

Engaging the General Public with High Altitude Ballooning

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Metropolitan Community College

Omaha, NE

7th Annual Academic High Altitude
Conference - 6/29/16 -#AHAC16

Why engage the general public?

- Recruiting for your institution
- Inspiring youth
- Raising awareness of science and engineering
- Expanding your network of collaborators
- Communicate with supporters and researchers
- Gain new supporters (additional funding)
- Increased media attention
- Some large grants ask for public outreach component
- Give students a chance to communicate science



DURHAM
RESTORATION GALLERY

SR FO







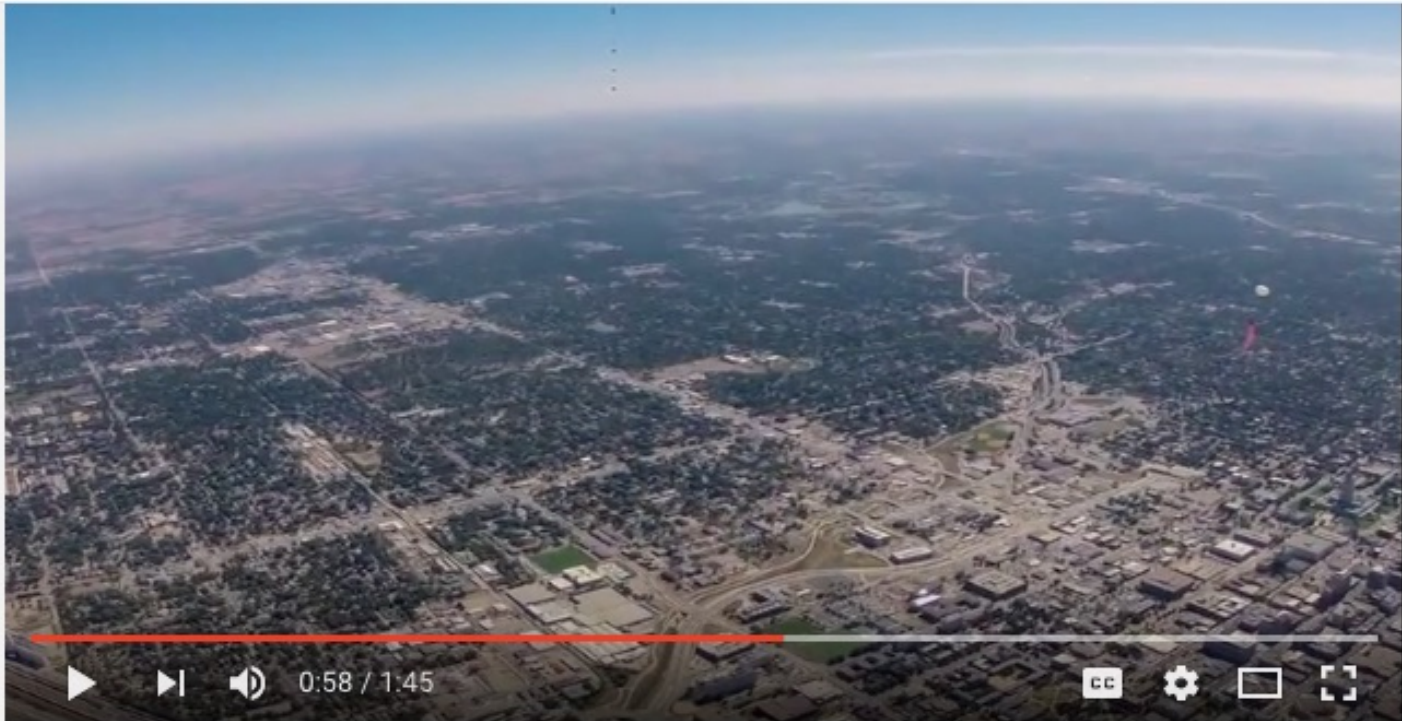


Husker Launch

- 3 HAB balloons were released from Memorial Stadium in Lincoln, NE during the halftime of a Husker football game on Sept. 15, 2012.
- 2 of the balloons had scientific payloads and were released from behind the Husker-Vision (Jumbotron) screen and the other was released from the field by Astronaut Clayton Anderson as well as students, teachers, and professors.
- Over 85,000 people were in attendance.
- Accompanying 1 minute video:

