008	7:07:40	41.284	-70.168	7	7	40	190	200	3	10 M	2	26	16	12	2008	TRUE
79640	12/18/2008	14:12:24	41.283	-70.122	14	12	24	4	3	0	2 M	9	31	18	12	2008	FALSE
79640	12/20/2008	16:11:34	41.293	-70.214	16	11	34	193	208	1	13 M	11	30	20	12	2008	FALSE
79640	12/23/2008	0:12:46	41.343	-70.131	0	12	46	193	196	1	19 M	19	32	22	12	2008	TRUE
79640	12/25/2008	2:40:01	41.293	-70.157	2	40	1	1	6	0	2 M	21	59	24	12	2008	TRUE
79640	12/27/2008	8:58:32	41.304	-70.216	8	58	32	1	7	0	2 M	4	17	27	12	2008	TRUE
79640	12/29/2008	17:56:33	41.279	-70.264	17	56	33	4	8	0	2 M	13	15	29	12	2008	FALSE
79640	12/31/2008	20:23:14	41.304	-70.231	20	23	14	1	9	0	2 M	15	42	31	12	2008	FALSE
79640	1/3/2009	2:31:16	41.312	-70.22	2	31	16	191	200	1	33 M	21	50	2	1	2009	TRUE
79640	1/5/2009	9:36:11	41.375	-70.172	9	36	11	3	11	0	2 M	4	55	5	1	2009	TRUE
79640	1/7/2009	16:23:31	41.202	-70.366	16	23	31	4	12	0	2 M	11	42	7	1	2009	FALSE
79640	1/9/2009	20:06:06	41.272	-70.2	20	6	6	2	13	0	2 M	15	25	9	1	2009	FALSE
79640	1/12/2009	0:39:43	41.317	-70.174	0	39	43	1	14	0	2 M	19	59	11	1	2009	TRUE
79640	1/14/2009	9:29:45	41.329	-70.242	9	29	45	192	192	1	4 M	4	48	14	1	2009	TRUE
79640	1/15/2009	22:25:22	41.274	-70.205	22	25	22	68	192	3	8 M	17	44	15	1	2009	FALSE

79641	12/13/2007	14:50:00	41.297	-70.102	14	50	0	0	0	0	0 M	10	9	13	12	2007	FALSE
79641	12/19/2007	16:22:04	41.238	-70.098	16	22	4	192	204	2	49 M	11	41	19	12	2007	FALSE
79641	12/21/2007	21:49:36	41.23	-70.004	21	49	36	4	4	0	2 M	17	9	21	12	2007	FALSE
79641	12/24/2007	1:02:01	41.246	-70.12	1	2	1	3	5	0	2 M	20	21	23	12	2007	TRUE
79641	12/26/2007	7:04:44	41.216	-70.044	7	4	44	190	204	1	17 M	2	24	26	12	2007	TRUE
79641	12/28/2007	9:15:18	41.24	-70.067	9	15	18	190	212	3	17 M	4	35	28	12	2007	TRUE
79641	12/30/2007	16:12:34	41.181	-70.291	16	12	34	192	208	3	31 M	11	31	30	12	2007	FALSE
79641	1/1/2008	22:28:32	41.275	-70.202	22	28	32	192	204	2	60 M	17	47	1	1	2008	FALSE
79641	1/4/2008	3:28:24	41.279	-70.216	3	28	24	192	200	2	1 M	22	47	3	1	2008	TRUE
79641	1/6/2008	9:06:25	41.36	-70.077	9	6	25	191	204	1	3 M	4	26	6	1	2008	TRUE
79641	1/8/2008	13:08:39	41.289	-70.227	13	8	39	192	204	2	8 M	8	27	8	1	2008	FALSE
79641	1/10/2008	17:37:27	41.29	-70.224	17	37	27	193	204	3	10 M	12	56	10	1	2008	FALSE
79641	1/12/2008	21:24:55	41.473	-70.053	21	24	55	1	14	0	2 M	16	44	12	1	2008	FALSE
79641	1/15/2008	1:47:02	41.027	-70.224	1	47	2	191	212	1	30 M	21	6	14	1	2008	TRUE
79641	1/19/2008	16:02:07	40.99	-70.109	16	2	7	4	17	0	2 M	11	21	19	1	2008	FALSE
79641	1/21/2008	21:08:30	40.964	-70.123	21	8	30	192	204	3	51 M	16	28	21	1	2008	FALSE
79641	1/24/2008	2:26:26	41.422	-70.099	2	26	26	191	204	2	54 M	21	46	23	1	2008	TRUE
79641	1/26/2008	6:44:16	41.359	-69.941	6	44	16	3	20	0	2 M	2	4	26	1	2008	TRUE
79641	1/28/2008	10:23:20	41.228	-70.051	10	23	20	190	208	2	8 M	5	43	28	1	2008	TRUE
79641	2/1/2008	21:47:39	41.319	-70.084	21	47	39	192	204	3	27 M	17	7	1	2	2008	FALSE
79641	2/4/2008	3:10:48	41.341	-70.079	3	10	48	3	24	0	2 M	22	30	3	2	2008	TRUE
79641	2/6/2008	9:47:26	41.345	-70.041	9	47	26	190	200	3	40 M	5	7	6	2	2008	TRUE
79641	2/8/2008	14:08:39	41.289	-70.204	14	8	39	4	26	0	2 M	9	27	8	2	2008	FALSE
79641	2/10/2008	17:14:05	41.293	-70.205	17	14	5	192	208	3	57 M	12	33	10	2	2008	FALSE
79641	2/12/2008	22:25:35	41.375	-70.09	22	25	35	192	208	3	5 M	17	45	12	2	2008	FALSE
79641	2/15/2008	2:16:37	41.315	-70.112	2	16	37	192	208	3	7 M	21	36	14	2	2008	TRUE
79641	2/17/2008	9:18:01	41.351	-70.122	9	18	1	190	204	3	6 M	4	37	17	2	2008	TRUE
79641	2/19/2008	14:38:28	40.968	-70.004	14	38	28	3	31	0	2 M	9	58	19	2	2008	FALSE
79641	2/21/2008	20:30:22	41.301	-70.111	20	30	22	193	200	2	28 M	15	49	21	2	2008	FALSE
79641	2/24/2008	1:19:09	41.358	-70.09	1	19	9	4	33	0	2 M	20	38	23	2	2008	TRUE
79641	2/26/2008	6:22:06	41.356	-70.063	6	22	6	190	204	1	32 M	1	41	26	2	2008	TRUE
79641	2/28/2008	9:42:32	41.313	-70.092	9	42	32	190	208	2	32 M	5	2	28	2	2008	TRUE
79641	3/1/2008	16:30:10	41.305	-70.095	16	30	10	193	204	3	38 M	11	49	1	3	2008	FALSE
79641	3/3/2008	22:46:55	40.988	-69.863	22	46	55	190	204	3	42 M	18	7	3	3	2008	TRUE
79641	3/6/2008	2:54:07	41.419	-70.03	2	54	7	191	204	2	42 M	22	13	5	3	2008	TRUE
79641	3/8/2008	9:27:13	41.349	-70.111	9	27	13	190	200	1	45 M	4	46	8	3	2008	TRUE
79641	3/10/2008	13:35:58	40.969	-69.853	13	35	58	191	204	2	49 M	8	56	10	3	2008	FALSE
79641	3/12/2008	18:35:37	40.733	-69.818	18	35	37	2	41	0	2 M	13	56	12	3	2008	FALSE
79641	3/15/2008	2:44:22	40.926	-69.969	2	44	22	190	200	3	5 M	22	4	14	3	2008	TRUE
79641	3/17/2008	7:55:59	41.24	-70.126	7	55	59	4	43	0	2 M	3	15	17	3	2008	TRUE
79641	3/19/2008	11:34:00	41.292	-69.95	11	34	0	2	44	0	2 M	6	54	19	3	2008	TRUE
79641	3/21/2008	17:00:19	41.289	-69.942	17	0	19	193	208	2	22 M	12	20	21	3	2008	FALSE
79641	3/24/2008	0:56:04	41.325	-70.078	0	56	4	191	200	2	27 M	20	15	23	3	2008	TRUE
79641	3/26/2008	6:21:47	41.372	-70.099	6	21	47	190	200	3	26 M	1	41	26	3	2008	TRUE
79641	3/28/2008	9:49:23	41.35	-70.111	9	49	23	2	48	0	2 M	5	8	28	3	2008	TRUE
79641	3/30/2008	14:13:38	41.309	-70.092	14	13	38	191	212	1	27 M	9	33	30	3	2008	FALSE
79641	4/1/2008	22:11:30	41.369	-70.075	22	11	30	191	204	1	28 M	17	31	1	4	2008	FALSE
79641	4/4/2008	1:43:14	40.804	-70.025	1	43	14	191	212	2	29 M	21	3	3	4	2008	TRUE
79641	4/6/2008	9:33:18	41.204	-70.192	9	33	18	2	52	0	2 M	4	52	6	4	2008	TRUE

79641	4/8/2008	14:02:08	41.308	-70.087	14	2	8	193	208	2	45 M	9	21	8	4	2008	FALSE
79641	4/10/2008	22:41:16	46.951	-64.748	22	41	16	4	54	0	2 M	18	22	10	4	2008	TRUE
79641	4/13/2008	3:15:57	47.321	-64.698	3	15	57	190	204	3	52 M	22	57	12	4	2008	TRUE
79641	4/15/2008	7:53:07	47.488	-64.635	7	53	7	2	56	0	2 M	3	34	15	4	2008	TRUE
79641	4/17/2008	15:14:36	47.335	-64.205	15	14	36	3	57	0	2 M	10	57	17	4	2008	FALSE
79641	4/19/2008	22:26:05	47.316	-64.236	22	26	5	191	200	3	3 M	18	9	19	4	2008	TRUE
79641	4/22/2008	1:20:10	47.468	-64.292	1	20	10	190	212	2	3 M	21	2	21	4	2008	TRUE
79641	4/24/2008	7:57:42	48.105	-65.856	7	57	42	189	208	2	2 M	3	34	24	4	2008	TRUE
79641	4/26/2008	13:51:42	47.827	-65.534	13	51	42	191	208	2	7 M	9	29	26	4	2008	FALSE
79641	4/28/2008	21:57:32	49.01	-68.39	21	57	32	190	204	1	13 M	17	23	28	4	2008	FALSE
79641	5/1/2008	2:58:43	49.032	-68.207	2	58	43	191	208	3	13 M	22	25	30	4	2008	TRUE
79641	5/3/2008	8:07:06	48.997	-68.433	8	7	6	190	212	1	13 M	3	33	3	5	2008	TRUE
79641	5/5/2008	15:57:15	49.058	-68.27	15	57	15	191	208	1	18 M	11	24	5	5	2008	FALSE
79641	5/13/2008	3:21:10	49.032	-68.341	3	21	10	189	212	3	20 M	22	47	12	5	2008	TRUE
79641	5/20/2008	19:22:49	56.927	-76.762	19	22	49	191	200	1	21 M	14	15	20	5	2008	FALSE
79641	5/28/2008	2:35:42	57.209	-76.735	2	35	42	188	212	3	20 M	21	28	27	5	2008	TRUE
79641	6/4/2008	15:49:28	62.716	-87.069	15	49	28	157	200	2	41 M	10	1	4	6	2008	FALSE
79641	6/11/2008	20:04:43	62.683	-87.05	20	4	43	1	6	0	2 M	14	16	11	6	2008	FALSE
79641	6/19/2008	6:32:51	67.95	-94.838	6	32	51	188	208	2	43 M	0	13	19	6	2008	TRUE
79641	7/3/2008	23:42:06	68.861	-95.662	23	42	6	187	208	2	44 M	17	19	3	7	2008	FALSE
79644	12/13/2008	14:00:00	41.297	-70.102	14	0	0	0	0	0	0 M	9	19	13	12	2008	FALSE
79644	12/14/2008	7:25:36	41.258	-70.155	7	25	36	191	212	1	6 M	2	44	14	12	2008	TRUE
79644	12/16/2008	13:21:45	41.241	-70.16	13	21	45	4	2	0	2 M	8	41	16	12	2008	FALSE
79644	12/18/2008	15:50:11	41.266	-70.114	15	50	11	1	3	0	2 M	11	9	18	12	2008	FALSE
79644	12/20/2008	21:24:14	41.267	-70.16	21	24	14	1	4	0	2 M	16	43	20	12	2008	FALSE
79644	12/25/2008	11:26:10	41.261	-70.189	11	26	10	4	6	0	2 M	6	45	25	12	2008	TRUE
79644	12/27/2008	16:39:37	41.009	-70.127	16	39	37	193	208	3	56 M	11	59	27	12	2008	FALSE
79644	12/29/2008	23:27:23	41.215	-70.151	23	27	23	192	208	1	13 M	18	46	29	12	2008	TRUE
79644	1/1/2009	1:34:21	41.33	-70.127	1	34	21	192	220	1	13 M	20	53	31	12	2008	TRUE
79644	1/3/2009	10:00:57	41.261	-70.167	10	0	57	3	10	0	2 M	5	20	3	1	2009	TRUE
79644	1/5/2009	15:36:27	41.122	-70.113	15	36	27	3	11	0	2 M	10	55	5	1	2009	FALSE
79644	1/7/2009	22:21:00	41.264	-70.168	22	21	0	192	204	1	2 M	17	40	7	1	2009	FALSE
79644	1/10/2009	1:27:55	41.251	-70.187	1	27	55	2	13	0	2 M	20	47	9	1	2009	TRUE
79644	1/12/2009	9:52:34	41.261	-70.17	9	52	34	4	14	0	2 M	5	11	12	1	2009	TRUE
79644	1/14/2009	15:27:39	41.269	-70.185	15	27	39	4	15	0	2 M	10	46	14	1	2009	FALSE
79644	1/16/2009	20:42:38	41.28	-70.213	20	42	38	193	204	1	5 M	16	1	16	1	2009	FALSE
79644	1/19/2009	2:33:48	41.317	-70.231	2	33	48	4	17	0	2 M	21	52	18	1	2009	TRUE
79644	1/21/2009	8:59:21	41.309	-70.121	8	59	21	190	200	1	12 M	4	18	21	1	2009	TRUE
79644	1/23/2009	11:05:27	41.333	-70.153	11	5	27	191	212	3	13 M	6	24	23	1	2009	TRUE
79644	1/25/2009	20:29:01	41.285	-70.172	20	29	1	193	200	3	30 M	15	48	25	1	2009	FALSE
79644	1/28/2009	1:08:10	41.328	-70.186	1	8	10	3	21	0	2 M	20	27	27	1	2009	TRUE
79644	1/30/2009	7:38:18	41.348	-70.12	7	38	18	189	200	2	42 M	2	57	30	1	2009	TRUE
79644	2/1/2009	10:58:54	41.328	-70.128	10	58	54	1	23	0	2 M	6	18	1	2	2009	TRUE
79644	2/3/2009	16:19:40	41.249	-70.185	16	19	40	1	24	0	2 M	11	38	3	2	2009	FALSE
79644	2/5/2009	22:43:07	41.347	-70.26	22	43	7	2	25	0	2 M	18	2	5	2	2009	TRUE
79644	2/8/2009	3:32:41	41.359	-70.169	3	32	41	190	212	1	50 M	22	52	7	2	2009	TRUE
79644	2/10/2009	9:21:12	41.331	-70.199	9	21	12	1	27	0	2 M	4	40	10	2	2009	TRUE
79644	2/12/2009	15:54:09	41.279	-70.189	15	54	9	191	208	1	54 M	11	13	12	2	2009	FALSE
79644	2/14/2009	23:15:04	41.314	-70.198	23	15	4	191	204	1	5 M	18	34	14	2	2009	TRUE

