

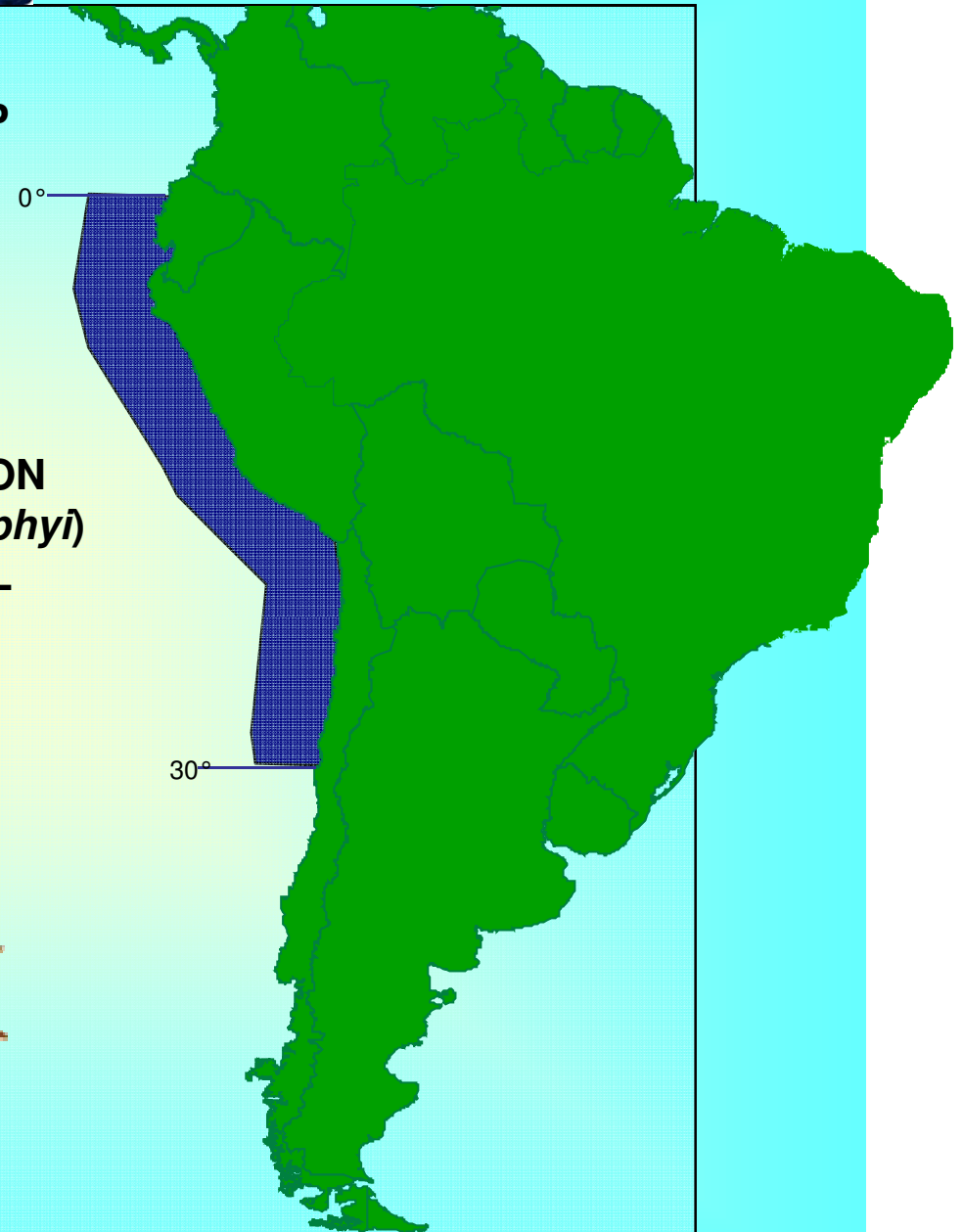
## CHILEAN JACK MACKEREL WORKSHOP

30 JUNE – 4 JULY 2008

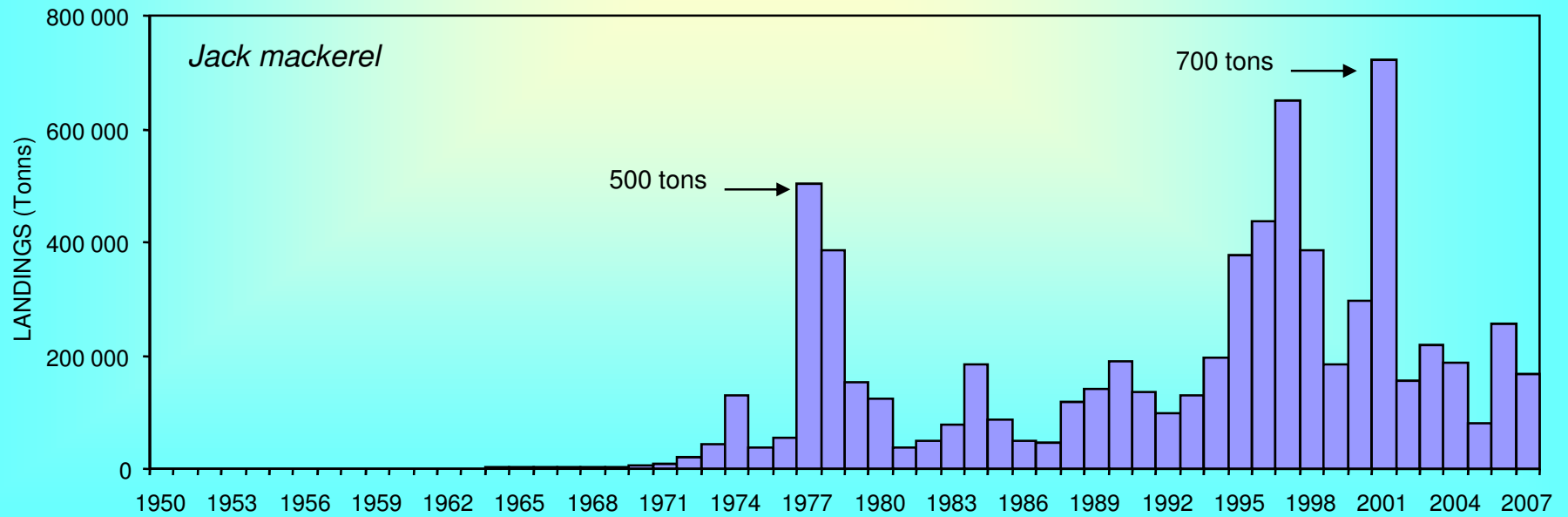
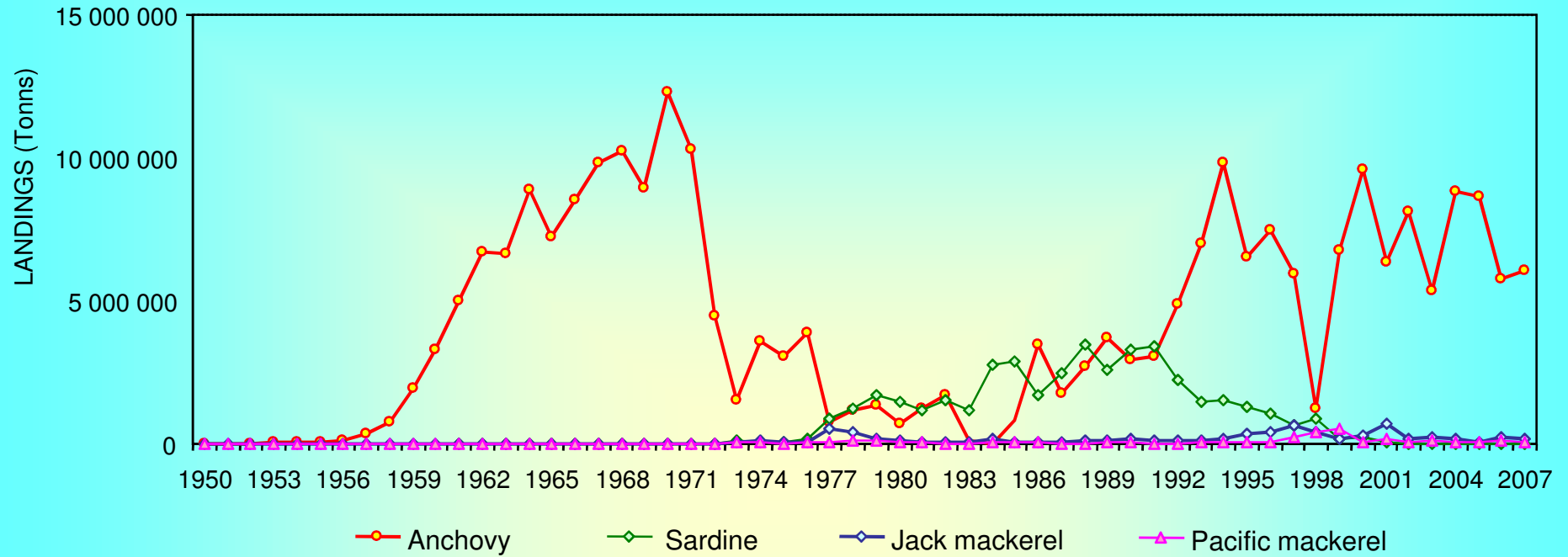
**DISTRIBUTION AND CONCENTRATION  
OF JACK MACKEREL (*Trachurus murphyi*)  
RELATED TO OCEANOGRAPHICAL  
FEATURES BETWEEN  
NORTH PERU TO NORTH CHILE**



*Trachurus murphyi*



# JACK MACKEREL ANNUAL LANDINGS IN PERU FROM 1950 TO 2007



## STUDY AREA

### LOCATION

4 °00'S – 24 °00'S

Main pelagic resource:



