# DataSourceCheck

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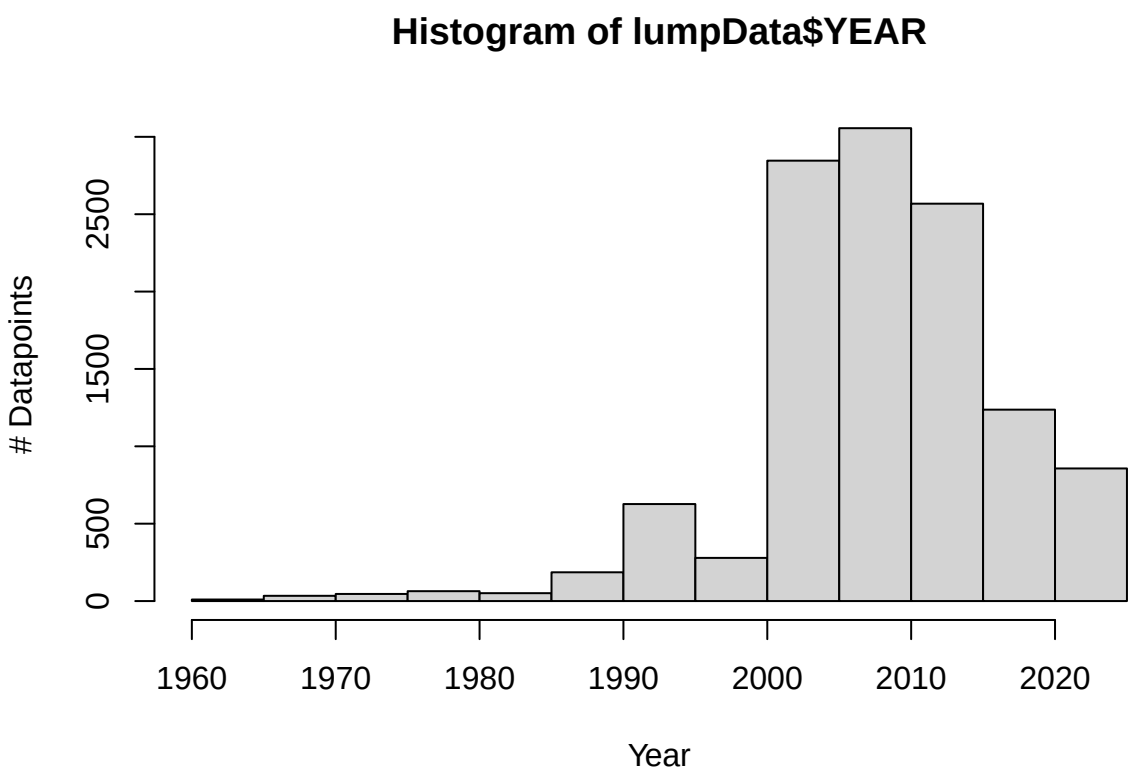


Figure 1: Number of datapoints per year

| YEAR | count |
|---|---|
| 1963 | 3 |
| 1964 | 1 |
| 1965 | 6 |
| 1966 | 3 |
| 1967 | 10 |
| 1968 | 4 |
| 1969 | 8 |
| 1970 | 9 |
| 1971 | 8 |
| 1972 | 7 |
| 1973 | 14 |
| 1974 | 6 |
| 1975 | 11 |
| 1976 | 3 |
| 1977 | 7 |
| 1978 | 16 |
| 1979 | 15 |
| 1980 | 23 |
| 1981 | 13 |
| 1982 | 21 |
| 1983 | 5 |
| 1984 | 7 |
| 1985 | 5 |
| 1986 | 20 |
| 1987 | 18 |
| 1988 | 12 |
| 1989 | 56 |
| 1990 | 80 |
| 1991 | 107 |
| 1992 | 129 |
| 1993 | 176 |
| 1994 | 114 |
| 1995 | 101 |
| 1996 | 64 |
| 1997 | 95 |
| 1998 | 48 |
| 1999 | 28 |
| 2000 | 44 |
| 2001 | 64 |
| 2002 | 86 |
| 2003 | 338 |
| 2004 | 617 |
| 2005 | 1741 |
| 2006 | 427 |
| 2007 | 472 |
| 2008 | 571 |
| 2009 | 750 |
| 2010 | 836 |
| 2011 | 699 |
| 2012 | 405 |
| 2013 | 289 |
| 2014 | 584 |
| 2015 | 591 |
| 2016 | 186 |
| 2017 | 357 |
| 2018 | 265 |
| 2019 | 238 |
| 2020 | 191 |
| 2021 | 849 |
| 2022 | 8 |

