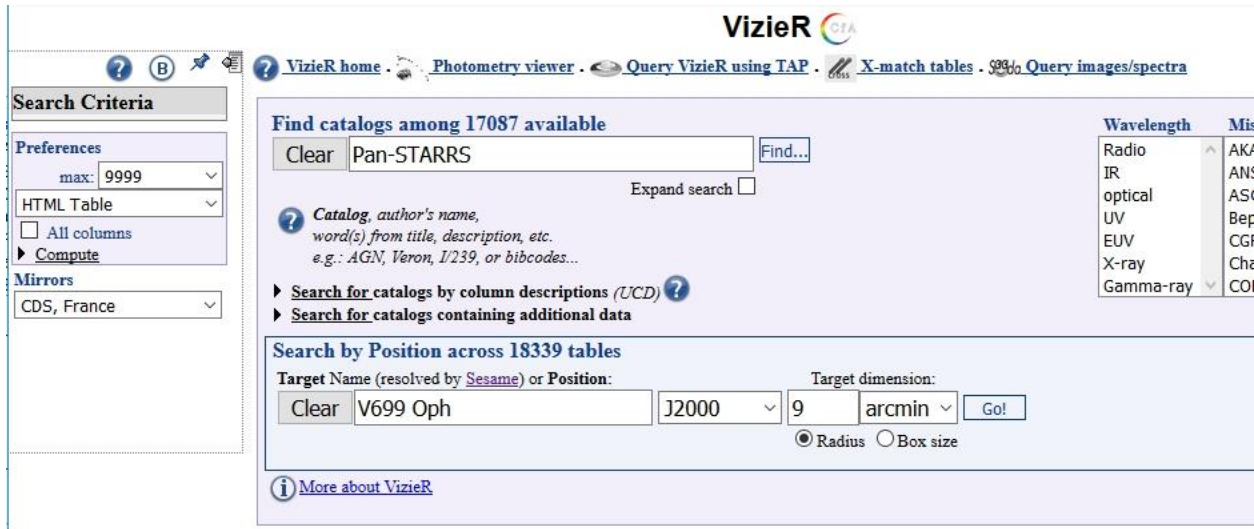
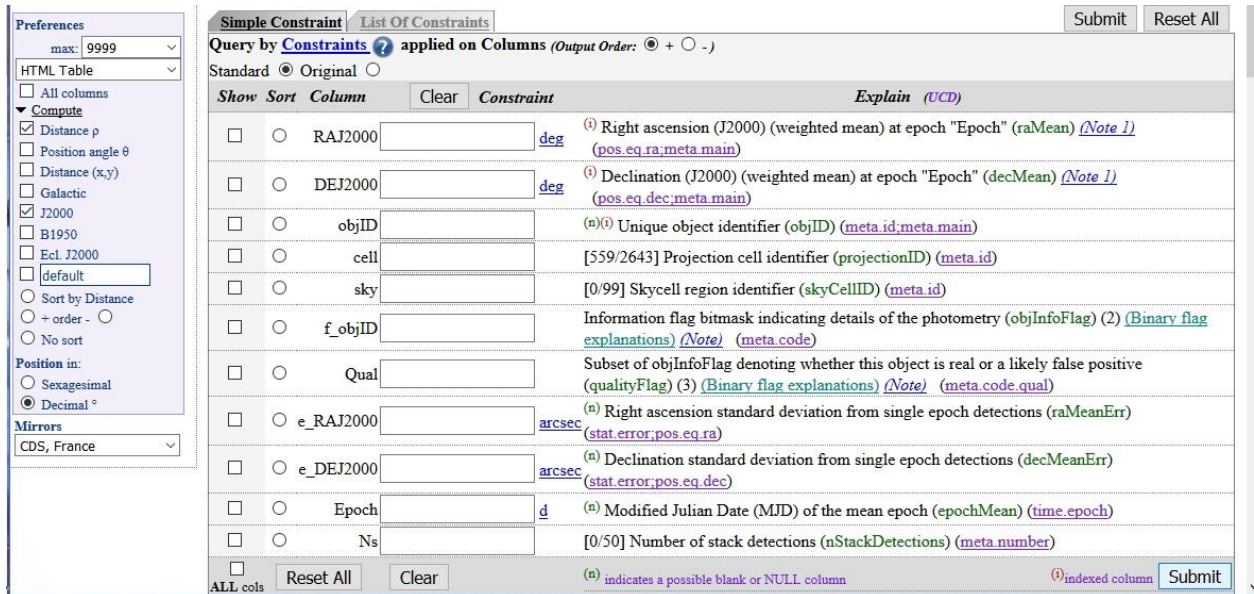


