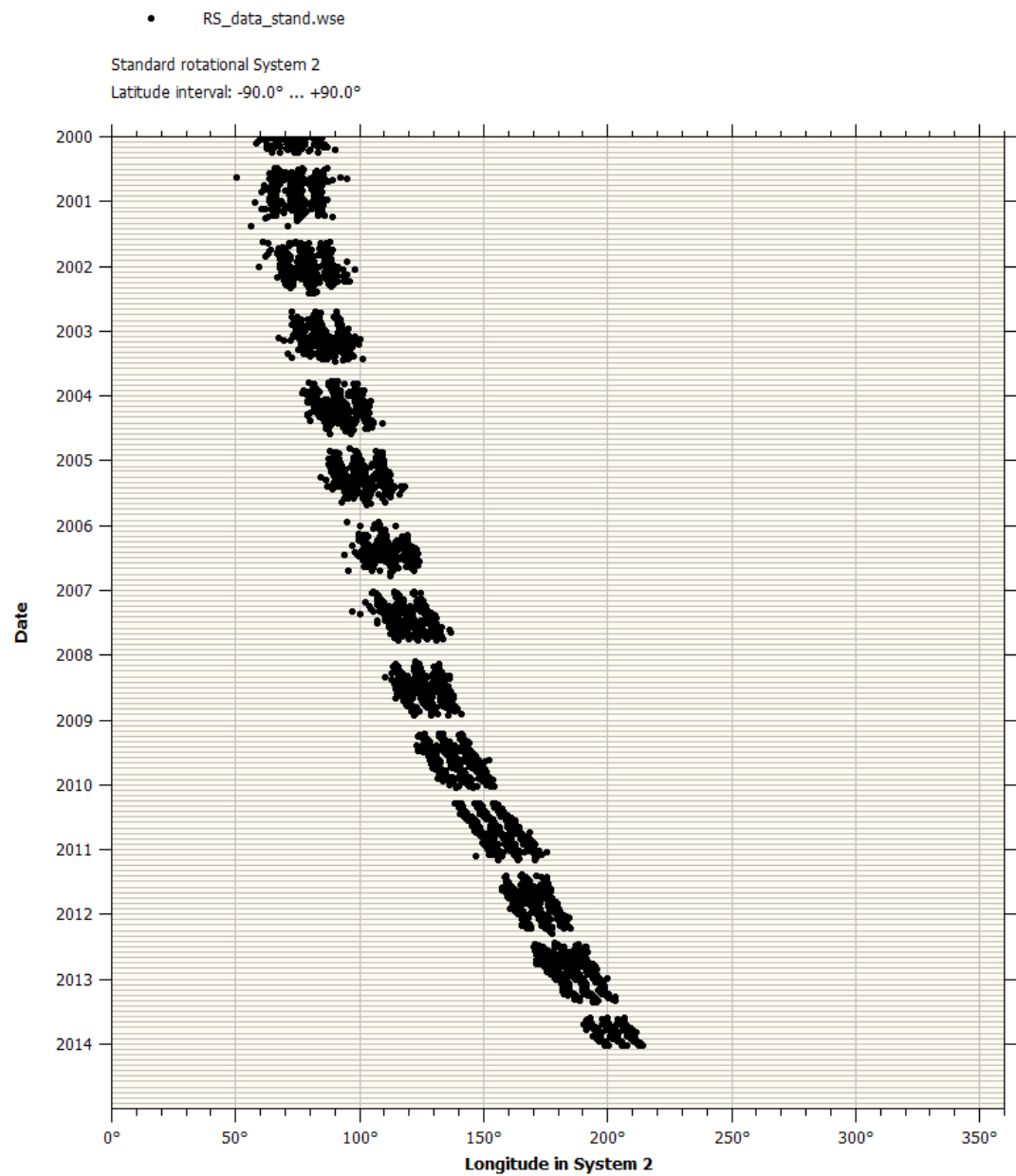


# RS Latutude Report (2000-2015)

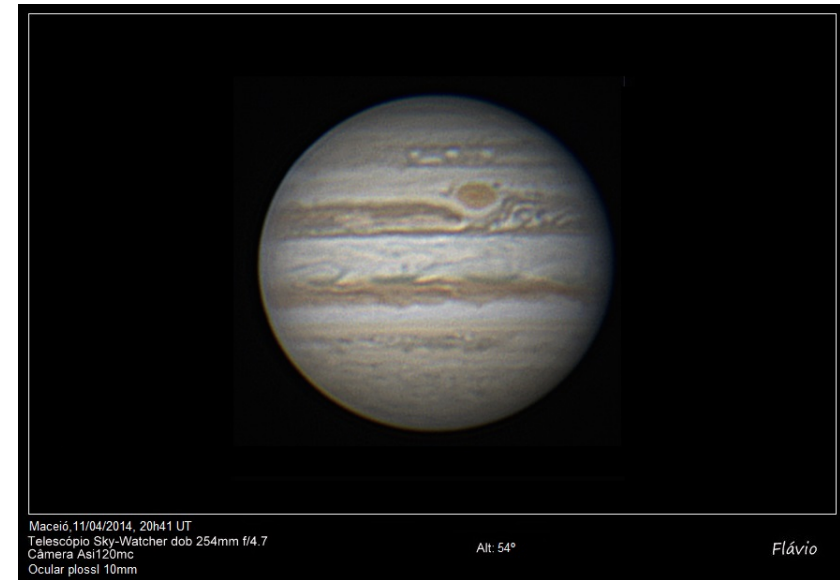