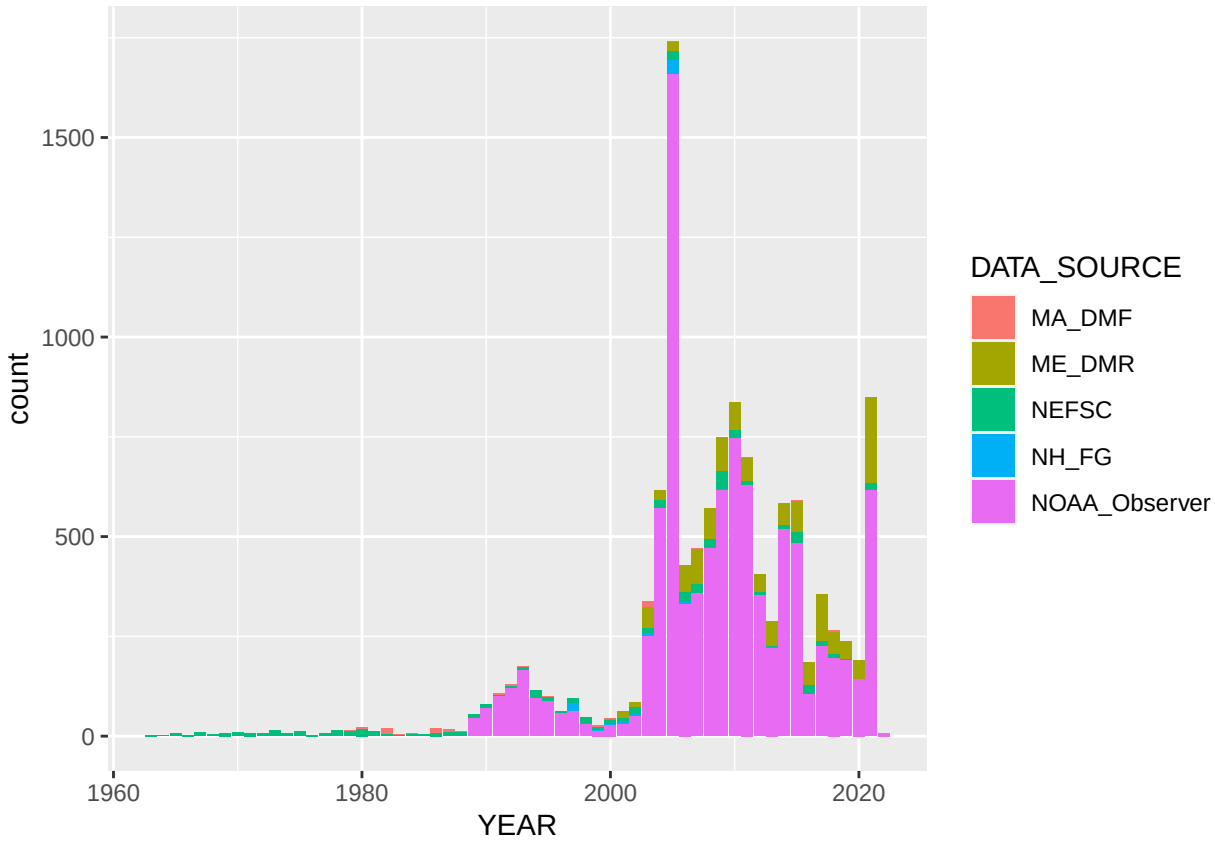


Figure 2: Number of datapoints per year separated by Data Source

Table 2: Year and Source Breakdown (1/2)