# Visual Clues on Using VizieR to Select Potential Comps From the Pan-STARRS Catalog



After Selection of the Go! Box, when the Data Comes up click on the “Modify Query” Box (left side) and you will be presented with the following screens

Click on “All Cols” 2X (follow the “Show” down to the first one) to uncheck all boxes then Select only what is shown below and note the one “sort” option selected! Also note that you must check the Position Box to be Decimal (left side)



| <input type="checkbox"/> ALL cols   | Reset All                        | Clear   | <sup>(n)</sup> indicates a possible blank or NULL column | <sup>(i)</sup> indexed column   | Submit              |
|-------------------------------------|----------------------------------|---------|--|---|---------------------|
| <input type="checkbox"/>            | <input type="radio"/>            | Nd      |  | [3/369] Number of single epoch detections in all filters ( <sup>(n)</sup> Detections) ( <a href="#">meta number</a> )   |                     |
| <input type="checkbox"/>            | <input type="radio"/>            | Ng      |  | [0/52] Number of single epoch detections in g filter ( <sup>(n)</sup> g) ( <a href="#">meta number</a> )  |                     |
| <input type="checkbox"/>            | <input type="radio"/>            | Nr      |  | [0/368] Number of single epoch detections in r filter ( <sup>(n)</sup> r) ( <a href="#">meta number</a> )   |                     |
| <input type="checkbox"/>            | <input type="radio"/>            | Ni      |  | [0/88] Number of single epoch detections in i filter ( <sup>(n)</sup> i) ( <a href="#">meta number</a> )  |                     |
| <input type="checkbox"/>            | <input type="radio"/>            | Nz      |  | [0/44] Number of single epoch detections in z filter ( <sup>(n)</sup> z) ( <a href="#">meta number</a> )  |                     |
| <input type="checkbox"/>            | <input type="radio"/>            | Ny      |  | [0/53] Number of single epoch detections in y filter ( <sup>(n)</sup> y) ( <a href="#">meta number</a> )  |                     |
| <input type="checkbox"/>            | <input type="radio"/>            | gPSFf   |  | <sup>(n)</sup> Maximum PSF weighted fraction of pixels totally unmasked from g filter detections ( <a href="#">gQfPerfect</a> ) ( <a href="#">instr.det.psf</a> ) |                     |
| <input checked="" type="checkbox"/> | <input checked="" type="radio"/> | gmag    |  | <sup>(n)(i)</sup> [-33/33] Mean PSF AB magnitude from g filter (4866Å) detections ( <a href="#">gMeanPSFMag</a> ) ( <a href="#">phot.mag;em.opt.B</a> )           | <a href="#">mag</a> |
| <input checked="" type="checkbox"/> | <input type="radio"/>            | e_gmag  |  | <sup>(n)</sup> [0/0.5] Error in gmag ( <a href="#">gMeanPSFMagErr</a> ) ( <a href="#">stat.error;phot.mag;em.opt.B</a> )  | <a href="#">mag</a> |
| <input type="checkbox"/>            | <input type="radio"/>            | gmagStd |  | <sup>(n)</sup> Standard deviation of PSF AB magnitudes from g filter detections ( <a href="#">gMeanPSFMagStd</a> ) ( <a href="#">stat.stdev</a> )                 | <a href="#">mag</a> |
| <input type="checkbox"/>            | <input type="radio"/>            | o_gmag  | >2   | [0/49] Number of measurements included in mean PSF magnitude from g filter detections ( <a href="#">gMeanPSFMagNpt</a> ) ( <a href="#">meta number</a> )          |                     |
| <input type="checkbox"/>            | <input type="radio"/>            | b_gmag  |  | <sup>(n)</sup> Minimum PSF AB magnitude from g filter detections ( <a href="#">gMeanPSFMagMin</a> ) ( <a href="#">stat.error;phot.mag;em.opt.B</a> )              | <a href="#">mag</a> |
| <input type="checkbox"/>            | <input type="radio"/>            | B_gmag  |  | <sup>(n)</sup> Maximum PSF AB magnitude from g filter detections ( <a href="#">gMeanPSFMagMax</a> ) ( <a href="#">stat.error;phot.mag;em.opt.B</a> )              | <a href="#">mag</a> |