Husker Launch





Scientific Balloons Launched at Husker Football Game



University of Nebraska-Lincoln

 **Subscribe** 2,956

15,783 views

 Add to  Share  More

 73  1

Video statistics Through Jun 21, 2016

VIEWES	TIME WATCHED	SUBSCRIPTIONS DRIVEN	SHARES
15,782	15 days	4	41

Do Space Grand Opening

- Unique facility on corner of 72nd and Dodge St.
- Digital Library / 3D Printing / Maker Space
- Grand Opening on Nov. 7, 2015
- Remote HAB launch at UNO
- Video streaming from launch site
- HAB expert at Do Space during tracking



DO SPACE
10000 W. 16TH AVE.
DENVER, CO 80202

DO space

DUNKIN'
DONUTS













DO space

STRATOSTAR
UNO AND MCC, THE STRATOSTAR MISSION

UNO and MCC #StratoStar004

ALTIMETER: 40000 FT | TIME: 10:49:48 (2015-11-07 12:00)

MAPS | GRAPHS | SOCIAL

View as altitude

MISSION TIME: 00:55

TRACKING: 210

UNO AND MCC, THE STRATOSTAR MISSION

Google Maps

APR 8 - Login

Search for Station

Track station: Clear

Address, city or location: Clear

Show text: 1 hour | Show all

Track last length: 1 hour

ED00990 11

Updated: 2015-11-07 11:42:14 (UTC)
Position: 47°13.56' N 107°41.20' W

2012 | 2011 | 2010

Other SIDs: none

Other views:

- Station info
- Base profiles
- Station profiles - Beacon profiles
- APRC/WWP weather - Telemetry
- Messages - Bulletin board
- Profile browsing
- Google Earth KMZ
- Data export tool
- Preferences - My account

Information:

Station currently missing - FAQ - Blog
Discussion group - Linking to aprs.fi - ADG sites - Service status - Database statistics
Advertising on aprs.fi - Technical details
API - Change log - Planned changes
Credits and thanks - Terms Of Service