| YEAR | DATA_SOURCE | count |
|---|---|---|
| 1963 | NEFSC | 3 |
| 1964 | NEFSC | 1 |
| 1965 | NEFSC | 6 |
| 1966 | NEFSC | 3 |
| 1967 | NEFSC | 10 |
| 1968 | NEFSC | 4 |
| 1969 | NEFSC | 8 |
| 1970 | NEFSC | 9 |
| 1971 | NEFSC | 8 |
| 1972 | NEFSC | 7 |
| 1973 | NEFSC | 14 |
| 1974 | NEFSC | 6 |
| 1975 | NEFSC | 11 |
| 1976 | NEFSC | 3 |
| 1977 | NEFSC | 7 |
| 1978 | MA_DMF | 2 |
| 1978 | NEFSC | 14 |
| 1979 | MA_DMF | 3 |
| 1979 | NEFSC | 12 |
| 1980 | MA_DMF | 5 |
| 1980 | NEFSC | 18 |
| 1981 | MA_DMF | 2 |
| 1981 | NEFSC | 11 |
| 1982 | MA_DMF | 17 |
| 1982 | NEFSC | 4 |
| 1983 | MA_DMF | 3 |
| 1983 | NEFSC | 2 |
| 1984 | MA_DMF | 2 |
| 1984 | NEFSC | 5 |
| 1985 | NEFSC | 5 |
| 1986 | MA_DMF | 12 |
| 1986 | NEFSC | 8 |
| 1987 | MA_DMF | 8 |
| 1987 | NEFSC | 10 |
| 1988 | MA_DMF | 3 |
| 1988 | NEFSC | 9 |
| 1989 | NEFSC | 11 |
| 1989 | NOAA_Observer | 45 |
| 1990 | MA_DMF | 1 |
| 1990 | NEFSC | 9 |
| 1990 | NOAA_Observer | 70 |
| 1991 | MA_DMF | 4 |
| 1991 | NEFSC | 3 |
| 1991 | NOAA_Observer | 100 |
| 1992 | MA_DMF | 4 |
| 1992 | NEFSC | 6 |
| 1992 | NOAA_Observer | 119 |
| 1993 | MA_DMF | 4 |
| 1993 | NEFSC | 7 |
| 1993 | NOAA_Observer | 165 |
| 1994 | NEFSC | 19 |
| 1994 | NOAA_Observer | 95 |
| 1995 | MA_DMF | 4 |
| 1995 | NEFSC | 10 |
| 1995 | NOAA_Observer | 87 |
| 1996 | NEFSC | 7 |
| 1996 | NOAA_Observer | 57 |
| 1997 | NEFSC | 12 |
| 1997 | NH_FG | 21 |
| 1997 | NOAA_Observer | 62 |
| 1998 | MA_DMF | 2 |
| 1998 | NEFSC | 13 |
| 1998 | NH_FG | 4 |
| 1998 | NOAA_Observer | 29 |
| 1999 | MA_DMF | 6 |
| 1999 | NEFSC | 8 |
| 1999 | NH_FG | 1 |
| 1999 | NOAA_Observer | 13 |
| 2000 | MA_DMF | 1 |
| 2000 | ME_DMR | 3 |
| 2000 | NEFSC | 10 |
| 2000 | NH_FG | 2 |
| 2000 | NOAA_Observer | 28 |
| 2001 | MA_DMF | 2 |
| 2001 | ME_DMR | 17 |
| 2001 | NEFSC | 7 |
| 2001 | NH_FG | 8 |
| 2001 | NOAA_Observer | 30 |
| 2002 | MA_DMF | 1 |
| 2002 | ME_DMR | 13 |

| YEAR | MinLat | MaxLat | MinLong | MaxLong |
|---|---|---|---|---|
| 1963 | 41.83333 | 43.35000 | -69.96667 | -68.53333 |
| 1964 | 44.05000 | 44.05000 | -68.21667 | -68.21667 |
| 1965 | 40.45000 | 43.61667 | -68.80000 | -65.75000 |
| 1966 | 41.56667 | 43.05000 | -70.25000 | -68.68333 |
| 1967 | 41.25000 | 43.45000 | -69.88333 | -64.60000 |