79644	2/17/2009	3:23:52	41.332	-70.196	3	23	52	190	208	1	4 M	22	43	16	2	2009	TRUE
79644	2/19/2009	10:46:10	41.391	-70.163	10	46	10	189	204	1	5 M	6	5	19	2	2009	TRUE
79644	2/21/2009	16:55:18	41.303	-70.196	16	55	18	193	204	3	17 M	12	14	21	2	2009	FALSE
79644	2/23/2009	22:12:35	41.273	-70.216	22	12	35	192	204	1	26 M	17	31	23	2	2009	FALSE
79644	2/26/2009	3:15:58	41.371	-70.158	3	15	58	191	208	1	34 M	22	35	25	2	2009	TRUE
79644	2/28/2009	8:51:17	41.405	-70.141	8	51	17	189	208	1	34 M	4	10	28	2	2009	TRUE
79644	3/2/2009	15:37:42	41.282	-70.204	15	37	42	192	204	1	35 M	10	56	2	3	2009	FALSE
79644	3/4/2009	23:03:26	41.33	-70.21	23	3	26	4	37	0	2 M	18	22	4	3	2009	TRUE
79644	3/7/2009	1:21:21	41.337	-70.197	1	21	21	1	38	0	2 M	20	40	6	3	2009	TRUE
79644	3/9/2009	8:34:12	41.349	-70.182	8	34	12	2	39	0	2 M	3	53	9	3	2009	TRUE
79644	3/11/2009	13:43:45	41.318	-70.394	13	43	45	1	40	0	2 M	9	2	11	3	2009	FALSE
79644	3/13/2009	22:58:46	41.342	-70.214	22	58	46	190	196	3	17 M	18	17	13	3	2009	TRUE
79644	3/16/2009	1:16:09	41.343	-70.241	1	16	9	189	208	2	16 M	20	35	15	3	2009	TRUE
79644	3/18/2009	7:44:38	40.757	-70.157	7	44	38	190	208	3	16 M	3	4	18	3	2009	TRUE
79644	3/20/2009	15:48:20	40.834	-69.962	15	48	20	3	44	0	2 M	11	8	20	3	2009	FALSE
79644	3/23/2009	0:13:44	40.92	-70.153	0	13	44	4	45	0	2 M	19	33	22	3	2009	TRUE
79644	3/25/2009	6:31:41	40.925	-70.171	6	31	41	4	46	0	2 M	1	50	25	3	2009	TRUE
79644	3/27/2009	10:25:49	41.116	-70.253	10	25	49	2	47	0	2 M	5	44	27	3	2009	TRUE
79644	3/29/2009	18:59:30	41.15	-69.954	18	59	30	4	48	0	2 M	14	19	29	3	2009	FALSE
79644	4/1/2009	1:04:00	40.689	-70.051	1	4	0	191	192	2	32 M	20	23	31	3	2009	TRUE
79644	4/3/2009	6:37:35	40.843	-70.227	6	37	35	190	196	2	38 M	1	56	3	4	2009	TRUE
79644	4/5/2009	14:04:07	47.111	-64.547	14	4	7	4	51	0	2 M	9	45	5	4	2009	FALSE
79644	4/7/2009	20:03:54	47.965	-64.39	20	3	54	4	52	0	2 M	15	46	7	4	2009	FALSE
79644	4/10/2009	1:34:52	48.281	-63.961	1	34	52	4	53	0	2 M	21	19	9	4	2009	TRUE
79644	4/12/2009	5:00:20	48.006	-63.594	5	0	20	190	208	3	23 M	0	45	12	4	2009	TRUE
79644	4/14/2009	10:15:18	47.94	-63.378	10	15	18	192	212	3	24 M	6	1	14	4	2009	TRUE
79644	4/16/2009	16:26:26	47.887	-63.442	16	26	26	193	212	3	45 M	12	12	16	4	2009	FALSE
79644	4/19/2009	1:26:50	48.044	-63.548	1	26	50	190	196	1	56 M	21	12	18	4	2009	TRUE
79644	4/21/2009	5:07:21	48.147	-63.467	5	7	21	1	58	0	2 M	0	53	21	4	2009	TRUE
79644	4/23/2009	12:22:22	47.844	-65.512	12	22	22	2	59	0	2 M	8	0	23	4	2009	FALSE
79644	4/25/2009	17:36:57	48.024	-65.761	17	36	57	191	208	2	6 M	13	13	25	4	2009	FALSE
79644	4/27/2009	23:40:02	50.256	-65.914	23	40	2	1	61	0	2 M	19	16	27	4	2009	TRUE
79644	4/30/2009	8:33:49	50.228	-65.189	8	33	49	4	62	0	2 M	4	13	30	4	2009	TRUE
79644	5/2/2009	13:34:52	50.292	-65.208	13	34	52	192	200	2	29 M	9	14	2	5	2009	FALSE
79644	5/4/2009	16:54:33	50.232	-65.105	16	54	33	192	208	3	35 M	12	34	4	5	2009	FALSE
79644	5/7/2009	0:20:03	50.26	-65.293	0	20	3	190	204	2	41 M	19	58	6	5	2009	TRUE
89595	11/22/2009	19:30:00	41.284	-70.17	19	30	0	0	0	0	0 F	14	49	22	11	2009	FALSE
89595	11/23/2009	21:30:44	41.288	-70.168	21	30	44	4	1	0	2 F	16	50	23	11	2009	FALSE
89595	11/26/2009	0:18:10	41.332	-70.247	0	18	10	191	208	3	5 F	19	37	25	11	2009	TRUE
89595	11/28/2009	2:56:21	41.287	-70.168	2	56	21	191	208	3	4 F	22	15	27	11	2009	TRUE
89595	11/30/2009	8:12:14	41.39	-70.183	8	12	14	4	4	0	2 F	3	31	30	11	2009	TRUE
89595	12/2/2009	9:48:59	41.371	-70.119	9	48	59	2	5	0	2 F	5	8	2	12	2009	TRUE
89595	12/4/2009	13:09:03	41.188	-70.016	13	9	3	1	6	0	2 F	8	28	4	12	2009	FALSE
89595	12/6/2009	19:37:54	41.144	-69.919	19	37	54	191	208	2	46 F	14	58	6	12	2009	FALSE
89595	12/8/2009	23:26:18	41.469	-70.149	23	26	18	191	208	1	54 F	18	45	8	12	2009	TRUE
89595	12/11/2009	1:32:56	41.62	-70.175	1	32	56	1	9	0	2 F	20	52	10	12	2009	TRUE
89595	12/13/2009	5:58:24	41.439	-70.129	5	58	24	190	208	2	56 F	1	17	13	12	2009	TRUE
89595	12/15/2009	9:39:56	41.419	-70.195	9	39	56	2	11	0	2 F	4	59	15	12	2009	TRUE
89595	12/17/2009	14:49:04	41.305	-69.87	14	49	4	3	12	0	2 F	10	9	17	12	2009	FALSE

