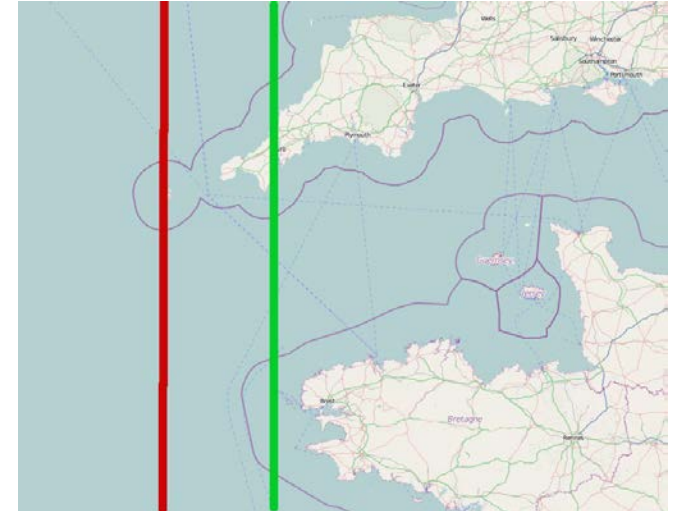




John “Longitude” Harrison

(24 March 1693 – 24 March 1776)

22 October 1707: Shipwreck!



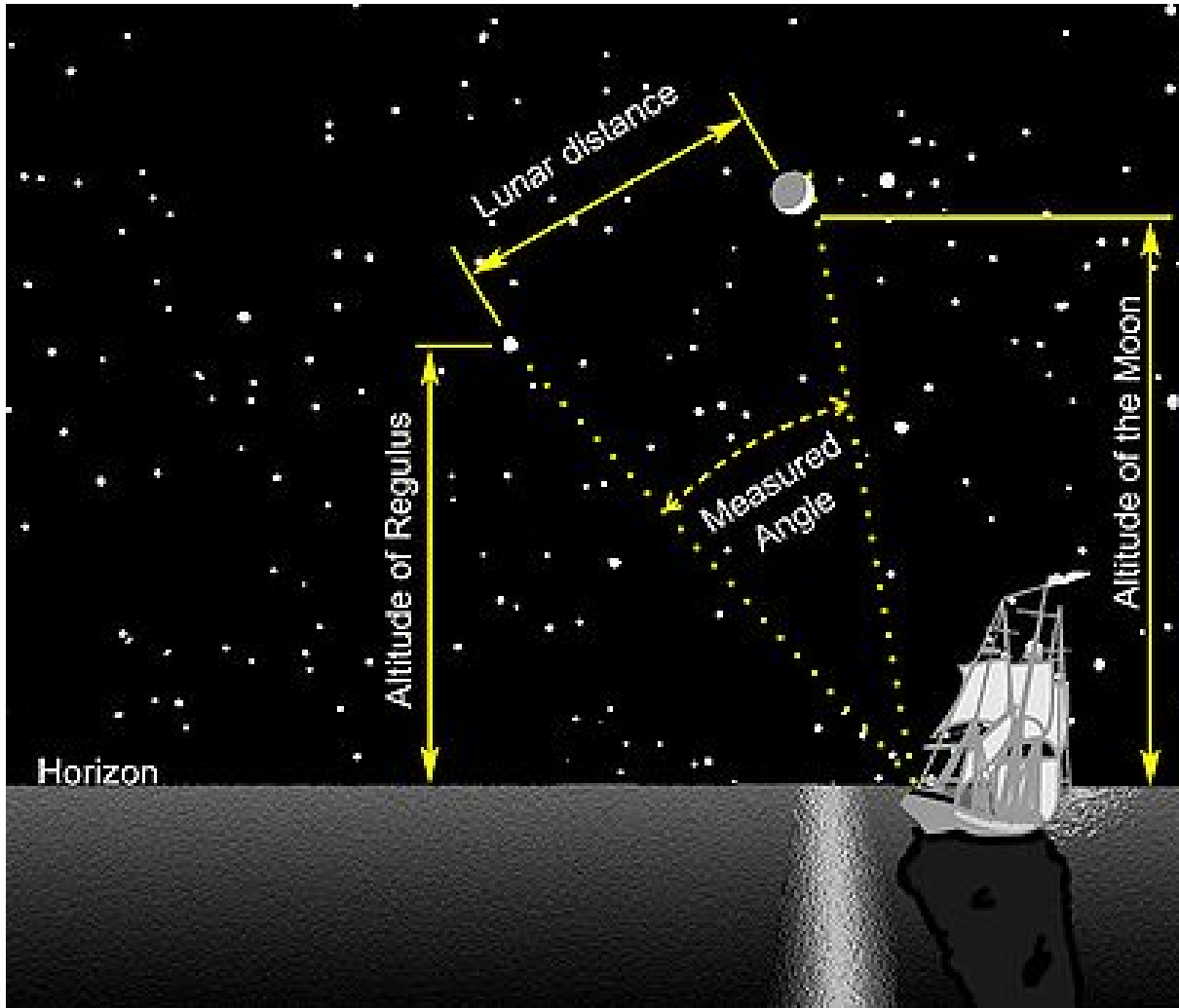
Scilly Islands Disaster



Board of Longitude

- Scilly naval disaster 22 October 1707
- Sinking of a British naval fleet off the Isles of Scilly
- Four large ships (Association, Eagle, Romney and Firebrand) and 1,400 sailors lost
- One of the greatest maritime disasters in the history of the British Navy