Shigenori Suzuki

2015/8/30

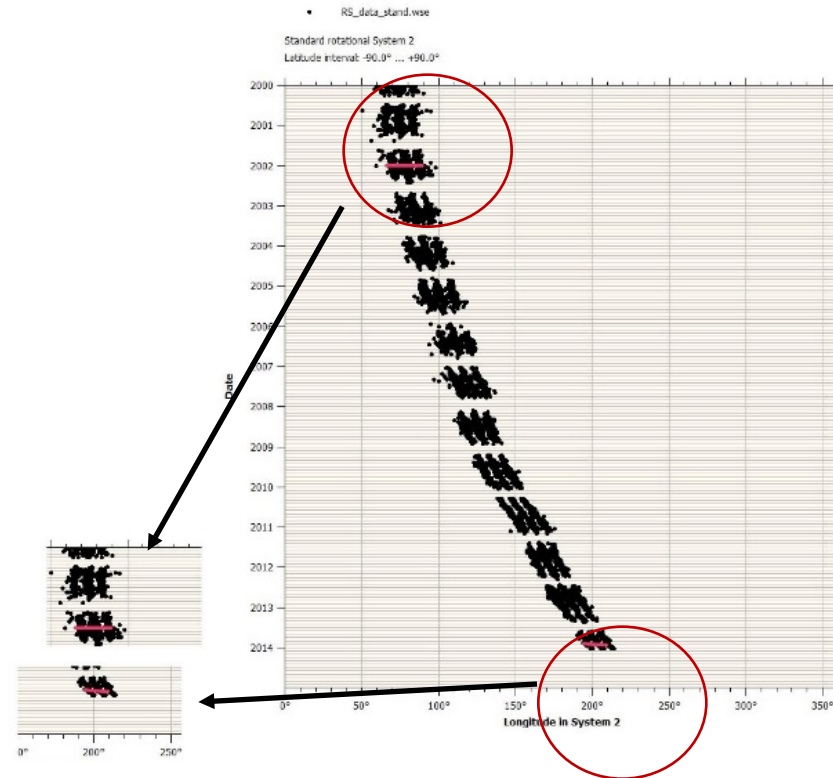
# 1. RS longitude (200-2015)