89595	12/19/2009	18:08:27	41.307	-69.849	18	8	27	191	208	3	21 F	13	29	19	12	2009	FALSE
89595	12/22/2009	0:36:39	41.314	-69.863	0	36	39	190	204	1	34 F	19	57	21	12	2009	TRUE
89595	12/24/2009	2:18:10	41.312	-69.87	2	18	10	190	208	1	37 F	21	38	23	12	2009	TRUE
89595	12/26/2009	6:34:55	41.283	-69.927	6	34	55	2	16	0	2 F	1	55	26	12	2009	TRUE
89595	12/28/2009	11:07:56	41.418	-70.204	11	7	56	190	208	2	40 F	6	27	28	12	2009	TRUE
89595	12/30/2009	14:11:11	41.215	-69.84	14	11	11	191	212	3	52 F	9	31	30	12	2009	FALSE
89595	1/1/2010	18:40:13	41.314	-70.34	18	40	13	1	19	0	2 F	13	58	1	1	2010	FALSE
89595	1/3/2010	23:20:56	41.338	-70.222	23	20	56	2	20	0	2 F	18	40	3	1	2010	TRUE
89595	1/6/2010	2:49:29	41.226	-69.85	2	49	29	192	212	1	17 F	22	10	5	1	2010	TRUE
89595	1/8/2010	6:33:52	41.323	-69.843	6	33	52	1	22	0	2 F	1	54	8	1	2010	TRUE
89595	1/10/2010	10:31:02	41.271	-70.293	10	31	2	190	212	1	26 F	5	49	10	1	2010	TRUE
89595	1/12/2010	14:41:39	40.99	-70.224	14	41	39	1	24	0	2 F	10	0	12	1	2010	FALSE
89595	1/14/2010	22:22:10	40.973	-70.239	22	22	10	192	204	2	54 F	17	41	14	1	2010	FALSE
89595	1/17/2010	0:30:16	41.407	-70.19	0	30	16	2	26	0	2 F	19	49	16	1	2010	TRUE
89595	1/19/2010	5:42:42	41.378	-70.208	5	42	42	190	204	3	0 F	1	1	19	1	2010	TRUE
89595	1/21/2010	7:39:56	41.213	-70.234	7	39	56	190	212	1	0 F	2	58	21	1	2010	TRUE
89595	1/23/2010	13:45:33	41.12	-70.251	13	45	33	3	29	0	2 F	9	4	23	1	2010	FALSE
89595	1/25/2010	17:47:19	41.052	-70.235	17	47	19	3	30	0	2 F	13	6	25	1	2010	FALSE
89595	1/27/2010	20:29:29	41.046	-70.223	20	29	29	2	31	0	2 F	15	48	27	1	2010	FALSE
89595	1/30/2010	2:08:37	41.334	-70.118	2	8	37	3	32	0	2 F	21	28	29	1	2010	TRUE
89595	2/1/2010	6:46:49	40.922	-70.066	6	46	49	190	204	1	62 F	2	6	1	2	2010	TRUE
89595	2/3/2010	9:40:32	40.939	-70.194	9	40	32	190	208	1	62 F	4	59	3	2	2010	TRUE
89595	2/5/2010	12:05:19	40.783	-69.991	12	5	19	1	35	0	2 F	7	25	5	2	2010	FALSE
89595	2/7/2010	17:10:55	40.897	-70.048	17	10	55	191	208	2	23 F	12	30	7	2	2010	FALSE
89595	2/9/2010	23:30:18	41.066	-70.154	23	30	18	4	37	0	2 F	18	49	9	2	2010	TRUE
89595	2/12/2010	2:03:48	40.97	-70.029	2	3	48	2	38	0	2 F	21	23	11	2	2010	TRUE
89595	2/14/2010	7:50:09	41.046	-70.309	7	50	9	186	204	2	46 F	3	8	14	2	2010	TRUE
89595	2/16/2010	9:29:25	41.469	-70.187	9	29	25	1	40	0	2 F	4	48	16	2	2010	TRUE
89595	2/18/2010	15:17:47	40.976	-70.248	15	17	47	2	41	0	2 F	10	36	18	2	2010	FALSE
89595	2/20/2010	19:00:41	41.069	-70.259	19	0	41	191	208	2	16 F	14	19	20	2	2010	FALSE
89595	2/23/2010	1:07:20	40.796	-70.195	1	7	20	190	204	3	33 F	20	26	22	2	2010	TRUE
89595	2/25/2010	5:52:17	41.375	-70.315	5	52	17	4	44	0	2 F	1	11	25	2	2010	TRUE
89595	2/27/2010	6:22:09	41.42	-70.299	6	22	9	190	212	2	41 F	1	40	27	2	2010	TRUE
89595	3/1/2010	12:42:44	41.269	-70.225	12	42	44	3	46	0	2 F	8	1	1	3	2010	FALSE
89595	3/3/2010	15:46:29	40.869	-69.994	15	46	29	192	208	3	58 F	11	6	3	3	2010	FALSE
89595	3/5/2010	21:23:30	41.116	-70.295	21	23	30	190	204	3	29 F	16	42	5	3	2010	FALSE
89595	3/8/2010	0:07:12	41.103	-70.216	0	7	12	191	208	3	29 F	19	26	7	3	2010	TRUE
89595	3/10/2010	6:09:09	41.182	-70.34	6	9	9	3	50	0	2 F	1	27	10	3	2010	TRUE
89595	3/12/2010	8:15:19	41.068	-70.403	8	15	19	191	208	3	29 F	3	33	12	3	2010	TRUE
89595	3/14/2010	11:31:28	41.419	-70.351	11	31	28	1	52	0	2 F	6	50	14	3	2010	TRUE
89595	3/16/2010	18:14:38	40.732	-69.984	18	14	38	192	204	2	10 F	13	34	16	3	2010	FALSE
89595	3/18/2010	20:31:39	41.142	-70.197	20	31	39	2	54	0	2 F	15	50	18	3	2010	FALSE
89595	3/21/2010	0:38:05	41.112	-70.256	0	38	5	191	208	1	22 F	19	57	20	3	2010	TRUE
89595	3/23/2010	5:34:53	41.158	-70.34	5	34	53	191	208	2	27 F	0	53	23	3	2010	TRUE
89595	3/25/2010	9:42:13	40.93	-70.031	9	42	13	191	208	3	33 F	5	2	25	3	2010	TRUE
89595	3/27/2010	12:18:44	41.231	-70.095	12	18	44	1	58	0	2 F	7	38	27	3	2010	FALSE
89595	3/29/2010	18:22:09	41.269	-70.312	18	22	9	191	208	1	54 F	13	40	29	3	2010	FALSE
89595	3/31/2010	22:56:40	40.894	-70.172	22	56	40	3	60	0	2 F	18	15	31	3	2010	TRUE
89595	4/3/2010	0:58:47	40.962	-70.288	0	58	47	191	208	3	6 F	20	17	2	4	2010	TRUE

89595	4/5/2010	6:42:27	41.128	-70.106	6	42	27	190	204	3	8 F	2	2	5	4	2010	TRUE
89595	4/7/2010	8:02:46	41.101	-70.217	8	2	46	1	63	0	2 F	3	21	7	4	2010	TRUE
89595	4/9/2010	12:32:03	41.037	-70.225	12	32	3	1	64	0	2 F	7	51	9	4	2010	FALSE
89595	4/11/2010	18:50:39	47.803	-64.505	18	50	39	192	204	3	53 F	14	32	11	4	2010	FALSE
89595	4/18/2010	23:46:19	47.992	-65.162	23	46	19	190	204	1	2 F	19	25	18	4	2010	TRUE
89595	4/26/2010	0:21:43	47.953	-65.089	0	21	43	192	212	3	4 F	20	1	25	4	2010	TRUE
89595	5/3/2010	6:53:41	48.182	-69.322	6	53	41	190	208	1	10 F	2	16	3	5	2010	TRUE
89595	5/10/2010	12:06:34	49.108	-67.06	12	6	34	192	204	2	42 F	7	38	10	5	2010	FALSE
89595	5/17/2010	16:00:06	47.593	-64.455	16	0	6	192	200	3	58 F	11	42	17	5	2010	FALSE
89595	5/24/2010	18:08:13	49.27	-67.775	18	8	13	190	208	1	1 F	13	37	24	5	2010	FALSE
89595	5/31/2010	23:48:40	61.449	-86.728	23	48	40	190	204	2	21 F	18	1	31	5	2010	TRUE
89595	6/8/2010	5:38:41	65.106	-86.886	5	38	41	4	9	0	2 F	23	51	7	6	2010	TRUE
89595	6/15/2010	8:06:54	65.143	-86.881	8	6	54	2	10	0	2 F	2	19	15	6	2010	TRUE
89595	6/22/2010	9:57:38	65.083	-86.913	9	57	38	193	212	3	53 F	4	9	22	6	2010	TRUE
89595	6/29/2010	14:17:58	65.098	-87.156	14	17	58	191	208	3	57 F	8	29	29	6	2010	FALSE
89595	7/6/2010	17:34:22	65.097	-87.15	17	34	22	192	200	2	61 F	11	45	6	7	2010	FALSE
89595	7/13/2010	16:27:51	65.099	-87.172	16	27	51	193	204	3	61 F	10	39	13	7	2010	FALSE
89595	7/20/2010	18:27:34	65.099	-87.171	18	27	34	1	15	0	3 F	12	38	20	7	2010	FALSE
89596	11/22/2009	19:30:00	41.297	-70.102	19	30	0	0	0	0	0 F	14	49	22	11	2009	FALSE
89596	11/23/2009	18:52:56	41.271	-70.184	18	52	56	1	1	0	2 F	14	12	23	11	2009	FALSE
89596	11/26/2009	0:42:51	41.287	-70.171	0	42	51	191	208	3	5 F	20	2	25	11	2009	TRUE
89596	11/28/2009	1:16:24	41.32	-70.291	1	16	24	3	3	0	2 F	20	35	27	11	2009	TRUE
89596	11/30/2009	2:28:53	41.312	-70.223	2	28	53	191	216	1	5 F	21	47	29	11	2009	TRUE
89596	12/2/2009	7:51:04	41.295	-70.269	7	51	4	3	5	0	2 F	3	9	2	12	2009	TRUE
89596	12/4/2009	11:04:14	41.201	-70.209	11	4	14	190	208	1	11 F	6	23	4	12	2009	TRUE
89596	12/6/2009	11:33:41	41.204	-70.268	11	33	41	191	216	1	12 F	6	52	6	12	2009	TRUE
89596	12/8/2009	16:37:43	41.243	-70.104	16	37	43	192	208	3	30 F	11	57	8	12	2009	FALSE
89596	12/10/2009	17:33:05	41.311	-70.072	17	33	5	192	216	2	31 F	12	52	10	12	2009	FALSE
89596	12/12/2009	22:14:44	41.014	-69.849	22	14	44	193	208	3	46 F	17	35	12	12	2009	FALSE
89596	12/15/2009	0:25:10	41.023	-69.827	0	25	10	191	212	1	50 F	19	45	14	12	2009	TRUE
89596	12/17/2009	3:03:41	41.007	-69.9	3	3	41	192	216	1	56 F	22	24	16	12	2009	TRUE
89596	12/19/2009	6:37:04	41.013	-70.056	6	37	4	2	13	0	2 F	1	56	19	12	2009	TRUE
89596	12/21/2009	10:36:24	41.344	-70.429	10	36	24	191	212	3	63 F	5	54	21	12	2009	TRUE
89596	12/23/2009	12:24:25	41.337	-70.474	12	24	25	2	15	0	2 F	7	42	23	12	2009	FALSE
89596	12/25/2009	15:05:07	41.425	-70.457	15	5	7	192	216	1	14 F	10	23	25	12	2009	FALSE
89596	12/27/2009	19:33:11	41.412	-70.48	19	33	11	3	17	0	2 F	14	51	27	12	2009	FALSE
89596	12/29/2009	22:06:42	41.441	-70.49	22	6	42	192	212	2	40 F	17	24	29	12	2009	FALSE
89596	12/31/2009	23:56:23	41.41	-70.466	23	56	23	191	216	3	43 F	19	14	31	12	2009	TRUE
89596	1/3/2010	2:37:07	41.387	-70.607	2	37	7	192	216	1	49 F	21	54	2	1	2010	TRUE
89596	1/5/2010	9:48:40	41.401	-70.447	9	48	40	190	208	1	49 F	5	6	5	1	2010	TRUE
89596	1/7/2010	11:06:34	41.411	-70.494	11	6	34	191	212	3	48 F	6	24	7	1	2010	TRUE
89596	1/9/2010	15:45:32	41.366	-70.482	15	45	32	4	23	0	2 F	11	3	9	1	2010	FALSE
89596	1/11/2010	16:53:45	41.434	-70.534	16	53	45	193	212	1	0 F	12	11	11	1	2010	FALSE
89596	1/13/2010	21:06:24	41.412	-70.385	21	6	24	3	25	0	2 F	16	24	13	1	2010	FALSE
89596	1/16/2010	0:52:50	41.447	-70.429	0	52	50	190	208	2	22 F	20	11	15	1	2010	TRUE
89596	1/18/2010	1:47:17	41.444	-70.435	1	47	17	190	212	2	22 F	21	5	17	1	2010	TRUE
89596	1/20/2010	7:52:10	41.425	-70.422	7	52	10	4	28	0	2 F	3	10	20	1	2010	TRUE
89596	1/22/2010	11:08:41	41.413	-70.443	11	8	41	190	208	3	23 F	6	26	22	1	2010	TRUE
89596	1/24/2010	11:05:39	41.43	-70.465	11	5	39	191	216	2	22 F	6	23	24	1	2010	TRUE