- Cause of the disaster was the navigators' inability to accurately calculate their positions (longitude and compasses)
- Led to the First Longitude Act passed in July 1714 during the reign of Queen Anne
- Created the Board of Longitude and offered a 20K Pounds for anyone who could find a simple and practical method for the precise determination of a ship's longitude while at sea

Most promising method: Lunar Distances



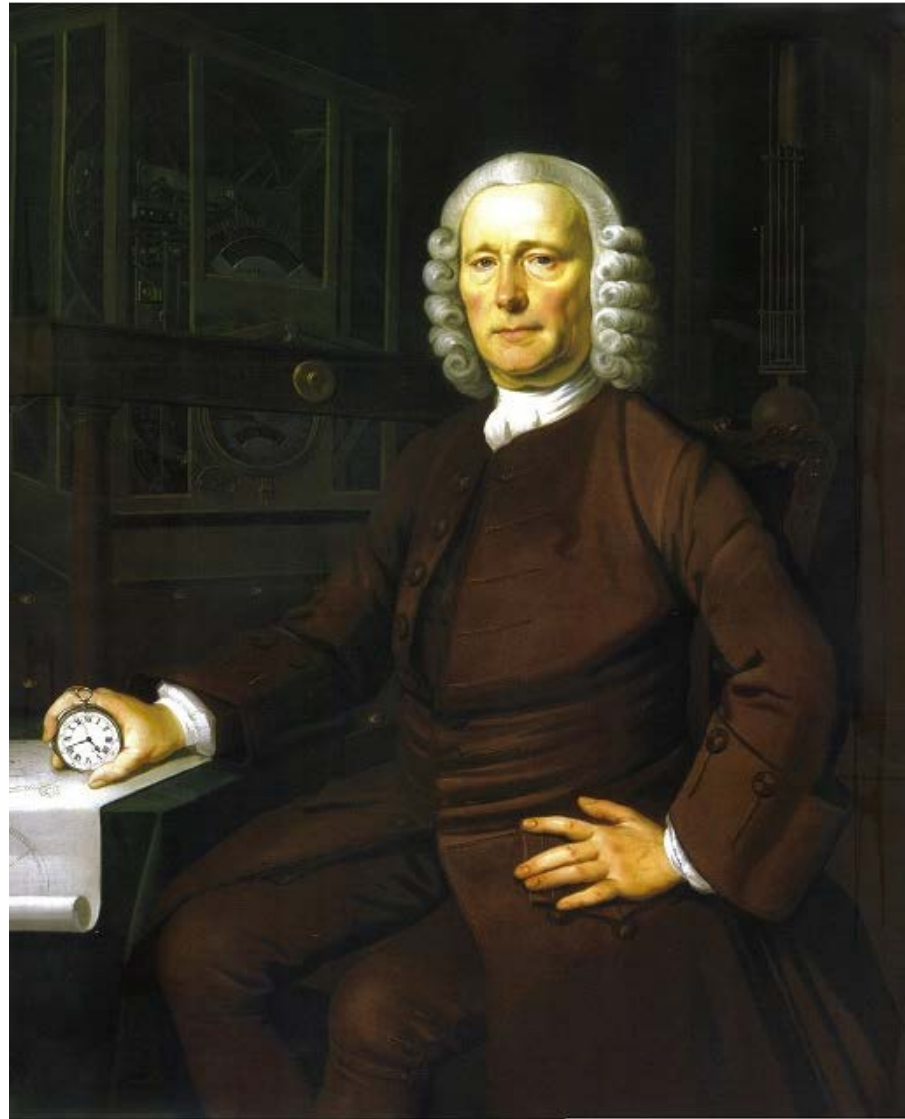
Distances of β 's Center from Sun, and from Stars east of her.