*(continued)*

| YEAR | MinLat | MaxLat | MinLong | MaxLong |
|---|---|---|---|---|
| 1968 | 41.56667 | 43.03333 | -70.61667 | -65.63333 |
| 1969 | 40.58333 | 44.65000 | -69.98333 | -64.70000 |
| 1970 | 40.63333 | 43.61667 | -70.00000 | -64.50000 |
| 1971 | 41.78333 | 43.95000 | -68.58333 | -64.46667 |
| 1972 | 42.20000 | 44.28333 | -70.25000 | -66.56667 |
| 1973 | 41.43333 | 44.20000 | -70.28333 | -64.13333 |
| 1974 | 42.91667 | 43.41667 | -70.11667 | -64.11667 |
| 1975 | 42.25000 | 44.16667 | -70.20000 | -66.98333 |
| 1976 | 41.73333 | 43.75000 | -69.76667 | -64.28333 |
| 1977 | 40.90000 | 44.30000 | -69.66667 | -65.83333 |
| 1978 | 41.08333 | 44.21667 | -70.42267 | -63.90000 |
| 1979 | 41.35000 | 44.35000 | -70.92517 | -65.38333 |
| 1980 | 39.20000 | 44.30000 | -74.55000 | -65.35000 |
| 1981 | 40.85000 | 44.31667 | -70.75117 | -65.21667 |
| 1982 | 41.74217 | 43.71667 | -70.74250 | -65.45000 |
| 1983 | 42.70817 | 43.90000 | -70.75083 | -68.43333 |
| 1984 | 42.06767 | 44.31667 | -70.63950 | -66.41667 |
| 1985 | 41.40000 | 44.01667 | -70.40000 | -66.63333 |
| 1986 | 41.97450 | 44.31667 | -70.71350 | -66.60000 |
| 1987 | 41.85000 | 44.35000 | -70.73333 | -66.70000 |
| 1988 | 42.31667 | 44.11667 | -70.69883 | -66.58333 |
| 1989 | 39.51862 | 44.28224 | -72.39420 | -65.95000 |
| 1990 | 40.41691 | 44.26667 | -70.87109 | -66.41667 |
| 1991 | 40.41691 | 44.28224 | -70.79617 | -67.44059 |
| 1992 | 39.51862 | 44.28224 | -72.39420 | -66.63333 |
| 1993 | 40.49857 | 44.28224 | -71.46660 | -66.52396 |
| 1994 | 40.49857 | 44.16667 | -71.46660 | -66.58333 |
| 1995 | 39.49140 | 44.28224 | -73.50714 | -67.39261 |
| 1996 | 41.23352 | 43.68333 | -70.53333 | -66.60000 |
| 1997 | 40.41691 | 44.41667 | -70.85419 | -66.36667 |
| 1998 | 39.49140 | 44.11667 | -73.50714 | -66.71667 |
| 1999 | 40.01933 | 44.21433 | -71.46660 | -66.58733 |
| 2000 | 37.01467 | 44.58780 | -74.73383 | -66.36767 |
| 2001 | 39.51862 | 44.65595 | -72.39420 | -66.75609 |
| 2002 | 41.72350 | 44.53153 | -70.85419 | -66.59317 |
| 2003 | 40.41691 | 44.59635 | -71.46660 | -66.79142 |
| 2004 | 38.51146 | 44.77074 | -73.50994 | -66.16967 |
| 2005 | 39.49140 | 44.62450 | -73.50714 | -66.49225 |
| 2006 | 40.41691 | 44.50639 | -70.82003 | -66.46847 |
| 2007 | 40.41691 | 44.76868 | -70.95550 | -66.74728 |
| 2008 | 40.41691 | 44.72416 | -70.87109 | -66.63096 |
| 2009 | 37.50430 | 44.52421 | -74.51710 | -66.64065 |
| 2010 | 37.50430 | 44.64460 | -74.51710 | -67.10059 |
| 2011 | 40.60745 | 44.65062 | -70.87109 | -66.79142 |
| 2012 | 41.72350 | 44.52500 | -70.60698 | -67.15181 |
| 2013 | 38.51146 | 44.44257 | -73.50994 | -66.76661 |
| 2014 | 40.60745 | 44.68487 | -70.87109 | -67.11232 |
| 2015 | 40.41691 | 44.49910 | -70.87109 | -66.76661 |
| 2016 | 39.51862 | 44.59638 | -72.49803 | -66.44018 |
| 2017 | 35.48997 | 44.73924 | -75.28286 | -66.79142 |
| 2018 | 40.96812 | 44.68482 | -70.67387 | -66.09097 |
| 2019 | 41.72350 | 44.66759 | -70.63820 | -67.09868 |
| 2020 | 38.51146 | 44.74422 | -73.50994 | -67.01329 |
| 2021 | 40.41691 | 44.73650 | -70.71811 | -66.93450 |
| 2022 | 42.40401 | 42.40401 | -70.37739 | -70.37739 |

