PCA Report: Day-by-Day Analysis

# Explained Variance Percentages

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Day | PC1 | PC2 | PC3 | PC4 | PC5 |
| Day 1 | 89.93% | 7.99% | 1.34% | 0.56% | 0.09% |
| Day 2 | 90.88% | 5.54% | 1.97% | 1.14% | 0.41% |
| Day 3 | 76.54% | 14.55% | 4.93% | 2.39% | 1.37% |
| Day 4 | 92.55% | 3.87% | 1.95% | 1.44% | 0.15% |
| Day 5 | 84.95% | 8.22% | 4.89% | 1.38% | 0.33% |
| Day 6 | 81.62% | 12.92% | 3.74% | 1.13% | 0.32% |

# Top 10 Wavelengths for Each Principal Component (Day-by-Day)

## PC1 Wavelengths

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
| 416 | 1712 | 1720 | 1468 | 1162 | 545 |
| 417 | 1708 | 1718 | 1466 | 1161 | 547 |
| 418 | 1711 | 1719 | 1467 | 1163 | 548 |
| 419 | 1707 | 1721 | 1469 | 1160 | 544 |
| 415 | 1709 | 1711 | 1465 | 1159 | 546 |
| 412 | 1719 | 1709 | 1458 | 1164 | 549 |
| 411 | 1721 | 1710 | 1464 | 1165 | 550 |
| 1732 | 1710 | 1716 | 1470 | 1166 | 551 |
| 1731 | 1714 | 1712 | 1459 | 1168 | 543 |
| 1729 | 1717 | 1708 | 1471 | 1158 | 552 |

## PC2 Wavelengths

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
| 572 | 581 | 598 | 653 | 1905 | 979 |
| 571 | 580 | 599 | 652 | 1906 | 978 |
| 570 | 582 | 597 | 654 | 1907 | 977 |
| 569 | 579 | 600 | 651 | 1904 | 976 |
| 573 | 588 | 601 | 655 | 1908 | 974 |
| 568 | 584 | 596 | 650 | 1909 | 975 |
| 574 | 583 | 602 | 656 | 1910 | 973 |
| 575 | 589 | 603 | 649 | 1911 | 971 |
| 567 | 590 | 595 | 657 | 1912 | 972 |
| 576 | 587 | 604 | 658 | 1903 | 969 |

## PC3 Wavelengths

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
| 620 | 587 | 1907 | 686 | 583 | 653 |
| 619 | 588 | 1906 | 685 | 582 | 654 |
| 618 | 586 | 1908 | 684 | 584 | 774 |
| 617 | 589 | 1905 | 687 | 585 | 772 |
| 616 | 590 | 1904 | 683 | 581 | 773 |
| 621 | 585 | 1909 | 688 | 586 | 771 |
| 615 | 583 | 1903 | 682 | 580 | 782 |
| 614 | 582 | 1910 | 689 | 587 | 775 |
| 613 | 591 | 1902 | 681 | 579 | 770 |
| 612 | 592 | 1911 | 680 | 588 | 652 |

## PC4 Wavelengths

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
| 2507 | 643 | 552 | 683 | 677 | 2507 |
| 2506 | 644 | 553 | 684 | 678 | 2483 |
| 2467 | 645 | 557 | 682 | 679 | 2506 |
| 2468 | 621 | 554 | 577 | 676 | 2482 |
| 2485 | 642 | 556 | 576 | 675 | 632 |
| 2484 | 646 | 551 | 578 | 680 | 631 |
| 2473 | 620 | 555 | 685 | 674 | 633 |
| 2489 | 622 | 550 | 574 | 673 | 630 |
| 2486 | 641 | 549 | 575 | 407 | 634 |
| 2469 | 647 | 548 | 579 | 406 | 2465 |

## PC5 Wavelengths

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
| 2498 | 429 | 607 | 348 | 2507 | 629 |
| 2499 | 428 | 608 | 349 | 2506 | 628 |
| 624 | 430 | 606 | 347 | 982 | 630 |
| 623 | 407 | 605 | 357 | 2505 | 627 |
| 625 | 594 | 609 | 346 | 983 | 631 |
| 622 | 595 | 604 | 350 | 984 | 626 |
| 621 | 592 | 610 | 356 | 985 | 2415 |
| 616 | 593 | 611 | 353 | 1073 | 625 |
| 617 | 408 | 603 | 354 | 1072 | 632 |
| 619 | 596 | 612 | 355 | 1075 | 970 |