Star Names.	Noon.	3 Hours.	6 Hours.	9 Hours.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
	D. M. S.	D. M. S.	D. M. S.	D. M. S.	D. M. S.	D. M. S.	D. M. S.	D. M. S.
1 α Arietis.	58. 50. 18	57. 14. 38	55. 33. 25	54. 3. 49	52. 28. 0	50. 52. 1	49. 15. 12	47. 35. 54
2	46. 3. 0	44. 26. 29	42. 49. 44	41. 12. 51	39. 35. 50	37. 58. 41	36. 21. 21	34. 44. 3
3	32. 8. 34							
4 Aldebaran.	65. 57. 58	64. 10. 59	62. 41. 49	61. 3. 28	59. 24. 50	57. 46. 15	56. 7. 24	54. 28. 22
5	52. 49. 14	51. 9. 54	49. 30. 25	47. 50. 49	46. 11. 5	44. 31. 13	42. 51. 16	41. 31. 11
6	39. 31. 8	37. 50. 54	36. 10. 42	34. 50. 33	32. 50. 13	31. 10. 21	29. 30. 27	27. 50. 44
7	26. 11. 14							
8 The Sun.	116. 48. 6	115. 14. 12	113. 40. 49	112. 6. 51	110. 31. 39	108. 58. 13	107. 23. 34	105. 48. 41
9	104. 13. 35	102. 38. 14	101. 2. 40	99. 26. 52	97. 50. 50	96. 14. 34	94. 38. 4	92. 62. 0
10	91. 24. 23	89. 47. 12	88. 9. 47	86. 32. 0	84. 54. 51	83. 16. 11	81. 37. 53	79. 59. 31
11	78. 20. 35	76. 41. 37	74. 2. 27	72. 3. 1	71. 43. 59	70. 3. 40	68. 53. 41	67. 43. 31
12	65. 3. 0	63. 21. 20	61. 41. 53	60. 1. 0	58. 19. 57	56. 38. 43	54. 57. 25	53. 15. 5
13	51. 31. 22	49. 51. 39	48. 10. 51	46. 28. 58	44. 47. 0	43. 4. 58	41. 22. 53	39. 40. 44
14 Spica μ .	29. 41. 54	28. 0. 42	26. 19. 58	24. 59. 43	23. 59. 53	21. 20. 30	19. 41. 52	18. 3. 30
15 Antares.	16. 25. 25							