89596	1/26/2010	16:36:15	41.383	-70.475	16	36	15	192	208	1	41 F	11	54	26	1	2010	FALSE
89596	1/28/2010	17:15:35	41.442	-70.399	17	15	35	1	32	0	2 F	12	33	28	1	2010	FALSE
89596	1/30/2010	21:20:51	41.425	-70.438	21	20	51	192	212	1	56 F	16	39	30	1	2010	FALSE
89596	2/2/2010	0:57:04	41.448	-70.453	0	57	4	190	212	1	59 F	20	15	1	2	2010	TRUE
89596	2/4/2010	5:15:12	41.438	-70.431	5	15	12	190	208	1	60 F	0	33	4	2	2010	TRUE
89596	2/6/2010	6:36:10	41.276	-70.538	6	36	10	1	36	0	2 F	1	54	6	2	2010	TRUE
89596	2/8/2010	11:32:32	41.249	-70.504	11	32	32	191	212	2	60 F	6	50	8	2	2010	TRUE
89596	2/10/2010	16:38:38	41.262	-70.688	16	38	38	192	208	2	17 F	11	55	10	2	2010	FALSE
89596	2/12/2010	18:42:48	41.298	-70.444	18	42	48	192	208	3	31 F	14	1	12	2	2010	FALSE
89596	2/14/2010	19:58:35	41.265	-70.498	19	58	35	1	40	0	2 F	15	16	14	2	2010	FALSE
89596	2/17/2010	0:07:57	41.278	-70.525	0	7	57	192	212	3	60 F	19	25	16	2	2010	TRUE
89596	2/19/2010	2:38:19	41.282	-70.533	2	38	19	1	42	0	2 F	21	56	18	2	2010	TRUE
89596	2/21/2010	9:08:08	41.259	-70.46	9	8	8	3	43	0	2 F	4	26	21	2	2010	TRUE
89596	2/23/2010	10:11:47	41.284	-70.506	10	11	47	1	44	0	2 F	5	29	23	2	2010	TRUE
89596	3/1/2010	23:51:00	41.289	-70.484	23	51	0	190	208	1	7 F	19	9	1	3	2010	TRUE
89596	3/4/2010	3:10:36	41.315	-70.464	3	10	36	191	208	1	7 F	22	28	3	3	2010	TRUE
89596	3/6/2010	7:39:26	41.284	-70.501	7	39	26	190	204	3	6 F	2	57	6	3	2010	TRUE
89596	3/8/2010	8:10:39	41.279	-70.503	8	10	39	1	50	0	2 F	3	28	8	3	2010	TRUE
89596	3/10/2010	13:22:21	41.263	-70.516	13	22	21	3	51	0	2 F	8	40	10	3	2010	FALSE
89596	3/12/2010	15:05:20	41.298	-70.608	15	5	20	191	216	3	17 F	10	22	12	3	2010	FALSE
89596	3/14/2010	20:27:02	41.346	-70.48	20	27	2	3	53	0	2 F	15	45	14	3	2010	FALSE
89596	3/17/2010	0:21:16	41.451	-70.439	0	21	16	192	208	1	58 F	19	39	16	3	2010	TRUE
89596	3/19/2010	1:46:39	41.312	-70.486	1	46	39	190	216	1	58 F	21	4	18	3	2010	TRUE
89596	3/21/2010	7:35:22	41.27	-70.473	7	35	22	190	208	2	60 F	2	53	21	3	2010	TRUE
89596	3/23/2010	11:23:29	41.302	-70.533	11	23	29	191	208	1	60 F	6	41	23	3	2010	TRUE
89596	3/25/2010	13:23:31	41.27	-70.49	13	23	31	2	58	0	2 F	8	41	25	3	2010	FALSE
89596	3/27/2010	16:23:12	41.238	-70.35	16	23	12	193	212	1	18 F	11	41	27	3	2010	FALSE
89596	3/29/2010	21:06:26	41.011	-70.382	21	6	26	191	208	3	58 F	16	24	29	3	2010	FALSE
89596	4/1/2010	0:11:48	40.873	-70.199	0	11	48	191	212	3	2 F	19	31	31	3	2010	TRUE
89596	4/3/2010	5:22:35	41.097	-70.248	5	22	35	191	208	2	2 F	0	41	3	4	2010	TRUE
89596	4/5/2010	8:36:43	41.098	-70.169	8	36	43	3	63	0	2 F	3	56	5	4	2010	TRUE
89596	4/7/2010	13:42:37	41.079	-70.155	13	42	37	192	208	2	8 F	9	1	7	4	2010	FALSE
89596	4/16/2010	20:35:20	41.025	-70.14	20	35	20	3	2	0	2 F	15	54	16	4	2010	FALSE
89596	4/23/2010	23:28:04	48.169	-69.698	23	28	4	192	212	3	62 F	18	49	23	4	2010	TRUE
89596	5/1/2010	1:30:56	49.302	-67.062	1	30	56	2	4	0	3 F	21	2	30	4	2010	TRUE
89596	5/8/2010	6:01:39	49.088	-67.147	6	1	39	3	5	0	2 F	1	33	8	5	2010	TRUE
89596	5/15/2010	8:37:57	48.767	-68.971	8	37	57	190	208	2	3 F	4	2	15	5	2010	TRUE
89596	5/22/2010	8:36:27	54.528	-79.752	8	36	27	191	216	3	5 F	3	17	22	5	2010	TRUE
89596	5/29/2010	13:10:09	60.155	-78.729	13	10	9	191	208	1	27 F	7	55	29	5	2010	FALSE
89596	6/5/2010	10:47:41	63.637	-82.501	10	47	41	191	216	2	31 F	5	17	5	6	2010	TRUE
89596	6/12/2010	14:59:18	65.581	-83.142	14	59	18	191	208	3	51 F	9	26	12	6	2010	FALSE
89596	6/19/2010	15:05:31	68.906	-86.692	15	5	31	2	9	0	3 F	9	18	19	6	2010	FALSE
89596	6/26/2010	16:07:18	69.679	-87.28	16	7	18	194	216	2	56 F	10	18	26	6	2010	FALSE
89596	7/3/2010	18:15:18	71	-85.224	18	15	18	4	13	0	2 F	12	34	3	7	2010	FALSE
89596	7/10/2010	17:49:29	71.003	-85.272	17	49	29	4	14	0	3 F	12	8	10	7	2010	FALSE
89596	7/17/2010	15:35:24	70.995	-85.285	15	35	24	192	208	3	3 F	9	54	17	7	2010	FALSE
89596	7/24/2010	14:39:41	70.984	-85.284	14	39	41	193	208	2	3 F	8	58	24	7	2010	FALSE
89596	7/31/2010	13:55:35	70.985	-85.512	13	55	35	192	212	1	5 F	8	13	31	7	2010	FALSE
89596	8/7/2010	12:11:31	70.964	-85.308	12	11	31	1	18	0	2 F	6	30	7	8	2010	TRUE

89596	8/14/2010	12:43:40	71.004	-85.585	12	43	40	193	208	3	10 F	7	1	14	8	2010	FALSE
89596	8/21/2010	9:37:55	70.947	-85.545	9	37	55	196	216	3	10 F	3	55	21	8	2010	TRUE
89596	8/28/2010	11:55:37	70.979	-85.516	11	55	37	192	204	2	21 F	6	13	28	8	2010	TRUE
89596	9/4/2010	10:59:06	70.977	-85.44	10	59	6	193	212	3	20 F	5	17	4	9	2010	TRUE
89596	9/11/2010	14:24:38	71.142	-85.93	14	24	38	190	212	3	32 F	8	40	11	9	2010	FALSE
89596	9/18/2010	18:41:49	70.984	-85.984	18	41	49	193	212	3	47 F	12	57	18	9	2010	FALSE
89596	9/25/2010	22:28:49	71.112	-85.998	22	28	49	2	25	0	2 F	16	44	25	9	2010	FALSE
89596	10/3/2010	3:08:53	71.189	-85.796	3	8	53	191	208	3	8 F	21	25	2	10	2010	TRUE
89596	10/24/2010	10:57:36	55.509	-79.864	10	57	36	189	216	1	15 F	5	38	24	10	2010	TRUE
89596	10/31/2010	15:35:35	55.476	-79.738	15	35	35	2	30	0	3 F	10	16	31	10	2010	FALSE
89596	11/7/2010	20:07:58	41.218	-70.381	20	7	58	3	31	0	3 F	15	26	7	11	2010	FALSE
89596	11/14/2010	23:09:48	41.295	-70.405	23	9	48	191	212	2	57 F	18	28	14	11	2010	TRUE
89597	12/18/2008	20:00:00	41.284	-70.17	20	0	0	0	0	0	0 M	15	19	18	12	2008	FALSE
89597	12/19/2008	21:49:39	41.29	-70.167	21	49	39	192	212	1	15 M	17	8	19	12	2008	FALSE
89597	12/21/2008	20:38:39	41.334	-70.306	20	38	39	1	2	0	2 M	15	57	21	12	2008	FALSE
89597	12/24/2008	1:21:08	41.34	-70.289	1	21	8	192	212	1	30 M	20	39	23	12	2008	TRUE
89597	12/26/2008	2:30:17	41.39	-70.053	2	30	17	192	212	2	35 M	21	50	25	12	2008	TRUE
89597	12/28/2008	3:08:12	41.302	-69.978	3	8	12	190	216	2	36 M	22	28	27	12	2008	TRUE
89597	12/30/2008	8:00:49	41.31	-69.947	8	0	49	4	6	0	2 M	3	21	30	12	2008	TRUE
89597	1/1/2009	10:19:44	41.222	-70.009	10	19	44	4	7	0	2 M	5	39	1	1	2009	TRUE
89597	1/3/2009	9:30:40	41.3	-69.926	9	30	40	1	8	0	2 M	4	50	3	1	2009	TRUE
89597	1/5/2009	15:35:56	41.281	-69.959	15	35	56	193	212	1	2 M	10	56	5	1	2009	FALSE
89597	1/7/2009	18:05:30	41.281	-69.953	18	5	30	192	212	3	9 M	13	25	7	1	2009	FALSE
89597	1/9/2009	20:07:04	41.279	-69.956	20	7	4	4	11	0	2 M	15	27	9	1	2009	FALSE
89597	1/11/2009	22:40:34	41.288	-69.98	22	40	34	190	212	3	35 M	18	0	11	1	2009	TRUE
89597	1/13/2009	22:49:08	41.419	-70.084	22	49	8	192	216	1	44 M	18	8	13	1	2009	TRUE
89597	1/16/2009	1:56:27	41.227	-69.967	1	56	27	189	212	2	52 M	21	16	15	1	2009	TRUE
89597	1/18/2009	6:21:41	41.281	-69.945	6	21	41	190	212	3	54 M	1	41	18	1	2009	TRUE
89597	1/20/2009	7:41:38	41.435	-69.998	7	41	38	2	16	0	2 M	3	1	20	1	2009	TRUE
89597	1/22/2009	10:16:07	41.306	-69.921	10	16	7	189	212	1	58 M	5	36	22	1	2009	TRUE
89597	1/24/2009	13:04:24	41.278	-69.951	13	4	24	2	18	0	2 M	8	24	24	1	2009	FALSE
89597	1/26/2009	15:50:22	41.273	-69.962	15	50	22	190	212	1	18 M	11	10	26	1	2009	FALSE
89597	1/28/2009	19:15:22	41.39	-70.078	19	15	22	191	212	1	27 M	14	35	28	1	2009	FALSE
89597	1/31/2009	0:05:53	41.416	-70.004	0	5	53	191	208	1	42 M	19	25	30	1	2009	TRUE
89597	2/2/2009	2:43:55	41.408	-70.072	2	43	55	4	22	0	2 M	22	3	1	2	2009	TRUE
89597	2/4/2009	3:25:54	41.42	-70.112	3	25	54	190	212	3	46 M	22	45	3	2	2009	TRUE
89597	2/6/2009	8:03:16	41.359	-70.062	8	3	16	190	208	2	46 M	3	23	6	2	2009	TRUE
89597	2/8/2009	9:37:40	41.45	-69.962	9	37	40	2	25	0	2 M	4	57	8	2	2009	TRUE
89597	2/10/2009	10:54:31	41.37	-70.012	10	54	31	189	216	2	54 M	6	14	10	2	2009	TRUE
89597	2/12/2009	16:48:58	41.4	-70.036	16	48	58	4	27	0	2 M	12	8	12	2	2009	FALSE
89597	2/14/2009	18:07:11	41.42	-69.99	18	7	11	3	28	0	2 M	13	27	14	2	2009	FALSE
89597	2/16/2009	22:51:11	41.406	-70.103	22	51	11	190	204	3	22 M	18	10	16	2	2009	TRUE
89597	2/19/2009	0:12:37	41.433	-70.048	0	12	37	3	30	0	2 M	19	32	18	2	2009	TRUE
89597	2/21/2009	1:09:25	41.439	-69.997	1	9	25	1	31	0	2 M	20	29	20	2	2009	TRUE
89597	2/23/2009	6:47:35	41.415	-70.04	6	47	35	190	208	1	31 M	2	7	23	2	2009	TRUE
89597	2/25/2009	6:25:16	41.436	-70.008	6	25	16	189	216	2	30 M	1	45	25	2	2009	TRUE
89597	2/27/2009	10:53:24	41.446	-70.086	10	53	24	189	208	2	30 M	6	13	27	2	2009	TRUE
89597	3/1/2009	12:10:45	41.392	-70.015	12	10	45	191	216	2	34 M	7	30	1	3	2009	FALSE
89597	3/3/2009	16:49:02	41.424	-70.044	16	49	2	3	36	0	2 M	12	8	3	3	2009	FALSE