*Engraulis ringens*



*Sardinops sagax sagax*



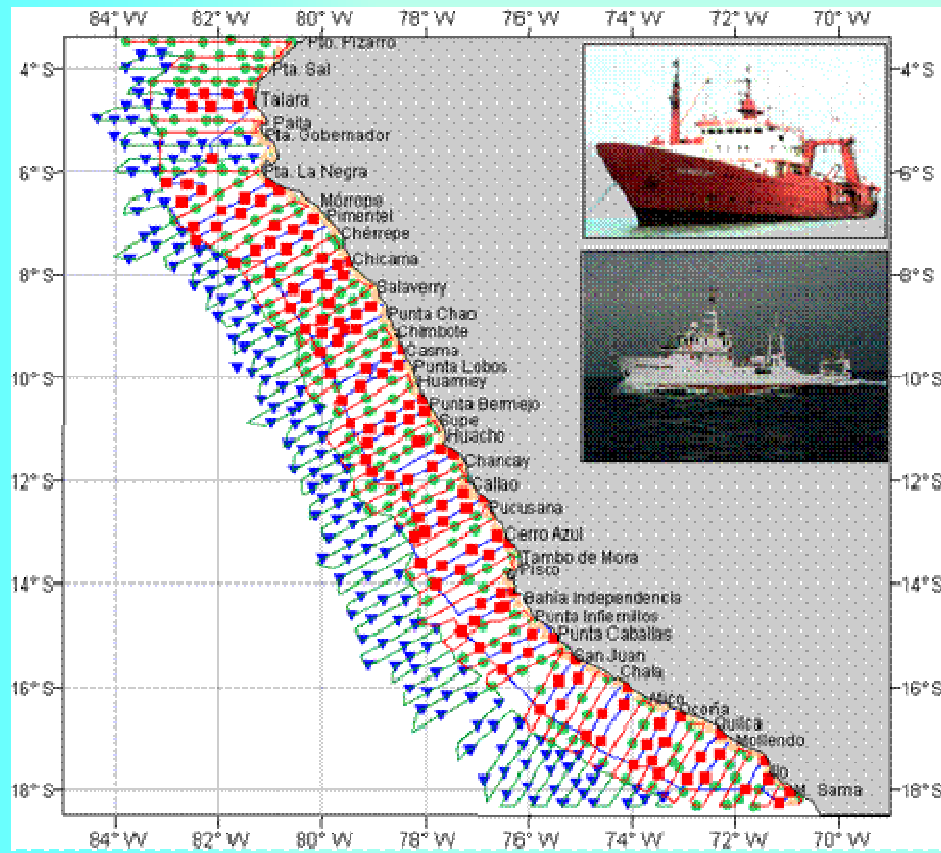
*Trachurus murphyi*



*Scomber japonicus*



## SOURCE OF INFORMATION