A U G U S T 1787. VIII

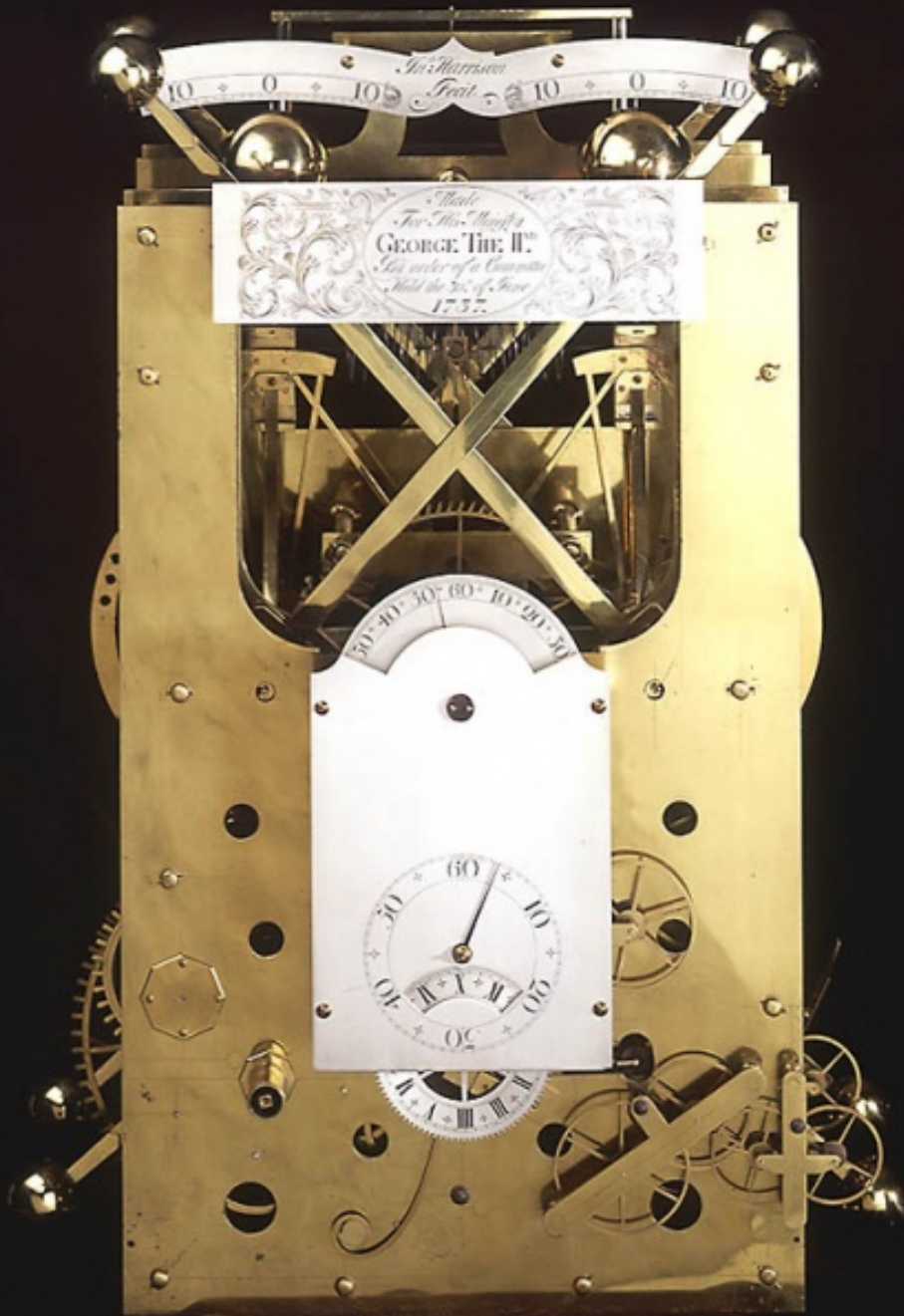
Solve lunar semi-diameter
Correction for parallax and
refraction
Solve for time and longitude