89597	3/5/2009	19:51:57	41.406	-70.03	19	51	57	3	37	0	2 M	15	11	5	3	2009	FALSE
89597	3/7/2009	22:24:05	41.426	-70.021	22	24	5	2	38	0	2 M	17	43	7	3	2009	FALSE
89597	3/10/2009	1:56:02	41.436	-70.014	1	56	2	190	208	1	18 M	21	15	9	3	2009	TRUE
89597	3/12/2009	5:27:50	41.42	-69.937	5	27	50	4	40	0	2 M	0	48	12	3	2009	TRUE
89597	3/14/2009	6:48:15	41.434	-69.971	6	48	15	2	41	0	2 M	2	8	14	3	2009	TRUE
89597	3/16/2009	10:48:15	41.401	-70.016	10	48	15	3	42	0	2 M	6	8	16	3	2009	TRUE
89597	3/18/2009	11:39:36	40.712	-70.167	11	39	36	1	43	0	2 M	6	58	18	3	2009	TRUE
89597	3/20/2009	15:48:57	40.875	-70.104	15	48	57	2	44	0	2 M	11	8	20	3	2009	FALSE
89597	3/22/2009	21:07:43	40.902	-70.211	21	7	43	190	204	2	6 M	16	26	22	3	2009	FALSE
89597	3/24/2009	22:27:04	40.904	-70.128	22	27	4	3	46	0	2 M	17	46	24	3	2009	FALSE
89597	3/27/2009	1:06:41	40.818	-70.007	1	6	41	3	47	0	2 M	20	26	26	3	2009	TRUE
89597	3/29/2009	5:50:06	40.892	-70.03	5	50	6	4	48	0	2 M	1	9	29	3	2009	TRUE
89597	3/31/2009	5:29:01	40.941	-69.917	5	29	1	1	49	0	2 M	0	49	31	3	2009	TRUE
89597	4/2/2009	9:00:33	40.884	-70.098	9	0	33	2	50	0	2 M	4	20	2	4	2009	TRUE
89597	4/4/2009	12:12:21	40.861	-69.857	12	12	21	2	51	0	2 M	7	32	4	4	2009	FALSE
89597	4/6/2009	14:55:38	40.676	-69.986	14	55	38	191	117	3	61 M	10	15	6	4	2009	FALSE
89597	4/8/2009	18:55:01	40.863	-69.922	18	55	1	192	208	2	11 M	14	15	8	4	2009	FALSE
89597	4/10/2009	20:28:41	40.782	-70.118	20	28	41	190	212	2	18 M	15	48	10	4	2009	FALSE
89597	4/13/2009	0:24:57	40.755	-70.068	0	24	57	2	55	0	2 M	19	44	12	4	2009	TRUE
89597	4/15/2009	3:00:17	40.871	-70.26	3	0	17	2	56	0	2 M	22	19	14	4	2009	TRUE
89597	4/17/2009	5:52:23	41.016	-70.387	5	52	23	189	212	3	26 M	1	10	17	4	2009	TRUE
89597	4/19/2009	10:31:57	40.943	-70.273	10	31	57	3	58	0	2 M	5	50	19	4	2009	TRUE
89597	4/21/2009	12:53:45	41.095	-70.259	12	53	45	3	59	0	2 M	8	12	21	4	2009	FALSE
89597	4/25/2009	19:32:25	47.988	-65.858	19	32	25	4	61	0	2 M	15	8	25	4	2009	FALSE
89597	4/30/2009	0:30:32	47.99	-64.786	0	30	32	189	204	2	25 M	20	11	29	4	2009	TRUE
89597	5/2/2009	0:26:49	48.218	-64.581	0	26	49	190	216	2	24 M	20	8	1	5	2009	TRUE
89597	5/4/2009	6:11:46	49.144	-67.247	6	11	46	189	204	2	45 M	1	42	4	5	2009	TRUE
89597	5/11/2009	6:38:17	48.267	-69.119	6	38	17	3	2	0	2 M	2	1	11	5	2009	TRUE
89597	7/27/2009	8:08:46	68.892	-93.719	8	8	46	191	212	2	50 M	1	53	27	7	2009	TRUE
89597	8/3/2009	8:34:35	68.622	-93.753	8	34	35	192	208	2	0 M	2	19	3	8	2009	TRUE
89597	8/10/2009	9:01:10	68.544	-93.625	9	1	10	191	204	1	6 M	2	46	10	8	2009	TRUE
89597	8/17/2009	7:47:22	68.65	-93.824	7	47	22	191	208	3	8 M	1	32	17	8	2009	TRUE
89597	8/24/2009	11:23:41	68.584	-93.692	11	23	41	190	204	2	9 M	5	8	24	8	2009	TRUE
89597	8/31/2009	11:57:03	68.563	-93.71	11	57	3	2	18	0	3 M	5	42	31	8	2009	TRUE
89597	9/7/2009	12:28:52	68.592	-93.74	12	28	52	190	208	1	18 M	6	13	7	9	2009	TRUE
89597	9/14/2009	15:58:20	68.613	-93.959	15	58	20	3	20	0	3 M	9	42	14	9	2009	FALSE
89597	9/21/2009	18:27:33	68.416	-90.19	18	27	33	192	200	2	14 M	12	26	21	9	2009	FALSE
89597	9/28/2009	17:52:12	65.138	-77.831	17	52	12	3	22	0	3 M	12	40	28	9	2009	FALSE
89597	10/5/2009	19:32:04	66.422	-76.561	19	32	4	3	23	0	2 M	14	25	5	10	2009	FALSE
89597	10/12/2009	18:24:43	66.327	-76.665	18	24	43	193	212	2	4 M	13	18	12	10	2009	FALSE
89597	10/19/2009	22:12:25	56.882	-76.735	22	12	25	188	204	3	33 M	17	5	19	10	2009	FALSE
89597	10/26/2009	23:05:55	55.057	-78.685	23	5	55	189	204	2	63 M	17	51	26	10	2009	FALSE
89597	11/2/2009	22:10:46	41.534	-70.153	22	10	46	2	27	0	2 M	17	30	2	11	2009	FALSE
89597	11/10/2009	0:14:41	41.38	-70.233	0	14	41	187	73	0	36 M	19	33	9	11	2009	TRUE
89597	11/17/2009	0:52:48	41.369	-70.167	0	52	48	1	29	0	3 M	20	12	16	11	2009	TRUE
89597	11/24/2009	2:39:53	41.369	-70.33	2	39	53	192	212	1	2 M	21	58	23	11	2009	TRUE
89597	12/1/2009	3:34:17	41.317	-70.123	3	34	17	189	212	3	9 M	22	53	30	11	2009	TRUE
89597	12/8/2009	6:26:12	41.43	-69.934	6	26	12	189	208	1	10 M	1	46	8	12	2009	TRUE
89597	12/15/2009	7:16:54	41.412	-70.22	7	16	54	189	208	1	16 M	2	36	15	12	2009	TRUE

89597	12/22/2009	7:21:22	41.329	-69.939	7	21	22	189	212	3	16 M	2	41	22	12	2009	TRUE
89597	12/29/2009	9:05:43	41.414	-70.032	9	5	43	188	212	3	17 M	4	25	29	12	2009	TRUE
89597	1/5/2010	9:38:02	41.324	-69.977	9	38	2	1	1	0	4 M	4	58	5	1	2010	TRUE
89597	1/7/2010	14:57:48	41.423	-69.946	14	57	48	3	2	0	4 M	10	18	7	1	2010	FALSE
89597	1/9/2010	15:44:44	41.405	-70.017	15	44	44	1	3	0	4 M	11	4	9	1	2010	FALSE
89597	1/11/2010	21:52:29	41.403	-70.059	21	52	29	191	204	2	30 M	17	12	11	1	2010	FALSE
89597	1/13/2010	23:00:34	41.429	-70.018	23	0	34	191	208	3	33 M	18	20	13	1	2010	TRUE
89597	1/16/2010	0:51:29	41.437	-69.991	0	51	29	2	6	0	4 M	20	11	15	1	2010	TRUE
89597	1/18/2010	5:51:48	41.455	-70.067	5	51	48	190	204	1	45 M	1	11	18	1	2010	TRUE
89597	1/20/2010	7:51:59	41.391	-69.985	7	51	59	3	8	0	4 M	3	12	20	1	2010	TRUE
89597	1/22/2010	9:30:35	41.385	-69.979	9	30	35	189	208	2	46 M	4	50	22	1	2010	TRUE
89597	1/24/2010	13:24:41	41.413	-70.025	13	24	41	3	10	0	4 M	8	44	24	1	2010	FALSE
89597	1/26/2010	14:16:31	41.428	-70.134	14	16	31	192	212	3	10 M	9	35	26	1	2010	FALSE
89597	1/28/2010	17:16:07	41.41	-70.043	17	16	7	1	12	0	4 M	12	35	28	1	2010	FALSE
89597	1/30/2010	23:01:11	41.423	-70.066	23	1	11	191	200	3	18 M	18	20	30	1	2010	TRUE
89597	2/2/2010	0:56:46	41.431	-70.027	0	56	46	3	14	0	4 M	20	16	1	2	2010	TRUE
89597	2/4/2010	1:10:22	41.383	-70.096	1	10	22	1	15	0	4 M	20	29	3	2	2010	TRUE
89597	2/6/2010	7:32:41	41.415	-70.063	7	32	41	190	200	3	30 M	2	52	6	2	2010	TRUE
89597	2/8/2010	7:57:50	41.414	-70.072	7	57	50	190	208	3	30 M	3	17	8	2	2010	TRUE
89597	2/10/2010	13:24:37	41.409	-70.026	13	24	37	192	204	1	37 M	8	44	10	2	2010	FALSE
89597	2/12/2010	12:38:35	41.365	-70.029	12	38	35	192	212	2	41 M	7	58	12	2	2010	FALSE
89597	2/14/2010	17:38:35	41.384	-70.181	17	38	35	192	204	1	4 M	12	57	14	2	2010	FALSE
89597	2/16/2010	19:08:20	41.363	-70.056	19	8	20	192	212	3	14 M	14	28	16	2	2010	FALSE
89597	2/19/2010	0:57:40	41.416	-70.062	0	57	40	4	22	0	4 M	20	17	18	2	2010	TRUE
89597	2/21/2010	1:58:20	41.405	-70.064	1	58	20	2	23	0	4 M	21	18	20	2	2010	TRUE
89597	2/23/2010	5:22:08	41.402	-70.125	5	22	8	190	204	3	52 M	0	41	23	2	2010	TRUE
89597	2/25/2010	10:52:37	41.451	-70.048	10	52	37	190	88	1	53 M	6	12	25	2	2010	TRUE
89598	12/18/2008	20:00:00	41.284	-70.17	20	0	0	0	0	0	0 F	15	19	18	12	2008	FALSE
89598	12/19/2008	21:50:56	41.288	-70.167	21	50	56	193	208	2	14 F	17	10	19	12	2008	FALSE
89598	12/21/2008	20:39:23	41.245	-70.081	20	39	23	1	2	0	2 F	15	59	21	12	2008	FALSE
89598	12/24/2008	1:20:41	41.274	-69.926	1	20	41	3	3	0	2 F	20	40	23	12	2008	TRUE
89598	12/26/2008	2:29:59	41.327	-69.95	2	29	59	1	4	0	2 F	21	50	25	12	2008	TRUE
89598	12/28/2008	8:21:31	41.338	-69.988	8	21	31	189	204	3	29 F	3	41	28	12	2008	TRUE
89598	12/30/2008	9:26:29	41.303	-69.963	9	26	29	189	208	2	29 F	4	46	30	12	2008	TRUE
89598	1/1/2009	10:17:37	41.234	-70.041	10	17	37	189	212	3	30 F	5	37	1	1	2009	TRUE
89598	1/3/2009	13:03:35	41.266	-69.966	13	3	35	1	8	0	2 F	8	23	3	1	2009	FALSE
89598	1/5/2009	16:44:56	41.277	-69.968	16	44	56	194	208	3	2 F	12	5	5	1	2009	FALSE
89598	1/7/2009	20:38:40	41.279	-69.975	20	38	40	4	10	0	2 F	15	58	7	1	2009	FALSE
89598	1/9/2009	21:45:35	41.269	-69.93	21	45	35	192	208	1	41 F	17	5	9	1	2009	FALSE
89598	1/12/2009	2:19:08	41.332	-69.989	2	19	8	4	12	0	2 F	21	39	11	1	2009	TRUE
89598	1/14/2009	1:33:08	41.328	-69.981	1	33	8	191	212	2	61 F	20	53	13	1	2009	TRUE
89598	1/16/2009	6:42:01	41.322	-69.978	6	42	1	190	204	3	62 F	2	2	16	1	2009	TRUE
89598	1/18/2009	8:32:56	41.223	-69.984	8	32	56	190	208	3	62 F	3	52	18	1	2009	TRUE
89598	1/20/2009	9:59:20	41.271	-69.929	9	59	20	189	212	3	62 F	5	19	20	1	2009	TRUE
89598	1/22/2009	14:03:25	41.262	-69.961	14	3	25	193	208	2	27 F	9	23	22	1	2009	FALSE
89598	1/24/2009	18:27:09	40.977	-70.101	18	27	9	193	204	2	13 F	13	46	24	1	2009	FALSE
89598	1/26/2009	20:14:53	40.917	-70.134	20	14	53	3	19	0	2 F	15	34	26	1	2009	FALSE
89598	1/28/2009	20:53:06	40.917	-70.084	20	53	6	192	212	1	58 F	16	12	28	1	2009	FALSE
89598	1/31/2009	0:05:35	40.87	-70.068	0	5	35	1	21	0	2 F	19	25	30	1	2009	TRUE