| <input type="checkbox"/>            | <input type="radio"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/>   |
|-------------------------------------|-----------------------|----------------------|----------------------|----------------------|--|
| <input type="checkbox"/>            | <input type="radio"/> | iPSFf                | <input type="text"/> |                      | (n) Maximum PSF weighted fraction of pixels totally unmasked from i filter detections (iQfPerfect) (instr.det.psf)           |
| <input checked="" type="checkbox"/> | <input type="radio"/> | imag                 | <input type="text"/> | mag                  | (n)(i) [-5/30] Mean PSF AB magnitude from i filter (7545Å) detections (iMeanPSFMag) (phot.mag;em.opt.I)                      |
| <input checked="" type="checkbox"/> | <input type="radio"/> | e_imag               | <input type="text"/> | mag                  | (n) [0/0.5] Error in imag (iMeanPSFMagErr) (stat.error;phot.mag;em.opt.I)  |
| <input type="checkbox"/>            | <input type="radio"/> | imagStd              | <input type="text"/> | mag                  | (n) Standard deviation of PSF AB magnitudes from i filter detections (iMeanPSFMagStd) (stat.stdev)                           |
| <input type="checkbox"/>            | <input type="radio"/> | o_imag               | >2                   |                      | [0/85] Number of measurements included in mean PSF magnitude from i filter detections (iMeanPSFMagNpt) (meta.number)         |
| <input type="checkbox"/>            | <input type="radio"/> | b_imag               | <input type="text"/> | mag                  | (n) Minimum PSF AB magnitude from i filter detections (iMeanPSFMagMin) (stat.error;phot.mag;em.opt.I)                        |
| <input type="checkbox"/>            | <input type="radio"/> | B_imag               | <input type="text"/> | mag                  | (n) Maximum PSF AB magnitude from i filter detections (iMeanPSFMagMax) (stat.error;phot.mag;em.opt.I)                        |
| <input type="checkbox"/>            | <input type="radio"/> | iKmag                | <input type="text"/> | mag                  | (n) Mean Kron (1980) AB magnitude from i filter detections (iMeanKronMag) (phot.mag;em.opt.I)                                |
| <input type="checkbox"/>            | <input type="radio"/> | e_iKmag              | <input type="text"/> | mag                  | (n) Error in zKmag (iMeanKronMagErr) (stat.error;phot.mag)   |
| <input type="checkbox"/>            | <input type="radio"/> | iFlags               | <input type="text"/> |                      | Information flag bitmask for mean object from i filter detections (iFlags) (4) (Binary flag explanations) (Note) (meta.code) |
| <input type="checkbox"/>            | <input type="radio"/> | zPSFf                | <input type="text"/> |                      | (n) Maximum PSF weighted fraction of pixels totally unmasked from z filter detections (zQfPerfect) (instr.det.psf)           |
| <input type="checkbox"/>            | <input type="radio"/> | zmag                 | <input type="text"/> | mag                  | (n)(i) [-5/29] Mean PSF AB magnitude from z filter (8679Å) detections (zMeanPSFMag) (phot.mag;em.opt.I)                      |
| <input type="checkbox"/>            | <input type="radio"/> | e_zmag               | <input type="text"/> | mag                  | (n) [0/0.5] Error in zmag (zMeanPSFMagErr) (stat.error;phot.mag;em.opt.I)  |

Now Select The “Submit” Box and you will be presented with 10 columns of data as shown below which can then be copied and inserted into the team Excel spread sheet designed to convert this Sloan Filter Data Into BVRI Data for potential selection of individual sequence members.

**Search Criteria**

Save in CDSportal

Keywords: Pan-Starrs, V699 Oph

Tables: II/349, ..ps1

Constraints: V699 Oph (arcmin 9), o\_gmag >2, o\_rmag >2, o\_imag >2

Preferences: max: 9999, HTML Table, All columns, Compute

Mirrors: CDS, France

- Show the target form
- Show constraint information

The 3 columns in *color* are computed by VizieR, and are *not part of the original data*.

Note:

[II/349/ps1](#) The Pan-STARRS release 1 (PS1) Survey - DR1 (Chambers+, 2016) [2016arXiv161205560C](#)  
*Post annotation* Pan-STARRS DR1 catalogue (original column names in green) (1919106885 rows)