John Harrison

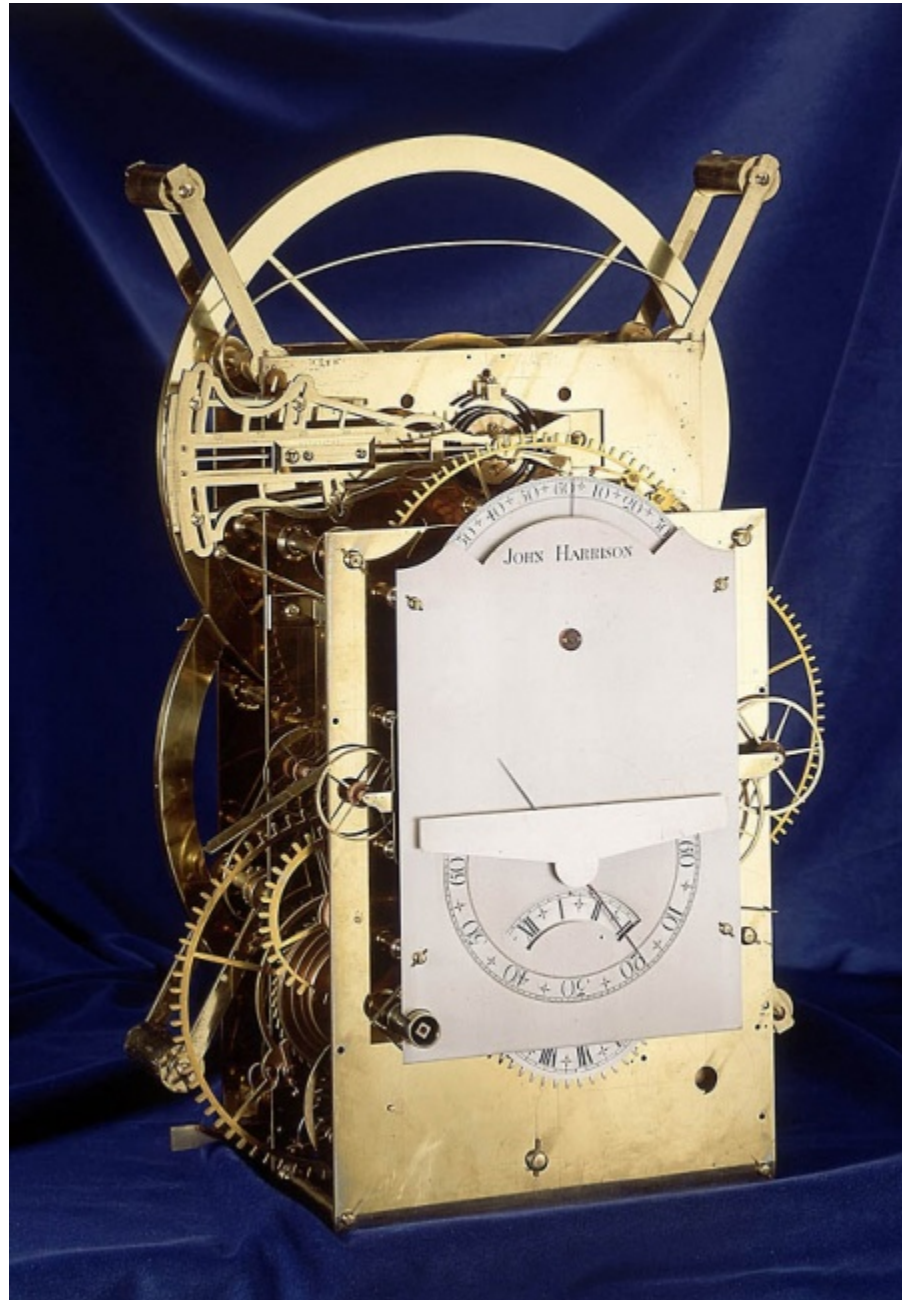


H1 The Sea Clock 1735





H2:
1741



H3
1758

The Ultimate: H4 1759 (5)



St. John-at-Hampstead



Memorials