89598	2/2/2009	2:42:29	40.901	-70.015	2	42	29	1	22	0	2 F	22	2	1	2	2009	TRUE
89598	2/4/2009	8:24:41	41.273	-69.944	8	24	41	4	23	0	2 F	3	44	4	2	2009	TRUE
89598	2/6/2009	10:56:09	41.278	-69.944	10	56	9	192	204	1	14 F	6	16	6	2	2009	TRUE
89598	2/8/2009	14:08:47	41.259	-69.962	14	8	47	4	25	0	2 F	9	28	8	2	2009	FALSE
89598	2/10/2009	15:34:35	41.262	-69.944	15	34	35	192	204	3	54 F	10	54	10	2	2009	FALSE
89598	2/12/2009	18:28:12	41.267	-69.905	18	28	12	193	204	3	24 F	13	48	12	2	2009	FALSE
89598	2/14/2009	19:54:39	41.268	-69.968	19	54	39	2	28	0	2 F	15	14	14	2	2009	FALSE
89598	2/16/2009	22:50:55	41.078	-70.204	22	50	55	192	208	2	14 F	18	10	16	2	2009	TRUE
89598	2/19/2009	0:56:03	41.252	-69.948	0	56	3	2	30	0	2 F	20	16	18	2	2009	TRUE
89598	2/21/2009	2:50:28	41.26	-69.955	2	50	28	1	31	0	2 F	22	10	20	2	2009	TRUE
89598	2/23/2009	6:47:22	41.242	-69.993	6	47	22	2	32	0	2 F	2	7	23	2	2009	TRUE
89598	2/25/2009	8:06:13	41.22	-69.998	8	6	13	1	33	0	2 F	3	26	25	2	2009	TRUE
89598	2/27/2009	10:53:38	41.25	-69.96	10	53	38	1	34	0	2 F	6	13	27	2	2009	TRUE
89598	3/1/2009	14:01:41	41.282	-69.953	14	1	41	193	208	2	40 F	9	21	1	3	2009	FALSE
89598	3/3/2009	18:29:29	41.287	-69.95	18	29	29	193	204	1	12 F	13	49	3	3	2009	FALSE
89598	3/5/2009	21:31:20	41.276	-69.949	21	31	20	4	37	0	2 F	16	51	5	3	2009	FALSE
89598	3/7/2009	22:23:56	41.282	-69.952	22	23	56	192	208	3	62 F	17	44	7	3	2009	FALSE
89598	3/10/2009	1:55:28	41.353	-69.962	1	55	28	192	204	3	62 F	21	15	9	3	2009	TRUE
89598	3/12/2009	2:49:08	41.38	-69.957	2	49	8	190	208	2	62 F	22	9	11	3	2009	TRUE
89598	3/14/2009	8:27:21	41.308	-69.915	8	27	21	4	41	0	2 F	3	47	14	3	2009	TRUE
89598	3/16/2009	8:07:11	41.321	-69.929	8	7	11	190	212	1	1 F	3	27	16	3	2009	TRUE
89598	3/18/2009	14:27:15	41.255	-69.959	14	27	15	4	43	0	2 F	9	47	18	3	2009	FALSE
89598	3/20/2009	15:49:13	41.259	-69.954	15	49	13	3	44	0	2 F	11	9	20	3	2009	FALSE
89598	3/22/2009	18:30:15	41.265	-69.961	18	30	15	193	204	1	11 F	13	50	22	3	2009	FALSE
89598	3/24/2009	22:29:04	41.299	-69.944	22	29	4	4	46	0	2 F	17	49	24	3	2009	FALSE
89598	3/27/2009	1:06:54	41.353	-69.962	1	6	54	4	47	0	2 F	20	27	26	3	2009	TRUE
89598	3/29/2009	1:13:51	41.348	-69.964	1	13	51	2	48	0	2 F	20	33	28	3	2009	TRUE
89598	3/31/2009	3:04:11	41.333	-69.959	3	4	11	191	212	2	25 F	22	24	30	3	2009	TRUE
89598	4/2/2009	8:59:51	41.338	-69.971	8	59	51	190	204	1	26 F	4	19	2	4	2009	TRUE
89598	4/4/2009	12:09:58	41.271	-69.938	12	9	58	192	204	1	44 F	7	30	4	4	2009	FALSE
89598	4/6/2009	13:16:30	41.238	-69.958	13	16	30	3	52	0	2 F	8	36	6	4	2009	FALSE
89598	4/8/2009	17:12:44	41.263	-69.952	17	12	44	194	204	2	14 F	12	32	8	4	2009	FALSE
89598	4/10/2009	18:33:14	41.262	-69.978	18	33	14	3	54	0	2 F	13	53	10	4	2009	FALSE
89598	4/12/2009	19:42:20	41.269	-69.947	19	42	20	192	208	2	40 F	15	2	12	4	2009	FALSE
89598	4/14/2009	22:14:27	44.259	-67.179	22	14	27	1	56	0	2 F	17	45	14	4	2009	FALSE
89598	4/17/2009	2:12:42	47.205	-64.603	2	12	42	2	57	0	2 F	21	54	16	4	2009	TRUE
89598	4/19/2009	5:28:00	47.327	-64.245	5	28	0	190	208	3	62 F	1	11	19	4	2009	TRUE
89598	4/21/2009	8:27:00	47.486	-64.175	8	27	0	191	208	3	63 F	4	10	21	4	2009	TRUE
89598	4/23/2009	10:09:42	47.375	-64.196	10	9	42	191	212	2	2 F	5	52	23	4	2009	TRUE
89598	4/25/2009	15:55:53	47.403	-64.219	15	55	53	193	204	3	35 F	11	39	25	4	2009	FALSE
89598	4/27/2009	18:44:23	47.467	-64.265	18	44	23	4	62	0	2 F	14	27	27	4	2009	FALSE
89598	4/29/2009	21:15:19	47.416	-64.152	21	15	19	4	63	0	2 F	16	58	29	4	2009	FALSE
89598	5/1/2009	21:41:25	46.862	-63.747	21	41	25	191	212	3	61 F	17	26	1	5	2009	FALSE
89598	5/3/2009	23:42:15	46.756	-63.649	23	42	15	1	1	0	3 F	19	27	3	5	2009	TRUE
89598	5/11/2009	4:56:21	46.524	-63.017	4	56	21	190	200	1	15 F	0	44	11	5	2009	TRUE
89598	7/26/2009	19:57:18	61.717	-77.934	19	57	18	3	13	0	2 F	14	45	26	7	2009	FALSE
89598	8/2/2009	18:44:40	61.63	-77.795	18	44	40	3	14	0	2 F	13	33	2	8	2009	FALSE
89598	8/9/2009	17:17:59	61.631	-77.796	17	17	59	193	208	3	31 F	12	6	9	8	2009	FALSE
89598	8/16/2009	20:52:06	61.641	-77.779	20	52	6	193	196	3	1 F	15	40	16	8	2009	FALSE

89598	8/23/2009	18:16:14	61.621	-77.826	18	16	14	193	212	3	5 F	13	4	23	8	2009	FALSE
89598	8/30/2009	22:12:13	61.631	-77.765	22	12	13	193	204	3	38 F	17	1	30	8	2009	FALSE
89598	9/6/2009	23:25:58	61.633	-77.792	23	25	58	194	200	3	58 F	18	14	6	9	2009	TRUE
89598	9/14/2009	0:33:06	61.669	-77.802	0	33	6	192	200	3	59 F	19	21	13	9	2009	TRUE
89598	9/20/2009	22:08:13	61.594	-77.733	22	8	13	192	208	1	58 F	16	57	20	9	2009	FALSE
89598	9/28/2009	2:24:39	61.578	-77.87	2	24	39	190	200	2	9 F	21	13	27	9	2009	TRUE
89598	10/5/2009	1:36:10	56.042	-80.2	1	36	10	1	23	0	2 F	20	15	4	10	2009	TRUE
89598	10/26/2009	7:15:56	50.428	-75.036	7	15	56	1	26	0	2 F	2	11	26	10	2009	TRUE
89598	11/2/2009	10:11:23	48.574	-68.816	10	11	23	189	208	1	34 F	5	36	2	11	2009	TRUE
89598	11/9/2009	12:39:43	41.184	-70.125	12	39	43	189	208	3	10 F	7	59	9	11	2009	FALSE
89598	11/16/2009	17:03:48	41.212	-70.143	17	3	48	191	200	3	51 F	12	23	16	11	2009	FALSE
89598	11/23/2009	17:10:53	41.238	-70.235	17	10	53	193	208	2	62 F	12	29	23	11	2009	FALSE
89598	11/30/2009	22:02:33	41.359	-70.131	22	2	33	192	200	3	25 F	17	22	30	11	2009	FALSE
89598	12/8/2009	1:04:14	41.414	-70.253	1	4	14	190	200	1	29 F	20	23	7	12	2009	TRUE
89598	12/15/2009	1:38:50	41.382	-70.16	1	38	50	2	33	0	2 F	20	58	14	12	2009	TRUE
89598	12/22/2009	2:59:52	41.257	-69.932	2	59	52	191	212	3	35 F	22	20	21	12	2009	TRUE
89598	12/29/2009	7:46:39	41.224	-70.083	7	46	39	3	35	0	3 F	3	6	29	12	2009	TRUE
89598	1/5/2010	8:11:55	41.287	-69.927	8	11	55	191	208	2	42 F	3	32	5	1	2010	TRUE
89598	1/7/2010	10:29:36	41.236	-69.991	10	29	36	190	212	2	44 F	5	49	7	1	2010	TRUE
89598	1/9/2010	14:11:49	41.262	-69.976	14	11	49	1	3	0	4 F	9	31	9	1	2010	FALSE
89598	1/11/2010	18:34:07	41.26	-69.957	18	34	7	2	4	0	4 F	13	54	11	1	2010	FALSE
89598	1/13/2010	21:02:00	41.211	-70.046	21	2	0	193	208	2	18 F	16	21	13	1	2010	FALSE
89598	1/16/2010	0:52:28	41.341	-69.964	0	52	58	191	204	1	26 F	20	13	15	1	2010	TRUE
89598	1/18/2010	6:29:05	41.332	-69.975	6	29	5	190	196	3	31 F	1	49	18	1	2010	TRUE
89598	1/20/2010	6:11:15	41.381	-69.911	6	11	15	191	208	3	30 F	1	31	20	1	2010	TRUE
89598	1/22/2010	9:30:58	41.312	-69.928	9	30	58	190	208	2	34 F	4	51	22	1	2010	TRUE
89598	1/24/2010	15:31:59	41.254	-69.953	15	31	59	193	196	3	4 F	10	52	24	1	2010	FALSE
89598	1/26/2010	17:34:09	41.263	-69.996	17	34	9	191	200	3	28 F	12	54	26	1	2010	FALSE
89598	1/31/2010	0:52:01	41.34	-69.973	0	52	1	4	13	0	4 F	20	12	30	1	2010	TRUE
89598	2/2/2010	1:49:52	41.35	-69.958	1	49	52	2	14	0	4 F	21	10	1	2	2010	TRUE
89598	2/4/2010	6:17:05	41.337	-69.966	6	17	5	191	204	3	40 F	1	37	4	2	2010	TRUE
89598	2/6/2010	7:35:28	41.254	-69.959	7	35	28	190	212	3	42 F	2	55	6	2	2010	TRUE
89598	2/8/2010	13:45:29	41.258	-69.966	13	45	29	191	200	3	14 F	9	5	8	2	2010	FALSE
89598	2/10/2010	16:22:15	41.2	-70.006	16	22	15	3	18	0	4 F	11	42	10	2	2010	FALSE
89598	2/12/2010	20:45:59	41.255	-69.97	20	45	59	192	200	1	50 F	16	6	12	2	2010	FALSE
89598	2/14/2010	23:26:14	41.296	-69.941	23	26	14	192	204	3	5 F	18	46	14	2	2010	TRUE
89598	2/17/2010	1:46:27	41.339	-69.954	1	46	27	191	204	3	4 F	21	6	16	2	2010	TRUE
89598	2/19/2010	6:57:27	41.331	-69.966	6	57	27	4	22	0	4 F	2	17	19	2	2010	TRUE
89598	2/21/2010	7:23:17	41.33	-69.94	7	23	17	2	23	0	4 F	2	43	21	2	2010	TRUE
89598	2/23/2010	7:53:58	41.336	-69.968	7	53	58	192	212	3	20 F	3	14	23	2	2010	TRUE
89598	2/25/2010	11:30:23	41.288	-69.936	11	30	23	192	204	1	41 F	6	50	25	2	2010	TRUE
89598	2/27/2010	13:51:57	41.277	-69.953	13	51	57	192	204	2	17 F	9	12	27	2	2010	FALSE
89598	3/1/2010	18:18:08	41.247	-69.976	18	18	8	191	196	3	5 F	13	38	1	3	2010	FALSE
89598	3/3/2010	21:30:07	41.233	-69.97	21	30	7	193	192	3	51 F	16	50	3	3	2010	FALSE
89598	3/5/2010	23:02:45	41.243	-69.968	23	2	45	191	192	1	13 F	18	22	5	3	2010	TRUE
89598	3/8/2010	1:02:52	41.234	-70.038	1	2	52	2	30	0	4 F	20	22	7	3	2010	TRUE
89598	3/10/2010	6:08:20	41.231	-70.079	6	8	20	190	124	2	13 F	1	28	10	3	2010	TRUE
89598	3/12/2010	11:49:53	41.285	-69.972	11	49	53	191	84	2	24 F	7	9	12	3	2010	FALSE
89598	3/14/2010	15:18:56	41.274	-69.955	15	18	56	3	33	0	4 F	10	39	14	3	2010	FALSE