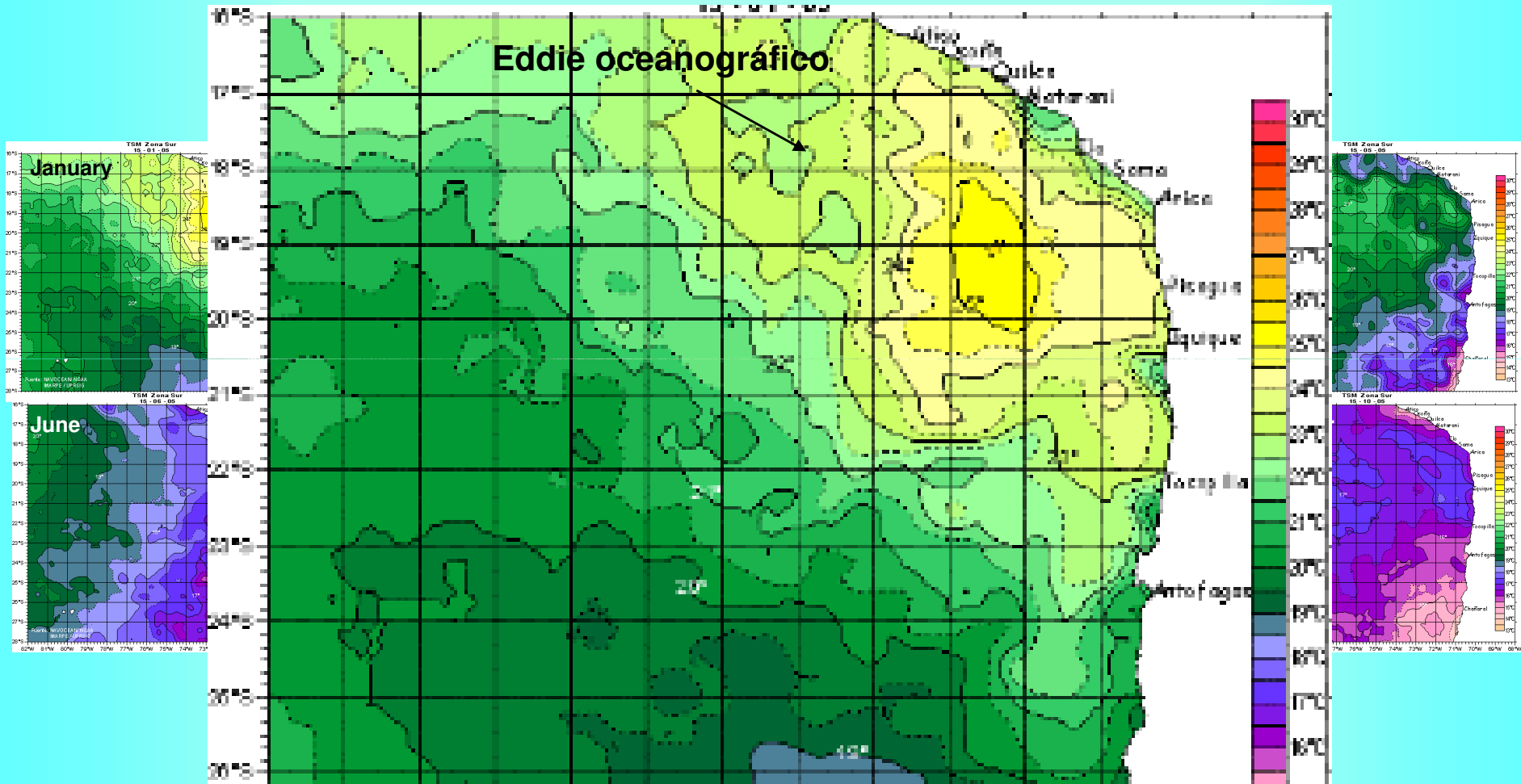


**IMARPE PELAGIC SURVEY**  
*Hydroacoustic method*

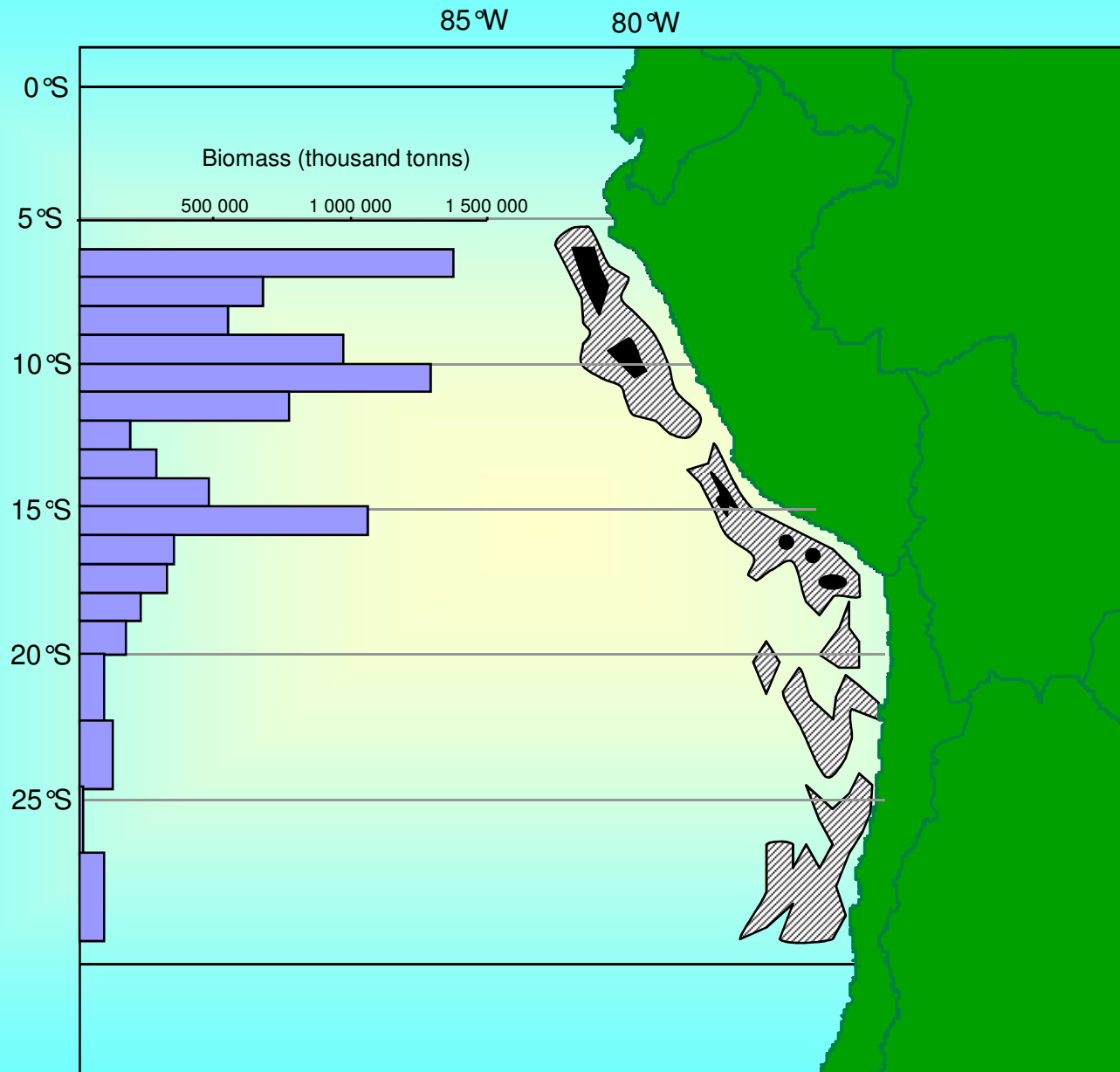
**LAND OCEANOGRAPHIC STATION**  
*From: ILO (17°S)*