Table 3: Year and Source Breakdown (2/2)

| YEAR | DATA_SOURCE | count | YEAR | DATA_SOURCE | count |
|---|---|---|---|---|---|
| 2002 | NEFSC | 17 | 2011 | NEFSC | 9 |
| 2002 | NH_FG | 5 | 2011 | NOAA_Observer | 629 |
| 2002 | NOAA_Observer | 50 | 2012 | ME_DMR | 43 |
| 2003 | MA_DMF | 15 | 2012 | NEFSC | 10 |
| 2003 | ME_DMR | 54 | 2012 | NOAA_Observer | 352 |
| 2003 | NEFSC | 11 | 2013 | MA_DMF | 1 |
| 2003 | NH_FG | 9 | 2013 | ME_DMR | 61 |
| 2003 | NOAA_Observer | 249 | 2013 | NEFSC | 5 |
| 2004 | ME_DMR | 25 | 2013 | NH_FG | 1 |
| 2004 | NEFSC | 20 | 2013 | NOAA_Observer | 221 |
| 2004 | NH_FG | 2 | 2014 | ME_DMR | 55 |
| 2004 | NOAA_Observer | 570 | 2014 | NEFSC | 11 |
| 2005 | MA_DMF | 2 | 2014 | NOAA_Observer | 518 |
| 2005 | ME_DMR | 23 | 2015 | MA_DMF | 1 |
| 2005 | NEFSC | 21 | 2015 | ME_DMR | 80 |
| 2005 | NH_FG | 37 | 2015 | NEFSC | 26 |
| 2005 | NOAA_Observer | 1658 | 2015 | NH_FG | 2 |
| 2006 | ME_DMR | 68 | 2015 | NOAA_Observer | 482 |
| 2006 | NEFSC | 23 | 2016 | ME_DMR | 57 |
| 2006 | NH_FG | 5 | 2016 | NEFSC | 25 |
| 2006 | NOAA_Observer | 331 | 2016 | NOAA_Observer | 104 |
| 2007 | MA_DMF | 5 | 2017 | MA_DMF | 2 |
| 2007 | ME_DMR | 86 | 2017 | ME_DMR | 118 |
| 2007 | NEFSC | 23 | 2017 | NEFSC | 12 |
| 2007 | NOAA_Observer | 358 | 2017 | NOAA_Observer | 225 |
| 2008 | ME_DMR | 78 | 2018 | MA_DMF | 4 |
| 2008 | NEFSC | 20 | 2018 | ME_DMR | 56 |
| 2008 | NH_FG | 3 | 2018 | NEFSC | 9 |
| 2008 | NOAA_Observer | 470 | 2018 | NOAA_Observer | 196 |
| 2009 | MA_DMF | 1 | 2019 | MA_DMF | 1 |
| 2009 | ME_DMR | 84 | 2019 | ME_DMR | 44 |
| 2009 | NEFSC | 47 | 2019 | NEFSC | 3 |
| 2009 | NH_FG | 3 | 2019 | NOAA_Observer | 190 |
| 2009 | NOAA_Observer | 615 | 2020 | ME_DMR | 48 |
| 2010 | ME_DMR | 70 | 2020 | NOAA_Observer | 143 |
| 2010 | NEFSC | 19 | 2021 | MA_DMF | 1 |
| 2010 | NH_FG | 1 | 2021 | ME_DMR | 214 |
| 2010 | NOAA_Observer | 746 | 2021 | NEFSC | 18 |
| 2011 | MA_DMF | 1 | 2021 | NOAA_Observer | 616 |
| 2011 | ME_DMR | 60 | 2022 | NOAA_Observer | 8 |