89598	3/16/2010	18:18:01	41.281	-70.009	18	18	1	193	128	3	21 F	13	37	16	3	2010	FALSE
89598	3/18/2010	22:09:41	41.253	-69.958	22	9	41	192	148	3	48 F	17	29	18	3	2010	FALSE
89598	3/21/2010	2:16:25	41.287	-69.931	2	16	25	1	36	0	4 F	21	36	20	3	2010	TRUE
89598	3/23/2010	8:48:00	41.297	-69.952	8	48	0	189	104	2	58 F	4	8	23	3	2010	TRUE
89598	3/25/2010	12:40:16	41.306	-69.957	12	40	16	193	112	2	19 F	8	0	25	3	2010	FALSE
89598	3/27/2010	18:00:41	41.261	-69.946	18	0	41	193	104	2	62 F	13	20	27	3	2010	FALSE
89598	3/29/2010	21:37:49	41.28	-69.95	21	37	49	193	108	1	22 F	16	58	29	3	2010	FALSE
89598	4/1/2010	1:50:51	41.352	-69.967	1	50	51	192	104	1	34 F	21	10	31	3	2010	TRUE
89598	4/3/2010	7:05:33	41.16	-69.986	7	5	33	4	42	0	4 F	2	25	3	4	2010	TRUE
89598	4/5/2010	10:17:06	40.909	-70.155	10	17	6	192	116	3	43 F	5	36	5	4	2010	TRUE
89598	4/7/2010	16:48:02	40.83	-70.082	16	48	2	192	68	2	20 F	12	7	7	4	2010	FALSE
89598	4/9/2010	20:01:30	40.861	-70.004	20	1	30	3	45	0	4 F	15	21	9	4	2010	FALSE
89598	4/11/2010	22:25:34	40.888	-69.984	22	25	34	191	160	3	5 F	17	45	11	4	2010	FALSE
89598	4/14/2010	6:50:41	40.837	-70.109	6	50	41	191	52	1	6 F	2	10	14	4	2010	TRUE
89598	4/16/2010	9:11:32	40.905	-70.262	9	11	32	190	128	2	6 F	4	30	16	4	2010	TRUE
89598	4/18/2010	13:17:39	40.933	-70.096	13	17	39	1	49	0	4 F	8	37	18	4	2010	FALSE
89598	4/22/2010	23:50:55	40.998	-70.14	23	50	55	193	104	2	12 F	19	10	22	4	2010	TRUE
89598	4/27/2010	11:08:45	47.253	-63.934	11	8	45	192	68	1	45 F	6	53	27	4	2010	TRUE
89598	5/1/2010	21:54:16	47.018	-63.764	21	54	16	2	55	0	4 F	17	39	1	5	2010	FALSE
89598	5/4/2010	2:07:01	46.982	-63.777	2	7	1	190	136	1	22 F	21	51	3	5	2010	TRUE
89598	5/13/2010	0:43:47	47.147	-63.822	0	43	47	1	60	0	4 F	20	28	12	5	2010	TRUE
89599	12/18/2008	20:00:00	41.284	-70.17	20	0	0	0	0	0	0 M	15	19	18	12	2008	FALSE
89599	12/20/2008	1:12:52	41.343	-70.217	1	12	52	190	212	1	6 M	20	31	19	12	2008	TRUE
89599	12/22/2008	2:13:40	41.396	-70.05	2	13	40	1	2	0	2 M	21	33	21	12	2008	TRUE
89599	12/24/2008	7:23:22	41.391	-70.043	7	23	22	192	212	3	13 M	2	43	24	12	2008	TRUE
89599	12/26/2008	11:01:44	41.401	-70.101	11	1	44	2	4	0	2 M	6	21	26	12	2008	TRUE
89599	12/28/2008	15:21:38	41.398	-70.076	15	21	38	192	212	1	23 M	10	41	28	12	2008	FALSE
89599	12/30/2008	20:49:27	41.388	-70.083	20	49	27	192	208	1	1 M	16	9	30	12	2008	FALSE
89599	1/1/2009	21:41:43	41.044	-70.095	21	41	43	191	220	2	2 M	17	1	1	1	2009	FALSE
89599	1/4/2009	9:04:59	41.346	-70.018	2	4	59	190	216	1	7 M	21	24	3	1	2009	TRUE
89599	1/6/2009	2:24:12	41.402	-70.025	9	24	12	190	208	2	10 M	4	44	6	1	2009	TRUE
89599	1/8/2009	10:51:23	41.356	-70.087	10	51	23	1	10	0	2 M	6	11	8	1	2009	TRUE
89599	1/12/2009	22:16:37	41.389	-70.086	22	16	37	4	12	0	2 M	17	36	12	1	2009	FALSE
98732	11/22/2009	19:30:00	41.284	-70.17	19	30	0	0	0	0	0 F	14	49	22	11	2009	FALSE
98732	11/23/2009	21:29:47	41.289	-70.162	21	29	47	193	192	1	9 F	16	49	23	11	2009	FALSE
98732	11/26/2009	0:42:54	41.288	-70.199	0	42	54	193	192	1	22 F	20	2	25	11	2009	TRUE
98732	11/28/2009	6:52:15	41.259	-70.147	6	52	15	190	184	1	24 F	2	11	28	11	2009	TRUE
98732	11/30/2009	10:12:45	41.36	-70.232	10	12	45	3	4	0	2 F	5	31	30	11	2009	TRUE
98732	12/2/2009	11:31:50	41.261	-70.167	11	31	50	191	192	2	32 F	6	51	2	12	2009	TRUE
98732	12/4/2009	16:28:56	41.241	-70.113	16	28	56	193	188	1	58 F	11	48	4	12	2009	FALSE
98732	12/6/2009	19:37:16	41.244	-70.122	19	37	16	1	7	0	2 F	14	56	6	12	2009	FALSE
98732	12/8/2009	23:26:42	41.355	-70.228	23	26	42	1	8	0	2 F	18	45	8	12	2009	TRUE
98732	12/11/2009	7:32:26	41.23	-70.007	7	32	26	190	176	1	1 F	2	52	11	12	2009	TRUE
98732	12/13/2009	7:37:36	41.514	-70.198	7	37	36	1	10	0	2 F	2	56	13	12	2009	TRUE
98732	12/15/2009	11:20:20	41.274	-70.211	11	20	20	191	192	2	33 F	6	39	15	12	2009	TRUE
98732	12/17/2009	16:17:52	41.176	-70.037	16	17	52	193	188	1	41 F	11	37	17	12	2009	FALSE
98732	12/19/2009	22:45:33	41.335	-70.251	22	45	33	191	176	1	61 F	18	4	19	12	2009	TRUE
98732	12/22/2009	2:16:11	41.287	-70.201	2	16	11	191	180	3	36 F	21	35	21	12	2009	TRUE
98732	12/24/2009	3:10:15	41.23	-69.975	3	10	15	193	188	1	42 F	22	30	23	12	2009	TRUE

98732	12/26/2009	6:36:04	41.254	-70.242	6	36	4	1	16	0	2 F	1	55	26	12	2009	TRUE
98732	12/28/2009	11:08:33	41.35	-69.958	11	8	33	189	192	1	58 F	6	28	28	12	2009	TRUE
98732	12/30/2009	15:49:51	41.25	-69.959	15	49	51	192	188	1	4 F	11	10	30	12	2009	FALSE
98732	1/1/2010	20:24:15	41.226	-70.085	20	24	15	194	184	3	36 F	15	43	1	1	2010	FALSE
98732	1/3/2010	23:20:49	41.268	-69.935	23	20	49	2	20	0	2 F	18	41	3	1	2010	TRUE
98732	1/6/2010	5:12:39	41.295	-69.96	5	12	39	192	176	1	33 F	0	32	6	1	2010	TRUE
98732	1/8/2010	5:59:20	41.32	-69.973	5	59	20	1	22	0	2 F	1	19	8	1	2010	TRUE
98732	1/10/2010	10:30:54	41.253	-69.966	10	30	54	189	188	1	34 F	5	51	10	1	2010	TRUE
98732	1/12/2010	14:39:56	40.931	-70.135	14	39	56	193	188	3	57 F	9	59	12	1	2010	FALSE
98732	1/14/2010	21:09:40	40.988	-70.22	21	9	40	4	25	0	2 F	16	28	14	1	2010	FALSE
98732	1/17/2010	0:40:58	41.264	-69.958	0	40	58	4	26	0	2 F	20	1	16	1	2010	TRUE
98732	1/19/2010	1:40:01	41.258	-69.97	1	40	1	1	27	0	2 F	21	0	18	1	2010	TRUE
98732	1/21/2010	6:00:02	41.297	-69.982	6	0	2	1	28	0	2 F	1	20	21	1	2010	TRUE
98732	1/23/2010	11:18:09	41.252	-70.118	11	18	9	3	29	0	2 F	6	37	23	1	2010	TRUE
98732	1/25/2010	15:10:22	41.246	-69.973	15	10	22	192	184	2	62 F	10	30	25	1	2010	FALSE
98732	1/27/2010	19:10:05	41.26	-69.958	19	10	5	192	180	2	33 F	14	30	27	1	2010	FALSE
98732	1/29/2010	23:16:35	41.255	-69.956	23	16	35	192	180	1	50 F	18	36	29	1	2010	TRUE
98732	2/1/2010	0:31:35	41.256	-69.974	0	31	35	1	33	0	2 F	19	51	31	1	2010	TRUE
98732	2/3/2010	8:04:32	41.238	-69.98	8	4	32	191	176	3	6 F	3	24	3	2	2010	TRUE
98732	2/5/2010	10:25:16	41.236	-70.033	10	25	16	3	35	0	2 F	5	45	5	2	2010	TRUE
98732	2/7/2010	14:39:49	41.24	-69.993	14	39	49	192	180	3	23 F	9	59	7	2	2010	FALSE
98732	2/9/2010	16:48:10	41.247	-69.965	16	48	10	192	188	3	25 F	12	8	9	2	2010	FALSE
98732	2/12/2010	0:21:51	41.323	-69.947	0	21	51	189	172	3	42 F	19	42	11	2	2010	TRUE
98732	2/14/2010	2:42:39	41.352	-69.922	2	42	39	191	180	2	43 F	22	2	13	2	2010	TRUE
98732	2/16/2010	6:33:29	41.33	-69.933	6	33	29	3	40	0	2 F	1	53	16	2	2010	TRUE
98732	2/18/2010	8:41:35	41.277	-69.93	8	41	35	1	41	0	2 F	4	1	18	2	2010	TRUE
98732	2/20/2010	14:34:02	41.269	-69.976	14	34	2	192	184	1	49 F	9	54	20	2	2010	FALSE
98732	2/22/2010	17:51:37	41.259	-69.964	17	51	37	192	188	1	57 F	13	11	22	2	2010	FALSE
98732	2/24/2010	21:28:39	41.275	-69.954	21	28	39	1	44	0	2 F	16	48	24	2	2010	FALSE
98732	2/27/2010	3:15:13	41.31	-69.95	3	15	13	192	184	2	11 F	22	35	26	2	2010	TRUE
98732	3/1/2010	6:00:47	41.242	-69.897	6	0	47	1	46	0	2 F	1	21	1	3	2010	TRUE
98732	3/3/2010	10:18:42	41.219	-70.016	10	18	42	1	47	0	2 F	5	38	3	3	2010	TRUE
98732	3/5/2010	14:27:57	41.271	-69.964	14	27	57	192	188	1	33 F	9	48	5	3	2010	FALSE
98732	3/7/2010	21:35:48	41.274	-69.946	21	35	48	193	176	1	46 F	16	56	7	3	2010	FALSE
98732	3/10/2010	1:05:11	41.321	-69.93	1	5	11	191	176	2	56 F	20	25	9	3	2010	TRUE
98732	3/12/2010	2:04:29	41.333	-69.969	2	4	29	190	192	3	56 F	21	24	11	3	2010	TRUE
98732	3/14/2010	9:05:44	41.379	-70.112	9	5	44	3	52	0	2 F	4	25	14	3	2010	TRUE
98732	3/16/2010	13:33:13	41.251	-69.959	13	33	13	4	53	0	2 F	8	53	16	3	2010	FALSE
98732	3/18/2010	15:36:34	41.27	-69.952	15	36	34	2	54	0	2 F	10	56	18	3	2010	FALSE
98732	3/20/2010	19:42:19	41.251	-69.947	19	42	19	2	55	0	2 F	15	2	20	3	2010	FALSE
98732	3/23/2010	0:14:47	41.23	-69.975	0	14	47	191	188	3	9 F	19	34	22	3	2010	TRUE
98732	3/25/2010	2:34:48	41.179	-70.02	2	34	48	191	192	2	9 F	21	54	24	3	2010	TRUE
98732	3/27/2010	8:53:22	41.178	-70.14	8	53	22	191	184	2	17 F	4	12	27	3	2010	TRUE
98732	3/29/2010	13:28:17	41.27	-69.957	13	28	17	192	180	2	21 F	8	48	29	3	2010	FALSE
98732	3/31/2010	16:23:21	41.248	-69.947	16	23	21	2	60	0	2 F	11	43	31	3	2010	FALSE
98732	4/2/2010	20:52:50	41.256	-69.947	20	52	50	3	61	0	2 F	16	13	2	4	2010	FALSE
98732	4/5/2010	1:50:40	41.223	-69.996	1	50	40	4	62	0	2 F	21	10	4	4	2010	TRUE
98732	4/7/2010	3:07:15	41.22	-69.996	3	7	15	191	188	1	7 F	22	27	6	4	2010	TRUE
98732	4/9/2010	6:38:34	41.257	-69.937	6	38	34	1	64	0	2 F	1	58	9	4	2010	TRUE