**IV REGIONAL OCEANOGRAPHIC SURVEY**

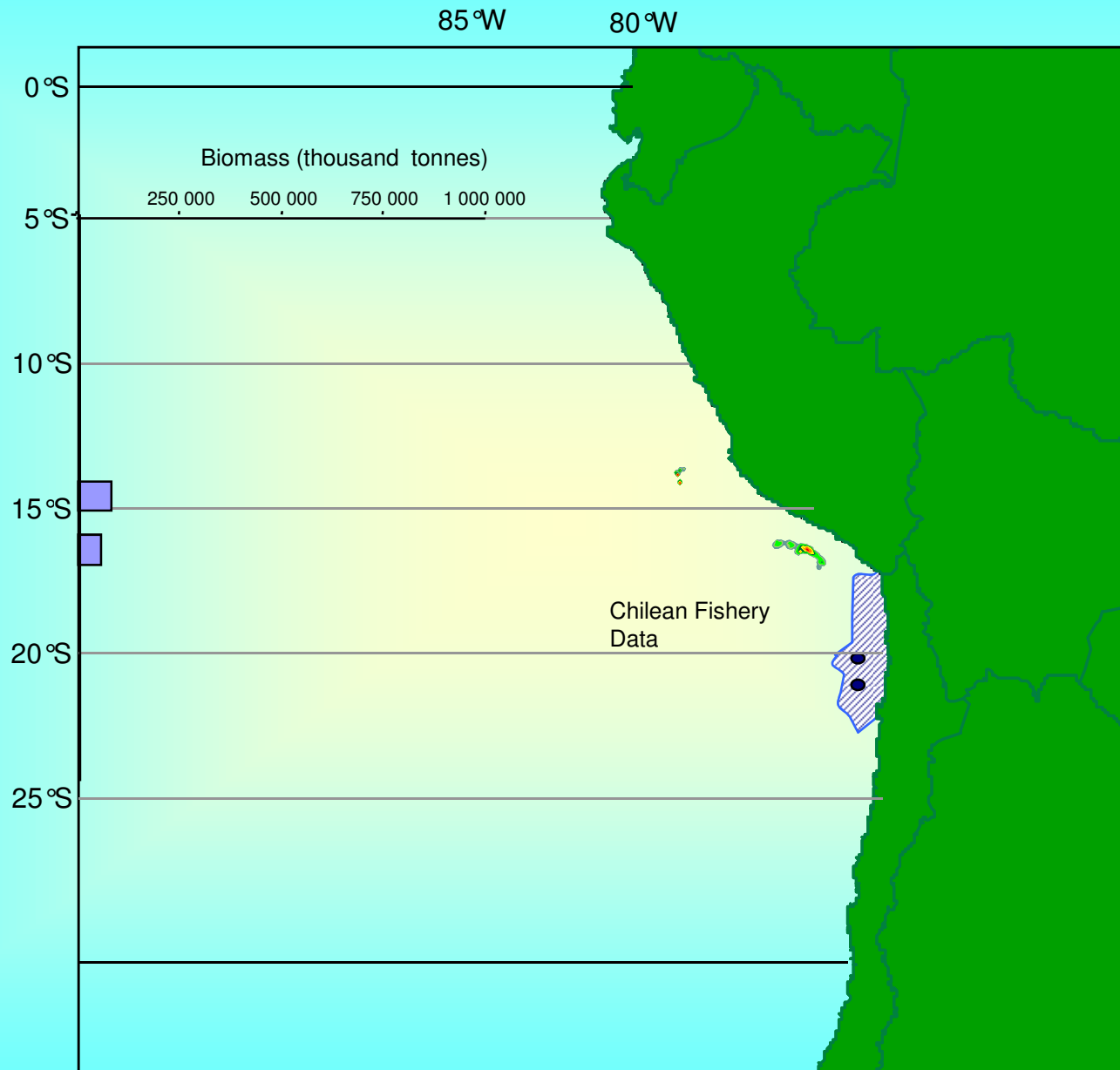
# SYSTEM OF CURRENT BETWEEN SOUTH PERU – NORTH CHILE (JANUARY – OCTOBER 2005)