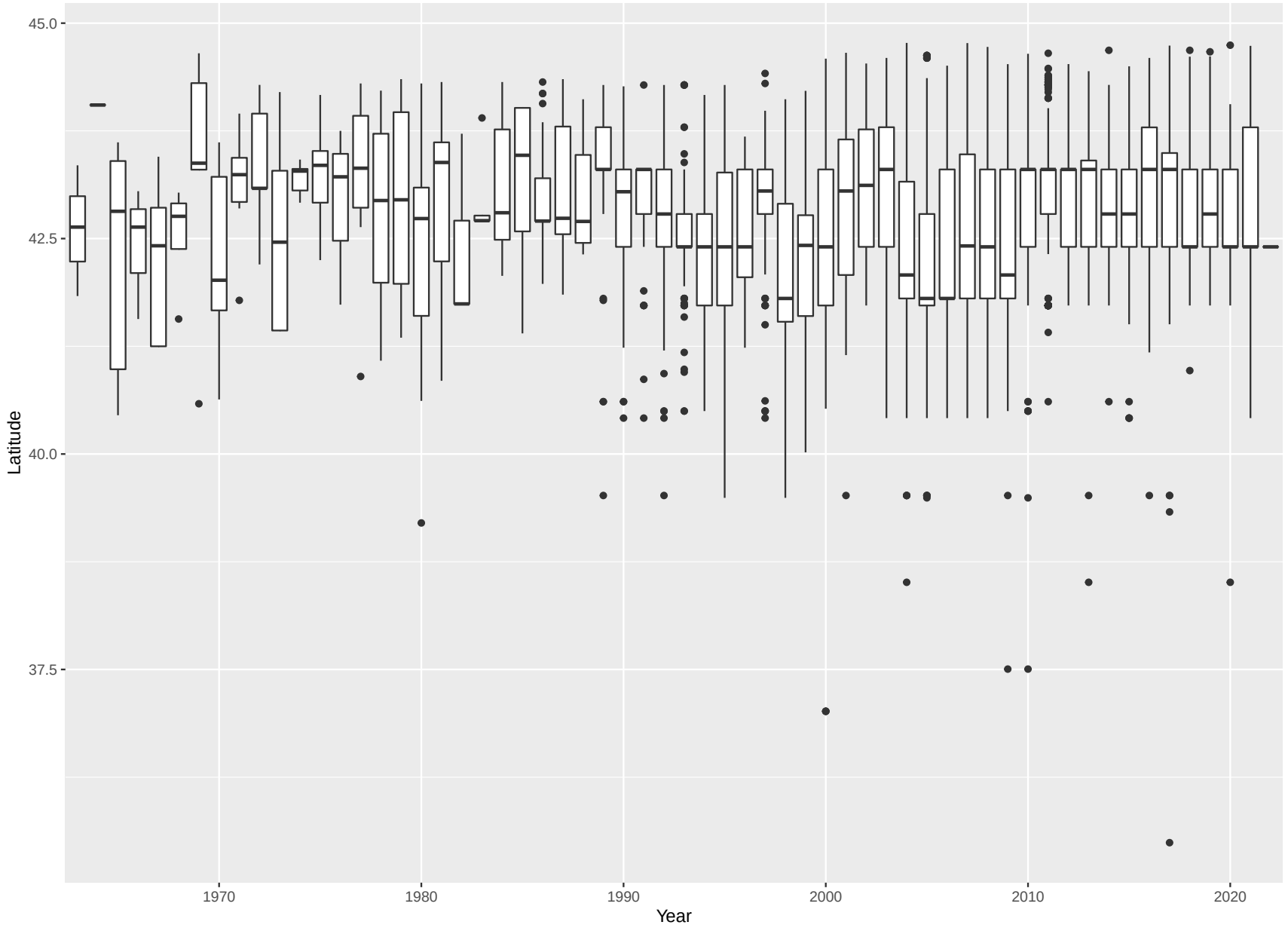


Figure 3: Range of latitudes Lumpfish were collected at per year

| Source | Gear.Type | Negative.Catch. |
|---|---|---|
| MA_DMF | Trawl net is a ¾ size North Atlantic type two seam otter trawl (39' headrope/51' footrope) rigged with a 3.5" rubber disc sweep and a ¼" knotless codend liner (1/2" stretched mesh) | Yes |