MAPS

GRAPHS

DATA

SOCIAL

LEARN MORE ABOUT THIS PROJECT

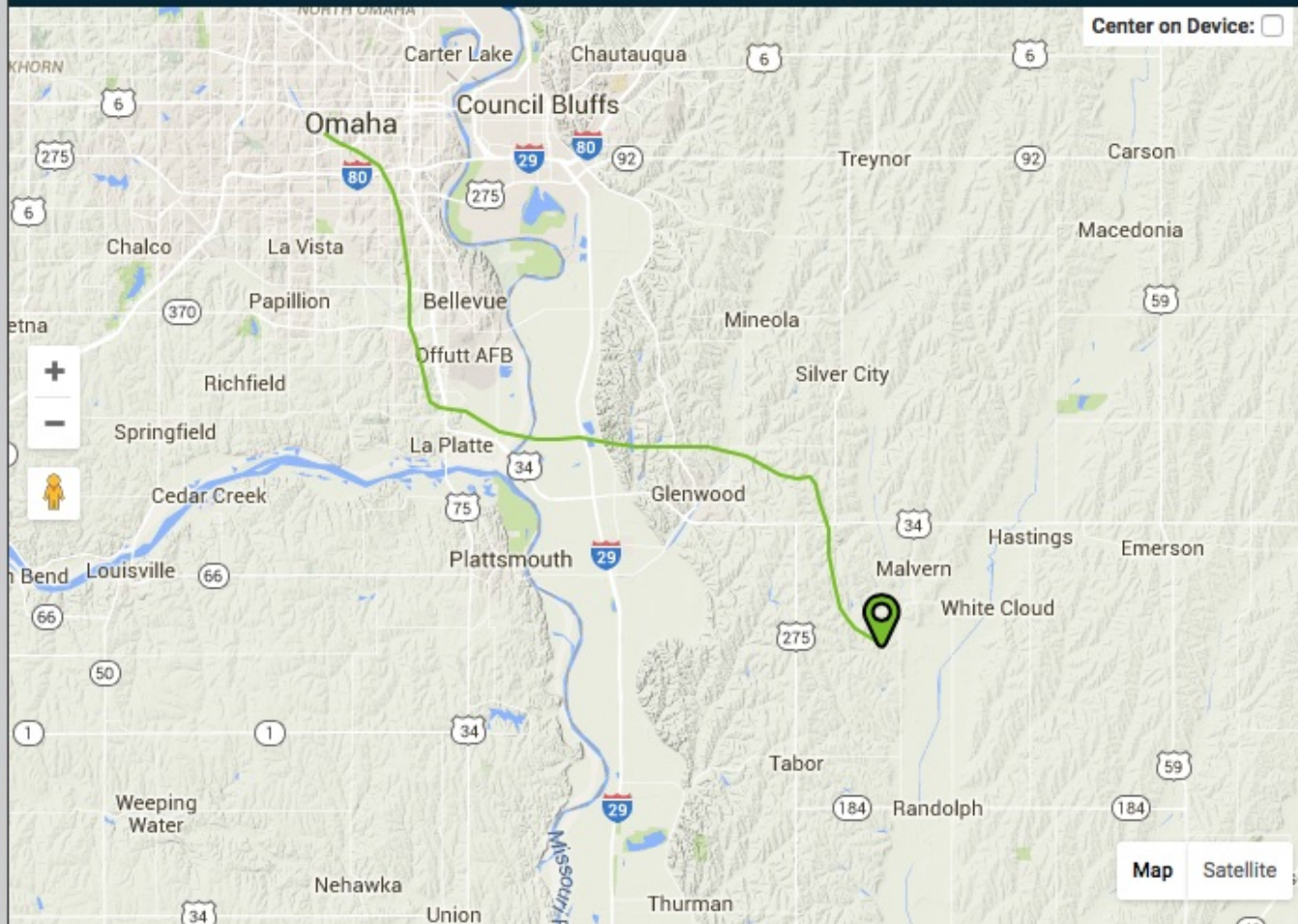
UNO and MCC

#StratoStar0040

STRATOSTAR DEVICE 2

VOLTAGE: 3.5V

DISTANCE TRAVELED: 29.0 MILES



GROUND

BALLOON

FLIGHT

BURST

PARACHUTE

END MISSION

MISSION TIME:
01:30
 HRS MIN

TRACKING:
680
 MISSION FOLLOWERS

UNO and MCC

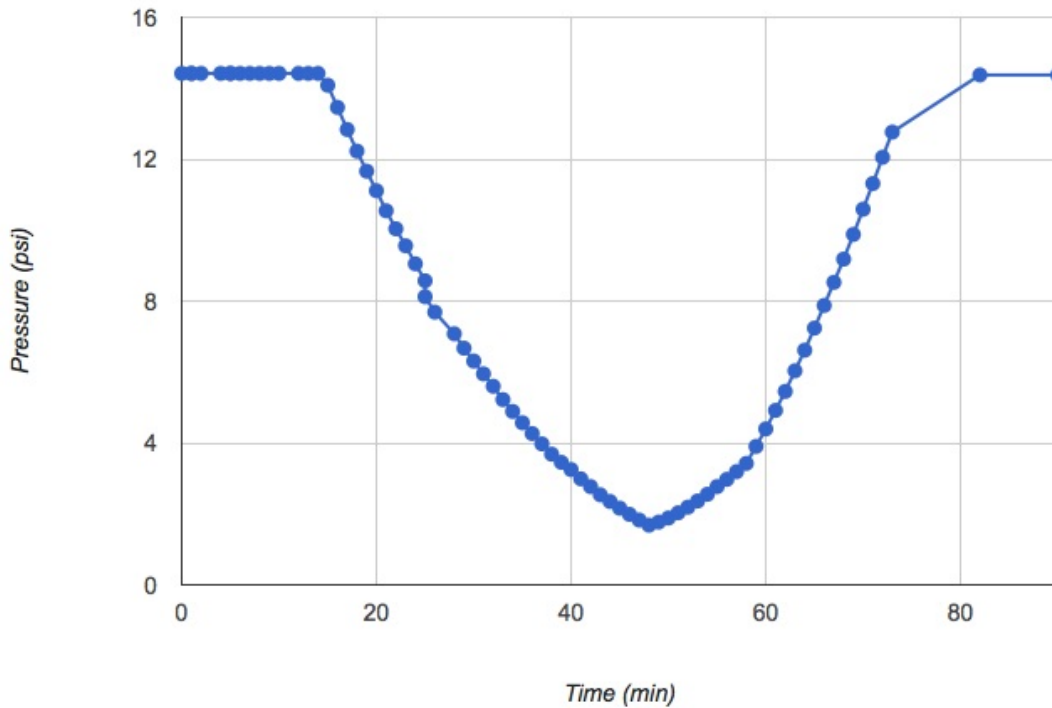
#StratoStar0040

STRATOSTAR DEVICE 2

DISTANCE TRAVELED: 29.0 MILES

FOLLOWERS: 681

Time vs Pressure



Axis 1:

- TIME
- ALTITUDE

MISSION TIME:
01:30
HRS MIN

Axis 2:

- ALTITUDE
- TEMPERATURE
- HUMIDITY
- SPEED
- VERTICAL RATE
- PRESSURE
- HEADING
- SPIN RATE
- BATTERY
- TURBULENCE

MAPS

GRAPHS

DATA

SOCIAL

LEARN MORE ABOUT THIS PROJECT

Share your mission on social media accounts to boost the reach of your mission. Don't forget to use your hashtag:

#STRATOSTAR0040



Do Space @DoSpaceOmaha Nov 7, 10:40 AM

Follow the balloon mission online:

<https://tracking.stratostar.net/mission/0040> #stratostar0040 #DoSpace



Naomi See @colorful_n0mi Nov 7, 10:30 AM



GPS Data

ALTITUDE (ft)

1,214

LATITUDE (degrees)

40.96261

LONGITUDE (degrees)

-95.60688

SPEED (mph)

0

HEADING (degrees)

319.1

DISTANCE TRAVELED (mi)

29.0

VERTICAL RATE (ft/min)

0

Sensor Data

System Data

Edit

Save Sample & Continue Tracking

Tip: Save this tracker to track future posts.