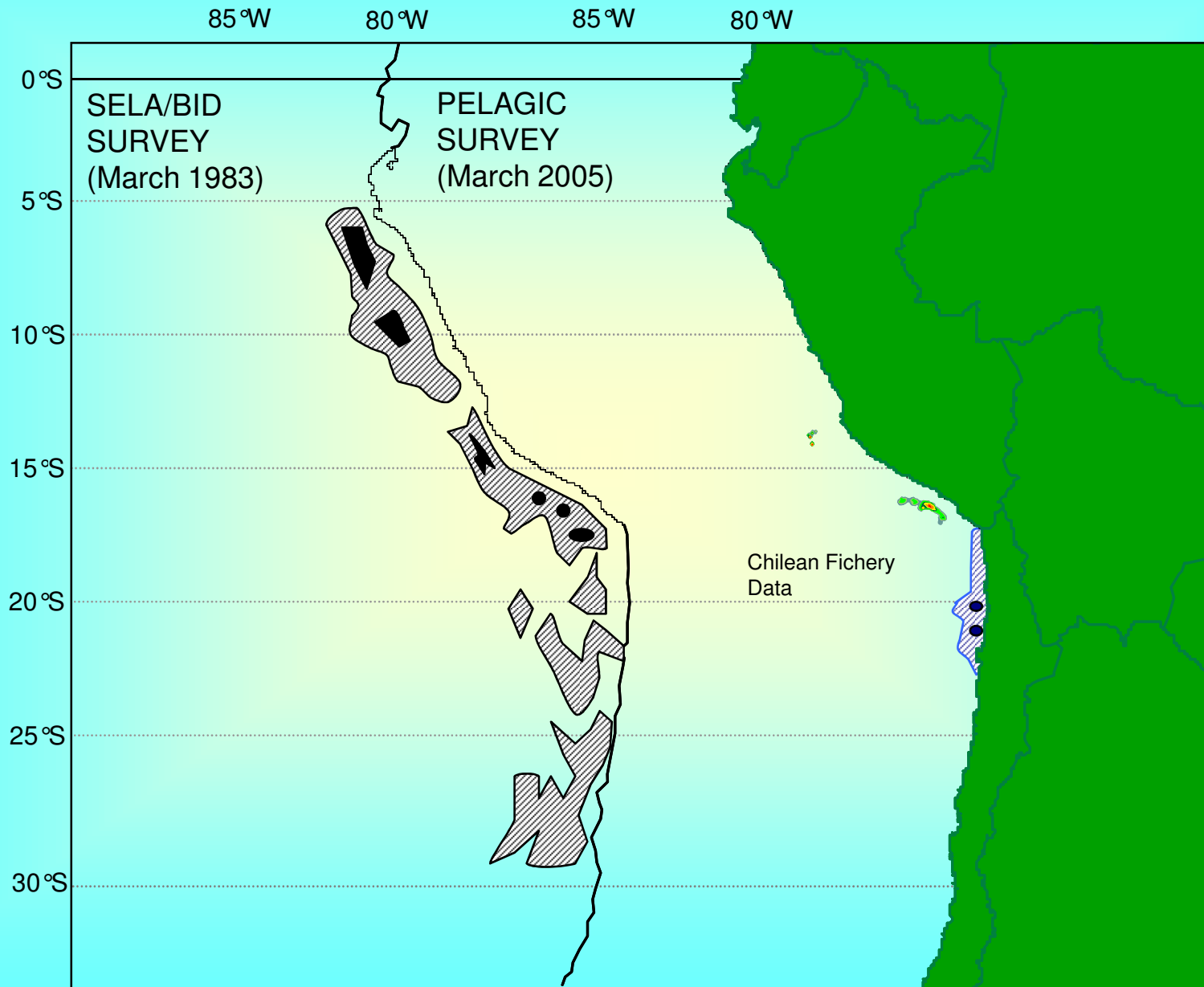
# SELA/BID SURVEY MARCH 1983



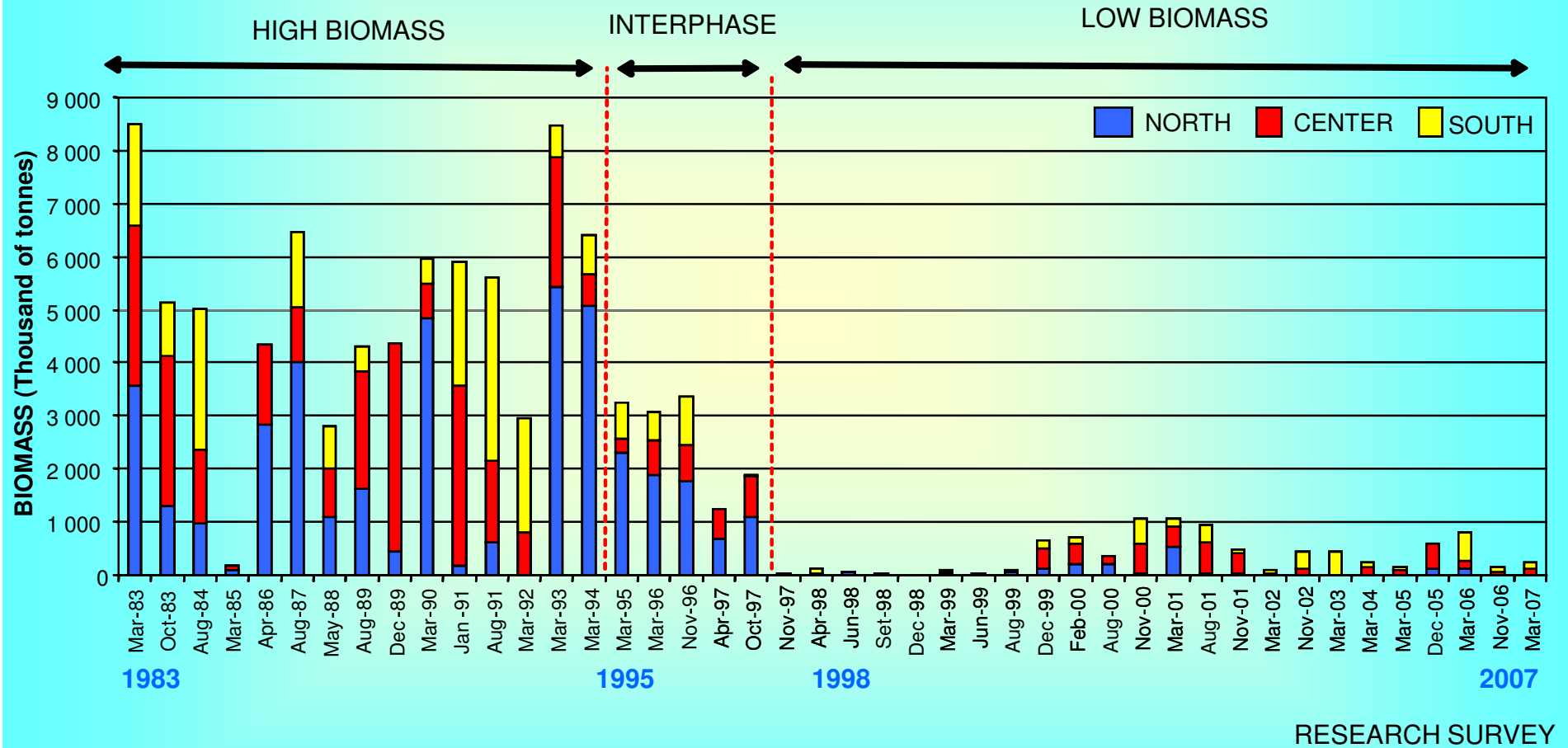