 [start AladinLite](#)  [plot the output](#)  [query using TAP/SQL](#)

| <i>Full</i> | <i>r</i> | <i>RAJ2000</i> | <i>DEJ2000</i> | <i>gmag</i> | <i>e</i> | <i>rmag</i> | <i>e</i> | <i>imag</i> | <i>e</i> |
|-------------|----------|----------------|----------------|-------------|----------|-------------|----------|-------------|----------|
|             | arcmin   | deg            | deg            | mag         | mag      | mag         | mag      | mag         | mag      |
| 1           | 8.4676   | 246.223996     | -04.784727     | 14.5943     | 0.0023   | 14.1138     | 0.0043   | 13.8996     | 0.0038   |
| 2           | 4.7463   | 246.344355     | -04.601787     | 14.8169     | 0.0018   | 14.2859     | 0.0027   | 14.0721     | 0.0019   |
| 3           | 6.0246   | 246.351702     | -04.581729     | 14.8390     | 0.0028   | 14.3349     | 0.0008   | 14.1262     | 0.0012   |
| 4           | 3.8929   | 246.358137     | -04.719185     | 15.0206     | 0.0008   | 14.3512     | 0.0027   | 14.0780     | 0.0016   |
| 5           | 8.3799   | 246.430974     | -04.600720     | 15.1899     | 0.0022   | 14.4186     | 0.0035   | 14.0605     | 0.0022   |
| 6           | 6.8107   | 246.293919     | -04.561695     | 15.2352     | 0.0025   | 14.4085     | 0.0019   | 14.0541     | 0.0031   |
| 7           | 8.5789   | 246.300590     | -04.531271     | 15.2767     | 0.0028   | 14.3485     | 0.0025   | 13.9187     | 0.0024   |
| 8           | 8.5270   | 246.324712     | -04.815347     | 15.3020     | 0.0021   | 14.4925     | 0.0045   | 14.1342     | 0.0027   |
| 9           | 7.7642   | 246.225074     | -04.770333     | 15.3516     | 0.0014   | 14.6479     | 0.0020   | 14.3346     | 0.0020   |
| 10          | 6.6467   | 246.416819     | -04.638192     | 15.4234     | 0.0037   | 14.5721     | 0.0017   | 14.1502     | 0.0019   |
| 11          | 1.8892   | 246.281688     | -04.663656     | 15.4473     | 0.0028   | 14.5117     | 0.0024   | 14.0652     | 0.0007   |
| 12          | 0.9992   | 246.294958     | -04.675502     | 15.4717     | 0.0020   | 14.9068     | 0.0018   | 14.6550     | 0.0029   |
| 13          | 8.6607   | 246.171685     | -04.711186     | 15.5295     | 0.0048   | 14.9316     | 0.0068   | 14.7049     | 0.0038   |
| 14          | 3.4503   | 246.283903     | -04.724288     | 15.5458     | 0.0037   | 14.8326     | 0.0023   | 14.5283     | 0.0019   |

### Copy Instructions:

Right click on the first left hand column and sweep the mouse across to the last column then all the way down to the bottom of the data and then left click your mouse and select copy..

| <u>Full</u> | <u>r</u><br>arcmin | <u>RAJ2000</u><br>"h:m:s" | <u>DEJ2000</u><br>"d:m:s" | <u>gmag</u><br>mag | <u>e</u><br>mag | <u>rmag</u><br>mag | <u>e</u><br>mag | <u>imag</u><br>mag | <u>e</u><br>mag |
|-------------|--------------------|---------------------------|---------------------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|
| 1           | 8.4676             | 16 24 53.759              | -04 47 05.02              | 14.5943            | 0.0023          | 14.1138            | 0.0043          | 13.8996            | 0.0038          |
| 2           | 4.7463             | 16 25 22.645              | -04 36 06.43              | 14.8169            | 0.0018          | 14.2859            | 0.0027          | 14.0721            | 0.0019          |
| 3           | 6.0246             | 16 25 24.409              | -04 34 54.23              | 14.8390            | 0.0028          | 14.3349            | 0.0008          | 14.1262            | 0.0012          |
| 4           | 3.8929             | 16 25 25.953              | -04 43 09.07              | 15.0206            | 0.0008          | 14.3512            | 0.0027          | 14.0780            | 0.0016          |
| 5           | 8.3799             | 16 25 43.434              | -04 36 02.59              | 15.1899            | 0.0022          | 14.4186            | 0.0035          | 14.0605            | 0.0022          |
| 6           | 6.8107             | 16 25 10.540              | -04 33 42.10              | 15.2352            | 0.0025          | 14.4085            | 0.0019          | 14.0541            | 0.0031          |
| 7           | 8.5789             | 16 25 12.142              | -04 31 52.58              | 15.2767            | 0.0028          | 14.3485            | 0.0025          | 13.9187            | 0.0024          |
| 8           | 8.5270             | 16 25 17.931              | -04 48 55.25              | 15.3020            | 0.0021          | 14.4925            | 0.0045          | 14.1342            | 0.0027          |
| 9           | 7.7642             | 16 24 54.018              | -04 46 13.20              | 15.3516            | 0.0014          | 14.6479            | 0.0020          | 14.3346            | 0.0020          |
| 10          | 6.6467             | 16 25 40.037              | -04 38 17.49              | 15.4234            | 0.0037          | 14.5721            | 0.0017          | 14.1502            | 0.0019          |
| 11          | 1.8892             | 16 25 07.605              | -04 39 49.16              | 15.4473            | 0.0028          | 14.5117            | 0.0024          | 14.0652            | 0.0007          |
| 12          | 0.9992             | 16 25 10.790              | -04 40 31.81              | 15.4717            | 0.0020          | 14.9068            | 0.0018          | 14.6550            | 0.0029          |
| 13          | 8.6607             | 16 24 41.204              | -04 42 40.27              | 15.5295            | 0.0048          | 14.9316            | 0.0068          | 14.7049            | 0.0038          |
| 14          | 3.4503             | 16 25 08.137              | -04 43 27.44              | 15.5458            | 0.0037          | 14.8326            | 0.0023          | 14.5283            | 0.0019          |
| 15          | 8.1648             | 16 25 21.766              | -04 33 27.17              | 15.5046            | 0.0028          | 14.4102            | 0.0024          | 13.8206            | 0.0016          |

