1. p.181, 3rd paragraph: The first sentence has no verb and shouldn't Section 6.2 be Section 6.3?

2. p.181, 3rd paragraph, last sentence: The specialized topics dealing with applications to non-parametric quantile regression aren't treated in the final section of the chapter. They are treated in Section 6.10 and 6.11.

3. p.181, 3rd paragraph: Shouldn't a synopsis for Section 6.5, 6.6, 6.7 and 6.8 be given?

4. p.182, last equation: move "x" down a little to align it with the center of ().

5. p.184, second equation: There shouldn't be any subscript for σ and subscript i for b is missing.

6. p.184, line -15: σ_i should be σ without the subcript.

7. p.184, last line: a missing comma before "we have...".

8. p.186, line 6 of Lemma 6.1: "...columns of B..." should be "...columns of A...".

9. p.187, after the second equation: $r_i = a_i^\top x_0 - b$ should be $r_i = a_i^\intercal \hat{x} - b_i$.

10. p.187, Theorem 6.2: Is the $\hat{u}$ relatedd to v in the previous paragraph?

11. p.187, Theorem 6.2: Since this theorem is not proved and it's derivation isn't very clear, it might help bride the gap to provide the reference to Theorem 7.8.2 in Gill, Murray and Wright (1992).

12. p.187, second equation in Theorem 6.2: $u \geq 0$ should be $\hat{u} \geq 0$.

13. p.187, line -2: $\tilde{c} = (c, 0)^\top$ should be $\tilde{c} = \left(c^\top, 0\right)^\top$

14. p.188, line 16: a missing left (in front of $a_i \hat{x}_i - b_i$

15. p.189, lines 6: add an "as" to after "formulate the primal problem".

16. p.189, line 10: a missing "(ii)" somewhere infront of "...convex combination..."?

17. p.189, 3rd equation: "if$x$" should "if x"

18. p.189, next 2 lines: "$K = R^n, K^* = 0_n$; and $K = R^n_+, K^* = R^n_+$" should be "$S = R^n_+, T = 0_m$; and $S^* = R^n_+, T^* = R^m_+$"

19. p.190, 4th displayed math: move d down to align with the center of ().

20. p.192, 1st displayed math: I'm not sure if there should be a "$-X\left(h\right)^{-1}$" in front of the $\sum \psi^*_\tau \left(y_i - x_i^\top b\left(h\right)\right) x_i^\top$

21. p.192, line 18: $b\left(h\right)$ should be $b\left(h_0\right)$ two times.

22. p.193, 2nd displayed math: subscript for min should $b \in R$

23. p.193, 4th displayed math: a missing ")" on the left-hand-side, the second "$\acute{-}$" should be a "+" on the rhs and another missing ")", and the last "+" in the last equation should be a "$\cdot$" and drop the $|x_i|$ at the end. The equation should be

$$\begin{aligned}\sum \left(\tau - I\left(y_i < x_i b\right)\right) x_i &= \sum \left(\tau - \frac{1}{2} + \frac{1}{2} sgn\left(y_i - x_i b\right)\right) x_i \\ &= \sum \left[\tau - \frac{1}{2} + \frac{1}{2} sgn\left(y_i / x_i - b\right) sgn\left(x_i\right)\right] x_i \\ &= \left(\tau - \frac{1}{2}\right) \sum x_i - \frac{1}{2} \sum |x_i| \, I\left(y_i / x_i < b\right)\end{aligned}$$

or

$$\begin{aligned}\sum \left(\tau - I\left(y_i < x_i b\right)\right) x_i &= \sum \left(\tau - \frac{1}{2} + \frac{1}{2} sgn\left(y_i - x_i b\right)\right) x_i \\ &= \sum \left[\tau - \frac{1}{2} + \frac{1}{2} sgn\left(y_i / x_i - b\right) sgn\left(x_i\right)\right] x_i \\ &= \left(\tau - \frac{1}{2}\right) \sum x_i - \frac{1}{2} \sum |x_i| + \frac{1}{2} \sum |x_i| \, I\left(y_i / x_i \geq b\right)\end{aligned}$$

24. p.193, the last sentence before the 5th dispalyed math: "...the corresponding sum of $|x_i|$'s exceeds..." should be "...the corresponding sum of $\frac{1}{2} |x_i| \, I\left(y_i / x_i \geq b_i\right)$'s exceeds..."