# PELAGIC RESOURCE SURVEY MARCH 2005



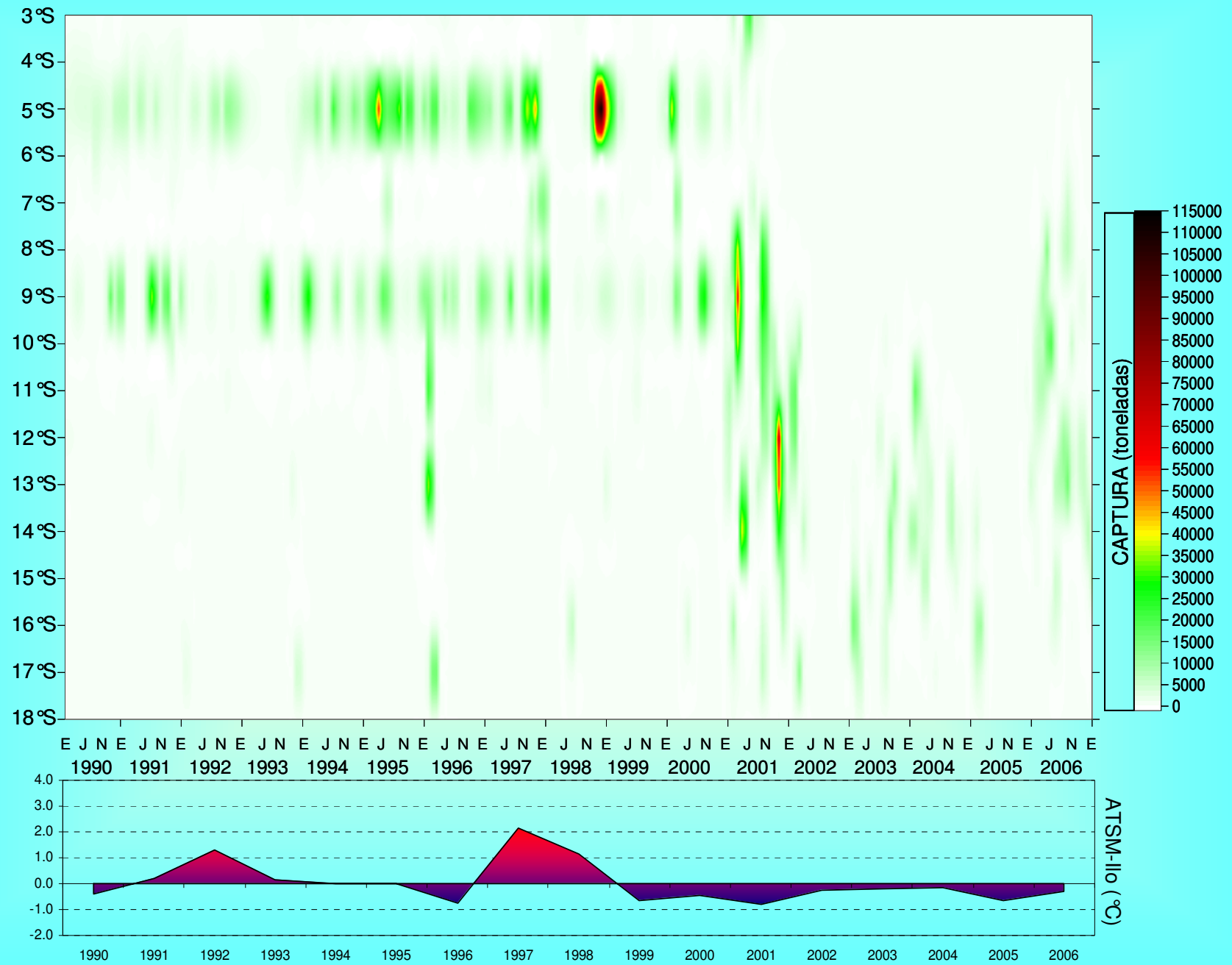
# JACK MACKEREL DISTRIBUTION ON MARCH 1983 AND MARCH 2005