98732	4/11/2010	10:59:15	41.289	-69.937	10	59	15	191	188	2	16 F	6	19	11	4	2010	TRUE
98732	4/18/2010	19:44:50	40.772	-69.834	19	44	50	4	2	0	2 F	15	5	18	4	2010	FALSE
98732	4/26/2010	1:35:08	50.187	-63.375	1	35	8	4	3	0	3 F	21	21	25	4	2010	TRUE
98732	5/3/2010	5:11:18	50.171	-63.311	5	11	18	191	180	2	60 F	0	58	3	5	2010	TRUE
98732	5/10/2010	7:49:29	50.158	-63.332	7	49	29	190	192	2	60 F	3	36	10	5	2010	TRUE
98732	5/17/2010	14:53:32	50.217	-63.354	14	53	32	193	176	2	9 F	10	40	17	5	2010	FALSE
98732	5/24/2010	20:25:47	56.288	-77.87	20	25	47	193	176	3	29 F	15	14	24	5	2010	FALSE
98732	5/31/2010	23:13:55	62.333	-78.155	23	13	55	2	8	0	2 F	18	1	31	5	2010	TRUE
98732	6/8/2010	3:45:08	62.088	-77.57	3	45	8	192	184	3	53 F	22	34	7	6	2010	TRUE
98732	6/15/2010	10:08:30	62.111	-77.576	10	8	30	191	172	2	58 F	4	58	15	6	2010	TRUE
98732	6/22/2010	13:28:18	62.103	-77.567	13	28	18	192	176	1	60 F	8	18	22	6	2010	FALSE
98732	6/29/2010	15:57:53	62.106	-77.577	15	57	53	193	180	2	62 F	10	47	29	6	2010	FALSE
98732	7/6/2010	17:41:25	62.106	-77.577	17	41	25	4	13	0	3 F	12	31	6	7	2010	FALSE
98733	11/22/2009	19:30:00	41.284	-70.17	19	30	0	0	0	0	0 F	14	49	22	11	2009	FALSE
98733	11/23/2009	23:02:57	41.29	-70.166	23	2	57	192	216	2	4 F	18	22	23	11	2009	TRUE
98733	11/26/2009	1:58:10	41.273	-70.27	1	58	10	192	212	2	8 F	21	17	25	11	2009	TRUE
98733	11/28/2009	6:31:40	41.257	-70.2	6	31	40	4	3	0	2 F	1	50	28	11	2009	TRUE
98733	11/30/2009	7:48:40	41.293	-70.248	7	48	40	3	4	0	2 F	3	7	30	11	2009	TRUE
98733	12/2/2009	9:48:59	41.233	-70.131	9	48	59	190	208	3	17 F	5	8	2	12	2009	TRUE
98733	12/4/2009	11:06:33	41.346	-70.147	11	6	33	190	216	1	21 F	6	25	4	12	2009	TRUE
98733	12/6/2009	16:59:35	41.288	-70.246	16	59	35	194	204	1	29 F	12	18	6	12	2009	FALSE
98733	12/8/2009	16:12:49	41.265	-70.36	16	12	49	1	8	0	2 F	11	31	8	12	2009	FALSE
98733	12/10/2009	19:14:43	41.243	-70.282	19	14	43	194	212	1	30 F	14	33	10	12	2009	FALSE
98733	12/12/2009	22:13:51	41.358	-70.189	22	13	51	193	208	2	62 F	17	33	12	12	2009	FALSE
98733	12/15/2009	1:41:22	41.221	-70.134	1	41	22	3	11	0	2 F	21	0	14	12	2009	TRUE
98733	12/17/2009	2:32:46	41.223	-70.109	2	32	46	191	208	3	8 F	21	52	16	12	2009	TRUE
98733	12/19/2009	6:10:09	41.237	-70.119	6	10	9	3	13	0	2 F	1	29	19	12	2009	TRUE
98733	12/21/2009	7:28:06	41.245	-70.152	7	28	6	190	208	3	14 F	2	47	21	12	2009	TRUE
98733	12/23/2009	11:27:25	41.271	-70.07	11	27	25	191	204	2	21 F	6	47	23	12	2009	TRUE
98733	12/25/2009	11:58:03	41.242	-70.152	11	58	3	2	16	0	2 F	7	17	25	12	2009	FALSE
98733	12/27/2009	14:14:58	41.233	-70.038	14	14	58	192	212	3	2 F	9	34	27	12	2009	FALSE
98733	12/29/2009	19:13:35	41.235	-70.049	19	13	35	4	18	0	2 F	14	33	29	12	2009	FALSE
98733	12/31/2009	21:17:48	41.217	-70.02	21	17	48	192	204	1	54 F	16	37	31	12	2009	FALSE
98733	1/2/2010	23:32:55	41.24	-70.142	23	32	55	192	208	3	5 F	18	52	2	1	2010	TRUE
98733	1/5/2010	3:10:36	41.259	-70.202	3	10	36	3	21	0	2 F	22	29	4	1	2010	TRUE
98733	1/7/2010	6:43:53	41.262	-70.22	6	43	53	4	22	0	2 F	2	3	7	1	2010	TRUE
98733	1/9/2010	8:02:52	41.261	-70.178	8	2	52	3	23	0	2 F	3	22	9	1	2010	TRUE
98733	1/11/2010	10:31:37	41.262	-70.203	10	31	37	2	24	0	2 F	5	50	11	1	2010	TRUE
98733	1/13/2010	11:24:31	41.253	-70.159	11	24	31	190	216	2	37 F	6	43	13	1	2010	TRUE
98733	1/15/2010	16:49:24	41.245	-70.161	16	49	24	192	204	1	22 F	12	8	15	1	2010	FALSE
98733	1/17/2010	19:31:01	41.242	-70.202	19	31	1	194	204	3	41 F	14	50	17	1	2010	FALSE
98733	1/19/2010	23:32:32	41.253	-70.183	23	32	32	190	200	1	14 F	18	51	19	1	2010	TRUE
98733	1/22/2010	0:13:59	41.085	-70.254	0	13	59	2	29	0	2 F	19	32	21	1	2010	TRUE
98733	1/24/2010	3:17:29	41.232	-70.204	3	17	29	191	204	1	21 F	22	36	23	1	2010	TRUE
98733	1/26/2010	6:09:32	41.258	-70.254	6	9	32	3	31	0	2 F	1	28	26	1	2010	TRUE
98733	1/28/2010	10:25:26	41.049	-69.951	10	25	26	4	32	0	2 F	5	45	28	1	2010	TRUE
98733	1/30/2010	9:37:30	41.04	-69.959	9	37	30	190	212	2	26 F	4	57	30	1	2010	TRUE
98733	2/1/2010	15:14:45	40.821	-69.941	15	14	45	4	34	0	2 F	10	34	1	2	2010	FALSE
98733	2/3/2010	16:08:17	40.805	-69.534	16	8	17	2	35	0	2 F	11	30	3	2	2010	FALSE

98738	1/9/2010	17:15:35	41.294	-70.241	17	15	35	3	22	0	2 M	12	34	9	1	2010	FALSE
98738	1/11/2010	18:34:52	41.294	-70.236	18	34	52	1	23	0	2 M	13	53	11	1	2010	FALSE
98738	1/14/2010	0:00:40	41.291	-70.243	0	0	40	192	208	1	30 M	19	19	13	1	2010	TRUE
98738	1/16/2010	1:01:53	41.292	-70.247	1	1	53	191	216	3	30 M	20	20	15	1	2010	TRUE
98738	1/18/2010	6:31:09	41.332	-70.18	6	31	9	190	208	3	33 M	1	50	18	1	2010	TRUE
98739	11/24/2009	20:00:00	41.284	-70.17	20	0	0	0	0	0	0 F	15	19	24	11	2009	FALSE
98739	11/26/2009	2:23:40	41.289	-70.161	2	23	40	3	1	0	2 F	21	43	25	11	2009	TRUE
98739	11/28/2009	6:29:46	41.288	-70.167	6	29	46	191	188	2	2 F	1	49	28	11	2009	TRUE
98739	11/30/2009	9:00:41	41.271	-69.954	9	0	41	189	188	1	3 F	4	20	30	11	2009	TRUE
98739	12/2/2009	9:47:30	41.294	-69.938	9	47	30	191	196	1	3 F	5	7	2	12	2009	TRUE
98739	12/4/2009	12:46:53	41.288	-69.959	12	46	53	192	196	3	4 F	8	7	4	12	2009	FALSE
98739	12/6/2009	16:58:42	41.241	-69.986	16	58	42	192	192	1	7 F	12	18	6	12	2009	FALSE
98739	12/8/2009	19:33:00	41.258	-69.989	19	33	0	2	7	0	2 F	14	53	8	12	2009	FALSE
98739	12/10/2009	21:23:29	41.351	-69.977	21	23	29	194	192	2	33-F	16	43	10	12	2009	FALSE
98739	12/13/2009	0:47:13	41.287	-69.951	0	47	13	2	9	0	2 F	20	7	12	12	2009	TRUE
98739	12/15/2009	2:06:48	41.335	-69.972	2	6	48	190	196	2	39 F	21	26	14	12	2009	TRUE
98739	12/17/2009	6:30:48	41.292	-69.963	6	30	48	191	192	3	41 F	1	50	17	12	2009	TRUE
98739	12/19/2009	9:48:58	41.234	-70.067	9	48	58	2	12	0	2 F	5	8	19	12	2009	TRUE
98739	12/21/2009	13:12:01	41.202	-69.882	13	12	1	2	13	0	2 F	8	32	21	12	2009	FALSE
98739	12/23/2009	16:54:06	41.271	-69.934	16	54	6	193	188	3	1 F	12	14	23	12	2009	FALSE
98739	12/25/2009	18:15:24	41.225	-70.008	18	15	24	1	15	0	2 F	13	35	25	12	2009	FALSE
98739	12/27/2009	21:15:07	41.266	-69.955	21	15	7	1	16	0	2 F	16	35	27	12	2009	FALSE
98739	12/30/2009	2:31:56	41.244	-70.034	2	31	56	189	188	1	29 F	21	51	29	12	2009	TRUE
98739	1/1/2010	17:00:37	41.246	-70.033	17	0	37	89	80	2	28 F	12	20	1	1	2010	FALSE
98739	1/13/2010	21:05:02	41.246	-70.032	21	5	2	6	17	1	9 F	15	24	13	1	2010	FALSE
98739	1/13/2010	2:03:19	41.247	-70.031	2	3	19	72	76	2	38 F	21	23	12	1	2010	TRUE
98739	1/16/2010	0:53:45	41.245	-70.033	0	53	45	119	149	1	15 F	20	13	15	1	2010	TRUE
98739	1/16/2010	18:18:34	41.248	-70.026	18	18	34	14	24	0	10 F	13	38	16	1	2010	FALSE
98739	1/17/2010	14:40:17	41.248	-70.034	14	40	17	73	32	3	38 F	10	0	17	1	2010	FALSE