25. p.196, line -8: Move the sentence "Denote the jth column of $\tilde{X}$ by X_j." to before "Our first task is to reduce ..." will read better.

26. p.196, line -7: $i \notin h$ should be $i \notin \hat{h}$

27. p.196, 3rd displayed math: what is u_i isn't clear.

28. p.197, 4 lines before the 1st displayed math: $b\left(h\right)$ should be $b\left(\tilde{h}\right)$

29. p.197, 2 lines down: h should be $\tilde{h}$

30. p.197, 1st displayed math: h should be $\tilde{h}$ 7 times.

31. p.197, 2nd displayed math: why is there a ">" in the minimand?

32. p.198, 1st sentence of the 2nd paragraph: "... a large number vertices..." should be "... a large number of vertices..."

33. p.198, 3 lines down: remove the comma after "dimension".

34. p.198, 1st line of the last paragraph: fix "/citeasnouncKarm"

35. p.199, the next line after the 3rd displayed math: (6.58) should be (6.9)

36. p.199, 2 lines down: (6.58) should be (6.9)

37. p.199, 3 lines above the 4th displayed math: (6.58) should be (6.9)

38. p.200, 1 line before equation (6.16): (6.58) should be (6.9)

39. p.201, last sentence of the 1st paragraph: A period is missing before "But before doing ..."

40. p.202, equation (6.25): Shouldn't it be

$$p = \mu^{-1} D^2 s + De - \mu^{-1} D^2 \hat{a} e$$

41. p.204, equation (6.29) and (6.30): A hat is missing for both p_d and p_z since there is a hat in $\hat{p}_a$

42. p.204, the paragraph after (6.30): The comparison between the primal-dual direction with the purely primal step dervied isn't discussed explicitly later anywhere.

43. p.208, 1st line: The period after $(0, 1)$ should be a comma.

44. p.208, equation (6.36): Shouldn't the $\left(A^{-1} - S^{-1}\right)$ be $\left(A^{-1} + S^{-1}\right)$ and likewise for all subsequant appearance.

45. p.211, equation (6.49): The second "$-$" sbould be a "$+$" in δ_u

46. p.214, line 2: Fix Renegar.88

47. p.219, before the beginning of Section 6.9: Why not add the picture of the results for PFN's performance since it's so convincing evidence in the Tortise race.

48. p.291, last line: remove the dash in non-linear.

49. p.220, 3rd displayed math: What is $g(\theta^*)$?

50. p.220, next line: $J(\theta) = (\partial g_i / \partial t_j)$ should be $J(\theta) = (\partial g_i / \partial \theta_j)$?

51. p.220, equation (6.53): Shouldn't the subscript of min be $\beta \in R^p$ instead?

52. p.221, line 1: "minimand" should be "maximand".

53. p.221, equation (6.54): Shouldn't $\left(R^{-1} - S^{-1}\right)$ be $\left(R^{-1} + S^{-1}\right)$ and $g^\top r$ be $g^\top \delta$?

54. p.221, the next displayed math: The 2nd "$+$" should be a "$-$", no transpose in J and $\left(R^{-1} - S^{-1}\right)$ be $\left(R^{-1} + S^{-1}\right)$. It should be

$$g + \mu \left(R^{-1} + S^{-1}\right) - \mu \left(R^{-2} + S^{-2}\right) \delta = J\beta$$

55. p.223, line after equation (6.57): space in front of d_1.

56. p.223, next line: Aren't d_1 constrainded to be $\in [\tau - 1, \tau]^n$ rather than "unconstrained"?

57. p.223, the line after the 2nd displayed math: $d_1 = 1 - \tau + d_1, d_2 = d_2$ should be $a_1 = 1 - \tau + d_1, a_2 = d_2$

58. p.224, line 4: Insert a "in" between "Modern developments" and "sparse linear ...".

59. p.225, line 6: "200 by 750" should be "750 by 200"

60. p.225, next line: XXX should be 1.6%. I can't obtain YYY yet since the code in tripack and triogram seems to have changed and is causing problem in SparseM. I'll need some more time to fix that.

61. p.225, last line: Figure ?? should be Figure 6.7.

62. p.226, line -5: Reference for Edgeworth (1888) is missing in the Bibliography.