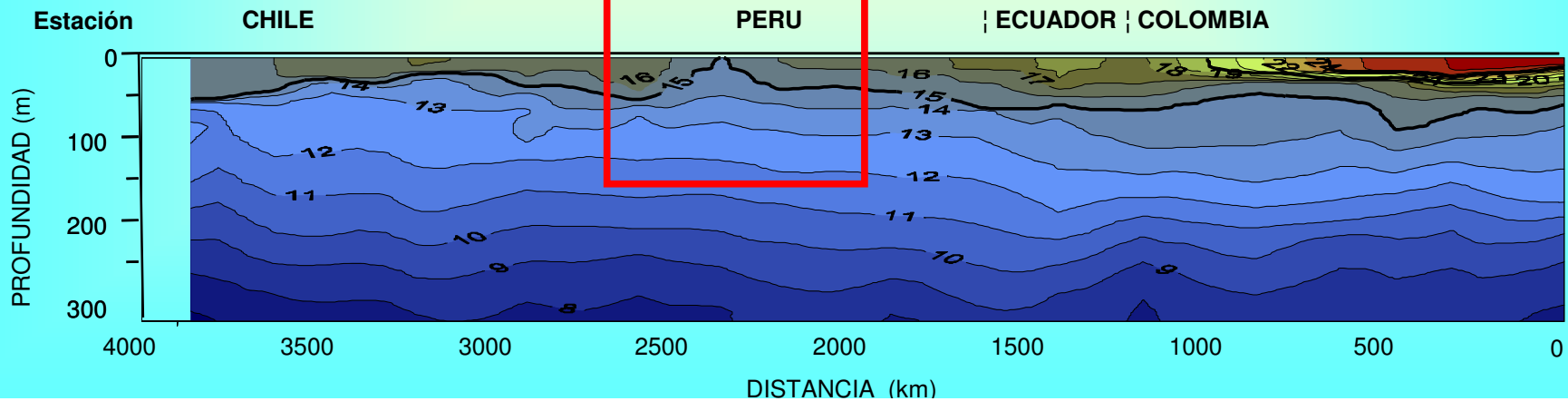
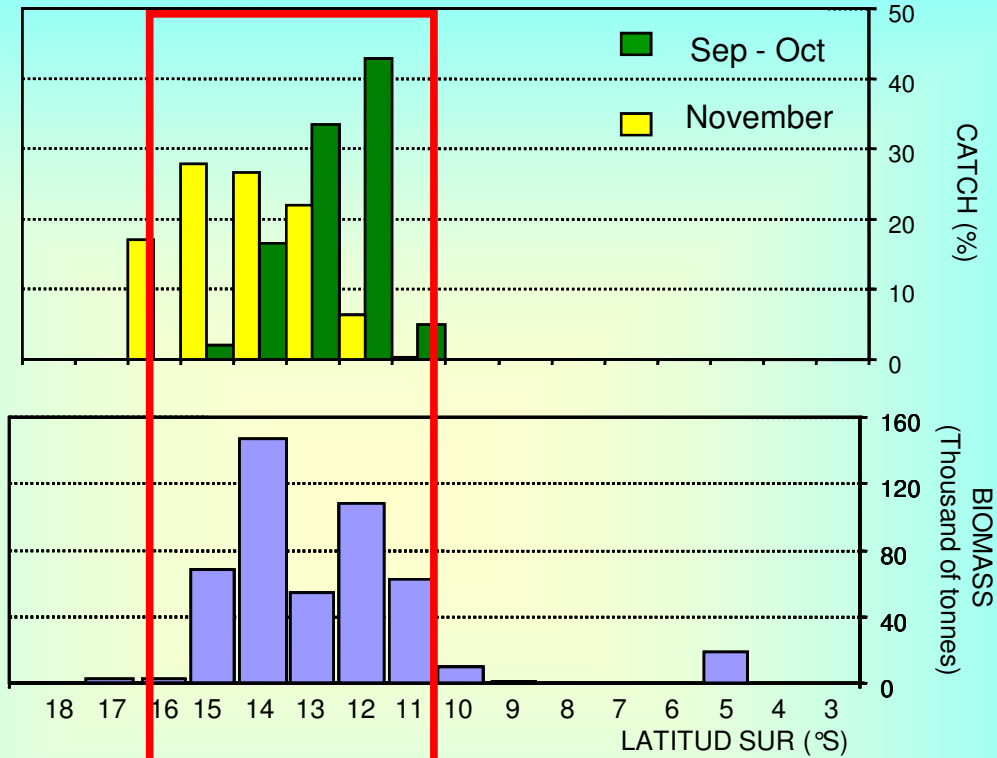
# JACK MACKEREL BIOMASS IN PERU FROM 1983 TO 2007



# MONTHLY CATH DISTRIBUTION OF JACK MACKEREL RELATED TO ATSM IN ILO



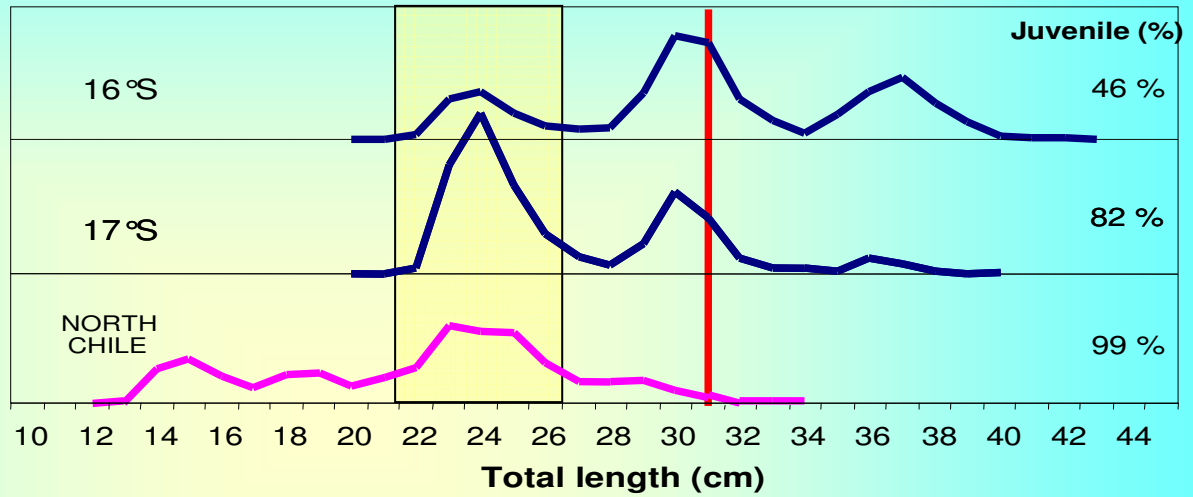
# WATER COLUMN (200 km) OFF SOUTH AMERICAN COAST RELATED TO JACK MACKEREL BIOMASS AND CATCH (SEPTEMBER 2001)



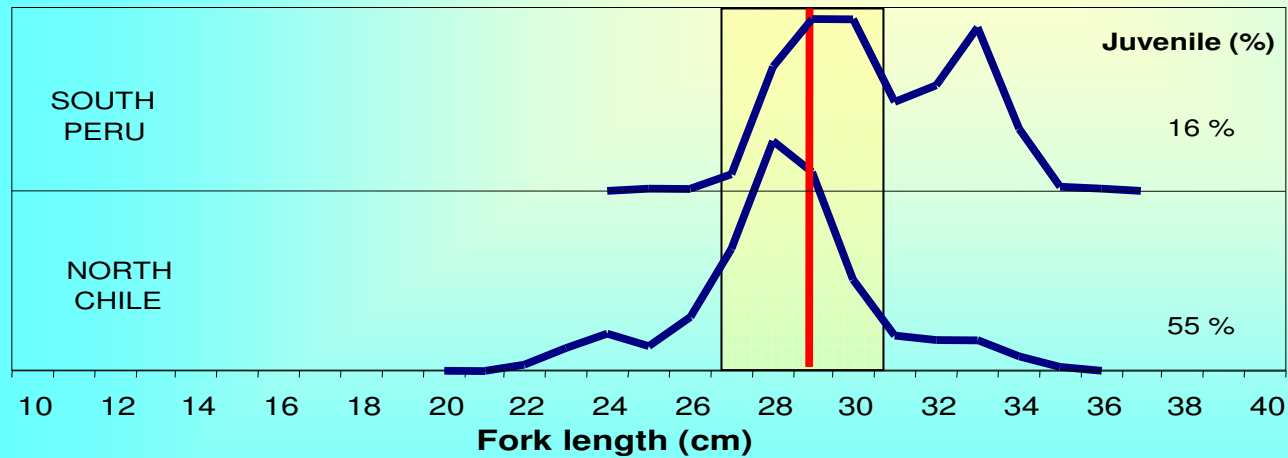
# JACK AND PACIFIC MACKEREL LENGTH STRUCTURE

(February, 17th – 23rd 2003)