43

posts

14

users

9,383

reach

26,211

impressions

Timeline



Top Posts

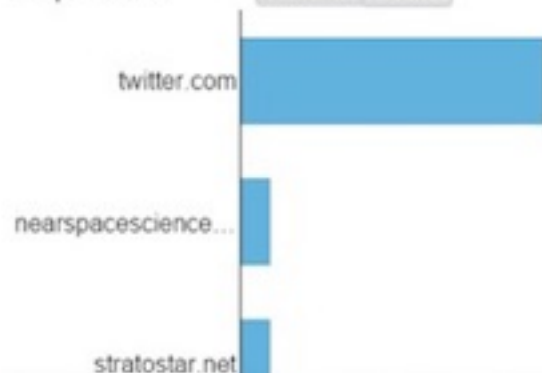
RTs/Likes Klout Recent

Tip: Click on a post's date to be taken to original post

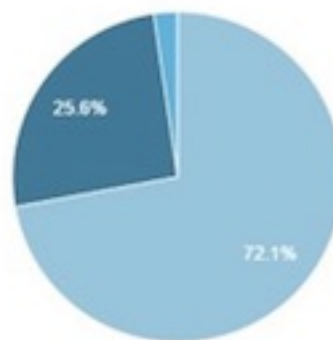
- 
 James Taylor @jamestaylor402 Nov 7 4
 #StratoStar0040 Great job! Mission accomplished: payload recovered. Thanks, @DoSpaceOmaha for hosting us! <https://t.co/aPCvGhnXOL>
- 
 Rebecca Stavick @RebeccaStavick Nov 8 2
 ALL the pretty pictures of the balloon launch into near space for @DoSpaceOmaha Grand Opening <https://t.co/StuMRavxFk> :) #StratoStar0040
- 
 MCC @mccneb Nov 7 2
 Under 2 hrs until #mccneb instructor launches high altitude balloon! Watch the coverage @ #DOSpace. #stratostar0040 <https://t.co/O7MhgGLiZw>
- 
 Jon Helgason @jonihelgason Nov 7 1
 @DoSpaceOmaha watching #stratostar0040 come down <https://t.co/vCFW4MbMep>
- 
 Do Space @DoSpaceOmaha Nov 7 More

Top Sites

Domains Pages



Share of Posts



Edit

Save Sample & Continue Tracking

Tip: Save this tracker to track future posts.

Most Influential

Avg Engmt Klout Frequency



Recent Users



Location

World USA



100 100

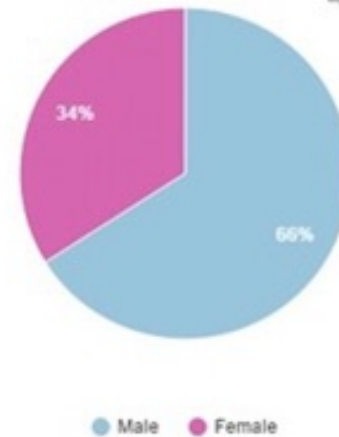
Topics

Hashtags Keywords

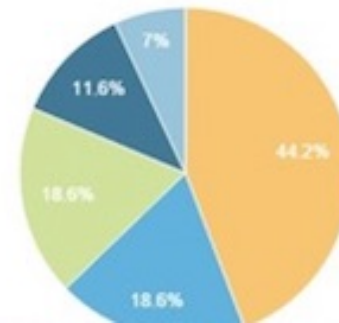
Tip: Click on a keyword or hashtag to see related posts

Demographics

Export Demographics <



Top Sources



Cues from EPO (Education and Public Outreach)

- Outsource EPO responsibilities during flight
- Make it relevant to your audience (3D Printing, coding, scientific inquiry, education, remote sensing, space testing and exploration)
- Keep it as simple as possible to without oversimplifying (Avoid jargon, use QR Codes)
- Treat everyone as a VIP
- Create an inclusive narrative (Blog, postcards, keepsakes)

Near Space Science

Nebraska High-Altitude Ballooning Adventures

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[Space Crafts](#)



Eureka! Launch – 6/17/16

This was the 5th summer in which Michael has helped with the Girls Inc. group and the 3rd

Categories

[3D Printing](#)

[High-Altitude Ballooning](#)

[Observatory](#)

[Science Using Mobile Devices](#)

[Scientific Inquiry](#)

[Space Crafts](#)

[Uncategorized](#)

Citizen Science with Helium Balloons

The Upward Bound Math and Science group launched helium balloons from Metropolitan Community College on Dec. 6th, 2014.

By finding this piece of paper, you are an important part of their science experiment.