| ME_DNR | Modified shrimp net with a 2-inch mesh in wings and 1-inch mesh liner in the cod end | No |
| NEFSC | Varies | Yes |
| NH_FG | Bag seine 30.5 m long and 1.8 m high with 6.4 mm mesh | No |
| NOAA_OBSERVER | NA | No |

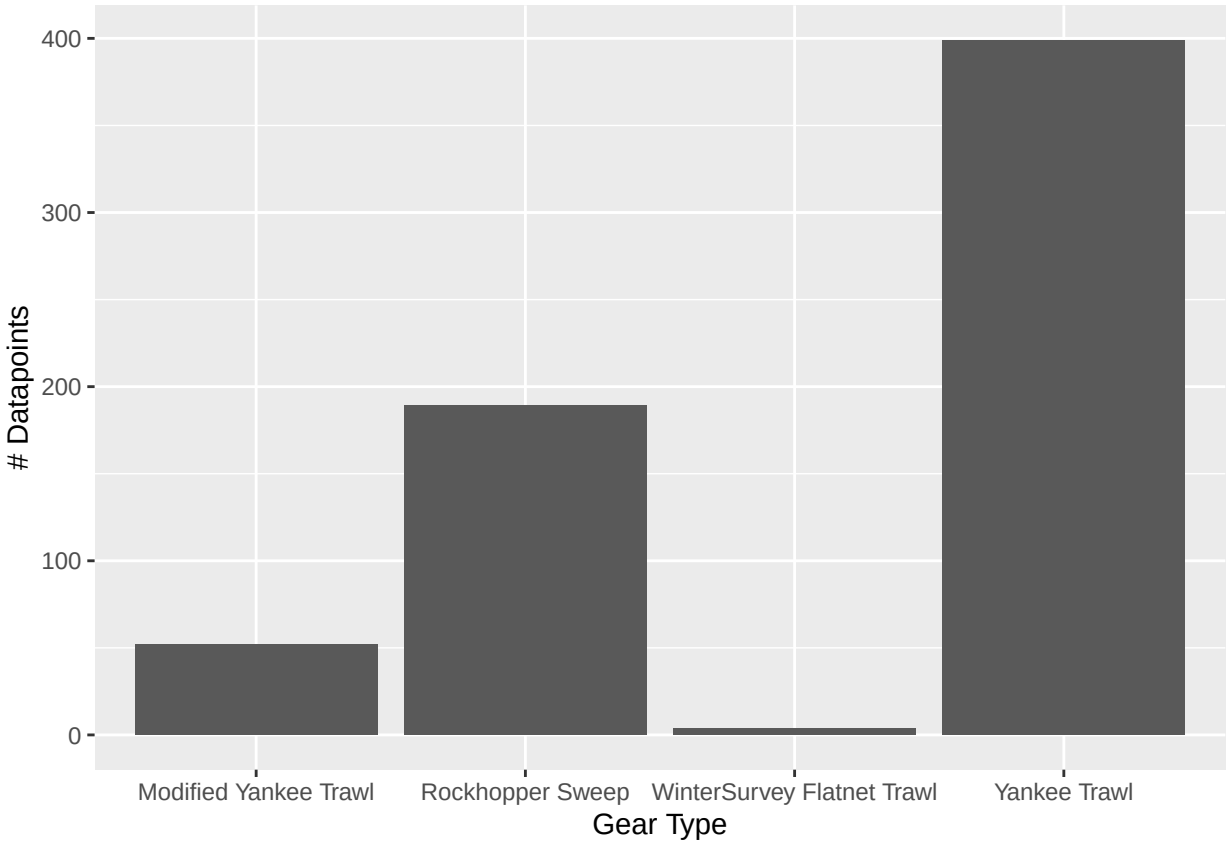


Figure 4: Gear Types used by NEFSC Dataset