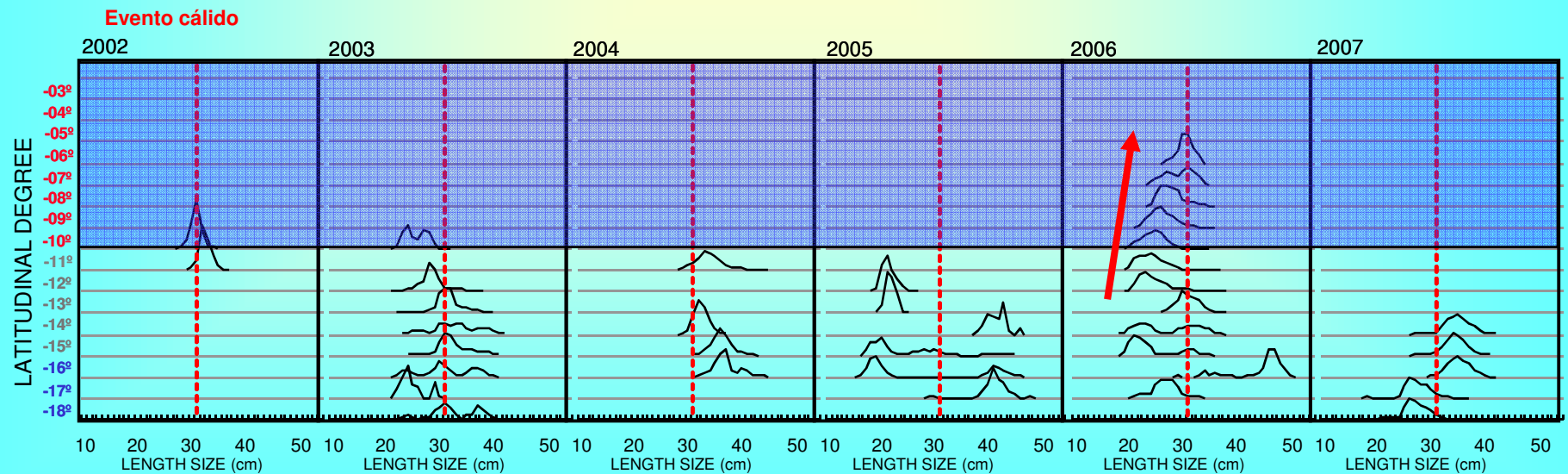
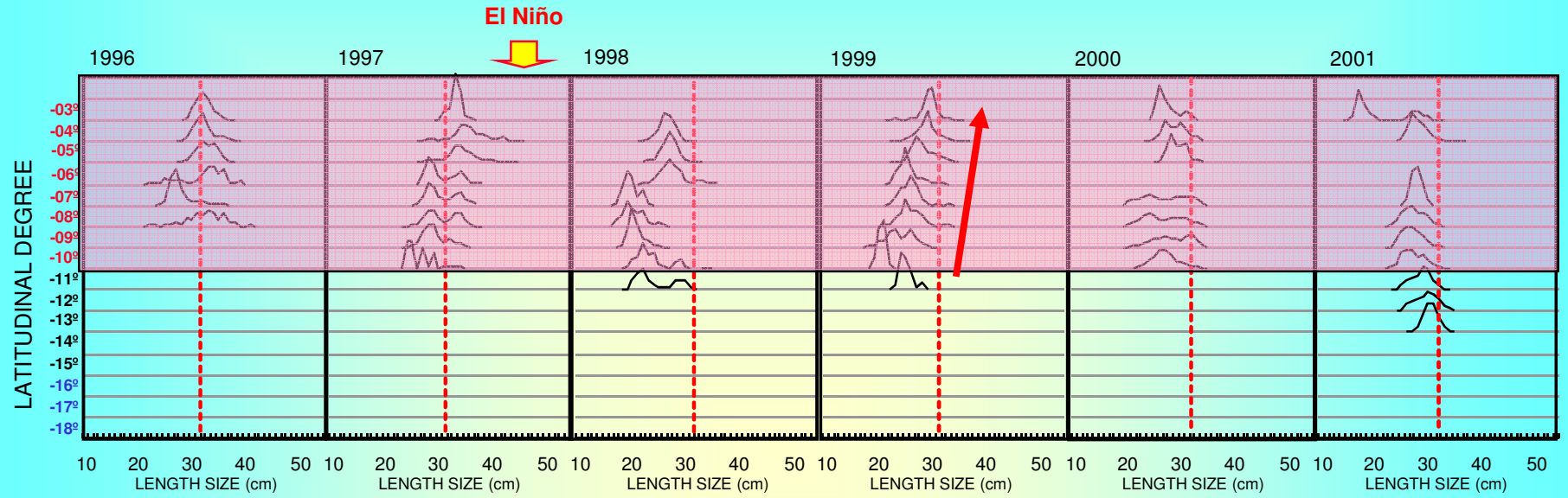
## JACK MACKEREL



## PACIFIC MACKEREL



# JACK MACKEREL ANNUAL LENGTH STRUCTURE BY LATITUDINAL DEGREE (1996-2007)



## CONCLUSION

During 1983 to 2007 drastically changes occurs in distribution and concentration of jack mackerel on Peruvian sea, and these changes would be linked to interdecadal and interannual changes of environmental conditions, and they will be important for to test hypothesis about the structure of jack mackerel population, and also for resource management.

# INTERDECADAL AND INTERANNUAL CHANGES OF ENVIRONMENTAL CONDITIONS (1900-2007)