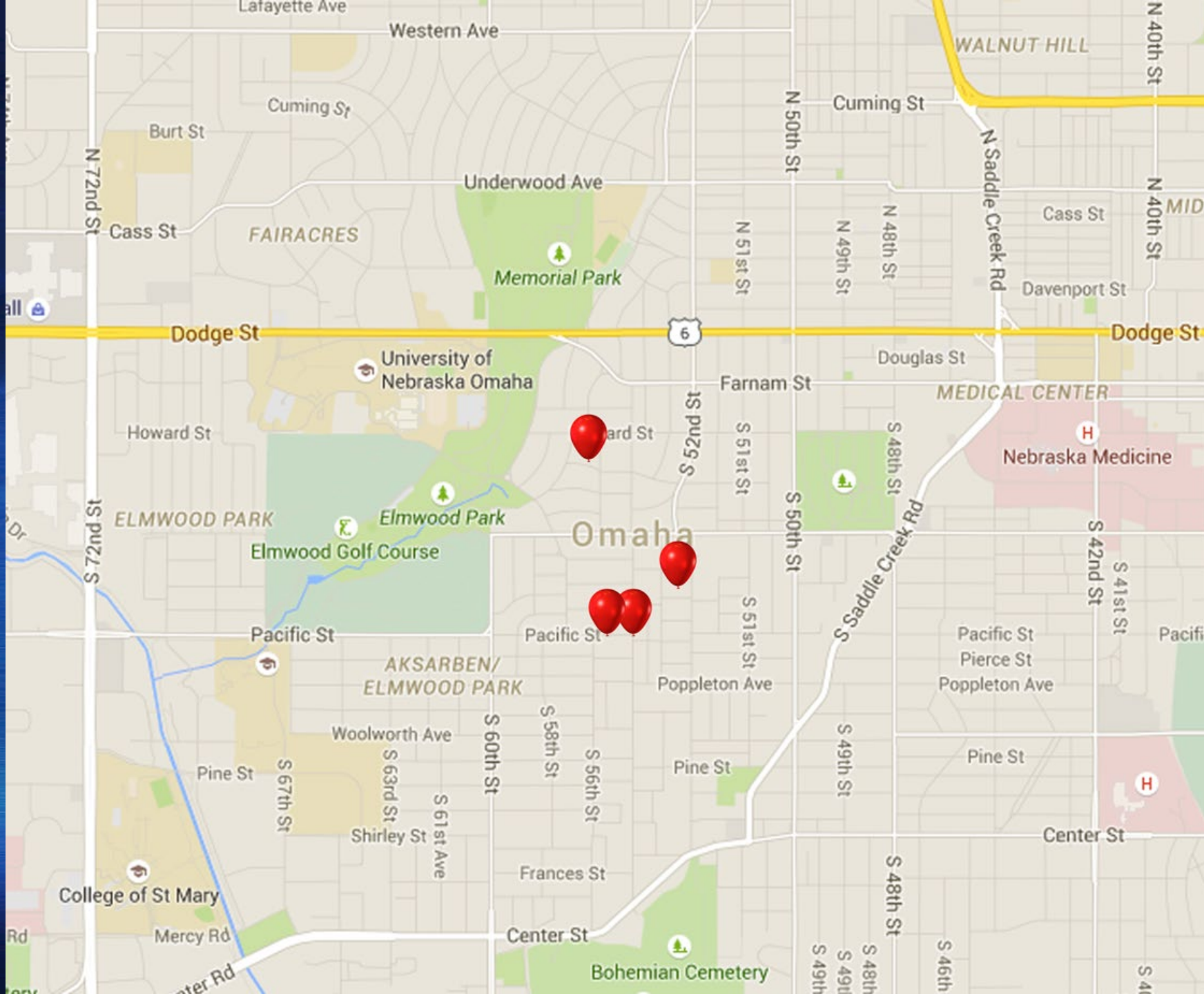
If you would let us know where and when you found this, we would have data on how far the balloons traveled at this time of year.

Please email the information to: **ksibb@cox.net**

Thank you for your participation!











Resources

- [Blog: www.nearspacescience.com](http://www.nearspacescience.com)
- Facebook: Near Space Science
- Twitter: @nearspacesci
- Husker Balloon Launch:
www.youtube.com/watch?v=Tn6dL6AZcrs
- Do Space Launch Data:
www.tracking.stratostar.net/mission/0040
- Storify from Do Space Launch: www.sfy.co/j1BEc
- Do Space Photos credit: HDR Architecture, Inc
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- www.keyhole.co
- CAP Journal Rosetta Special, Issue 19, Mar. 2016