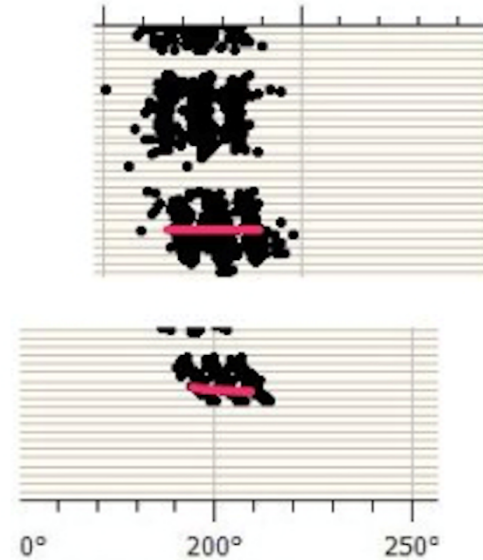
## 2. image 2000と2014



# 3. compare 2011-2014 part1

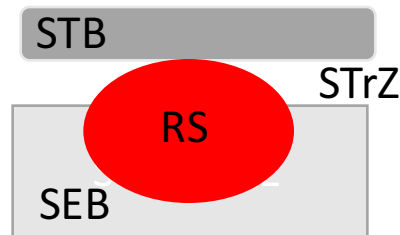


# 4. compare 2011-2014 part2

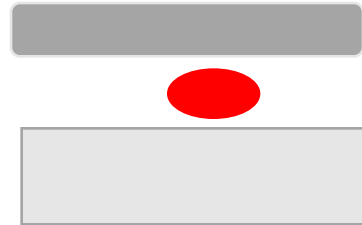


RS'S longitude is reduce to 2/3

# 5. How it will change the RS ?

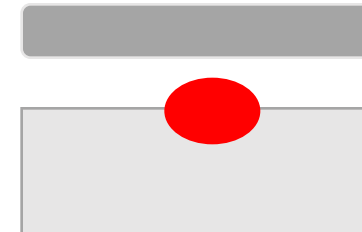


A. Move to StrZ



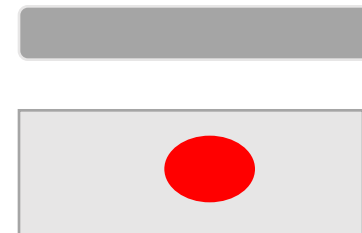
RS moved to the South Pole direction  
And small

B. Not move



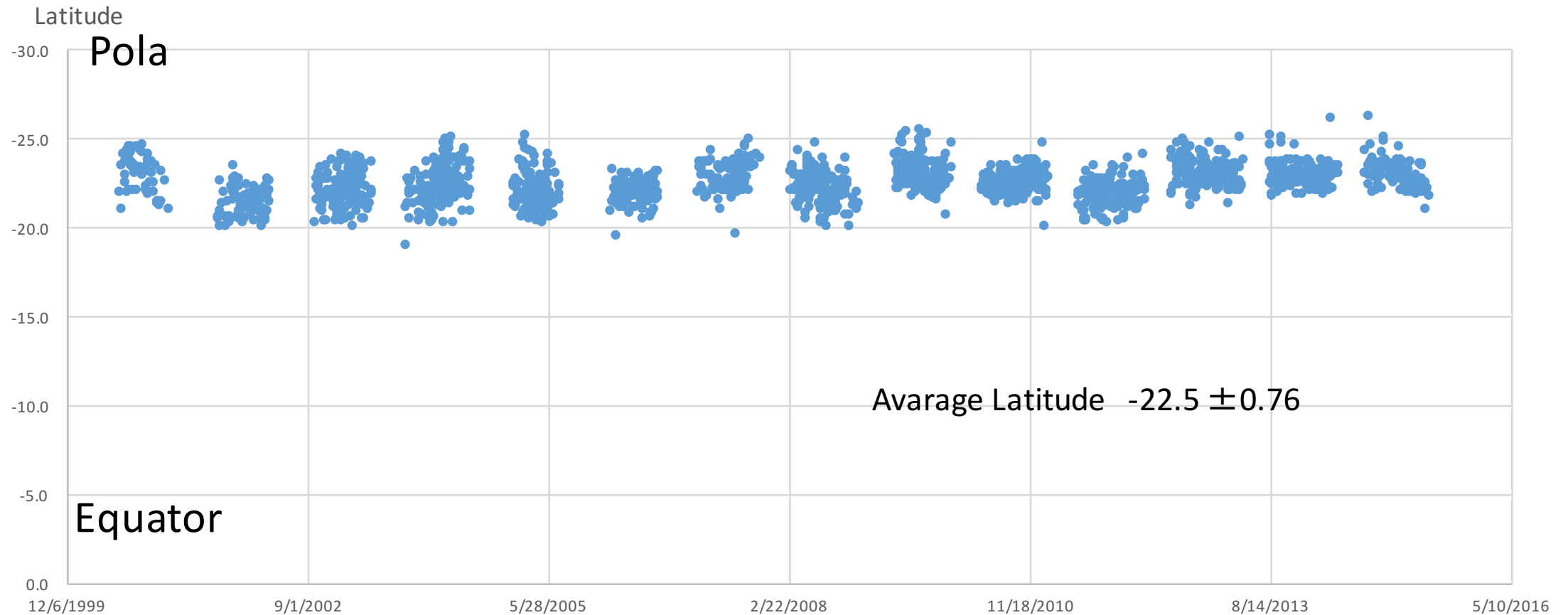
RS does not change latitude  
And longitude decreases