then simply click on the 1<sup>st</sup> column of row 3 of the spread sheet and paste the data.

| 1  | <u>Full</u> | <u>r</u><br>arcmin | <u>RAJ2000</u><br>deg | <u>DEJ2000</u><br>deg | <u>gmag</u><br>mag | <u>e</u><br>mag | <u>rmag</u><br>mag | <u>e</u><br>mag | <u>imag</u><br>mag | <u>e</u> |
|----|-------------|--------------------|-----------------------|-----------------------|--------------------|-----------------|--------------------|-----------------|--------------------|----------|
| 3  | <u>1</u>    | 8.4676             | 24 53.759             | 4 47 05.02            | 14.5943            | 0.0023          | 14.1138            | 0.0043          | 13.8996            | 0.0038   |
| 4  | <u>2</u>    | 4.7463             | 25 22.645             | 4 36 06.43            | 14.8169            | 0.0018          | 14.2859            | 0.0027          | 14.0721            | 0.0019   |
| 5  | <u>3</u>    | 6.0246             | 25 24.409             | 4 34 54.23            | 14.839             | 0.0028          | 14.3349            | 0.0008          | 14.1262            | 0.0012   |
| 6  | <u>4</u>    | 3.8929             | 25 25.953             | 4 43 09.07            | 15.0206            | 0.0008          | 14.3512            | 0.0027          | 14.078             | 0.0016   |
| 7  | <u>5</u>    | 8.3799             | 25 43.434             | 4 36 02.59            | 15.1899            | 0.0022          | 14.4186            | 0.0035          | 14.0605            | 0.0022   |
| 8  | <u>6</u>    | 6.8107             | 25 10.540             | 4 33 42.10            | 15.2352            | 0.0025          | 14.4085            | 0.0019          | 14.0541            | 0.0031   |
| 9  | <u>7</u>    | 8.5789             | 25 12.142             | 4 31 52.58            | 15.2767            | 0.0028          | 14.3485            | 0.0025          | 13.9187            | 0.0024   |
| 10 | <u>8</u>    | 8.527              | 25 17.931             | 4 48 55.25            | 15.302             | 0.0021          | 14.4925            | 0.0045          | 14.1342            | 0.0027   |
| 11 | <u>9</u>    | 7.7642             | 24 54.018             | 4 46 13.20            | 15.3516            | 0.0014          | 14.6479            | 0.002           | 14.3346            | 0.002    |
| 12 | <u>10</u>   | 6.6467             | 25 40.037             | 4 38 17.49            | 15.4234            | 0.0037          | 14.5721            | 0.0017          | 14.1502            | 0.0019   |
| 13 | <u>11</u>   | 1.8892             | 25 07.605             | 4 39 49.16            | 15.4473            | 0.0028          | 14.5117            | 0.0024          | 14.0652            | 0.0007   |
| 14 | <u>12</u>   | 0.9992             | 25 10.790             | 4 40 31.81            | 15.4717            | 0.002           | 14.9068            | 0.0018          | 14.655             | 0.0029   |
| 15 | <u>13</u>   | 8.6607             | 24 41.204             | 4 42 40.27            | 15.5295            | 0.0048          | 14.9316            | 0.0068          | 14.7049            | 0.0038   |
| 16 | <u>14</u>   | 3.4503             | 25 08.137             | 4 43 27.44            | 15.5458            | 0.0037          | 14.8326            | 0.0023          | 14.5283            | 0.0019   |