Solution to Strings of Communication

By Hemanth Srinivas

There is a subtle clue in the flavor text with the word "mail." It should signify places / destinations.

The first thing to notice is the first 4 numbers in each set of characters represents a year. Furthermore, these years correspond to years in which the Olympics were held (either Winter or Summer). For the years greater than 1994, the task is easy because the winter and summer Olympics alternate every two years. However prior to 1994, both sets were held on the same year. Figuring out the numbers and arrows after the year provides the next step. These numbers represent latitude and longitude coordinates in degrees, and minutes. The arrows represent the direction, therefore up arrow would be North, and an arrow pointing right would be East and so forth. Therefore each set of numbers and arrows represents a date and the city where the Olympics were hosted during that year. From this, you can determine when / where the Olympics were hosted for the blank space. When is not so important as where. Getting the list of cities that are missing, and then reading the first letter of each city, a clue is formed: "IOC LOCATION." A quick search online will tell you that the International Olympic Committee headquarters are located in LAUSANNE.

The purpose of the very first string is to show that the winter Olympics happen BEFORE the summer Olympics when they occur in the same calendar year. Most of the latitudes and longitudes can be found from: http://www.infoplease.com/ipa/A0001769.html and http://www.infoplease.com/ipa/A0001796.html

```
When you decode the strings, you get the following:
Rome --- INNSBRUCK--- Tokyo
Los Angeles ---XXX---XXX---XXX---QSLO---XXX---XXX---Melbourne
Moscow---XXX---XXX---CALGARY---Seoul
Barcelona---LILLEHAMMER---Atlanta
London---OSLO---Helsinki
Antwerp---CHAMONIX---XXX---St. Moritz
ALBERTVILLE---XXX---Lillehammer---XXX---XXX---Sydney
Salt Lake City---XXX---TURIN---XXX---Vancouver
Munich--- NNSBRUCK---Montreal
Garmisch-Partenkirchen---XXX---XXX---XXX---OSLO---XXX---Cortina d'Ampezzo
Atlanta---NAGANO---XXX---XXX---XXX---Beijing
Looking at the missing cities:
       INNSBRUCK
       OSLO
       CALGARY
       LILLEHAMMER
       OSLO
       CHAMONIX
       ALBERTVILLE
       TURIN
       INNSBRUCK
       OSLO
```

NAGANO