C. Move to SEB



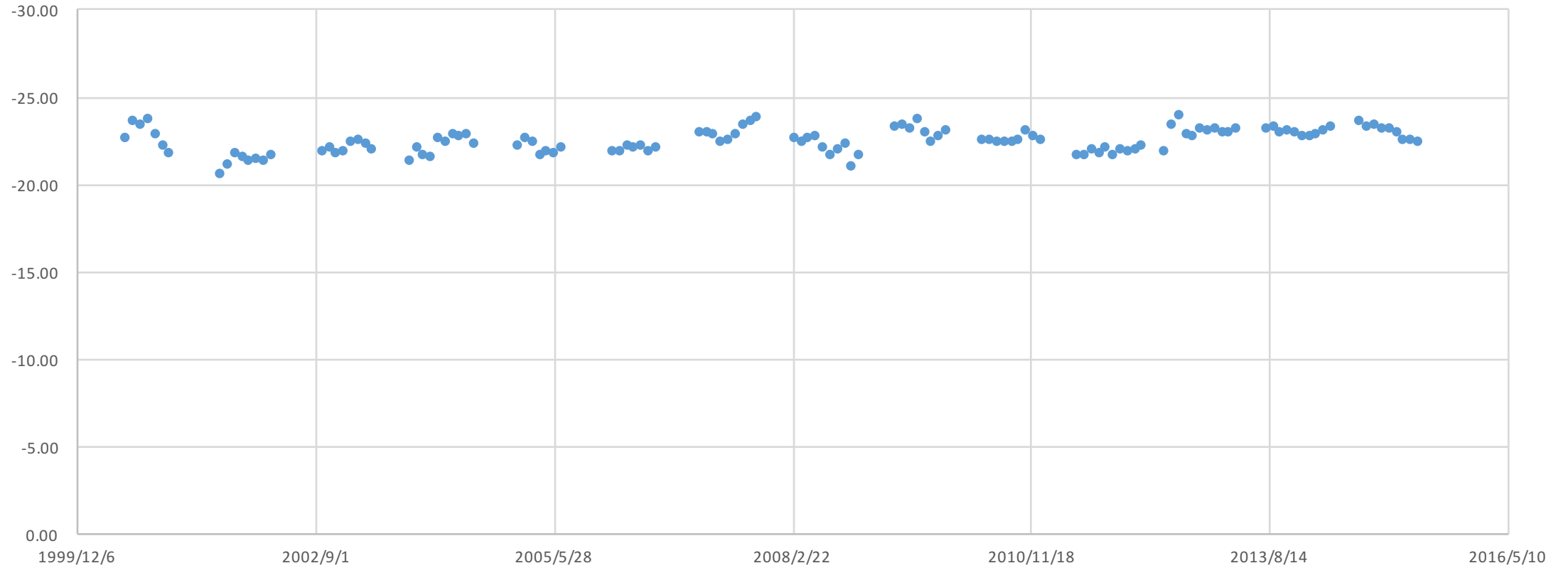
RS move to SEB

## 6. RS Center Latitude 2000-2015 (Measurement 1902 point)



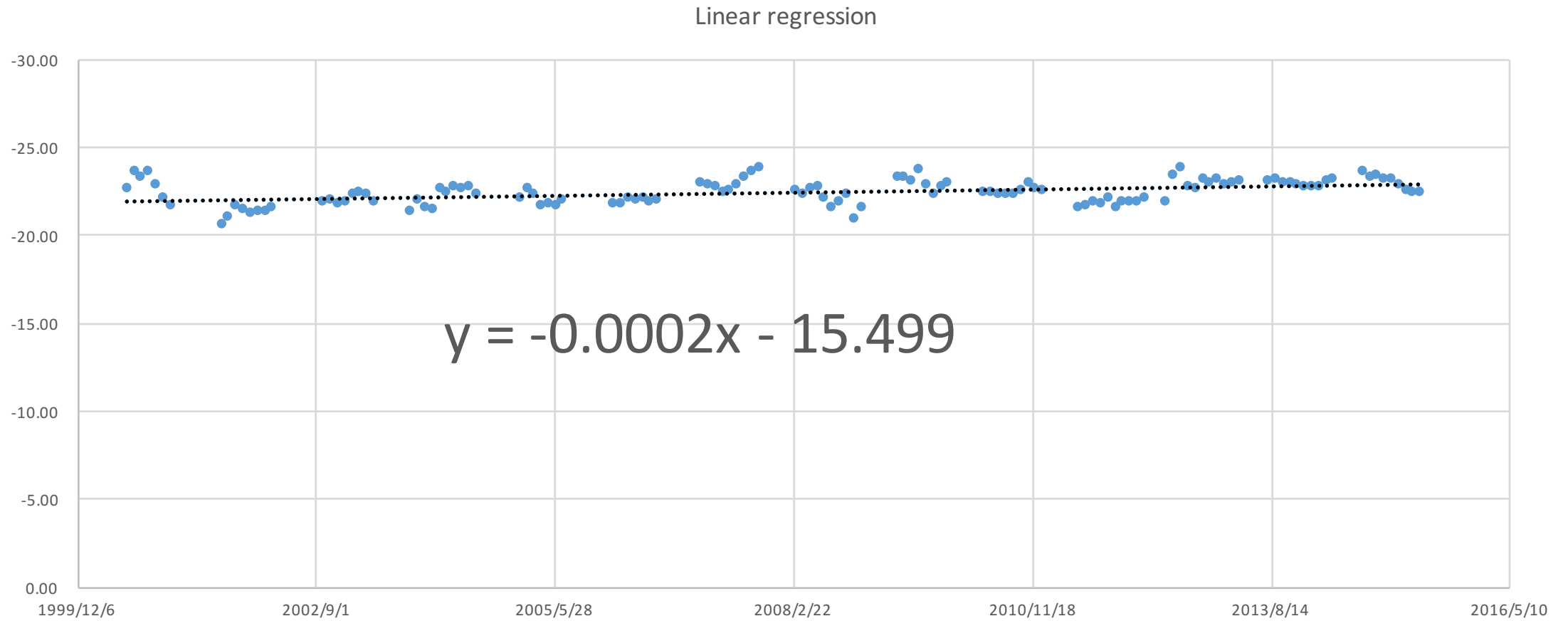
# 7. Average one month each latitude

平均緯度





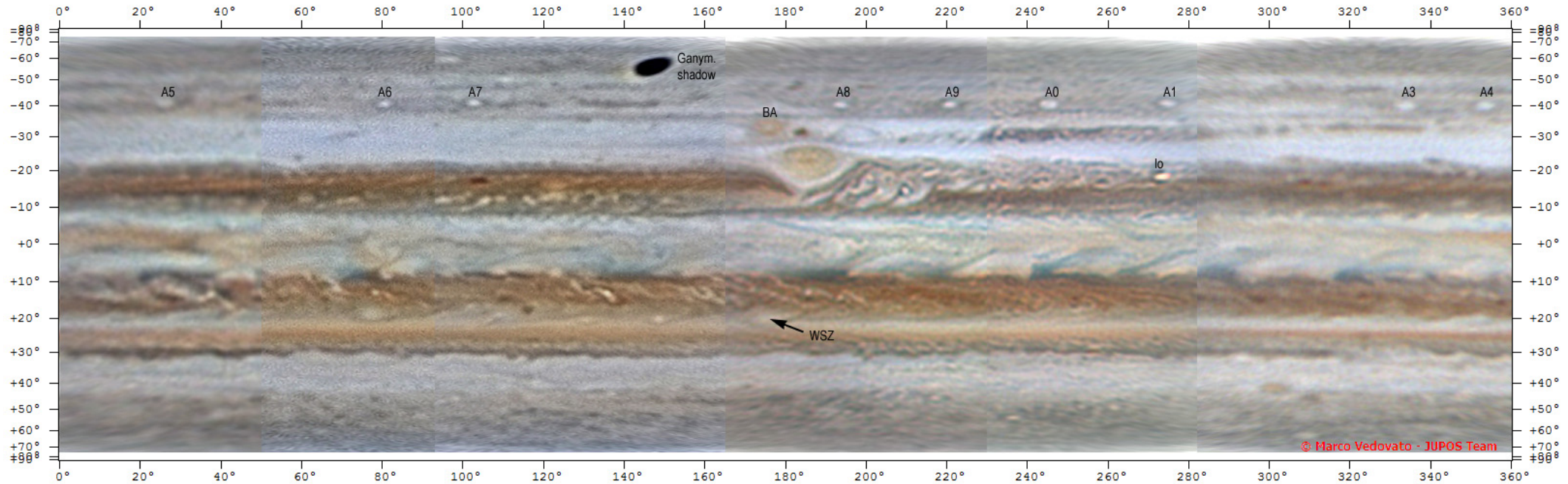
# 8. Linear regression



# 9. Interaction of RS and BA?

Result uncorrelated

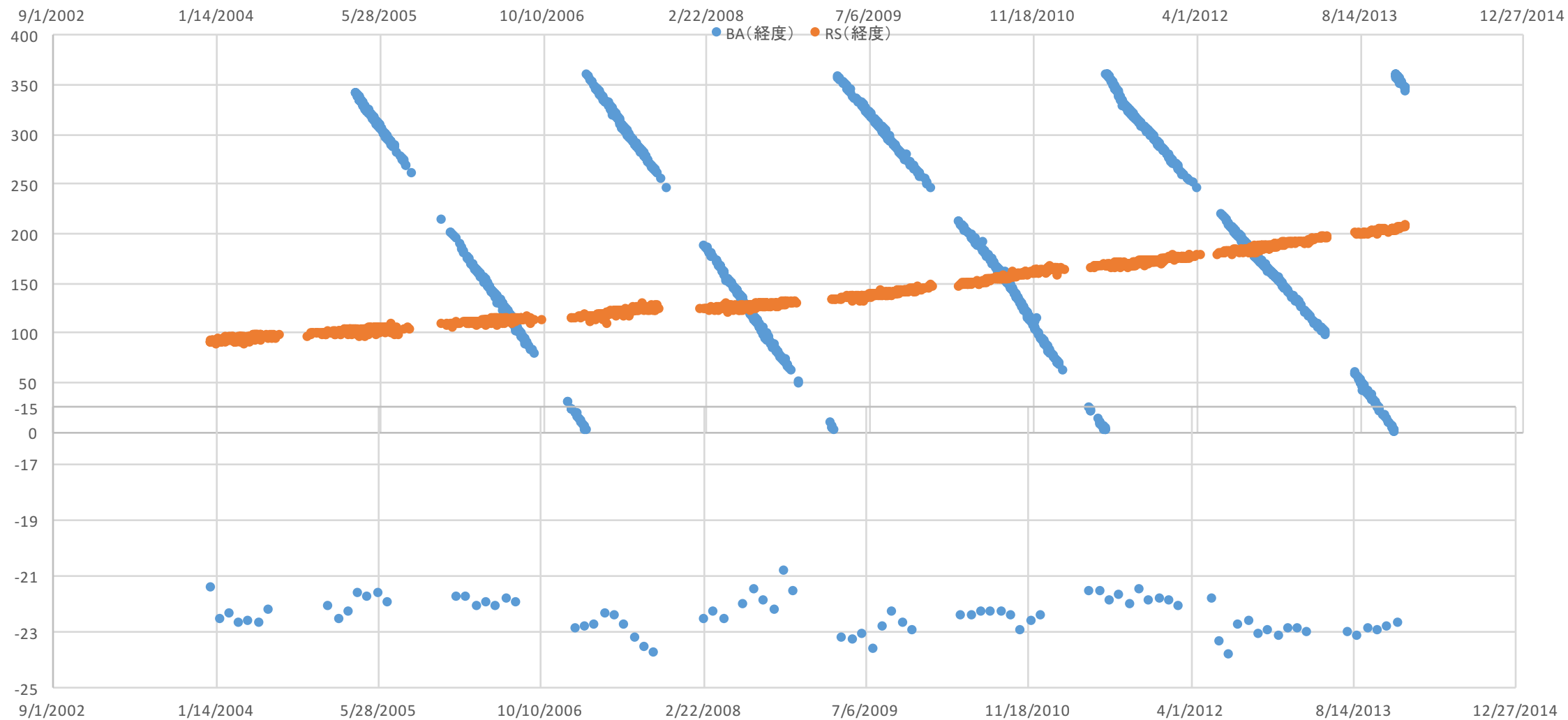
| Date        | UI      | Observer         | Channel | Longitude   | Sy. | Latitude    |
|-------------|---------|------------------|---------|-------------|-----|-------------|
| 2012 Oct 09 | 17:15,8 | Teruaki Kumamori | Colour  | 0°... 50°   | (2) | -75°...+75° |
| 2012 Oct 09 | 17:55,5 | Satoshi Ota      | Colour  | 50°... 93°  | (2) | -75°...+75° |
| 2012 Oct 09 | 19:21,3 | Satoshi Ota      | Colour  | 93°...165°  | (2) | -75°...+75° |
| 2012 Oct 09 | 01:47,0 | Jesus R Sanchez  | Colour  | 165°...230° | (2) | -75°...+75° |
| 2012 Oct 09 | 02:41,0 | Jesus R Sanchez  | Colour  | 230°...282° | (2) | -75°...+75° |
| 2012 Oct 10 | 10:52,0 | Jim Phillips     | Colour  | 282°...360° | (2) | -75°...+75° |



Longitudes in System 2, planetographic latitudes  
Cylindrical projection

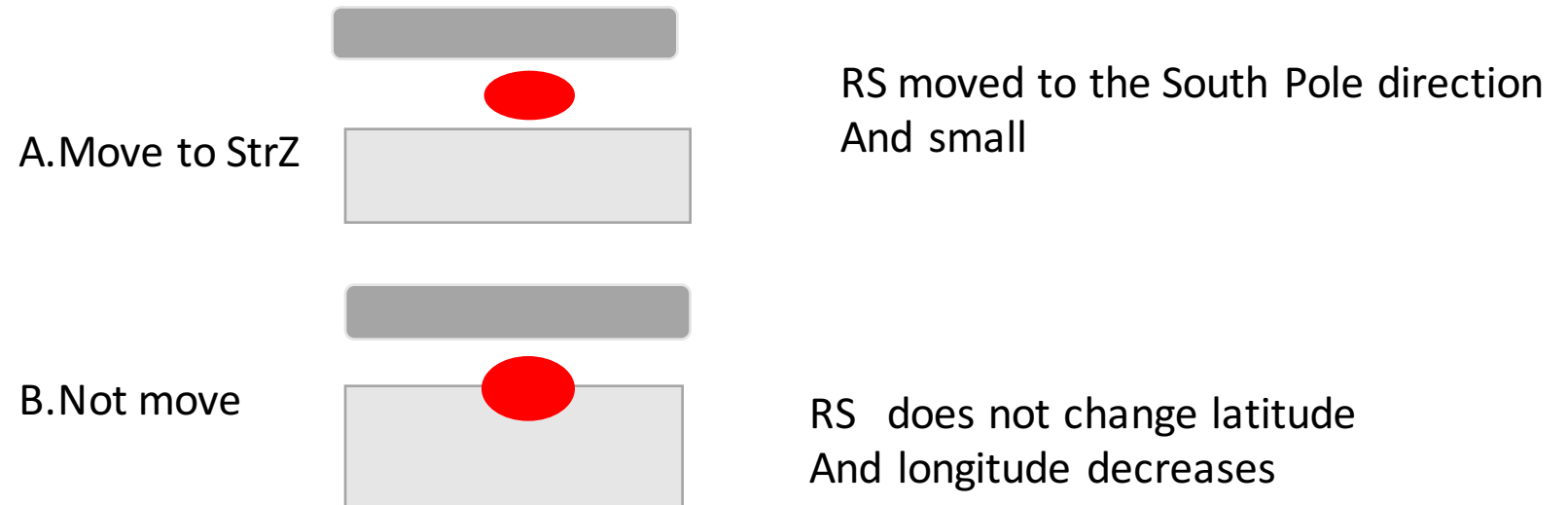
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# 10. BA,RS (Result uncorrelated)



# 11. Result

- RS's latitude has moved slightly to the very direction that you are not moving
- It takes in 27year's to move 2 deg upside



# 13. Consideration and Impressions

- RS's latitude has fluctuated in short period  
(RSの緯度はシーズン中にも変化している)
- What is the cause? (RSの緯度変化の短期的な原因は何か?)
- RSの長期的緯度変化の原因は? (あるのか?)
- その他
  - 緯度変化のモデル化
  - RS以外の模様(例 BA,SEB,STB,NEB,BTB、etc)
- ALPOの画像を有効利用して下さい